

# In one year our <sup>K40</sup> antenna has become the largest selling CB antenna in the world!

### 1. It's more expensive...

£32.50 suggested retail vat included

And when you pay more, you expect more!

#### **MORE PERFORMANCE:**

The K40 is guaranteed to transmit further or receive clearer than any antenna it replaces. We know it will. We've tested it with 771 CB'ers just like you for one Vear

MORE FLEXIBILITY:

You can fit your K40 to any mounting surface. It will fit any vehicle you'll ever own! That includes choppers, dune buggles, gutters, mirror mounts, luggage racks, trunks, hatchbacks, through roofs, semis, pick ups and RV's.

#### **MORE QUALITY:**

It's not imported. It's not made in Taiwan, Korea or Japan, It's American made in an American town. It's made with better materials that cost more and by professional people we pay more. And we designed it in the U.S.A.

\* Including optional mounts at extra cost

#### ... This Antenna is so DYNAMITE you receive a ...

DEVENDENCE SKATCHER SKATCHER GUARANTEE 1: The K-40 will transmit far

GUARANTEE II

AL YANKAL YANKAN A

### 2. It's made 3. It's proven best! better...

... Here's what the leading U.S.A. CB publications said.

CB TIMES: "... it's not often that a product bursts onto the market scene, dominates and improves CB'ing for everyone. American Antenna and the K40 are doing it-repeated tests showed the K40 could out-perform the major competitive brands.

RADIO ELECTRONICS: "The results of our tests showed that, in three different positions of the monitoring receiver, the model K40 equaled or out-performed the competitive antenna. Apparently, American Antenna's advertising is not merely Madison Avenue showmanship.

PERSONAL COMMUNICATIONS: ". . . an impressive 95% of the trials, the K40 out-performed the existing mobile antennas. We had to try one for ourselves.

In every case, the K40 either equaled or out-performed its competitor

"No ifs, ands, or buts! The K40 Antenna from American Antenna would have to be just about the best antenna around.

CB MAGAZINE: "Introduced in October, 1977, the K40 quickly became the top seller and in mid 1978, became the number one selling antenna in the nation.

#### ... Here's what CB'ers all across the U.S.A. said.

ANTENNA SPECIALISTS: "..., truck driver and CB'er for 10 years ... 50% further than my M410 'Big Momma'.

-J.H. Collett 207 McFee, Bastrop, LA

AVANTI: "I'm an electronic technician with a Second Class FCC license ... I was able to transmit 70% further and tune the SWR 75% lower than my Avanti."

-H.R. Castro VRB Monserrante D-67, Salinas, Puerto Rico

PAL: "... 20% better in transmission and reception than my 5/8 wave Pal Firestik."

-John A. Blum, Box 446, Zelienolpie, PA

SHAKESPEARE: "... I've been a CB'er for three years and the K40 is the best I've ever had. Better in reception and transmission than my Shakespeare."

-H. Bachert, Jr., 15 King Rd., Park Ridge, NJ HUSTLER: "Compared to my Hustler XBLT-4, the K40 can consistently transmit 40% further and the reception was better. The K40 is the perfect way to complete a CB system. -Jerome R. Brown, 7800 S. Linder, Burbank, IL

PERFECT FOR FM TOO!

#### (SPECIAL NOTE) IF YOU'RE A **BEGINNER:**

Our K40 Dealers will be happy to sell you any of the older style and less expensive antennes that are great bar-gains for any beginning CB'er



...Sold exclusively by 5000 K40 dealers throughout the U.S., Canada & U.K.

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#### **CB** Radio Magazine

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The Radio Society

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Well, this past year has gone pretty quickly, hasn't it! It doesn't seem that long ago when we were all out with coats buttoned up to the eyes and gloves, scarves, woolly hats and flasks of tea (or brandy!) marching for a legal CB service. (Why did they always have rallies in winter?) And now we've had that service, welcomed or not, for a year. No one can pretend that it has been ideal but, on the whole, it seems to have worked better than its worst critics predicted. Mind you, at one time we were beginning to wonder. It seemed that no sooner was CB legalized than it immediately degenerated into a horrible mess, horror stories were abounding and it really did seem that CB wasn't even getting the chance to establish itself properly. Unfortunately, for the advantage of a citizens' band service open to virtually anybody, the price you pay is that anybody can use it, whether they want a traffic report on the M1 or to soundly abuse and insult the listening public. There are, however, indications that this is beginning to die down – I hope so!

No one knows what the next year will bring – I only wish I did – I could probably make a fortune instead of being shut up in the editorial office for 12 hours a day (Well, maybe 10...eight...six?) (Now that's more like it.—Ed.) It was gratifying to find that out of all the people I spoke to for this article, most of them thought that CB had a real future in this country. To celebrate this important first anniversary, there will be special features and articles throughout this month's magazine, covering a wide range of the CB spectrum.



One of the big problems CB has suffered from this year has been its public image. A lot of the blame for this has been put at the feet of the press, particularly some of the more sensational daily papers.

There seems to have been three main types of stories. The first was more usually seen a few months ago, hidden amongst the share prices in the financial pages of the more serious papers and had headlines like "Has the bubble burst for CB?". Most of these stories concentrated on the apparent lack of sales since legalization and speculated that many of the big companies had "caught a cold" in "dabbling" in CB. Unfortunately, there were some quotes from fairly senior personnel in some of these companies supporting this claim. No one seemed prepared to suggest that the companies may have estimated sales wrongly in the beginning - but then no one likes advertising their mistakes.

The second story is of the "CB broke up my marriage" or "CB gang warfare" type. It's fair to say that those stories weren't published simply because they featured CB – they must have been considered newsworthy in the first place – but how often do you read a headline saying "Stamp collecting" broke up my marriage" or "Fishing gang warfare"?

The last type is a bit more sympathetic. Stories about CB bringing a couple together and their subsequent wedding or a disabled child being given a rig as a 'lifeline' get an "Aah" from everyone but, unfortunately, these stories are only really featured in local papers rather than the national dailies.

I did a quick straw poll amongst some of the papers that regularly report on CB. Sadly, not all of them were prepared to answer but the Daily Mirror phoned up to answer a letter I had sent asking for their editorial views on CB and said, "We only report on CB-connected stories as they happen and we don't think we take a particularly biased view". The Editor of the Sunday Journal, a give-away newspaper covering large areas of the country, sent me the following reply:

"I have to keep an open mind about legalized CB radio. As long as users keep to the required frequency then the Sunday Journal can hardly have any worry about this concept. The fact that CB radio is attracting large numbers of selfish indivíduals and is used by unsavoury elements of society is unfortunate and has been reported in this paper. I am also disturbed by the illegal use of CB radio on alternative frequencies.

"I agree that CB has suffered with a rather bad public image over the past year in certain aspects. CB fans, however, are very quick to publicize their good deeds and their publicity machine seems to me to be very well oiled. There have been numerous cases of CB users aiding the emergency services and/or raising money for charity.

"Each story featuring CB radio will be treated by this paper and, I suspect, every other paper, on its merits.

"Of course, we thank responsible users of CB and, of course, we are against its misuse."

Very laudable sentiments but, I'm afraid, it's the old story that bad news is better than good news. Although the Journal has published large articles on the more adverse side of CB, there have been no comparable articles on the good side of CB!

Once again, it's the minority spolling it for the majority, since it is only the minority that behave in the way that gets the worst publicity. But one thing's for sure, whilst the bad headlines predominate, there will be a lot of people who think twice before buying a CB.



A good way of finding out how FM CB is progressing at the end of its first year is to visit a club and speak to its members. Although there is probably no such thing as a typical club, the EARS club (Elite Amateur Radio) at Bracknell, Berkshire, covers both rural and urban areas and has a proportion of both AM and FM users.

The club itself was formed in September, 1981. It wasn't started with the intention of being either an AM or FM club. The main prerequisite for membership was and still is whether you were suitable, rather than which mode you used, as the club is keen to attract members who are responsible and sensible breakers. This, the committee feels, is self perpetuating, as if the club is good, it will attract good members.

I spent some time talking to the committee and asked them why they felt the club was successful and still recruiting, when many other clubs have not been able to sustain membership. Their first comment was that the EARS club was run on a different basis to many others. For many breakers, CB is a family hobby and the club caters for family membership. There is a room with disco, flashing lights, etc., for the more energetic but there is also a large lounge with easy chairs, tables, accessory shop and snack bar which is used by members' families aged from a few months to old age pensioners. The club house is on the Pinewood Leisure Centre complex and solely used by the EARS club and this ideal venue has also helped the club and its stability.

The committee has very definite ideas on the success of FM CB. Although the majority of members are FM users, quite a few have an AM CB tucked away and many of the original members are or were AM breakers. They regret that FM is used as a toy by some people but their experience shows that many breakers who start off by being wallies either pack in CB fairly quickly or become sensible breakers.

The club experienced a slowing down in new members and attendance has dropped slightly, especially over the summer period but the general opinion was that EARS has grown as CB has and that FM has benefitted the club, since they attracted potential members rather than the strongly-AM clubs in the area. The friendly atmosphere of the meetings has prevented the disintegration that other clubs have suffered and the club's reputation for the "better face of CB" has meant that people can attend the meeting with no fear of who they may be eyeballing.

The committee strongly believes that the past year has proved that CB was wanted and needed and that breakers now have to get on with making the system work. They see this as being a process of self education on behalf of breakers and the general public. Looking at the future, they are optimistic for both EARS and CB. They hope that the 'wally' situation will improve still further and expect interference to be less of a problem as operators get used to their equipment and more manufacturers fit better



filters to both CB and other electrical equipment. Looking around that night's meeting, the Chairman reckoned that at least 60% of the people were at the original meeting a year ago – which is a good record for a hobby that has a reputation of rapidly changing.

Apart from talking to the club's committee, I spent some time chatting to two members about their year of CB; after all, a club doesn't consist entirely of its committee. Mary and Peter, or Red Vixen and Hawkeye, both work on a farm outside Bracknell. To a certain extent, they are more fortunate than 'townie' breakers as they don't suffer from the worst levels of misuse and bad language and the channels are not so badly overloaded. Their first rig, a Uniace, was bought for legalization and they have run a licensed, legal system since then. I can do no better than to quote directly from Mary and Peter on their impressions of CB.

"We bought the CB for fun and we've made lots of new friends, although we have found it very useful for directions and it's at its best in traffic. Since legalization, we have bought a Rotel to use as a home base and (Peter) would really like to have a proper radio shack. Unfortunately, it's too crowded with people who don't know how to operate. Sometimes nowadays you're lucky to get a conversation but it should be better in another six months or so when the novelty wears off. It's easy to blame kids for it but it's not always their fault. Since the prices dropped so drastically, it has attracted too many idiots and, unfortunately, it has put some genuine users off - we don't talk to nearly as many people as we used to and the friendly copies have gone. That means, really, it's not so much fun. When we first went on channel, there were a lot of AM users who could educate us new users but that doesn't seem to happen now.

"The good thing about CB is that it's for all walks of life and there are 10 good breakers for every bad one. Younger breakers just need someone to help and educate them. From what we can see, town breakers are their own biggest enemy. They put up big twigs and use more power to get out over the overcrowding and they just add to the confusion – we're better off in a country area. We blame the Government for not being realistic in the first place, rather than the breakers and the authorities for not taking it seriously.

"Ultimately (Peter) would like to go on UHF 934MHz. It could well be better than 27 meg. But, although we moan about it, we wouldn't be without CB. If it broke down tomorrow, we would go and buy another. It's better than television! We have got more out of it than we expected – lots of friends and a social life. Our big regret is not being able to get hold of the mike keyers to thump them!"

Once again, the typical breaker probably doesn't exist, Mary and Peter's opinions probably echo those of many, many other breakers.

# 

This superb prize, which has been donated by Plustronics Ltd., will be awarded to the person who enters both parts of this competition **and** gets the right answers in the opinion of the judges. Part 2 of this competition will appear In December CB Radio Magazine. This month you have to identify the six different CB rigs which we have used to make up the composite photograph below. When you have successfully identified the name and model of each rig, write your answers down so that you can fill them in on the entry form which we will print with Part 2 of this competition next month.

#### DO NOT SEND US YOUR ANSWERS UNTIL YOU HAVE COMPLETED PART 2 OF THIS COMPETITION



# Now the ONLY combined mobile AND hand held CB THE MAXCON ZE ALERT NOBILE

**T**RANSCEIVER

- No installation
- Fully portable-full 4W power
- 40 Channel FM
- Includes battery pack and carrying case
   The CB for all the family

whether in the home, car or outdoors.

> Battery pack and carrying case.

> > Strap for

carrying case.

From the manufacturer of the Midland range, Cobra, Colt and Commtron comes the newest innovation in CB-a combined mobile and hand held CB.

A CB unit that requires no installation and no SWR tuning. Just plug into your cigarette lighter, put the magnetic mount and aerial on the roof and you're on the air. For portable use just put the batteries in the battery pack, clip the strap to the carrying case, screw on the aerial and you have a full 4 W power, hand held CB!

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5



Ask any breaker (well, legal CB'er, at least) what's wrong with the CB system in this country and it's guaranteed that the catalogue of complaints will include overcrowding, swearing, misuse of channels, interference and general dissatisfaction at the level of behaviour on channel and, in most cases, these complaints would be justified. It's also guaranteed that at the end of the list, the breaker will finish up with "Why don't the Government/ Home Office/British Telecom do something about it – what are we paying our licence fee for!".

This seems like a reasonable question, especially as the Government has recently announced that approximately 300,000 licences have been issued - which works out at £3,000,000 even by my shaky maths. However, as most of our readers will already know, CB is a non-protected service. This means that while CB equipment must be maintained and used so that it doesn't cause undue interference to other services, breakers cannot be protected from interference from other radio services. British Telecom is responsible for monitoring radio frequencies for the Home Office but the number of interference complaints they have to deal with leaves them very little time for general monitoring. So, in effect, it seems you are not really getting anything for your money apart from a blue licence and a yearly reminder and the dubious advantage of being legal.

Of course, British Telecom and the Home Office are stretched even further because of the economic recession, spending cuts and lack of staff, so what facilities they do have available have to be concentrated on what they consider are the more important areas of the radio spectrum. This isn't a lot of comfort to the poor breaker, though.

This apparent lack of value for money seems to be encouraging breakers not to bother to get a licence or to renew it when the year's up, which starts a vicious circle of less money so less action, etc. How justified is this accusation of non-interest from the authorities? I contacted the Home Office to ask what the licence money was spent on. They explained to me that, quite simply, the law requlres a licence to operate CB (or PMR or marine or amateur radio) and the licence fee for any radio service is set Is your licence fee worth paying?



to cover the full administration costs so that the users and not the general tax payer pay for it. Apart from general administration costs at Chesterfield, the £10 also has to cover payments to the Post Office to issue licences and keep records, administration and technical development costs at the Radio Regulatory department and a contribution towards British Telecom interference-tracing costs (interference from CB to other users). That doesn't leave much over for dealing with the bucketmouths and wallies. The Home Office also pointed out that to mount an enormous monitoring/ eavesdropping exercise (which users could well object to) would cost a great deal of money that is not available and the licence fee would, consequently, have to go up to cover it.

Strangely enough, we seem to be the only European country that suffers this badly from the misfits that delight in bunging up our channels. Although other countries, obviously, have their own version of radio vandals, citizens' band use seems to be on a different, less social, level and less prone to the misuse we experience. The only exception to this in Europe is Italy, where CB'ers delight in outdoing each other with power and volume but I suspect this is a national characteristic rather than a CB problem.

The other big exception to this is America, that cradle of citizens' band where unlicensed operators probably outnumber the licensed ones. Although the FCC (Federal Communications Commission) tries to concentrate its efforts into catching the blatant outbanders and burner users, it doesn't seem to have any great success, especially as its budget has been dramatically cut over the past few years. It has even been suggested that the CB licence be abolished completely in an attempt to reduce costs, although this was greeted with alarm by some groups within CB. REACT, particularly, were against this step and many other organizations, including CB publications, regarded this as an attempt to trivialize CB. It would be encouraging to think that since CB has been in existence longest in the USA that the problems would have been ironed out in the past 40 years but, unfortunately, it doesn't seem to be the case. The FCC are in a similar position to the Home Office in that they just don't have the means available to combat the CB abusers and in a country of an estimated 30 million operators there are plenty of those.

Whether we can expect a better service in the future and more active measures from the authorities remains to be seen. It may well be that we have to consider putting our own house in order, as the funds (and inclination?) are just not available for anyone else to.

# Shogun

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# with Sel-call

The new communications system at a price you can afford.

Shogun quality CB with Sel-call is for serious users – users who need one to one communication – as well as the usual network

facility. Shogun is ideal for business or private use.

A slim efficient Japanese CB transceiver with Sel-call to match – Legal 27 Mhz FM.

Shogun comes with full money back guarantee. Shogun with Sel-call £148.50 each – without Sel-call £99 each.

Prices include postage, packing and VAT. Antenna not supplied.

Write now for the finest CB with Sel-call. Featuring:

Channel selector with LED read-out. R.F. Gain. Squelch control. Volume control. Delta tune. PA or CB switch and noise blanker facility. Microphone and fixing bracket. 10 decibel attenuator switch. Selective calling unit with 2560 calling codes over 40 channels. A seven second audio signal and a constant visual flashing device. Call button. Normal/Sel-call switch.

olituinal
Signature: Or please send me all particulars. Please allow 28 days for delivery
Postcode:
Address:
Name:



A personal, slightly humorous, view of the CB magazine scene at the end of one year of legal CB.

As the first CB magazine in the UK, apart from a pioneering effort called Bandstand (which gave us a lot of inspiration), we have seen the arrival (and sometimes departure) of a wide assortment of competitors. Some of those which no longer exist, we sadly miss. Some of the survivors don't really deserve to be around. The last year has been the proving time for CB and, at the same time, the CB publications.

Herr Bauer, Herr Britscho, Herr Glatz and Herr Reppin used to delight us each month through the badly-translated pages of CB-Euro-Revue. Well remembered for articles on CB in Libya (Do camels really break on the 9?), interviews with sciencefiction writers and adverts for toilet paper, this European magazine is no longer published in the UK but the lucky French, Austrians, Dutch, Germans and Belgians can still get a copy.



CB-Euro-Revue. Is Wipe a new Continental loo roll?

Sweeny Todd, Todd Slaughter and Al Gross conspired together to bring us CB News, which, despite its cartoon-style front cover, used to carry some fairly-respectable CB features. Some interesting historical pieces and some original photographs of scanners and cordless phones (which in those days were fairly rare) often used to brighten the pages up.

The front cover of CB News was obviously highly regarded by the publishers and it was used to launch 10-4 Action, hailed as "The new monthly comic for citizens' band radio fans". Citizens' band radio fans, obviously, were not too keen on comics and especially not 10-4 Action. This was not surprising because this "was probably the worst magazine in the world". 10-4 Action ceased to exist, so unfortunately, did CB News.

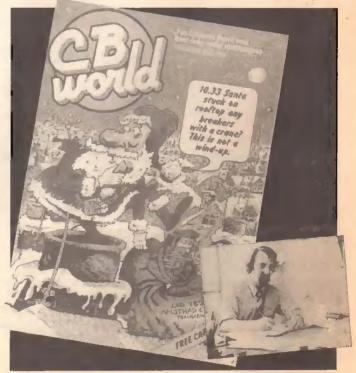


Yearoff

Everyday stories about CB'ing folk (If our hero extends his oerial, he may even get our).

The only CB newspaper to appear disappeared during 1982. Supposedly suspended for a couple of months, CB Gazette seems destined never to return. Always controversial, very pro-AM, anti-FM and, consequently, a bit unrealistic as a CB publication. It is rumoured that one member of CB Gazette's editorial staff is now working as a secretary for IPC, who, for their sins, are the publishers of CB World.

Renowned for such rivetting articles as "How to convert your twig into a fishing rod", "27MHz goldfish" and "1-4 for a coffee", CB World must get the prize for the most alternative uses for CB. Forthcoming editorial features are promised on "Modulatin' on the moon", "CB for scuba divers" and "Rigs for pigs". As well as these more obviously frivolous pieces, CB World does actually do a lot of good work for charity.



(Editor CB World) writing a begging letter to Oxfam for a new blazer.

# riendly Competition



Breaker reject model. Deciding whether to be a lorry driver or a sex symbol.

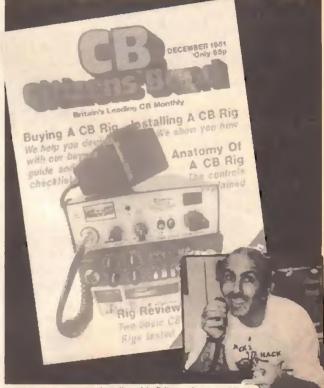
Judging by its cover, Breaker On The Side is trying very hard to become a pocket Playboy. However, BOTS, as its readers have aptly named it, still manages to cover club and charity events in great depth. Obviously aimed at a more northern audience, I wish that BOTS wouldn't keep using Breaker's cast-off models on the front cover.



Scenes from a recent editorial conference at Breaker.

Sister publication to Exchange & Mart (better paper quality, less advertising), Breaker has carved out a niche for itself as the CB magazine with a softcore-porn centre. Unfortunately, the bad economic climate of '82 has resulted in the scantily-clad female content being dropped which has left its readers (and me) with a pretty good in-car entertainment feature, a cartoon and a bit of CB info. Staffed by amiable loonies who occasionally fire off a few warning shots, Breaker is definitely the better of the two Link House CB titles.

Born out of Breaker and serving as a vehicle for the articles that nobody else wants, What CB is about to incorporate Radio Amateur Review. This, no doubt, will soon become Radio Amateur Review incorporating What CB, which in the fullness of time will become Radio Amateur Review. Now, if you were to incorporate Breaker with ...?

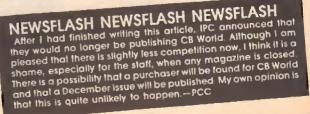


Mack The Hack politely telling his Editor where to go.

One of the most unlikely contributors to a CB magazine must be cab driver Mack The Hack. This Fred Housego of Argus Specialist Publications, is one of the few originals left on the staff of Citizens' Band. Citizens' Band has a nice line in record reviews and "coming next month" pages and has never been the same since Rick, its original editor, left. Chris, who took over, made it his first job to update the Rig Check List, which used to be the funniest thing ever.

The only magazine which really tells it how it is, is CB Radio Magazine. Biased? I may be but we certainly are the most informative, the most copied and the most modest.

We lead, others follow. 10-10.



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Model P 27-1

**High Quality Pre-Amps** 

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**Quality Frequency Counters** 50 MHz Price £68.91 (P&P £4)

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Other Linear Amps available:-B70 - 70W FM 120W SSB Price £39.95 (P&P £2) B150 - 100W FM 180W SSB Price £57.50 (P&P £2) B35 — Switchable Version B30 Price £19.25 (P&P £2)

Price £119 (P&P £4)

B300P 400W SSB 140W FM

**CB** Radio November 82

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Internal maintenancefree rechargeable battery, up to three working days' use on high power.

Internal protected 13.8V mains-regulated power supply.

Internal battery charger(fully charged in 5 hours). Quick-release car mounting bracket.

PL259 aerial socket, rubber duck antenna, shoulder strap, mains lead, etc. 4-watt, 40ch. UK spec. for use as home base, mobile and portable.

Available November 1982, further details, sae Westward Electronics The Mill House, Tuckenhay, Totnes, Devon TQ9 7EL Tel. Harbertonford 336 or 370

## Attention mobile CBers "You don't need a new twig for your mobile rig."

(That's CB talk for you no longer need to go to the trouble and expense of drilling a bole in your car. buying a special Citizen's Band aerial, fitting it and paying all the bills).

Because Hythe Electronics have produced the box that enables you to use your ordinary car aerial for Citizen's Band transmitting and receiving.

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Trade enquiries welcome. Made in Singapore



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#### **Thunderpole** NEW

Pre-tuned Legal UK Base Station Antenna

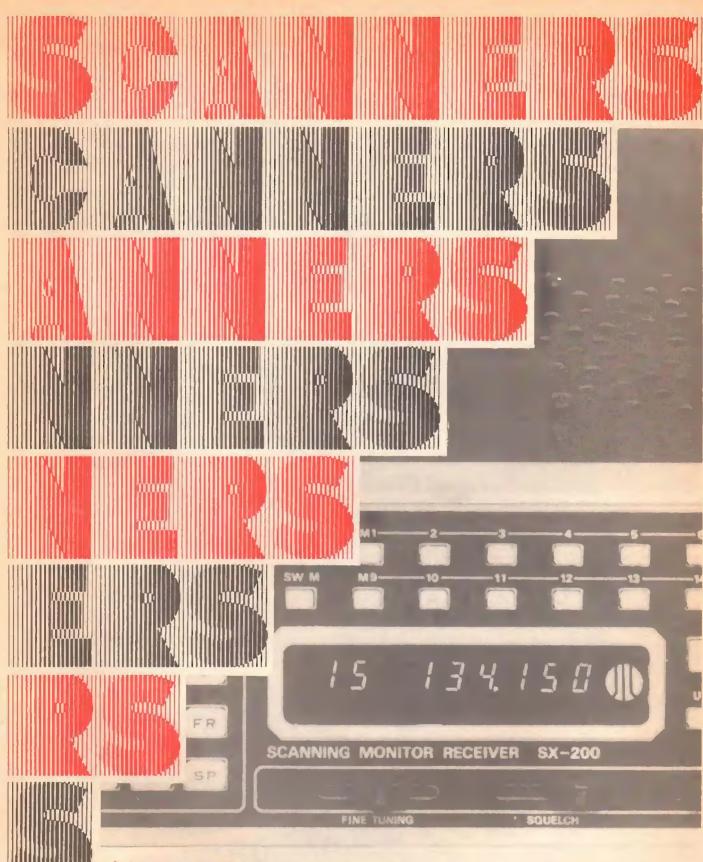
Model:	Thunderpole	THUNDERPOLES
Type:	Base loaded	ARE GO
Power	500W	A well constructed, easily
handling: Frequency:	27MHZ	assembled and erected,
SWR	1:1.5	excellent performance
(Pre-set):		legal antenna, with the
Radiating	1.5 metres	added bonus that it is
element legal length:		pre-tuned.
3 angled	Each 2.67m.	
ground	iong (105in.)	CITIZENS' BAND
planes:		September 1982
Pole	1¼in. dia.	
mounting		
base:		
		Price: £28.95
		incl. VAT &
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NAME ADDRESS

SIGNATURE

NUMBER



#### A fast-growing hobby

The use of complex scanning receivers has been a popular hobby in America for nearly two years now and it seems that it is beginning to get a grip on the British market. If you were to casually flick through the pages of one of the many amateur radio publications, you could observe that most of the dealers who advertise therein have a range of scanners in stock ranging in price from £40 to £300, dependent upon specification and it is likely that most CB dealers will be stocking similar equipment very shortly.

For the benefit of the uninitiated, a scanning receiver is a sophisticated radio receiver which incorporates microchip technology to seek out transmissions on radio frequencies used by services such as police, fire, ambulance, taxi, civil and military aircraft, public services, amateur radio and CB. Tuning into these frequencies manually requires a lot of finger work, bookwork or just plain luck but with a scanning receiver it is only necessary to press a few buttons and computer technology does the rest.

Some of the following equipment is currently available from either your CB shop or local amateur radio emporium.

#### Bearcat 100

The world's first digital handheld scanner that does not use quartz for programming. It has a 16-channel programmable memory and can scan the following frequencies:

70-90MHz, 4-metre amateur, broadcasting, navigation, mobile services;

138-144MHz, mobile (air\*, marine, land) services;

144-148MHz, 2-metre amateur band; 148-174MHz, mobile (air, marine, land) point to point;

406-420MHz, 70cm. special, mobile;

420-450MHz, 70cm. amateur; 450-470MHz, UHF mobile, point-to-

point, satellite;

470-512MHz, UHF TV sound; Power supply - built-in accumulator

(9V): Scan speed - 16 channels per

second;

Approximate price - £250.

\*Does not cover British air bands which lie between 118 and 138MHz.

### Bearcat 250

Much the same as the Bearcat 220 but without the 118-136MHz band and with 50 channels per band memory as opposed to 20 channels per band memory. All other features and specifications are the same.

#### **Regency M100E**

This unit features fully-automatic programming of its 10-channel memory and is intended for universal use. Up to 30,000 frequencies can be scanned in the following bands:

VHF 66-90MHz, amateur, mobile, navigation;

VHF 144-174MHz, amateur, mobile, point-to-point;

UHF 440-512MHz, amateur, mobile, satellite, TV.

Power supply 220V ac or 12V dc. Scanning speed 14 channels per

second. Scan delay 0.6 seconds normal, 2 seconds on hesitate.

#### Bearcat 150

A low-budget version of the Bearcat scanner with a none the less stylish design incorporating a touch-sensitive control panel with a green vacuum fluorescent digital display. A 10channel memory allows frequencies over the five frequency bands to be scanned or directly selected. A twosecond delay allows the channel to be automatically held pending a reply. As with most scanners, a small telescopic antenna is supplied and so, too, is a built-in 240V ac power supply.

Specification:

Frequency range; 66-88MHz mobile, including four-metre amateur, 144-148MHz two-metre amateur, 148-174MHz land and marine mobile, 440-450MHz 70cm. amateur band, 450-470MHz UHF band, 470-512MHz UHF TV band.

Audio output; 800mW rms.

Sensitivity; 0.5uV for low and high bands, 0.8uV for UHF.

Scan speed; 16 channels per second.

Price £129 inc. VAT.

#### Bearcat 220

A fully-automatic digital scanner capable of scanning 38,000 frequencies. The control panel is clearly arranged with a central red LED display. The memory allows 20 channels to be programmed on each of the five bands.

100

Frequency range: 66-88MHz, 4-metre amateur, broadcasting, navigation, mobile;

118-136MHz, air band;

144-148MHz, 2-metre amateur;

148-174MHz, mobile services;

420-470MHz, 70cm. special and 70cm. amateur bands;

470-512MHz, UHF special, TV band. Power supply 12V dc or 220V ac.

scentin 450.125

CB Radio November 82



A scanning receiver that uses a microprocessor to scan over 32,000 possible frequencies and, if necessary, store them in its 16-channel memory. Manual operation is also possible via a number pad situated on the fascia panel where controls are also provided for the 16-channel memory, fine-tuning squelch and volume. Frequencies are displayed on an LED display.

Specification:

Frequency range; 26-57.995MHz at 5kHz spacing, 58-88MHz at 12.5kHz spacing, 108-180MHz at 5kHz spacing, 380-514MHz at 12.5kHz spacing. Audio output; 2 watts. Power supply; 12V dc. Antenna impedance; 50-75 ohms. Scan rate; 8 channels/sec. fast, 4 channels/sec. slow. Scan delay time; 0-4 sec. Price approximately £265.

-

#### Bearcat 20/20

Bearcat 20/20

The latest edition to the popular Bearcat range is the 20/20 FB, which can store up to 40 channels (two sets of 20) for direct access or scanning. Seven bands are covered from 66MHz up to 512MHz. Separate search facilities are provided for the aircraft and marine bands, although most of the marine band 156.05-162.025 is occupied by mobile land services such as police, fire and ambulance services when used inland. Frequencies, whether selected manually or by auto scan, are displayed on a red LED display. Automatic lockout allows channels to be

skipped over for a faster scanning cycle whilst the priority feature allows one specific channel to be sampled every two seconds. Specification:

Frequency range; 66-88MHz mobile, including four-metre amateur, 118-136MHz aircraft, 144-148MHz twometre amateur, 148-174MHz land and marine mobile, 421-450MHz 70cm. amateur, 450-470MHz UHF band, 470-512MHz UHF TV band. Power requirements; 240V ac 50Hz 20 watts or 13.8V dc 9 watts. Audio output; 2.0W rms.

Sensitivity; 0.4uV for 12dB sinad or low and high bands, 1.0uV for 10dB S/ N 60% modulation on air band.

Scan rate; 5 or 15 channels per second.

Price approximately £227.70 inc. VAT.

#### Frequency guide

26-28MHz CB 28-29MHz 10-metre band (amateur) 30-40MHz military – radio models (35MHz) 40-68MHz VHF band 1 TV 68-88MHz mobile radio, 4-metre amateur (70MHz) 88-108MHz broadcasting 108-136MHz air 136-137MHz satellite 138MHz satellite 139-144MHz mobile radio 144-146MHz 2-metre amateur 146-156MHz mobile radio 156-162MHz marine VHF 159-180MHz mobile radio 380-470MHz mobile radio/70cm. amateur 470-512MHz UHF TV band



# Vultures on the Side (rides again)

It is a long time since this article has been featured in CB Radio Magazine, although the authorities have persevered in acting against AM users. However, the more dramatic cases don't seem to be so common – or maybe we aren't being informed of them any more.

Bob Vancliffe contacted us for some legal advice at the suggestion of a local CB shop when he fell foul of the Wireless Telegraphy Act and his local Customs and Excise Department. Since even the lawyers don't seem to properly understand the law involved, we could only offer some general advice but we thought you might like to hear the story.

Bob is the director of a flourishing automatic transmission company in Brentford, West London. In 1979, he was due for a new company car. Since his company has links with America, he decided on a Cadillac Seville and one was ordered in his choice of colour and trim through Cadillac in the US.

The car arrived at Southampton, from New York, in September 1979.



Clearly stuck in the window was the Cadillac identification form, detailing the car and its extras, with costs, so that the appropriate customs duty could be charged. Without anyone really being aware of it (although it was listed on the Cadillac form) the extras also included an AM CB radio, fitted as an integral part of an audio console that included a radio and eight-track cartridge player. The whole console had an estimated value of \$480 for duty purposes and this was paid when the clearing agents handled the importation of the car.

Bob took delivery of the car in October 1979 and was very pleased with it. Whilst familiarizing himself with the car and controls, he came across the CB. Bob has never been (and still isn't) the slightest bit interested in CB and has a personal mobile radio installed for mobile communication. So he largely ignored the CB, accepting it as standard to the car, along with other things he could have done without like the eight-track cartridge player.



As Bob said, if he'd stopped to think about it, he knew it was illegal to use but he never used it and as far as he was concerned it had been legally imported and duty paid.

That's how the situation stayed for the next three years until July 1982 when, heading down a major road towards work, Bob was stopped by the police. He had got caught up in an 'AM blitz team' and had been stopped because of his car and the two antennas on the car (one was for his PMR, remember). The police were joined by Customs officers and Post Office officials, who identified the CB in the console and warned Bob that he was in possession of an illegal set. Much to his alarm, they wanted to take the radio out there and then. Bob flatly refused to permit that since the CB wiring was inextricably involved with the wiring for the audio console. The Seville also has a dash-mounted computer-type driving monitor and Bob was reluctant to let the authorities get behind the dashboard and start dismantling things. Eventually, a Customs Officer accompanied Bob back to his office to inspect the importation documents and to make arrangements for the confiscation of the set.

Although the documents were produced and Bob argued that the set was legally imported (although inadvertently), it was stated on the Cadillac's identification form and no deliberate deception was involved, the officer maintained that since it had not been specifically itemized on the C10 importation document, it had been illegally imported. Bob then asked, if that was the case, was it possible for the set to be converted to prevent spoiling the console in the car. The officer replied that this was possible but couldn't be allowed "now you have been caught". Bob rather took excep-



tion to that comment, as he maintains he was unaware of any lawbreaker and has been caught up in something he is essentially innocent of.

However, the only acceptable solution has been that the set was taken out professionally (to avoid damage to any other units in the car) and surrendered for destruction at the local Customs and Excise Department at Isleworth. This is no real loss to Bob, as he never used it anyway but he has persevered with his request for a conversion to maintain the car's completeness. The Customs and Excise Department has still refused to allow it.

The Department are unlikely to presecute Bob but have told him that he can appeal against the confiscation in court if he wishes to. This is likely to be expensive and not really worth it for something that wasn't used in the first place. Bob also feels he shouldn't have to take it to court, either, since the CB was declared on the Cadillac's documents as being part of the audio unit and duty was paid on the unit at importation.

Although Bob isn't necessarily asking for special treatment, he feels some unfair assumptions have been made and that the authorities have not been prepared to listen or be flexible. He certainly didn't smuggle the radio in - he didn't even know it was fitted until he took delivery of the car and he still maintains it was legally imported. Rather than being his crime, he feels it was the Southampton Customs' fault in not doing their job properly. He also thinks there has been an unjust distinction in allowing people who have deliberately bought or smuggled illegal sets to have their sets converted but not permitting nim to do the same.

Obviously, for Bob, there is a principle at stake rather than a cause. His interest in CB as such is nil but the fact that he has been accused of something he didn't do and has had goods confiscated that he feels were rightly his, is another matter. Refusing a conversion seems like further bloody-mindedness on the part of the Customs and Excise. I contacted the appropriate officer at Isleworth to see if they felt they had sufficient justification but the Department was not prepared to make any comment at all about the incident.

SS



During the six months previous to legalization on 2 November, 1981, manufacturers and importers of CB equipment were preparing their products for the British market. Due to the Government's late release of the vital specifications MPT 1320 (27MHz FM) and MPT 1321 (934MHz FM), most of this preparation was being done by Far Eastern factories who had already been producing similar radios for the European market. The British com-panies were, therefore, unable to produce a comparable product at a competitive price in the limited amount of time given. Even the Far Eastern companies had problems getting their products on the shelf in time. In fact, there were only three or four models to choose from when the big day arrived, despite desperate attempts by many importers to speed up Customs clearance.

Although these original sets were fairly basic in design, many of them proved to be reliable and effective. Once the initial shortage of stock had been rectified and the Christmas rush had been and gone, more companies began to release their CB equipment. In a bid to make the customers choose their particular sets, manufacturers were pushing them further up market by the addition of extra features such as built-in power supplies and selective calling devices (a device that allows one rig to selectively call another by the use of an electronically-coded signal) until April 1982 when a range of home base stations appeared.

#### Home base stations

Breakers using the illegal AM system had available to them the prestigious and much-envied Ham International Jumbo, if they were prepared to risk having the £300 unit seized by Home Office officials. The legal home base stations followed closely along the Jumbo's lines, even though they were not permitted to include SSB operation or 10 watts of RF power. Many of them did have built-in SWR meters and a host of variable controls such as RF gain, mike gain, PA gain, Delta tune and tone controls. The larger casings on the home base rigs allowed substantial improvements to be made to speech clarity by the inclusion of a larger speaker. The need for legal home base

The need for legal home base antennas was soon recognized by many antenna manufacturers who now produce a comprehensive range to suit most requirements, including several kits designed to convert a



standard base-loaded whip for base station use.



#### Multi-function transceivers

Further expansion to the range of CB transceivers intended for the British market came with the introduction of Ready Rescue units, a small, portable transceiver, complete with its own mag-mount antenna and packed in a small carrying case ready for use in emergencies. The units are powered by either their own rechargeable battery packs or by connection to the car battery via a cigarette-lighter socket.

#### 934MHz?

The former part of this article has been wholly concerned with the development of 27MHz FM equipment. What happened to the 934MHz equipment specified in MPT 1321? The answer to this question is that it has taken nearly a whole year for the equipment to be produced, due to the lack of British UHF technology. Slowly, though, 934MHz transceivers are being distributed throughout the country and by the early part of next year they should be available in most areas.

#### One handers

The latest in this sequence of variations is the remote hand-held transceiver. Designed to facilitate ease of mobile operation, all the necessary controls, including channel change, volume, squelch and an LED readout, are contained within the microphone which is connected to a remote box either under the driver's seat or in the car's boot. Removal of the microphone is simple and is a valuable theft deterrent.



#### Personal CB

Following close behind were the 'Speak Easy'-type, personal CB units. Designed along the lines of the infectious 'Walkman' stereo cassette players, the 'Speak Easy' consists of a headset with its own microphone and antenna connected to a small control box which can be clipped onto the user's belt. Although the range of these sets is fairly minimal, their advantage is that they can be operated by a built-in VOX (voice operated switch) leaving the hands free to perform other duties.

## THE GOVERNMENT GAVE YOU 40 CHANNELS *CB Radio Distributors Ltd will give you A LOT MORE AND – WE ARE HERE TO STAY !*

Sole importers of :



All our sets are legally imported, legal to own, duty and VAT paid, prices include postage, packing and insurance. NB—it is illegal to operate a rig that does not conform to MTP 1320 without a licence.



# "Clean and green for that 10.13" Breaker Profile No. 1

Over the next few months, we will be featuring a selection of breakers in our Breaker Profiles; meeting and chatting with breakers who have, maybe, an interesting opinion, operate an unusual station or offer a particular service.

We start the first of these profiles by meeting Janet and Thelma, of Basingstoke. More easily recognized by local breakers from their handles of Speedy Lady and Thermogene, they provide a channel 19 service offering information, help, directions, message relays, breakdown advice and even coffee and sandwiches to the occasional driver who has been broken down for a long time and waiting for a breakdown service.

Both Janet and Thelma were on channel prior to legalization but have operated their base-station service on channel 19 FM since last 2 November. Thelma coming in at a later date when Janet was overwhelmed with the response. The monitoring day begins for Janet at 6.30am and she covers the whole day as far as possible, with Thelma standing by when she needs to go shopping, etc. Although Janet has a full day anyway, including the usual range of household chores, she has found a novel way of keeping the rig permanently by her side. The rig, a Harrier, is bolted to a power supply and has a leather carrying strap attached. Both rig and power supply are connected to very long 'wan-dering'-type leads and the rig is fully portable throughout the house and accompanies Janet wherever she goes. Thelma has a JCB 861 which is stationary but is invariably switched on even when she's not 'on duty': her monitoring stint starts when Janet shuts down at 5.30pm and continues to midnight or so - depending how tired she is! Thelma also covers weekends where possible.

Basingstoke is a junction for many major roads, including the M3, A33, A339 and includes main routes for Winchester, Newbury, Reading and Alton. Depending on conditions, the M4 can also be heard in their 15-20mile radius. Speedy Lady and Themogene also have phone links with similar breakers in Reading, Guildford, Farnham and Winchester, so they can pass on major incidents along the line to Inform drivers as far down the road as possible. Both breakers also liaise with channel 9 monitors and police as far as possible on more serious incidents.

During the course of the day, Janet and Thelma reckon to deal with 50-60 calls. A lot of these are giving traffic reports on the motorway and major routes and giving directions on finding locations in Basingstoke (not the easiest town to find your way around). Many of the regular drivers that contact 'Base Station Basingstoke' are professional drivers and are grateful for any information that helps the journey. Janet and Thelma have street plans, AA books and route information like bridge heights to hand for drivers unfamiliar with a particular route.

Both Speedy Lady and Thermogene are, obviously, very well known on channel 19. During the time I spent with them, we were constantly interrupted by a stream of drivers asking for 10.13's and directions through Basingstoke's warren of roundabouts. Many asked after Janet's and Thelma's families and had a general chat about holidays, illnesses, etc. Whilst 1 was visiting Janet, she was also getting a lot of congratulations on passing her Class III HGV, fulfilling a long ambition to drive a lorry. Although many of the calls dealt with are from regulars, there are also general appeals for

help and some drivers have been told by others of the service available. Of course, it's a two-way street as both base-station breakers need information passed in as well as out and they can only forward on information that has been reported on to them in the first place.

lasked Janet and Thelma what they got from doing this service. Both ladies looked at each other, roared with laughter and said together, "A lot of fun". They added to that "Friendship" and "The satisfaction of hel-ping". I also asked if they were happy with FM. Both replied that they were, with certain reservations. Janet commented that they could certainly do with more channels but they don't suffer too badly from bad language or misuse. Thelma followed that up by saying that many of the truckers protect them from that sort of treatment, anyway. Both experience some bleedover problems, especially from people using linear amps and hi-band SSB users but on the whole have few operating problems.

I was most impressed by the way in which Speedy Lady and Thermogene manage to balance homes, children, jobs, their own interests and hobbies and still run a successful and useful service on channel 19. Most people have trouble in managing just one or two of those!







#### Microphone

The microphone which is supplied with this rig is the same type as the one supplied with the DNT M 40 FM mobile rig. It is comfortable to hold and has no sharp corners, as some microphones. Although still fitted with five-pin din plug, being a base station we found no problem with the microphone coming adrift while in use.

#### Construction

The rig itself is the same size and construction as the DNT M 40 mobile rig. The one difference being that the base station is 3in. longer, front to back, to accommodate the mains power supply. The case is of standard top and bottom two-piece construction, finished in black crackle stove enamel and the front panel is made of moulded plastic with raised sections around the controls and white silkscreen lettering.

The control knobs are of the flatsided type which aids setting and the channel display is green, unlike most sets which are red. On the front panel is a local DX switch which was found to be very useful for cutting out skip and other interference. The high-low power switch is also positioned on the front panel. These are mounted either side of the signal strength meter, which is of the larger, back-illuminated, type.

The printed circuit board is the double-sided type but does not have any component identification; the PCB layout, with component identification, is supplied in the handbook. We feel that the printed circuit construction tended to bunch up the components in certain areas, which could cause problems for servicing.

One unusual but very useful facility on this set is the 'Channel free' indicator, which lights up if the selected channel is free.

While being tested, it was found that the 240V mains supply is neither fused nor switched, which means if the rig is left plugged in the power pack is left turned on with no form of protection if a fault should occur.

#### **Transmitter test**

Test equipment available: Two Racal 9081 signal generators. Racal 9009 modulation meter.

Racal 9301 milli-voltmeter.

Racal 9917 and 9024 frequency counters.

Marconi TF 2501 RF power meter. Bird 43 RF power meter with load. Marconi TF 893 AF power meter. Marconi TF 2337 distortion meter. Levell TG 66B audio generator. Solartron CD 1400 scope. IE DS 50/2 power supply. Keithley 130 digital voltmeter. Hewlett Packard spectrum analyser.

This test is done to ensure that the power output of the rig conforms to the output power levels laid down by Home Office specification MPT 1320.

	Power Output and Attenuation	
Atten.		
High	3.9W	
Low	.25W	

The results of this test are fairly good, as the rig gives out power very slightly below maximum permissible allowed. When this test was done, we did not find any trace of the fault (RF power not constant) which was noticed on the super-tuned DNT M 40 FM (CB Radio Magazine June 82).

#### Frequency

This test is done at two different temperatures, 48°F and 68°F, to check the frequency stability with changes of temperature.

	Tempe	reture stabil	ity
Temp.	OII	02110	0140
	27.60130 27.60102	27.70103 27.79102	27.99103 27.99102

Over the temperature ranges that the rig was tested at, the rig drifted 280 cycles in frequency. This result is not too good. Drifting seemed more noticeable on the lower channels.

#### Modulation

The modulation tests are done to check the ability of the set to give a good modulation level and quality over a range of different input conditions.

	Moc	iulation	
Input.	Input Frequency		
Level	500Hz	1125Hz	2500Hz
Vm6.0	0.05kHz	0.2kHz	02HHz
2.5mV	0.2kHz	1.3kHz	0.81412
6.0mV	Q.6kHz	2.3kHz	POLHZ
25mV	1.4kHz	2.5kHz	O QHII:
Vm00	1 8kHz	2.5kHz	0.94112
250mV	2.0kHz	2.5kHz	1.0×Hz

We can see from the table that the modulation circuit of this rig is quite good and gives good limiting between 6mV and 250mV and would not benefit from having a power mike fitted.

#### **Receiver** tests

#### Squeich level

The threshold of the squelch was measured at .1 mV in a DX position and .5 mV in the local position and fully muted was measured at .5 mV in the DX position and 3 mV in the local posi-



tion. The squelch operation was found to be very good when used in conjunction with the DX local switch for cutting out unwanted noise and skip.

#### Audio output

This test is done to check the speech quality given out of the rig's receive audio stage. To do this test, we feed into the antenna socket a carrier modulated by a 1,000-cycle tone, using a Racal 9002 RF synthesized signal generator.

	Measured	Distortion
0.5 wall		11% distortion
1.0 wati	i	11% distortion
2.0 wall	13	26% distortion

The table shows a set of figures which seem compatible with most of the sets tested up to date. The important figures in the table are the distortion figures; the lower the reading, the better the audio quality.

#### Receiver sensitivity

This test is done to check the sensitivity (the ability of the rig to pull in weak stations) of the receiver.

	Sensitivity	
	DX	Loc,
Detitetuo Bb01	045uV	2.50uV
20dB quieting	1.30uV	7 00uV
36dE quieting	4.00uV	22.0uV

From the figures in the table, we can see that the results are very slightly below average of the sets we have tested so far.

#### AM rejection

The AM rejection on this rig was measured at 30dB, which is a slightlybelow-average result when compared to other rigs that we have tested.

#### Adjacent channel rejection

This test is done to check the rig's resistance to bleedover from other breakers who live close by. We check the effects on one channel above or below and also at extreme ends of the band (channels 1 and 40) while the rig is being operated on channel 20.

	S Meter Reading	
	DX	Loc.
1	VUBO	5uV
2	2 50V	154V
5	4uV	20uV
7	7uV	40uV
9	10uV	60uV
10.4	300UV	1.5mV

The adjacent channel result was one of the best recorded so far and the bleedover tests done on channel 40 appear to be an average result.

#### Summary

The DNT B 40 gave average to good results on most tests and for its size is a good buy, especially for someone who has not got room to accommodate one of the larger base stations

#### GUARANTEE

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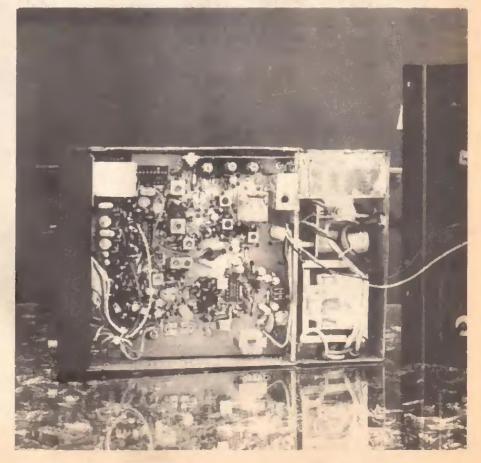
#### TECHNICAL DATA

General		Sensitivity
Eraquency Channels Frequency Tolerance Operating Temperature Power Supply Dritensions Semiconductors	26-28MHz/operational 27,60125 – 27.99125 MHz 40 0.001% minus 10°C plus 55°C 240 V – 50 Hz 229 x 155 x 64 mm 24 Transistors, 14 Diodes, 5 1C's	Adjaeen Channel Pépetion IF Frequencies Squelch Adjassible Image Rejection Addre Output Transmitter AF Ebution
	2 LED, 1 Channel Display	Type of Mudialation
Ceramit: Filter Crystal Filter	2	Modulation Deviation Marmonik, Sputions Rejection
Weight	2100 gr.	Antenna htyrelawa

#### Receiver

Settor Haw 0.81/2V for 10dH S+N/N 1.3 (SH2+668, 10KH2-8668) 20d8 35 (KH2/10,699/M91z 0.2 = 3.01/2 Bettor (Haw 80/0H 2 (Wat/25 obtor

0,474,0 Wart (Exc)10 FM 2 3KHz max. Better than 5 × 10 <sup>8</sup>/2,5 × 10 <sup>6</sup> Wart 50 Ohm



Junior Breakers

Join CB Radio Magazine Junior Breakers' Club. Open to 7-14 year olds, the Junior Breakers' Club. offers: **CERTIFICATE LAPEL BAADGE CODE BREAKER LABE BOOKLET** 

Although anyone will be able to read Junior Breaker, only members of the Club will be able to decipher the special message that will be printed in each issue of Junior Breaker.

To join Junior Breakers' Club, all you need to do is send a cheque or postal order for £1.49, made payable to CB Radio Magazine Ltd., to CB Radio Magazine, Tudor Works, Beaconsfield Road, Hayes, Middx. UB4 0FL and enclose a stamped addressed envelope. (The envelope should measure 9in. x 12½in. or A4 to hold the certificate without folding). Ask many breakers what they think is wrong with CB – both AM and FM – and many of them will straightaway say, "Too many kids" (and some of them won't even be that polite). If you sit on the side and listen for a time, it's true that you can hear younger breakers misusing the channels but it's also true that you would hear lots of older breakers doing exactly the same thing. So, do you think that junior breakers are unfairly blamed for the noise and confusion often heard on channel? Let us know. But be fair, don't just leap up and shout "It's not our fault". Although CB is a good laugh, it is used almost as a toy by too many kids and it can be very frustrating to be asking for a traffic report and no one can come back because of all the clowning around. Are kids as black as they are painted?

We have heard a few stories of some more practical CB uses by younger breakers. Doing your homework together on channel might not be what teacher had in mind but five minds are better than one in trying to solve

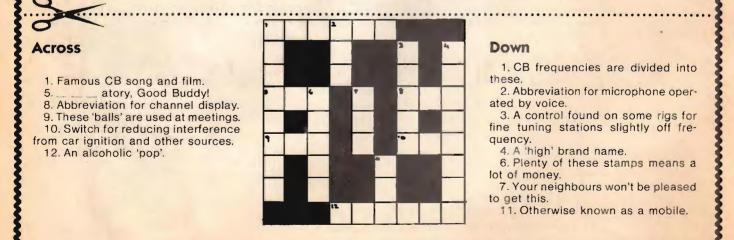
$$(x^2 - y)b \div \frac{a}{b^2} = 12.$$

Not all teachers can be against it, though, because we heard of one teacher setting up a homework channel to help with any problems pupils had.

Another, more serious, side of CB was illustrated by Stickinsect, who was featured a few months ago receiving his prize for the 1982 CB Show Draw. During last winter's atrocious weather, Stickinsect spent many hours giving traffic and weather reports in his corner of Oxfordshire. Once again, let us know if you are involved in anything like homework networks, traffic help or something we haven't even heard of yet.

We hope to be able to run Junior Breaker regularly but it depends on you sending in your letters, ideas and suggestions. So get writing.

To start Junior Breaker off, we are beginning with a crossword competition. Fill in the crossword from the clues given and send off completed entries, with your name and address, to Junior Breaker Crossword Competition 1, CB Radio Magazine, Tudor Works, Beaconsfield Road, Hayes, Middx. UB4 OFL. The first three correct entries pulled out of the hat will get a free Junior Breakers' Club membership. Please include your age. ENTRIES LIMITED TO BREAKERS AGED 14 AND UNDER.



# Radiotechnic presents its new, supertuned, M40 FM Anticipating the need for more reliable and trouble-free B transceivers, Badiotechnic

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Price £37.85 excluding VAT To get two completely different views of the first year of CB, we went to an AM breaker and an amateur radio operator. Everybody concerned with FM CB has very definite opinions on the last 12 months and the original decision behind it. However, it is interesting to see the reactions of others who may be closely but not directly involved. Steve's views are certainly controversial and he is unrepentant, even after I telephoned him to tell him what I had written. Karen's views are more common amongst dedicated AM breakers but breakers who are only familiar with FM might care to think about some of the comments she has made. Whilst AM is still illegal and likely to remain so, rightly or wrongly. AM was the first CB system in this country and, hopefully, the two should coexist where possible.

To balance these two rather negative views, we have followed them up with some comments from a more-than-happy FM breaker who, because he didn't start out with any preconceptions, is very satisfied with the CB system we have.

Steve is a Class B licensed radio amateur and has had his licence for well over a year. He was involved in AM in its early days in this country and had "a lot of fun and a lot of laughs" with his AM rig. Although he started off with just a straight 40-channel rig, like many others the bug bit and by hard saving and hard bargaining he got hold of a SSB set – which cost anything up to £150-170 at the time (and, remember, that was SSB straight 40 only, no hi or lo bands or multimodes).

He had always been interested in radio but felt at the time CB was enough for him but as it grew more crowded and there was no sign of a legal CB system, he decided to "go the whole hog" as he said and signed up for local classes in amateur radio. Since his early interest in radio also extended to electronics, he found most of the course work fairly easy and passed the Radio Amateur Examination at first try. However, that elusive Morse code has so far escaped him.

Although he is free to roam the spectrum (above 144MHz, at least) he has crystalled his amateur rig to cover both AM and FM CB frequencies and made the following comments:

#### Not worth using

"Quite honestly, I'm glad I got out when I did. By the time legalization came, AM was becoming a mess because of overcrowding and the same thing happened on FM about five times as fast. I used to enjoy talking to a particular group of people on AM who had similar ideas and I would enjoy doing the same on FM but in this area there's no chance of doing that. In Kent, where I live, it's so bunged up, CB's not worth using. At least when I was on channel there was some form of radio courtesy but unless you get onto a net on AM on the high channels or on FM at 3 o'clock in the morning - forget it, 'cause it's just a free for all.

"I'm very disappointed at the way it's gone. I wanted legal CB along with everyone else at the time - on AM but I would have been prepared to give FM a chance. However, I'm more or less satisfied with amateur radio, although I miss the atmosphere that we used to have on channel - it's much more formal than CB. Really, I think breakers only have themselves to blame - they are the ones that have made the system unworkable. They had the opportunity to make what they wanted of it, and, in my opinion, it has been ruined inside a year. It's a shame - maybe it will improve next year - but people are the stumbling block, not the system."

Karen has been an AM breaker for over two years and now has an 80channel AM-only rig. Although she would like a multimode set, the price has been an obstacle and she has no facilities for the large aerial she would like to put up. She goes to two CB clubs a week, both of whom have a mix of AM and FM breakers. Once again, I shall let Karen speak for herself.

"AM has gone very quiet lately and I miss the old days, although the atmosphere on AM is still different than FM. A lot of AM breakers have gone down because they are fed up completely with FM bleedover. I've effectively lost the top 24 channels on my rig because they coincide with the FM frequencies.

#### Like dialling a phone

"I have used FM but I didn't think much of it. It seemed just like picking up the telephone and dialling a number and speaking to someone I didn't know. Although you speak to stangers on AM, they seem more friendly, the feeling of all being illegal AM breakers together. There's quite a lot of FM breakers on AM now and a lot of breakers who were AM went onto FM with legalization and came back to AM. Unfortunately, a lot of bad FM habits have come with them.

"I'm still loyal to AM and would like to think that it will eventually be legal but in my heart of hearts I can't really see it happening. I don't ever see AM dying out – we will still end up with two systems. DX'ers will never give up multimode, multi-channel sets for a 40-channel FM rig.

"If people on FM knew how to use it properly then it would stand some chance of working. It's opened the floodgates for all the kids, though, as parents wouldn't let them go on an illegal system. FM seems a bit of a con – prices have been high and sets are covered in unnecessary switches and knobs to justify higher prices. I admit I am blased over FM – perhaps I haven't given it a fair chance but I don't really feel the need to go out and really try it.

#### Not the system I wanted

"FM is not the CB system I wanted to see. Perhaps if I were a new breaker, I wouldn't know any better and would enjoy it. If FM is left to get out of hand, it will effectively kill any chance for a proper CB system in this country. At one time, I couldn't see FM working at all but I suppose if the right people stick it out, it might work when the novelty dies off. So many FM breakers I've met haven't got licences anyway, so the Government haven't really won and they've got bigger problems than they bargained for."

Peter Clarke is an accountant based at a coach company at Heathrow Airport, where the airwaves can be pretty crowded on CB's as well as jumbo jets. He lives a few miles away from the airport and, In his words, "still suffers" from the congestion and misuse of the system that seems to go with built-up areas.



#### What's SWR?

Peter is a genuine FM breaker, inasmuch as he has only used FM CB and came to it as a new, uncommitted, user. He wasn't at all familiar with CB until just before legalization when the publicity brought it to his attention. By legalization, he was eager to go and he had made up his mind to buy a Tandy handheld. He was more than a little put off when he couldn't get hold of one and eventually settled on an Alba handheld set at the end of December. Peter had decided on a handheld as he was completely ignorant about antennas and SWR and thought that a walkie-talkie would avoid these problems. Obviously, he has learnt a lot since then and there are now five rigs in his stable.

Peter continues, "I'm happy with the system and enjoy using it. I moved to

### CONTINUED

my area five years ago and I didn't really know anyone until I went on CB. I have made many friends and met dozens of people. I never thought it would be something I would be interested in - I didn't really know it existed. I was slightly interested in radio hams but thought I would never be able to afford it or pass the exam. Now I've got CB, I have used it every day since I bought it and for me it's a long-term commitment - I can't see myself getting rid of it or losing interest. It's very useful to and from work, as well. (The Heathrow area is notorious for its traffic jams!).

#### **Social benefits**

"It's benefits are not widely-enough recognized - the publicity talks about traffic and things like that but I know a breaker, whom I now visit regularly, who is confined to a wheelchair with a severe heart problem. He has been using CB since legal and has gained a large group of friends who visit regularly and check he is OK. He was given six months to live about 18 months ago - I put his survival down to CB, it's the best thing that ever happened to him.

"Sometimes the legal system is frustrating, it's tempting to want to get out more and it does have its faults but as far as I'm concerned, I'm delighted with it. I'm surprized how much I have got out of it. I was rather shy but it's helped me get over that; so much so that I and some friends are forming the Langley CB Association at a local venue at the end of October. Most breakers I speak to feel pretty much the same way as me."





# Monitoring

Are the smaller gro

During the past few months, we have looked at REACT (UK) and THAMES, two not entirely happy stories. Although these are the two major organizations, there are plenty of smaller, more local groups who have not affiliated themselves to any major organization and operate independently.

The smaller groups don't have the advantage of being able to draw on a larger organization's common experiences and resources but they do benefit from not growing too unwieldy and top heavy. They can also concentrate their efforts onto a fairly restricted area and build up a specialized knowledge of that locality without the distractions of a national group.

A glance through back issues of CB Radio Magazine will show that there has been a lot of monitoring organizations springing up over the past year. In Round Up alone there have been upwards of 15 different groups mentioned in as many months, from Base Station One operating in West London, Open Channel Monitors in Mid Glamorgan, Wales, Stockport Citizens' Radio Emergency Action Monitors in Stockport, Eastbourne Communications and Help Organization, Citizens' Radio Emergency Service Team in Yorkshire and CB Aid in Birmingham.

Many of these groups have grown from CB clubs in their particular area. These are often quite successful as they already have a pool of breakers to draw from and many of the monitors will know each other. They may have already forged links with emergency services in the area through charity events and local co-operation. Other monitoring services have also formed as breakaway groups from the major organizations as individuals have become disillusioned with methods or attitudes.



The first group "under the microscope" this month is one of the lastmentioned groups, Clevedon Monitoring. Formed by monitors in the Clevedon area, between Bristol and. Weston-super-Mare, the nucleus of the group came from both REACT and Delta teams in the vicinity. The founder members hope to have left the problems of the old teams behind and have a totally independent group

without allegiance to other organizations.

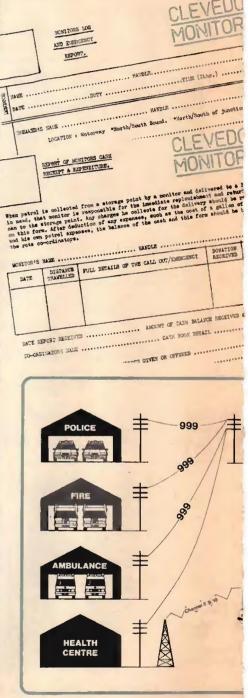
Geographically, Clevedon Monitoring have a busy area to cover. The junction of the M4 and M5 motorways is just to the north and forms a major route in summer for holidaymakers. Apart from the usual problems associated with motorway traffic, there are enormous tailbacks and congestion in the summer with added complications of overheated engines, empty fuel tanks and distressed children.

Although the group monitors channel 9 for emergencies, they don't restrict themselves to 'life or death' situations. As Trevor Tomasin, of Cleveland Monitoring, says: "If someone has a problem on the road, it's important to them and you can't refuse to help because it doesn't fit into your emergency scenario". (This was one of the major differences of opinion between the REACT team and its ex-members). In actual fact, this means that the majority of the service's time is spent on more mundane problems like directions, empty petrol tanks and, for example, reporting to the motorway police that there is a tyre on the carriageway but they consider these difficulties equally important to the motorist at the time.

Cleveland Monitors obviously have regular monitors' meetings and have a handbook which includes emergency phone numbers, street plans and area maps, monitoring procedures and information such as chemical hazard codes. They are also working very hard in trying to make themselves known locally and have mounted a local publicity campaign. This has involved information leaflets, posters and windscreen stickers. They have also attended charity events and were requested to monitor the Cleveland Fire Stations' Bed Push. Monitors were stationed around the course and were able to report on the progress of the race and accidents to the St. John Ambulance Brigade in attendance.

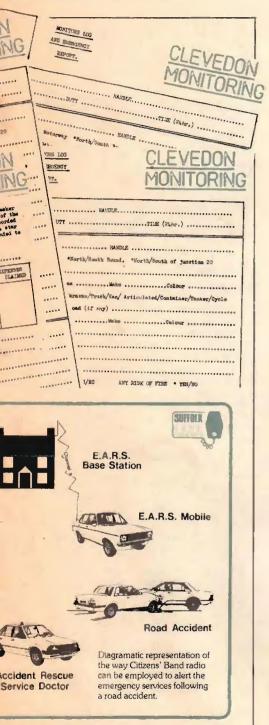
The group would be the first to admit that their main role has been inmore minor incidents but, as Trevor says, they would prefer not to be involved in 'life or death' accidents as they would rather they didn't happen

In the first place! Trevor also feels that it is very difficult at this early stage to gauge the effectiveness of Cleveland Monitors. They hope as more people become aware of their existence the facilities will increase and their usefulthe ness will increase correspondingly. hind and However, going by the mound of publiendent group city material that has arrived on my



# small is best?

#### ups more successful?



desk with a Cleveland postmark, whatever they might lack they make up for in enthusiasm.



To balance this small and fairly new group, Suffolk EARS was established before legalization, although they have never monitored the AM channel 9. When the news of legalization was announced, Emergency Action Radio Service was formed so they could be organized and trained for Day 1 of FM CB. They have been lucky in having Dr. Andy Mason as a Founder Member and President, as he has been able to co-ordinate first aid training and provide an accident rescue service doctor. It is hoped that, eventually, all mobile members will have basic first aid training. Because of this, EARS has a good relationship with emergency services and Dr. Mason has been able to present the case for CB and monitoring services very effectively.

Although the group was originally started to cover the accident-prone A45, there are now three teams covering the Bury St. Edmunds area, Woolpit, Beyton and Rougham area and Stowmarket. They are hoping to expand to cover Sudbury and Saxmundham soon. This expansion, up to 200 monitors, has surprised the organizers as they are purely a local group and have no plans to extend outside Suffolk.

In common with other monitoring organizations, they do have problems in covering the early hours of the morning but their coverage varies between 123 to 138 hours out of a possible 168 per week and hope to maximize their manpower for an expected busy patch as winter approaches. This they regard as their real test as it will be the first full winter since they were established. They only accept monitors who can promise regular service. Those that can't are used as stand-ins for illness or holidays.

EARS count themselves very fortunate in not having too many problems from the 'idiot element' and local breakers are very co-operative. Although there are the occasional music players and channel 9 breakers, the main problem is from sidebanders on high channels who break through.

The group is anxious that it should not grow too big, since it tries to keep in touch with individual monitors and the committee doesn't want to become a faceless hierarchy. It is only willing to expand if it is satisfied that the areas already covered are operating efficiently. A monitoring group takes a lot of organizing but the officers are keen to stay approachable and they see this as being one of the benefits of a smaller organization.

All monitors receive formal training, which is done by an area co-ordinator and is done individually in the monitor's home. This puts no pressure on the prospective monitor and he can make his mistakes in private! Although EARS sees its basic job as helping with accidents, it is sympathetic to motorists' incidents like running out of petrol or assistance in directions, etc. - if they are satisfied that there isn't a 10.33 in the background trying to get through.

Suffolk EARS is keen to liaise with other monitoring groups that operate in the area and already has a good relationship with REACT. As the PR officer says, "We are all doing the same job and we would like to think that we work together to save lives".

Although we have only looked at two organizations in this appraisal of smaller monitoring groups, it would seem from them and the other groups I have contacted that although they may not have the resources (particularly financial) that some of the bigger services have, they have a particular effectiveness of their own. It would be foolish to suppose that they don't have their problems and they can have as many difficulties with power seekers, glory earners and the perennial wallies and bucketmouths as any other group but it seems that some of the smaller organizations, because of their size, can deal with these problems more easily. Their main problem is in maintaining a tightly-knit group and effectively covering an area, as they may be a bit thin on the ground but it would seem that they are less prone to the administrative difficulties and communication problems of the larger groups.



#### Lima Mike Group UK

I would like to introduce our club to you and give some information about it. The Lima Mike Group UK is a recently-formed club and works primarily as a DX group, although we do meet once a week at the Corner House public house at Bledlow in Buckinghamshire on a Friday night.

At the moment, we have about 40 members but this is increasing as the weeks go by. Upon joining the club, the member receives a membership card and 50 QSL cards. It also entitles them to use the PO Box.

In the near future, three members will be holding a 72-hour QSL marathon to raise money for cancer research. We hope this will be the first of many charitable ventures.

There is no age restriction for membership and no preference to mode. Also, we do not confine the membership to the local area. We will always welcome new members or correspondence from other clubs. The address to write to is The Lima Mike Group UK, PO Box 2, Chinnor, Oxford OX9 4UB or come along on a Friday. Breakers are always welcome.

The Printer LM 091 (President)



#### Dyffryn and Talybont Radio Club

Just a few lines about the DTRC. Being a relatively new club, we have about 30 members but being a holiday village, all visitors are more than welcome. We have our meetings once a fortnight (Thursday, 7.30) in the village hall and we have outdoor eyeballs whenever possible.

We try to cater for all modes of radio. FM, AM, SSB and hams are all welcome.

We break on 14 here, so if you are in the area give a shout for any Delta Tango member and we will welcome you to North Wales.

We are hoping to put out a News Desk once a week in the near future, giving information about local events, the best beaches, local weather forecasts, etc. We also intend to put this out in both Welsh and English but more about this nearer the time. So, 10-10 for now, we gone.

Diver One (Mark) (PRO)

#### Mendip CB Radio Club

We have been running for nearly 12 months at the Globe Inn, Wells, Somerset. Meetings are held fortnightly on Wednesdays at 8.00pm. Activities are made as diverse as possible, technical and humorous dialogues occupying the first half of the evening and general chat, raffles and competitions the latter. Outside events, fox and treasure hunts, eyeball barbecues, etc. are also arranged.

Members are allocated a number prefixed by MCB and this can be used as an alternative to the handle when calling on 14.

A Friday night link up is run by our Secretary and other members and breakers are welcome to join Mike Station Charlie Bravo and receive a station QSL. Assistance is also given to local events by members who are also REACT (UK) members. Membership is £2.50 and visitors are charged 25p. A Giant Eyeball is planned for 1983 and QSL cards promoting this will be available, as will a limited edition of birthday QSL cards in November. Any breakers passing our locale can give a shout for a Mike Charlie Bravo breaker and will be welcome as some members are disabled and would appreciate hearing a new voice.

A junior link is run by members on Sundays and it is hoped to establish a junior section in the near future. November will see our birthday celebrations and we wish all other UK clubs good luck and clear channels.

MCB 11 Fenian (Vice-Chairman)

## The Ham International DX Association

I noted with interest on page 36 of the August edition of CB Radio Magazine that there is a Ham International Owners' Club in the process of being formed. May I take this opportunity of advising your readers that there is already in existence an official club approved by the Ham International Company of Belgium. For details of this club, could your readers please write to Michael Starkey, The Ham International DX Association, PO Box 24, Cannock, Staffs. WS11 2XP.

I have also written to Martyn Bolt to inform him of our existence and suggest that we get together with a possibility of merging the two clubs. I have enclosed for your perusal a QSL card approved by Ham International. I hope that you may be able to reproduce it in your magazine.

I thank you in anticipation on behalf of the Ham International DX Association and send to you and to your readers all the best 73's, 51's and 88's. Ken Partridge (Hotel India 03)



#### Garforth Senior Breakers' Club

Our breakers' club started in early November last year. We meet every Monday from 8.30pm at the Miners Arms public house, Garforth and we have now obtained use of the room on Bank Holiday Mondays as well. At the moment there are about 50 members in our club.

We recently held a barbecue which was a tremendous success. Other activities have included exchange eyeballs and a treasure hunt, with another in the not-too-distant future. We would like to hear from any clubs who would like to hold an

clubs who would like to hold an exchange eyeball with us and I can assure you of a warm welcome. If any Committee members from

If any Committee members from other clubs would like to telephone me on Leeds 864980 then I am sure that we will be able to arrange something. Also, if any clubs would like to issue a challenge to our club at any games, competitions, etc. then please ring me.

All the best for now.

S. Kirk (Manifesto) (Social Secretary, GSBC)



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It has been a year of ups and downs for many stores and shops selling CB. A lot of people had drastically overestimated demand and consequently were overstocked, which resulted in the dramatic price decreases that happened this summer. Most breakers have seen a shop or two in their area close down as people's business mistakes and the economic recession have bitten deep. So we asked two vastly different businesses for their comments on the first year of CB. It's fair to say that whilst they sit at very different ends of the retail scale, they both have an optimistic outlook for the future of CB.

Out of the larger or 'chain' stores, Halfords showed perhaps the biggest long-term commitment to CB. Their planning started long before legalization and included comprehensive staff training. This training covered video productions for staff familiarization and extensive paperwork to identify problems before they happened. A book was also published, 'Big Hal's British CB Handbook,' and Big Hal himself appeared – a free-wheeling, CB-using, 10-gallonhatted character they have used to promote CB.

As a specialist auto accessories supplier, Halfords see CB as being part and parcel, like in-car entertainment, of their business and say their commitment is still as strong. Although John Bedford says "By and large we are not unhappy", it is true that Halfords have discounted CB over the summer because of slight overstocking and are wary of putting numbers on next year's projected sales.

John Bedford feels they have been more fortunate than some in that they started off with a realistic assessment of the first year's market. The Halfords estimate of sales for the year was considerably lower than some of the figures that were being kicked around, so their original orders have proved to be more realistic. One of Halfords's strongest selling points has been an established, recognized name that was already familiar to the car-owning public and, eager to maintain this advantage, they took deposits before legalization to help combat the expected shortage of sets.



Halfords have obviously been affected by this summer's huge discounts on sets. Buyers have gone elsewhere, as even with the price cuts Halfords have been offering on their Barracuda and Binatone sets less famous brands have been available at £25-£30. However, the price reductions they instigated have had encouraging results.

John Bedford feels that one of the major obstacles to CB's complete acceptance is the conversion from fun to serious use being slower than they anticipated and that this is needed before the next boost in CB can occur. He also said that the press have handled CB badly and gone overboard on the more lurid stories that have arisen. He firmly believes that once CB is regarded as just another facility then the situation will be better for both the retailer and user.

In conclusion, he commented that CB is still in its infancy and it is premature to judge any real future. John thinks that Halfords have "handled it well" and looks forward to a long future in CB.



Simply CB is a small CB shop in Rickmansworth, Hertfordshire and has been open for over two years. In that time, Malcolm, the owner, has seen CB move through several stages from its early AM days to a year of legal breaking.

Surprisingly, Malcolm says a high percentage of his customers are AM breakers who have taken a long time to be converted to FM but sees several new brands of breakers emerging. Although this summer he has had a large number of younger buyers who can only afford the very cheapest rig (often with piles of 10p's!), he is getting a growing number of older CB'ers who have carefully weighed up and considered the market before committing themselves to a high-quality set.

Along with all other retailers, Simply CB experienced an initial boom last November (selling 75 sets in two hours one Sunday). Things have obviously quietened down since then.

Malcolm also sees a move towards better quality sets at the moment and multimode sets are still popular – especially amongst disappointed FM breakers. Happily, he also sees CB improving. "People are learning to deal with wallies, becoming more educated and using CB better. I think it will get even better next year." Parents are also beginning to take a closer interest in their children's activities on CB and are also becoming more involved in the purchase of the set. Malcolm comments that he often gets a father look around the display, buy a fairly basic set and is back a few days later to buy a better one for himself!

Malcolm says, "CB is still wide open and brand new and it will grow when it gets a better press and loses its bad image. That is, it will grow as long as people have the right attitude." Simply CB, he believes, has prospered not by luck but because he tries to offer a service, both technical and general, to his customers. He is not the cheapest but charges reasonable prices to cover that type of service and to stay in business. For him, the chain multiples, like Halfords, have been some competition as, initially, they could offer better prices on sets as they were buying in bigger quantities. However, he also feels that some stores couldn't offer any back up - and have, consequently, lost customers that have gone to the smaller, independent, shops. He does appreciate what they have done for CB, though, since any promotion they have done for CB has benefitted all of the CB community, not just themselves.



#### Lucky Jim's

Lorry drivers in need of a spot of light refreshment whilst using the M4 in Wales, can now use their CB's to reserve tables and order such delicacies as an 'Alamo Salad' or a 'John Wayne Grill' at the newest bean store in town

Lucky Jim's real American diner is situated in the heart of the Welsh valleys and offers a special take-away service for breakers. Run by a London-born business man, Mr. David Hall, the cafe, in an industrial estate near Caerphilly, has been turned into a little piece of America, which has been given the CB handle, Roundhouse American Diner.

A team of chefs work up to 17 hours a day manning the kitchens and the rig, which can contact the motorway 12 miles away.

The menu consists of items such as Tucson Tuna', 'Mexican Chilli,' 'Great Balls of Fire' and 'Keep 'em Comin', Mama' (as many steaks as can be eaten by one person for £12).

Lorry drivers can call the Roundhouse day or night to reserve tables and order food and they can also be helped out with accommodation and breakdowns. The diner is already getting quite well known by CB drivers and can accommodate up to 48 people at one time. There is also a bar with its own video films, which is open until midnight, Lorry drivers are also permitted to sleep in their cabs over night in the ample car park.

World record attempt in a wheelchair

On 4 September, Gerry Kinsella, a polio victim since early childhood, set off from Land's End in his self-propelled wheelchair on a marathon run to John o' Groat's. He aims to push his chair a staggering 885 miles, averaging 55 miles a day, in a world-record time of 151/2 days.

Gerry's progress will be monitored by branches of REACT throughout the UK and his route will take him through Bristol, Liverpool, Penrith, Moffat, Edinburgh, Blair Atholl, Aviemore, Evanton, Helmsdale and John o' Groat's. Gerry, who comes from Toxteth, Liverpool, uses the CB handle Marathon Man and his support car uses Highland Laddie.

The run has been organized to raise money for the Greenbank Project, a rehabilitation centre offering employment, re education and accommodation, run by the disabled for the disabled.

In order to reach his goal, Gerry has contacted industry, organizations and schools for support in the form of donations, sponsorship, publicity and fund-raising activities.





~~~~~ **THAMES Paramedico update** 

In a recent letter from the THAMES Paramedicos, their National Secretary, Mr. A. Medcraft, expressed his thanks to all those breakers who have generously given both money and moral support over the first months of the scheme's existence.

Just to refresh your memory. THAMES Paramedico is a team of 302 men and women from all over the country, many of whom are police officers, doctors, nurses, ambulancemen and firemen, who offer radio-controlled medical assistance at planned events. Two recent events that were covered were the British Heart Foundation cycle ride from Clapham to Brighton, in which 60 of the 15,000 cyclists who took part were treated by Paramedico for their injuries and the Cane Hill Hospital, Surrey cycle ride which took place from their hospital to Brighton.

Paramedico are now a registered charity available to help other charities by raising funds or offering assistance in the form of communications and first aid cover. Training In advanced first aid and monitoring procedures takes place every other week and is helping to attract new mem-bers. Channel 9 is monitored mostly by mobile members who will, if required, offer medical assistance until the emergency services arrive. If anybody requires further information on THAMES Paramedico, please write to

Paramedico Centre 10 Stanhope Grove Eden Park Beckenham Kent BR3 3JA

#### Sixty-hour ratchet

Colin Crossman, alias Double Jay, recently held a 60-hour marathon ratchet to raise funds, in conjunction with the Plymouth REACT team, to supply disabled, blind or housebound people with CB equipment. More than £350 was raised, which will enable several people to be put on the air. At least one of the rigs will be fitted with a backchat board to enable it to be used by a blind person.

Many donations have been made to Plymouth REACT in both cash and surplus equipment and local dealers have shown great generosity in offering substantial discounts on equipment.

Vice-chairman of Plymouth REACT, Mr. Russell Symons, wishes to express his thanks to all concerned with the event.

\*\*\*\*\*\*

#### The Dirty Dozen CB Club

The Dirty Dozen the one in Selby, North Yorkshire, that is, consists of breakers from all three modes of operation, AM, FM and SSB. They have been established for over two years, during which time the following activities have regularly taken place: indoor sports competitions with other CB clubs, in-depth discussions on CBrelated topics such as the misuse of calling and emergency channels and regular technical discussions organized by Rasputin.

The photograph shows one of the club's recent activities at the Selby Gala, in which they entered a float and held a sponsored 24-hour ratchet. During the ratchet, 397 FM breakers were contacted and a prize (a JWR M2) was given to the person whose guess was nearest to the total number

\*\*\*\*\*\*\*\*





of copies. The photograph was taken by DD's PR man, Instamatic.

Contact Giyn Craig Westbourne Grove Selby N. Yorks. YOB 9DG

#### **Rescue, Aid and Distress**

Secretary of the Rescue, Aid and Distress team, Mrs. N. E. Jones, has written to us requesting that we ask if any other rescue teams would like to swap names and address with them in order to trace missing persons and vehicles. RAD is situated in the heart of the Rhondda Valley and monitors both AM and FM. If you are interested, write to

Mrs. N. E. Jones 17 Alfred Street Williamstown Tonypandy CF40 1PD Tel: Tonypandy 422350

#### **Touch Disabled CB Radio**

B. R. Powell, Honorary General Secretary of the registered charity Touch Disabled CB Radio, wishes to thank, via the pages of CB Radio Magazine and on behalf of those disabled breakers that the charity has benefited, all those who have supported and helped the scheme. Thanks in particular go to three main companies who have moved Heaven and Earth to try and make life happier for the disabled members of our society who have a keen interest in CB radio. The three companies in question are Hammersmith CB Centre, Atlantic Supplies of Cornwall and LCL Imports, whose help has resulted in the efficient distribution of rigs to the disabled.

#### 

Push-button eyeballers, all the rage with breakers

The recent launch of a completely new design in eyeball badges has taken the CB world by storm.

CB enthusiasts throughout the UK are wearing these clever, eyecatching badges which have proved so successful that the manufacturers are trebling production to meet the demand.

The eyeball badges, rectangular in shape, have a push button on the front which, when pressed, results in a flag popping up with the breaker's handle printed on it.

See the colour leaflet in this issue of CB Radio Magazine for details.

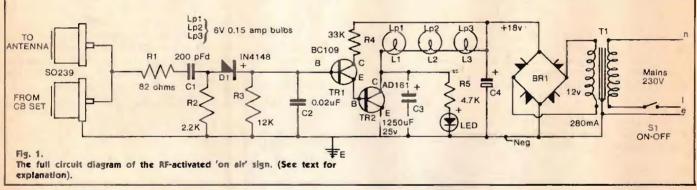
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# CB radio DIY project

RF activated `on the air' sign by F. C. Judd

This 'on the air' sign becomes illuminated when you press the mike transmit button but is initially activated by power flowing from the CB set to the antenna although none of this power is used, at least none that is measurable. The DC power required for the circuitry and sign lamps comes from a built-in power supply. The sign will be activated whether you run the set at the normal 4 watts or with the output attenuated by 10dB, i.e., to 0.4 of a watt.

The unit will have no effect whatsoever on VSWR or the transmit/receive performance of your set. Nearly all the required components are available from one source (see components list) and this includes the case as used for the prototype and shown in the photographs. TR2 base via R4 and TR1 is sufficient to limit the current through TR2 and, therefore, the current through the three lamps to a safe limit of 120 milliamps. An added feature is the LED indicator connected to TR2 collector via the resistor R5. When TR2 is not conducting, the rail voltage at this point will be high (plus 18 volts) and so the LED will be illuminated. When the sign lamps light up, the voltage at TR2 collector falls to virtually zero and the LED then becomes extinguished. So when the CB set is *receiving* the LED on the front panel is illuminated and when the CB set is in the *transmit mode* the LED is extinguished and the sign 'on the air' lights up. The unit circuit as a whole simply functions as an RF activated two-way switch.



#### The circuit (Fig. 1)

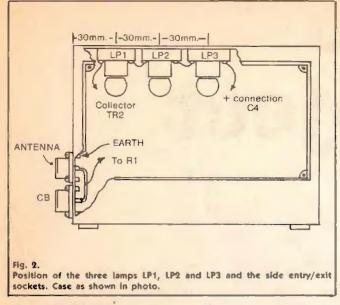
The RF output from the CB set is taken to the unit via a short length of 50-ohm coaxial cable to the SO239 socket marked from CB set. The antenna cable simply connects to the SO239 socket on the unit and which is marked to antenna. These two sockets are linked together so that power from the CB set to the antenna goes straight through. However, the connection from this link via the resistor R1 allows a very small amount of RF current to flow through the isolating capacitor C1 to the diode rectifier D1. This RF current is rectified to now provide a small positive DC voltage across R3/C2. The transistors, TR1 and TR2, are normally cut off, i.e., taking no current. However, when the CB transmit button is pressed and RF power is flowing through the antenna, the positive DC voltage from the diode D1 is sufficient to cause TR1 to conduct. The emitter of this transistor and the base of TR2 now both become positive and which causes TR2 to conduct with a collector current of approximately 120 milliamps. This is sufficient to fully light the three 6-volt 0.15-amp lamps LP1, LP2 and LP3 in series with TR2 collector. Hence the reason for the DC supply rail from the rectifier BR1 of 18 volts. The biasing on

#### Construction

If the case for the unit is the same as used for the prototype, it will have a removable aluminium front panel and a removable plastic back panel. The back panel is used for mounting the two circuit boards, one containing the mains power supply components (T1, BR1 and C4), the other board containing the control circuit components (D1, TR1 and TR2), etc. With 'both panels removed, the two SO239 side sockets and the three lamps LP1, LP2 and LP3 can be mounted as shown in Fig. 2.

The illustrations in Fig. 3 show how the two circuit boards are mounted side by side on the rear panel (see also photos). Wiring for the power supply on circuit board 1 is as shown but the wiring for circuit board 2 is given separately in Fig. 4 as the wiring between the components is on the reverse side of the board. Apologies to those with experience of circuit building of this nature for the rather lengthy explanations which are mainly for the benefit of those new to constructing accessories of this nature.

NOTE: The collector connection to TR2 is made to the body of this transistor hence the reason for the solder tag under the fixing screw as in Fig. 4.



#### The panel sign

The reason for mounting the three lamps at the top of the case, as in Fig. 2, will be apparent from the position of the sign cut-out on the front panel as in Fig. 5(A). Details of the on/off switch and LED positions are also given in this diagram. The lower diagram (B) shows the screens for the sign itself. The front sheet may be coloured (Cinemoid) or similar material. The sheet containing the sign itself is tracing paper which carries the appropriate lettering. Behind this is a sheet of thin Perspex (1/16in. or 1/8in.). The lettering on the tracing paper can be hand drawn in black or maybe Letraset or Meccanorma transfer lettering as shown in Fig. 6. The upper style (A) is as used in the prototype but the alternative (B) could be used so as to include the station call-sign or handle.

### Checking out and connection to equipment

Before connection is made with the CB set, it would be wise to check the rail voltages, etc., with the unit switched on. In this case, the DC voltages at various points should be as follows: C4 plus to ground, 18 volts; collector TR2 and C3 plus to ground 18 volts; TR1 collector to ground 10-11 volts; TR1 base and TR2 base to ground 0 volts; junction R4 and LED plus to ground 2 volts.

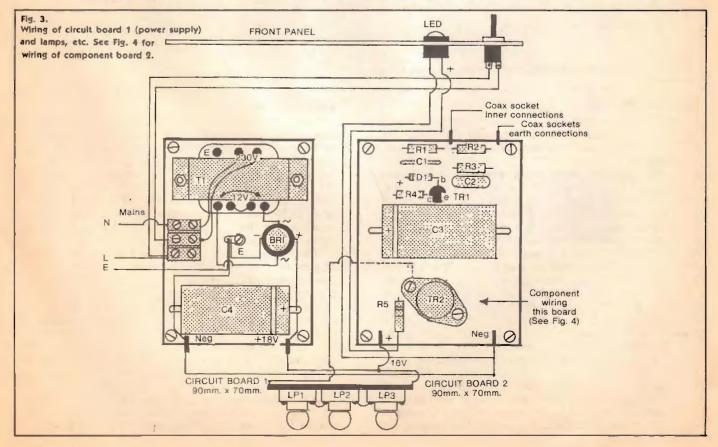
With connection made to the CB set, the unit switched on and the transmit button depressed, the LED will go out and the sign will light up. In this condition the various voltages at parts of the circuit can be checked as follows: C4 plus to ground 15-16 volts; TR2 collector and C3 plus to ground 0 volts; collector TR1 to ground approximately 0.35 volts; junction of D1 plus and R3/C2 approximately 900 millivolts (0.9 volts) with the set on 4 watts output or approximately 70 millivolts with the set on 0.4 watts output.

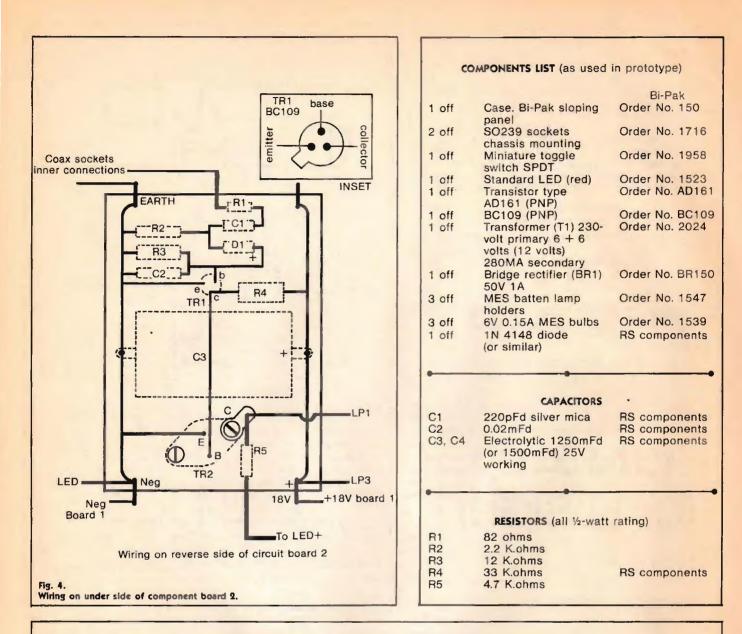
NOTE: These voltage checks can only be carried out accurately with a high-resistance voltmeter (20,000 ohms per volt) or a high-impedance digital voltmeter.

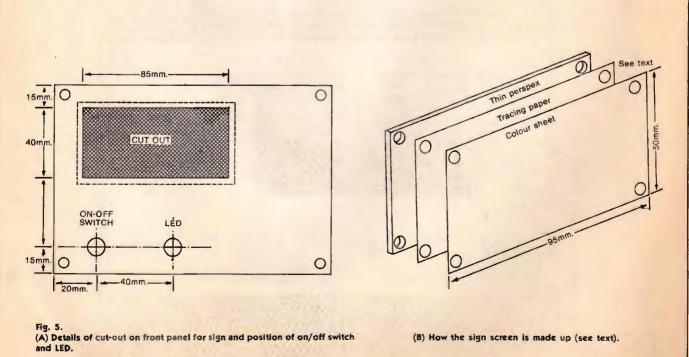
Connections with the CB set are shown in Fig. 7. The normal connections to a base station set with built-in VSWR meter are shown as (A). All that is required is a short length of 50-ohm coaxial cable terminated with PL259 plugs for connection between the CB set and the 'on air' sign as shown.

If you use an external VSWR meter, the connections are as shown by (B) and, therefore, two short 50-ohm connecting cables will be needed.

If you use a linear amplifier, the connections are as at (C). DO NOT CONNECT THE ON AIR SIGN UNIT AT THE OUTPUT OF A LINEAR AMPLIFIER. THIS WOULD DAMAGE THE INPUT CIRCUITS OF THE SIGN UNIT. DO NOT FEED MORE THAN 10 WATTS DIRECTLY INTO THE UNIT.







#### MISCELLANEOUS ITEMS

Plain punched Veroboard sufficient for two boards each 90mm. x 70mm.

Thin Perspex and colour screen material as shown in Fig. 5. 6BA nuts and bolts, solder tags, insulated copper

6BA nuts and bolts, solder tags, insulated copper wire for wiring.

Three-section electrical connector block as on circuit board 1.

Readers are advised to write for the Bi-Pak catalogue and price list to: Bi-Pak, PO Box 6, 63A High Street, Ware, Herts. SG12 9SD or phone Ware 3442. NOTE: Items marked RS components should be available from most stockists of radio components.



(A and B) Suggested layouts for the sign lettering (See text).

To Antenna ON AIR SIGN CB SET VSWR Meter To Antenna B LINEAR To Antenna AMPLIFIER Fig. 7. How the unit can be connected to a CB set (See text).



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## **CBRADIO** THE **JJDIARY**

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Parliamentary Review

#### A look at one year of legal CB

As this issue of CB Radio Magazine commemorates one year of legal British CB, we thought it appropriate to go back over the past year to recall what actions have been taken by our Government to ensure the smooth running of the system.

During November 1981, CB became legal on 27MHz FM and 934MHz FM for equipment covered under the Government specifications MPT 1320 and MPT 1321. The late release of these specifications allowed Japanese and Far Eastern electronics factories to flood the market with sets (some of which were poorly manufactured) and ensured that it was not viable for a British company to produce an equivalent set. The spokesman for the Home Office with reference to CB radio was and still is the Secretary of State for the Home Office, Mr. Timothy Raison, whose name has appeared on the pages of every Parliamentary Review since November 1981 answering questions on a multitude of CBrelated subjects.

During December 1981, written questions directed at Mr. Raison referred to the following subjects: the type of equipment to be used to detect illegal breakers; the conversion of AM sets to FM; the setting up of a common European system; measures to pre-vent the sale of 49MHz walkie talkies; the Government's reasons for choosing an FM system and the extortionate price of the CB licence. In his replies to these questions, Mr. Raison stated that existing detection equipment was sufficient, AM-FM conversion would be allowed, a common European system would be set up eventually, measures to prevent the sale of illegal transceivers would be introduced and the licence fee would stay at £10. The Government's choice of an FM system was defended on the grounds that it causes less interference to other users of the radio spectrum.

In January 82, it was suggested that the CB licence fee should be brought in line with that of yacht radio, a suggestion that was rejected by the Prime Minister herself. It was also suggested that steps should be taken to prevent the sale of illegal equipment. Although Mr. Raison agreed to this proposal, measures have still not come into force but will do shortly when the new Telecoms Bill comes into force after the next election. Mr. Allen McKay asked Mr. Raison if an AM system would be introduced and whether more FM channels would be introduced. The answer to both questions was a definite NO.

During February, in reply to a question by Mr. Clement Freud, Mr. Raison stated that 106,408 CB licences had been sold and that he thought the new system had been well received. The Lords were concerned about the effects of CB radio on road safety, in particular the use of a hand microphone whilst on the move and promised to keep a close watch on the situation.

During March, the question of licence revenue was brought up and Mr. Miller suggested that the figure of just over £1 million could have been exceeded if a more compatible system had been introduced. In reply, Mr. Raison reiterated previous remarks about AM interference and defended his choice of the FM system. It was then suggested by Mr. Onslow that the Post Office were not really trying hard enough to track down users of illegal equipment. In their defence, Mr. Raison stated that there had been a considerable drop in the number of reports of interference since November. Mr. Campbell Savors repeated his request for a lower licence fee.

Again in April, the question of TV interference was raised and in reply, Mr. Raison reported a nationwide drop of 20% since November, Clement Freud expressed his concern that the licence fee revenue should be spent on ensuring a trouble-free service for the licence holders. Mr. Raison replied that the only cause of interference to the legal system was the use of AM sets and that once revenue costs had been met, the remaining revenue would be spent on investigating interference. Mr. Sheerman asked how many prosecutions had been made against illegal radio operators since legalization, to which Mr. Raison gave a figure of 700. Mr. Sheerman also asked how long it was taking before complaints of interference were investigated and Mr. Raison admitted that there was, in some areas, a long delay due to the large number of complaints.

In May, following a number of traffic accidents, the question of mobile use of CB radios was again raised but the possibility of preventive legislation was rejected. Mr. Clement Freud was still asking questions about the licence fee, in particular whether it would be the subject of periodic review, to which a positive answer was given.

During June, much of the Government's time was taken up by matters concerning the Falklands crisis, although a few CB questions did manage to

break through the barrage. The question of faulty power supplies was finally raised in the Commons after much publicity in the national press. This time, the Minister of Trade, Dr. Vaughan, was asked by Mr. John Fraser if he would use his powers under the Consumer Safety Act to prohibit the sale of lethal power supplies. In his reply, the Minister stated that some suppliers were already being prosecuted for failure to observe the 1975 Electrical Equipment Safety Regulations in the Manchester area. In reply to a question by Mrs. Dunwoody, Mr. Raison stated that there had been 11 summonses issued against users of illegal CB equipment. July was a relatively quiet month for CB in the Commons with only fairly routine questions about interference and prosecution figures for the Isle of Ely being raised.

The subject of faulty power supplies came to the surface again in August when Mr. John asked the Minister for Trade what steps he was taking to advise purchasers of CB equipment which was in a dangerous condition. Dr. Vaughan stated in his reply that purchasers had already been warned via media programmes such as Nationwide and Thames News and by local authorities about the dangerous equipment. Mr. Grist asked how many prosecutions had been made in the last three months and whether the Home Office was in a position to estimate the number of owners of legal CB equipment, Mr. Raison said that he was not in a position to answer either question.

Also in August, the ethics of allowing the sale of unlicensable radio equipment which is liable to cause interference to other users of the radio spectrum was discussed and plans to prohibit their sales in the UK were announced by Timothy Raison. Equipment covered by the legislation includes remote telephones, page alerts and, of course, all AM and SSB CB equipment.

That just about covers the past 12 months' activity by our honourable Friends, who should now be returning from their summer recess. We will keep you up to date with further Parliamentary events as they happen.

# NFWS REVIEW

#### Western Morning News Breakers get the hang of rescue

A young hang glider, recovering from injuries received in a Bank Holiday crash, can be grateful to Double Dealer, Green Flash, Slack Alice and other oddly-named characters.

They are all CB enthusiasts who raised the alarm when they saw his hang glider nosedive into thickets on the edge of Gittisham Common, East Devon, after being caught by a gust of wind.

John O'Conner (Everard), from Sidmouth, was taking part in a West Country multi-linkup for breakers with his wife, Slack Alice, when they saw the hang glider take a plunge. He put out a 10-33 and contacted Double Dealer, from Exeter, who made a 999 call from a nearby phone box.

The hang glider was taken to Royal Devon and Exeter Hospital, where his condition was described as satisfactory.

#### **Belfast Telegraph**

#### Protest at CB language

It is not often that we reproduce a letter that has previously been reproduced in a newspaper but this letter demonstrates how much harm can be done by misuse of the CB system. The letter also refers to the article "Obscene 'good buddies' cut blind man's lifeline", also reproduced.

I wish to protest most strongly about the foul and positively indecent language being used nightly on CB radio.

There seems to be a nightly contest on for supremacy as to who can hit the other breaker with the direst insults and threats of personal violence, phrased, of course, in the foulest of foul terms.

A sightless operator, to whom con-versations on the CB meant his all, has recently been the subject of the most vituperous and filthy remarks each time he spoke on the channel so much that as he said himself his spirit is broken, he can't take any more, he'll quit. This genteel breaker hasn't been heard since.

My own expensive rig lies dormant. I can't bring myself to be a party to such filth and inanity as is current among the so-called 'good buddies'.

**Red Falcon** 

One year ago, press publicity for CB radio was mainly concerned with the release of the new CB system In Britain with headlines like "CB Radio Takes To The Air" and "Switch-on Day For Good Buddles". One year later, complaints about interference to emergency radio systems and foul language on channel are commonplace but public awareness of CB and its emergency potential seems to be still increasing despite the bad publicity.

Emergency monitoring services are getting plenty of good publicity for their prompt reporting of road traffic accidents and providing coverage for charity events up and down the country. So, too, are the CB clubs who are still managing to raise vast quantities of money for charity at every opportunity. According to the press, donating CB equipment to blind and disabled persons is also still a favourite CB club activity.

## Obscene 'good buddies' cut blind man's lifeline

'His spirit is broken. He can't take any more'

FOUL-MOUTHED Citizen's Band operators have forced a blind pensioner to give up the hobby he loves so much.

Even when heartless thieves tricked 65-year-old James Gordon into parting with his radio rig on two occasions the old man went back on the air.

But last Tuesday he hung up the microphone for good...because of the obscene taunts of his fel-Jow "good buddies"

"They have called me 'a blind old F' and every letter in the alphabet," said the heartbroken Belfast pensioner.

#### Dirty

"I never talk that kind of dirly talk," he added.

The Tennent Street man Ine Tennent Street man used his radio link as a life-line to the outside world. Friends would call him up to ask if he needed any-thing from the shops or if needed decorating he done.

Оп On two occasions thieves walked into the old man's house and confis-cated his set, claiming they were representatives of British Felecom.

Northern Echo

Swearing CB fans

rapped in 999 row

Irresponsible CB fans have been

blasted after blocking an emergency call. Taxi driver Ken Watson hit out

after he tried to make an emergency

call recently following a motor-cycle

Then Newtownards bank manager heard of the CB lover's plight and bought him a new legal set on the licensed FM band.

But the new listeners on line legal channel didn t welcome the chatty old fel-low, instead they accused him of interferring with their broadcasts, swore at him and sent him to Coventry

"They said I was cueing the mike and broke in to tell people not to answer my calls," complained James.

Finally in disgust the blind CBer disconnected bis set and went off the air for good on Tuesday. "Anyone who applies for a CB should be tested. The

airwaves are not for dirty talk," said James. "I used to make up wee poems and songs for the girls who spoke to me." he added

But James who used the "handle" Charm Boy will be sadly missed by the more friendly CB good buddies.

"His spirit is broken. He cannot take anymore," said one of his radio pals code named Red Falcon.

#### Protest

"There seems to be a nightly contest in who can hit the other breaker with the dirtiest insults and

threats of violence," he added.

added. The CBer has also packed in his hobby as a protest. "CB channels are not policed. The authorities should monitor the band and introduce some form of control with penalities for control with penalties for offenders." said Red Falcon

A spokesman for the Home Office in London said the angry CB lans should write to the Radio Regulatory Division with details of their complaints.

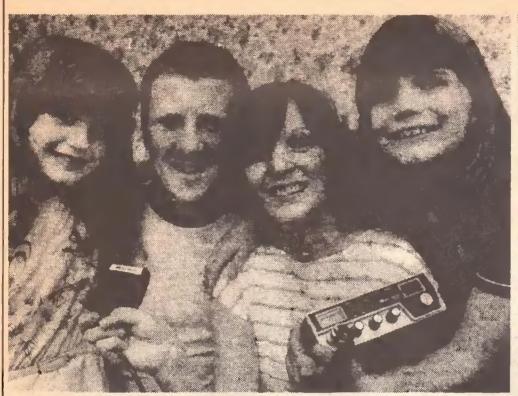
The division, which is based at Waterloo Road is responsible for policing the

"We will took into the complaint," said the spokesman.

accident. His efforts were foiled by four people talking over channel 9. They refused to switch off, swore at him and eventually he had to run to a telephone box to make the call.

Ken, from Darlington, is now angry that the foursome's antics could have meant the difference between life and death. Luckily, this time, the motor cyclist was not seriously hurt.





Fay Craig and Ronnie Towner get together with bridesmaids to be Rebecca and Anna McCall.

#### News of the World

#### **Balloon goes up for heroes**

There were plenty of volunteers when servicemen were asked to dance naked with balloons. The call for five dancers came at a party for 30 Task Force heroes thrown by a CB club.

So great was the enthusiasm to strip that the volunteers bared all as they raced to join in the fun at a Bath night club. At this stage, several disgusted guests walked out. Mrs. Celia Powers, of Bath, said, "I thought it may turn into an orgy, so I took my 17-yearold daughter home".

The Mayor of Bath, though, who was at the party, said that they were just young men letting their hair down and that he would have done the same at their age if he had been through what they've been through.

The servicemen joined in after a balloon dance by CB club members including two girls dressed only in suspenders, pants and a bra. Club member Biff Gower said "We've done the act before at a Bath police dance – and there was no shortage of volunteers then either".

#### Morning Telegraph

#### Police seek curbs on CB radio 'danger'

The Government is planning urgent legislation to curb the use of CB radio less than one year after it was legalized. Home Office ministers are having to bow to increasing pressure from the emergency services, especi-

#### The Journal

#### **Drummer knocked out**

An 18-year-old girl was knocked unconscious when a stack of loudspeakers collapsed at a recent carnival. The drummer with a Tyneside jazz band was taken to hospital after being unconscious for five minutes. The drama happened in high winds at an Eyeball carnival organized by the South Tyne Association of CB Clubs, at Greenside, near Ryton.

Speakers in the main arena blew

ally the police, who say that since CB became legal last year, interference with their own communications has increased enormously.

"It is posing a serious risk to life and limb and to our ability to respond quickly to emergency calls," said a Scotland Yard spokesman.

The problem is being caused by the use of illegal linear amplifiers with the legal 27MHz FM system. The problem being that at the moment the Law does not prevent the sale or manufacture of equipment that is illegal to use. Even if someone is caught using the equipment, the police do not have the powers to seize it.

The action is almost certain to be an extra clause to the Telecoms Bill, details of which are to be announced shortly.

Although emergency services have been affected all over the country, the problem appears worst in the London area, where at least one channel had to be shut down recently for 23 days out of 31.



A hundred good buddies were waiting at the church this afternoon to witness a fairy-tale romance come true between Cherry Brandy and Boxer.

Eighteen year-old Fay Craig moved to Bromford Park and bought a Citizens Band Radio.

She soon made friends using her "handle" Cherry Brandy and before long met Ronnie Towner, known as Boxer.

With the help of a few good-buddies — the CB name for breakers the couple were brought together and they were marrying at St. Philip's and St. James's Church.

over onto Julie Blake, from South Shields, who was taking part in a competition at the carnival. She was then treated by St. John Ambulance men before being taken to hospital.

The carnival was staged in ald of the Craiglea Home for the Handicapped and organizers were hoping to raise more than £2,000 by staging events, including the band competition, five-aside football and a disco.

Julie was released from hospital after an examination.

#### East Anglian Daily Times CB fans do best to rouse crash victim unconscious in hospital

Colchester's 'good buddies' are doing their best to help a teenager who is unconscious in hospital as a result of a road accident more than seven weeks ago, when the CB enthusiast received head injuries. Recently, though, friends of Shaun Wyatt's, the injured youth, took a CB rig into the ward at the Essex County Hospital and other breakers spoke to him on the air. His sister, Jean, said that there was a slight response from him as the voices came through.

"His favourite hobby is CB," she said, "and I thought it could help."

A spokesman for the hospital said that voices were the best therapy for someone in this condition.



INTERNATIONAL r spo



KEEP HIM IN THE AIR

Hi there, swingers. I thought I'd try a new approach this month. What I intend doing is to utilize to a greater extent some of the smashing letters which I receive. By this I mean to get a bit of an international chit-chat going. It might work, it might not. I don't know for certain. I certainly find inter-national mail extremely interesting and absorbing. All sorts of useful bits of CB info come to light this way. Anyway, rather than waffle on any more, I'll get going. By the way, I would like your comments on this month's article. Let me know if you find it interesting enough and, in fact, good enough for me to do a similar style now and then.

Before I do actually get going, I'm pleased to announce that once again I am back on the airwayes, running riot and trying to act like any self-res-pecting pirate! You've guessed it, my Colonel FR360 has come back home. Mind you, not 100% of its own free will. It received a wee bit of help from the local constabulary and some incredible detective work from my brother, Mike (Triple Sierra 01 – Local AM Bandit). Without his help and determination, I'd still be 'radioless'. Thanks a bundle, Mike. Thanks also to you all who wrote to me expressing your sympathy and an extra special 'ta' to Chris Moore (Greybeard CFB31), who actually offered to loan me his Tristar 747. I really appreciated your kindness, Chris.

Right, enough of the gruesomes. First name on this month's 1-4-1 list is Norman NS21. Until recently, Norman was quite happy operating on SSB, assuming that he was safe from TVI and thinking that he was upsetting no one. However, this dream was rudely shattered one day. It seems that a funeral service was being held in the local church when suddenly SPLATTO! Norman's modulation came screaming through the church tannoy system. It soon became apparent who was responsible for this interference, with the result that Norman received a visit from Buzby and ended up on the wrong side of a pecking session. It must have been a real severe pecking, as Norman has had to give up sideband for the while and resort to legal FM. To keep his hand in, Norman is busy QSL'ing left, right and centre and would appreciate some new contacts.

His special interest at the moment is Australian QSL'ers. Should you know of any Aussie contacts, Norman will be really chuffed to get their names and AD's.

NEW ZEALAND NATIVE BIRD SERIES #>

I think it is generally accepted throughout the whole of the 11-metre population that possibly the two best and most respected DX groups in the world are the World Wide (Whiskey Whiskey) and Alfa Tango Group. It is arguable which is best but if I was forced into a corner, I think I would eventually concede that, point for point, Alfa Tango Int. DX Group of Asti, Italy must head the list. The sheer pro-

fessionalism of the group is something else. Several new items have recently been added to their impressive list of available items. Perhaps most important of all is the new second edition of the 1982 roster available now. Containing more than 3,500 AT members, it is a must for keen AT unit operators. Cost is US\$3, surface mail. Air mail is an extra US\$2, I've probably no need to remind you that the AT Group also has an extensive award system ranging from the rela-tively easy worked all continents (WAC) award to the super-dooper Golden Group Award, i.e., 300 confirmed

VanZoggel

P.O. Box 14067

Kilbirne Wgin

NEW ZEALAND

eter

QSO's with 300 AT members. Probably the easiest award of all to claim, from our point of view, is the Friendly Award Italia, five confirmed QSO's with five Italian stations will bring you this award. When the conditions are right and you put your mind to it, you could probably knock this one off on a Sunday afternoon. Alfa Tango Group have just held their European AT congress, in Asti, Italy. A very grand and ambitious affair, lasting from 1 October up to 3 October. Everything was arranged by AT Group, Including meals and accommodation. All that you had to do was book your place and turn up. As yet, I've no idea as to how the event went, so am most keen to hear from anyone who was there. If anybody fancies dropping me a line and letting us all know how it went, I'd appreciate it.

Some good news now for all you Tshirt collectors. Sandcastle QSL Club, of Pacific Beach, Washington, has announced that a club T-shirt is now available. Ian Schrader contacted me the other month and gave me the upto-date info. The T-shirts will be a silkscreen printed design, possibly a white logo on a coloured shirt. Cost is not too bad, US\$10 sea mail or US\$12 air mail.

#### Guaranteed 1-4-1 QSL'ers

NS 21 Norman 63 Stoneywood Terr. Bucksburn Abardeen Scotland (A dead cert for 100% 1-4-1)

Ken Potter (Kilo Pape Whiskey) 79 Auckland Way Whitby YO21 TLL

Mike and Anne Smith PO Box 18262 Christoburch New Zealand

James Walsh (Alien) 111A Hartplain Ave. Cowplain Hampshim POS BPN

Fren and Bill Popp 8618 Gillespie Street Philadelphia PA 19136 USA

Arthur R. Feinberg (Arty 6 Int. 43) 23 Pearl Street Stoughton MA 02072 USA Rose Maria Arnolt B304-133 Avanue Edmonton, Alta. Canada T5E 138 (Muzziałoader OSL card) Roy Staflord (29 IDD 34)

(29 IOD 34) Birchville House Kliquade, Greystones Co. Wicklow, Ireland

Ronald Fraser (IRF 588) 8 Polworth Road Torry, Aberdeen Scotland AB1 3DA

Brian Degnan (Samural) 39 Burnside Road Aviamore Invamese-shire Scotland

(Brian's Samuari card is a belter, simple but highly effective)

Michael (The Flasher) 12 Cleveley Gardens Mytholmroyd Hebden Bridge West Yorks

DX/QSL club calling frequencies Mike Delta Radio Club, Mid Glamorgan, S. Wales 27.635 USB. NT. New York, USA 27.785 LSB. Int. Freq. Operatora. Gadsdon, Alabama, USA 27.605 LSB. President Sideband Club, Maryland, USA 27.375 USB.

lan is quite happy to accept English money (paper only, please) as long as sufficient funds are sent to cover costs. To order a T-shirt, just drop a line to lan at PO Box 167, Pacific Beach, Washington 98571, USA and state size required. I'm not certain if UK and USA sizes are compatible, so possibly it's better if you state actual chest size as opposed to the normal

Puny, Fair, Medium and Butch. Delivery is pretty quick, the only drawback is that lan has to order a minmum of six at a time. This may cause a slight delay but nothing to worry about. On a different level now, lan has told me that he has had to ask his English Sandcastle rep. to resign. For some reason best known to himself, Alistair Southeby (Cool Aid) has appeared to have totally opted out of the QSL scene, ignoring QSL mail in the process. It wasn't an easy decision for lan to come to but, after receiving rather a lot of complaints, he felt that in order to preserve the good name of Sandcastle Club he had no alternative. This now leaves a gap in the Sandcastle ranks which lan is keen to see filled as soon as possible. So, how about it? If you think you would like to be English rep. for Sandcastle Club, either get in touch with lan direct or drop a line to lan's UK rep., Clem Bain, 151 Ferryboat Lane, Sunderland, Tyne and Wear. For the really ambitious who have dispensed with pen and ink, try giving a shout on the Sandcastle Club frequency, 27.605 LSB.

Can you remember, a couple of issues back, when I rambled on about the Int. Radio Group of Boston, Mass.? Well, I had a surprise letter the other week from Arthur Feinberg, an Int. Radio Group member. As it happens, Arthur is a well-known visitor to these shores, courtesy of the frequency, operating as Station ARTY 6 Int. 43. Earlier this year, Arty actually visited the UK in person and met many of the stations he had QSO'd with. He especially would like to thank Frank, the Delta Tango 308 of Bedford and Roy the CMC 01 of Huntingdon. As Arty says, he was really treated with that good old English hospitality. I've since asked Arty to give me an update on how the DX/SSB/QSL/CB scene was going Stateside, What Arty told me was very interesting but what really excited me and made me feel very proud was how, according to Arty, USA stations are impressed with the standard and quality of English stations and our QSL response. I'll quote Artie: "As far as the DX situation

between England and the USA is, I think USA stations are just as happy to talk across the Pond to you as you are to talk over to the USA. I'll tell you, you guys in the UK send over some surprising things to the USA. I have received some interesting things for sure. I will tell you, Chris, England is one country that you can be sure to receive a QSL return from. I get about a 90% return. Italy is one country I don't like to QSL with because I hardly ever get a return from them. If guys over in Italy want to QSL, I have them send to me first then I will return to them. That's the only way I will QSL with Italy, South America is another place that is poor when it comes to QSL'ing.

Well, there you go, UK DX'ers and QSL'ers. Stand up and take a bow! Arty, by the way, can generally be found on 27.640. Unfortunately, though, not on a Sunday. DX work in the Feinberg household is definitely out of order on Sundays due to the fact that everybody is home and Arty just absolutely buries the telly! Yes, folks, TVI still exists Stateside.

TVI still exists Stateside. A quick word of warning now via Dave Wilson (Stormbringer) of Newcastle Kevin Keegan upon Tyne. Dave recently received a card and letter from Gene Chellberg, President and Founder of Redwood Country Club. The card was OK but the letter stinks! It's a copy of a pyramid letter which is going the rounds; the usual sort of thing, a dollar to the number one AD, move the other three up one and shove your name on the bottom. As Dave says, "A rip off of the first order'. I heartily agree. It's a shame that the QSL scene is used in this way. Take my advice, should one of these letters appear in your mail, put it where it belongs - the rubbish tip. International contacts via CB can

International' contacts via CB can certainly be interesting. Apart from giving you a real insight into other cultures, you can get to know the international CB scene pretty well. The following info is courtesy of Harry Jones, of Otaki, New Zealand, a very well-respected NZ operator known on the frequency as Buck 41E57. As you will quickly gather, this info is extracted



Hello From 6 INT. 43 In Boston

Mass.

"ARTY"

6 INT. 43

P.O. BOX 641 STOUGHTON, MASS. 02072



from a couple of Buck's letters. CB New Zealand, Scene One, Take One, action!

action! "CB here is now losing its initial popularity which peaked around two years ago with registered sets numbering about 60,000. CB was first allotted frequencies approximately 23 years ago on 26MHz from 26.425 to 26.725MHz with 25kHz spacings on AM only. Maximum output is 2W and antennas are restricted to omnidirectional with a gain no greater than that of a half-wave dipole. Skip may be worked, the only restriction being that we stay within the boundaries of NZ and her territories. Sideband is illegal but many sets have come into the country via Australia and at a rough count there must be at least 5,000 pirates working International DX. Europe comes in well between 7.00pm and 1.00am NZ time (7.00am to 1pm GMT) for about 4-5 months starting late November. The most prolific European contacts are via Belgium, Holland and Germany with (surprisingly) Luxembourg not too far behind. Other contacts have been made in Switzerland, Denmark, Yugoslavia, Finland and Hungary, all on 27MHz. The UK is making itself heard down here in no uncertain terms (I like it, I like it) and, although I don't work the set much at night, I have made a few contacts but friends of mine talk to the UK almost exclusively."

So much for Buck's views on the NZ radio scene. The QSL scene is just as Interesting. Sundown cards appear to be the most popular of the Collectors' Card Series with NZ QSL'ers. As it happens, I have quite a few of the NZ Native Bird Series and often wondered how and where they originated. By pure chance, Buck provided the answer.

"New Zealand Birds began, like so many good things do, over a few beers. Three of us were poring over our Sundown cards whilst pouring down copious quantities of lager when somebody raised the idea of starting a typically NZ series. Each thought it a good suggestion but we couldn't agree on a subject. One thought of NZ country scenes, another idea put forward was native Maori carvings but the idea which was most popular, at the time, was country pubs (naturally). However, next day, upon sober reflection, we decided upon Native Birds. The series is now so popular with collectors in the Wellington region that there are now 25 cards either on order or already done with more showing interest every day.

We've even had enquiries from the South Island and Auckland, some 400 miles away. If this keeps up, we'll have to import some more native birds! Of course, there are other Sundown card holders besides those with birds and this would bring the total number of NZ Sundown card holders to around 60-70. There are several damn good collections down this way and all.



"Abdul" Relbudden, the President of the Kia-Ora QSL Club, has the most complete set in the country. There are (to date) 930 cards in existence and he has all bar 28! I would be next, needing 48 and third is Wayne, the KO Unit 01, the Founder of the Kia-Ora Club, needing around 60. We were the three that started the Bird Series and many a beer has passed under various bridges (and other places) since then but precious few new ideas. Needless to say, there's intense competition between us. We still have to go some, though, to catch Mick, the President of the Connecticut Crumb Snatchers Club, who needs just one more card to complete his second collection."

That, more or less, is the bulk of Buck's news regarding the NZ scene. I, personally, found it very interesting. Hope you did, too. To finish off NZ and give you an idea of the Native Bird Series, reproduced is Card No. 7 in the series (Sundown 907-81). This card is held by my great pal, Peter Van Zoggel (ZOG), of Kilbirnie, Wellington.

Talking about Sundown cards reminds me that, some time in the near future, I must give you the inside story on Sundown cards.

My last piece of international gossip is from Rose Marie Arnott, of Edmonton, Alberta, Canada. I've included this little snippet just to prove that CB is the same, no matter where you go. Rose can generally be heard on USB, channel 37/38 and LSB channel 37 to 40. Equipment is a TRC Navaho, original mike topped off by a Starduster approximately 45ft. up. As yet, Rose hasn't contacted any UK stations but there's a chance in the future if Rose's plan comes off. She's thinking about the possibility of a beam, which will certainly make one hell of a difference. Rose's husband, Jim, talks local but Rose just can't be bothered with AM (This is going to sound very familiar to you!). If there's nobody on sideband, Rose generally closes down the station. Apparently, in Edmonton, there's an awful lot of people who do nothing else but abuse the channels. It's sad to hear that this appears to be a world-wide affliction.

Right then, that just about wraps it up for another month. I was going to give the background on the Scottish DX Club but, once again, I've run out of space. I'll put SDX on a standby and give it the once-over next month; a good club and one worth knowing about. A special request now which I hope some of you can help me with. Yonks ago, before the glossy CB mags hit the stands, the only CB publication available was the legendary Bandstand, run by Mike and Wendy Evans. Years ago, people would ask me "What's CB?" or "What's going on?" and similar questions. In the happy belief that I was passing the word, I gave my Bandstand copies away as soon as I read them. In retrospect, I reckon people were just too tight to buy a copy and came for mine because I was a soft touch! Anyway, I am now looking to build up my collection of back issues. Can anybody either sell me theirs or put me in touch with someone who will. No reasonable price refused. I would really appreclate some info on back issues of Bandstand.

Well, that's it for another month, guys and gals. Hope it has been of some interest to you. Let me know how this style seemed. Good or a load of rubbish is the sort of comment I'm looking for.

Till next month, take care, best regards.

Charlie Hotel Unit 25, clear.

News, views, comments, QSL swaps, dirty fivers, etc., to Charlie Hotel, c/o 3 West Street, Tyne and Wear SR3 1EU.





# Readers Write

#### Dear Sir.

As a professional in the communications field, I am not often prompted to write to periodicals due to other pressures on my time. However, the letter from K. Bradford, in your August issue, seemed to contain such a hotchpotch of half truths and misleading snippets of information that, for the sake of sanity, a few points in reply are offered.

#### 1. AM is dead

Despite Mr. Bradford's position as a technician in the TV trade, he seems terribly lacking in understanding of the way in which FM is demodulated in the present generation of CB radios. Many sets do exhibit a high noise output in the absence of a signal due to the use of 'signal' squeich rather than 'noise' squelch which is, in fact, used in most professional and amateur FM equipment. 'Signal' squelch has been the standard for AM CB radios and was, unfortunately, retained for the initial production of sets for the UK market due to cost considerations. Use of the correct form of squelch circuitry in radios properly designed for the FM mode can certainly give far superior results than AM under the same conditions. If Mr. Bradford doubts this, let him properly investigate the subject under controlled conditions and also make himself properly aware of current professional practice in the communications field. Far from being "technically simpler" as Mr. Bradford states, modern FM radio systems and circuitry can be far ahead of the "Ancient Modulation" he so dearly loves in sophistication of desian.

#### 2. Interference

One of the few areas where the content of Mr. Bradford's letter approaches the real truth is his comment about the design and constructional standards of consumer electronics equipment. Our own long experience also suggests that the vast majority of BCI, TVI and AFI cases are due to deficiencies in design, installation, use or maintenance of the offended equipment. Of the remaining cases (those about which Mr. Bradford makes no meaningful comment) there is absolutely no doubt that the use of amplitude modulated equipment figures most highly in the range of sources found to cause interference in this way. If Mr. Bradford will refer back to the theory he must surely have studied in the course of becoming a TV technician, he will be aware that signals varying in amplitude, as opposed to signals varying in frequency, are more likely to evidence themselves as interference to other services. This is particularly true in the

case of interference to audio equipment. It should also be borne in mind that operators are all too often the cause of interference, especially when technically ignorant and using high-power (often converted-amateur) equipment. Much of this equipment requires at least some understanding of radio theory if it is to be operated and adjusted correctly. Monitoring of many of the signals attributed to Mr. Bradford's "best operators of all" will demonstrate that the case is made for much more control ..., not less!

#### 3. Range

Oh dear ... ! Mr. Bradford, did you really want to fall into the morass that this argument can lead you to? Apart from the fact that CB is not intended to offer RELIABLE long-range communications, I suggest that you investigate further the achievements of radio amateurs on the 10-metre band (not a gnat's whisker away from 27 MHz). FM contacts have been made around the world using low power without satellites, repeaters or any technical trickery. There are groups such as 10-UK and Ten-Ten International which exist to investigate and popularize this type of activity among radio amateurs. Mr. Bradford, please remember that not all the readers of this magazine are going to be so lacking in knowledge and experience of radio-wave propagation as to fall for that line of propaganda

#### 4. Filters

Mr. Bradford really gets my sympathy here. He is correct in stating that standards of RFI proofing in the UK are guite abysmal and could be improved to the USA standard at the very least. As to Mr. Bradford's comment about other user services in the 27 MHz band, just what can one say? A proper study of the history of the development of radio will show that CB is a much more recent user of frequency space than the other users he mentions. It would be just as valid to guestion whether "the turkey who put CB on 27MHz in the first place is the full shilling". Much informed opinion would suggest that 27MHz was a most unsuitable frequency for not only CB but also many of the other services. The letter from Mr. Leslie, of NATCOLCIBAR, has some relevance to this point.

#### 5. The superior system

Well now, Mr. Bradford. Please tell all! Just how do you get all these wonderful facilities into the 26-28MHz band that you are so keen to organize for yourself? As a "TV technician", are you really so unaware of the band-

width required for "TV (not slow scan...but fast scan, honest to goodness video)"? Or do you intend to have the whole 2MHz to yourself plus a huge chunk outside your band as well? SSB, CW, RTTY ...? All modes exhibiting major excursions in amplitude and you advocate the free use of them in your ideal CB system. I sug-gest, with respect, Mr. Bradford, that you (and any like minded) make a much more careful study of the subject of radio communications before committing yourself to a particular policy or course of action. It is probably worth remembering that the electromagnetic spectrum is as much a natural resource as the air we breath. the water we drink or the space in which we live. As such, there is a responsibility incumbent upon us all to husband and value that resource in the same way as any other ... or perhaps, Mr. Bradford, your way is better?

Yours faithfully,

P. J. Gillen (Good Vintage Whisky) Ipswich, Suffolk Mr. Bradford has certainly caused a bit of contention in our Readers Write column. Has anybody got strong views on 934MHz equipment yet? (Wooden spoon)—Ed

#### Dear Sir,

I strongly applaud the very responsible comments on page 50 (bottom of left hand column and top of right hand column) of your September 82 issue. It was with much disappointment that I then read the highly-irresponsible comment in the left hand column of page 44 of the same issue!

Since 1978, a considerable programme of investigation and research into the hazards of non-ionizing radiation has been carried out under the aegis of the Health and Safety Executive, with participation by a Ministry of Defence establishment and several of the major oil companies. This programme has addressed the hazards that may occur in flammable atmospheres and the hazard to electroexplosive devices. British Standards are currently being developed to cover both aspects and are based on the best knowledge presently available. However, there is more yet to be learnt, especially in the context of the use of explosives in drilling operations. Indeed, Shell Research Limited is currently engaged in research into this in conjunction with Schlumberger - one of the world's biggest users of downhole explosives.

So long as there is the *slightest* chance of an inadvertent detonation, we in the oil industry will impose radio silence within our drill sites and we shall expect responsible breakers to co-operate by not transmitting near such sites. We may have to take other action to exclude from areas near drill sites irresponsible breakers, including those 'cowboys' who still operate rigs





Yours faithfully,

A. W. Richards Head of Telecommunications

Engineering, Shell UK The irresponsible comments that you refer to were made by a Sun journalist who obviously doesn't know his non-ionizing radiation from his elbow. Seriously, though, I do hope that breakers in the vicinity of drill sites will observe radio silence. Ed.

Dear Sir,

The Suffolk Emergency Action Radio Service, along with many other groups, monitors channel 9 for the reporting of accidents.

It is becoming an increasingly difficult job owing to the number of sidebanders who are coming through on the emergency channel.

When monitoring here in East Anglia, I have clearly heard people from Scotland and Ireland as well as Malta and Italy.

Can I ask all readers who enjoy sidebanding if they could please ensure that they keep clear of channel 9 FM (channel 64 AM or 27.685MHz ±5kcs)? It is possible that they could block an emergency from being reported - thus perhaps causing loss of life.

May I finish by thanking you for your

help and wishing you all good sidebanding on the higher channels? Yours faithfully, P. Hainsworth (Mrs.)

Chairman, Suffolk EARS

Dear Sir.

On 22 July, my family and a neighbour's family left our home in Dover and set out for Souillac, in the South of France, approximately 150 miles east of Bordeaux, arriving on Friday afternoon about 4.00pm and only copying one other English breaker all the way down, I was a bit disappointed. Anyway, we arrived at our camp site at La Paille Basse, a short distance from Souillac and, after erecting the tent, I returned to the Ford Motor Home, which we had driven down in, only to find, when I switched my rig on, every channel from 1 to 40 had not a breaker on it. I must have called on 14 and 19 for over an hour and not a breaker found anywhere. The same happened on Saturday. On Sunday, a quick flick through the channels and stopping on 32, I called CQ-DX only to find my call answered by The Badger, in South Wales. Great, I thought. I can get to the UK.

The best day was on 27 July at 9.40 in the morning on channel 33. There it

was all from Grimond Fraserburgh, Yankee Doodle and Apple Blossom: signal 4lbs., modulation very clear. Both of us had QSL and I enclose a copy card. For the record, my rig is LCL Communicator 440DX and my twig is a DB27. All together while on holiday I copied 15 and enclose a list of stations.

Congratulations to Dillon and Hot Rod, in Neath, South Wales, who on Sunday the 29th were running the Hospital Laser Beam Fund to raise money for their local hospital. I copied them and also passed on a cheque from Souillac in the South of France. Well done, lads, for all the effort you put into it.

Copies: TW06, Scotland; AM, Belfast; BM, Ireland; GL, Ireland; IPC 036; TR7; WB 1465, PO Box 8; GL; Sweetooth, Aberdeenshire; Ironduke, Market Drayton; WT01, Belfast; The Badger, South Wales; GC 15, Treorchyl, Wales; Tone ND1, Derbyshire; Moby Dick, West Wales.

Regards,

Tony Guest (AG10)

Dover, Kent Having seen the OSL's for these copies, I can assure you that they are 100% authentic.—Ed.







# An Introduction

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In the 70 years since the formation of the London Wireless Club in 1913, the face of amateur radio has changed dramatically. Consequently, the national body that looks after the interests of the radio amateur has had to change too, starting in 1922 with a name change from the London Wireless Club to the Radio Society of Great Britain.

The work of the Society has increased rapidly over the past years. This is illustrated by the fact that at the last Radio Amateur's Examination (RAE) there were 6,000 passes out of 8,000 examinees, a number which goes up at each examination sitting. Since 65% of radio amateurs belong to the RSGB, the administration problems increase at each RAE. There are also a large number of members who are either short wave listeners, interested in radio communications or who are overseas. The Society's current membership is approximately 33,000.

The RSGB operates from crowded offices in central London with 16 HQ staff and the publishing and sales sections are also run from the same address. I visited John Nelson at the RSGB to talk about the role the Society plays in the amateur radio field and to see how they work.

The first comment John made was on the difficulties of running such a complex operation in such overcrowded surroundings. It is only the faithful microcomputer, which deals with membership, beacon and repeater information and financial details, etc., which prevents the system breaking down. This workload partly stems from the RSGB funding itself from publishing a large range of books for the radio amateur which are sold by themselves through mail order, personal callers or through amateur radio

#### The Radio Society of Great Britain

#### shops.

Apart from publishing books, the RSGB also produces Radio Communications, popularly referred to as Radcom, a montly magazine which is included in the membership costs of the Society and is the official journal of the RSGB. Publishing Interests aside, the Society deals with a great number of other subjects. The senior administrative staff liaise with the Home Office (and latterly the Department of the Environment over planning permission) to protect the interests of the radio amateur and establish a working relationship with all the parties involved in using the radio spectrum. The RSGB is also the national member for Britain of international bodies like the International Telecommunications Union and the International Amateur Radio Union.

Membership services range from the necessary paperwork to join to a series of information services. Although not responsible for allocating call signs to operators, they do issue membership numbers and receiving station numbers for listeners. The Society also organizes and participates in rallies, exhibitions and competitions throughout the year, including the National Amateur Radio Exhibition. The RSGB is the licence holder and administrator for beacons and repeaters and they co-ordinate and plan repeaters through the Repeater Working Group.

Information services include a weekly bulletin of news which is broadcast throughout the country on Sunday mornings under the GB2RS call sign, news material on Oracle, the BBC teletext service and the Headline News, a telephone service giving a three-minute news bulletin which is usually changed twice a week. The RSGB also operates a QSL Bureau, which undertakes the International distribution of QSL cards and is widely used.

The RSGB is the 'umbrella' for specialist committees who deal with many aspects of amateur radio from education to propagation studies. The committees are a valuable part of the Society, dealing with areas of radio that the HQ staff would not have the time or expertise to deal with. (Apart from which, they are answering the 1,000 letters that arrive each day!).

When I spoke to John Nelson, I commented on the criticism that the Soclety received from its detractors: that it wasn't in touch with its members, that the staff "sat around and drank tea all day", that it was ineffectual and that it didn't let members know what was happening. This is harsh criticism and John acknowledged that the Society is aware that their public image isn't good. He sees the main problem as being time. Since they are undermanned, none of the staff has the time they would like to improve their relationship with the 'grass roots' of the Society. Apart from a better image amongst their members, they are also prevented from participating in other areas by lack of time. Ideally, says John, the RSGB would like to be more closely involved with experimental equipment design, fighting for more bands and to increase their contact with the media. They are pushing for a novice licence but have come up against problems at the Home Office something which they find frustrating since the Society often gets the blame for the slow progress. John feels that some of the criticism is unjustified, especially as they are at the mercy of the Home Office in the same way as everyone else and they are not a lawenforcement agency.

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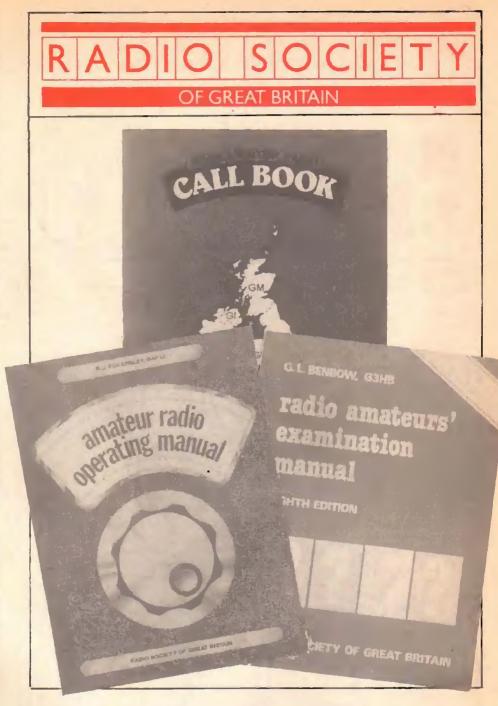
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John emphasized to me that the RSGB is "all for CB". They aren't convinced that the right choice of frequency was made, although they have higher expectations of 934MHz. He feels that part of the increase in amateur radio is due to CB, as some breakers have found the limitations of CB frustrating and have moved on to amateur radio. Here lies, in John's opinion, the fundamental difference between the two. Legal CB consists of going out and choosing a suitable transceiver, whilst amateur radio involves learning and gaining knowledge to expand on the hobby.

The attractiveness of the amateur bands seems to have been too much for some CB'ers, as there are an increasing number of 'outbanders' and ex-CB'ers moving onto these frequencies. This is a source of increasing annoyance to licensed operators and the RSGB is getting a lot of complaints. John feels that the problem here is that dealers are free to sell any equipment to any one who wants to buy, so there is no effective way of preventing this sort of frequency abuse, especially as British Telecom do not have sufficient manpower to track down offenders.

This move towards amateur radio by CB'ers has contributed to the 'new breed' of radio amateur. In the past, many operators came to radio through short wave listening and were already familiar with operating procedures and some technical aspects. Now many prospective operators are coming into radio with no previous background and more of the RSGB's time is being spent in answering specialist technical advice.

Although there is dissatisfaction amongst the ranks at the RSGB, the amateur radio fraternity is fortunate in having a national organization that does have the interests of radio users at heart. It is one of the pities of CB that there isn't a similar situation for citizens' band users. Although there are several groups trying to protect the interests of the breaker, there isn't one group that is recognized by the authorities in the same way or able to offer the same service to the CB user.



#### RAYNET

The RSGB also administers and sponsors RAYNET, the Radio Amateurs' Emergency Network. This is a national organization of radio amateurs who operate on a county or area basis to provide free communication facilities during emergencies for the police, county emergency officers or their deputies, the British Red Cross Society and the St John Ambulance Brigade.

RAYNET is co-ordinated by a RAYNET committee, which appoints local officers who lialse with respective services in their area. Many groups have radio equipment installed in police stations, hospitals or borough control rooms and participate in emergency exercises. Members of RAYNET are trained and equipped to deal with disasters or

Members of RAYNET are trained and equipped to deal with disasters or emergencies. These rarely happen on a national scale but RAYNET can operate inter-county or national networks if required.

The organization exists to provide a flexible service that operates whilst traditional communications systems are inoperative or inappropriate. It also has full authority from the Home Office.





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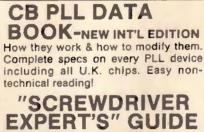
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