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CB RADIO



Ski-Speak Easy – CB on the slopes

The British Breakers Mag.

Live Promotions present

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This month's cover photograph was taken at Val d'Isere by James O'Hara. For more information on skiing the CB way, see page 6.

An introduction in more ways than one

Hello from me and goodbye from him

Although I might only just have been appointed Editor of CB Radio Magazine, any avid reader of the credits list on the Contents Page will know that I'm certainly no newcomer to this magazine or to CB. My interest and involvement with citizens' band goes back quite a few years now to, dare I say, the illegal AM days.

I, along with the CB club I belonged to, did my stint of signing and collecting petitions, marching in the cold and rain, making a thorough pest of myself to our local MP's and, I might add, reading this magazine eagerly when it came out as it was the only source of information on CB.

Now, some four years later, I am left with feelings of both satisfaction and disappointment. Obviously, becoming Editor of the magazine is a personal success for me and, through CB, I can honestly say that I have seen democracy in action. Sounds pompous, I know but true. Ordinary people, with no political axe to grind, who were convinced that the current law was wrong, campaigned and *forced*, by weight of numbers and public opinion, a change in the law. Although the result wasn't to everyone's satisfaction, it was a good illustration of a basic process of democracy that's all too rarely seen.

Regrets

Unfortunately, I'm beginning to think that the disappointment is starting to outweigh the satisfaction. In my area, it's now (and has been for some time) more or less impossible to use the rig for the reasons I bought it - traffic directions, road conditions and a casual chat when I'm on the road.

Don't get me wrong. I don't think I deserve CB run my way nor am I against breakers in general. I don't care if they're young or old, rich or poor or whether they like Beethoven or The Jam, Charles Dickens or Playboy. What I am against are the breakers who think that CB is their own private and personal plaything. This extends from breakers who get their kicks from propositioning lady breakers, through bucketmouths, mike

keyers, would-be pirate radio operators to timewasters who don't see why they shouldn't stay on channel 14 for three hours solid or why they should show any signs of courtesy at all.

The same old problem?

I *know* that the majority of breakers out there are reasonable, sensible people. So how the hell has this lamentable situation arisen where the minority can ruin the fun and useful hobby for so many people? A rhetorical question, I'm afraid, since I can't supply the answer nor, I suspect, can anyone else.

For better or worse, we have the CB system that the authorities have seen fit to give us. Whether or not we get a Euro standard remains to be seen - that is in the future. We have to cope with the present system NOW.

A prime example

Many FM CB'ers are fed up with the finger being pointed across the water to America. Understandably, they think the American CB experiences are not relevant to British FM. It's worth remembering, though, that in a way, we are going through the same process as America but telescoped into a smaller country and a very much shorter space of time. Human nature being what it is all over the world (and common sense not being as common as it could be) abuses of a free and unrestricted facility are inevitable. It is only now, many years after the fabled boom, that some sensible use is returning to CB in America and there is still widespread misuse of one kind or another.

We quite often answer the phone to very depressed or agrieved breakers commenting on CB in their area who finish up by saying "Why can't you do something about it?". I'd like to think we do make our attitudes clear throughout the magazine but I can't see that us saying "Please, don't do it" will make a lot of difference. Let's face it, people who abuse CB aren't bothered by other people's opinions in the first place or they wouldn't behave as

Sew yourself
a rig case

Baking
for
breakers

Knit a
woolly wally

New articles for CB Radio Magazine?

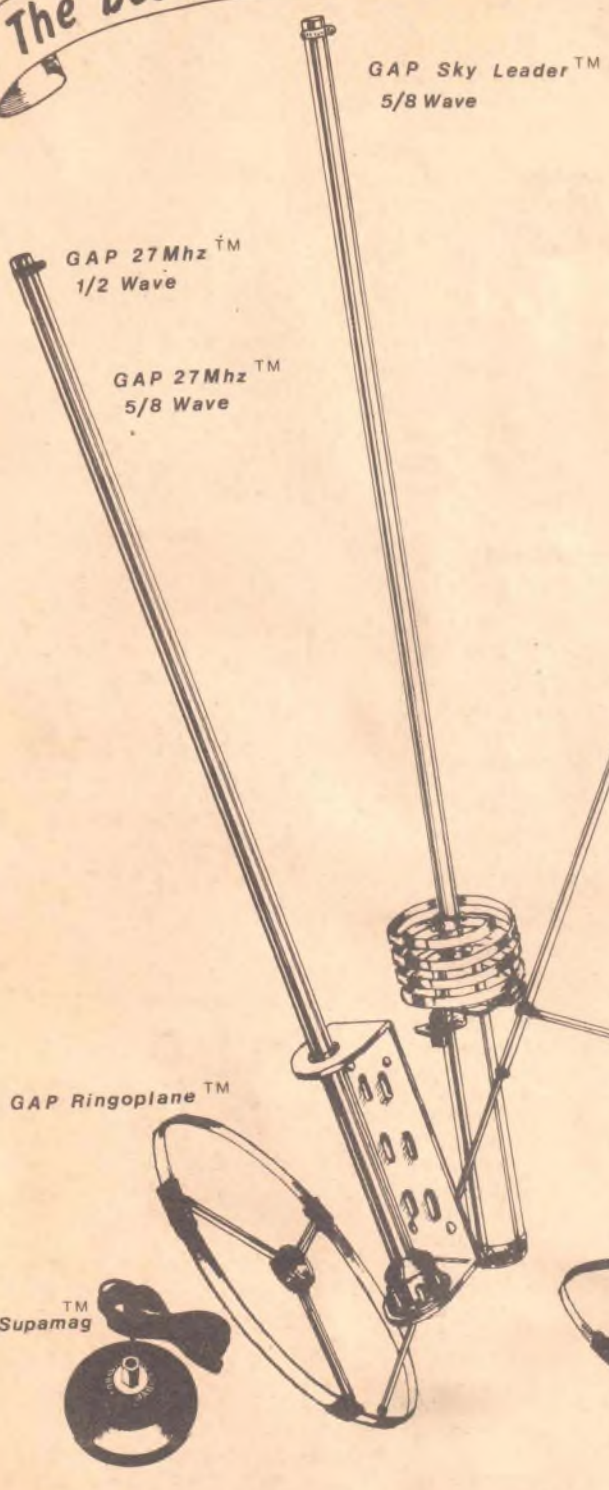
they do!

Revenge!

On a lighter note, I should really take the departing PCC to task for his chauvinistic comments last month but I suspect that it might be more dignified to remain silent on the scurrilous claims he made. However, revenge is sweet and I have hidden his granary bread and cheese sandwiches where the mice will definitely find them and put gravy powder in his coffee granules.

Suffice to say that the content of the magazine will not be changing significantly (except, I hope, for the better) and things will be staying very much as they were. When you find a winning formula, you stick to it!

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Gamma Aerial Products

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JOGLE 83



Not being the most intelligent person in the Universe (just second), I never realized before that the word Jogle was derived from the words John O' Groats and Land's End until our resident crossword addict, Alan Brown, pointed it out to me. Anyway, Jogle 83 is a sponsored run, organized by Kalamazoo Business Systems, with teams entering from such worthy companies as Leyland, Barclays Bank, Rowntrees, National Coal Board and Computastars. The run starts at John O' Groats at noon on 3 April and finishes at Land's End at noon on 7 April.

Despite vast amounts of surplus fat amongst our staff and contrary to popular belief, CB Radio Magazine is not entering a team in this run. However, CiBTA, the trade association that we support, is supplying a quantity of CB rigs so that the runners and team captains can communicate with each other. Once again, we need your help.

There are two ways in which you, our loyal readers, can be of assistance. First off, we would like to

appeal for a bit of radio silence. Take a look at the map and timetable on this page and, if the run is passing through your area, it would be beneficial if you and your fellow breakers could stay off channel altogether so that communications are not interrupted. On a previous similar run, whole teams of people got badly lost, hence the reason for CB this year.

Regardless of where you live, you can also help Jogle by making some form of donation to their appeal. The organizers aim to raise some £30,000 by their efforts which will be split between the Arthritis and Rheumatism Council for Research and the British Heart Foundation. Both of these organizations depend entirely on public donations for their help.

One thing which surprised me is that arthritis not only affects the elderly but some 12,000 children, including babies, suffer from it. In total, amongst adults, 47 million working days are lost every year. The Arthritis Council currently supplies £4 million per annum to help relieve some of this suffering.

Heart disease also affects children and 1,400 of them die every year due

to lack of treatment. Fifty-six million working days are lost because of this disease. All sorts of clever technology can be applied to save lives but, once again, it all costs money which the British Heart Foundation helps to supply.

It is gratifying to see able-bodied people giving up their Easter Holidays to help these charities. Why not give them your financial support?

Cheques and postal orders only, please, to David Morgan, K.P.O. 492, Kalamazoo Business Systems Ltd., Northfield, Birmingham B31 2RW. Please make cheques payable to Kalamazoo Jogle 83 Fund and write CB on the back.

Some of the Jogle runners are real masochists and only a few days after running from John O' Groats to Land's End, 18 of them will be running in the London Marathon. Watch out for wobbly-legged athletes wearing CB T-shirts.

I'm exhausted just writing about all this physical activity and intend spending the rest of today fast asleep.

Place	Road	Estimated arrival time		
Rest Centre - Pentland Hall, John O' Groats				
John O' Groats	A9	12 00	Sunday, 3 April	
Wick	A9	13 53		
Lybster	A9	15 24		
Brora	A9	19 17		
Bonar Bridge	A9	22 15		
Evanton	A9	00 35		Monday, 4 April
Inverness	A9	01 53		
Aviemore	A9	05 26		
Dalwhinnie	A9	08 17		
Pitlochry	A9	11 49		
Perth	A9	14 50		
Rest Centre - Gleneagles Hotel				
Stirling	A9	18 38	Tuesday, 5 April	
Airdrie	A73	21 09		
Lanark	A73	23 00		
Beattock Village	A74	03 02		
Gretna	A74	06 21		
Carlisle	A7	07 24		
About halfway to Land's End here				
Kendal	A6	12 16		
Lancaster	A6	14 40		
Rest Centre - Lancaster University				
Preston	A6	16 53	Wednesday, 6 April	
Wigan	A49	18 49		
Warrington	A49	20 07		
Whitchurch	A49	23 43		
Shrewsbury	A49	01 53		
Ludlow	A49	05 04		
Hereford	A49	07 49		
Chepstow	A466	11 36		
Bristol	A4018	13 30		
Rest Centre - Goldney Hall, Bristol University				
Bridgewater	A38	17 08	Thursday, 7 April	
Taunton	A38	18 21		
Waterloo (Cross)	A38	19 51		
Tiverton	A373	20 42		
Crediton	B3214	22 06		
Okehampton	B3215	00 02		
Launceston	A30	02 06		
Bodmin	A30	04 32		
Redruth	A30	07 52		
Penzance	A30	09 44		
Land's End	A30	10 53		
Rest Centre - School of St. Clare Polwitten				

This is an abbreviated schedule showing selected points on the route





The chance to

WIN TWO SEL. CALL RIGS

When you become an Associate Member of CiBTA

Yes, every new Associate Member who joins CiBTA before 1 May, 1983 will automatically qualify for entry into our Free Draw. The winner of this draw will receive two specially-tuned Sel. Call rigs.

What is CiBTA?

CiBTA is the CB Trade Association which is interested in a secure future for CB.

Why should I join?

You should join CiBTA because it is actively campaigning for more CB channels.

You should join CiBTA because CiBTA wants less wallies on CB.

You should join CiBTA because it is powerful enough to make the Government listen to its demands.

You should join CiBTA to make your voice heard.

And that's not all . . .

CiBTA's membership encompasses some of the most influential CB dealers in the UK and these companies will be offering you, the Associate Membership, in return for your commitment to CiBTA, some regular CB special offers that will make your eyes pop out.

CAMPAIGN FOR A BETTER CB
+
GET YOUR REGULAR SPECIAL OFFERS
+
A CHANCE TO WIN TWO SEL. CALL RIGS
= CiBTA ASSOCIATE MEMBERSHIP

I hereby apply for my lifetime Associate Membership of CiBTA and enclose the one-off fee of £5.00.

Name

Address

Please allow 28 days for the processing of your application form and the return of your membership certificate.

CiBTA, PO Box 6, Hayes, Middlesex UB4 0SS

Ski-speak easy



A novel way to communicate on the slopes

As Britain's fastest-growing activity gathers more enthusiasts willing to hurl themselves headlong down the snow-covered slopes, supported only by a will to survive, two planks of fibreglass and two aluminium poles, we decided to send one of our own enthusiasts out to demonstrate that even in the bleak, wind-swept Alps, CB can play both a helpful and a fun role in the pastime known as skiing.

The gear!

To help familiarize those non-participants with the art of skiing, the loose description "hurtling headlong down a snow-covered slope with two planks of wood strapped to one's feet" – although descriptive and capable of conjuring up an accurate picture of the first-time skier's or the novice's uncontrolled descent – is somewhat unfair on the sport. Today's skier and his equipment bears little or no resemblance to the original men of skiing who really did ski with planks of wood strapped to their feet and thought little of walking up the mountain for a whole day before skiing down on their wooden skis.

Nowadays the skis are made of a delicate, yet highly strong, balance of modern materials designed to flex with the terrain yet withstand a considerable amount of punishment. The feet are no longer strapped to the skis in any old boot but are contained carefully in specially-designed boots moulded to place the ankles and shins at the correct angle thus placing the body weight forward. The front and rear of these boots have an exaggerated lip designed to fit into the modern quick-release binding. The tech-

nological changes and engineering improvements that have gone into the design and development of these quick-release bindings, skis and boots have made skiing a much safer sport and certainly more accessible to the average man and woman of today.

The sport!

With the increase in safer ski-technology and the resulting increase in skiers, the enthusiast can now pay his lift fee and be whisked to the top of mountains that his forefathers would

A brave hang glider.

have spent days climbing. Some mountains have been so well developed that one day's skiing can easily cross and re-cross several different valleys, each with a considerable amount of ski runs. The ski accessories have naturally kept pace with the sport's increase in popularity from jackets and clothing to parachutes for uphill skiing, hang gliders for off-hill skiing and parakites for off-anything skiing. Perhaps I should explain that a parakite is rather like attaching a triangular table-cloth behind your back, attached to your body at either hand



and at your knees. With it in place, you find the steepest side of a hill with snow on it, spread your arms out and head straight down – the idea is that the parakite acts as a brake!

On a more sober note, one recent accessory that has become almost a fad with the serious 'lone skier' is the personal hi-fi. I say 'lone skier' because whilst all that high-fidelity music is pumping its way through your head, you are literally in a world of your own. It is terribly anti-social and absolutely impossible if you happen to be the only one in your group without one. Every time you say something to one of your skiing partners, it is followed by a very loud "WHAT DID YOU SAY?". To which you either repeat your comment at a shout and risk the deafening answer or shrug, say nothing and ski alone in silence.

The Speak Easy

Having experienced on several occasions the solace of lending one's hi-fi to a fellow skier, only to be shouted at every time he decides to speak to you, not to mention the impossible task of informing one's fellow hi-fi-listening skiers that they're skiing off down the wrong *piste* (slope), I was looking forward to trying out the personal Speak Easy CB's we had with us this time.

Something which tends to be the trend with any sport, to which skiing is no exception, is 'posing'; cowboy hats, bright ski suits, parakites and personal hi-fis all come into this bracket. So by the same degree does the personal CB. Thus whilst one can feel slightly foolish wearing a headphone with a boom microphone in front of your mouth, to the average skier it seemed quite normal and just another of the many gimmicks skiers use at some resorts. This certainly helped in our party, as the girls in particular felt uneasy at first and imagined every one looking at them.

The unit itself is quite compact and



fits snugly away under a jacket, the spring-loaded clip on the back of the unit allowing it to be attached to anywhere as opposed to requiring a pocket. For skiing, the 'Hands Free' VOX voice-operated facility is practically essential. Skiing as a group with four units, we soon found the best setting was the VOX on low with the microphone slightly away from the mouth thus preventing the user's breath freezing on the microphone head and the receive volume high. In this way the transmitting party had to raise his voice to purposely activate the unit and the receiving parties (the

other three) had their volume high to compensate for the slight distance that the transmitting party's microphone was away from the face.

Pure fun

As a means of communication whilst skiing, we found the units to be great fun. One cannot expect a great deal of range from such a compact unit carrying its own power supply, using only 55mA on transmit generating 40mW output and 45mA on receive, yet the range was easily line of sight plus. For simple ease of direction, the ski party was able to communicate without stopping and thus all take the same route down. Approaching junctions, one could ask and receive an answer as to which *piste* the followers desired. An ideal argument-saver preventing the lead skier from taking a wrong turn and unknowingly leading a couple of tired skiers, who did not fancy a difficult ski, straight down a black run.

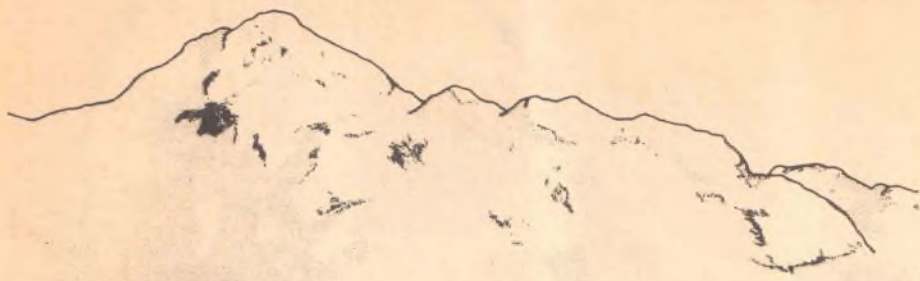
Although, truth be known, the most practical direction use for us was on deciding which bar to stop at on which run down and making sure that everyone got there or at least knew where we were headed. An essential part of skiing, known as *apres-ski* (That's talking about it, after you have done it and how you survived it), best performed with an alcoholic beverage in one's hand.

Practical use

Whilst the Speak Easy units are primarily good fun to use, there are a few occasions in normal skiing when being able to communicate has a



Ski-speak easy



OK this time but what if it had been a serious accident?



more important advantage than which direction to take or which bar to stop at.

TWO-WAY COMMUNICATION: Quite simply, if a member of your party is skiing last and he or she falls over, the ability to ask if they are O.K. and receive an answer can save a long wait or a tiring uphill struggle. Although one should never rely on such communication alone in the event of an injury, with four or more users it would also be feasible to form a range of communication chain. It's also capable of relaying the message to the stricken party that help has been summoned and is on its way – a comforting thought if you are unfortunate enough

to be lying prostrate in the snow. As depicted on the front cover, in some of the more developed ski resorts, emergency phones are often available and knowing that help has been summoned is not only comforting but can save other skiers arriving at the scene later, dashing off to report the same accident thus confusing the rescue teams.

ONE-WAY COMMUNICATION: With the Speak Easy units, it is possible to de-activate the VOX, making the unit capable of transmitting only by depressing a PTT button (not an easy task whilst skiing). If a ski instructor kept his unit as voice operated and all of his ski school were listening only,

this one-way communication would mean that even the skier at the back could hear the instructor, which for the learner could be the difference between falling over all week or picking up the basics in half the time. As yet, we don't know of any ski school using this equipment but the idea was well received by one or two instructors.

Conclusion

The units we had with us were the basic Speak Easy, which operate with normal batteries. This did not pose any problems, although even using Duracell batteries there was a noticeable difference in their performance after two days of constant use. However, since our trip, there is now a rechargeable version of the Speak Easy and this would definitely combat any power problems. One should also



remember that the temperatures we were skiing at, 12-18° below zero, are certainly not liked by any battery. As a very rough test, we took a normal Ever Ready in one Speak Easy unit. Whereas it lasted only two days at these temperatures, a similar battery performed approximately four times longer under normal circumstances. In fact, one of the batteries we had given up on worked quite O.K. when we tried it later back in Britain.

For the skier interested in something different or fed up with continual hi-fi use, this type of unit must surely be his next craze. For the novice skier with a friend prepared to instruct him via the airwaves, the units could certainly be a different way to learn.

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FM SUPERkrunch

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Skylab

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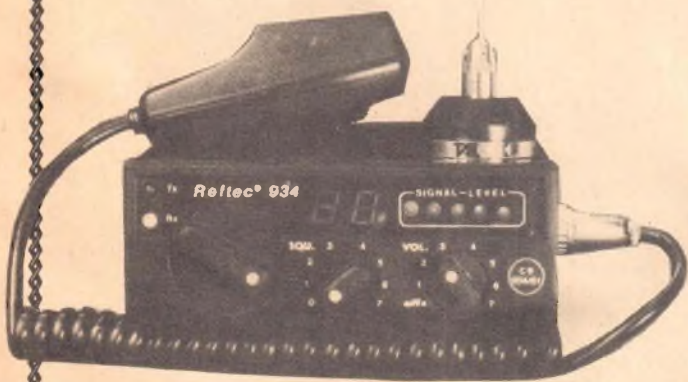
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should *invest* in one for it has so many benefits because



The campaign for the legislation of CB radio

by Major Sir Patrick Wall, M.C., V.R.D., R.M. (Rtd.), M.P., the Chairman of the Parliamentary Committee for the Legalization of CB Radio



Major Wall in a campaigning mood.

Are these reasons against your choice of Free Speech on the Airways, i.e., 27mhz C.B. Radio?

Britain is a co-signatory to the Treaty of Rome, 1973 and C.E.P.T. agreeing to adopt 27mhz for the U.K.

Strong radiated interference on 27mhz can also be caused by Hospital Diatherapy Equipment and Paging Systems used to communicate with personnel outside of hospitals.

Also close proximity of Mobile Taxi and Police TX causing shock excitation.

Also in this free radio band by Plastic Welders, etc. All T.V.I. can and is the same method is All the above prob Band falls with

Uses of the

An essential Emergency TRAFFIC and whenever

C.B. Radio on 27mhz

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Date: Saturday, Oct. 18th

12 noon

at the West Pier

"Level" Brighton

March

on

welcome

Organisers

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C.B. RADIO ON 27MHZ

When legalised in the U.K. a Citizens Band Radio Service will enable YOU to:

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- * Help in Emergencies
- * Provide information on Road and

CITIZEN'S BAND

BRITISH CAMPAIGN FOR PUBLIC 2-WAY RADIO

MASS DEMONSTRATION

TRAFALGAR SQUARE

JULY 6th 1980

11.00 a.m.

An important report advocating the legislation of CB radio was published by the National Electronics Council in June 1978. It advocated a high-quality service; a frequency between 100 and 50MHz; it came out against a frequency of 27MHz and suggested that all equipment be subject to adequate technical standards and approval; finally, that the licensing procedure should be as simple as possible. The British Radio Equipment Manufacturers' Association came to much the same conclusion.

However, towards the end of 1978 and early 1979, a number of questions were asked in the House of Commons, to which the Government of the day gave negative answers. In reply to a question of mine of 15 January 1979, the Minister concerned said: "There are strong arguments on regulatory, administrative and social grounds against the introduction of CB radio. In particular, we are not satisfied that an effective means could be found of overcoming the problem of control and interference to other services commonly associated with its use in other countries."

Clearly the Labour Government was not prepared to take any positive action.

The position changed after the General Election of May 1979. The Conservative Government took the view that people had the right to the freedom of air provided that this did not interfere with other people's freedom. Soon after the Election, a Parliamentary CB Committee was set up, with myself (Conservative) as Chairman; Mr. Austin Mitchell, M.P. (Labour) as Vice-Chairman; Mr. John Butcher, M.P. (Conservative) as Secretary; and Mr. Richard Town, G.L.C. as our Technical Adviser. The Parliamentary Committee got in touch with all the national CB organizations as well as potential manufacturers, clubs and other organizations.

In July, we had our first meeting at the Home Office with Mr. Timothy Raison, the Minister of State. He proved to be sympathetic and told us that no legislation was required. This was important as the Parliamentary timetable was so full that no time could be found for legislation, probably for several years. There were, however, other problems to be ironed out, frequencies, monitoring, possible adverse effects on others, etc. The Government made it clear at this early stage that they were opposed to 27MHz AM as they maintained that this caused interference with TV viewers, was highly detrimental to model aircraft operators, had too long a range and was often a poor frequency for reception. They also took the

view that a choice of a different frequency would allow British manufacturers to catch up with foreign competition if they so desired.

It was decided that the Home Office would set up an internal inquiry and would meet the Parliamentary Committee again in November 1979 to report



progress.

This meeting, in fact, took place on 26 November and showed that considerable progress had been made. We were told there were no insuperable difficulties as far as the legalization of CB radio was concerned. What, however, did worry the Government was that it would require some additional civil servants to operate and monitor the service at a time when the Government was cutting down the Civil Service. We agreed that some 30-40 more Civil Servants might be required but pointed out that with the licensing scheme, the whole system could be financially self supporting; that the new market might be as large as 6-8 million sets, which would mean a large Government revenue in licensing fees not counting the V.A.T. that they would gain, a total of a possible several hundred million pounds a year.

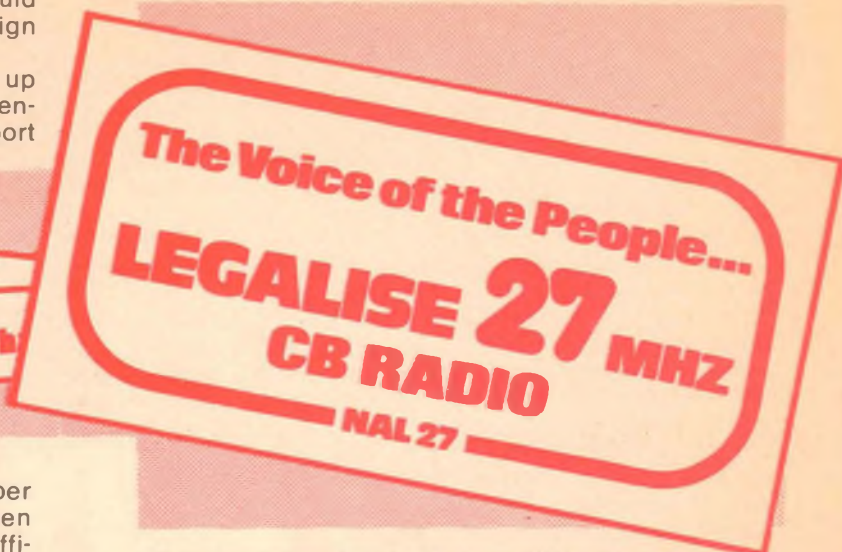
All these arguments were referred to in more detail in a Parliamentary Debate that I initiated on 6 December. As a result, the Home Office promised to continue its investigations and to make a Statement in the House of Commons as soon as a decision had been reached.

Meanwhile, CB enthusiasts were getting together. A meeting of representatives from a number of clubs was held in Birmingham in December and as a result a steering committee was set up which, by 1980, was fully launched as the National Council for the Legalization of CB Radio (NATCOLCIBAR). The Council initiated a number of meetings and marches in several cities, culminating in a major rally in Trafalgar Square in July.

Parliament was not the only legislature on the move. The Greater London Council issued a discussion document giving full details about CB radio and how it could operate and asking for comments and views to be sent to the Director General at County Hall by 4 June. This document pointed out that 10 million sets were in operation in the USA; that CB radio could be of help to the elderly if sick or attacked by a burglar and that it provided an alternative battery-operated voluntary service for use in emergencies - from road accidents to fire or flooding.

In May 1980, the Home Secretary announced that he had agreed in principle to legalize what he then called 'Open Channel' on 928MHz, once details had been sorted out. In August, the Government issued a Green Discussion Paper on 'Open Channel', which recommended 928MHz and asked for the views of the general public. In November that year, NATCOLCIBAR forwarded their recommendations - opposing 928MHz and suggesting 41MHz as the Government was clearly opposed to 27MHz. Papers were also sent in from the CB Association, the Telecommunications Council, etc.

A letter was later received from the Minister of



State opposing 41MHz but admitting that there was considerable opposition to 928MHz. This was followed by a meeting between the officers of NATCOLCIBAR and the Home Office advisers.

As it appeared that little progress was being made, I initiated a further Parliamentary Debate on 9 February 1981, asking for rapid legislation and proposing 42.806-43MHz with 16 channels and 43.694-44MHz with 24 channels, pointing out the majority of users still wanted 27MHz. Having backed the Minister in opposing 27MHz AM, it was pointed out that this position might have to be reversed as it was estimated that there were now over a quarter of a million users on 27MHz. It also appeared that 27MHz FM was now virtually the European standard and that this should be legalized.



Par Wall, with Andy Donovan, determined President of the U.S.A.

A few days after this Debate, NATCOLCIBAR demanded the legalization of 27MHz AM as well as 41-48MHz as they considered that 27MHz FM was unsuitable.

In March, the Parliamentary Committee met and requested the publication of authorized specifications as rapidly as possible. In April, these specifications were announced with the Home Secretary stating that he was prepared to authorize 27.6-28MHz AM on 40 channels with the power of 2 watts. A little later on, in answer to a Written Ques-

tion, the Minister of State gave the reasons for this choice.

In May, NATCOLCIBAR presented the Home Office with a detailed response to their draft specifications.

In June, the Parliamentary Committee met twice to discuss the harmonization of frequencies with Europe, specifications for antennas, the conversion of existing sets and licensing procedure. A meeting with the Home Secretary followed, attended by representatives from NATCOLCIBAR, the CB Association, the mobile radio users, model controllers, paging services and radio amateurs, who had agreed on a mutually acceptable allocation of frequencies on the following lines: CB 26.9-27.4MHz with 40 channels at 4 watts; mobile radio 30-40MHz with 20 channels at ½ watt; paging services would move to 30-40MHz; model controllers to 27.6-28MHz. It was also suggested that all frequencies under 30MHz should be AM/SSB and above 30MHz FM. The de-rating of antennas was opposed and Ministry officials criticized.

In reply, the Home Secretary insisted upon AM in view of the large number of complaints over interfer-



ence (14,000 in four months) and reiterated that 27.6-28MHz FM would, in due course, be legalized though he undertook to move to European frequencies at a later date when a common European standard had been agreed.

Further pressure was applied in August on the grounds that over one million 27MHz AM sets were now operating and complaining about the timing of the meeting of the Ministry's Advisory Committee on radio interference. This received a sharp reply from the Home Secretary who, however, agreed to comparative tests of 27 AM and FM sets in both rural and urban surroundings. Meanwhile, a code of conduct was agreed between NATCOLCIBAR and the Home Office.

After a further meeting of the Parliamentary Committee, I initiated a third Parliamentary Debate on 22 October, stressing the need for a common European frequency and pointing out that there was already a good deal of harmonization in Europe and that 55 countries out of 61 allowed 27 AM/SSB. The point



ment was still worried about the use of illegal 27MHz AM transmissions and introduced regulations with regard to the manufacture and importation of CB equipment and was intending to crack down rather more severely on illegal users.

Although ¼ million CB licences had been issued, it was thought that some ¾ million illegal sets were still in operation. In order to clear up the remaining difficulties, the Parliamentary Committee met the officers of NATCOLCIBAR in June 1982. As a result of this meeting it was decided to again approach the Home Office on the following matters:

a) **European frequencies.** It was now established that there was a good degree of agreement worked out by the TR 19 Working Group of CEPT which was suggesting the following European standards: frequency 26.965MHz with 27.405 FM with 40 channels at 4 watts. The Home Office would be requested to clear these frequencies so they could be legalized in this country in addition to those frequencies that are already legalized since November 1981.

b) **Antennas.** It was considered that the present regulations with regard to antennas were unneces-



was also made that the de-rating of antennas was unnecessary. I concluded my speech with four suggestions - that the Home Office should study the whole spectrum of radio frequencies with regard to re-allocation; that tests of AM and FM sets should be held; that the date of change to European frequencies should be announced as soon as possible and that these frequencies should be included in all newly-manufactured sets so as to avoid the purchase of yet a further set in two or three years' time.

Although it was agreed that there should be comparative tests of AM and FM sets, the other suggestions were turned down and in November CB radio was finally legalized. Thus, after a 2½-year fight, the battle was finally won but not the war!

The situation was still not satisfactory and in December the Parliamentary Committee returned to the attack on European frequencies and on antenna de-rating but again with little success.

By May 1982 it was announced that over ¼ million CB licences had been issued but the Govern-





sarily restrictive, were not being observed and could not be enforced. It was, therefore, requested that tests should be held with various antennas so as to establish for a fact which caused the maximum and which caused the minimum interference.

c) **Tests.** That the Home Office should be asked to initiate tests between FM and AM sets provided by members of NATCOLCIBAR, details of which had been supplied to the Home Office. It was hoped that these tests together with the ones on antennas mentioned above would settle once and for all the question of interference.

d) That there should be legal protection for channel 9 for emergency services only and that there should be an age limit for licence holders.

e) That the Home Office should authorize CB to be used in ultra-light aircraft and that digital transmission limited to 10 seconds should be authorized by the Home Office.

f) That it should now be recognized that frequency of 934MHz did not correspond with any other country and that, therefore, manufacturers would not produce sets on this frequency. It was understood that the European standard of 928MHz was being recommended and should, therefore, be followed by the Home Office.

On a broader issue it was decided that in view of the success of the meeting of various radio users held in June 1981, a Spectrum Committee should be set up under Mr. Walter Stephenson, to try and obtain the agreement of all users on the division of the radio spectrum which would suit all concerned. It was pointed out that in the Parliamentary Debate in October 1981 this question had been put to the Home Secretary but no reply had been received. It was believed if all radio users could come to an agreement over the division of the radio spectrum then it was very difficult for the Home Office not to review the whole question of the allocation of frequencies.

In October 1982, NATCOLCIBAR elected new officers, the Chairman being A. Bevington and the Secretary, S. Donohue. With a year's experience of legal CB radio and after a meeting with the representatives of the Parliamentary Committee, it was decided to seek a further meeting with the Home Office. This took place in November with the Minister of State, the Rt. Hon. Timothy Raison in the chair. The result of this meeting, which was in general a follow-up to the issues already described, was as follows:

1. **Common European Frequency.** It was generally agreed that Europe was moving towards a common frequency of 26.965-27.405, a strength of 4 watts

and the FM mode. This had been agreed by a recent Sub Committee of CEPT but was still subject to final approval. The Home Office still intended to move towards a common European frequency once this was finally established but it would take time to remove present users of these frequencies.

2. **Abuses.** All present had received considerable correspondence about abuses by both legal and illegal users of CB radio. It was suggested that for an experimental period, NATCOLCIBAR should undertake monitoring in a specific area. The Minister of State asked them to submit proposals to this effect. He was not inclined to give a lower age limit for a CB licence and hoped that the protection of channel 9 would be carried out by common sense rather than by legislation. He had made it clear all along that the Government could not undertake a monitoring service itself.

3. **Liaison.** It was agreed that there should be closer liaison between NATCOLCIBAR and the CEPT official, who would be meeting again in a few weeks' time.

4. **Penalties.** It was pointed out that if the Telecommunications Bill and the Criminal Justice Bill were taken together, very severe penalties could be meted out to legal CB users which could turn them into criminals and allow them to be detained for many hours in a police station while the house was searched without a warrant. The Minister agreed to examine these two Bills and to modify them where necessary. It was, however, made plain that illegal breakers would be dealt with severely.

Should a monitoring programme be finally agreed, the way would be open for NATCOLCIBAR to become recognized as the governing body for CB radio.



Major Wall in his office, working on early proposals for a British CB system.

Anyone familiar with the long and, at times, bitter campaign for legal citizens' band radio will recognize the name Patrick Wall with some gratitude. Major Wall was one of the few supporters of CB within the House of Commons and was almost the only MP to actively encourage the lobby for CB radio and to identify himself with the campaign. He is still very much involved with CB and regularly meets with NATCOLCIBAR and other interested parties to press for improvements in the system. He was honoured with a Knighthood in 1982.

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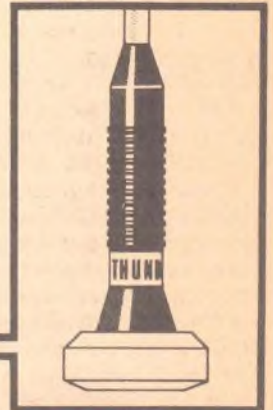
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THE LAW AND YOU

The Telecommunications Bill – friend or foe?

At the time of writing, the Telecommunications Bill was at the Committee stage and was proceeding at a snail's pace through the protracted discussions that go with any new legislation. This delay is mainly due to the Department of Industry, to whom most of the Bill applies and for whom the Bill has even greater consequences than those involved in CB.

It is even possible that the clauses relevant to CB (and the most worrying to breakers), concerning the Wireless Telegraphy Acts, might not even get the thorough discussion that most parts of the Bill are receiving. Parliamentary time is always limited and the progress of the Bill might well be speeded up to get it through Parliament – especially before it can be influenced by factors like General Elections.

The Telecommunications Bill (all 149 pages of it plus explanatory notes) is aimed at reorganizing the structure of British Telecom. This reorganization includes the appointment of a Director General of Telecommunications, the removal of the current British Telecom monopoly on equipment and services and the provision of denationalization.

Listed amongst these far-reaching proposals is "to amend the Wireless Telegraphy Acts 1949-1967 and to make further provision for facilitating enforcement of those Acts and for connected purposes". It's this legislation that could dramatically affect CB'ers, particularly AM/SSB users.

The Home Office motives

As our article on interference commented last month, the Home Office is convinced that all CB-source interference comes from illegal CB – either prohibited frequencies or illegal operation. With this legislation they are hoping to stop this interference, without necessarily increasing the load on the Radio Interference Services, by extending police powers and closing existing loopholes.

Reading Government documents requires fluency in bureaucratese and a degree in law. Since I have neither, reading it was hard going in places! Rather than inflicting large chunks of it on readers, we have done our best to interpret it and paraphrase it into English.

Much of the Bill deals directly with British Telecom but there are clauses throughout the Bill which refer to all radio use. This particularly applies to general licensing conditions and penalties for offences.



"Provisions relating to wireless telegraphy"

One of the first changes is in the penalties and method of trial for some offences. Until now, sending false or misleading messages likely to prejudice the efficiency of any safety of life service, etc., or using apparatus for the purpose of interfering with wireless telegraphy, were *summary* offences; that is, they were tried at a magistrates court and, in the definition of the law, were not serious offences. These cases can now be tried on *indictment* in a crown court, either at the request of the accused or at the referral of a magistrates court. This gives the courts power to pass a more severe penalty if the result is guilty but, conversely, gives the accused the chance to have his case heard by jury, if he desires. The maximum penalty at a magistrates court is six months' imprisonment and/or a fine on a set scale. The crown court is able to give a two-year sentence and/or up to the maximum fine on the appropriate scale.

One of the consequences of the Criminal Justice Act 1982 is to increase the maximum fine for the above offences and others within the Wireless Telegraphy Act to £1,000 from £400.

Police powers

Another important clause changes the powers of the police in dealing with the Wireless Telegraphy Acts. The police will be able, in certain cases, to arrest without warrant where transmitters are illegally used.

In an attempt to limit the scale of illegal equip-

ment and thereby prevent interference and close previous loopholes, there are provisions in the Act to control equipment suspected of 'causing interference'.

This effectively will make it illegal to manufacture, sell, possess or import certain equipment, including AM/SSB rigs or sets capable of operating on frequencies not licensable for use by the user. Although it hasn't been itemized in the Act, it might well include linear amplifiers and similar gadgets (although we are awaiting confirmation on this).

In the past, possession of such equipment was not in itself enough to constitute an offence. Up to now, the Secretary of State only had the power to prohibit the manufacture and importation of specified equipment.

Seizure and forfeiture

Further provisions entitle officers with a warrant (a search warrant for entry and search of premises) to seize and detain equipment or "other things found in the course of the search". This extends to apparatus which appears to have been used in the suspected offence.

Although equipment is almost automatically forfeited when people are found guilty of such offences as transmitting without a licence, there are also allowances for the forfeiture of illegal equipment through a civil procedure. This is aimed at reducing the burden on the judicial system and for cases where a criminal conviction would be inappropriate. This could particularly apply to cases when the offender accepts that he should not have had the equipment or that the law was inadvertently (or not deliberately) flouted.

The implications

The most striking implication is that passing of the Bill would make the selling and possession of AM/SSB equipment an offence. This affects breakers in two ways.

Firstly, the defence used by many AM breakers that equipment was legally imported will no longer be sufficient nor will the plea that the equipment has never been used, since possession itself will be illegal.

Secondly, the neighbourhood CB shop will be breaking the law by selling such equipment. Many smaller shops have survived by selling AM/SSB sets as FM CB has not been enough to keep their business alive. Some shops may have to close down rather than take the risk - depriving the area of possibly the only specialist CB shop.

Another worrying development is that people found guilty of indictable offences will have a criminal record, rather than a civil judgment against them. It doesn't require much imagination to see the consequences of that. With this is also the disturbing increase in police powers. Although only very briefly touched on in this article, the wider implications of this in an increasingly-regimented society go beyond the confines of a Telecommunications Bill.

Many of the provisions within the Act will also apply to those operating 'pirate' or free radio stations. In the past, proving that individuals had actually operated equipment was extremely hard for the Radio Regulatory Department but the offence of 'possession' will now apply.

This has been a very brief and unqualified look at the Bill. As and when a more informed interpretation is available, we will publish details.

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"Why do you want to buy that, there's no one up there!"

Breaker Profile 5

Cyril Forrister is no stranger to electronics and radio communications and, if the truth be known, his interest hasn't always been strictly legal.

Although Cyril (alias Woodpecker, of Romford, Essex) hasn't worked professionally in electronics, his early activities included building the family's first television set and, more recently, a variable power supply and CB filters. His involvement with radio dates from the early 1960's when tape recorders became generally available to the public. At the time it was a new and exciting hobby and clubs sprang up for enthusiasts to get together to swap tapes and information.

Through his club, Cyril met a like-

tests and networks with other operators. Eventually, Cyril was prosecuted for his activities which, unfortunately, had far reaching effects.

Cyril's more legitimate radio hobbies included short wave listening (for which he has certificates of achievement) and studying for the amateur radio operators' licence. Although he passed the examination, because of his conviction for 'piracy', the authorities were only prepared to let him use his equipment when accompanied by another licensed operator until they were satisfied with his behaviour. Cyril was not prepared to go along with this and consequently never took up his licence.

As soon as a legal service became available, Cyril changed over to the FM system, although he had been dubious in the beginning. Like many areas, initially the channels weren't that crowded and Cyril enjoyed his hours on his Uniace rig. This situation lasted until the channels got more and more crowded and Cyril was surrounded by both keen CB'ers and the idiots who spoil the channels for all of us. Cyril's lucky now if the needle drops below S7 and he doesn't have the rig on nearly so much, especially as he gets upset at his wife having to listen to such bad language.

It's this situation, as well as his keen interest in radio, that made him consider 934MHz. So, armed with a considerable amount of money, he set off to buy a UHF rig. A local CB shop in Barking was able to sell him one, although they weren't too optimistic, as their quote which forms the title of this article indicates. Cyril added a Reftec beam antenna with rotator to his Reftec rig and, in September 1982, he was ready to go.

Except, really, he hasn't gone at all as he's never been able to contact another user. Cyril grew increasingly worried. After all, he'd accepted that there weren't many 934MHz users - that's why he bought it - but none at all! The set went back to Reftec for confirmation that it was in working order and was pronounced OK.

So the set sits patiently on the sideboard waiting for the magic day when someone actually comes back. Cyril says, after such a long time, he'd even be pleased if someone said "Clear off" back at him but he's not giving up. He has tried to influence other local breakers into giving it a try but, although they come in for demonstrations, they're not over impressed by the silence that greets them. Cyril feels this is a great shame, as many local breakers, dissatisfied with 27MHz, are moving on to amateur radio and the examination without considering the other, cheaper, alternative.

Cyril has suggested that everyone who has 934MHz equipment should try to use it at 12.00 noon on Sunday for 15 minutes on channel 14, giving breakers the chance to listen out for someone in their area and make contact with them. This seems a very good idea and any 934MHz breakers reading this might care to take it up. Hopefully then stories like Cyril's won't happen to anyone else.



minded 'fanatic' who was also interested in transmitting, using his tape recorder as a modulator and became involved in his experiments. Cyril's fascination for radio led to him becoming an active experimenter himself, using many frequencies for

However, his interest in radio didn't lapse and he was (and still is) a firm supporter of the ordinary man's right to radio communication. So when citizens' band equipment started to make its way over to this country during the American CB boom, Cyril was ready.

CLUB SPOT

LIMA MIKE GROUP INTERNATIONAL

It was last November when the Group last appeared in these pages. Since then we have gone from strength to strength, to the stage where we have had to change the name slightly from U.K. to International.

Our primary function is still as a DX group, with members working on FM and SSB, even CW. Also our eyeball (every Friday at the Corner House public house, Bledlow, Bucks.) at Mole Catcher's is becoming a popular event with any breaker who can get there.

In the latter part of November, two of our members (LM 035 Alex and LM 999 Dave) ran a 72-hour marathon in aid of the Helen House Hospice in Oxford, which raised over £300 and a teddy bear. They would like to thank all the breakers who donated to such a worthy cause.

The outline of the Group since the slight change of name is as follows.

Upon joining the Group, the member receives a membership card and 50 QSL cards, which for a small additional charge can be personalized with member's number, handle, name and country or origin. Membership also entitles them to use the Group P.O. Box from which mail can be forwarded to them. We also have a range of other sundry items, e.g., log books, stickers, rubber stamp, etc., available.

In the not-too-distant future, we hope to start a junior division for younger breakers, with the prefix of Juliet Bravo so as not to be confused with regular members.

We always welcome new members or correspondence from other clubs. The address to write to is The Lima Mike Group International, P.O. Box 2, Chinnor, Oxford, England OX9 4UB.

J. J. Sydenham (The Printer LM 091)
(President)
Chinnor, Oxford

Tango Bravo CB Club

I would like to introduce you and your readers to our club. We are known as 'T' Bee, for obvious reasons. We formed in January, 1982 and had a very successful year. Some of the many events organized included treasure hunts, trips to France, football matches, darts tournaments, ice skating at Peterborough, fancy dress dances, etc.

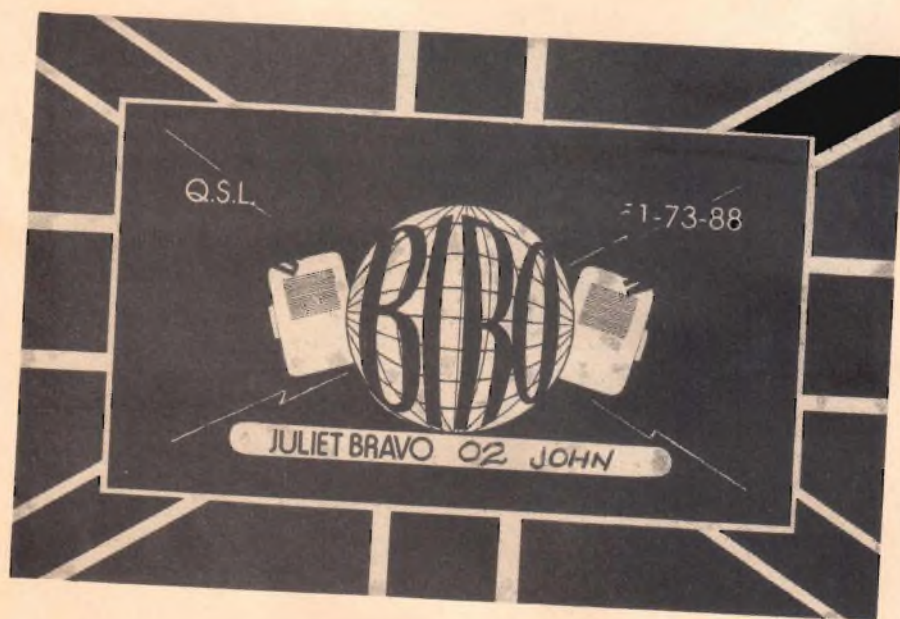
Our membership presently stands at 220 but as it is now renewal time and being aware of the downslide in CB interest, we only expect about 100 renewals. Therefore, new members will be most welcome. Our venue, Guisnes Court, is a very smart country club and we meet every Sunday evening from 7.30-11.00pm.

The Club operates an SSB club and we have 14 members currently. Once again, new members most welcome.

Well, enough said. I'll sit on the side and welcome any new members.

77's and 88's.

Red Baron (Chairman)
Tiptree, Essex



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51, 73 to you all.

Old Caveman (JB 02) (Chairman)
Nottingham



NATCOLCIBAR REPORTS.....

This is the first report from the Chairman of Natcolcibar, who will regularly be letting us know of developments and results of meetings that the Committee attends.

The Chairman and Secretary of Natcolcibar met with Home Office officials on 1 February to discuss various CB-related problems.

Channel 9 and its problems were discussed first and protection against abuse for channel monitors. It was discovered that the main reason for lack of protection was that when the licence and restrictions were formulated, the Home Office consulted the various emergency services for their opinions on the desirability of channel 9 monitoring. It appears that the emergency services felt that people would

a) expect the services to monitor CB and come in response to a call for assistance and this would not be the case and

b) no longer use the already existing and efficient 999 service.

Natcolcibar felt this to be rubbish and that the whole point of monitoring services was being missed, as its obvious purpose is to complement and assist, not replace. The CB user would use the monitor to speed up the advising of the emergency services and monitors would be there for the CB'er to use or not as required.

It was felt that, to a great extent, the general lack of understanding and sympathy for CB was responsible for CB not being taken seriously. However, we were assured that if we could produce details of the kind of problems that monitors contend with for the next meeting, they might look more sympathetically at our request for protection of channel 9. So we need evidence from you and emergency services in your areas that monitors are needed and are beneficial and details of the types of abuse difficulties you experience. We understand that the licence conditions are being reviewed at the moment and if the evidence we present endorses our viewpoint then it may well influence their attitudes to the new licence.

Antenna restrictions

Various aerial problems were discussed. An across-the-board single type, approved for both home and mobile use, was envisaged by the



Home Office but we challenged this as being completely unrealistic in the light of the number of half-wave dipoles and similar illegal aerials that are in use. We felt that a more sensible attitude would be to forget aerial restrictions and concentrate solely on interference, irrespective of mode or antenna, as interference is by far and away the most serious problem.

Natcolcibar does not blame either mode specifically for interference, neither do we accept the Home Office claim that any FM station causing interference must be illegal.

The comment was made that in any further specifications issued by the Home Office, we would like to see some standards laid down for the receive section of the radio as we blame many of the problems on the extremely poor standards in this part of the set. The Home Office said they might be willing to endorse particular standards to which manufacturers could then say their rigs complied but at this stage they didn't want to enforce such a specification.

Progress towards a compatible European system seems to be moving

well, the countries involved not having many basic objections. The main difficulty seems to be the agreement of a universal 40 channels (and the UK doesn't object to this). Our main problem will be moving existing users from the desired frequencies, mainly paging systems (who are keen to move any way) and the CAA, who will want assurance that the frequencies will cause no problems to aircraft. We sincerely hope that the mistakes made with the UK service will not be repeated when this one is introduced.

934MHz CB at home and abroad

Nine hundred and thirty-four megahertz, although as yet hardly a reality, was seen by the Home Office as maybe being priced out of the average user's pocket - a view not necessarily agreed with by Natcolcibar in the light of the amounts of money spent on 27MHz equipment. If and when 934MHz makes progress, we feel that this will be the area for the inclusion of extras like digital transmission accessories rather than on 27MHz as this

NATCOLCIBAR REPORTS.....

frequency already has enough confusion and problems.

The whole area of 900MHz usage was discussed in the light of the Japanese decision to introduce 902-904MHz for their own CB service. The Japanese will, of course, have the very latest in up-to-date technology, including digital channel selection and automatic transmitter identification. Japan is not the only country to have plans for the 900MHz range as America also has a similar scheme in mind. Our discussions centred on the fact that neither of these countries mention 934MHz and we are worried that the UK might be left out in the cold again with vast new areas available for pirates if due care is not taken.

The Telecommunications Bill came up, not unnaturally and, despite assurances that it would not be used against CB'ers specifically and that many other areas presented just as much a problem to the department, the Natcolibar representatives pres-

ent felt that it was not what the Bill said but what it didn't say that was the greatest threat to CB'ers. It was felt that many areas of the Bill were wide open to abuse and misuse by those in authority and that, given the opportunity, sections of it could easily be used to make even a short wave receiver illegal to own.

It was for this reason that four members of Natcolcibar met Mr. Dafydd Wigley, M.P., later in the day at the House of Commons. Mr. Dafydd Wigley is a member of the Standing Committee on the Telecommunications Bill and we met to discuss various amendments we would like to see to the Bill. We received a most sympathetic hearing from Mr. Wigley, who agreed that there did seem to be one or two rather grey areas in the Bill which he would try to get amended. He did comment that the Bill might well be 'guillotined' and any further debate curtailed before the committee ever got to the sections which

concerned us (which seemed very undemocratic to us).

Facts and figures

CB Radio Magazine has very kindly agreed to let us have some of the relevant results of the survey featured in the February issue, so we hope you've all filled them in and sent them back as we hope to use the results to try to influence the intransigent and dogmatic attitude in the Home Office towards CB and its problems. We feel that the way they blindly ignore the reality of the CB situation is not good enough and to make rules that are ignored, yet discard the necessity for rules that would help the service work, is even more foolish.

It's about time it was accepted that CB users are entitled to some consideration and neither will they continue to pay licence fees for nothing nor will they continue to be pushed from pillar to post by civil servants and MP's who couldn't care less about their "stupid CB's". It's gone on for quite long enough and it's about time the CB'er had a say in his destiny. So help us to help you.

If you would like to contact Natcolcibar to contribute evidence and opinions or to ask about membership and affiliation then write to The Secretary, Natcolcibar, 430 West Wood, Windmill Hill, Runcorn, Cheshire WA7 6LL.

May's edition of CB Radio Magazine includes

- ★ An article on CB for disabled users
- ★ Pathfinder community radio
- ★ Marathon copies – who's the champion?
- ★ Results from our second Reader Survey

plus regular features like

Rig Test, Rufnek, Readers Write and Club Spot

Don't miss it!

RIG TEST



Magpie

Magpie Autoscan 5000

This is the second 'all-British' set we have looked at in detail and, like the EMS set featured a few months ago, the Magpie really scores on quality of manufacture. The set is available through Magpie on mail order only and retails at £120.00.

Microphone

The microphone supplied with this rig is of the standard oblong shape with rounded corners. It is fitted with a red-and-black push button top which is used for up and down stepping and scanning of channels. If either of the buttons are pressed once the rig will either go up or down a channel. If the button is held in the down position, the rig will automatically scan up or down looking for either an empty or busy channel (whichever scanning mode has been selected by the search control switch). It is also fitted with a lockable four-pin plug.

Construction

Like most Far Eastern sets, its construction is of the two-piece (top and bottom) cover plus chassis. The case itself is finished in a stylish dark bluish-grey stove enamel paint. The front panel is aluminium extrusion with a

lettering around switches, meter and display. The controls from left to right on the escutcheon are, PA CB switch, channel 9 priority switch, power high/low switch and a search switch. The search switch decides whether the scanner looks for a busy or free channel. Next is the signal strength meter and channel display (which was a good size), TX lamp and underneath the TX indicator is a photo-sensitive cell which will dim or brighten the channel indicator to suit external lighting conditions. On the bottom row from left to right is a mike gain control, an RF gain control, squelch control, volume on/off control and a pair of up and down scanning buttons and the mike socket, which if both are pressed at once reset the scanner to channel 14.

The internal construction is of a very high standard, with very few floating wires. Important ic's were mounted in sockets for ease of servicing and replacement. All the components are clearly identified.

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.

Power output

This test is done to check that the power output of the rig conforms to Home Office specification MPT 1320 and that the rig will give the user sufficient power output for normal use over a reasonable variation of power supply voltages in both high and low settings.

Power Output and Attenuation			
Atten.	10.8v	13.8v	14.8v
High	2.0W	3.1W	3.3W
Low	0.3W	0.3W	0.3W

The power output test shows a rather low reading but this would be hardly noticeable during normal use. This appeared on both high and low power.

Temperature stability

This test is done to ensure that the rig stays on the frequency for a reasonable change in environmental temperature (48°F to 68°F).

The temperature stability seems to be reasonably good, drifting a maxi-



imum of 100 cycles over the temperature range.

Temperature stability			
Temp. Should be	CH1	CH19	CH40
48°F	27.601250	27.791250	27.991250
68°F	27.601200	27.791210	27.991220
88°F	27.601130	27.791150	27.991150

Modulation

This test is done to check the ability of the rig's modulation circuit to give a good modulation level over a varying range of input levels and frequencies.

Input Level	Modulation Input Frequency		
	500Hz	1193Hz	2500Hz
0.6mV	0.15kHz	0.2kHz	0.2kHz
2.5mV	0.5kHz	0.9kHz	0.7kHz
6.0mV	1.2kHz	1.6kHz	1.3kHz
25mV	2.2kHz	2.0kHz	1.7kHz
60mV	2.5kHz	2.2kHz	1.8kHz
250mV	2.5kHz	2.3kHz	1.9kHz

The results of this test are quite good and at no point did the modulation level exceed the specification in MPT 1320. The only complaint found was that when the rig was air tested, the modulation was said to sound a bit 'tinny' but this could easily be the fault of the microphone and not the rig.

Receiver test

Audio distortion

To do this test, the loud speaker was replaced by a Marconi TF 893 AF power meter with a Marconi TF 2337 distortion factor meter connected across it.

Measured Distortion	
0.2 watts	9% distortion
0.4 watts	10% distortion
0.6 watts	12% distortion
0.8 watts	12% distortion

In PA mode, 2 watts are available.

From the results of these tests, we can see the output is lower than most normal sets but was found to be good to listen to and not harsh as some foreign sets can be.

Squelch level

The threshold of the squelch was measured at .25mv and fully muted at 300mV. The fully muted results seemed rather excessive but no problem was experienced when used out in the field under normal operating conditions.

Receiver sensitivity

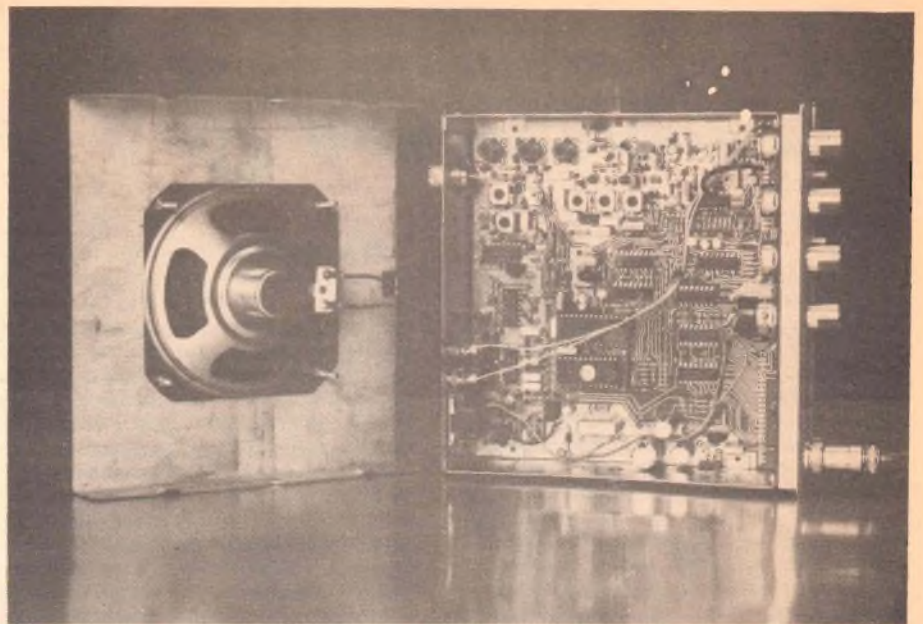
This test is done to check the ability of the rig to pull in weak or distant stations.

Sensitivity	
10dB quieting	1.1uV
20dB quieting	3.0uV
30dB quieting	6.0uV

From the results of this test, we can see that the rig gave only average results and could, perhaps, have been more sensitive.

S meter reading

This test is done to check the calibration (sensitivity) of the rig's signal strength meter.



S Meter Reading	
3	3uV
5	6uV
7	10uV
9	15uV

We can see from the results of this test, which was done with the RF gain control turned to maximum, that a 9lb signal (S9) means that the station you are receiving is putting 15mV down your aerial. We feel this is a bit low and would cause you to give better poundage reading than you would receive back.

AM rejection

The AM rejection measurement taken from the rig gave a result of 20dB, which is a slightly below average reading but should not cause any trouble.

Adjacent channel rejection

This test is done to check the rig's resistance to bleed-over by other stations near by. We take a measurement by receiving a signal on channel 20 then introduce a second transmitted signal first on channel 19 then 20 to check the filter band width then on channels 1 and 40 to check for receiver desence.

Adjacent Channel Rejection			
CH1	CH19	CH21	CH40
300mV	3mV	5mV	100mV

The results of this test on channel 1 and 40 are very good but we feel the results on channels 19 and 21 could have been higher but no problems were found during air testing.

Summary

This is the second 100% British rig we have tested so far and we were quite impressed by the high standard of workmanship used in the manufacture of this rig. We also found while air testing this rig that the up and down scan on the microphone was very handy whilst driving around, although unfortunately in London the high con-

SPECIFICATIONS	
GENERAL	
FREQUENCY RANGE CHANNELS:	27.00125 MHz - 27.99125 MHz 40 channel 10 KHz spacing PLL synthesized. Frequencies in accordance with Home office requirements published in MPT 1320
CHANNEL SELECTION:	Internal electronic tuner selection controlled by push buttons on Microphone or front panel
CHANNEL DISPLAY:	7 segment vacuum fluorescent display with automatic dimming
SPECIAL FEATURES:	a) Search mode enables automatic search for busy channel or free channel as required b) Instantaneous channel 14 selection
OPERATING TEMPERATURE RANGE:	-5°C to +45°C
POWER SOURCE:	+10 BV DC to +15 BV DC (+13.2V DC nominal)
CURRENT DRAIN:	Approx. 300mA on receive 1.2A on transmit (based on 2A)
DIMENSIONS:	Width 182mm (7.16") Height 56mm (2.2") Depth 175mm (6.8")
TRANSMITTER	
OUTPUT POWER:	4W high power setting 400mW (100dB) low power setting
FREQUENCY ACCURACY:	Better than ± 1.5 KHz over temperature range
TYPE OF MODULATION:	FM
DEVIATION:	Nominal ± 1.5 KHz. Max permissible ± 2.5 KHz for +20 dB input overload from 300 Hz to 3KHz
SPURIOUS EMISSIONS:	
a) Adjacent channel	<10 microwatts
b) Out of band	<10µW within the bands: 80 - 85 MHz 87.5 - 118 MHz 125 - 136 MHz 174 - 230 MHz 470 - 862 MHz <250nW elsewhere
RECEIVER	
CIRCUIT TYPE:	Dual conversion superheterodyne
SENSITIVITY:	1µV for 20dB noise quieting (typical 0.7µV)
IF BANDWIDTH:	>= 3 KHz (± 6dB)
ADJACENT CARRIER REJECTION:	>= 80dB (typical 100dB)
IMAGE REJECTION:	>= 60dB
AM REJECTION:	>= 40dB
2 TONE INTERMODULATION:	3rd order intermodulation products for 2 inputs of 1mV typically <0.25µV
RF GAIN CONTROL:	30dB
SQUELCH RANGE:	0.3uV to 10uV
AUDIO OUTPUT POWER:	1.5W into 8 Ω 3W into 4 Ω

centration of breakers made the search facility unoperable (due to the fact there were no free channels and all channels were busy) but out in low-population areas and motorway driving, the scan facility comes into its own for finding somebody to talk to or searching for a clear channel. As for the low results in some of the tests, it was explained to us by the manufacturers and was confirmed by the Serial No. (009) of the rig that this rig was only a prototype and that the actual production rigs would be made to a far higher standard. In our opinion, this rig is well worth buying and, hopefully, the price will not make it prohibitive.

Readers Write



Dear Sir,

On reading the Home Office News Release in your February 83 edition of CB Radio Magazine, I found it a bit unclear of what you can legally possess.

It was clear that you can be done for illegal possession of AM/SSB equipment but what I was wondering is that, in my case, I purchased (quite legally) a Bremi mains linear amplifier. Say now that I decide to *not* use this any more but leave it next to my rig but *not* connected into the system, is this counted as illegal possession or can I legally keep it if it is not used? I would appreciate if you could publish the answer to this question in your Readers Write column.

Yours with hope,

N. J. Kemp
March, Cambs.

I'm sorry, Mr. Kemp, we just don't know at the moment. Although the main points of the Bill are easily picked out, interpretation of some of the finer points is another matter! My guess is, yes, your linear amplifier will be illegal whether you use it or not but we hope to have more explicit information next month.—Ed.

Dear Sir,

I would like to use the letter page of your magazine to put to your readers a few points on two items that will affect both CB radio and amateur radio in the coming 12 months.

The first is regarding the advent of cable TV in this country. This system will use high level composite video and audio signals across the complete frequency range of 5-440MHz. This range houses most of the popular amateur bands and, of course, 27MHz CB. The problem arises from the permitted external radiation limits and I quote from the specifications, "Radiation Limits: Maximum permitted equivalent radiation level from individual components within non-broadcast bands equals +11dB/uV/m at 10m or a radiated power of $2.5 \times 10^{-11}W$ (25pW)".

A footnote to this specification states, "This is a compromise value and MAY NOT protect from system interference all services operating within the bands specified". This has caused concern with the University of Bath School of Electrical Engineering's Chris Morcomb, and with John Wilson of the R.S.G.B. Both have submitted a report to the Hunt Committee on cable TV, that radiation from "leaky coaxial cables" anywhere near these levels will lead to the end of amateur radio, CB radio and other similar systems.

This opinion is echoed by other users of this part of the radio spectrum and one can see the problems that may arise by looking at the American radio scene, where amateurs have been forced to close their stations because of interference to and from the US cable system.

There are at present two types of cable transmission system under consideration. The first is the 'all-American' coax cable system, with all the problems of TVI and interference to users in that part of the spectrum. The other is a hybrid fibre optic/coax cable system that is distributed via a fibre optic 'main' and the houses are connected by coax to it. This means that interference can still be caused but only locally(!) Probably the best system is the all-fibre optic type as pioneered by British Telecom but whether we get this superior system or not, the decision lies with the Government and after seeing their handling of the CB question, I do not have much faith in the outcome.

The second item concerns the British Telecommunication Bill which is at the moment making its way through Parliament. This Bill is largely concerned with the selling off of British Telecom and the setting up of private telephone companies. However, it also includes sections dealing with the following: possession of illegal transmitting equipment, the right of police to confiscate illegal equipment (in the case of CB that means antennas over 1.5 metres, linears and sideband/AM rigs), the use of illegal frequencies, the advertising and sale of illegal equipment and a lot more. The interesting thing is that Government has yet to say what is illegal equipment. Apart from the regulations governing CB, the law on radio equipment is very vague (as we all know!). This, in my opinion, is clearly an attempt to impose more regulations on CB and amateur radio via a 'back-door' method.

Now an interesting point was made during the Bill's second reading in the House of Commons and that was a statement from the three main opposition parties that if any of them was elected they would not implement this Bill. The Government has said that this Bill will not come into force until after the next General Election, which most people think will be 1983.

Far be it from me to tell you who to vote for but if you do not want this Bill to be enforced, you know who NOT to vote for, don't you?

Yours faithfully,

J. E. Burtenshaw (The Modelmaker)
Littlehampton, W. Sussex

Dear Ed,

Firstly, thanks for a very readable magazine. It's nice to see you keeping it the same as when we bought the first copy, although AM seems to be getting less and less space nowadays.

Secondly, I have been watching your letter pages with interest now for the last three issues. In all of them, we have the year-old rivalry of AM v. FM. OK, I will admit to having been an AM

breaker now for over three years and many of my original friends on AM still operate the same but we have moved with the times and all also run FM. I am not about to start a long-running feud about how far you can get out on AM as opposed to FM as I have had phenomenal copies on both modes myself and, obviously, I knock the spots off both with SSB. Also, I won't go on about FM CB becoming legal because of all our harassment and effort in pre-Legalization days. (I got that all in rather well, didn't I?).

The point is, in AM days, wallies, bucketmouths, etc., were soon found out and sorted out because a) there were not the profuse number of users as there are now and b) what we were doing was illegal, so we administered our own justice. So, rather than moan about something that I very much doubt anything can be done about, what about the people who have facilities other than 27 FM using them? Get together in your respective areas and revive the 'Good old days'. We have all said it ourselves in the past 14 months: "It's not the same now it's legal". So how about a revival? We've had rock revivals and 60's revivals, so why not a CB revival? If this gets going, how about a national AM appreciation club? Let's stop moaning and see how many of us are left.

Peter H. P. Gruender (Red Baron)
Tiptree, Essex

P.S. Anyone seriously interested in a national AM appreciation club, please contact me through this mag., marking your letter 'NAMAC'.

Dear Sir,

I was pleased to see the article 'When 27MHz went to war' in your January issue. As a young airman in 1938, I was posted to the Research Station at Bawdsey to start a career of over 40 years in Air Defence Radar and Communications.

Mr. Judd's list of CH stations is not quite correct. About the most important is omitted, viz., Swingate, which was on the White Cliffs just east of Dover. I recall that the photograph (Fig. 5) in the 'R' Block operations room was taken there in late 1941.

There were five stations in the initial CH chain from Bawdsey to Swingate with frequencies 22.69, 25.01, 26.36, 27.03 and (I think) 27.93MHz. By the outbreak of WW2, the chain had been expanded south-west to Ventnor and up the east coast to Hillhead to make 20 stations. One or two mobiles had been added, including Netherbutton, near Kirkwall, Orkney Isles. By the time of the Battle of Britain, Devon and Cornwall plus S. Wales and a few other areas had been covered, mainly by mobile radars which were later made into permanent 'West Coast'-type stations. These included Hays-

RUFNEK by ZAKZ

IT CAN'T BE MY MOTHER THIS TIME! SHE'S GOT A SORE THROAT!

SHOCKED

LISTEN TO THAT BUCKETMOUTH! I'VE NEVER HEARD ANYTHING LIKE IT!

NOT SINCE THAT TIME I TOLD YOU IT WAS YOUR ROUND IN THE PUB!

WHAT MAKES IT WORSE, IS IT'S AS CLEAR AS OUR WORKS CANTEN SOUP!

YOU MEAN WALL TO WALL TREE TOP TALL!

FOULMOUTHING IS ONE THING THAT ALWAYS GETS UP MY NOSE!

POKE

HIS FINGER IS ONE THING THAT ALWAYS GETS UP HIS NOSE!

THESE HOOLIGAN FOULMOUTHS GIVE CB A BAD NAME. I'LL POUND THESE STREETS UNTIL I FIND THE CULPRIT!

I'LL FOLLOW IN THE CAR IF YOU DON'T MIND!

WHAT ARE YOU GOING TO DO IF YOU FIND HIM?

I'LL DO WHAT ANY LAW ABIDING CB'ER WOULD DO... SNAP HIS TWIG OFF HIS CAR!

THAT'S BRAVE!

I'VE GOT HIM! HE'S STILL GIVING IT SOME VERBAL AROUND THE CORNER!

ET. PHONE HOME!

HE DOESN'T NEED TO... HE'S GOT A C.B.!

GO AND DO YOUR STUFF, RUFNEK. IF HE'S BIG I'LL BACK YOU UP!

SOME BACK UP!

IF HE'S BIG, I'LL JUMP ONTO HIS BONNET AND SNAP HIS TWIG BEFORE HE REALISES WHAT'S HAPPENING!

SECONDS LATER...

LET'S SPLIT! HE WAS MASSIVE!

DID YOU DO IT?

YEH! I SNAPPED IT IN TEN PLACES!

HA! HA! BY THE TIME HE GETS OUT OF THE CAR WE'LL BE MILES AWAY!

WHAT CAR?

.... HE WAS STOOD AROUND THE CORNER USING A HAND HELD CB SET!

HELP!

Readers Write



castle Cross – not Haycastle as listed in the article.

Most were closed at the end of WW2 down to a care and maintenance basis followed by a top priority refurbishing in 1950-51 back to operational status as phase one of ROTOR – the restoration of the U.K. air defence system. By 1960 or so, all CH's had been closed and mostly dismantled.

So it can be said that for a quarter of the century, 27MHz was used for our air defence system. I wonder if CB on 27MHz will beat that record?

Wg. Cdr. H. E. Bennett,
M.B.E., C.Eng., F.I.E.R.E., R.A.F.(Rtd.)
G8PF (Papa Foxtrot)
New Milton, Hants.

Dear Editor,

Regarding the great debate about FM v. AM, I'm totally unbiased as here in Gibraltar it's all illegal but having tried a U.K. FM set, they certainly work well, much better than the AM sets for a local chat. Mind you, there are only a handful of people with them here, although we do hear the U.K. when the propagation is good.

Has anyone thought what an AM system with thousands of breakers fighting for 40 channels would have really been like in the U.K. without the advantage of the capture effect on FM?

If Mr. Bradford, writing to you recently, has found a way of getting high definition real television into 40kHz, perhaps he would be well advised to rush to the Patent Office and sell the result to Japanese video manufacturers.

Anyway, keep up the good work with

an excellent magazine and don't go QRT.

Calentita
Gibraltar

Dear Sir or Madam,

As you know, this is the United Nations Year of Worldwide Communications but this Government is trying to prevent me and thousands of other 11-metre sideband radio operators communicating with the rest of the world.

They are trying to impose a fine of up to £1,000 and confiscation of all illegal 11m. equipment for doing no more than trying to make friends in the rest of the world, whereas other people are allowed to go around beating up and maiming old folk and raping six-year-olds and getting very trivial sentences for their outrageous crimes.

Their reason for making 11m. illegal is interference with TV's and hi-fis but I believe that sideband radio operators are being used as a scapegoat for others. So the reason for this letter is to try to get other clubs, AM, FM and sidebands and magazines such as yourself to show the Government that there is a need to legalize 11m. sidebands more sensibly than they legalized FM CB.

Equipment such as 11m. should all be of high standards like amateur radio equipment. The operator would have to pass a simple examination to prove that he knew how to use his radio, i.e., if he was using Yaesu or Sommerkamp radios, he would know the difference between 11m. and 10m. or 20m. and he would know how

to cure any interference problems. If he could have 11m. legalized with 12 watts output on sidebands and 4 watts output on FM or AM and they were allocated unlimited use of antennas with a maximum height allowed above buildings, almost all interference would be eliminated at once. Therefore, it would be in the interest of all radio users, CB and sideband, to let the Government know by writing to your local M.P. and any other sources that could help in the fight for legalization of 11m. sidebands in this, the year of worldwide communication.

Now take the sideband station: 90% of the stations know that they are 100% illegal and do not want any aggravation from the neighbours, so they take great care and pride in setting up a clean station.

Obviously there would be interference if they tried to hide their antennas as some FM CB stations try to hide illegal antennas and create interference plus the sideband station would not be very successful in worldwide communications, so their antennas go on top of their houses with around 10-15ft. clearance from TV antennas or on 30ft. masts at the bottom of the garden, thereby eliminating 80% of the interference straight away. Any other interference is usually cured by the operator buying or making a filter. Anyway, I don't see how 11m. sideband interference is any different than radio amateur 10m. sideband interference.

Yours faithfully,

Stuart Ratcliffe (TFC 437)
Chairman, TFC Bolton Branch



Dear Sir,

I read your statement about channel 9 with much interest. I, myself, am a THAMES Monitor and would like, through your magazine, to voice my own opinion. I agree that THAMES Monitors are not fully trained and that there is much THAMES can do in the way of training new recruits and also vetting them. On the whole, most Monitors are to my mind sensible adults

and just wish to help fellow breakers in an emergency. We are not trying to outdo the 999 service but just add a little assistance to our over-worked service.

I can understand that many breakers couldn't or wouldn't contact a 9 Monitor that is their privilege.

I do not think that threatening behaviour will help 9 Monitors carry on with monitoring the 9 or persistent wallies, so called. In all it is just going to block the 9 constantly and, after all, we will still be there when you are all fed up of jamming the 9.

I can fully understand such organizations such as West Hampstead Mafia criticizing us and also thinking we are a load of inexperienced idiots! If they do not agree with what 9 Monitors are trying to do then they should not bother going on the 9. All it needs is giving and taking on both sides. Surely all it needs is genuine need to help all breakers in need of help, whether you are a Monitor or a breaker!

I, myself, have been insulted in

many ways on the 9 by wallies or breakers. In fact, they have been very abusive because I am a woman. That should not come into it. I know personally many 9 women breakers who have been reduced to tears from so-called good buddies.

There have been many changes in the Southwest. We hope for the best. Obviously in a large organization which is voluntary there are many things that need ironing out. We like to hear people criticize us and voice their opinions but not on the 9. Take us to another channel so we can iron them out with you.

Also, if there are any breakers reading the magazine who wish to ask questions or voice their opinions about THAMES in all Southwest areas, they can contact CSW1 or ADO1. We will only be too glad to answer any questions on the subject, whether for or against the 9.

Yours,

Carole Milbank (ADO1)
(THAMES Southwest)
Wimbledon, SW19

Think of all the people who regularly travel on Britain's road system: commuters to and from work, truckers carrying the necessary components for modern living, sales reps with cars full of samples and high hopes for this month's commission, service vehicles, etc., right down to journalists for CB magazines who day-dream about beating Nikki Lauda by two laps at Le Mans.

Many of these people rely on clear routes and good weather to meet their delivery times and appointments. Unfortunately, fate doesn't always look too kindly upon the poor British driver. Road works, burst water mains, broken traffic lights and accidents combine with rain, ice and fog to make some routes judder to a halt.

CB to the rescue

In a lot of cases, this is where CB can step in. Many a driver has been grateful for news from a patient monitoring breaker that, for example, the M62 is blocked by an accident and he can divert around it by taking the exit three miles before.

Unfortunately, although the wally breaker is the least favourable side of CB, it's him (or her) that gets the attention, particularly publicity in the press. Not so much attention is given to the many breakers who give up their spare time to provide a traffic and road service that, in its own way, helps keep Britain's roads moving.

The other problem is that not every-one knows the monitor is there. Although someone might provide a very useful service in, say, Birmingham, the driver shooting up the M5 from Exeter doesn't know that

someone is sitting there who can help him find his destination when he gets to Birmingham.

Traffic directory

This is where we can help. CB Radio Magazine will try to compile a directory of breakers or organizations who can offer help to motorists while on the road and what area they cover. This doesn't necessarily mean emergency monitors but CB'ers who give directions, weather reports, traffic conditions or advice on service stations and facilities. Of course, many emergency monitors give this sort of help, too but the directory is primarily aimed at motorist assistance.

We need you to tell us if you or your club, group or association offer this sort of help. But one word of warning. Please don't send in information if you can't regularly be on channel. Motorists and breakers need to rely on someone offering an efficient and constant service and it does them less than a favour if they are vainly trying to contact someone who just isn't there any more.

We have already heard from and reported on both individuals and groups of CB'ers who are well known in their area for giving this support to motorists, like Speedy Lady and Thermogene in Basingstoke and Tango Control in Slough. **But** even if you think we already know about you, please write in with your details or fill in the form below if it is easier.

When we have collated all the information received, we will publish a supplement to CB Radio Magazine that can be used for reference when travelling.

Name of breaker or group _____

Contact channel _____

Days covered _____

Hours covered _____

Contact area (approx.) _____

Main routes covered _____

What information can you usually give? _____

(e.g., weather, traffic volume, services and facilities, directions, etc.)

Any other comments _____

On the move

Round Up

A.I.M. update

In the January issue, we informed you of the formation of a new monitoring service entitled A.I.M. (the Association of Independent Monitors). Since their formation, the members of A.I.M. have spent a considerable amount of time and effort on setting up a workable training programme, which now takes the form of a regular monthly meeting devoted to this purpose. Lectures are frequently given by members of the police, fire and ambu-

lance services and also from the St. John Ambulance service and Red Cross Society. The meeting usually terminates with a social function.

A.I.M. has recently been presented with a mobile control unit, fully equipped with base stations and antennas. A telephone answering machine has also recently been donated by A.I.M. Unit 007, alias Cubby Broccoli, Producer of the James Bond films.

A.I.M. are very active members of NATCOLCIBAR and spend a great

deal of time visiting breakers' clubs to inform them of benefits of A.I.M. and NATCOLCIBAR and to keep them up to date with legal matters.

Recently, A.I.M. was involved in the search for two children missing in the Epping Forest and recorded the event on video for training purposes.

If you feel you would like to serve the breaking public, contact A.I.M. at: **102 Beaconsfield Road
Tottenham
London
N15 4SQ**



Swift in speech if not in speed!

Keen readers of News Review will have read a clipping a few months ago on Ernie Warmington and his recent London to Brighton Veteran Car Run in his 1903 De Dion Bouton. Ernie (otherwise known as T-Ern) sent us in his account of the journey.

"When completing the entry form for the 1982 London to Brighton Veteran Car Run, the R.A.C. wanted to know if there was anything special about my car. It was then I decided, with the R.A.C.'s approval, to install my CB radio, a Fidelity 2000, in my veteran car.

"My veteran car is a 1903 De Dion Bouton, Q-type, two seater, single cylinder with a lovely registration number of R12 6HP and does about 15m.p.h. with a following wind.

"Mounting a K40 on the car step, it gave me an SWR of 1.5:1 and whilst waiting to leave Hyde Park (I must stress at this point that it is not a race - all the pre-1905 cars have to be at Brighton before 4.00p.m. to qualify for an award), I got in a 'link up' and fellow CB'ers were very surprised to know what vehicle the 'chicken box' was installed in.

"One copy I did get was with Lord Nelson, the driver-mechanic from the Beaulieu Motor Museum and I eyeballed another breaker who's handle

CB veteran
ANCIENT and modern will be combined in a Cornish entry for the RAC London to Brighton run for veteran cars on November 7.
Ancient, of course, is the car, a 1903 De Dion Bouton entered by Mr. Ernie Warmington, a Redruth engineer. Modern is the "optional extra" he has installed in it - citizen's band radio. Mr. Warmington reckons he will have the first CB entry in the run's long history.
The RAC reports that he expects quite a bit of CB encouragement en route, having commented: "No doubt, there will be lots of spectators with rigs on the way, and I am bound to get some encouraging copy."

was Sprite 1 from the Southall 20 (27/81 Club).

Starting at 8.30a.m., the weather was cloudy but dry and as we progressed to Brighton, I did get other copies (quite a number, in fact). After a while it began to rain and I ended up wet through at Brighton but without having to use channel 9.

"Anyway, I'm claiming to be the first to use a CB radio in a veteran car on the Brighton Run."

Touch CB

Readers may remember reading about Touch CB, a Slough-based charity that had been established to provide CB equipment specially adapted for disabled users. Sets were available on the payment of a £25.00 deposit, which was returnable when the set was no longer required.

After receiving some phone calls from breakers who had been unable to contact Touch CB about equipment and repairs, we attempted to contact them ourselves but with no better result. At the same time as our investigations, the B.B.C. radio programme for the disabled, 'Does He Take Sugar?' was also doing some investigating of its own.

It was able to get in contact with Barry Powell, the founder of Touch CB, who had moved from the advertised address. It would seem that the organization of the charity left something to be desired and that some applications and repairs had been overlooked.

For anyone wishing to contact Mr. Powell, his new address is:

**Peel Cottage
The Creek
Sunbury-on-Thames
Middlesex
Tel: Sunbury-on-Thames 88897**



Cancer Research Campaign

Following the success of their first Great Picnic two years ago, the Cancer Research Campaign is inviting young people from all over the U.K. to 'get sponsored' to their 1983 Picnic at the Royal Showground, Stoneleigh, Kenilworth, Warwickshire over the Spring Bank Holiday, Saturday, Sunday, Monday, 28-30 May.

The previous Picnic, which was the Campaign's most popular fund-raising event ever, was held in July, 1981. It was honoured by the presence of Her Majesty The Queen on the first day and attracted a total of 25,000 visitors. Young people may not have a lot of money to spare but they certainly showed tremendous enthusiasm and ingenuity and over 3,000 sponsored supporters travelled to the 1981 Picnic.

They cycled, rode on horseback, roller skated, came in a covered wagon, pushed a bed, a gigantic mock banana, several prams, got 'delivered' to the picnic in mail bags and canoed or sailed up the river. Once again, in 1983, anything is possible.

This year's prizes will be awarded to the individuals and teams who raise the most money for cancer research, invent the most ingenious method of getting sponsored or create the best sponsored life-size model. Each day 1,500 free picnics will be available to sponsorees.

Both sponsoree and visitors will enjoy a wonderful day out with plenty of things to do. This year the Picnic is being staged with the Model Craft Country Show, which is holding its annual event there. Fair organs, traction engines, sub-aqua and archery displays, a vintage car rally, a gyrocopter display, African and folk dancing, a country and western wagon train are just a few of the attractions.

Once again, Dave Lee Travis, of B.B.C. Radio 1, will be host on behalf of the Campaign and Grand National hero Bob Champion, with his horse, Aldaniti, will be there on Sunday.

Young people wanting to get sponsored should write to:

Michael Heyland
 Youth Action Promoter
 Cancer Research Campaign
 2 Carlton House Terrace
 London
 SW1Y 5AR

U.B.A. convoy

We must first of all apologize to the U.B.A. for printing their address incorrectly in the February issue. The address should have read 50 Gaskell Street, not 5 as printed.

The walk planned by the U.B.A. from Glasgow to London on 30 May has now been turned into a convoy. Further details will be given in the next issue of the magazine; alternatively, contact the U.B.A. at

50 Gaskell Street
 London
 SW4 6PJ
 Tel: 01-720 7468

CB
934/81

934MHz contact column

Another 934MHz breaker waiting for people to talk to is Delta One, of Nine Elms, in London. He has already spoken to one of the breakers mentioned in last month's column (from Clapham Common) and Hillbilly, Unit 172, in Weybridge (approximately 20 miles away). Delta One has a Reftec set bought from Videotone Ltd. in London and since he is high up, he is con-

fident of some copies.

You may have already read Woodpecker's suggestion in this month's Breaker Profile but here it is again - the more that read it, the better. Woodpecker suggests that 934MHz rig owners try at 12.00 noon on Sundays for 15 minutes on channel 14 to give breakers a chance to contact other breakers in their area.

A repeater station for 934MHz CB

Part 2 A plan for a national service by F. C. Judd

No doubt the first questions to be answered are – Who pays for the repeater stations, Who installs them and Who is responsible for maintenance and running costs, etc.? Let us take the amateur radio repeater system as an example and which at present in the UK involves about 160 fully operational stations, all paid for, installed and maintained, etc., *BY THE RADIO AMATEURS THEMSELVES*. The stations are licensed by the Home Office via the Radio Society of Great Britain.

A repeater station system for 934MHz CB radio could be organized on the same basis.

Each amateur radio repeater is used mainly by those in the area served by the repeater and a group is appointed to deal with initial construction and installation and afterwards the maintenance *on a purely voluntary basis*. The initial cost for the equipment is raised from the area users by individual subscriptions and/or fund raising by other means. After this the area users make a small annual subscription towards maintenance and running costs and any rental that may have to be paid for the repeater site. The benefit of any repeater is mutual to all radio amateurs regardless of which area repeater they subscribe to. In other words – *You may use our repeater if you happen to be in our area and vice versa.*

Obviously a national repeater station network must be carefully planned with regard to unnecessary overlapping of areas which would occupy channels that might well be denied to others in another area. Ideally, therefore, an appointed committee or controlling body would be needed to vet all applications for repeater station installations and to allocate appropriate frequency channels for the areas concerned. For example, with 20 repeater channels available, they would probably have to be shared by 100 or more repeaters although this is quite practicable providing repeaters sharing channels are far enough apart so as not to cause interference to each other. *The 432MHz amateur radio repeater system which covers the whole country has a total of 108 repeaters sharing 16 channels.*

Guide to a system

Firstly frequency allocation and as already explained, this would require a bandwidth of 2.950MHz to provide 20 repeater channels and 20 simplex channels. SIMPLEX means direct station to station operation and the term DUPLEX is often used to denote repeater operation. The primary function of a repeater is to greatly extend the wor-

Channel No. In order of 50kHz spacing	Frequency MHz	Repeater No. INPUT	Repeater No. OUTPUT	Simplex Channel No.
1	934.025	R1	-	-
2	934.075	R2	-	-
3	934.125	R3	-	-
4	934.175	R4	-	-
5	934.225	R5	-	-
6	934.275	R6	-	-
7	934.325	R7	-	-
8	934.375	R8	-	-
9	934.425	R9	-	-
10	934.475	R10	-	-
11	934.525	R11	-	-
12	934.575	R12	-	-
13	934.625	R13	-	-
14	934.675	R14	-	-
15	934.725	R15	-	-
16	934.775	R16	-	-
17	934.825	R17	-	-
18	934.875	R18	-	-
19	934.925	R19	-	-
20	934.975	R20	-	-
21	935.025	-	-	S1
22	935.075	-	-	S2
23	935.125	-	-	S3
24	935.175	-	-	S4
25	935.225	-	-	S5
26	935.275	-	-	S6
27	935.325	-	-	S7
28	935.375	-	-	S8
29	935.425	-	-	*S9
30	935.475	-	-	†S10
31	935.525	-	-	S11
32	935.575	-	-	S12
33	935.625	-	-	S13
34	935.675	-	-	S14
35	935.725	-	-	S15
36	935.775	-	-	S16
37	935.825	-	-	S17
38	935.875	-	-	S18
39	935.925	-	-	S19
40	935.975	-	-	S20
41	936.025	-	R1	-
42	936.075	-	R2	-
43	936.125	-	R3	-
44	936.175	-	R4	-
45	936.225	-	R5	-
46	936.275	-	R6	-
47	936.325	-	R7	-
48	936.375	-	R8	-
49	936.425	-	R9	-
50	936.475	-	R10	-
51	936.525	-	R11	-
52	936.575	-	R12	-
53	936.625	-	R13	-
54	936.675	-	R14	-
55	936.725	-	R15	-
56	936.775	-	R16	-
57	936.825	-	R17	-
58	936.875	-	R18	-
59	936.925	-	R19	-
60	936.975	-	R20	-

*Emergency
†Calling

Total band frequency coverage – 934.025-936.975MHz

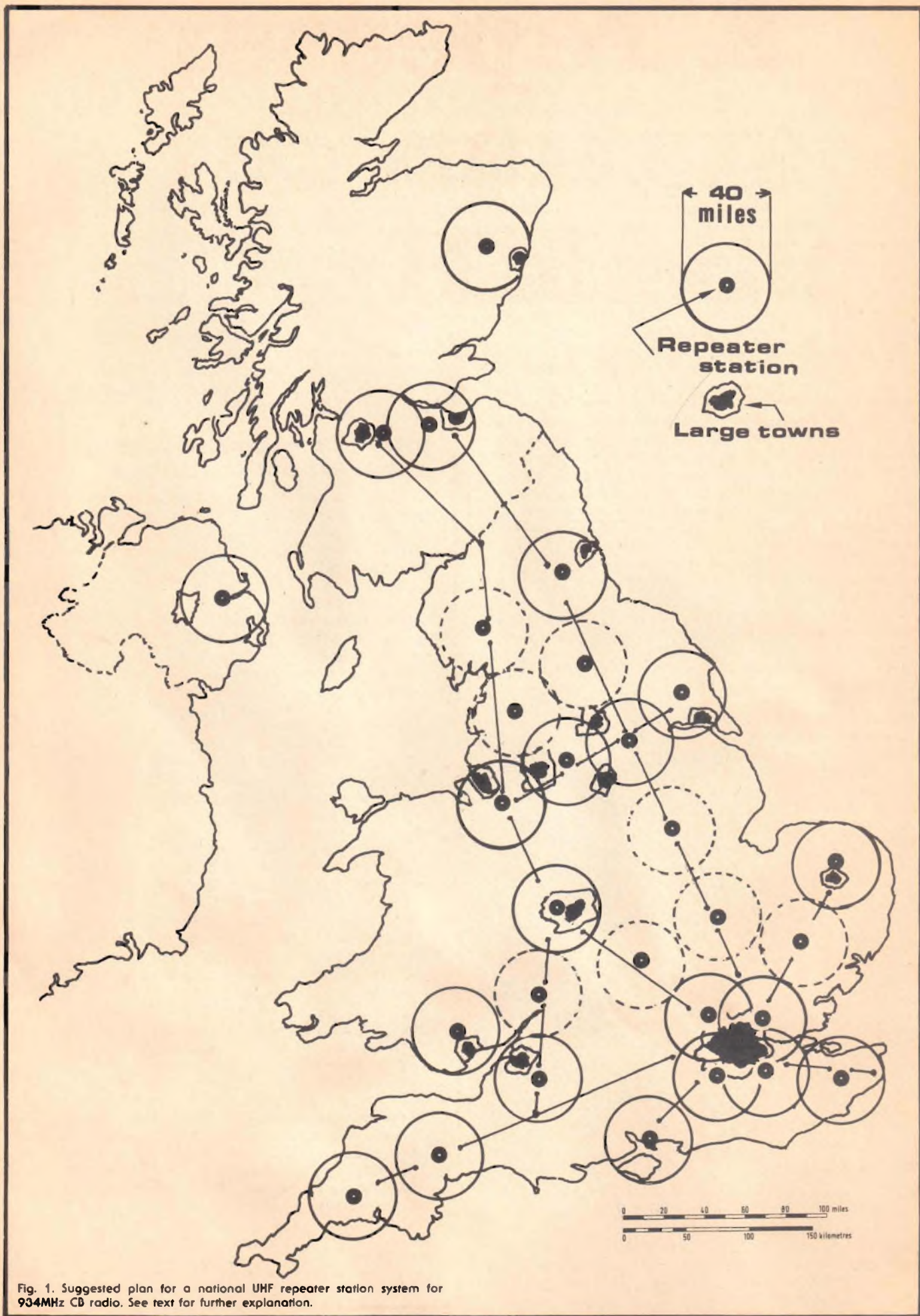


Fig. 1. Suggested plan for a national UHF repeater station system for 934MHz CB radio. See text for further explanation.

A repeater station for 934MHz CB

king ranges of mobile stations who have the disadvantage of an antenna at low height and consequently lower radiation efficiency. They also have the problem of greater attenuation of signals due to variations in surrounding terrain. However, this does not bar the use of repeater stations by home based operators providing they don't hog the repeater channels when mobiles need them.

A suggested frequency allocation to cover the number of repeater and simplex channels already mentioned is shown in Table 1. Although there is a total of 60 separate channels (1 to 60) the repeater INPUT and corresponding OUTPUT channels are designated R1, R2, etc., whilst the simplex channels are denoted by S1, S2, etc., with S9 as an emergency channel and S10 as a general calling channel. As an example, if you were working through a repeater and using the channel number R12, you would be transmitting to it on a frequency of 934.575MHz. When your set is switched to receive, it would be automatically tuned to the repeater output (R12) but to the frequency 936.575MHz. The repeater is therefore occupying two channels, the normal numbers of these in order of frequency being 12 and 52 respectively. When operating simplex on, say, S2, you would be occupying only the one frequency for both transmitting and receiving, in this case channel number 22 or frequency 935.075MHz.

Repeater location

Since repeater stations have the greatest use in highly populated areas, it follows that most of them, as with amateur radio repeaters, would be located close to those areas, as for example large cities like London or Birmingham and other major towns. Many large towns are often fairly central to a county and a single repeater station carefully sited could well cover the town and a substantial portion of the county itself. Since the primary function of a repeater is to cater for mobile transmitters (this was explained in Part 1) some thought should be given as to the coverage by repeaters along main trunk roads. Although a repeater might cover a town and part of a county at one end of a trunk route, say Birmingham and local area, another may be needed to provide continuity along the intermediate portion of the route and at the same time cater for towns along or otherwise situated near the route. A study of the 934MHz repeater location map Fig. 1 will give some idea of the planning needed to accomplish as wide a coverage as possible, not only for individual towns and suburbs but for main trunk roads as well. PLEASE TAKE INTO CONSIDERATION THAT THE DISTRIBUTION OF REPEATERS SHOWN IN FIG. 1 IS ONLY A SUGGESTED PLAN BUT IS BASED ON THE LOCATIONS AND COVERAGE PROVIDED BY THE AMATEUR RADIO REPEATER NETWORK AT PRESENT IN OPERATION. The repeaters ringed by a solid line circle would cover adjacent large towns whilst those ringed by a dotted line circle would cover sections of trunk roads and other towns along them. Mountain areas such as those in Scotland and

Wales could not be covered efficiently by VHF or UHF repeaters although there may be a few instances where a fairly large town and its outskirts might be usefully served if the CB radio population were large enough. Note that a very large and densely-populated area like Greater London would almost certainly need three or four repeaters to cover both the inner city area and outer suburbs, some of which are located in surrounding counties like Essex and Middlesex. A large town like Birmingham and its suburbs might also warrant more than one repeater for the same reason.

934MHz CB transceivers for both simplex and repeater operation

Again like amateur radio, the type of UHF transceivers required to cater for both simplex and repeater operation would be somewhat more expensive than anything at present on the market. Such sets are much more complex to begin with because of the additional facilities required. The most obvious requirement would be the necessary switching and provision for the additional channels needed for both simplex and repeater operation (duplex). Power output now rated at 8 watts would be adequate but antennas for both mobile and home base stations would need to have as much gain as the Home Office specification allows. A four-element vertical colinear should provide a reasonable amount of gain if carefully designed and, therefore, give increased ERP. Being omni-directional, such an antenna would be suitable for mobile, home base and repeater station operation.

The only other requirement in the transceiver is a tone burst generator for activating the repeater through audio system, etc. Naturally, the additional channels, switching and tone burst facility would bring the cost of a set to about that paid for an amateur radio UHF transceiver with similar facilities and which average at around £300 to £400.

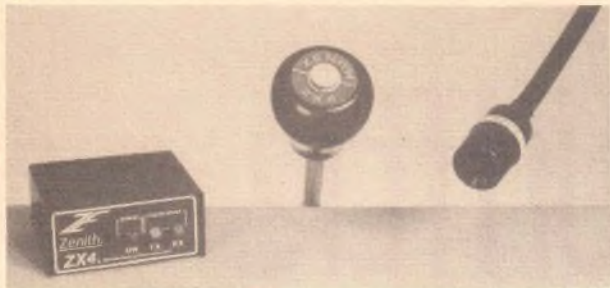
No doubt the question will be asked - why not a repeater system for 27MHz? Technically this would be possible as would dual band repeaters, e.g., 27-934MHz but as far as 27MHz is concerned there would not be sufficient channels available unless the frequency band were extended down to at least 26MHz and with a channel spacing of not more than 25kHz. The frequency bands above and below the present licensed 27MHz band are already occupied by other services. This may well be the case where 934MHz is concerned as allocations for radio telephone systems and other services communications have already been made within the spectrum 900-1000MHz. Nevertheless a repeater system for 934MHz would be well worth pressing for. Nothing ventured, nothing gained.

References

Amateur Radio Operating Manual. R. J. Eckersley. Published by The Radio Society of Great Britain.
Radio Amateurs VHF Manual. Published by The American Radio Relay League.

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 Ponders End, Enfield
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 Tel: 715709

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 Tel: 417120

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BILTONS

In November's edition of CB Radio Magazine, we carried an advertisement from Biltons, of 377 Edgware Road, London, W2. This advertisement featured a range of CB equipment available through mail order.

This advertisement was placed with the advertising department in the usual manner and complied with our acceptance terms. However, it has become evident through readers' enquiries that goods have not been supplied and we have been unable to contact them by letter or telephone.

The matter is now in the hands of Paddington Green Police Station. A police raid has found empty premises and some unopened mail, although some cheques have been cashed at a bank local to the Bilton address.

Readers who have ordered goods and have sent cheques with their order should contact:

Det. Sgt. Hurley
 Paddington Green Police Station
 Edgware Road
 London, W2
 Tel: 01-725 4171

The magazine has forwarded any information we had to Det. Sgt. Hurley to help police investigations.

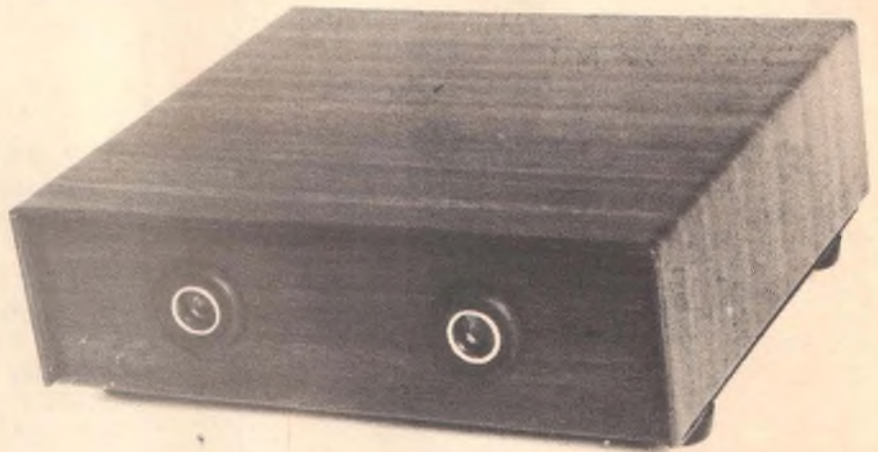
Unfortunately, we can take no responsibility for any debts or fraud on behalf of Biltons or the individuals who placed the advertisement.

OVER THE COUNTER

Ultrasonic burglar alarm

In Britain, over 1,000 burglaries are committed every day, therefore this new product from Heathtex Electronics, of Leeds, may prove to be an invaluable asset.

When the 'Secur-A-Space' is turned towards the area to be protected and armed by turning and withdrawing the key, it will send out a sound envelope. If this envelope is disturbed, i.e., by anyone walking in front of it, it will trigger off an ear-piercing tone. The unit can then only be turned off by using the key. The 'Secur-A-Space' is mains operated and backed up by its own interior battery pack in case the plug is accidentally removed or mains failure should occur.



Audioline 324

Harry Moss International Ltd. have sent us details of a new item that has recently been introduced to their range of CB products. Entitled the 324 Harry Moss 40-Channel CB Transceiver, their new addition does a remarkable impression of the Interceptor TC 300. Features are as follows:

- Multiple LED signal strength indicators and RF output power indicators which also serve as an incorrect SWR warning device.

- LED digital channel indicator (red).

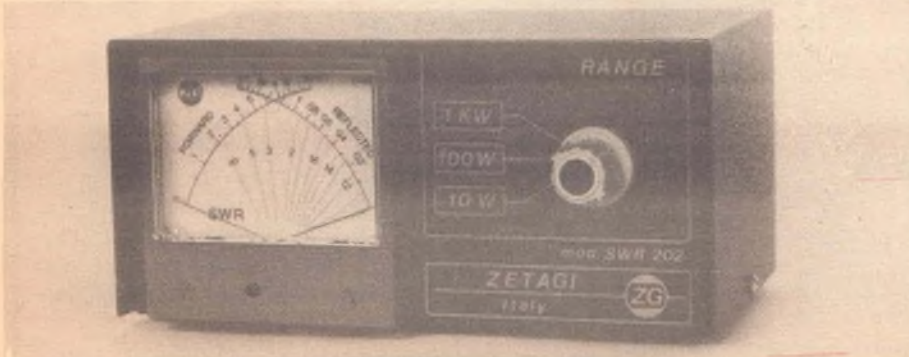
- Rotary controls for volume, squelch, RF gain and channel select.

The 324 fully complies with the British specification MPT 1320 and bears the CB 27/81 logo. The Harry Moss CB range includes five other transceivers, two SWR meters and various antennas and accessories. Harry Moss products are available at most CB and car accessory shops.

Zetagi SWR 202

Telecoms Ltd., of Portsmouth, are

currently marketing the Zetagi range of Italian CB accessories. One out-



standing product from this fairly extensive range is the SWR 202, which can give accurate reading of forward and retracted power levels of up to 1kW. The unusual design incorporates a unique triple-purpose meter. Separate needles measure forward and reflected power levels, the SWR reading being given at the point where the two needles intercept.

The SWR 202 is already available at most CB shops.



Super Speak Easy

The Maxcom MX-49SSE Super Speak Easy has been released to complement the already-popular MX-27SE Speak Easy personal communications unit. The Super Speak Easy is a heavy-duty version of its predecessor with several significant modifications. Firstly, the frequency band has been changed from the congested 27MHz CB band to the less busy 49MHz (FM) band in order to give the system a better range. The unit's power supply has been changed from

a single PP3 transistor radio battery to a set of four penlight (HP7) batteries to allow the use of rechargeable Nicad batteries. A charger is supplied for this purpose. A vinyl cover is also provided to protect the transceiver unit from damage.

These modifications allow the Super Speak Easy to be used for commercial applications, such as on building sites, in warehouses and factories, as well as giving the unit the greater durability necessary for use in outdoor activities such as climbing. The R.R.P. is £39.95.

Skybreaker

Gamma Aerial Products, from Lye, West Midlands, are now producing a legal home base antenna entitled the Skybreaker. The antenna is constructed throughout from high-grade aluminium seam welded tubing. The plastic moulded components are made in Gamma's own moulding department. In compliance with MPT 1320, the Skybreaker's main radiating element is 1.5 metres in length and is pre-tuned to the U.K. FM band. The integral power saver coil has been designed by computer to overcome the losses incurred by other coils in similar antennas. The G.A.P. Skybreaker retails at £23.99 inc. V.A.T.

Other products manufactured by Gamma are: the G.A.P. 27MHz $\frac{1}{2}$ -wave antenna, the G.A.P. 27MHz $\frac{5}{8}$ -wave antenna, the G.A.P. Skyleader $\frac{5}{8}$ -wave antenna and the Gamma Supa Mag magnetic base for $\frac{3}{8}$ stud mobile antennas.

This range will shortly be increased to include two further legal loft antennas and a revolutionary-type ground plane kit.



ProTel microphones

Three attractively-designed base station microphones are currently being marketed under the ProTel® trade mark.

The **AM601** is a uni-directional condenser microphone with a built-in high performance compressor amplifier, allowing manual level control and tone quality control for use with AM/FM and SSB equipment. A lockable PTT switch is provided for ease of operation and the microphone lead is mounted on a flexible 'goose-neck' to allow precise positioning for optimum voice level.

The **AM103** is a smaller version of the AM601 without the compressor amplifier. It does, however, have a high-quality low-noise amplifier with manual level control and an FM/SSB tone switch.

The top-of-the-range **AM6000** is similar in design to the AM601 but with a built-in four-band graphic equalizer allowing specific control of frequencies at 250Hz, 600Hz, 1200Hz and 2400Hz by ± 12 dB. This allows more accurate control of tone according to the operator's voice pattern.

All three microphones are made in Japan to their usual high standards and are available at most CB shops.



Hot Wire

Due to the number of enquiries received about an item publicized in the January issue of CB Radio Magazine, we thought it would be a good idea to let you know where to get hold of it! Just to recap, the Hot Wire is a fully-weatherproofed disguise antenna consisting of a loading coil and two lengths of wire, attached to each end of the coil. The result is a 65%-effi-

cient assymmetric dipole giving a high level of ERP. The retail price for the Hot Wire is £9.85 and it is available from Mobile Sound Centre, 248 Torquay Road, Paignton, Devon. Tel: Paignton 521532.

Astrali console

More famous for their range of steering wheels and automotive accessories, Astrali Accessories Ltd., a Midlands-based company, have introduced two overhead consoles designed to house most radio/cassette players. The unit, which is constructed from vacuum-formed ABS, is designed to fit, by means of brackets provided, into the roof between driver and passenger and with a little persuasion and ingenuity could be used to house most CB units.

The ribbed design of the console incorporates a switched courtesy light and will house equipment up to the following maximum dimensions: 185mm. W x 60mm. H x 180mm. D. The fascia panel is left blank with the most common standard and DIN sizes scored into the face allowing the user to cut out the aperture to suit his equipment.

The De Luxe version of the two consoles offers the same facilities as the Standard model but incorporates provision for an auxiliary speaker up to 6in. in diameter and further switches should they be required. Retail prices are £15.00 (Standard) and £20.00 (De Luxe) approximately. Enquiries as to where they will be available should be directed to:

Astrali Accessories (Midlands) Ltd.
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Redhouse Industrial Estate
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Tel. 76748

Tridentstar Ltd.

Unit 30, Century Street
Sheffield
(0742) 442486

GLOBE CB

110 Hoe Street
London, E17
01-520 5831

Rusty CB Centre

Davidson Road
Lichfield
Lichfield 57411

Shadow Communications

259 High Street
Waltham Cross, Herts
Tel. 26896

ACORN

Unit 43, Station Road
Coleshill, Birmingham

Catswhisker's
CB Stores


25 Chatham Street
Reading
(0734) 589193

CTVR

35 Oxford Street
Grantham, Lincs.

Ratchet Shack

Unit 6, 8 Bells Arcade
Newbury, Berks
(0635) 31451

CB TRADER

243 Caledonian Road
N1

Northampton Elec

47 Queen Eleanor Road
Northampton
Northampton 67666

Globe Wholesale

168 Brooker Road
Waltham Abbey

Hobby Communications

Hobby House, 54 London Road
Milton Common, Oxon

Skyriders

557 Hertford Road
Enfield, Middx
01-805 6400

AM & T

AM House, 9a Olds Approach
Tolpits Lane, Watford, Herts

Black Knights Grotto

Lewfield Gardens
Hoddesdon
Hoddesdon 45161

OCT

407 Lordship Lane
N17

James Group Ltd.

Tudor Works
Hayes, Middx
01-561 5778

Gamma Aerial Products

Crabbe Street
Lye
Lye 891132

Radio Telephone Centre

148/149 Manchester Road
Swindon, Wilts
(0793) 34136

CAPITAL CITY CB

34 Buckstone Terrace
Edinburgh, Scotland
(031 445) 4711

Scunthorpe CB Centre

4 Ferry Road
Scunthorpe
Scunthorpe 842744

Pama and Co.

Pama House
433 Wilmslow Road, Withington
Manchester M20 9AF
(061 445) 8918

North Herts Wholesale

8 Melbourn Street, Royston
Herts SG8 7DZ
(0763) 42295

MicroComms

372/374 George Street
Aberdeen AB1 1EQ

RADIOMOBILE

Goodwood Works
North Circular Road
London, NW2
01-452 3333

Wallace Telecommunications

Greencoat House
Francis Street, London, SW1
01-828 2673

Llanelli CB Centre

21 Station Road, Llanelli
Dyfed, Wales

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19 Bridge Street
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CB Radio Distributors Ltd.

Unit 2
Government Industrial Estate
Union Mills, Isle of Man
851140

QFS and CB Centre

92d High Street
Billericay, Essex
22200

Auto Save Car Radio

11 Windsor Terrace
Grangetown, Sunderland
Tyne & Wear
(0783) 58392

Electromec Engineering Co. Ltd.

Claremont House
Northampton
(0604) 810000

Johnston Communications

63 Barclay Street
Stonehaven, Scotland
(0569) 64618

Silver Streak CB Sales

83a Roman Bank
Skegness, Lincs.
(0754) 810914

Elektronika Ltd.

239a Wellingborough Road
Northampton
(0604) 31785

The Motorists Shop

207 Lenthall Avenue
Grays, Essex
33428

CB Corner

19 Trinity Street, Gainsborough
Lincs. DN21 1HS
Gainsborough 611199

Autosound Services

1 Portland Place
Doncaster DN1 3DW

Billericay CB

92d High Street
Billericay, Essex
Billericay 22200

N & K Blake

17 Wood Market
Kelso, Borders
(0573) 24217



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LONDON N12 8NP.
Tel: 01 - 445 4441



DX QSL

INTERNATIONAL

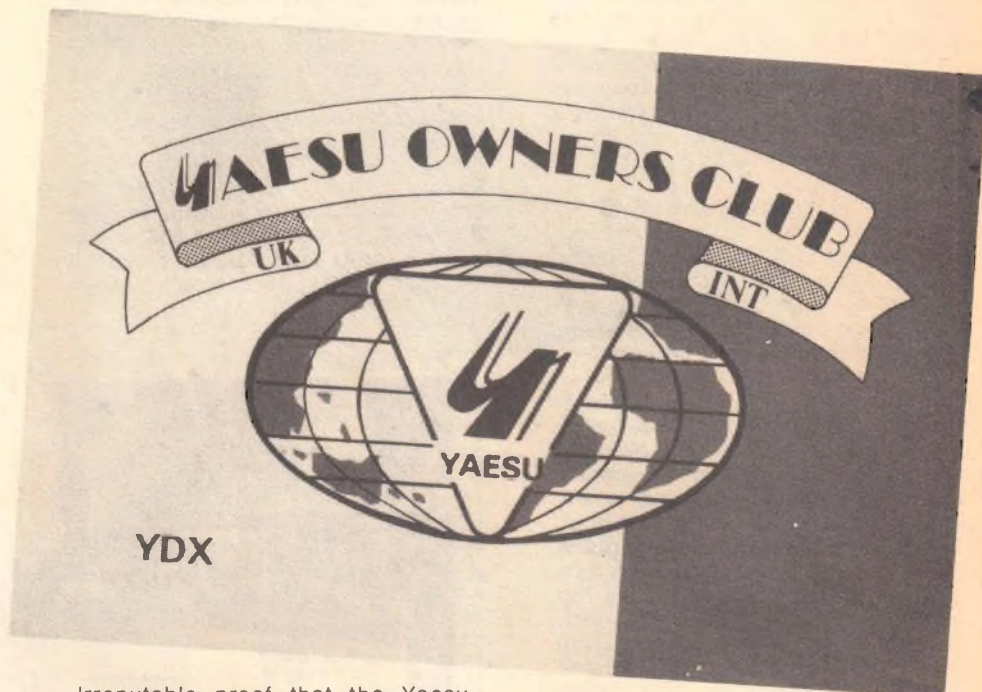
CLUB SPOT

You whimpered a bit at 'Old Yellow', shed a tear or two at 'Love Story', broke your heart over 'ET'. Now be prepared for some real 'sob stories'! This month's bunch of melodrama is brought to you courtesy of Charlie 'Heartbreak' Hotel.

First Kleenex tissue special concerns the Yaesu Owners Clubs, both the U.K. and Stateside versions. I pride myself in thinking that the info. bits and pieces and general news I set out each month are accurate and true. Regrettably, however, this wasn't so in the Christmas '82 issue. In this issue, I told you about the Stateside version of the Yaesu Owners Club and stated in no uncertain terms that this was the original and authoritative Yaesu Owners Club. Well, folks, I must now ask you to wipe that piece of information from your memory banks and prepare for reprogramming. Since the publication of that particular article, I have unwittingly brought down a tremendous amount of bother and trouble upon the heads of two very hardworking and conscientious people. My sincere apologies to Tony and Pamela, the YDX01 and YDX02, of Dewsbury, Yorks. and also to all the members of Yaesu Owners Club U.K. International. As you can gather by now, I had got things totally the wrong way around. How this came about is no longer relevant but suffice to say I do feel a PROPER CHARLIE now! It gives me genuine pleasure, therefore, to set the record straight and also at the same time to let you know about a superfine group.

With an outfit like Y.O.C.-U.K., it's difficult to set down all that's going on without taking up all the space available to me, so I must, of necessity, attempt to condense all available info. into a few paragraphs.

Initially formed in August 1981, the basis of the club was to act as a Register of Yaesu Equipment Owners. A letter outlining the club's ideas and intentions was posted off to Yaesu in Japan who, in turn, replied giving Tony and Pam not only encouragement for their venture but, most importantly, official permission to use both their name and emblem as part of the club's set-up. Perhaps the most exciting part of Yaesu's letter was the following statement: "Yours will be the first such club recognized by Yaesu Musen Co. Ltd."



Irreputable proof that the Yaesu Owners Club U.K. is, indeed, the ORIGINAL outfit. This gesture, not unnaturally, is subject to certain conditions including the submission of a once-yearly report, including a full list of members and an undertaking to safeguard both the proper use of the

Yaesu emblem and the good name of the company.

As a true owners' club, the status of members and the usage of their equipment is unimportant excepting, of course, to insist on correct, considerate and courteous use at all times.

QSO of the Month

Sorry, no photo this month but Station HC 710 Jason is also a legal FM operator (sometimes) and reckons that if his mug shot is printed up, he'll suffer at the hands of his local FM'ers, there being a bit of an FM'er versus SSB'er battle going on down in his part of Wiltshire. Jason, by the way, is a Happy Cobbler DX/QSL Group member and thoroughly recommends the group. Jason gave me quite a long list of some very tasty QSO's, though perhaps the best one is his hook up with Station Riverside 949 - Gene, in Ohio, this QSO being notable in that it was straight out of the box - 12 watts PEP.

Station Hotel Charlie 710 - Jason working condition
Radio: Cobra 148 GTL DX
Mic: Lejon TW 232
Linear: Zetagi BV 131 (200 watts)
Antenna: Sigma 1V

Station: MI 217 - Personal Bod
QTH: Darwen, Australia
29 OCT 82: 1045 GMT 27.440 LSB S4 - R5

Station: FTN 98 - Personal Esa
QTH: Ulvila, Finland
30 OCT 82: 0911 GMT 27.345 LSB S3 - R4

Station Radar - Personal Luis
QTH: Uruguaiana, Brazil
30 OCT 82: 1125 GMT 26.805 LSB SO - R4

Station Riverside 949 - Personal Gene
QTH: Ohio, U.S.A.
30 OCT 82: 1535 GMT 27.445 LSB S9 - R5+

some nice hooks up there, Jason. Particularly of interest are the contacts on 30 October. It's amazing how much the skip can roll about. Within the space of a few hours, Finland, Brazil and then Stateside into Ohio. Nice work.



All that is meant by that tongue twister is simply that membership is open to anyone who operates Yaesu equipment, be it for 11-metre operations, all-band coverage or short wave listeners; in other words, CB'ers, licensed amateurs or super-doooper ear-wiggers! Such has been the response to the Yaesu Owners Club U.K. that, in little more than a year and a half, membership is now knocking on the door of that magical 1,000.

To complete the 11-metre picture, several members requested Tony and Pamela to make available standard DX club items: QSL cards, etc. These items are now readily available, I'll draw up a full list further on.

One of the nice things about Y.O.C.-U.K. is that Tony and Pamela recognize the fact that it is not enough to just call yourself an 'Owners Club' and sit back on your laurels. To be successful, you must offer a full owners' club organization. In this respect, Y.O.C.-U.K. are very successful. As an example, take the Christmas Newsletter 1982 (Newsletter No. 4). Not only is it very interesting and well presented but presents bang-up-to-date info on Yaesu prices and contains several technical pages on Yaesu modifications. In order to keep things going smoothly and the club operating as a true club, it was decided to split the U.K. into 21 geographical areas, each one to have its own Regional Co-Ordinator. Volunteers and nominations have been forwarded and some appointments have been made but all the positions are far from being filled. It is to be hoped that suitable members will come forward in the near future and fill these very important roles. A natural progression to this 'regionalisation' is that members in certain regions are getting together on a social basis and are certainly making the club work as a club.

Time and space have now forced me to close down on Y.O.C.-U.K. As mentioned earlier, I can only scratch the surface with these random jottings but it must be obvious to all except 100% Muppets that the Y.O.C.-U.K. is something special. I can honestly say that in all my experience of U.K. 11-metre organizations on a national basis, Y.O.C.-U.K., in my opinion, is the most efficient one I have ever come across. Perhaps the best way I can illustrate this is to state that the only way that an organization can hope to grow and succeed is via strong and determined leadership. So strong is the leadership of Pamela, the YDX02, that I was lucky to escape with my life when the Christmas issue came out. As it happens, when she eventually caught up with me over the phone, my hair began to turn white and drop out! (Only joking, Pam).

O.K., all you lost Yaesu operators, that's about all I can do for you. The rest is up to yourselves. Listen in for those YDX numbers on 26.645 LSB and have a chat. I'm sure you'll be warmly welcome into the fold. If you want to take things a step further, just drop a line (s.a.e. please) to Yaesu Owners Club, P.O. Box 9, Dewsbury, West Yorks. WF12 8TB and request full details from Pam. You won't regret doing so.

From a mild tear jerker to a full-bodied tragedy!

Remember QSL Club Tucan of Caracas, Venezuela from March last year? This club is run by Jorgen Hansen, who over the years has built up Club Tucan to quite a good standard. Unfortunately, it appears to be in big trouble at the moment and there's not a damn thing he can do about it. I'll explain.

As we all know, South America is a strange place, the whole of the continent appears to be one heaving mass of dictatorship, revolution, pollution, exploitation and corruption. Venezuela is no exception. How this affects Jorgen is through the mailing system. On 18 January, 1983, I received a letter from Jorgen, dated 13 October, 1982 at his end. In it, Jorgen

tells me that the mail service is now so bad (I believe it, I believe it) and expensive that it is becoming almost impossible to use. A lot of letters, both standard and registered, just simply disappear or are blatantly opened and anything of value extracted. Up to the time of him writing to me, Jorgen was missing out on approximately \$200.00. This is from letters arriving last year with new member applications and containing the corresponding \$15.00. It is a bit of a disaster for Jorgen but he is still carrying on (as long as he financially can). Despite his mail being violated and the money stolen, Jorgen has sent out full club packages to everybody whose applications have reached him. He has filed several complaints with the necessary authorities and also the police but nothing seems to help and it goes without saying, of course, no sign of the missing dollars. No one appears to want to accept the responsibility, so the complaints just go on circulating round and round until they, too, disappear. The real problem with the applications, though, is not just the missing dollars. As I've mentioned, Jorgen has honoured all applications that he has received but there is no way to check up on letters which may have simply



Seeing as this could be the last one for a while, I thought I'd go for one of the biggest of all - Ian Shrader, Sandcastle 01 of the famous Sandcastle QSL Club of Pacific Beach, Washington State, U.S.A.!

Ian, who is 30 years old and happily married (to Laura) has been into CB radio since 1976. He started off the Sandcastle Club back in November 1977, mainly because the QSL clubs he had joined were putting out lousy packages. Ian figured that he could put out a far superior package and proceeded to do so. Indicative of this is the fact that nearly all of the club artwork is designed by the maestro himself - Dirty Doodler.

Besides DX'ing and QSL'ing, Ian's main interests in life are short wave radio and beachcombing. He also plays around quite a lot with video games.

On sideband, Ian uses the call sign of Sierra Charlie 1, usually monitoring

27.605 upper side.

Ian's work is not something which you would associate with the Pacific Beach AD. He works for a lumber company. With an AD like that, I would have thought a fishing company more appropriate.

Ian's radio set-up is pretty interesting. Radio is a Navaho 457 Base (very popular Stateside) manufactured by Radio Shack (Tandy). His mike is a D104 Astatic, complemented by a 100-watt amplifier. For local work, Ian uses a 3/8-wave ground plane antenna. When he's out skip shooting, Ian switches into his three-element beam. Both antennas are mounted, rather handily, 50ft. up, in trees. Sounds really grand, don't it?

So, folks, if ever you hear Stateside come rolling in and the Sierra Charlie One booming through, you'll know what's going on. Give him a shout and try for the contact. Ian's a great bloke and loves to talk skip with us Limeys.

Worldwide DX'ers

Well, I bet you were all wondering what has happened to this column. I sent in three columns but they didn't make it to print, so we'll try it again and keep our fingers crossed. Scanning the frequencies in the evening over here is very interesting, you never know what you're going to hear. Most of the time we hear Australia or New Zealand then during the winter we also get Japan and the Philippines but there are so many South Pacific islands you can hear any number of places. I've had a few contacts into New Caledonia and I'm still waiting for a QSL from there but I understand most of the stations there are very good at QSL'ing. One of the most interesting stations I heard was in Borneo and he said he would QSL. I tried to make contact and he did hear me but there was a lot of Stateside station trying for him. I sent him my QSL and he responded with a QSL, photo, coin and letter. Many of you may know him, since he is from England and is working in Borneo. His name is John, the NDX 01 and he is a member of the Northumbria DX Group of England. John gave me a lot of information on Borneo and he is going to be a member of the Sandcastle Club soon. He says Borneo is populated around the edges but the rest is mostly unexplored jungles and mountains, so John doesn't wander too far. John's address is listed so drop him a line. He gets back to England a few times a year, so he may reply to you when he gets back to England and can save a bit on his postage costs. You can also reply to him through the club address and save yourself a bit on postage. Take care and hope to hear from you soon. Please enclose an International Reply Coupon when writing. Ian Shrader, P.O. Box 167, Pacific Beach, Wash 98571, U.S.A.

John (NDX 01)
P.O. Box 347
Labuan, Sabah
East Malaysia
Borneo

Greg Veith (SC 815)
P.O. Box 50
Golden Square
Victoria 3555
Australia

Ian MacDonald
(S.C. 810)
P.O. Box 7
Falmouth, Cornwall
England
TR11 3SN

Bill Penhall (S.C. 596)
P.O. Box 1
Snug
Tasmania 7154
Australia

Paul Speairs
(S.C. 806)
10 Seidel Ave.
Picnic Front
N.S.W. 2213
Australia

Charley (S.C. 545)
P.O. Box 1174
Athens, Greece

Charlie Jones
(S.C. 593)
Box 253 - RT 20
Bridgewater
N.Y. 13313
U.S.A.

Gene Chellberg
(R.C. 1)
31900 Pudding
Creek Rd.
Fort Bragg
Calif. 95437
U.S.A.

more than 700 clubs and prints of more than 700 club stamps. A rather unique and, I would have thought, highly-desirable book.

Unfortunately, this is not the general opinion, as orders for only 26 books have been received, out of which seven were offered as roster swaps from other clubs. As Jorgen needed (and counted on) a minimum of 75 copies sold just to have the printing expenses covered, he'd now got his Caracas in a bit of a twist over the whole business. It seems obvious by now that no more orders are forthcoming, so Jorgen is left to ponder on the alternatives - go ahead and still have the books printed or risk sending the money back. Either way is financially crippling, bearing in mind the amount he has already had stolen in the mail. Even to send the money back to members is going to cost him \$70. Jorgen naturally does not want to let any members down, so he is desperately looking for a way out of his predicament. The only solution I can think of is for more rosters to be ordered; so if you fancy one or can think up some way to get Jorgen out of his plight, drop him a line at QSL Club Tucan, P.O. Box 250, Caracas 1010 A, Venezuela, S. America. If a solution is forthcoming, I know Jorgen will be eternally grateful. Incidentally, if any of you are kind enough to write to Jorgen, can I prevail upon you to extend your kindness a wee bit more and enclose a couple of International Reply Coupons (IRC's)? Thanks.

I received a card the other week from Garvin Leitch, 'Captain Cobweb,' of Renfrew, Scotland. The special significance of this being that it is card number 120 in the magnificent 'Eart Attack series. For sheer art work and ideas, the 'Eart Attack series just has to be one of the best in the U.K. You may wonder, therefore, why I have not mentioned this series previously. The answer being that 'Eart Attack is, in fact, the QSL card series which is designed and printed by Laser Litho Ltd. and is advertised each month in CB

Radio Magazine. Laser Litho Ltd. and CB Radio Magazine are, in fact, part of the same organization, even to the extent of being the same AD for both organizations. You can see my predicament now. Much as I wanted to mention Eart Attack cards, there is no way that I could unless I wished to be accused of 'favouritism', 'crawling' and so on. I've had to patiently wait until one turned up on my QSL list and then quite genuinely extol the virtues of 'Eart Attack QSL card series. They're good, very good in fact and well worth a thought when considering how and where to have a card printed up.

OK, as promised, a big finale. This is the sob story to end them all (as far as I'm concerned, anyway).

I've more or less decided that this will be the last Charlie Hotel article. Now before you all shout "Hurray", let me give you my reasons. I have written this article for two years non stop, this being my 24th. (No cards, please, just send money). It is my opinion that I've got to stop some time and now's a good a time as any. Although I'm never short of news, ideas and general rubbish to waffle about, just how far can you go on the one specialized subject? I believe I've said all that there is to say about QSL'ing, DX'ing and SSB operating. In other words, the full 11-metre pirate thing. So, rather than go on churning out the same sort of thing month in, month out and boring you all silly, I'm packing it in while the going's still good, so as to speak and that's it, folks. A simple reason and laid on the line for you. However, if enough of you are still interested and if the recent CB Radio Magazine survey proves me wrong, I may still be here next month. Who knows? In the meantime, my sincere apologies to all clubs, QSL'ers and DX'ers who have written to me but look like not making the article. I will be writing to you all and tying up all the loose ends.

Till next I surface (in some other guise, perhaps), take care, look after yourselves and good DX'ing.

Station Charlie Hotel Unit 25-QRT.



vanished. So, if you have written to Club Tucan in the past or know of anyone who has and a reply was never received, now you know why. The answer to this problem is relatively simple - if you're still awaiting a reply from Jorgen and you consider it long overdue, just drop him a card giving dates and all relevant info. and politely enquire as to whether your original letter was ever received. Now for Jorgen's real headache and, boy, does he have my sympathy. A while back, a letter was sent to all 675 Club Tucan members giving details of the Tucan Roster. This Roster is a splendid affair, 80 pages in all, containing all members' names and addresses, AD's of

1-4-1 QSL Swappers

Ian Howell
(Moondog)
13 Ceri Ave.
Rhoose, Barry
S. Glamorgan
CF6 9HG
(Ian is trying to check up on lost mail)

Ken Thompson
Radio Liverpool 11
(Nuts and Bolts)
91 Peckmill Green
Netherley, Liverpool
L27 6PG

Gary Hughes
(White Knight)
482 Cowbridge Rd.
West Ely, Cardiff
S. Wales
CF5 5BZ

Tony Hailstone
(Medicine Man 27)
428 Cowbridge Rd.
West Ely, Cardiff
S. Wales
CF5 5BZ

Garvin Leitch
(Captain Cobweb)
3 McClue Rd.
Renfrew, Scotland
PA4 9BL

Leon Pyke (T.A.Q 95)
R.S.D. Hillwood
Tasmania 7252

Garry Paul (BH 406)
19 Horbling Lane
Stickney, Lincs.
PE22 8DG

Malcolm Fisher
(K.I.T. 636)
Aughnish
Ramelton,
Co. Donegal,
Ireland
(Malcolm likes to swap photos with fellow QSL'ers)

Bill Coopland
(CC Rider)
226 Rock Street
Pitsmoor, Sheffield
S. Yorks.

S3 9JF
(Bill is getting back into the QSL swing, so give him a wee bit of time)

Thomas Pobee
P.O. Box 562
Agoua Swedni
Ghana, West Africa
(Recommended via Bill Coopland)



Parliamentary Review

Due to Parliament's winter recess, the last time we published a Parliamentary Review was in December last year. Since then responsibility for political matters concerning broadcasting has been taken away from Mr. Timothy Raison and given to Mr. David Mellor, M.P.

Several MPs have already taken the opportunity to bombard the new Minister with CB questions, which seem to centre around the subject of illegal transmissions rather than improvement to the legal system and control of its use.

Illegal AM transmissions

Mr. Austin Mitchell asked the Secretary of State for the Home Department how many prosecutions there were in 1982 for (a) illegal AM citizen's band transmissions and (b) FM citizen's band transmissions without licence.

Mr. Mellor: (a) Approximately 2,350; (b) 24 including 13 cases where a licence was held but its terms were not complied with.

Mr. Austin Mitchell asked the Secretary of State for the Home Department how many licences were issued for citizen's band sets in the first full year of issue and what is the rate of renewal for those issued in the first month.

Mr. Mellor: About 350,000 licences were issued in the first year of the CB service and 36% of those issued in the first month have been renewed.

Monitoring?

Mr. Austin Mitchell asked the Secretary of State for the Home Department what arrangements he proposes for monitoring citizen's band transmissions for (a) stopping the use of bad language, (b) the playing of records and tapes and (c) the rebroadcasting of radio and television programmes.

Mr. Mellor: The radio interference service of British Telecom is at present heavily committed to dealing with the many complaints of interference to broadcast reception and the emergency services which arise from the illicit use of non-approved citizen's band radio apparatus. B.T. has, however, been asked to investigate breaches of licensing conditions of the authorized CB service when it can do so without detriment to the work of dealing with interference, which must remain its priority.

Investigation delays

Mr. McNamara asked the Secretary of State for the Home Department how many people are employed by British Telecom, York, investigating complaints of television and radio interference by citizen's band radio.

Mr. Mellor: Four.

Mr. McNamara asked the Secretary of State for the Home Department what is the length of time taken to investigate complaints by members of the public of interference on television and radio caused by citizen's band radio in the York office of British Telecom.

Mr. Mellor: It varies with the complexity of the case. In most of the area covered by the York office complainants are visited normally within two weeks of lodging a complaint, although in Hull, because of the large number of cases arising there, it may be up to five months before a visit can be made.

Mr. McNamara asked the Secretary of State for the Home Department how many complaints have been received of citizen's band radio interference by British Telecom, York, how many have been investigated and with what results.

Mr. Mellor: Since April 1981, over 2,340 complaints of interference to broadcast reception from all sources have been lodged with the York office. Of these, 90% are estimated to be due to CB radio. All complaints are investigated and 2,260 cases of interference have been cleared in the same period.

Mr. McNamara asked the Secretary of State for the Home Department how many complaints have been made to the York office of British Telecom for the city of Hull concerning citizen's band radio interference with television and radio reception, how many have been investigated, how long the investigations took and with what results.

Mr. Mellor: Since April 1981, some 1,230 complaints of interference to broadcast reception in the Hull area have been lodged with British Telecom, York. All complaints are investigated and some 1,070 cases have been cleared in that period. The time taken to complete an investigation varies with the complexity of the case.

Continued service

Mr. Teddy Taylor asked the Secretary of State for the Home Department whether British Telecom has indicated whether it will continue to provide a service to the Home Department for seeking out illegal operators of citizen's band radio and if he will make a statement.

Mr. Mellor: British Telecom has raised with my right hon. Friend the question of the future of the radio interference service in the light of the changes in B.T. proposed in the Telecommunications Bill now before the House. We are not at present in a position to make a statement.

How many prosecutions?

Mr. Teddy Taylor asked the Secretary of State for the Home Department how many persons have been charged with the offence of operating illegal

citizen's band radio over the most recent 12-month period for which figures are available and if he is satisfied with the progress made in detecting such breaches of the law.

Mr. Mellor: Some 2,300 prosecutions were undertaken during the 12 months up to 30 September, 1982. Powers to help officers investigating the illicit use of radio to carry out their duties more effectively are being sought in part V of the Telecommunications Bill now before the House.

Foul language

Mr. Waller asked the Secretary of State for the Home Department how many complaints of interference attributable to the illegal use of citizen's band radio transmitter were received in West Yorkshire for the most recent convenient period available and for a comparable period prior to November 1981.

Mr. Mellor: One thousand, four hundred and thirteen for the period 1 January to 31 October, 1982 and 1,064 for the comparable period of 1981.

Mr. Greville Janner asked the Secretary of State for the Home Department if he will introduce legislation to make the use of foul language by citizen's band radio users a criminal offence.

Mr. Mellor: The citizen's band radio licence, condition 8, already prohibits transmissions which are grossly offensive or of an indecent or obscene character. It is an offence under section 1(1) of the Wireless Telegraphy Act 1949 to use a radio transmitter in contravention of licence conditions.

Licence fees

Mr. Freud asked the Secretary of State for the Home Department what has been the revenue, to date, from citizen's band licence fees.

Mr. Mellor: Revenue from the sale of citizen's band radio licences in the period 2 November, 1981 to 31 December, 1982 was £4,141,440.

CEPT

Sir Patrick Wall asked the Secretary of State for the Home Department what decisions about a common European citizen's band frequency were reached at the European conference of posts and telecommunications administration meeting in Stockholm and when it will be ratified and implemented.

Mr. Mellor: At the recent meeting of the radio working group of the European conference of posts and telecommunications administration - CEPT - in Stockholm, it was agreed that the draft recommendation on citizen's band radio equipment operating at 27MHz should be presented to the Telecommunications Commission of CEPT for consideration at its meeting in September. If it is formally adopted as a recommendation by CEPT at that meeting, it will be for individual members to consider whether and, if so, how to implement it. It is our objective to adopt the CEPT recommendation in the United Kingdom in due course.

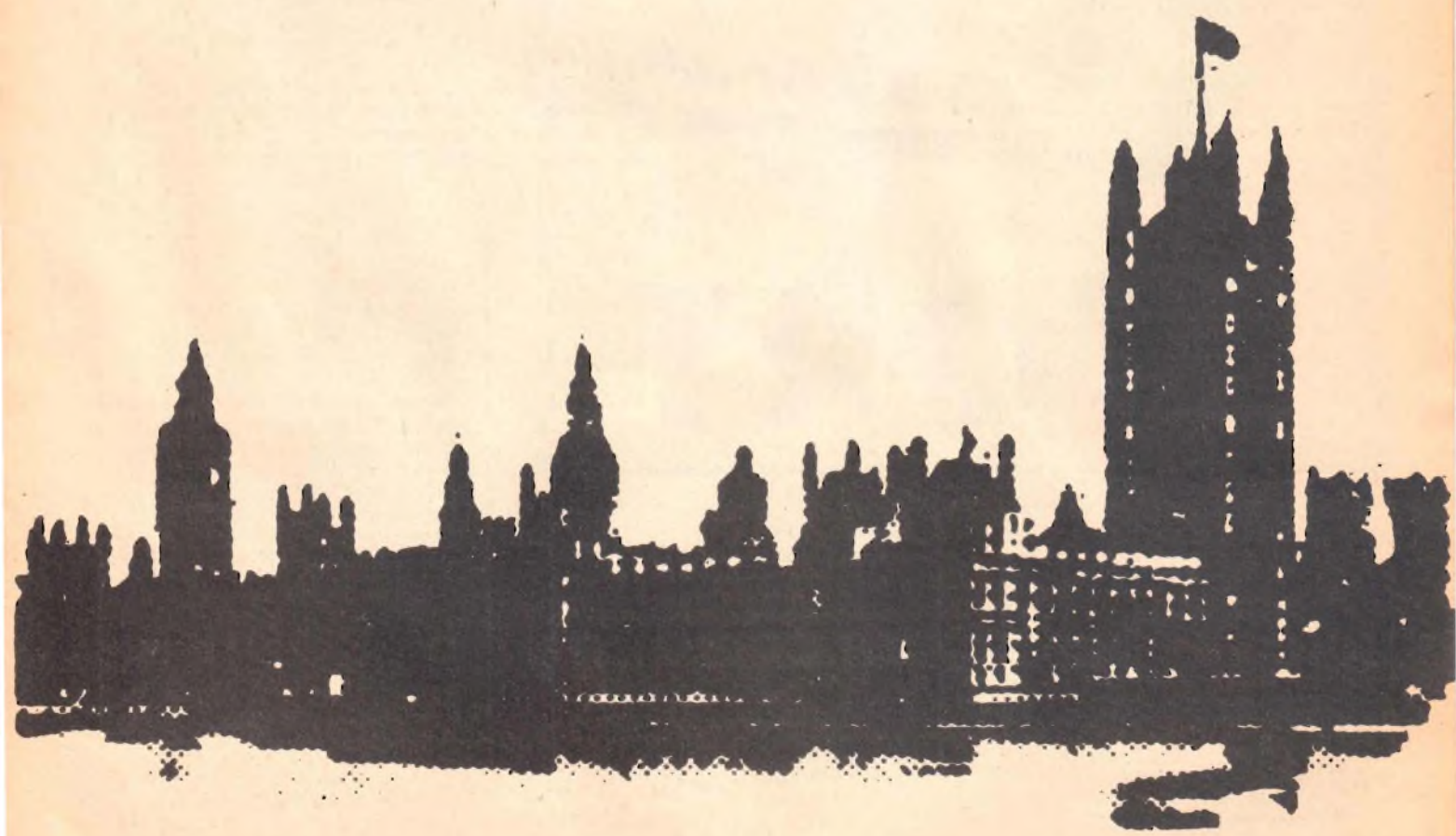
Channel 9

Sir Patrick Wall asked the Secretary of State for the Home Department what proposals he has for safeguarding citizen's band channel 9.

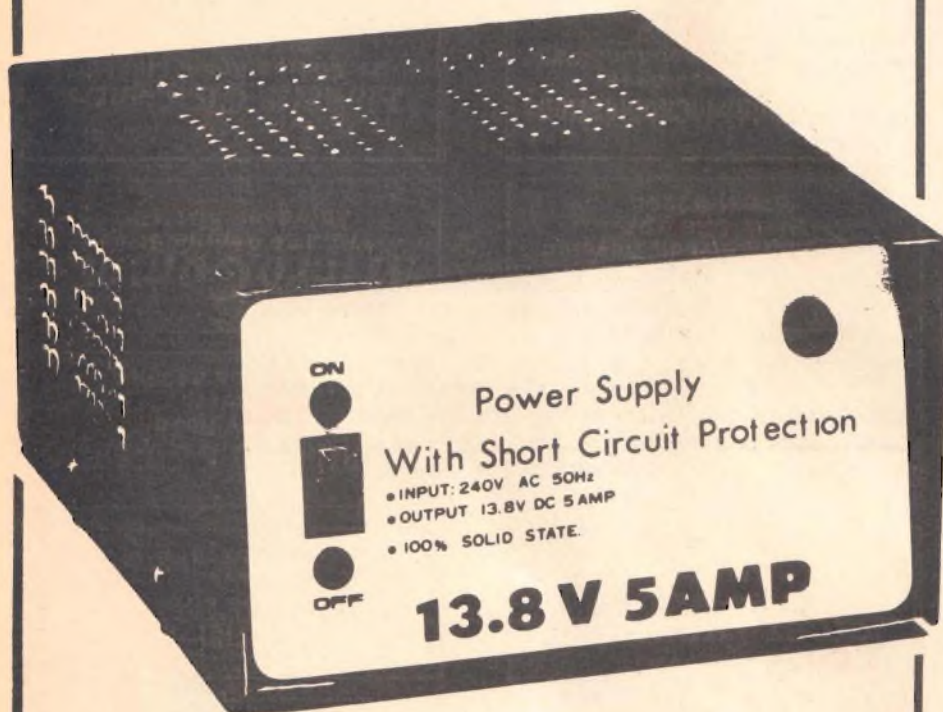
Mr. Mellor: None. The CB code of practice already recommends that channel 9 should be used only for emergencies and assistance.

Sir Patrick Wall asked the Secretary of State for the Home Department if he will consider changing the present restrictive regulations regarding citizen's band aerials so as to come into line with European practice.

Mr. Mellor: There is no common European standard for CB antennas and consequently practice varies. We are, however, considering whether any modification might be made to the current antenna description contained in the CB licence.



SHOCK



STORY

Back in April 1982, there was considerable news coverage on television and in daily newspapers (as well as specialist CB publications) on faulty and possibly dangerous CB power supplies. This rush of attention followed, amongst other things, the tragic death of a boy in Wales. Although it was subsequently found that the power supply was not directly responsible for his death, it focused public and media interest on a potentially lethal piece of equipment.

It's no great surprise that the bulk of these faulty power packs started sur-

facing about six months after legalization. Equipment prices were dropping, which attracted new customers looking for value for money and not necessarily aware of the technical aspects of their new hobby. Many of the suspect power supplies were very cheap and, anyway, made quite misleading claims about the units' electrical characteristics.

The investigations of local authority Trading Standards Offices and test houses showed some serious faults. These included:

Faulty earth or no earth at all, which

could lead to the unit becoming live;

Bad location of components, causing the casing to become very hot after extended use (this could lead to the melting of insulation on internal wiring and units catching fire);

Bare wires very close to the external metal casing of the power supply (heavy handling or knocks could cause shorting or the unit to become live).

The fuse holder cap being easily removable by hand whilst the fuse could remain live when exposed. Some supplies also only had a single pole power switch.

An alarming catalogue of faults, any of them serious enough to kill you. Many units tested also had design faults, which, while not injuring a user, could cause a rig nearly the same damage as its owner.

At least a dozen brand names were identified, all of Taiwanese manufacture, although other countries of manufacture have also been guilty. These names were circulated by press publicity and Trading Standards Offices (TSO's) and just about everyone using or dealing in CB knew of the problems. Stocks were withdrawn from shops and many breakers had their power supplies checked for safety. Hopefully, the end to a serious problem.

Not so. A day phoning around CB shops and local authority TSO's revealed that many of these units and similar but previously unnamed ones are still being sold and bought, more than 12 months after the scare and the unfortunate tragedy that sparked it off.

At the risk of sounding like Esther Rantzen, "How and why?". How can it be possible that potentially-lethal pieces of equipment are still changing hands. A few more phone calls and the reasons became obvious.

The importers of these power supplies have found themselves with large stocks of almost unsaleable equipment. Since they are in business to make money, they reduce the wholesale price until they find someone to buy them - and at such a price they won't particularly query the quality of the goods. The main customers have been:

CB dealers looking for a cheap product but who should know better; Retailers or dealers who are unconnected with CB and are unaware of the problems but know a good price when they see one; and

Street traders who fall somewhere between the other two groups and are unlikely to have any comeback from dissatisfied customers.

When you consider that power packs have been offered to wholesale customers by importers at as little as £3 each, you can see why they are attractive to a trader.

Breakers are also partly to blame. They want a cheap product, too, particularly younger breakers with pocket-money to spend. If they are new to CB, they might well not know of the possible dangers and if they do, well, no one thinks they are the one likely to be electrocuted. It's an unhappy but inevitable consequence that power

supplies will cost more if built to a higher standard but, unfortunately, not everyone makes that connection.

Another problem is the law surrounding this type of situation. Under the Consumer Safety Act, to stop the importation and sale of dangerous goods, the Government must put an enforcement order on the type of goods. Effectively this means that the Government can only ban 'CB power supplies' or 'Taiwanese CB power supplies' - not 'Brand X' or 'Brand Y'. It would obviously cause administrative chaos to stop the sale of all power supplies, particularly as all the dangerous ones weren't Taiwanese and not all the Taiwanese units are dangerous. Local Trading Standards Officers don't have the power to immediately stop the sale of suspect equipment either - they can only ask the retailer to stop selling them and take legal action if he refuses.

Trading Standards Offices are financed and operated by local councils. This means that the officer dealing with a particular problem has no authority outside his own area. So while Manchester, Barking and Lambeth have all been actively involved in preventing the sale of dangerous power packs, if shops a quarter of a mile outside their area still sell them, there is nothing he can do except inform the TSO in that area. If these officers choose not to follow it up, through lack of staff or interest, then the original officer can do no more.

The other major problem for TSO's

is that even if they were to successfully take an importer to court, a likely fine is £100-£200, hardly discouraging. Even if he is fined £1,500, like a Manchester company fairly recently, there are still plenty more to step into his shoes who won't be put off by such a fine. Goods must also be extensively tested before prosecutions can follow - and testing is very expensive.

The three regions mentioned have all made great efforts to deal with power supplies. Lambeth tested a selection of units and advised traders what not to stock. They also invited traders and members of the public to bring in units they weren't sure of, so they could be checked. Lambeth has successfully dealt with their own area but admit they have no doubts "that there are still lots going around".

Barking is sure they have "completely eradicated" faulty units in local CB shops - but as they point out, this has been made easier by the decline in the popularity of CB and the closing of CB shops. The officer I spoke to said, "Unfortunately, I still see them on my travels but there's not a lot I can do with things like street markets. Barking went for publicity rather than prosecutions, since there's no guarantee of a conviction."

Manchester's attention was drawn in the early days of CB by anonymous complaints but were unable to do anything about it as illegal CB'ers were not prepared to identify themselves or where the equipment came from. After purchasing and testing a dozen differ-

ent units, all of them failed the Electrical Safety Requirements of the Consumer Protection Act and prosecutions followed. Manchester is particularly attentive to electrical safety because of the high concentration of importers in the area and although the situation has improved it has not been resolved since this high concentration means stocks are constantly changing and modifications have been made to previously-unacceptable units. The Manchester office has not been able to check all of these modifications because of lack of facilities and staff.

Mr. Hodge, of the Manchester Consumer Services, did comment that some importers have been more scrupulous than others and have offered equipment for checking. He feels that the only real answer to this problem is to test a selection from each consignment at docks, which would involve test stations at all ports of entry - something unlikely to happen in economically-depressed times.

It would seem then, in the long run, a 'scandal' isn't enough. There are enough people anxious to make money and others anxious enough to save it to overcome their scruples or doubts. One of the Trading Standards Officers I spoke to commented on a badly-needed change in the law to permit TSO's to enforce immediate confiscation and there are indications that the legislation will change. Till then, be careful of what you buy - and if you are in any doubt, get your power supply checked out.

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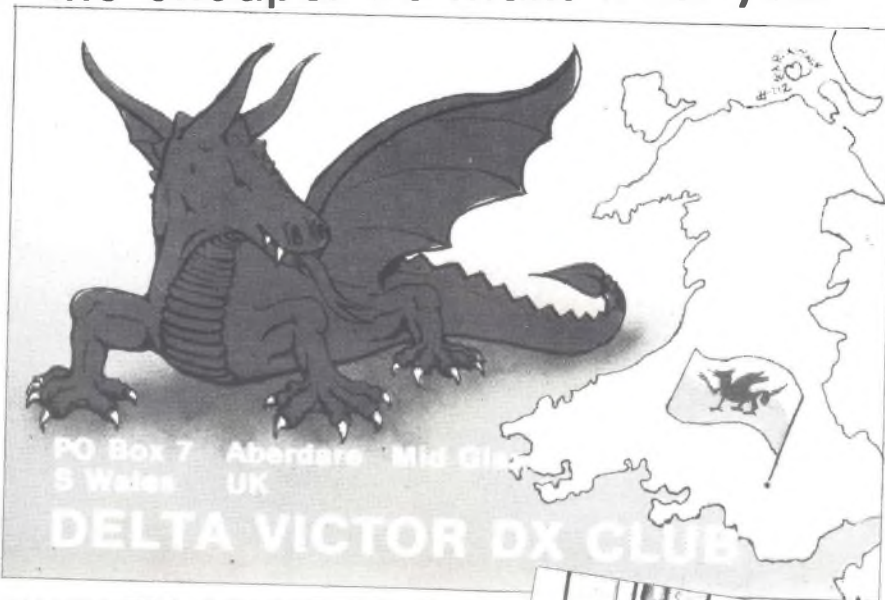
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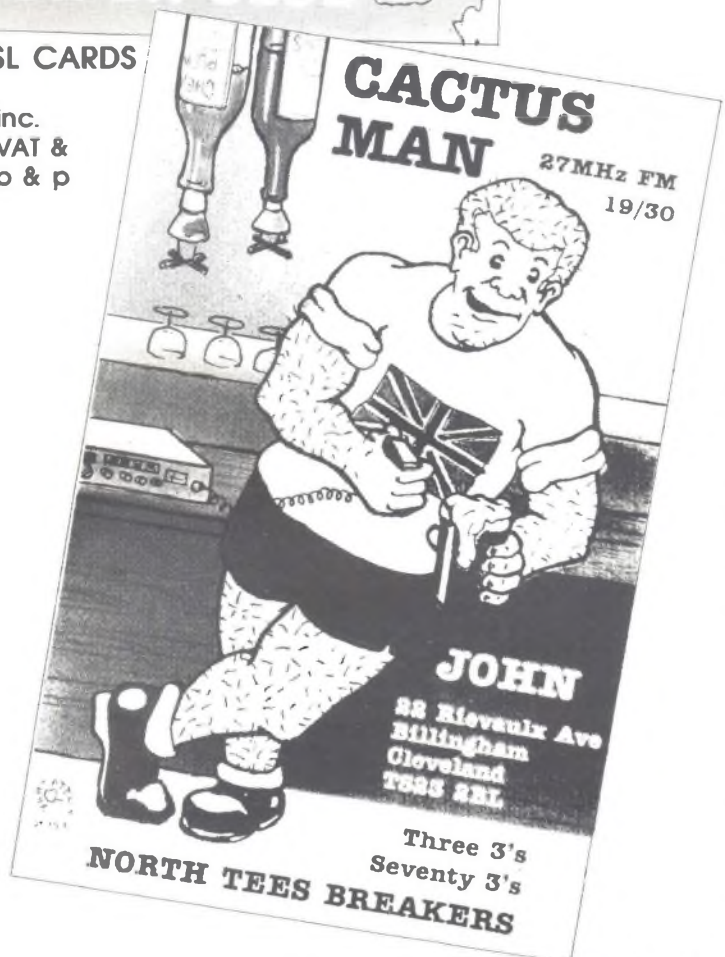
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