

RIG FILE Antennas The start of a major new series!

Scotland Devolution and CB!

PLUS

QSL, CB Columns, reviews, news, contacts and features

THE SHAPE OF THINGS TO COME!

Delta 4000 EXCLUSIVE Review!

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THE RANGE ALWAYS COMING TO HAND

MODEL KT-750

40-CHANNEL READY RESCUE HAND-HELD CB RADIO SPECIFICATIONS:

- Size: $2\frac{1}{2}$ "W \times $7\frac{1}{2}$ "H \times $1\frac{3}{2}$ "D.
- Frequency control: ETR.
- Controls: On/Off. Slide volume.
- Variable squelch.
- Up and down channel control
- buttons.
- Instant Channel 9 button.
- Power requirement: 12 VDC. Accessories include: DC cord
- with cigarette lighter adapter.

Built-in condenser microphone. Magnetic mount antenna base

with pre-wired cable.

Pretuned flexible antenna, complete with its own battery pack. Compact

carrying case



MODEL CB950T AND MODEL CB950R 40-CHANNEL HAND-HELD CITIZENS BAND TRANSCEIVER. 27MHz FM

Description

This model is an all-transistor 2-way radio. a frequency synthesizer circuit provides 40 crystal controlled PLL transmit and receive channels in the 27 MHz band, engineered for trouble-free performance. Your transceiver uses heat resistant transistors in all critical areas. Current drain on 12 volts DC is

exceptionally low. Operation over long periods is feasible. The transceiver may also be

operated from AC when used with an optional power

supply.

ESANGE

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ANTENNA A-Z Cut through the jargon!

BUYERS GUIDE -Tips for when you buy.

ON TEST - 24 antennas reviewed!

WHERE DID THEY TELL YOU TO STICK THAT AERIAL?

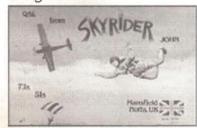
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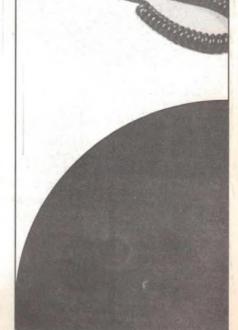
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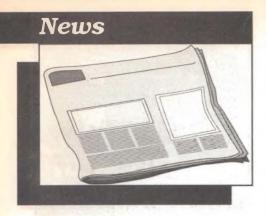
CITIZENS' BAND

ON THE COVER!

Is this the shape of things to come?

Read our exclusive review of the new Delta 4000 starting on page 8!





TEWS, TEWS, TOPOATE,

THE PACKET RACKET

As CBers try and build proposals for a CB packet system their efforts are being undermined by illegal operators that are already using CB channels to send and receive computer data. What makes it so galling as many of the operators are licensed Radio Amateurs that already have a legal packet system! CB Magazine has obtained transcripts of data transmissions sent by amateurs to a bulletin board in which many boast of their illegal achievements. These are presented with comment on page 30 and have also been sent to the R.A. for action.



MIDLAND EMERGENCY KIT

Is it a mobile? Is it a walkie-talkie? Is it a rescue rig? If it's the new Midland 77-9145 it's all three! Described as the radio for all occasions this deluxe 40 channel CB transceiver is powered from either a battery pack or car cigarette lighter, is supplied with two antennas that either screw directly into the unit or into a magnetic base for mobile use. With everything packed into a tough PVC carrying case it's the go anywhere rig and you can read all about it in the next issue of CB!



10 YEARS ON!

10 years ago, while British Cbers fought for legalisation another fight was taking place in the South Atlantic as the Falklands were liberated from Argentine occupation. 10 years after the war CB is playing a vital role in the community. With a sparse population spread thinly over two islands CB provides the cheap and vital link in schooling. Through CB teachers can talk to children even in the remotest farm to give that vital link. It's good to know that 10 years on CB is providing such a vital service 8000 miles away!

QSL COMRADE.

Do you remember the free Christmas QSL card that we gave away with the December 91 issue of CB? According to one of our readers, one has found it's way to Moscow! Is this the furthest one has travelled? If you know of any other globe-trotting cards please drop us a line. Until, then QSL comrade.





80 CHANNEL RIGS

Many thanks to Truck King for pointing out the confusion that reports on 80 channel rigs have caused. Apparently, some breakers see this as a cue to illegally customise their sets or put off buying a new rig in case they are replaced by 80 channel ones. To put the record straight, discussions have begun about 80 channel rigs at the forum between the user groups and the R.A. Before such sets become legal, if at all, there will

be a lot more talk, reports written, tests carried out and proposals made. Anyone who has ever seen Yes Minister will know how long this can take. You've probably got time to wear out two or three rigs before anything happens. Then when it does, it will be phased in as manufacturers, dealers and importers certainly don't want to destroy their present market on the promise of something new. So buy with confidence, keep within the laws and watch this pace for any future developments.

MARATHON MAN

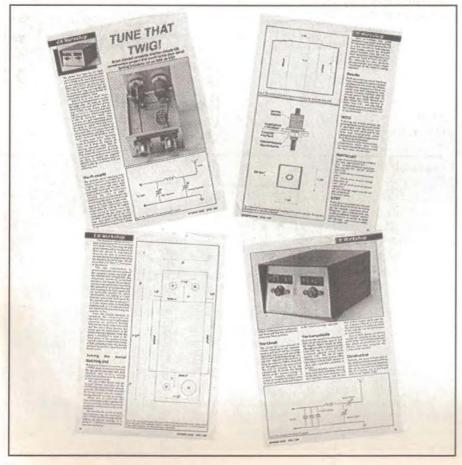
Licensed Radio Amateur Clive Dunnico is hoping to raise a substantial sum for the Winged Fellowship by running in this year's London Marathon. Clive is a seasoned runner and is part of the ADT team and hopes that his efforts will help the Winged Fellowship continue it's work to provide holidays and respite care for over 5000 physically disabled people.



OOPS!

The CB gremlins are back again shuffling the pages of Brian Kendal's Tune that Twig construction project. To make sense of it, try reading it in the following order of pages - 12, 15, 14 13 which should look like this. If you get confused, use the fig numbers

of the diagrams as a guide. If you've enjoyed these projects then look out for Brian's forthcoming series on construction which will include hints on metal working, how to find components at car boot sales and how to build useful projects out of electronic junk.



Editorial



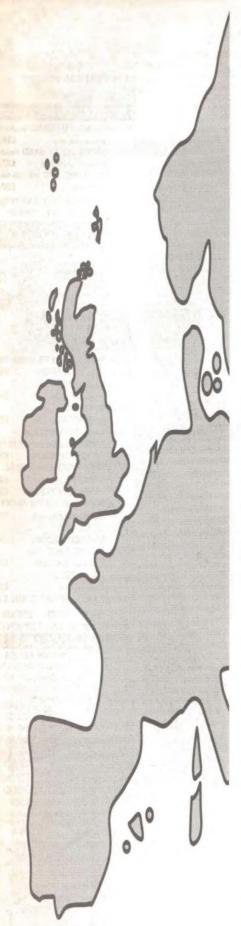
KEEP IT LEGAL!

The news that Radio Amateurs are using Cb channels to send data illegally has several worrying implications.

Firstly amateurs are not only flaunting their own licence restrictions but also undermining our attempts to instigate our own packet radio system. Secondly, they are also widening the gap between the CB and Amateur communities and souring further already tense relations. When will the Amateurs appreciate that CB is a fertile breeding ground for Amateurs and should be supported and not undermined. Thirdly, this throws down a challenge to the R.I.S. This is their chance to show CBers that they work on their behalf and not always against them. Therefore, we expect action against those who are blatantly breaking the law and interfering with our frequencies when they have so many!

On a wider note it is vital that we keep within the law. Whether it be buying a licence, the length of an aerial or 80 channel or adapted rigs. If we keep within the law our voice with the authorities is so much louder. So be patient. There is room for change and it will come. However, it will come quicker if we work with rather than against the authorities. After all, you can't pick and choose which laws to obey and the demand action against others. Keep it legal, keep together and things will change.

Tony Hetherington. Editor.





by: The News Hound.

PROGRESS HALTED.

The Swiss PTT have raised a problem with DSRR (Digital Short Range Radio). They are concerned that this new service will interfere with their Mobile Telephone System (GSM, ONet and C-Net) and cut down the achievable distance range. Their MTS runs from 935 MHz to 936 MHz without separation.

They have suggested that DSRR should be moved at least 2 or 3 MHz 'downwards'!. If so, will 934 MHz CB be reinstated?. The Swiss CB'ers hold their annual meeting on 15th March so we can expect further news in the coming months.

FRENCH CB'ers OBJECT

Leaders of the French P&T General Regulations Ministry have reneged on previous commitments (by PTT, CNCL and CSA) agreed during the last 11 years.

Reports indicate that the Minister of P&T has secretly been working with others to change legislation, in order to prohibit CB'ers having their voices heard. Part of this change in legislation will also directly affect the freedom of CB use in France.

DRG (Direction Reglementation Generale), a division of the French Ministry of PTT. Are accused of secretly taking it upon themselves to agree a number of legal use changes without full consultation of the FFCBL (Federation Francaise du CBistes Libres) membership. This included an acceptance of the CEPT/ETS FM standard - 300 135.

Others included:-

Agreements on CB Licence changes leading to its withdrawal, and the CB'ers right to call on the French RIS to deal with interference problems (caused by illegal use and other radio services).

Antenna regulation changes that limit the present choice of outside locations (and possibly height restrictions) for installation. Which will greatly increase TV reception problems.

A change in the legal references from "station" to "installers". Which in French law will undermine the CB'ers legal position and offer the authorities a number of 'get out' clauses and making it easier for them to alter regulations without user (FFCBL) consultation.

AN OFFICIAL FRENCH FINANCE NEWSPAPER reported that the Government intend to bring out a new purchase tax law of 260Fr (approx £26) on all new AM/SSB sets bought after a certain date. The tax will not apply to FM only sets, which are at present not available in France.

CB'ers are now being urged by their CB representative organisations to campaign against these changes and take 'what ever steps are necessary'!.

GERMANY CALLING.

DAKfCBNF met with the German PTT (BMPT) on 20th February 1992, and were told that the days of 'AM' CB are numbered. The final withdrawal date has yet to be fixed. Although it was explained that the reasons behind the withdrawal are not technical, but political!.

In the old East Germany CB'ers are fitting against antenna restrictions. In particular the restrictions are being aimed at those living in rented ("miete") accommodation. More information should be available on these two subjects after the 21st & 22nd March DAKfCBNF Meeting in Zwickau.

SIGNALLING THE END.

Unconfirmed reports indicate that the ERC (European Radiocommunications Committee), under the Chairmanship of Mr Michael Goddard (UK Radiocommunications Agency). HAVE decided to end the use of AM CB in Europe. And it is now left to ERC-RR (CEPT) to decide on a date.

IF YOU HAVE A NEWS STORY.

If you know of an event, or a news story that's breaking in your area whether it's a breaker in court or CBers breaking new ground we want to know about it. Drop us a line at CB Newsdesk, CB magazine, A.S.P. Ltd, Argus House, Boundary Way, Hemel Hempstead, HP2 7ST.



CB Review



The new Delta 4000 (MPT 1320) has all the regular features we have come to expect of an FM CB set, and then a couple more combined with a new sleek design which makes the whole rig more compact and less noticeable. All available space on the front panel of this latest offering available via Sharmans is utilised with barely room for the Model name and the 27/81 logo. On power up the set locks on to channel 9 but it also has a button to allow immediate switching to and from the Emergency Channel. Of course if you turn to 9 manually then you get off it in the same way!

AFTER DARK

Some thought has obviously been given to using this mobile rig after dark. The Dim switch highlights the whole front panel as opposed to simply brightening or dimming the Channel Number Display making it much easier to locate all the available controls. Keying the mike lights up the TX display which returns to RX on unkey. The rig, which is on 4 watts at switch-on, can

THE SHAPE OF THINGS TO COME!

The new Delta 4000 look set to define new standards in CB design and construction. Tony Jaconelli reviews this rig to find out whether it is the shape of things to come.





CB Review

be switched to low power by use of the H/L control and the LO message will be turned on to indicate that the set is in that mode. Similarly with the PA switch; once activated the fact is announced by the PA section lighting up. The set then has four push buttons; Channel 9; Dim; PA and H/L although the actual lay out of the controls on the set is different from that shown in the photograph on the information booklet which comes in the box with the radio.

FEATURES

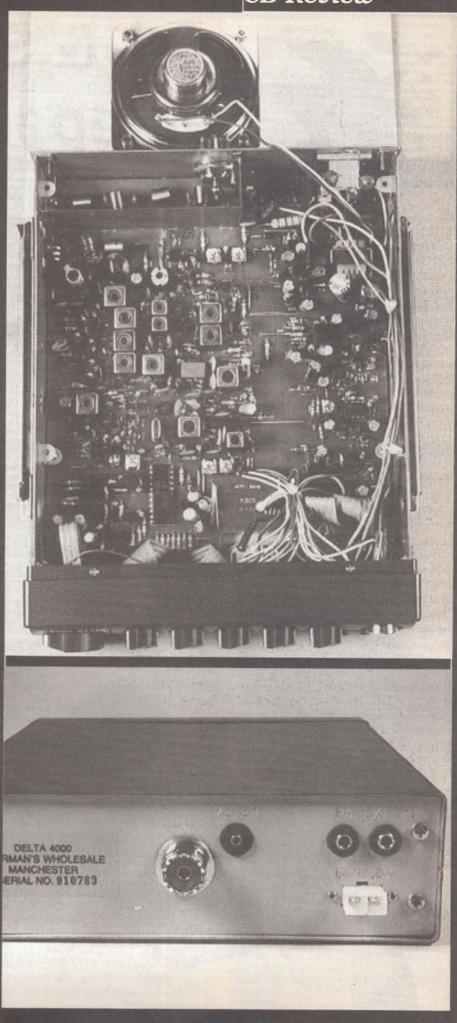
For control when transmitting or receiving the set has 6 adjustment knobs. ON/OFF/Volume; Squelch; Tone; RF Gain; Mike Gain; Channel Select and the only one needing comment is the last named. If the selector knob is turned into the half channel position and left there the PLL will cycle through the channels, either up or down. In effect it is scanning the channels; the only thing is that it does not stop when it finds a busy one.

However it could still be useful, although not when mobile, to see if there was any activity around the box. Reception is much quieter, as far as the white noise goes, than I have heard on other rigs and transmission reports were favourable. Another interesting feature is the mobile mounting assembly. The bracket fixes to the underside of wherever you are going to set it up; but presumably the underside of the dashboard. The radio is secured to the bracket by the customary thumb screws but the innovation is that the screws fit into plates which slot into runners fixed to the side of the rig.

These allow the set to be slid backward or forward into position and adjusted to the required angle before being tightened. Not a slide mount in the correct sense of the concept but it does allow a little leeway in positioning the rig.

VERDICT

The Delta 4000 is a very well made rig that performed well in all tests. It's sleek design will appeal to many as will it's additional features including the whole rig dim illumination for night time use and it's simple but effective bracketing. At the time of writing, pricing has yet to be settled but expect to pay a little above the ordinary for this extraordinary rig.



CB Report

CB & Scottish Independence.

In h General Election the thorny question of Independence Scotland, in whichever form, came back to the hustings. This is not a political article; I do not believe that CB is a political issue; but the question was asked: "What difference would it make to CB in the UK if Scotland gained Independence?". I suppose the initial answer would be: "None!" I put the question to Alasdair Hutton, OBE, TD, Honourary President of SACBC and former Tory MEP for South Scotland. He said: "Scotland would have to create entirely its own Civil Service. We would have to set up a whole Radio Regulatory system. It might well be based on what is already existing. Who knows? It is not automatic that Scotland would just inherit all the Treaties and things that the UK is a party to. That is not international law at all. Scotland would have to negotiate membership to CEPT and ETSI etc., etc.

Iasked Alasdair: "Does that mean that it would not be a case of getting Independence and just 'walking' into Europe at all?" He said: "No it would not. The majority legal opinion among the Legal Eagles, the people who know about these things, in the European Community is that you could not break up the UK without negotiating it through the Community."

mentioned

the case of

Greenland
wanting to
opt out of the
Community. It took
them nearly three years
of negotiation to get OUT of
Membership of the Community.

Although there would certainly have to be negotiations at the British level to unravel the Union, there would also have to be parallel negotiations at the Community level to unravel the membership of the Community and then to renegotiate membership if that was the wish of the successor state. All very complicated but having achieved all that could it be to the UK's advantage to have Great

Britain

with

two bites of each cherry, should we allow them to do that?"

I spoke to Kevin Pringle at the Edinburgh Headquarters of the Scottish National Party and asked him to comment on the roll of Scotland in the wider European context. He told me that the European Common Market

througha Council of Ministers which Scotland, as, independent member, would have representation. At present our interests are taken care of under the UK flag. Party supporters feel that Scotland would be better served through a Scottish delegate. In its turn this would lighten the load of the UK representative and allow him to devote more of his time to the rest of the UK. (I apologise for the use of him/his - it is more in the manner of person etc.,- no male chauvinism is intended - my wife would not let me!) Kevin reckons that this would be the situation all down the line of committee and council meetings

two

votes

including ETSI and

question the other states

might well ask themselves.

Alasdair said they might say to

themselves: "If the British want to

divide themselves into two and get

Committees

That is a

operates

CB Report

which the present UK delegates attend. Even to the level where our CB delegates would become involved. He agreed that in some instances it could even be an advantage to have two votes when it came to a decision, Scotland and UK delegates in agreement. Now that could be a first!

The SNP has had its ups and downs on the political scene but at the moment they are experiencing a high which to some extent can be attributable to the forthcoming lowering of Customs barriers the European Community. Gone forever will be the old chestnut about

world would fit.

I tried to reach Mr David Martin, Labour MEP for Edinburgh but he was enroute to Brussels. I spoke with Colin Bartie and he told me that Mr

decided by the Westminster Parliament with their own MP's down there, then different MP's from a Scottish Parliament would deal with Health and Education and Law, things which are already in a sense dealt with by the Scottish Office; but we just have not got a Parliament to control them.

It all sounds very complicated and complex. In the end, whichever system of Government we have north of the border, it will only have an effect on SACBC user Group delegates travelling to meetings with the authorities. It will not make any difference to other CBers. In that respect the Independence proposal begets the least inconvenience to them; they can meet the Scottish Radiocommunications Agency personnel in Edinburgh!

One area which would affect all **CBers** Scottish is licence arrangements. Since 31st March you cannot purchase, or renew a CB License over the Counter at the Post Office. They are now issued from the Radio Licensing Centre, Subscription Services Limited (SSL), Bristol. Will a Scottish Devolved Parliament allow License Revenue to cross the Border? Or will it be hived out to a Scottish franchise? It is a certainty that an Independent Scottish Government will keep the money here!

I'm sure SSL will be mentioned in other columns of Citizens' Band but just in case here are a few facts about them. You can get an application form by telephoning their "Help Desk" (0272) 258333 between 8.30am and 10.30pm, 7 days a week. You can also call

> this number if you have any queries

would like to see a Scottish Parliament within the UK with representation Edinburgh, London and Strasbourg. In such a scenario things would remain as they are as far as CB, and all the major institutions, are concerned. The MEP worries about the situation of Independence; that it is not necessary. Devolution would give Scotland the best of both worlds; representation in Edinburgh, in London and in Europe.

Martin

I asked Colin how the Minister viewed the situation of Scottish MP's in a devolved Parliament. Would they be allowed to sit in Edinburgh and participate in politics in Westminster as well? Colin said: "What David

is in favour of is what is called a Federal Structure. He believes there should not only be a Parliament

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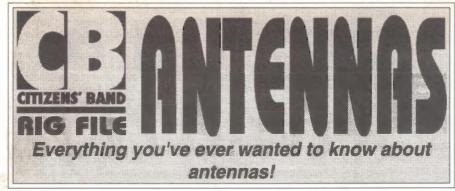
putting upCustoms posts along the Scotland/ England Border. The popular

conception of the modern Scottish National Party is that it encompasses all shades of political opinion but under a Scottish banner - a kind of coalition party but sporting the Lion Rampant!

Under self rule Scotland would have it's own Radiocommunications Agency and Radio Investigation Service. Granted we have our own branch of the Service at the moment but that is under UK control from London. The proposals for a Scottish Parliament is that it would have a Ministry of Trade, Industry & Technology into which our little CB

Scotland but regional Assemblies for England etc., and he thinks there are certain issues, Social Security Transport, Defence and Macro Economic policies, which should be

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	Midland Power Max (UK) Mobile Midland 77/1165 Mobile Radio Midland 9145 Ready Rescue Jesan 950 H/Held with R. Duck Jesan 950 H/Held with T/S Ant Jesan 4004 Mobile Radio Jesan 750 Ready Rescue Jesan 2 channel H/helds (pair)	125.00 79.95 99.95 79.95 79.95 59.00 69.95 34.00	3.75 3.75 3.75 3.75 3.75 3.75 3.75 2.75		Low noise-high performance to improve ven the best radios. Not Legal For CB Zetagi P27M Mobile Pre-Amp Zetagi P27-1 Base Pre-Amp Zetagi HP28 Delux Base Pre-Amp CTE RX25 Mobile (adj gain 25dB) CTE HQ375 Base (adj gain 25dB)	22.00 24.00 32.00 21.84 27.25	1.25 1.25 2.75 2.75 2.75
AN NIL	Team SR316D Selcall Unit Team Euro 3100 UK Base Station Maxcom 30E Mobile Radio	59.95 169.00 99.95	2.75 6.00 2.75		27Mhz BASE STATION ANTENNAS Super Lance Compact Base Ant Hy-Gain Half Wave Base Antenna Hy-Gain 5/8 Wave Base Antenna	15.44 19.95 24.00	3.75 4.75 4.75
((0)))	CB TRANSCEIVERS (C.E.P.T.) Satcom Scan 400 Base Radio Satcom Scan 40F Mobile Radio Midland 104 Mobile Radio Midland Power Max Mobile DNT HT4000 40 ch. Handheld Uniden PC4 Handheld Uniden Pro 620 Base Radio Maxon 1000 Mobile Radio Maxon 2000 Mobile Radio	179.00 99.95 69.95 89.95 79.95 122.00 159.00 69.95 79.95	6.00 3.75 3.75 3.75 3.75 3.75 6.00 3.75 3.75	Hills	CTE Saliut 27 3/4 Wave Ant CTE Top One Avanti Type Ant CTE Skylab UK Legal Antenna CTE Skylab Base Antenna CTE Spitfire 3 Element Beam CTE Boomerang Balcony/Base Ant CTE Mini Boomerang Balcony/Base Viper Fibreglass Half Wave Homeking 2 Element Mini Beam Shakespeare Big Stick Base Ant	69.95 34.00 24.00 24.00 49.95 14.80 18.95 69.95 39.95	7.25 7.25 7.25 4.75 4.75 6.00 3.75 3.75 4.75 6.00 6.00
	SADELTA MICROPHONES Sadelta MB30 Plus Base Mic Sadelta XL30 Delux Base Mic	36.50 46.50	2.75		Antron 99 Base Antenna SPEAKERS & HEADPHONES CTE AU10 Extension Speaker	9.95	2.75
THE RESERVE TO SERVE	Sadelta MM-90 Mobile Mic Sadelta Bravo + Base Mic Sadelta Echo Master + Mic Sadelta MC-7 Hand Mic	59.95 49.95 69.95 29.95	3.75 2.75 3.75 2.75		Altai Mini Ex Speaker Altai PA Speaker HVS22 Mono/Stereo Headphones Ext Speaker c/w Noise Filter	4.95 7.50 6.81 8.99	1.25 2.75 2.75 2.75
The second second	Sadelta MR1 Rep Hand Mic Sadelta MP2 Power Mic Sadelta ME3 Echo Mic	15.42 22.82 35.95	1.25 1.25 1.25		TVI FILTERS LP30 1.5Kw Low Pass Filter Back of CB TVI Filter	39.00 7.95	1.25 1.25
A STATE OF THE STA	MISC. MICROPHONES CTE F10 Power Microphone CTE F16 Power Mic/R.Beep CTE F36 Pwr/Beep/Up-Down Mic DMC 510 Power Microphone CTE 701KA Telephone Handset CTE 701KB Deluxe Tel.Handset	13.80 17.95 24.47 9.65 27.95 35.95	1.25 1.25 1.25 1.25 2.75 2.75		Back of TV TVI Filter SWR AND POWER METERS Altai SWR-2T (26-30MHz) 10W CTE HQ12 (2-30MHz) 10/100W SWR 171 (26-30MHz) 10/100W Bremi BRG22 (26-30MHz) 1KW Zetagi HP201 (3-200MHz) 1KW	8.95 11.95 17.95 37.50 29.95	1.25 1.25 1.25 2.75 2.75 2.75
Manage Ma	Replacement Hand Microphone President CS2 Power Mic President CS3 Echo Mic DM315E Echo Microphone Altai TW232 Base Mic Turner +3B American Base Mic Zetagi MB +4 Base Mic	7.95 26.82 39.95 27.95 39.00 69.95	1.25 1.25 1.25 1.25 2.75 2.75 3.75		Zetagi HP202 (26-30MHz) 1KW Zetagi Mod 500 (3-200MHz) 1KW Zetagi TM999 100W Match/SWR/Pwr Zetagi HP1000 1KW Match/SWR/Pwr CTE K150 SWR/Power Matcher CTE K160 SWR/Power Matcher CTE K160 SWR/Power/Deviation	47.00 49.95 33.54 69.95 19.65 29.50 31.00	2.75 3.75 3.75 3.75 3.75 2.75 2.75 2.75
Manne	Zetagi MB +5 Base Mic w/meters CTE EC92 Echo Unit/roger Beep POWER SUPPLIES	49.95 59.95	3.75 2.75	3	CTE K270 Multi Tester CTE K350 Multi Function Meter CTE HQ222 (26-30MHz) 10/100/1KW	29.95 39.95 39.95	2.75 2.75 2.75 2.75 3.75
ا	Altai 3 amp UK Spec (For std CB) Altai 5 amp UK Spec R 5 Amp 24/12 Volt Reducer R10 Amp 24/12 Volt Reducer	19.95 29.95 14.95 19.95	3.75 3.75 2.75 2.75	理 难 起	CTE HQ2000 (26-30MHz)1KW/Matchr CTE MCS500 Mobile SWR/Control WD202 SWR/Deviation Meter CB RADIO ACCESSORIES	62.00 99.95 19.95	2.75
	R16 Amp 24/12 Volt Reducer ZETAGI POWER SUPPLIES Model HP12 12 Amp Supply Model HP125 12 Amp w/meters Model 1230/5 30 Amp w/meters Model 1220/1 25 Amp Supply Model 1240/1 40 Amp Supply Model 1250/5 50 Amp w/meters	33.54 69.00 79.95 138.00 113.00 188.00 219.00	2.75 4.75 4.75 6.00 6.00 9.00 9.00		Zetagi MM27 100W Matcher Zetagi C57 Frequency Counter Zetagi M27 500W Matcher Zetagi DL50 50W Dümmy Load Zetagi DL61 1KW Dummy Load Zetagi V2 2 Way switch (500W) Zetagi V3 3 Way switch (1 KW) Zetagi V4 4 Way switch (500W)	13.00 78.00 25.00 14.54 79.95 8.68 17.63 14.00	1.25 2.75 1.25 1.25 2.75 1.25 1.25
	MOBILE AMPLIFIERS For the Radio Amateur, we offer a rathese are illegal for CB use.	ange of ampli	fiers –		CTE FD30 27 MHz Freq.counter Bremi BRL20 Power Reducer BATTERIES/CHARGERS	49.95 8.54	3.75 1.25
1 × 1	Zetagi B150 80W (26-30MHz) Zetagi B303 200W (26-30MHz) Zetagi B300P 200W (12-30MHz)	45.00 116.00 147.00	2.75 4.75 4.75	和 華 是	BCA4 Fast/Slow H/Held CB Charger BCA5A Universal H/Held Charger	17.95 15.95	2.75
	Zetagi B550P 250W (12-30MHz) Zetagi B750 650W (12-30MHz) CTE Mosquito 30W (26-30MHz) CTE 735 35W (26-30MHz) CTE 737 80W (26-30MHz) CTE 747 100W (26-30MHz)	205.00 345.00 19.95 16.65 29.95 46.66	4.75 4.75 4.75 1.25 1.25 2.75 3.75		BOOKS Understanding & repairing CB's Practical Troubleshooting CBer's SSB Manual CB Base Station Manual How to Speak/Hear CB	14.95 2.50 0.80 0.80 1.95	2.75 1.25 .50 .50
	BASE AMPLIFIERS Zetagi B132 130W (12-30MHz) Zetagi BV131 130W (26-30MHz) Zetagi B2002 1.2KW (26-30MHz)	131.00 125.00 480.00	4.75 4.75 7.25		USE YOUR CREDIT CARD FOR SAME DAY DISPATCH	NEW	SEND IN E



Antenna Jargon -

Cut through those technical terms.

Aerial / Antenna - An assembly of wire and or metal designed to radiate and receive signals. Also known in their various forms as a whip (mobile), twig, chopped top (short antenna), ears (antenna) or a stick (mobile antenna)

A.T.U. - Aerial tuning unit. A device that allows a badly matched antenna to be used by adjusting it's impedence to match the transceiver.

Active element - the part of an antenna which is electrically connected to the transceiver.

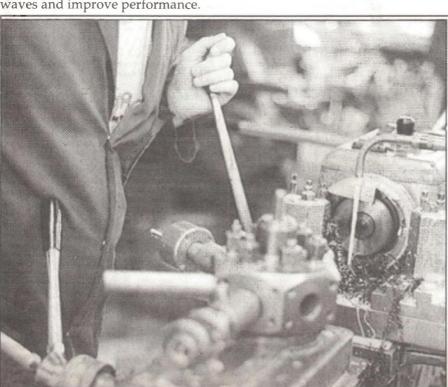
Feeder - The cable which interconnects the antenna and the transceiver and provides a path of radio signals between them.

Loaded Antenna - An antenna that incorporates a coil to reduce it's physical length while retaining it's electrical length.

Mounts - the ways of fixing an antenna to a car. These include magnets, screw fittings and clamps.

Standing Waves - Patterns of electrical waves that are set up on a feeder cable when the antenna is not correctly matched to the cable and transceiver. Standing waves reduce the efficiency of an installation.

S.W.R. - Standing wave ratio. A measure of the standing waves present on a feeder. SWR metres are used to adjust antennas and therefore reduce standing waves and improve performance.



Rigfile



IN THIS SPECIAL FEATURE

ANTENNA A-Z
Cut through the jargon!

ON TEST
24 antennas reviewed!

CHOOSING AN ANTENNA!

Help and advice.

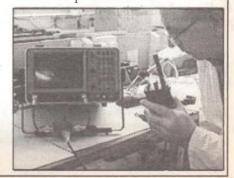
WHERE DID THEY
TELL YOU TO STICK
IT?

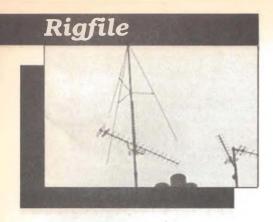
Words of warning.

Anything Goes.

From base stations to rubber ducks the variety of antennas is amazing! Depending on your needs and the price you're prepared to pay you can get steel for strength, fibreglass and even conductive rubber that springs right back into shape whatever anyone tries to do to it.

And like at this Les Wallen factory most antennas are made to a surprisingly high standard and then tested for performance.





It doesn't take a genius to work out that your antenna is the second most important item for working your CB radio. The real problems start when you come to making your choice of which one to buy. Mobile or home base it makes sense to choose the one which suits your needs, remembering of course that we are expected to abide by official UK regulations. I cannot suggest or encourage you to avoid the few regulations we have. Though for now let us dispense with formalities and consider the basic points.

DESIGNS.

When choosing from the large variety available remember that most CB retail outlets or direct suppliers will be happy to offer advice. Listen to their expert suggestions, because sometimes they can save you from buying an antenna that will not perform to your expectations.

The most popular design for home base (or static mobile) working on CB radio frequencies are those made for operating in the vertical plane using a single straight transmitting rod. In fairness they are out performed by others such as; beams, loops, quads and boxes working on the horizontal (all illegal for use on CB). But then not too many breakers can afford their high prices, will appreciate the benefits of horizontal working, or fancy the idea of giant shapes looming out across the neighbours garden.

PERMISSION TO ERECT.

Before deciding on which make or model to buy don't forget to check with your local council for planning permission to erect an outside antenna. Some council's like to be notified and some couldn't give a monkey's about what you put up. But its always advisable to check first. Decide on the intended position for the antenna and avoid any chances of it being situated in front, close behind

Buying a twig?

Michael Parks presents hints and tip on choosing the right antenna.

or alongside a TV antenna. Most problems can be overcome with a little bit of thought and long term it could save you money. Also, decide how you are going to fix it to the fabric of a building (ie angle bracket, chimney mounting bracket, polesetc). This will give you some idea of the distance you'll have for ground planes - if the antenna has any!

QUALITY CONTROL.

There are very few bad quality antennas on the market and different breakers have different preferences over design, type and performance requirements. So don't be forced into going along with the masses. Designs change frequently and performance specifications are up rated to give breakers an edge. Just because one model has more ground planes than another doesn't mean it's better or worse. It was scientifically designed to do a job of work. Most types available will operate between 26 MHz to 28 MHz or, 26 MHz to 30MHz. And because of their wide band range capabilities don't expect the perfect SWR of 1.1 Check throughout. manufacturers recommended SWR and be satisfied with that. One of the biggest mistakes you can make, is to believe a manufacturers claim of db gain - unless stated that it was measured against the ISO (Isotropic Radiator). That is the only true way of meas-uring 'real' db gain. It may state on the box "a 7 db gain". But measured against what? A lump of wood?, a piece of string?

If not on display don't be afraid of opening the package or box in the shop to check the quality of components and materials inside. Make sure that all parts are there (including nuts, bolts, washers etc) and take a good hard look at the way it all fits together. Being water tight on all main joints is critical - unless you fancy making regular trips up

and down a ladder every time it rains.

MAINTENANCE.

A good quality antenna will last a long time if regularly maintained. This should be carried out once a year. Depending on where you live and its position in relation to pollution and natural elements. Over the period of a year your antennas performance will reduce and in some cases where regular maintenance checks are not completed the SWR can alter - and as a result cause damage to your CB radio each time you transmit. The transmitting rod and ground planes (if not specially coated) can be clean using a small amount of wire wool. Oil or grease the bolts and replace any part which look faulty. Clean up the cable sock-ets and make sure everything is as water tight as possible. Finally - REMEMBER to check the SWR before reusing. Never assume it will be the same as before.



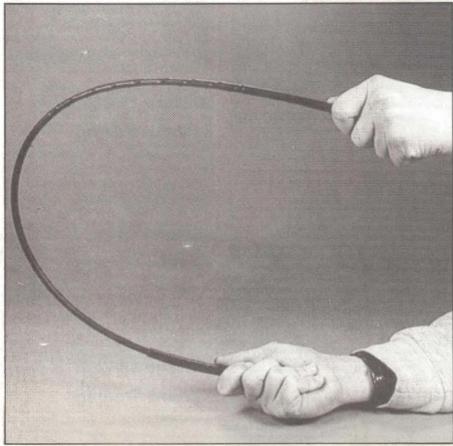
The right choice and good maintenance can ensure that once it's up - it stays up!

ONTEST

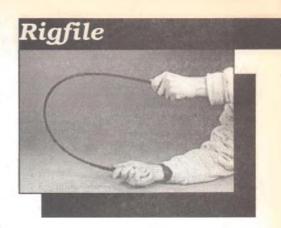
With so many options available, choosing an antenna can be a nightmare. In OnTest we dip into the CB files and present four pages packed with comments to help you choose.



Modulator 2000



Superflex



WARNING!

The legal limits as set by the Radiocommunications Agency are that only antennas whose radiating element (excluding ground plane but including castings, and associated circuitry) which is less than 1.65 metres long and 55mm diameter are allowed.

CTE Magic 60 / Nevada

This magic antenna boasts a sleek design making it simple to adjust and aerodynamic, good performance which makes it a must for mobile modulators looking for something slightly different.

Modulator 2000

/ Les Wallen.

The Modulator 2000 combines electrical performance and price which means that it won't get ripped off your roof during the next gale and will get you further than most. Available in both mobile and base versions it will further promote the Les Wallen legend.

Delta DX / Chelcom

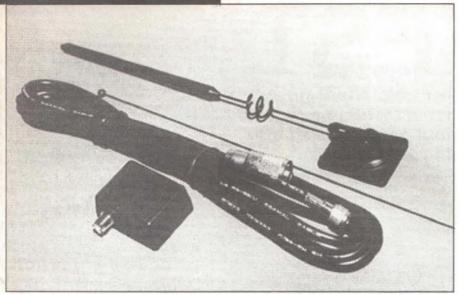
Aerials / £25

At the legal top limit this fibreglass and aluminium antenna performed very well under test. Easy to erect, simple to SWR and works well once in the air.

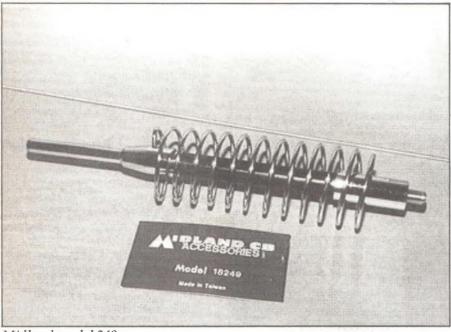
Superflex / Pama / £9.50

This is undoubtedly the most flexible aerial on the market as it can be bent a full 180 degrees and then whipped back into place. This could mean vandal proof stand up Cbing.

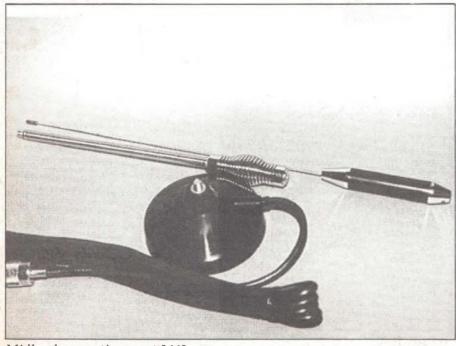
Rigfile



Midland window mount 258



Midland model 249



Midland magnetic mount 2442

Exterminator / Capco

A new novel loop design with one major problem - it's illegal in the UK! This has been included in this round-up as a warning o all as despite the many attractions of illegal designs and prices straying from the straight and narrow could result in fines and confiscation of equipment. It just isn't worth the risk.

Midland 18-400 / Kernow Trading.

The first of the impressive Midland range is a virtually fuss-free mini homebase antenna. Very good over short and medium distances this is the one for you if space is limited.

Midland 18-2983 /

Kernow Trading

This looks rather bulky for a mobile and I would have been happier with a larger magnetic mount but it did stay on and was successful for medium ranges.

Midland 18-258 / Kernow Trading

This antenna is uniquely designed to conduct the signal through glass, plastic, fibreglass and other conductive materials. It s very light and flimsy but delivers basic power and performance.

Midland 18-2442 /

Kernow Trading

This compact centre loaded antenna has a pleasing appearance and is ideal for those who want to modulate yet remain inconspicuous.

Midland 18-249 /

Kernow Trading

This 58" antenna should suit all uses. With could construction, and the coil fitted low to the fixing point it performed well in all tests.

Midland 18-248 /

Kernow Trading

If you want to get noticed then this is the twig for you. Measuring over 6 feet long (including a 47" whip) it tested well and should suit truckers.

Midland 18-2432 /

Kernow Trading

This well constructed popular mobile antenna performed well in a ll conditions - even when it's mounted on a roofrack!

Midland 18-2452 /

Kernow Trading

The twin version of the model 2432 but it is doubtful whether it will appeal to anyone except truckers and posers.

Gamma Scarlet Warrior / Kernow Trading

A standard antenna that's short on information as it's supplied without instructions or literature.

Wilson 1000 / Sharmans

Similar in design to the K40 but out performs it the Wilson 1000 is the antenna for those who want to pay and get a little more. Good performance, good construction - but at a price.

Sirtel "Idea 33"

A neat non-imposing little aerial that measures just 33cm but has a feeling of quality and performs well in all tests. However, it's short length does restrict incoming message distances.

Sirtel "Idea 44"

Identical to the Idea 33 but is 44cm long!

Video Star Special / Videoman

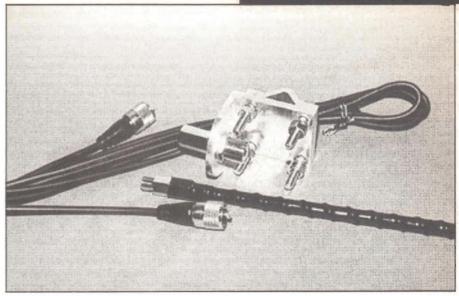
A double spring coil mobile antenna that passed all tests and represents excellent value for money at only £12.50!

USA series / Nevada

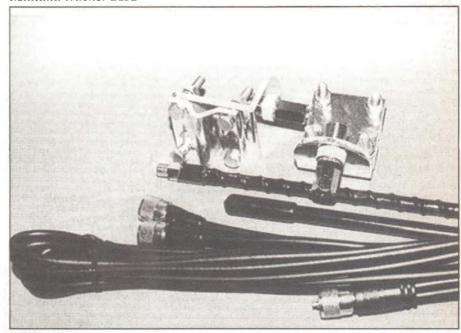
Manufactured by the Italian giant CTE, the USA series is whole range of antennas priced from just £11.90 to £18 and includes at least one that will suit your needs.

Solarcon A99 / Pama

This renamed Antron 99 comes complete with a fixing kit so you can attach it to a pole or chimney bracket



Midland trucker 2432



Midland twin trucker 2452



Wilson 1000

number of reasons. A domestic TV aerial was more in the nature of plant and was thus excluded from the definition of building.

Erecting it consequently was not regarded as an alteration or addition to a building and was therefore generally regarded under the principal of 'de minibus'- i.e.being too trivial for planning control. Their unsightliness had been accepted as a necessary evil of modern life. Consequently, when CB arrived, chimney, roof and wall mounted aerials could be treated in the same

Unfortunately the confusion prevailed, and still prevails! In general most councils will give permission, if not Planning permission, but they must be asked. There are exceptions, of course. The planning position is quite clear that all aerials used for business, taxi operators etc., require planning permission. Similarly aerials which have motors on their shafts in order that they can be rotated can be considered as engineering operations and would thus require planning consent, irrespective of their size. Also free standing aerials within the confines of a dwelling house are permitted if they are under 3 metres in height. Aerials and masts over three metres are considered as requiring planning permission. That is much clearer is it not? All that is required of the council is for them to say that permission is granted under whatever conditions they lay down, but you must submit an application.

The actual physical task of erecting antenna is outside the remit of this article but it must be secured properly.

Insurance should really be looked into unless you are filthy rich! Of course if you have had the job done professionally and the assembly comes adrift and causes damage you should have recourse compensation against the installers. If they are worth their salt at all they will be covered for Third Party Indemnity and Public Liability Insurance. If you erect the thing yourself and it comes down, and you are not insured, then pray that it does nothit anyone or anything! Otherwise you could be in debt, or jail, for the rest of your life.

There have been plenty of instances of authorities hounding CBers about their aerials. The most recent I have come across was the case of Gabbie (Alexis) from Gowkshill, near Edinburgh. I mentioned her plight a couple of months ago and her ordeal is still going on. Now it is even more

confusing. If you read the story so far.....

Gabbie was told by Midlothian District Council Housing Inspector Mrs Ormiston to remove her aerial, mounted on a metal clothes pole in her back garden, and she appealed against it. A letter arrived from Mr James Murray, JP, a local Councillor advising Gabbie to leave the aerial in place so that it could be inspected. A further letter arrived saying that permission had been granted subject to these certain provisions; all work had to be carried out to the satisfaction of, and without expense to, the District Council and it could only be erected in a position approved by the housing officer. When the work was completed Gabbie was to inform the council so that an inspection could be made. Into the New Year and another letter arrived advising Alexis to remove her aerial or face legal action. At this time Gabbie was recovering from illness and Blue Knight offered to help. Neil takes up the story: "I collected all the letters from Alexis and went to the Planning Office at Eskbank and spoke to Mr James Irvine about the situation. He phoned Midlothian District Council and spoke to a Mrs Mitchell. He then told me to tell Gabbie that planning consent was not required and not to worry about her aerial - if anyone called about the aerial she should refer them to Mr Irvine.'

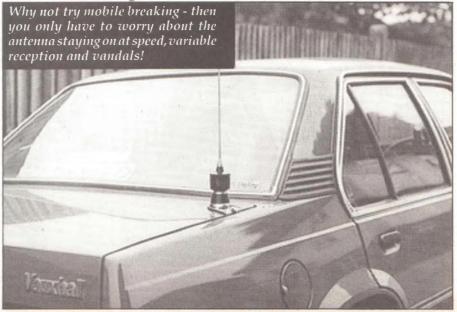
"Alexis got a message to phone Mrs Ormiston. She was told to remove her aerial as there was no planning permission for it and not to mount it on any council property and it must not be a permanent fixture. Gabbie referred her to Mr Irvine. Mrs Ormiston said she did not know Mr Irvine of the Planning and Building Control. She is in charge of CB aerials

and if Gabbie does not remove it then legal proceedings will be taken against her which could result in eviction"

Blue Knight continues: "I went back to Eskbank to see Mr Irvine but he was off work ill. I explained the case to Hugh MacDonald. He looked at the reference numbers and told me that they were from different departments and that although one department may approve, another may turn it down. He suggested the following solution:-Remove the aerial from the clothes pole and concrete the support mast into the ground. (This would have to be removed if Alexis gave up the tenancy). Apply to the Planning Office on the proper forms, which he gave me along with a diagram of how it should be done. However this could cost about £90 and there was no guarantee that it would pass. Alternatively he suggested that Gabbie obtain a letter from her doctor to say that CB would be a benefit to her in her condition. Still there were no guarantees that this would help. More local breakers have rallied round and they are having discussions on how best to help Gabbie."

It is no wonder that breakers do not apply for permission when situations like this develop. Alexis is recovering from a heart attack and her CB is a vital contact with the outside world. She has no desire to be a martyr and she has taken all the right steps to correct her initial mistake in having the aerial put up without permission. Mostly the council officials have been helpful but I can't help wondering if Mrs Ormiston is feeling that her nose is being pushed out of joint by colleagues invading her patch and that she is therefore adhering to the letter of the

law; as she sees it!



Where did they tell you to stick that aerial?

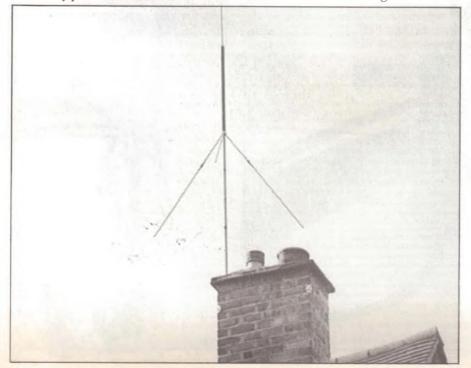
Tony Jaconelli with help, and advice and some timely words of warning!

Putting up a CB aerial is a relatively simple exercise - or is it? Basically it depends where you want it situated. Inside? No problem. Outside? How you tackle that can be a dream or a nightmare! Many breakers simply climb out onto the roof and lash their antenna on to a pole on the chimney head or some other prominent feature. That is all right as it goes but chances are that someone from the local council will happen along and tell you to get it down because you have not applied for the necessary permission. Worse still the assembly might fall, or be blown, down! If it does and it injures person or damages property then that could be expensive.

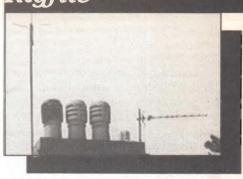
To erect an aerial outside you should do three things. Seek the necessary permission, ensure that the

assembly is securely mounted and take out insurance against accident. Of these three only the second is usually undertaken. Hardly anyone bothers to ask for permission from Local Authorities; and even if they do they invariably find themselves in a quagmire, bogged down by red tape. Few, if any, even consider insurance.

Obtaining permission from landlords or local councils can be fraught with such delays that it is often abandoned as a lost cause. Local authorities are the worst offenders when it comes to out and out bureaucracy-either they do not know what you are talking about, or they just say No out of cussedness. Some of them do not even know which department handles applications, never mind what the regulations are.



Rigfile



There are always the little tin Gods who do not know the rules either but they will make up some as they go along. Many Councils take exception to, what they term, the ugly appearance of all roof mounted aerials and sternly resist any attempt to have one erected. This attitude has its roots in the days when television sets received signals on 405 lines. Homes in most receptions areas were in line of sight of relay stations and therefore only needed relatively small antenna, which generally stood on top of the TV set. When the changeover to 625 lines came these small aerials were of little use and external antenna were required. However the thought of spoiling the appearance of properties prevailed and the resistance persisted. One or two authorities opted for communal aerials which was all right for public domain housing. Private houses had to rely on individual reception and set the trend for roof mountings. This is where the disputes and differences of procedure arose, even between departments in the same authority. The subject which caused the confusion? Planning permission!

Some councils insisted that planning permission to erect any aerial was necessary and the Planning Department would deal with the application. Others said the application should be processed by the Housing Department. Some Planning Departments said that since the mounting could not be considered a permanent fixture it did not require planning permission. Have you got all that? Still confused?

Well it seems that it was all down to interpretation of the Planning Acts, which may well have been the case but there was another consideration. Applications for planning permission had to be accompanied by a fee and that could mean an additional source of revenue. In fact fees charged varied greatly in different areas of the country.

The plain facts are that since the inception of the Planning Acts, domestic television had not been subject to planning controls for a

Rigfile



Midland universal homebase 18-400



Midland magnetic mount 2983

and performed well in the USA and is now doing well over here.

Pama Arrow 1 / Pama

Measuring only 28" long this mini antenna packs performance that exceeds all expectations. Bringing in stations from up to 25 miles away and mobiles up to 15 miles which is good in such high noise levels. This is small mobile that really works.

Pama Arrow Twin / Pama / £15.95

This antenna is just too heavy for it's own good. Under static conditions it works fine but even at low speeds it wobbled around while mobile. Fine on trucks or hilltop but I would,'t try it on a gutter mount!

Thorobred Z 27 / Pama / £12.95

This is good mobile antenna for a low cost. Although it needs some initial adjustment, and you may need some help with this, it performs well on the move. It received crisply, produced little noise up to 70 mph and works well in sometimes difficult conditions.

Rubberduck / Various

Made in conductive rubber these little antennas are popular in hand-helds and on mobiles where vandals may strike. These tough characters lack the range of larger antennas but will always bounce back.



A rubber duck!



CB Feature



within two seconds or so, encroption makes the signal unintelligible. So any burglariser could spend so much time figuring out the frequencies he would not have time to pinch your beloved TV set, video or dog kennel, the kind of stuff that gets pinched this neck of the woods.

So far, the local airport — which the Captain knows from his Swordfish biplane days — has not lost a stray jumbo jet, but it is probably only a matter of time. To equip as county force with this equipment would cost something in the range of millions (of pounds that is) and given the stern control of finance, it is unlikely that many forces will be picking up the electronic magic quickly. On the other hand, it is not too likely that they would admit to it even if they did.

A HEAVY HAND ON THE SCANNER

The battle against crime is being directed against wrongul use of scanners — could this lead to eventual ban on equipment? David Lazell reports.

As any CB enthusiast knows when he examines the piggy bank (and the tempting equipment adverts) progress is synonymous with electronics. So it is hardly surprising that, once again, wrongful use of radio equipment has been brought into the arguments about crime prevention. This time, though, the authorities seem to have a good case, namely that thieves listen in to police frequencies via scanners so that they and the loot can disappear before the Constables arrive with notebooks and rather old fashioned radio. Some of the crime busters in the home countries have apparently been tackling the problem, as best as they can, but as with so many problems in present-day Britain, there is an answer only secured by ready cash. Among the possibilities in the anti-scanner debate is new gear developed at Bristol University's centre for technology, giving channel switching within two seconds or so, of anyone tuning into the police communication. The equipment has been developed in association with the Marconi organisation, and when available in commercial form, should do well outside Britain if not within it. According to recent announcements on Bristol University's research programme, the module effecting the channel switching comes in a circuit board about one inch square, and which can be clipped into existing equipment. Although a crook using a scanner may pick up the police frequency, Some county forces are probably experimenting with the equipment, and even though the Home Office seems as enthusiastic about the idea as it might be about giving rotweilers the freedom of the City of London (financial jokes apart) the pressure to clean up the crime figures will probably accelerate introduction of the technology. One prompting might be TV coverage, on prime time programming, on some of the uses of radio technology in US cities.

The recent publicity about the possibilities of the work developed at Bristol University may yet prove to be an opening shot in a campaign for better-equipped police radio services. Could be an interesting time all

Over the air



In the past I've often asked for some interesting news about various clubs or individual CBers. Perhaps one day soon the Editor might take it into his head to designate a regular spot specifically to highlight a club for their charitable work, or individual CBers for being 'good buddies'. In the meantime, I want to spotlight a CB club that should be proud of its achievements. So stand up and take a bow:- The Foxtrot Charlie (Friendship) CB Club.

Founded on the 11th October 1985 by ten CB enthusiasts. The "FC's" have always been associated with helping others and enjoying themselves at the same time. From their very first charity venture on behalf of D.E.B.R.A. (Dystrophic Epidermylosis Bullosa Research Association) back in April 86, they haven't stopped working. Proof of which can be seen in the list of charitable causes they've supported over the years by collections and sponsorships made on or at things such as; trolley pushes, cycle rides, walks, dances, disco's, swimming, badminton marathons, drum marathons, bring-and-buy sales and, there has even been an egg pushing marathon. It doesn't seem to matter whether the need is great or small, local or national, the FC's are happy enough to help. And in fact I was

OVER THE AIR

Shepherd Man rounds up the latest Eyeball news and salutes the efforts of the Foxtrot Charlie (Friendship) CB Club!

astounded to learn, that since April 86 they have raised almost £9,000.00p.

Remarkably since the beginning in 1985, 8 of the 10 founder members still actively support the club; Geordie Boy, Dustie, Model Maker, Cherry Blossom, Double H, Papa One, Torchy and Bookworm. And their present membership stands at 45 (including 4 Juniors). They hold regular Friday night meetings at Pontlliw Village Hall and there is never any need to co-opt or coerce people in to helping out - they are happy to volunteer. Which makes the work of the two club committee members (Model Maker and Bookworm) that much easier. They have a separate but 'FC International' important members contingency from countries such as; America, Austria, Germany, Holland, Italy, Oman, Poland and the UK. And since 27th November 1989 have been running the 'Foxtrot Charlie Trust Fund' (Registered Charity No 702251). So if you fancy getting in contact with the club for more information write to: FC 10. PO Box 7, Swansea, South Wales, SA1

I know they have a number of social events planned including a 1940's Dance on October 17th. My thanks to Bookworm (Wendy) for help in supplying the information and photographs.

JUNGLE DRUMS.

I heard that the Radiocommunications



Agency might be in favour of us having an 80 channel CB radio (40 UK FM + 40 Mids FM). I for one will be only too pleased to combine the two in one set. As much as we might like to believe in the possibility of eventually having AM and SSB (something I gave up dreaming about long ago!). We first have to master the complexities of an 80 channel set. And although some people might envisage hoards of foreign stations screeching out from far and distant places, ready to unleash a new brand of peril on UK FM. I think we have something to offer them - OUR WALLIES. That should do wonders for this European state we are about to be cemented in to via that great big toilet pipe in Kent. Can things get worse by having a combination of two 40's in one? It's doubtful. From research carried out in to the use of PR 27 throughout Europe. All countries, where they have more than one system and PR 27 was launched as the second or even third alternative. PR 27 remains the least used in terms of numbers and only becomes highly active when skip occurs. Like CB'ers in the UK most Europeans still prefer their own old style systems and will not buy the new PR 27 CB's. So why should we think that they will throw away the chance of using old FM, AM and SSB sets, just to speak to us on

I have always felt that FM,AM & SSB according to FCC should have been legalised in this country years ago. It would certainly have saved all this fluffing about and confusion over the various systems in Europe. Confusion notably created by those in power. And while some countries are reported to be arguing over withdrawal dates for AM and SSB. Our beloved RA are only just considering the possible combination of two FM's. Well whatever the outcome, there will problems ahead for Europe when it comes to stopping the use of 'millions' of FCC CB's. And perhaps someone ought to inform the RA that while they were sitting on their backsides previously arguing against a combined service for FM's. Many thousands of UK CB'ers went out and had conversion boards fitted in UK sets.

A few UK CB'ers might not be overjoyed at the possibility of sharing our beloved channels with other Europeans. But then, the rest of Europe might not be excited at the thought of sharing a new system with us!. Well it's just a thought.

THE RIS ON CAMERA.

After last months mention about TV programmes getting their facts right when using CB. What joy it was to see the RIS featuring in a storyline for Taggart. For those who missed the episode. Taggart as usual was investigating a murder and during the course of his investigations fell foul of the men from the Radiocommunications Agency. They were watching, following and photographing a pirate commercial radio station operator, and at one point gave chase at high speed through the streets of Glasgow in an unmarked Toyota van. Not impressed, Chief Inspector Taggart questioned their morals. Working together (on orders from the "biscuit' - McVitie) they try tracking down the offender using their sophisticated equipment, only to find that he has used a relay station to avoid detection. Having heard so much about the way the RIS works. I found it hilariously funny to see them chasing this old van through the streets and then later being sold a pup. Though looking on the serious side, I now wonder if the RIS were consulted over the storyline. Because I can't believe they have the power to chase people through streets at high speeds, especially when they had no police escort.

DATES TO GET AWAY BY

Bank Holiday (Easter Weekend) will once more see the many hundreds travelling to Horseshoe Pass, Llangollen, N Wales. For the unofficial Eyeball taking place on the summit. It has been going for a number of years, so expect to see quite a few breakers present.

Beryl (Momma G) sent me a nice letter and enclosed details of the Third Telford Eyeball. It all happens on Sunday May 24th at Sutton Park, Sutton Hill, Madeley, Telford. It starts at 9am and finishes around 5pm, although you can stay for the weekend (from Saturday morning until Monday night) if you wish. Plot numbers for trade and club stalls can be obtained from either the Alpha Bravo or Tango Tango club stalls on arrival, if not previously booked and

paid for. A small Visitors fee of 25p per person (over 14 years old) will be charged - but you will be given a free raffle ticket for entry in the draw (3pm). Further details are available from either Tango Tango DX Club (PO Box 555), or the Alpha Bravo DX Group (PO Box 424), both at -Tweedale, Telford, Shropshire.

I now have written confirmation for details of the Sheffield Charity Gala & CB Eyeball 92. It all takes place on Sunday 14th June between 10am and 5pm at last years venue British Steel Sports Ground, Bawtry Road, Tinsley, Sheffield.

Hot and cold food will be available throughout the day and between 9am and 11am early risers can purchase a full English breakfast. Club and trade stalls are most welcome and the organisers suggest that the plots are booked asap. There will be plenty of entertainment and other fun things to do. For more details contact either Jean (Miss Kitty), PO Box 39, Chesterfield, S40 1DT. Or, Mac (Porcupine), PO Box 244, Sheffield, S12 2DX.

CHANGES AND PROGRESS.

A letter received from Rob-Roy (BH 02) confirms that he is standing down as Vice President of the BH's (Bedford & Herts). I am sure that if asked he will explain his reasons for taking this step. But, his letter confirms that he fully intends to remain a member of the group and offer his support.

TRUTH - HONEST GUV'!

I have had it confirmed that the 1992 Burnham Eyeball (Sunrisers) WILL NOT be at Home Farm, Edithmead. The actual Eyeball will still take place

Over the air

run by Sunrisers DX Group - but at another venue close by. Apparently the Home Farm management has booked the site and club house to someone else even though it was booked by Keith the day after last years event. More details will hopefully be printed in this column next month.

Regular column followers will recall that recently I included a report from last years Longleat Eyeball. In the report I happened to mention what misfortunes befell poor defenceless Red Admiral - how her portaloo ended up in the middle of a field and her large red bloomers were found flying on the flagpole. Well, some kind person sent me at note claiming to have 'overheard' a conversation at the Bracknell Breakers Club, which he claims identifies the culprits of one crime. And caused BBC member Billy Boy to receive the "Wally Award" for doing the foul deed. The conversa-tion went as follows: "Very well done Magpie", said Buster D. "Getting Billy Boy the Wally Award for putting Red Admiral's knickers up the flagpole at Longleat". "But we will have to keep quiet about it. If she ever got to find out it was US, I think she might send for her friend 'The Nut Cracker' then we would be well and truly cracked".

I only hope you two gentlemen have extra life and 'personal' accident insurance. That's if she gets to you before Billy Boy!. Oh, what a glorious new eyeball season this is going to be. Thanks to THEIR FRIEND for the info.

If you have any items of news, CB dates or something you want to say. Send it to me at PO Box 23, Stevenge, Herts, SG1 3TF.

Shepherd Man.



Results CITIZENS' BAND

Last year we launched our Great Prize Giveaway. Over three issues we gave you nine CB slang terms and nine possible meanings. Your job was to match them up, collect the coupons and send them in by new years eve. Then we started the mammoth tasks of opening, sorting and checking all of the entries until at last we are ready to announce the longawaited results.

Sorry for the delay but you should have seen that sacks of entries we had to get through and to be fair to everyone we had to open and check every single one. Now we have the winners but first the answers.

£1000 Great Prize Give Competition recompetition recompetition

Cue fanfare as we announce the 44 winners of the major prizes in the £1000 Great Prize Giveaway!

The rigs.

Four rigs were up for grabs in the Great Prize Giveaway and these were won by the following breakers.

Team Euro 3100 Base Station - Tom Saunderson, *Nottingham*.

Pama Mk 5 - Alan Bryant, Manchester. Danita Mk 5 (Cept) - Stephen Soper, Reigate.

Maxcom 20E - B. Hughes, Dorset.



The Antennas

We had a total of 20 aerials to give away. 10 Pama twin arrows and 10 Thorobred Z27.

Pama Twin Arrow - Derek Stevens, Birmingham, Gary Reece, Thetford, Ruth Brown, Coventry, R. Rogers, Ross-shire, Martin Macdonald, Isle of Lewis, Colin Repath, Monstrose, E. Hooges, London, R. Connor, Havant, Arthur Land, Stratford-upon-Avon and Derek Crossley, Kings Lynn.

Thorobred Z27 - Peter Jackson, Birmingham, Andrew Beaton, Montrose, Kevin Cahill, Cardiff, Ifor Willaims, Gwynedd, Stephen Elliot, Thornley, Alister Mitchell, Guisley, Brian Walgate, Market Weighton, John Pascoe, Truro, D. Goodfield, Lisburn and Reg Waymont, Calne.



THE ANSWERS!

GO-GO Girls 1. D. Cows in a truck.

Granny Gear 2. G. Low Gear

Monkey Blood 3. I. Fuel

Grease Spot 4. H. A dead trucker.

Rubberbander 5. F. A new CBer.

Hundred Mile Mud 6. B. Strong coffee

Pumpkin 7. E. Flat tyre

Portable parking lot 8. C. Car transporter

Haircut palace 9. A. Low bridge

eaway esults.

Antenna mounts.

These caused great problems to our copy writers but they are in fact flatbed mirror antenna mounts that are now owned by:-

Antenna mounts - J. Probert, Worcs., Trevor Hopkins, Hednesford, Neville Jefferiss, Weymouth, G. Simpson, London, Brian Martin, Sheffield, A. Clayton, Bedford, Pam Owen, Dyfed, Warren Martin, Manchester, Pat Payne, Bargoed and John McKillop, Ballymena.

The Mikes.

10 DM 437 microphones complete with battery were won by:-

Microphones - George Mcelroy, Warley, Fred Coates, London, Olwen Wells, Middlesborough, K. Rainford, Colwyn Bay, E. Crouch, Brentwood, James Hodgskiss, Huddersfield, A. Elias, Longlevens, M. Wooldridge, Cranleigh, David Lusty, Truro and Kenneth Pearse, Wincanton.





Finally, we also had 100 microphone hooks to give away that are now being sent out. We haven't got room to list another 100 winners but a full list is available on request. If you're a winner you should have received your prize from us already or in the next few weeks. Congratulations, to all those who won. commiserations to those who didn't. Maybe you'll strike it lucky in our next competition!

Once again we must thank Pama and Nevada for donating the prizes if you want to know more about these or other products these companies can be contacted on Pama- 061 446 2437 and Nevada - 0705 662145.



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(Patent Pending)



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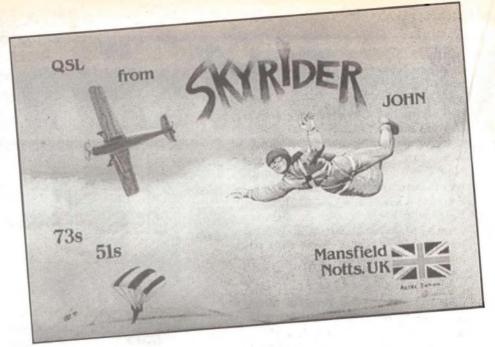


Check out the latest Eyeball Club and QSL news. David Shepherdson is your guide.

As per usual, I'd like to start off this month with a brief run though of various Eyeballs which I've been informed about so far. If your Club is organising one, and you haven't told me as yet, please put pen to paper and drop me a line with as many details as you can. If it's good time, I'll do my best to include your "do" here as I'm sure a little free publicity won't hurt!

Groups who have been in touch start off with the Fenland Tigers who are holding their eyeball on May 9th at the Anglia Motel at Fleet, Hargate which is just off the A17 in Lincolnshire. Times are 10am 'til 6pm and admission is 25p and the actual eyeball is held in the field adjacent to the Motel. Club Stalls £2.50, Trade Stalls £6, for details or to book contact the Fenland Tigers DX Group. July 4th sees the Delta X-Ray International Group holding their Eyeball at the Weston-Super-Mare Football Ground, Winterstoke Road, Weston-Super-Mare. Admission 50p for the day, or £3 for day and evening live entertainments plus Buffet. The Eyeball includes bar, snacks, trade stalls, raffles and Fun Stalls.

July 12th is the date, and the Railway Club Field, Station Road, Brimington, Chesterfield, Derbshire is the venue for the 2nd eyeball held by the Sierra Bravo CB DX Club. There are loads of attractions planned ranging from a Car Boot sale to live acts as well as the actual eyeball. The contact is Spanish Eyes who says that last years do was very successful even though there where some people who tried to spoil it by removing the direction signs. July 26th sees the annual Beach Eyeball at Southport held as usual on the beach about a quarter mile south from the pier, using the Weld Road entrance, Details from Tojo of the



Communicating the QSL Way



Bravo Bravo Group. I've just realised that for the last couple of months I've mentioned the Somerset Wallies third Eyeball as been at a new venue, but then went and forgot to say just when the eyeball is actually being held! So, to recap, the venue is the Royal Bath and West Showground, Shepton Mallet, Somerset. The Eyeball runs from 10am 'til 6pm, admission 50p, with an Evening Party from 7.30 'til late, tickets £1.50 and the date is Saturday 26th of September. My apologies for any inconvenience caused. Room for overnight parking, caravans, tents etc. For further details, to book or whatever, drop a line to the Club, with as usual, a SASE for their reply.

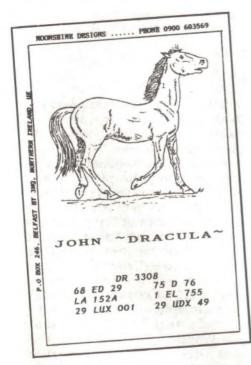
Briefly August 21-23 is the date for the Wallasey & District React Eyeball, October 10-11 is the 2nd Hastings Currie Card Swop Meet organised by The Sea Smugglers. Drop these clubs a line for booking details, hotel accommodation etc.

Just a few names this time to pass on, Tony (Bingo Boy) of the Scarlet Cedars club in London has sent me a bundle of his new Currie cards and asked me to specifically mention his new card, the NLAV one. This is the North London Atlantic Voice Group card and I'm also going to take the time to mention his XYL, Joan (Carnation Lady) who is a new collector of the Currie Series and pass on congratulations for their Ruby Wedding. From John (Skyrider) of Heanor comes a pair of his new Aztec cards.

Just in from John (Dracula) of

Northern Ireland is a request for a mention and saying that he has some new cards and will QSL 100% though a SASE would be helpful. He also asks that I reminder Collectors that he has Currie Card number 2:373.

Included in the letter from John was a card from Grant (DN2650) of New Zealand, perhaps a few people would care to drop this QSler a line. Another Collector is Vince (Brown Bear) who has a change of address from a PO Box to his home ad. Vince, Jonathan (SC 34) and Liz (SC 50) can also be contacted through this address. If you would like me to mention you or your new card(s), then do drop me a line with a couple of them and keep an eye on these pages in the not too distant future. This is after all one of those articles that cannot be written without your support so come on, please put pen to paper and get writing with your cards!



Anyway, that's it again for this month, take care and I'll catch you again next month. For a mention, for yourself or Club, drop me a line direct to 3 Tarn Villas, Cowpasture Road, ILKLEY, West Yorks, LS29 8RH and do please keep your letters coming, I do include almost every letter I receive, eventually! If you want a reply, then please do include return postage and if it's about an Event, please try to give me as much notice as possible and if you could mark the envelope "EVENT" nice and clearly so I can spot it easily, TNX. As for to whom to address your letters to, I do sometimes forget to say who I am, so it's David (Dragonrider), that's me!

QSL Addresses:

John (Dracula)

13 Fairview Way, Carnmoney, Co Antrim, Northern Ireland,

BT36 6PX

Vince (Brown Bear)

7 Buckingham Road, LONDON, N22 4SR

Tony (Bingo Boy) PO Box 1336, LONDON, N22

6YW

QSL Club Addresses:

Grant (DN2650)

Waitaki Kaik Reserve, 5

Bravo Bravo Group

H.R.D., Oamaru, New Zealand PO Box 9, Southport, Lancs,

PR8 3SD

Bravo Hotel DX Group

PO Box 3, Hitchin, Herts, SG4

7QY

Delta X-Ray Int

PO Box 73, Weston-Super-

Mare, BS23 4SY

Fenland Tigers DX

PO Box 2, Holbeach, Lincs,

PE12 BER

Hotel Bravo Club

PO Box 2, Flyde, Isle of Wight,

PO 33 2DB

Sea Smugglers

17 Edinburgh Road, Bexhill-

on-Sea, East Sussex, TN40

2AB

Sierra Bravo CB DX

PO Box 18, Chesterfield,

Derbys, S40 1FG

Somerset Wallies

PO Box 15, Radstock, AVON,

BA3 3QF

Wallasey & District 5010 PO Box 24, Wallasey,

Merseyside, L45 4FA

QSL Service Addresses:

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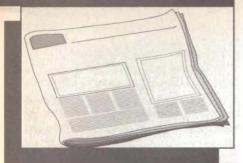
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CB News Extra



Recently my very good friend Tony Jaconelli openly discussed in this magazine, ideas behind a 'proposed alternative' use for CB'ers, namely that of CB Packet Radio. It may not be everyone's forte but it is worthy of consideration. Nowadays' more and more people are buying computers for convenience. So it follows that we ought to explore different ways of using CB and other recreational mediums. We all complain about overcrowded frequencies and an alternative (any workable alternative) may ease congestion. But we DO NOT need another almost unregulated, unmanageable or unenforceable system. The forward planning of any futuristic service must be explored from every angle.

Just to throw a spanner in the works. What about CB Packet Radio in the 934 MHz band? A new European digital transmission service (DSRR) is about to be launched and CB use (as we know it) up there will die out eventually so why not consider the idea. As you will read from the following, others seem to have their own thoughts.

I make no apologies for including an actual series of text's taken from the amateur packet network (BBS). If some amateurs are stupid enough to work outside the legal regulations and in doing so placing their licences at risk, then they have themselves to blame when they get caught. My concerns are firstly for CB radio and its users. Anything which threatens its normal use, limits CB'ers from enjoying its intended use and possibly contributes to the channel noise we experience - is fair game for investigation. However, those involved with leaving the following messages on BBS appear to be free from guilt and were on a legal packet frequency. Which is why I have excluded from publication their call signs, path codes and names. Specific references to the use of certain illegal frequencies are correct, they were checked out. These are all separate messages left on the 'open' BBS, and their contents are 100% genuine.

THE PACKET RACKET

As CBer's prepare their case for packet radio, evidence has emerged involving Amateurs in illegal data broadcasts on our channels! lan Oliver presents the evidence with expert comment from Tony Jaconelli.

takers?



SUBJECT: Packet Radio On CB

I was given a copy of an article that appeared in the February issue of Citizens' Band. It started off by saying about an item on the agenda at Waterloo House, that of digital transfer on CB.

I'm now asking what do people think?? Not only are there people saying we should get rid of the CW Test. Do we now have a group saying 'get rid of the RAE' because, they can do the things - we have to sit EXAMs for (and pay a lot of money for in the process), for a 10 pound

Just food for thought, please send replies via SB and lets have a proper debate over this.

SUBJECT: Re Packet on CB.

If they want to try it, why not let them. I don't reckon they would stick it for long though. We all know its hard enough to use packet on a busy channel, without some balloon playing the top 40 at the same time, or the "Phantoni Keyer Upper" striking.

SUBJECT: Packet on CB (11m).

I don't know about CB in your parts of the country but it is hard enough to hold a conversation on CB in never mind trying packet with error correction.

SUBJECT: Re Packet on CB Radio. Ah, but who's going to be the first to have a CB/amateur link node?

SUBJECT: CBing Packet.

I honestly can't see what the fuss is about!

If they want it and the RA let them have it, so what? Look at it this way, there will be plenty of cheap TNC's about when they start getting bored.

*** **** - asked who would

operate the first ham/CB packet node gateway? Any

Just think, a second hand CB for a fiver, add it to a TNC and dipole, then off you jolly well go!

Perhaps if it were only allowed on 934MHz it would be more palatable. Since that is used by the more radio & technically able CBers that have an operating manner more like our hobby than the '19 for a copy' brigade!

So good bud's what's it to be? Is it progress I wonder?

SUBJECT: CB PACKET OLD HAT.

T'was not long ago that I was running packet on CB and it worked very well. I had a direct link across town and used to do all manner of things on the old PC remotely. Ch 19 was fun - everybody took it to be a roger bleep, as it sent data on the drop of a carrier. I would wait till they stopped talking then 'wham' 25 more characters sent.

Had to keep packet length short to comply with the regs but still worked well. Mind you, found that the CB'ers did not really want to get involved with it! So I left that and took the ticket so as to run this BBS.

So what's on. Have they got the OK to link into the mail boxes or have they got to have a separate system? Just wondering?

73...... (now without 27 MHz FM)

SUBJECT: Packet on CB Debate.

I have been reading with interest the continuing debate about our beloved packet on CB. My question to the knowledgeable, is it legal?

SUBJECT: This Packet on CB

Well regards any node on CB within the UK, it is not legal. All that is allowed is F3E (FM tone). Also if you do have a receiver for CB (especially with an SSB facility), you will hear all sorts of nodes on CB as pointed out by *** ***, also **** too! If you listen on 26.840 LSB you will hear stations from all over the world (antenna and conditions allowing of course). There is a group of people on there who are within a group, dedicated to packet communications. They have BBS's operating their forwarding mail from country to country. Also some of these people are very dedicated and have HF transceivers rather than CB. So that they can also operate on 6.680 LSB when conditions go down on 27 MHz. There are approx 1,000 members, some operating from the UK - some being CLASS A amateurs!!!!!

These people are very experienced and have a lot more knowledge regarding data comms' than a lot of amateurs. Have a listen, it can prove interesting sometimes.

SUBJECT: So What's New!

I am told - there are some AMATEUR packet links forming part of THIS network that run on CB frequencies!!

If so, then I imagine that it's purely because there are not sufficient packet channels allocated by RSGB VHF Committee ON BANDS WHERE GEAR IS REASONABLY PRICED for the necessary links.

those reports are correct, then one cannot the condone practice.. but I merely make the point! With so many Hams now on packet we need more 2M access channels, not 12.5 KHz spaced ones either! I saw a bulletin suggesting cutting down the CW portion of the 2M bandplan. It was a well argued case I thought. I have scanned the 2M band..there is more activity on packet than all the rest put together.

SUBJECT: Packet on CB - so what's

I find all the recent comments about packet radio on CB something of a sick joke. Packet has been used on both the legal and the illegal CB frequencies for YEARS, and so far as I am aware, the authorities around Europe have lifted not one finger to stop it - ANYWHERE.

To show you how popular and well used packet radio really is on CB, I estimate that, on one 'well known' 6 MHz section of the spectrum there is more packet activity - than on the amateur 1.8, 3.5, 7 and 10 MHz bands all put together. If you don't believe me then just check around. On some 6 MHz fq's you will see Gateways advertised as being on 6, 7, 144 MHz and 1.4 GHz. You will also find numerous mailboxes. As to callsigns, well there are the usual HF CB calls, and a fair old number of 'amateur' calls (I know not as to their legality).

Half of me says these people should be tracked down and removed from the illegal 6 MHz fg's. However, another half of me says 'Good Luck to them so long as they cause no interference to anyone'. Why do I say this? Because the present 'legal' system of allowing HF BBS's, HF Gateways etc in some European countries on LEGAL AMATEUR ONLY FREQUENCIES is a total and absolute disgrace. Trying to abide by the rules is virtually impossible. Within the UK alone, if you want to put a BBS on to amateur HF fq's you have to apply for permission then wait, and wait, and wait.... Some stations have waited years for permission. Whilst you're waiting for this permission to be granted, you are of course acting illegally if you put a HF BBS or an unattended HF/VHF node on the air. Do you wonder why some experimenters move elsewhere?

Unless the authorities get weaving within Europe, I foresee vastly increasing numbers of experimenters shifting to non amateur frequencies in order to further their hobby. Although I will not be one of them, they do have my sympathy and understanding.

What an absolute c*** up. I can tell you folks, I found it a sight easier to obtain permission to operate an amateur radio station in the ****** than I am, in trying to get permission to run HF BBS on primary user amateur bands in the UK. Don't be kidded into believing that our bureaucracy is better than that in ******. In some areas it is just as useless - at least it is to the

ordinary' man.

Do
youwonderwhy'some'
are moving
other fq's!).

SUBJECT: CB Pkt etc.

I live in the backwoods and do not understand the ways of the world. Perhaps someone out there can enlighten me on a point.

2. CB Packet, 6 MHz etc. I thought it was only legal to listen to a legally licensed station. So I am surprised that so many adver-ise that they do, even giving details. But as I said, I live in the backwoods!

CB News Extra

Though I personally find one or two of the comments about CB and CB'ers offensive, I'd rather leave readers to make up their own minds. And concentrate on the more important issue of amateurs breaking their own licence regulations-by operating on illegal frequencies - and their use of our limited band space to send data. Amateur Packet is growing in popularity and like other forms of radio communications, it has problems. Limited channel spacing and delays in obtaining permission to run an HF BBS are just two. But don't be fooled in to believing that their system is perfect, it isn't, they have more than a few rouge operators. And anyone telling you different is a liar. In the past amateur packet has suffered from users leaving abusive and distasteful messages, some of which border on being pornographic. Which perhaps explains why the RSGB tend (in private) to play down this provided service.

It wouldn't take much for an APU (amateur packet user) to send data across CB frequencies. Given the right working conditions it would be relatively simply and almost unnoticeable. But not content to reek havoc on our small and very limited frequency allocation, some are brazen enough to use their UK allotted call signs on illegal frequencies such as 6 MHz and 26.840 LSB. Sowhy aren't the various authorities doing some thing about it?

Whatever their excuses for being on 6 MHz and 26.840 LSB. Amateur radio enthusiasts have NO RIGHT to pirate CB frequencies with packet. Of course we must accept that CB' ers aren't always blameless. But just like others I am beginning to wonder if the amateurs deserve the free reign afforded them by the Radiocommunications Agency!



CB News Extra

COMMENT.

February's item about the possibility of data transfer on CB frequencies has certainly stirred up a hornets nest, mainly amongst the Amateurs. If you have read Ian Oliver's piece on the subject you will no doubt have reached some conclusions of your own. I have reached a few myself and I set them out for you to appreciate or tear to ribbons. The choice is yours. Let me say straight away that there is no way that I would advocate doing away with the RAE. I believe that the HAMS have a right to feel pleased that they passed the test and that they should safeguard the territory which took them so long to put together. However I can't say the same about the Morse Test. Maybe I am bitter because I did not go for the "A" Class ticket. I do not think so, it was a choice I made at the time and one which I have never regretted. With modern technology enabling users to transmit Morse at incredible speeds without touching any other key except the ones on a computer keyboard, I can see no other reason but snobbery for retaining the Morse Test. Really it serves no modern purpose except for radio operators at sea and the like, but then they are professionals not Amateurs.

Neither did Morse ever make anyone a better operator because they could use it. Data transfer on the other hand optimises air time and in it's wake it has left behind Morse, RTTY and SSTV as too slow for the modern packeteer. Amateurs can bemoan the cash they

have spent to achieve their hobby but computer buffs will tell you that their equipment is every bit as expensive.

Some of the letters quoted by Ian show a true cavalier spirit but with some down to earth comments thrown in. "If they want it let them try it...","...its hard enough



to hold a conversation on CB never mind.....","..is it legal?" No! It is not legal at the moment, but we are working on it. Quite rightly someone pointed out that only plain speech (F3E) is allowed but as someone else noted one could use Packet surreptitiously on CB under the guise of a Cell c a 11 tone. Granted he could only packets transmit very small at a time but he kept it that way to avoid detection. The fact that Packet is no newcomer the CB frequencies comes as no surprise. It has been spoken of openly in one of the country. or two areas What surprising is the is depth of Amateur involvement in this practice. You know how they do go on when find a muppet "UP they THERE"! Must be a CBer! Funny how things are different when they come "DOWN HERE". The other thing that this revelation throws a light on is the unjust condemnation that has been lumped onto paging systems when clearly the beeps which we have all come to accept as interference from that source were fact largely from Packet

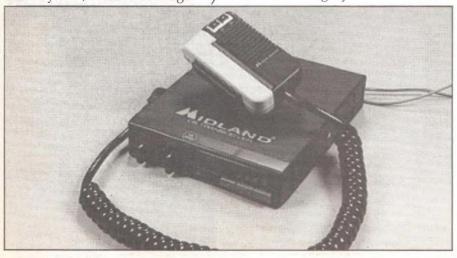
transmissions.

The message with the heading: "..so what's new?" hit the problem squarely on the head. If the authorities don't get their act together they will only finish up giving themselves a bigger headache when it comes to clearing the experimenters off of frequencies they should be nowhere near. Fortunately the Radiocommunications Agency has accepted the idea of Data Transfer

on CB, in principal anyway, and time will tell if they left it too late. Where would Data Transfer be best placed on CB? The suggestion that 934MHz might be the place has quite a few supporters for various reasons. For one thing if it was placed on those frequencies it could serve as the saviour of the system which is being allowed to peter out for lack of replacement parts. Data Transfer or even a full blown Packet system would be ideally suited to these higher frequencies. They are quieter and distances covered are greater than on 27MHz. Of course if the rest of Europe joined Switzerland and the UK on this band it would open up a whole new world for contacts. The possibilities are endless unless you think that all of Europe on 934MHz would make it overcrowded.

One thing you will notice as you read the messages is the amount of illegal Amateur activity that takes place on the various frequencies outside of the Amateur allocations. They have ample room on the bands which they can use legally without encroaching on other channels. It is time that RIS looked into these practices and brought a few of the miscreants to boot. No use saying that they are not causing anyone any bother. That is not the issue. RIS and RSGB are quick to point out how inconsiderate CBers are when they stray onto other frequencies. Make the wayward HAMS pay the same

Tony Jaconelli is heading the research into packet radio on CB.



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Talking Tartan



Talking Tartan

Bonnie Scotland's Rock the Jock reports on the news from north of the border and looks back to 1979 and the fight for legalised CB!

I met Arctic Warrior (Steve), 1 OT 16, at the Glencarse Village Eyeball in October but he was on the door and was so busy I hardly got a chance to talk to him. It was nice to get a note from him to say that Sam (Pasquanel) would be in touch shortly to thank all those people who turned up on the day, and on the night for the Dancebut just in case Steve includes his thanks for keeping him busy.

His favourite place for a modulation is in the hills near Glenshee about 1000 feet up. This spot is popular with local CBers and if you are in the area, or the skip is going in the right direction, you might copy Steve or any of the following:-Moonraker (Alec), White Dragon (Bill), Goose Hunter (Jim), Cairn Man, Mystery Man all from the Alyth 20. Nookie Bear and The Pirate from Blairgowrie use it as well. Steve is not on channel as often as he would like to be so he has missed a few Saturday with night natters Happy Wanderer(Arthur). He also says to listen out for The Home Brew booming out from his homebase in Blairgowrie.

I am thankful to Arctic Warrior for enclosing some interesting stuff with his letter all from around the 1979 era when CB was taking a foothold in the UK. Anyone out there remember the little Bandstand magazine? The issue Steve sent me is jam-packed with CB material and highlights the amount of pressure being exerted from all side to legalise our hobby. There are extract and reproductions from myriads of newspapers and other media sources extolling the virtues(or otherwise) of what - at that time - was a completely illegal system.

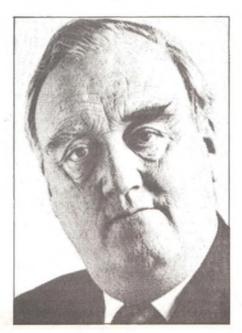
It makes fascinating reading and gives an insight, or brings back memories, depending on what age you are. Being so young I cannot recall the period but those involved were certainly in touch with reality. There is one article which I feel is worthy of reproduction; called A BRIGHT FUTURE. It is also slightly

topical in that an election has just gone by. The emphasis are mine!

"It was a Conservative Government that first made it possible for commercial radio to start with in the United Kingdom. Once again we have a Conservative Government, and they have the chance to show us again that they are the party believing in the freedom of a person from Government interference, and the right to self expression. BY LEGALISING C.B. THEY COULD PROVE THIS.

"An all party group of M.P's met the Home Secretary, William Whitelaw, M.P. recently, it is believed that they recommended legalisation of some form of Public Radio. Following this it is expected that the Home Secretary will make a statement in the House of Commons, in Mid November calling for legalisation of C.B., from this point on it will only be a matter of time before we have legal C.B., AT THE MOST IT WILL BE 2 YEARS.

"The argument for C.B. has been won, but there is still a battle to fight, CBers have to CONVINCE THE GENERAL PUBLIC OF THE VALUE OF C.B., because almost certainly even when legalised, IT WILL



RECEIVE A LOT OF ADVERSE PUBLICITY, just as amateur radio has done even though that has been legal for many years.

"Once legalised it will be the job of magazines such as Bandstand to pave the way for better relations with the Public, and the Authorities.

This can be done by:-

"PROVIDING A FORUM FOR DISCUSSION ON ALL TECHNICAL AND OTHER ASPECTS OF CITIZENS' BAND WITH THE AIM OF ENSURING THE HIGHEST POSSIBLE STANDARDS OF BROADCASTING.

"By giving help and advice to newcomers to what will be, once legalised one of BRITAIN'S FASTEST GROWING HOBBIES, if not the fastest.

"And finally, and most importantly informing the public of the value and uses, of a system of public radio.

"Only by maintaining public support can the C.B movement ensure that the battle soon to be won will remain a victory."

Stirring stuff indeed and certainly ahead of its time and up to the mark on it's predictions. Other excerpts where equally astute in their comments. Some where so far off the mark it makes one wonder where they got their tips. The Guardian of Tuesday 16th October 1979, in an article by one Alan Rusbridger, forecasts:-

"The new system, which would go under the name General Radio, is most unlikely to use the 27MHz frequency which at present is used illegally by thousands of CB enthusiasts in Britain."

"Leading CB pressure groups say the Home Office is likely to authorise transmission on 200 to 300 MHz UHF using 18 channels at a maximum of four and a half watts."

"....the additional cost of administering and supervising the system could be covered by a £5 licence fee payable on purchasing a set."

Richard Town (Technical Advisor to the Parliamentary Committee and GLC Councillor for Bexley, Erith and Crayford) on L.BC. Nightline:-(when asked what wave band would be used for CB)

"I am not empowered to say what frequency or type of emission.... but what I can say is that it will not be on the already discredited and already useless 27 megacycle band......."

One of the better comments and definitely before its time:-

"...all new sets could, for about £1, be fitted with a special silicone chip which would distinguish them."

(Auto Transmitted Identification System?)

Even in those early days the Radio Society of Great Britain had recognised the potential CB could offer in the drive for new members. Mr Town on the same program when asked about possible interference to other radio users:-

"The Radio Society of Great Britain has come out tentatively for CB radio, but of course they do recognise as well that CB radio will lead to a greater awareness of electronics and communications in general and that will lead provenly towards more Radio Hams coming to the fore who would want to communicate further than 10 or 15 miles."

Like many other groups in the UK, Second City Breakers celebrated their 10th Anniversary this year. Breakers from all across the Central Belt of Scotland joined club members and friends in the County Roadhouse Inn to take part in the club's Karaoke Dance. Over 140 revellers discoed, danced and drunk their way into the wee small hours. To list all who attended would be impracticable but I can mention a few to represent the surrounding areas. Falcon (Alex) from the Ayr Radio Group; Lady Jester (Ina), Irvine; Paisley Shawl, Edinburgh; Wild Cat (Helen), Castlemilk; Teddy Bear (Anne), Uddingston. To those who took part in the customary game it must be said that what was done with a balloon, an orange and a banana does not bear repeating!

SACBC have arranged a meeting with Scottish RIS officials in Edinburgh in August. If you have any points to be put, or questions you would like answered, write now and get them on the list. The address is PO Box 1 Glasgow G69 6EF.

Some former members of the Foxtrot Mike Club from Falkirk have got together other local breakers to start a new DX group called the Falkirk Bairns. (Bairns is a Scots word

meaning children; it is also the nickname of the town football team). The founder members are Pythagoras (John), Orange Billy (Alex), Jetty Man(Jim), Big Ears (Joe), Liberator (David), Whisky Queen (Jean), Bird Man (Jimmy), Ice Cube (Ina), John (Nighthawk) and The Chief (Chic). All in they number more than 30 and they already have quite a few international members. The Foxtrot Bravos can be contacted at PO Box 11, Falkirk. I spoke to Zoot(Joe) who told me that they will not be having a Committee as such but you can tell by the quality, and the quantity, of the paperwork that a lot of work has already been done.

News of another two group names to add to your list; The Scottish QSL Bureau and the Tawny Owl CB Group. Both will be administered by Colin Richardson (Tawny Owl). The Bureau is especially for those breakers who do not have a PO Box and who do not want to broadcast their home AD. There will be a small annual charge to help towards administrative costs and members will be asked to provide Self addressed, stamped envelopes. All names and addresses will be kept strictly confidential.

The Tawny Owl CB Group is more in the line of a QSL Club. Membership will be on a lifetime basis with a two tier choice of introduction packs. For further information or membership applications for either group write to Tawny Owl, Colin Richardson, 13 Muirpark Road, Tranent, EH33 2AX.

This years Seamill Eyeball is scheduled for Sunday 21st June at the usual place, the beach Car Park, Seamill. If you require information about stalls or anything else contact Ann Buckley (White Rabbit), 3 Moorfoot Place, Bourntreehill, Irvine, KA11 1SP. The Ayr Branch of the

Talking Tartan

Solway Pirates have offered to assist their Irvine counterparts on the day and a busy program has been drawn up. As usual all proceeds will go to charity and this years recipients will be the Hazeldene Adult Respite Centre which is run on a completely voluntary basis.

For safety the Car Park and Events field will be separated to protect the visitors from a repeat of last years escapades by a mad-cap element who were intent on demonstrating their prowess behind the wheel of their cars.

The Advanced School of Motoring will be giving a demonstration of Good driving and maybe these thoughtless fools will take note. Another improvement will be in the toilet facilities. The old brick building has been demolished and Portaloos will be on site.

For entertainment the Local Radio Station, Westsound, is setting up its Road Show at the park. There will be a mixture of Stalls, both CB and non-CB, for you to browse through. The kids will also be catered for with various events being arranged and it is hoped that The Magician (Alex) will again be on hand. All in all it sounds like a well organised day out; following in the tradition of previous organisers of the Eyeball. All that needed to complete the day is Sunshine - and You!!

Sadly once again I have to report the passing of a long time CB friend, Big D (Dave) from Wishaw. He had been ill for some time and finally passed away in February. There was a large turn out at his funeral, including many CB friends, who joined family, relatives and other friends to pay their last resects. Dave was a cheery, helpful person and was well liked by all who knew him.





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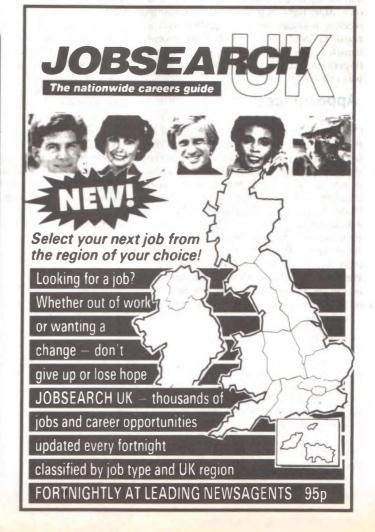
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A. AR-3000 ing 30kHz-2000MHz (!). We've plan to feature a separate review of this aerial together with AOR's new DA3000 wideband discone in next month's issue. The set is quite small at 138mm (W) x 80mm (H) x 200mm (D). It's designed for operation from a 12V supply, so with an optional mobile mounting bracket you can easily fit it into your car. A DC power lead is ing a scan initiasupplied, and together with a plug-in mains tion if you keep one of them pressed down for power unit for base use. A well-written It's been manual, prepared by AOR (UK) for UK use, several years since the a second or so. You can usefully

'original' AR-3000 receiver was launched, a marvel of compact engineering in its time. In my mind there's still been nothing to beat it in its size, and I'd still love to own one if I could afford one! AOR have now given their flagship receiver a slight 'facelift' together with a boost in performance, with their recent launch of the AR-3000A. So guess who's fingers started itching when he knew there was one on the way?

Appearances

Outwardly, it looks very similar indeed to the earlier AR- 3000, retaining many of the features of its predecessor including the staggering frequency coverage of 100kHz-2036MHz. You can use the receiver to listen into CW, USB, LSB, AM, Narrow FM and Wide FM, each individually selectable. The AR-3000A also lets you select any 'step' increment you like in 50Hz steps between 50Hz and 999.95kHz. So you can, for example, choose 9kHz steps for the Medium Wave broadcast band, 50Hz for 'fine tuning' on the HF amateur and utility bands, 1kHz or 5kHz for HF broadcast band listening, 12.5kHz on VHF/UHF, and so on.

Tuning

A free-running rotary knob lets you tune around manually, and small push buttons next to this let you speed up the rotary tuning rate by a factor of ten, or slow it down by a factor of five, to give you even more control. The usual 'Up/Down' buttons, positioned next to the tuning knob, give you an alternative tuning method as well as provid-

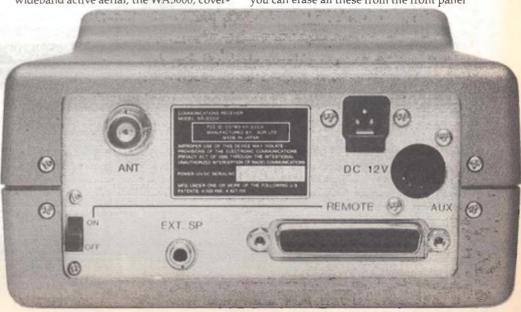
program a 'repeater split' into the set, so that when tuning around you can quickly switch between the input and output frequencies of split-frequency base or talkthrough stations as found on VHF and

A single BNC aerial connector on the rear panel is used for the entire frequency range, and a short telescopic whip comes with the set to get you on the air quickly. To guard against problems caused by megastrong signals upsetting the set's front end with an external aerial, you can switch an internal aerial attenuator in using a keypad function. If you're using a super-long outdoor wire aerial for HF then you can also switch the internal HF section preamp out by changing the positions of two internal switches. If you're short of space for an array of aerials covering such a wide frequency range, AOR can even supply a 1.5m long wideband active aerial, the WA5000, covercomes with the set, this giving practical operating examples together with a brief appendix of air band, marine, and TV audio frequencies.

Searching and Memories

One of the major improvements, in my mind at least, is that of the much faster scanning rate of the set, this now being up to 50 channels per second. You can do all the usual things such as search through your programmed frequency ranges for signals, store channels into the 400 memories arranged into 4 banks of 100 channels each, engage a 'priority watch' for each bank, this even having a programmable selection time interval, and so on.

All your programmed memory and search information is backed up by an internal lithium battery, but if you really need to, you can erase all these from the front panel





by pressing a couple of buttons whilst switching the set on.

As well as 'memory lockout' for skipping channels when scanning, up to 100 individual frequencies may be selected in each of the four search banks, for the scanner to ignore, when you're searching across a given range. This is useful for automatically passing the many 'constant' signals you may find, even down to those annoying carriers generated by the computer in the next room or house.

Remote Control

You can connect an external tape recorder to the AR-3000A's accessory socket, and an internal transistor switch driven by the set's squelch circuit lets you control the motor on your tape recorder. Hence you can leave your set switched on, with your tape recorder being enabled only when the set's squelch raises. An optional recorder lead is available (CR400) if you don't fancy making up your own.

Although the set doesn't have a 'timer' mode as such for automatic program recording, you can use the set's internal clock with its 'alarm' facility, where it switches on at a given time at a preset volume, switching off 60 minutes later. A 'sleep' timer can also be used to switch the set off after a predetermined length of time between 1 and 120 minutes. An external speaker socket is fitted on the rear panel, this cutting out the internally fitted speaker at the lower front of the set, and a headphone output giving a reduced audio level is provided on

LABORATORY RESULTS:

Sensitivity;			n sallin	
Input signal level required to give 12dB SINAD;				
Freq.	CW/SSB	AM	FMN	FMW
100kHz 500kHz 1MHz 2MHz 4MHz 6MHz 10MHz 20MHz 30MHz 50MHz 100MHz 145MHz	1.04 0.32 0.21 0.18 0.15 0.11 0.13 0.12 0.13 0.15 0.15	2.26 1.01 0.60 0.47 0.38 0.36 0.41 0.34 0.37 0.43 0.53	1.22 0.53 0.29 0.22 0.18 0.14 0.19 0.16 0.17 0.20 0.25	
250MHz 435MHz 700MHz 1300MHz 1700MHz	0.16 0.18 0.25 0.18 0.25	0.46 0.51 0.59 —	0.22 0.25 0.26 0.17 0.23	0.69 0.71 0.72 0.41 0.67

If you'd like to extend your scanning horizons, then you can also let your PC take control of the set's functions for you, through the set's RS-232 connector. A slide switch on the rear panel controls this, so that when the 'remote' mode is selected only the set's on/off switch and volume/ squelch controls are enabled. Through your computer or terminal you can duplicate the front panel controls as well as getting 'Smeter' level, dial or memory channel contents and the like, from the set. By running AOR's optional ACEPAC-3A software on your PC, as well as remotely controlled the set, you can monitor band activity with a display of percentage squelch opening time against frequency, even produce a graphical 'sweep output' of activity against frequency. Take a look at our test of the ACEPAC-3 program for the AR-3000, in the January 1992 issue of Scanners International, for an idea of the flexibility you can achieve.

On The Air

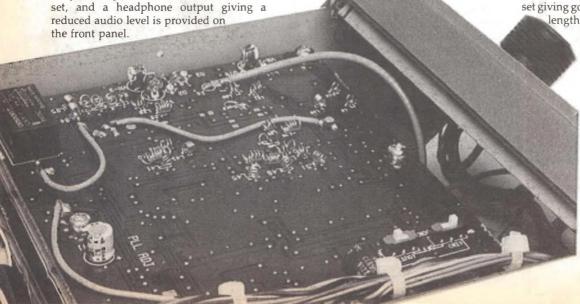
The supplied instruction book gave clear details on the set's use. Following a read of this I was quickly up and running, listening to my semi-local amateur 2m repeater with

the set's short telescopic whip. After programming some of my favourite frequencies, I then tried the set's 'search' mode to see what else was about over its wide frequency coverage. I found it very easy to manually store the many active frequencies I found into memory, the set automatically selecting the next channel for me each time. I did however find that I was sometimes programming multiples of the same frequency into subsequent memories, so I had to be careful!

The 'frequency pass' was easy to program when in search mode, just a two-button press. I found this function was very useful, I wish my own scanner had this facility! Scanning through both the memories within a given band, and across a programmed search range, was fast, very fast. I was pleased to be able to control the 'pause' time on an active frequency, which could be set to anything between 1 and 60 seconds to suit what I was scanning across, to give me a chance to hear what was happening before deciding whether to manually 'halt' the scan or not.

I sometimes found that I accidentally touched the free-running tuning knob, with the annoying result of the set either switching channel or just carrying on scanning. But manually tuning around on HF using the free-running knob was great, with the set giving good results even with just a short length of wire plugged into the aerial

socket. Connecting an external long wire of course brought in many more signals, although I never found I needed to switch the internalpreamp out. When changing between different bands and tuning steps, I found it handy to store the 'centre frequencies' of these into memory channels. I then used these as a



'band/mode' select, a simple press of the front panel 'dial' button then let me tune away from these, very handy! As well as 'normal' tuning in the usual steps, I found it useful to be able to program the set to tune in my programmed steps but with whatever offset I liked, for example a 5kHz or 1.25kHz offset with 10kHz steps for European and UK 26/27MHz frequencies.

The sensitivity was excellent, especially so on the frequencies above 1000MHz. I found I could hear my local 1297MHz repeater just as well on the AR-3000A as on a dedicated transceiver for the band, and although I didn't try it 'on air' I'm sure reception of 1691MHz geostationary weather satellites would also be superb. However on VHF I did sometime find I suffered from problems caused by other strong local signals in the same band mixing together, due to receiver overload. I suppose you can't have everything!

Finally, connecting my computer, operated purely in a 'dumb terminal' mode, to the RS-232 connecter let me remotely enter frequencies and the like at the touch of a keyboard. I was surprised how simple this was to do, in a few days I'd probably have started to write a simple program for it!

Adjacent Channel Selectivity, VHF;

Measured on 145MHz as increase in level of interfering signal, modulated with 400Hz at 1.5kHz deviation, above 12dB SINAD ref. level to cause 6dB degradation in 12dB on-channel signal;

+12.5kHz; 40.5dB -12.5kHz; 43.5dB +25kHz; 50.5dB -25kHz; 54.5dB

SSB Selectivity, HF;

Measured on 10MHz USB, single signal;

−3dB	1.9kHz
-6dB	2.6kHz
-40dB	3.6kHz
-50dB	3.9kHz
-60dB	4.4kHz

Blocking;

Measured on 145MHz NFM as increase over 12dB SINAD level of interfering signal modulated with 400Hz at 1.5kHz deviation to cause 6dB degradation in 12dB SINAD onchannel signal;

+100kHz;	67.0dB
+1MHz;	79.0dB
+10MHz;	94.5dB

Intermodulation Rejection;

Measured on 145MHz NFM as increase over 12dB SINAD level of two interfering signals giving identical 12dB SINAD on-channel 3rd order intermodulation product;

25/50kHz spacing; 41.5dB 50/100kHz spacing; 41.0dB

Insides

Opening the receiver shows a box packed with tiny electronics, arranged on several RF boards plus a control and keypad board. Fifteen switched RF bandpass filters are used before the GAsFET RF amplifiers, to give out-of-band rejection combined with good on-channel sensitivity. This should also allow, for instance, good reception of VHF when a local mega-strong UHF signal is present. A triple conversion superhet circuit is used (with quintuple conversion on WFM), and a more efficient microprocessor than the set's earlier cousin has been used to

give the much faster scan and search speeds as well as the extra features.

Conclusions

The lab results confirmed the good sensitivity of the set, the intermodulation figures also showing that I'd not been imagining the occasional problem I found on-air, no doubt the set's attenuator would be useful here. Nonetheless for its size, its array of reception modes, and incredible tuning range, I still feel it's a marvel, one that I'd love to own! The AR-3000A is currently priced at £765, and my thanks go to AOR (UK) for the loan of the review equipment.

S-Meter Linearity				
Measured on 145MHz NFM;				
Reading	Input Signal	Rel. Level		
S1	0.65uV pd	-29.7dB		
S2	0.94uV pd	-26.5dB		
S3	1.43uV pd	-22.8dB		
S4	2.11uV pd	-19.5dB		
S5	3.13uV pd	-16.1dB		
S6/7	5.42uV pd	-11.3dB		
S9	19.9uV pd	0dB Ref.		
S9+10	53.2uV pd	+8.6dB		
S9+20	255uV pd	+22.2dB		

Book Review

Short Wave Communications

by Peter Rouse GU1DKD

From the keyboard of *Scanners International* contributor Peter Rouse comes his latest book, aimed at the many new, as well as 'old hand', listeners to HF. Short wave listeners often just use their receivers to tune into broadcast stations, but there's a lot more that goes on over the short wave spectrum! You'll find conversations between air traffic controllers and intercontinental aircraft, between coastal stations and ocean going liners, maybe even an 'SOS' transmission and the resulting rescue operations.

But it's another matter knowing exactly what frequencies to tap into your receiver to hear these! Until now, many publications have been aimed at the amateur bands listener or the broadcast listener, or maybe the 'CW and data' utility specialist. However Peter's book, as well as giving an introduction to short wave and a guide to choosing a receiver, including sources of supply, also gives a comprehensive listing of frequencies used by speech stations, usually transmitting in English. Scanners International readers may for example be interested to note the HF 'Marine Band' Frequency Finder in the November 91 issue was compiled by Peter. We're told his lists in the book are not simply 'cribbed' from others, but are often the result of many hours spent

listening on the bands. In chatting with Peter, we know this is often the case!

'Short Wave Communications', ISBN 1 874110 00 X, 187 pages softback, is priced at £8.95 and is available from several bookshops as well as by mail order.



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FOR SALE

Realistic PRO-2005 scanner AM/FM, covers 25-520MHz, 760-1300MHz, £180 or near offer. (Deptford). Tel. 081 692 0944

Yupiteru MVT-5000, mint, boxed, nicads, car lighter adaptor, telescopic aerial, soft case, £130. (Maidenhead). James Trutwein, Tel. 0628 27505

AR2800 scanner, £275. (Northampton) Tel. 0604 718707 for details.

Realistic PRO-2005 400 channel memory, 25-520MHz, 760-1300MHz, Discone, manual, frequency books, in new condition, £300. (Hatfield, Herts). Contact George. 0707 261320

PRO-80 scanner, still boxed, £180, very good condition. Thomas B., 13/2 Wauchope Place, Edinburgh, Scotland. EH16 4NR

Fairmate HP200E scanner, 1000 channels, 500kHz to 1300MHz, books and accessories, £200 ono, as new. (Worcester). Tel. 0905 641041

AR2500 turbo scanning monitor, as new in box. Cost £420, asking £300. Tel. Chichester 602603

Realistic PRO-2004, boxed, VGC, £175 ono. Also handheld AR800E, £100 ono or WHY? Contact Charlie G7GKV (Crawley, W. Sussex), Tel. 0293 533827

Bearcat 100XL handheld scanner, immacualte condition, mains adaptor, charger, frequency manual, £100 including p/p. (Rochester) Tel. 0634 815920

Yaesu FRG-9600 VHFUHF receiver, 60-950MHz, no breaks, and adaptor, converts to HF band, boxed, manual, £300. (Sleaford, Lincs.) Tel. Roger 0778 440068 and leave message and phone number.

EXCHANGE

Scanner enthusiast wishes to hear from other enthusiasts and exchange frequencies (particularly airband), information, and opinions on scanners etc. Contact Gary Nuttall, 55 Eastdale Road, Wavertree, Liverpool L15 4HN

Sony ICF2001D, excellent condition, complete with charger, exchange for Sony PRO 80 or AOR 2000 or similar handheld, must be in VGC. (Nr. Devizes, Wilts). Cliff, Tel. 0380 813745 after 5.00pm.

Yupiteru MVT-5000 scanner, handheld, want to exchange for any reasonable base scanner. Cash either way. (Melton Mowbray). Phil, Tel. 0664 812441

Swap Any scanner in good condition for Hoover house alarm, WHY? (Sevenage). Tel. 0438 365738

WANTED

H/B Circuit for Puma 20 lo/hi band scanner RX. Buy, borrow, expenses paid. B. E. Viney GW4KDP, 10 Hedl Meirion, Barmouth, Gwynedd LL42 1LA

Discone Aerial 25-1300MHz, would swap Practica Super TL 35mm camera 50mm lends VGC, WHY? Also tereleader wnated, WHY? (Stevenage). Tel. 0438 365738

Realistic PRO-2005 scanner or any scanner covering up to 1300MHz, for heart patient with limited cash. Jane, 1 Auction Way, Woolsery, Bideford, Devon. EX39 5TT

Frequency Lists from 100kHz to 2GHz, and any info on scanners and Ham Radio equipment. Please send to Robert, P.O. Box 7, Denton, Manchester. M34 2BW

Fellow Listeners in the Blackpool area to swap frequencies, with all replies answered. Also wanted radio books, mags, guides and any radio related literature. Mark Hoey, 64 Layton Road, Blackpool, Lancs. FY3 8HT

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Armadle PP, PO Box 8, Falkirk, Stirlingshire

Bellshill DX Group, 38, Bridgeford , Ave., Bellshill, Lanarkshire, ML4 1ND.

Big Sail BC, 80 North Dryburgh Road, Wishaw, ML2 7LD.

Border Revivers DX, PO Box 19, Galashields, TD1 2DE.

Border Raiders DX Club, PO Box 1, Gretna, CA6 5AT.

Bravo Tango, 34 Bruckley Court, Meathill, Peterhead, Aberdeen, AB4 6UF.

Burnside Breakers, 78 Viewpart Drive, Burnside, Rutherglen, Glasgow.

CBF The Blind, PO Box 8, Falkirk.

Clyde Coast Search, PO Box 17, Greenock.

Cree Valley CB Club, PO Box 1, Wigtown, DC8 9HA.

Dunaverty B Club, PO Box 7, Campbeltown, Echo Delta X-Ray, PO Box 5, Livingston.

Echo Five Group, PO Box 101, Musselburgh. Scotland.

Echo India Group, PO Box 422, Edinburugh, EH11 2DJ.

Esk Valley, PO Box 5, Bonnyrigg, EH19 3HQ.

Excalibur Int DX-QSL, 29 Northwood Road, Tullibody, FK10 2TJ.

Fortissat DX, PO Box 3, Shotts, Lanarkshire.

Girvan Breakers, PO Box 1, Girvan, Ayrshire.

Guardstown B Club, PO Box 25, Duns, Berwickshire.

Int DX Group, PO Box 41, Kilmarnock, Ayrshire.

Inverscairn Breakers, PO Box 7, Frazerburgh, Aberdeenshire.

Jacobite Warriors, PO Box 27, Inverness

Kilmarnock Cares, 14 Charles Street, Kilmarnock, Ayrshire.

Kinlochleven Highland, School Lodge, Kinlochleven, Argyll.

Kyle & Carrick, PO Box 5, Prestwick, Legal Forty DX Club, PO Box 12, Alloa, Clackmannanshire.

Lightning CB Club, C/O McCleary,

22 Briarwood Road, Wishaw.

Lima Delta X-ray, PO Box 4, Coatbridge, Lanarkshire, ML5 2QA.

Lima Foxtrot, PO Box 2, Lochgilphead, Argyleshire.

Lima Oscar, PO Box 1, Lockerbie, Dumfriesshire. DG11 2EQ.

Lothian Terriers Dx Group, PO Box 17, Livingstone, EH54 6TT.

Mull of Kintyre, PO Box 20, Campbeltown, Argyleshire.

Old Timers Country Club, PO Box 36, Perth.

Outer Hebrides, PO Box 11, Isle of Lewis, PA87 2AA.

Parkhill CB Club, PO Box 4, Bellshill, Lanarkshire.

Riverside Breakers, PO Box 30, Perth.

Robert Burns QSL Club, PO Box 2, Dumfries, DG1 1AA.

Romeo Delta Club, Bardennoch Cottage, Auldgirth, Dumfries.

Romeo Delta X-ray, 10 Wallace Street, Rutherglen, Glasgow, G73 2SA.

Romeo Mike, PO Box 275, Uddingston, Glasgow.

Scalloway DX Club, 5 Kirtleside, Sandwick, Shetland, SCBN, C/O Arnail, Patison, Neilston, Glasgow, G78 3AT.

Scotland WW, Po Box 34, Greenock, Befrewshire.

Scottish Hillbillys, Burnside Nursery, Cleghorn, Lanark, Lanarkshire.

Scottish Truckers CL, PO Box 46, Stirling, FK7 7YA.

Shetland DX Club, Po Box 9, Lerwick, Shetland.

Solway Pirates, Po Box 15, Kirkcudbright.

Tartan Breakers, PO Box 6, Wishaw, Lanarkshire,.

Tartan Pirate, PO Box 11, Lanarkshire.

Tinto Cb Club, PO Box 1, Bigger, Lanarkshire.

Tulloch CB, PO Box 16, Perth.

Two Saints BC, Seahorse, 158 Woodstock Avenue, Galashields, Roxburghshire.

Victor Sierra, PO Box 29, Kilmarnock, Ayrshire, KA1 4QG.

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Echo Delta World Link DX Group, PO Box 248, Belfast BT4 3HQ.

Golf Bravo DX Club, Po Box 59, Cookstown, Co Tyrone, BT80 8XT.

Int Screwdrivers, PO Box 33, Lismore, Co. Waterford.

JB Radio Group, PO Box 2496, Dublin 13 Rep of Ireland.

Midnight Breakers, PO Box 21, Donaghee, Co Down.

Moyle BC, PO Box 25, Ballycastle, Co Antrim, BT54 6BB.

Port of Larne RC, PO Box 20, Larne, Co Down.

QSL Group NI, PO Box 18, Lisburn, Bt28 2LT.

Stone Throwers CB PO Box 20, Cahir, Co Tipperary.

Valley CB Cha.Club, 40 Church Road, Newton Abbey, BT36 7LT.

Whiskey Tango Int TX, PO Box 18, Ballymoney, Co Antrim.

North West

Alpha Zulu DX. PO BOX 5, Stockport, Cheshire, SK5 6UW.

Booth Hall Break-A-Ways, PO Box 23, Whitefield, Manchester, M25 6WQ. Bravo Bravo Group, PO Box 9, Southport, Lancashire.

Cumbria DX Group, PO Box 31, Carlisle, CA2 7BW.

Delta Bravo DX Gp,

PO Box 59, Rochdale, Lancashire, OL16 2TJ.

Echo Bravo Club, PO Box 1, Ellesmere, Salop.

Echo Lima, PO Box 12, Workington, Cumbria. John Peel QSL Club, PO Box 20, Workington, Cumbria.

Ken's Kommandoes, PO Box 93, Oldham, Lancs.

Kendal & District PO Box 37, Kendal, Lancs. Lima Foxtrot DX, PO Box 8, Liverpool, L26 9XX.

Romeo Hotel DX Club, PO Box 2, Radcliffe, Manchester, M26 9DB. Sierra Charlie, PO Box 27, Southport, Lancs.

Tango Papa, Po Box 13, Southport, Lancs.

The Abled & Disabled, PO Box 15, Denton, Manchester, M34 1TY.

Midlands

ABCB PO BOX 13 North PDQ Nottingham, NG5 7DU.

Alpha Bravo Group, PO BOX 424, Telford, Shropshire, TF7 4RB.

Big T Breakers, 62, The Oval, Bearwood, Warley, West Midlands.

Boomerang Radio DX/QSL PO BOX 502, Telford, Shropshire.

Bravo Echo DX, PO Box 17, Evesham, Worcs

Breakaways CB PO Box 15, Swadlingcote, Burton on Trent, Staffs Britannia QSL Club, Brickyard Cottage, Main Street, Ticknall, Derbyshire.

British Bulldogs, 39 Dickinson Ave., Low Hill, Wolverhampton, WV10 9DH.

Charlie Alpha CB Club, PO Box 1, Craven Arms, Shropshire, SY7 9ZZ.

Charlie Hotel DX, PO Box 7, Chinnor, Oxon.

DR Int Dx 71 Group, PO Box 16, Redditch, B96 6JL.

Duston Radio Club, Duston Comm, Centre, Pendle Road, Duston, Northhampton. Godiva DX Club, PO Box 57, Coventry, West Midlands.

Headache Control, PO Box 105, Northampton, NN3 1YY.

India Bravo Breakers Club, PO Box 1022, Hall Green, Birmingham, B28 0YB.

ITA DX QSL Club, 7 Toll Bar Ave., Bottesford, Nottingham, NG13 0BB

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Mike Whisky Kilo, PO Box 279, Newcastle, Staffs., ST5 1PA.

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PO Box 3, Heanor, Derbyshire, DE7 7UH.

Organisation of RC, PO Box 33, Ripley, Derbyshire.

Red valley, PO Box 16, Kineton, Warwickshire. CV3 50PX.

Road Train QSL PO Box 216, Wolverhampton, WV6 9EY.

Ruby Radio Assoc., 44 Bath Street, Rugby, CV21 3JF.

Sierra Delta Int DX PO Box 9, Stourport, Worcs., DY13 8QN.

Signal Radio, 67 Brundall Oval, Bentille, Stoke on Trent, Staffs.

Telford Thunderbirds

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Tor Radio Association PO Box 17 Matlock, Derbyshire

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Tunstall B DX Club, PO Box 316, Tunstall, Stoke on Trent, ST6 5JP.

Unicorn CB Club, PO Box 35, Redditch, Worcs.

Warley & Bearwood, PO Box 15, Warley, West Midlands.

Work Peoples CB, 18 Pennine Close, Huthwaite, Notts.



Wales

Alpha Victor, PO Box 5, Ammanford, Dyfed, SA16 3BN.

Eagles Breakers Club, PO Box 12, Caemarvon, Gwynedd.

Lima Alpha, PO Box 28, Bridgend, Mid Glam, CF32 9XL. Lima Delta Int Group, 2 Pen-Y-Maes, Meliden, Prestatyn, Clwyd.

N. Wales Breakers, D.X.Q.S.L. Group, PO Box 35, Rhyl, Clwyd, LL18 1JN.

Papa Delta Group, PO Box 28, Tenby, Dyfed, SA70 8JQ.

Papa Tango CB Club, C/O 22 Gorwel, Amlwch, Anglesey, North Wales. LL68 9EY.

Pembrokeshire CM, PO Box 49, St Davids, Dyfed.

Red Dragon, 38 Amroth Walk, St Dials, Cwmbran, Gwent, NP4 4NQ

Sierra Alpha, PO Box 43, Rhyl, LL18 1YW.

Sierra Tango, PO Box 8, Rhyl.

Welsh Lancers CB. PO Box 610, Gorseinon, SA4 2WR.

Whisky Bravo DX Club, P.O. Box 123, Newport, Gwent.

South Coast

CC DX Swap Club, PO Box 9, Isle of Wight, PO30 1AA.

Dover International, PO Box 112, ST Leonards On Sea, East Sussex.

Double "M" CB Club, P.O. Box 146, Haywards Heath, West Sussex, RH17 7YY. Ham Int. Radio Club, PO Box 898, Lewes, East Sussex, BN7 1LZ.

Sea Smugglers, 17 Edinburgh Road, Bexhill on Sea, East Sussex.

String Town Breakers, PO Box 47, Hailsham, East Sussex.

Tango Charlie,

Time Off B Club, Market Buildings, Vicar Lane, Liverpool.

Viaduct Breakers, PO Box 3, Stockport, Cheshire, SK3 9PP.

Whiskey Tango DX, PO Box 12, Burnley, Lancs.



PO Box 70, Portsmouth, PO2 9AP.

Waterlooville BC, PO Box 12, Waterlooville, Portsmouth.

Whiskey Delta X-Ray, PO Box 284, Guernsey, Channel Islands.

Worthing DX & QSL PO Box 404, Worthing, West Sussex.

North East

Blue Star, PO Box 11, Cramlington, Northumberland, NE23 9JW.

Calcaria & District Club, PO Box 6, Tadcaster, N. Yorks., LS24 9HO.

Crook DX Club, PO Box 2, Crook, Co Durham, DL15 8LX. Echo Whiskeys, PO Box 8, Cramlington, NE23 9HX.

Golf Bravo Charlie, PO Box 5, Consett, Co Durham, DH8 8NG.

Killamarsh Breakers PO Box 96, Sheffield, S31 8JZ.

Mike Delta, Po Box 244, Sheffield, Yorkshire, S12 2DX.

Mike Romeo, PO Box 5, Cramlington, Northumberland, NE23 9LB

November Charlie, 2 The Fairway, Romenby, Northallerton. N. Yorks.

November Yankee DX PO Box 14, Harrogate, N. Yorks. The Seventeen Club Stockton-on-Tees, Cleveland.

Spen & Mirfield Group, PO Box 5, Heckmondwike, West Yorks, WF16 0XA.

Steel City Breakers, PO Box 275, Sheffield, Yorkshire.

Thorn Birds DX/ QSL, PO Box 2, Spennymoor, CO Durham, DL16 6EG.

WDC Int QSL, PO Box 71, Wakefield, West Yorcs.

Wanderers BC, C/O Cavill Place, Anlaby Road, Hull.

Weardale CB Radio, PO Box 2, Stanhope, Durham, DL3 2TR.

Zone 18 B Club, 2 Elizabeth Drive, Palmersville, Forest Hall,

East

Bridge Breakers, P.O. Box 20, Clacton On Sea,

CB Intl Essex, 14 Meadow Way, Jaywick Sands, Clacton on Sea.

Eastern Star QSL, PO Box 184, Drayton, Norfolk, NR8 6RJ.

Hopscotch CB &

DX, PO Box 25, Skegness, Lincs, PE24 4LU.

Nene Valley BC, PO Box 37, Peterborough. Sea Dragon, PO Box 5, Sherington, Norfolk, NR26 8SZ.

Whiskey Charlie DX Group, PO Box 1. Spilsby, Lincs., PE23 5NE.

Zebra Wireless Int DX, 45 South Parade, Gainsborough, Lines

South East

Albion Breakers. PO BOX 17 Dagenham, Essex.

Bacon B CB Club, 36 High Road, Watford, HERTS.

Bravo Lima Charlie, PO Box 66, Bedford. BEDS.

East Kent DX Group, PO Box 61, Margate, Kent, CT9 1YP.

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Hampton Court DX. Po Box 50, East Moseley, Surrey.

Hotel Mike DX, PO Box 11, Hampton, Middlesex.

Maidstone Mod, Market House, Earl Street, Maidstone, Kent.

Marine Breakers, 15 Woburn Place, Billericay, Essex. Old Mill B Club 17 Mount Cottages, Old Common Road, Cobham, Surrey.

Omega DX, PO Box 38, Dagenham, Essex.

Our Heritage DX Group, PO Box 19, Gosport, Hants.

Mike Alpha DX Club, PO Box 3, Sidmouth, Essex.

Romeo Bravo Club 80 Fullers Way, Tolworth, Surrey.

Romeo Lima DX, 213 Hightown Road, Luton, BEDS.

Sierra Foxtrot DX & QSL Club, 52 Sunnyside Road, Hitchin, Herts., SG4 9JQ.

Stort Valley Radio Group, PO Box 1001, Harlow, CM21 0AG. Tango Echo, PO Box 1, Sothend on Sea, Essex.

Turbo CB Club, PO Box 163, High Wycombe, Bucks.

West Middlesex RG PO Box 23, Brentford, Middlesex, TW8 9NF.

London

Aeronauts of the Airwaves, PO BOX 525, London, N20 0UN.

MSGB (VO) School House, Meadway School, Littleton Street, London, SW18 3SZ.

Radio Travellers Int, PO Box 558, London, NW5 1HW

Scarlet Cedar CB Radio, PO Box 1336, London, N22 6YW.

South West

Delta Knights DX, PO BOX 93, Poole.

Devonport CB & DX, PO Box 28, Plymouth, Devon.

Exeter Breakers Club.

P.O. Box 85,

Foresters DX QSL, Paynes Cottage, Popes Hil, Newham, Gloucs., GL14 1LD,

Plymouth Devils, PO Box 91, Plymouth, Devon.

Radio Contact DX. PO Box 94, Exeter, Devon.

Somerset Knights DX, PO Box 26, Yeovil, Somerset.

Sunrisers DX, PO Box 7, Bridgewater.

Tango Charlies DX , PO Box 84, Westbury-on-Trym, Bristol, BS10 6NR.

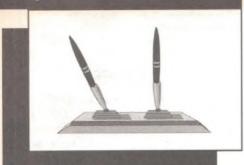
The Navigators DX Group, PO Box 32, Bumham-on-Sea, Somerset, TA9 3SJ. The Swindon CB, 32 Vicarage Road, Swindon, Wilts.

Torbay & SW DX, PO Box 48, Torbay, Devon, TQ2 7SZ.

Warminster Eagles, PO Box 13, Warminster, Wilts.,



CB Letters



EMERGENCY CHANNEL 23!

In recent issues you have been focusing on Channel 9 monitoring groups and having read the articles I am impressed by their dedication and professionalism. Here in the Leicestershire area we have Leicester control which is a similar sort of thing but it monitors channel 23!

It is a less formal group than some of those mentioned and comprises mainly of retired or house-bound CB operators. Their main purpose is to provide whatever form of help that may be required.

Usually manned from about 5:30 am to 8pm most of the people then go up to 36 until about 11pm or later. If a breaker is looking for directions in Leicester on 19. Most of the time a friendly voice will tell him or her to "go up to 23 and ask for Leicester Control", There they should find Cyril (Hurricane), Colin Roger (Red Rust), Bill (Morgie Doo) Trever (Tug Boat) and Rob (Captain Jack). (Apologies to

those missed out).
So, if you're lost in Leicester, and on CB, ask for Leicester Control on channel 23!

Tim (Mr Heli), Leics.

Tune in the next time you're in the area. It's good to hear from yet another monitoring group. If you're monitoring out there, but have yet to be discovered then let us know and we'll update our Monitoring Map in the near future.

THE ALTERNATIVE VIEW.

by: The Rt. Hon. B'Stard.

I'm afraid one will have to contradict the views expressed by 11+10 Radio Services of York and printed in Backchat March 92.

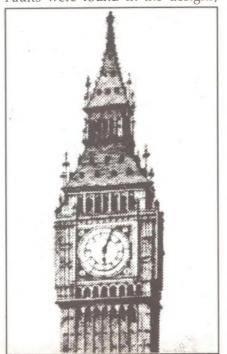
While Binatone and others share a number of commonly used components. 11+10 must surely agree that it is not always the components which let the longevity of a CB set down. In

BACKCHAT

If you have a letter or comment send it to CB Letters, A.S.P. Ltd, Argus House, Boundary Way, Hemel Hempstead, HP2 7ST.

the early days of CB in this country we were enveloped by a number of makers all completing for a stake in the newly formed market. And during that period new sets were being sold so fast, that manufacturers were forced to cut the odd corner. This led to a number of products being unleashed that hadn't been fully bench tested to a standard we now expect. In fact the manufacturing industry will even today admit that during this time they bench tested about one in every two hundred, and the testing time was limited to a very short duration. Let us not forget that CB sets had a relatively cheap new sales price tag. This meant that profitability to the makers was lowest when company time was spent carrying out extensive bench testing. But Binatone were not alone. Others produced goods of a sub-standard quality though they were quick to see their mistakes and rectify the faults. This fact is borne out by the way sets such as Rotel and Harrier even today retain their high resale value, and Binatone, apart from their 5 star model has fallen by the way side.

One should always remember that the problem of reliability isn't wholly dependent on internal components used. Otherwise similar sets using the same components would have been subject to the same failings. No. Faults were found in the designs,



internal fittings and on soldering. All problems which manufacturers have direct control over and more importantly have the capability of rectifying. Other makes might not be totally blameless, but early Binatone models suffered more than most. And as such, are not held in very high esteem by the majority of present day breakers. Like other daily users I have my personal preferences when it comes to makes and models. And I am suspicious of manufacturers who diversify from their regular electronic specialist fields such as building Hifi's, commercial radio's, TV's and even computers. To fill a gap in the market just because they see a healthy profit margin. Companies such as Binatone and Amstrad should stick to what they know best.

Possibly G1JBZ has by now been danced upon by stiletto wearing amateurs for suggesting our original frequency allocations should have been at 70 MHz. It is a good idea though again it would isolate us from everybody else in the world. But. One does wish he and others like him would stop believing - CB is "supposed to be for"..."short range communications, not DXing". All radio services have ranges indefinable in terms of distance. Sun-spot, lift, sun-cycle and therms will make any radio service act in a way uncharacteristic to their particular design. Equally a breaker living in a city or large town, should not expect to cover the same distance as another breaker living in the wilds using identical equipment and where other important factors are equal. CB was originally qualified by the Home Office as being for "short distance", but define short distance? If given to normal use I live in an area which allows me to regularly communicate over 10 miles, that would become my EXPECTED norm. One might even have justification in considering this to be my normal "short distance" working. If however, one lives in an area which allows one to regularly communicate over 200 miles, apart from being very lucky, that would be my EXPECTED norm. And therefore, my normal "short distance" working! Perhaps the Home Office would have been better in giving an 'expected normal working distance of up to X',

whereby ending this bone of contention between our regulatory institutions and CB users.

I think your apparent misguided belief that CB'ers should not DX on CB frequencies is very much a symptom of your amateur status. Thankfully a view shared by very few of your HAM compatriots. The thing about belonging to a supposedly peer group is that one can look down on others and hand out criticisms believing it to be justified. May one remind you that in America the use of FCC USB and LSB frequencies have for many years been associated with DXing. One should not blame honest FM UK CB'ers for using the best available modes at their disposal in the pursuit of contacting fellow human beings. CB radio has a myriad of functions within its terminology "hobby". DXing is just one of those functions. As one has previously said before. Many CB'ers like myself, have no interest in becoming a radio ham or joining a supposedly peer group. CB radio fulfils my needs and allows me to enjoy its many facets without having to hide behind an imaginary elitist call sign.

I seem to recall reading sometime ago in this illustrious magazine that the ownership of illegal CB sets is as much an offence for CB'ers as it is for amateurs. Though one is sure your intentions are strictly honourable one would has to question the logic behind placing your amateur licence at so much risk. Have you a dispensary note from the Radio Investigations Service to handle such goods?

The next time one is at York Races one will pop along for a nosebag and grog luncheon.

It's nice (I think) to hear from the honorable member again even tgough I would have thought he would be busy trying to save his seat! If he holds on to it, I'm sure we'll hear from him again. I wonder, if there's a hung parliament, can certain members be hung aswell?

ROCK THE JOCK

Do you know Tony Jaconelli? Of course you do. He's Chairman of the 2nd City Breakers, Chairman of SACBC, Vice President of Natcolcibar, writes regular and very informative article for this magazine and knows more about the rules and regulations of national CB than most people care to mention. There are people all over the country that claim that they know everything about the laws governing rigs and antennas and so on but Tony is the one who

actually does. Most Sundays when our club, the 2nd City Breakers, meet Tony usually comes along with more information, letters, diagrams and even more laws.

Like myself, he attends many eyeballs and social functions. The mass eyeballs at Auchanlarie and Southeness and many more as if there's an eyeball or event in travelling distance of Glasgow Tony will be there. On these occasions he regularly goes without sleep as he does what we call caravan hopping, going from one caravan to another. As long as there is a light on, Tony will call for a chat.

Had a bad day? Seek out Tony, as there's never a dull moment with him around. Next time you see him just eyeball that hat as he never wears the same one twice! When they've been worn they're taken home and pinned on the wall in his den where he has quite a collection.

If you need help forming a club or advice regarding CB radio then drop Tony a line as he is always ready and willing to help a fellow breaker.

I myself have honorary of a few CB and Dx Clubs being a popular mobile breaker and am quite surprised that Tony who dedicates so much of his time and effort to CB that he has not received the same honour. So what about it all you CB Clubs out there, surely there could not be a more deserving person than Tony.

Tommy (Rob Roy).

Thanks for your kind words about Tony. He is one of the small band of incredible breakers and enthusiasts that keep CB going. Without this group CB would have died out along with the skateboards

CB Letters

of this world. He's also one of the talented team of writers who make this the only magazine for CBers!

POETS CORNER

Thanks for a great magazine full of interesting articles and letters. In recent issues, I've seen several poems from readers and would like to see mine in print.

ODE TO A BREAKER

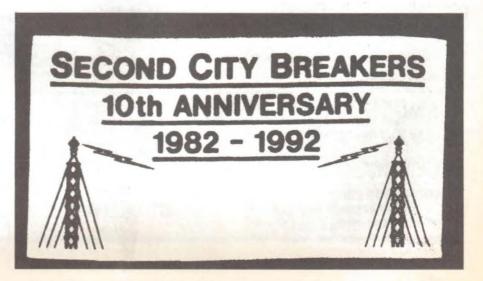
For all you aspiring young breakers, remember that fate deals your hand, that you carry through your life, Some make the grade, while others do not,

Well all that I can say to maybe help you decide is.

"It's tough, that's life breakers brake. Grizzly Bear, Bristol.

OK, I give in. You can have a poets corner. Send your poems to the address above and we'll do the rest. Please keep them clean, honest and decent, preferably about CB and not too long.





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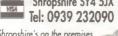


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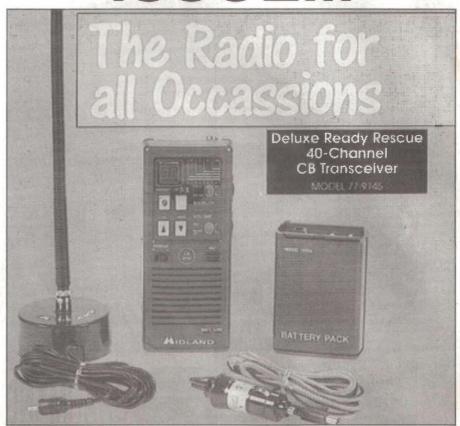
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