

ON THE SIDE

THE
MHC

ON
THE
SIDE

CB CLUB MAGAZINE FOR MEMBERS AND ENTHUSIASTS

What you think of British CB

Analysis of a "bust"

Is there a useless knob on your rig?

Rig Report: Harrier CB

Channel switch mod — how to do it



70p

JULY 1983

IT'S AWFULLY LONELY BEING NO.1



**CAR/HOMEBASE CB
TRANSCIVER**
Complete with microphone and
pre-tuned antenna with
magnetic base.



24 Alfric Square,
Off Maxwell Road,
Woodston Industrial Estate,
Peterborough, PE2 0JP.
Tel: (0733) 236010/233955

U.K. DEALERSHIPS AVAILABLE

Breaker, breaker

Mum — we're nearly famous now. That's how it seems from our point of view at *On The Side* magazine. I mean, calls from radio stations, from readers in all parts of the country, plus literally hundreds of letters wishing us well, or asking for CB information, or simply to tell us what's going on in the outside world. They're all arriving at Water Lane, and for which many thanks to one and all.

This issue reflects what you, the readers, think of us. For instance, from page 16 onwards, we've sort of summed up many of the comments you made on the questionnaire in the previous two issues. The analysis proves very interesting, because the vast majority see the future of CB (and its present, for that matter) as a mode of local two-way communication, or as an aid to disabled, blind, or otherwise home-bound people. While many of you voiced an interest in illegal CB and DXing, not many suggested it would be a major part of CB in the future. And so it goes on.

A number of radio amateurs replied to our original article putting the question "Will hams and CBers get together?", with a unanimous but understanding negatory. Most thought that NATCOLCIBAR should be the representative body (as the RSGB is for hams), if anyone. Turn to page 22 for G3GWD's letter replying to the big question. It makes interesting reading.

This issue marks the start of a series of major reviews by our team of consultants; this month we carry a handling review of one of the basic FM CB rigs, the Harrier, and Ray Pobgee (good old English name, that) writes it as (a) a review of the rig, and (b) an introduction for beginners to CB.

Perhaps the most controversial this month is our Analysis of a "bust". Now, this has been provided by Zeppelin, of the Pirate 27 Citizens' Band Radio Club, said to be the "only genuine AM breaker's club." We print it in all its detail, first as a guide to what goes on during a classic "bust." And second, because the outcome is "interesting" bearing in mind the evidence submitted. I comment no further — just read through it, and if you have any comments, please let me know, and I'll represent your views here in a future issue.

10-10

Frank V — *Editor*

Production

Editor : Frank Voller (Tripewriter)
Assistant Editor : Cass Simpson (Vegetarian)
Ad. Manager : Bernard Spencer
Chief Executive : Ken Oldroyd
Marketing Executive : Paul Kennedy

Editorial and advertisement offices:

On The Side, Knight and Forster, Water Lane, Leeds LS11 9UB
Telephone: 0532 432347

Published, Typeset and Printed by:

Knight and Forster

Distributors:

COMAG Ltd., Tavistock Road, West Drayton, Middlesex.
Telephone: 089 54 44055

Note to advertisers:

Please make sure that your copy reaches our offices by the 10th of the preceding month.

Editorial contributors ditto.

The publishers of *On the Side* magazine cannot condone the use of illegal CB equipment, and illegal ancillary equipment. Also, we do not accept responsibility for any damage, hardship, or other unfortunate happening which might have taken place as a result of editorial or advertisement material published in this magazine. In other words, if your new rig (which we might have recommended!) blows up, we won't pay.

CONTENTS

3 *On The Side*

Somebody said that this was the only thing the Editor actually writes in the mag. I'm only the Assistant Editor, so I won't comment. Suffice to say that "somebody" doesn't work here anymore . . .

6 *Copying the mail*

Your pages, including (if there's space) a letter replying to our article last month entitled "Grassing on your friends." They dared us to print it. Mind you, if it doesn't appear here, it was only 'cos of the lack of space . . .

10 *Campaign for real CB*

Steve Donohue, Secretary of NATCOLCIBAR, continues his commentary on the fight for amplitude modulation, SSB, and this month he revises with a few of the more common questions he is asked.

13 *CB for the blind*

One of the more useful ways in which CB can be used. Actually, it's a copy of an article that appeared somewhere else . . .

14 *New products*

What's new in the CB market this month. Some microphones, a linear amplifier, and a message for firms in the business.

16 *What you said*

Hundreds of completed questionnaires told us that *On The Side* is being read and digested. Here, Editor Voller repeats what a lot of readers said about the future of CB, whether it will ever get together with amateurs, and lots more. It sums up what the majority of you think of CB currently.

22 *A ham replies*

G3GWD, an amateur from way back, comments on our suggestion that amateurs should get together with breakers, and vice versa. He also points out why the RSGB will never be involved . . .

24 *Guide to the codes*

Another opportunity to swot up on the 10 code, Q code, and the RST codes. It makes sense to behave like responsible people, even if we aren't!

29 *Do you have a useless knob?*

Repairman continues his technical guide to improving the quality of breaking by suggesting a way to make the squelch control work properly.

32 *Rig Review: Harrier CB*

CB consultant Ray Pobjee begins his series of reviews by describing the basic FM rig available from Dixons, the Harrier. A basic review for a basic rig.

36 *We QSL, you QSL*

The Duke continues his series of worthwhile articles on DXing, and this month concentrates on QSLing. At least, that's what he said he would be writing about . . .

42 *Analysis of a "bust"*

From the first visit by "investigating officers", to the verdict in court, this describes what happens in all the gory detail, when the Home Office begin sharpening their claws.

48 *Copying the mail*

Continuation of the readers' letters beginning on page 6.

49 *Channel 9 or 19?*

Wouldn't it be a good idea to have a single switch that gave you channels 9 or 19, without all the effort (and distraction) involved in doing it by hand? Here's how to fit one on a Maxcom.

COPYING THE MAIL

LETTERS

LETTERS

LETTERS

IS "CB CHANNEL 14" AN ILLEGAL STATION?

I don't know if you have noticed, but on Tuesday afternoons on ITV there is a programme called CB CHANNEL 14. It is supposed to be an illegal CBTV station transmitting from the basement of the London studio.

The reason I tell you this is because with "CB" in the name, you would think they could be doing something on the subject, but there has only ever been two episodes in which I have seen them actually been used. And these were FM. Please could you find out what they are, AM or FM? Or, are they FM but they just haven't got the licence?

**John Sparticus
Birmingham.**

934 IS SUPERIOR

Further to the many references, some incorrect and misleading, to 934MHz citizens' band, I would like to advise you that we are a company specialising in the supply and installation of 934MHz equipment for both the public user and the small businessman.

We liaise very closely with REFTEC, the *only* producer of 934MHz transceivers in the world and excepting supply problems, carry a comprehensive stock of *all* the range of equipment available.

We believe 934MHz is the open communication system of the future, available today. It out-performs 27MHz proata, is not overcrowded and offers an alternative to PRM. REFTEC have spent a vast sum of money on development and have not yet even started to recover their costs. We have spent a great deal of time and money in experimentation and are therefore qualified to advise and comment on 934MHz.

You cannot buy from us "in a box". All

transceivers are checked and demonstrated before purchase or installation. We take great pride in our work and the advice we give, and will gladly discuss fully the "pros and cons" with any genuine enquirer and will also fully demonstrate, including in situ demonstrations, for business applications.

The Government has so far authorised 20 channels and will not allow repeater stations. Hopefully this destroys two of the current myths. However, we have a system which allows clear communications over varying distances, according to locations, which is not debased by stupid price cutting and which is not, and hopefully never will be, overcrowded or has irresponsible people spoiling it. We have great faith in 934MHz and genuinely feel it offers a non-complicated alternative to amateur radio, PMR and a vastly superior mode of communication to 27MHz.

I hope you can print this letter, or better still refer to us in some editorial, as we are not out to make a "fast buck" but are genuinely concerned with communications.

**Colin J. Webb
934 Communications
64 Footscray Road, Eltham,
London SE9
Tel. 01 859 0933**

WE ARRIVE IN SCOTLAND!

I would like to congratulate you on your new CB magazine *On The Side*. I had heard it was to be published in April, but I just could not find it in my area until a few days ago, when I did find a copy in my local newsagent.

I have had a try at your competition but I know I have made a mistake. Good luck to whoever is the winner. I wish every success to the magazine.

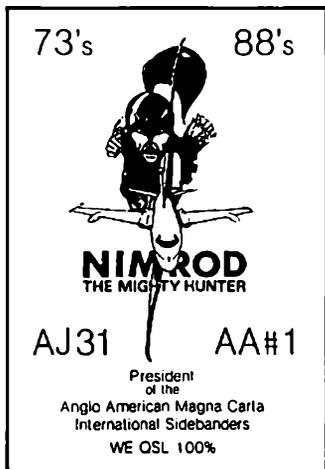
**Peter John Jaffrey,
(Oyster Catcher), Scotland.**

MIGHTY HUNTER?

Just a quickie to say: Great first issue of *On The Side*. Here's our latest club QSL.

Mick Marks

c/o Coronation House, Tolcarne,
Newquay, TR7 2NQ



DIRECTORS WANTED

Some time ago we wrote to CB Magazine concerning the new DXing group, Cobra Unit UK. We would like to now up-date the last information. The unit has now been successfully established for 15 months, and now feel through enquiries about the unit from other areas of the country that we would be prepared to accept directors for Cobra Unit UK in areas outside the Merseyside district.

Of course, as the unit members only operate Cobra 148 GTL DX transceivers, and insist upon good operating procedure and proven ability the prospective directors must be able to fill the above requirements. Applications to the Secretary PO Box 5, Moreton, Wirral, Merseyside L46 9SA.

We would like to thank all those who wished the unit well in the past. Keep up the good work.

**C. McCormick, Secretary,
Cobra Unit
PO Box 5,
Moreton, Wirral,
Merseyside L46 9SA.**

HOW ABOUT SCB — SENIOR CITIZEN BAND?

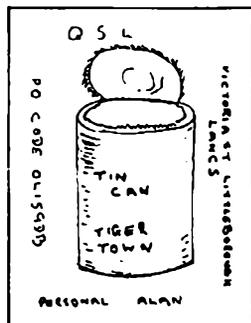
After a lifetime spent in the "Wireless" from its inception, with a Post Office Experimental Licence around 1922, and professionally since 1928 to 1971, I should be kicking up the daisies, but have settled for being registered blind, but with a little sight left.

Mildly interested in the development of CB, I picked up a copy of your May issue of *On The Side*, my first magazine on the subject. A first rig (secondhand) should be ready in a week or so since the vendor is scrounging help from fellow Cbers to help install it for me, probably gratis; he says they are like that!

Seriously, a couple of months ago I taped a short article as a contribution to the "Eastbourne Talking Newspaper" for the blind, and I enclosed a transcript for your interest, for who knows, it might provide a pointer for future development. (See page 13.—Ed.)

One comment I would add. If manufacturers would like to tap the Senior CB market, then let them produce an inexpensive mains model without the need for separate power units to adapt mobile models. They did it for radios and cassette players, so why not? Then *On The Side*, with ten times the present sales, could cut its price to 20p! Ha ha ha ...

**J. Stan Johnson
Eastbourne, East Sussex.**



All shapes and sizes, some specially printed, and some home brewed. Thanks for your great QSL, Alan.—Ed.

COPYING THE MAIL

GET INTO ORBIT?

We are a charity organisation called *ORBIT*. This stands for Organisation of Reliable Breakers In Trust. We do various activities for charity which included a fancy dress pub crawl on the 20th May 1983 for the physically and mentally handicapped children. The money we raised amounted to £46.75 and a slide was purchased for a playbus for these unfortunate children.

We are all AM breakers and have been for approximately four years. We would be grateful if you would print this letter to let everybody who reads your mag. know that there is still some good in we AM breakers.

Our Chairman is called The Little Nipper and if it wasn't for him all this wouldn't be possible. We live in Paradise which is Darwen, Lancs., and we are all reliable breakers.

**Jelly Baby and Stargazer,
ORBIT,
Punch Hotel,
Chaples, Darwen,
Lancs.**

DON'T CALL US . . . PLEASE

To begin with, congratulations on the issue of your new magazine, *On The Side*, and thank you for including our letters in your first two issues. It does of course help to put Castle Hill Breakers on the map and get the club more widely known throughout the country.

We would just like to correct you on a couple of points:-

1. Our club stand-by frequency is 29 Low Band, 26.845MHz, and not 20 as your magazine printed (or rather mis-printed). If you had checked the frequency against the channel number the mistakes would have been clear, as they do not tie up at all. For your future use we are enclosing a frequency chart covering the illegal frequencies mainly used. Hope you find this useful and that it prevents further mistakes.

2. The two AM breaking channels in the area are in fact 14 (mid-band) and 54 (high-band) and not 14 and 15 as you stated. Anyone calling on channel 15 in Hull would not be very popular as this is a frequency used for a local firms bleeper system.

We would appreciate it if you could correct these errors in your next issue as we wouldn't like people calling us on the wrong channels and getting no answer, (and we don't have any intention of changing our calling channels just for you). Perhaps in the future you will check your printing a bit more carefully as the letter we wrote you was quite clear and if our information has been mis-printed we wonder if the rest is all correct.

Now, to keep you up-to-date we would like to advise you of a change of our club's venue, our usual room has been turned into an entertainments room with pool tables etc so it is no longer suitable. For the time being, therefore, our meetings and socials are being held at The New York Hotel, Anlaby Road, Hull. Unfortunately we don't have dates very far in advance as we will be taking a summer break shortly. We will let you know more as soon as we have them.

On Bank Holiday Monday 30th May we took part in the annual carnival at Newlands Homes (Sailors Childrens Society) and hoped to raise money with a bottle stall, stocks, cake stall etc. Last year we raised well over £300.

We wish you continued success with *On The Side* and look forward to further contact in the future.

**CHB 02, Clive, Chairman.
CHB 05, John, Vice-Chairman.
CHB 64, Angie, Secretary.
Castle Hill Breakers,
c/o P.O. Box 803, Hull,
N. Humberside.**



Just a bit OTT with the reprimand, but the point's taken. Heaven knows how those errors crept in, and apologies etc. — Ed.

MORE ON 934!

Where are the rigs? Yes, that's right, those 934MHz we all see pictures of at exhibitions, in magazines and newspapers. Has *anybody* got one? I think that the Reftec and the Grandstand must be the most photographed rigs in the world, but I think it's all a big fib to let us think there is a better form of CB out there somewhere.

Colin Marks G6UNB
Birmingham

*More on 934MHz coming soon.
Promise—Ed.*

MONITORING THE REGIONS

Re: your feature in *On The Side*, May 83, about how to be a monitor. I would like to take this opportunity to tell your readers that REACT and THAMES are not the only emergency monitoring services in the country. With a lot of hard work we have formed our own.

My organisation SECON was formed in Dorset in April 1982. It costs nothing to become a monitor. Made up of volunteers from all walks of life we now have some sixty monitors covering the area with other branches in Sussex, the IOW and Scotland. In Dorchester the emergency channel is covered 24hrs per day. During our first year we have handled over 150 emergency calls ranging from RTA, air crash, missing persons and distress at sea.

Recently we founded and set up the Dorset Federation of Channel Nine Monitors with two other networks. The Federation is unique in this country and enables us to have two-way radio communications covering the whole of Dorset in a matter of seconds. The Federation has been formed with the assistance of our County Chief Emergency Planning Officer to help the National and Local Emergency Services in times of emergency or natural disaster.

We regularly have exercises between the three member networks that is SECON, REACT, and THAMES. The result being that we are now a well-established and highly regarded

emergency service called upon by the local authorities to give two-way radio security at special events and aiding the police in their duties.

I hope that other readers will see that it can be done no matter how small; our aim to help people in need and possibly save lives is reward enough.

Bob Oliver,
Public Relations Officer, SECON.
56 Cambridge Road,
Dorchester,
Dorset.

MAG MONITOR

Thank you for a most interesting article on being a monitor; as a monitor myself I must admit I get as much fun and enjoyment out of it as I hope the breakers who come through the bottle neck of the Comet in Hatfield get.

I try to keep it as light and informative as possible and although I'm not always able to answer every breaker who calls me, I do try! As an old AM monitor, I lost an awful lot of copies when I went FM, and when members of the East Coast Truckers Club missed me I wrote and told them I'd had to go FM, and they invited me to the club at Norwich and made me an honorary member.

I try to get to the meetings at least every two months, but I have to travel by train to get there. This way I am able to meet a lot of the truckers and their seat covers . . .

A1 Hatfield is almost as bad as the M1 at times, as we have breakers coming from all directions, going into or out of London. Anyway, on May 6th I celebrated the first year of FM monitoring, and I look forward to another year of good modulations and hope to send a few breakers on their way feeling happier and smiling as they leave "Patchworks patch". So I'll close this letter and wish you all good luck with *On The Side*. It's a super mag that I can slip into my handbag.

Patchwork,
Hatfield,
Herts.

continued on page 48

Campaign _____ _____ for Real CB

The fight for new bands continues despite the threat of the Telecommunications Bill and the Criminal Evidence Bill. At the time of writing, they have been temporarily shelved due to the General Election. But NATCOLCIBAR are still leading the battle on behalf of we CBers. Here, Steve Donohue, Secretary of NATCOLCIBAR (National Committee for Legalisation of Citizens' Band Radio) answers some of the questions put to him over the past months.

Q: BUT I THOUGHT CB WAS LEGAL NOW?

A: Yes, it is. The current legal system was introduced in November 1981. It operates on a part of the 27MHz band unused anywhere else in the world, and is unique only to Britain, thus totally isolating CB users from contacting other CBers in Europe. The frequencies permitted allow the use of 40 channels, which are already grossly overcrowded and results in communication range being reduced, in some cases even down to yards rather than miles. This is why NATCOLCIBAR is fighting for extra channels to be given for immediate usage on the FCC channels using modulations both amplitude and single sideband, and if the user chooses, to use frequency modulation also.

Q: WHAT WILL HAPPEN TO THE PRESENT LEGAL SYSTEM?

A: Nothing. This system will stay in operation. Let's face it, there are over 300,000 users at present. People who have paid large sums of money for equipment, aeriels, power supplies and licence fees. There are thousands of these people dissatisfied with the system, but there are also thousands satisfied with it. So it must stay, and NATCOLCIBAR is maintaining, through its representation in the Houses of Parliament, that the FCC frequencies must be introduced in addition to the present system. NATCOLCIBAR is not against the use of FM. We have many thousands of legal users in our organisation. Our fight is first and foremost against the frequencies which the Government is forcing us to use.

Q: WHY ARE WE NOT ON FCC FREQUENCIES ALREADY?

A: Good question, and one to which there is only one answer. Inefficiency by the Radio Regulatory Department, whose bungling bureaucracy and stonewalling tactics, coupled with an inherent desire to deny freedom of communication to the general public, has resulted in the chaotic situation prevailing with the CB system in this country today.

Historically the Post Office, now known as British Telecom, has always enjoyed a complete monopoly on all forms of communication in this country with the single exception of face-to-face conversation. Any other method of exchange may be performed only with their knowledge and consent, and then at a price. This

monopoly, as it applies to radio communications, has for a long time been protected by Act of Parliament and by various other statutory measures.

Indeed, as recently as 1968, when the rest of the world was beginning to embrace the concept of allowing the use of citizens' band, that Government were deliberately taking steps to make sure it would never operate here. Along with other organisations, NATCOLCIBAR protested and kept up a steady campaign for CB to be legalised.

Then came the red herrings. Interference reared its ugly head. The RRD thought of every trick in the book; hospital paging, TV, hi-fi systems, danger to aircraft, kidney machines, model aircraft, deaf aids and even baby alarms. Prior to legalisation we were accused of causing interference to all these. This is why they said we couldn't have 27MHz in any shape or form. Over a million CBers produced evidence in every conceivable way refuting these allegations.

But we slipped up. We only asked for 27MHz, forgetting to mention FCC AM and SSB and assumed that the Home Office would know what we meant. With this huge volume of support, including MPs and other radio users, the Home Office gave us 27, but put us on frequencies not used by anyone else in the world. We know interference *can* be caused. But we also know it is not as bad as the RRD say: and we know it can be cured. Otherwise CB on the standards we were refused could not operate in the USA with over 30 million users, and no disruption to other services.

The Home Office Report on Interference for 1981, recently published, shows how wrong the original interference allegations made by the RRD were. Write to your MP, and ask for him/her to get you a copy. They even admit that FM can cause interference, but of course, not as much as AM or SSB. They even admit now that the prime cause is not harmonic radiation but direct audio break-in arising from the close proximity of the CB transmitter to domestic equipment, hi-fi, TVs etc.

Q: WHAT'S THE EUROPEAN ASPECT?

A: Like it or not, we are part of the European Community now, and whether the price of butter or other products is as closely linked with the EEC as the weather is with satellites, will probably never be known. But having decided to join years ago it makes little sense now for us to choose another way of cutting ourselves off from the Continent. The present legal system we have got does exactly that.

It is not compatible with any of the existing 21 European services. Holidaymakers travelling abroad cannot take their CB sets with them, they are not able to obtain easy-to-follow road directions or emergency aid via CB radio. More seriously, this facility is also denied to the long distance truckers who drive on the Continent for their living. A thriving world of practical help is only a CB call away, but this is denied to the British traveller.

Language would not have presented a problem or a barrier to this either; apart from the fact that most Europeans can speak English anyway, it is the internationally recognised language of radio. The right choice of citizens' band in November 1981 could have given us real European citizenship for the people, not just for the bureaucrats. Natcolcibar, through its membership of the European CB Federation, is demanding just that. A common European frequency, a common European licence, the right to cross frontiers within Europe with our CB sets without hindrance, or fear of prosecution or confiscation.

We are supported in these demands by our other nine member states, who are urging the European Commission to press Governments to implement forthcoming new recommendations by the European Conference of Posts and Telecoms expected soon, and on which our demands are based. REMEMBER. It is not only

Britain who is demanding this commonality. There are 20,000,000 citizens' band radio users throughout Europe whose support we have. MPs and MEPs are also urging the Government to adopt a common standard, as they see the absurdity of the existing system and regulations.

Q: OK, IT MAKES SENSE. HOW DO I JOIN?

A: You can help by writing to your MP and MEP asking them to support our aims. Quote from this article if need be; our arguments are based on fact, if you don't know the name and address of your MP or MEP ask a CBer. They'll probably be one of those people you occasionally see around wearing T-shirts emblazoned with numerous badges and using in some cases a peculiar kind of gibberish language; but despite their appearance are ordinary down-to-earth people who believe in the cause they are fighting for. If you are already a CBer you can help by spreading the word about NATCOLCIBAR, or, if you believe in our cause, join us.

Q: YOU'RE A RIGHT BUNCH OF NUTTERS. I THINK YOU'RE MAD.

A: Well, of course everybody is entitled to their own opinion, but we would like to mention a small quotation from John Dryden which might help to clear the air.

*"There is a pleasure sure, in being mad,
Which none but madmen know."*

Our pleasure comes from CB radio; yours may come from other hobbies, perhaps woodwork, gardening, swimming or a hundred other different ones, and many of us have been fighting for a number of years to have our hobby legalised on frequencies of our choice, and just as our country united in the recent Falklands crisis; CBers are united in fighting for the right to use the FCC channels and all modes.

To those of you reading this who are ardent football fans, how would you feel if the Government were to say you can carry on playing, but you must use a square ball? And if you go abroad you can't borrow a ball to play with? *That* is madness, isn't it? Well, virtually a like situation exists in the present CB system over here. If we were footballers, as indeed many of us are, we wouldn't be allowed to play in Europe, not even if the opposing team offered to supply a proper ball, because their Government laws would not permit them to do so. That is why we are campaigning.

Q: WHAT DOES IT COST TO JOIN NATCOLCIBAR?

A: That's the easiest question I've had to answer. Club membership costs £10 yearly. This gives your own club full voting rights at all our meetings held monthly (at present) in various venues throughout the UK, but this may be changed at our AGM which will be in Birmingham this October. You receive all current information from the European CB Federation, and the Mobile Radio Users Association of which we are members; reports from the MPs and European Parliament Members who are actively concerned with our campaign, reports from local authorities and ambulance services, relating to CB interference, and to whom we have written requesting their advice. There is also an individual member's section with no voting rights, but with all the benefits as club members, and this costs £5 per year. More information from the addresses below:

**Mrs Madeleine Parkes,
80 Old Oscott Hill,
Great Barr,
Birmingham,
B44 9SP**

**Steve Donohue,
430 Westwood,
Windmill Hill,
Runcorn,
Cheshire, WA7 6LL**

CB for the BLIND

TRANSCRIPT FROM "THE EASTBOURNE TALKING NEWSPAPER"

The new world of CB is still in its infancy, though to some it may already seem 'old hat' and stale news! But what is CB? Well, for the uninitiated, it is "Citizens' Band Radio Communication", a means for ordinary people to talk to one another on the air, and now quite legal within a permitted range of radio frequencies.

We are all familiar with the fact that certain groups of people have for a number of years made use of the system of communication, such as the police with walkie talkies, service industries such as gas and electric engineers, and the now-familiar radio taxis.

Whilst the use of the system was restricted to such outlets, some enterprising 'pirates' took to the airwaves and became known as 'Breakers' — short for breakers of the law, one presumes. They developed quite a jargon of code words and phrases to preserve anonymity in the first place in order to avoid identification and prosecution; all cloak and dagger stuff!

With legalisation, a common use amongst lorry drivers and motorists is to be able to warn one another of difficult road conditions, accident hold-ups and the like. Where walkie talkies have a very limited range of some three hundred yards from one to another, mobile units for cars and home base stations can reach for some ten to twenty miles.

So, what has all this to do with we blind listeners to the *Eastbourne Talking Newspaper*? Well, apart from keeping abreast of the times with an interest in current affairs, it is not easy to avoid all the depressing topics which threaten to overwhelm us. So think to the future, when perhaps a number of us may launch out with CB rigs and be able to talk with one another and even hold debates over the air! You know and I know that loneli-

ness is our greatest problem: we need to talk, we need to listen. All right, so there are telephones available, but one is usually over-conscious of the very expensive seconds ticking away, or at least we men are; not so sure about the ladies! With CB, apart from initial cost (including a ten pounds licence) 'listening out' on a receiver uses about the same amount of electricity as an ordinary radio set — very little.

Apart from us, how about the ten thousand lonely widows, widowers, and single people in the Eastbourne area and particularly the disabled housebound? Perhaps one day we shall all make new friends and bless CB for bringing us together.

J. Stan Johnson

Both CB and amateur radio are a boon to the blind and partly-sighted, and we have heard of many ways in which these modes of communication can be of help, solve the problem of loneliness, and actually get people together — something that otherwise would not have happened!

If you know of a blind person, try gently, to introduce them to CB, and the benefits of maintaining friendly contact with the outside world. Amateur radio has its own organisation catering for blind members — it's called the Radio Amateur Invalid and Blind Club, which has a lively programme of nets and other activities. Person to contact here is F. E. Woolley, 9 Rannoch Court, Adelaide Road, Surbiton, Surrey KT6 4TE—Editor.

Shop talk



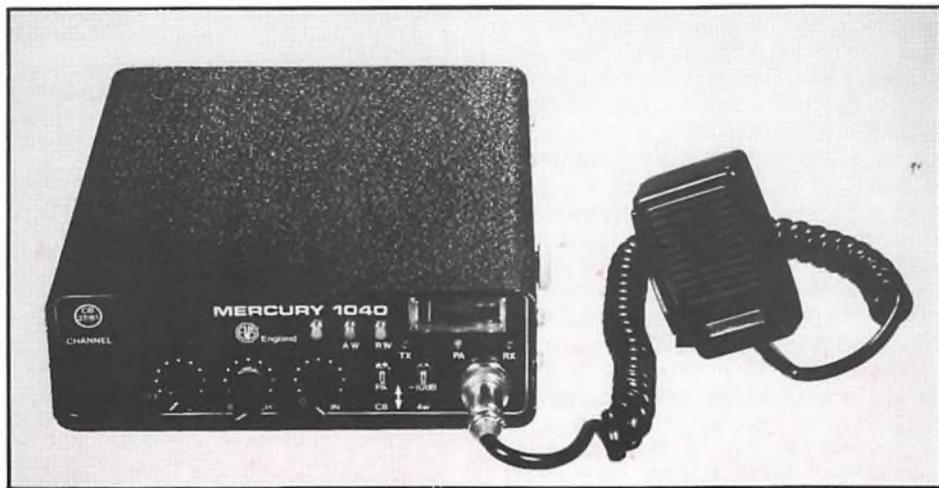
A round-up of what's available over the counter at the moment spot anything we don't know about, or if you're selling equipment, tell us about it and we'll probably give you some free publicity! Also, if you happen to build yourself something that might interest others, let us know, along with circuit diagrams, components used etc.

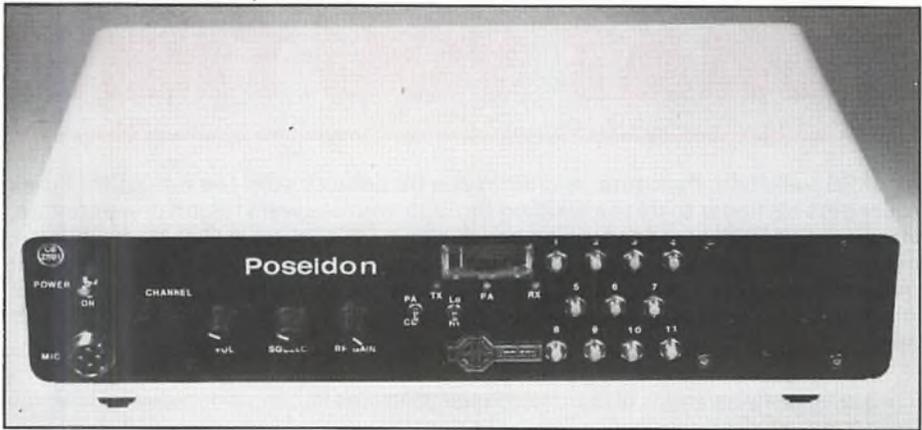
One of the most useful facilities of the CB rig (or the whole system, for that matter) is a selective calling device. Up to now it's been referred to as the "farmer's band" ie, a farmer with a home base can selectively call any particular person on his estate simply by pressing a button.

When the button is pressed, a coded signal is sent from the transmitter to the selected receiver (that particular person), where it activates a buzzer. Thus the called picks up the mike and completes the calling operation. This device is called the CatCall, and is fitted at the factory, to the Mercury 1040 FM rig; further units can be added later by any competent engineer. Another bonus is that often, the effective range of your radio is increased when CatCall is fitted.

Up to 18 radios can be fitted into the system, each line having a different code, enabling you to call each other independently. The Catcall is a definite must for some businesses, including office use, family and friend communication networks, farmers, doctors, tradesmen, taxi and delivery services.

The pictures show the Mercury 1040 fitted with selective calling, and the Poseidon base station, which comes standard fitted with 11 selective calling facilities and noise limiter. As a guide to prices, note the*following:





TWO VEHICLES

Pair of Mercury 1040 transceivers, each with push-button CatCall facility

Noise limiter on each unit (£25 each)

£260+VAT

£50+VAT

OFFICE AND THREE VEHICLES

Master Mercury 1040 transceiver with push-button selective calling to and from three mobiles all fitted with noise limiters

Additional calling facilities between all mobiles as required

Horn adapter kit to operate the vehicle horn for a sharp burst when the buzzer is operated

£620+VAT

£6 per radio

£22.50+VAT

MASTER BASE UNIT: ELEVEN UNITS

Poseidon master unit fitted with own mains power supply, noise limiter and public address. Selective calling coding fitted at factory — up to 11 units (expandable to 18)

Additional units from 11 to 18 factory-fitted

Telephone handset and stand, in addition to hand microphone

£275+VAT

£6 each

£32+VAT

NOTE: All the prices are nett ex-works and do not include aerials or power supplies. Advice given on request.



433 WILMSLOW ROAD
WITTINGTON,
MANCHESTER M20 9AF
Telephone 061-445 8918



For **C.B.** products, service and competitive prices

We are by far the best.

WHAT YOU THINK.

... of CB in Britain, its future, and what can be done to stop the rot. Editor Frank Voller gets his finger to do the walking through your answers to our questionnaire, and comes up with some surprising conclusions. CB's future is likely to be diverse, and be the link between many different types of people while a great number of readers seemed resigned in that CB is destined to be a simple, short-range mode of communication enabling easy-speak between two or more people in a particular area.

There are literally hundreds of completed questionnaires littering (not meant nastily, you understand) my desk, the floor, and some finding their way to Cass's corner. My brooding, subversive, furtive little Assistant Editor knows all there is to know about legal CB, and he finds it particularly easy to decipher the most 'orrible' handwriting. Probably because his isn't all that brilliant anyway . . .

First off then, we noticed all too well that while a small percentage read other CB magazines, such as CB Radio, Citizens' Band, etc (are even they left on the bookshelves?), that absolutely 100% of readers took On The Side magazine! What's that? Misleading analysis of information? Don't know what you mean . . .

To our questions about the future of CB, many of you took the trouble (thanks) to describe your feelings and hopes (and despair) about the subject. The Green Man of North West London, otherwise known as Eddie Greenhalgh, a self-employed married man, says that 934MHz will keep the wallies and the kids away from CB, if only because of its relatively high price. We hope that the price will remain high, and not go the same as 27MHz rigs . . .

He goes on that 934MHz "will develop into a nice place to be." On the other hand, he adds, "if we don't make use of it, we may find we don't have it any more!" Know what you mean, Eddie.

Eddie Greenhalgh is one of the many who read radio magazines as well as CB publications, although he is a strictly FM CB man. Incidentally, he is also one of the majority who have handles, although they are on FM only.

Speedbird of Aylesbury, motor fitter by trade, says he wants to see more channels on FM, while The Risin' Sun of Stourbridge, an HGV driver of 33, states that the government made the big mistake of letting kids have CB. "Now they should get us out of the mess by preventing kids using channels 19 and 9." It's one way out, anyway. Speedbird adds that the RSGB should help and encourage monitors of channels 19 and 9, and help force the government to promote CB as an aid to saving lives and time.

Eager Beaver of Preston, a 35 year old joiner says that in the future, CB should be installed in all new cars, vans and trucks, considering that it is a mode of public communication after all. Toothbrush of Barnsley is only 12 years old, but thinks that CB should get together with hams and both might be able to co-operate with DXing schedules etc. Nice idea, but would it work?

At the other end of the scale, 70-year-old Grenadier of Sunderland, is an ex-policeman, and works all modes, from FM to SSB. He used to be interested in ham radio, and now says that "in time, CB will progress towards the amateur radio field," while in the immediate future, we could see the necessity for many CBers to learn and study radio techniques before they get into a full CB-user category. Fifty-seven year old Zukie, who owns five rigs at her Hereford home, works all modes, and reads everything available on

the subject of CB, while adding that On The Side is "a first class magazine." Well, thanks, Zukie.

Specialist interest is the formation of networks for the disabled, and has already started a juvenile disabled club, and formed the Zero 3 channel monitoring service for disabled CBers. Zukie says that hams will get together with CBers because there will be a need (will?) for hams to help breakers to develop into amateurs. Again, it's a nice idea, but at least not yet.

On the subject of CB's future, Zukie says that there should be approved European AM frequencies within two years, and then, say, more available in five years, including SSB. Freedom of speech will rule, but a special licence might be required for EEC AM, SSB.

The Cutter, a steel tube cutter by trade (how did we guess) monitors AM and SSB, and is a short wave listener. Like some other readers, The Cutter was strong in his comments that the Home Office should begin to confiscate rigs being run by some of the wallies on channel. This would, he says, deter others from treating CB in the same way. Sixteen-year-old Green Beret of Scotland somewhere says that CB will develop into a nice, relaxing thing to listen to, or talk into before going to bed at night after a hard day's work. Also, it's a good way of solving a problem because you can seek advice from friends and other CBers - and there's a very wide range of different people on CB, from successful businessmen, to policemen, to, well, you name it.

Green Beret says he likes talking to "sensible people." Name that tune, sir.

Captain Birdseye is a 32-year-old computer operator, and obtained his licence in March last year. He liked the first issue of On The Side and says his simple pleasure is "just being able to talk to other good buddies." On the subject of whether CB will ever get together with hams he says an uncomprising NO, and adds that amateurs and breakers will stay apart unless some changes are made to 27MHz. And we all know how likely that is in the near future, don't we?

"I would hope that the powers that be will earn the licence fees, and attempt to clean up the airwaves," he says. Good point.

Fisher Boy of Stockport says he likes making new friends and having a good laugh. "That's my specialist interest in CB" he says. And he adds that he reads a magazine called Breaker on the Side. Now which one's that, we wonder . . .

Artist Strider of Warrington, Cheshire, seems to be a bit of a sadist, because he would

**433 WILMSLOW ROAD,
WITTINGTON,
MANCHESTER M20 9AF**

Telephone 061-445 8918

CBI

Retail Department

PAMA

Wholesale Department

**For the best C.B. products and service at the best
prices in the U.K.**

Regular van deliveries every week



EYEBALL! EYEBALL!
 You've Just Eyballed
DOCTOR
 From Container Town
 10-10 Till We Meet Again

like to see in this magazine "a page on people who are busted, eg areas, numbers etc." Well, don't know about that, as a great many wouldn't like their names to be spread about a national magazine, even this one. Mind you, we can see the use it would be to other readers . . .

Regarding CB's future in this country, Strider says that FM will get easier as the kids become bored with it, and then both FM and AM should be used more by serious and well-meaning breakers who are ready to help others. In other words, the "plank" element will begin to disperse. On the subject of ham and CB getting together, Strider thinks there might be possibilities with SSB but no chance with FM and AM channels, at least on the straight 40. His rigs, incidentally, are a Fidelity 1000FM and President Adams AM/SSB transceiver, with Thunderpole, and he went in for his CB licence in March 1982.

One thing that comes out with many of the readers' questionnaires is that they're genuinely interested and concerned about the current state of, and the future, of citizens' band. For instance, P. Lanchester of Diss, Norfolk, a straight FM user with a JWR Mk. 2 plus Orator states that in years to come, the by-words will be correct operating techniques, patience with others, and consideration also. Among his reading matter he lists Citizens Band magazine, and something called Ham Radio Today, or Amateur Radio magazine.

Buck Cannon of Rotherham plays it safe and "no comments" our question about which mode he uses, and this 21-year-old miner thinks that CB will prosper, hopefully, with the introduction of another 40 channels. Another 21-year-old, a student with the handle Prisoner (wonder why), is another who thinks that ham and CB will get together inevitably, because CB is a valuable way of getting people into two way radio communication, and consequently, amateur radio.

"Hopefully," he says, "we will get better legal wavebands and rigs, twigs etc. Also,

as the number of elderly, housebound and lonely people in society increase, CB will play an increasingly important role in keeping them in contact with the rest of the community." Good Stuff, Prisoner, and hope you get out soon.

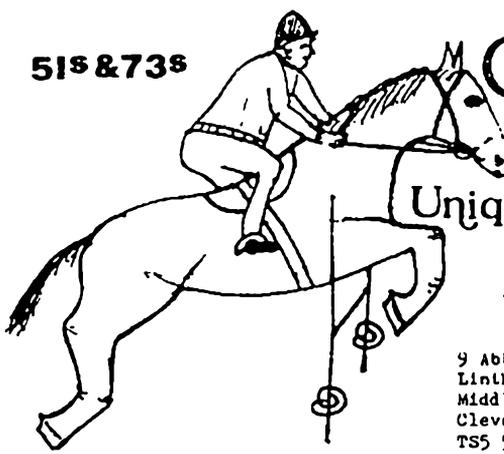
"Modjitating" with the other yokels of the village is what Red Rider of Sutton Coldfield values, while he still thinks that rigs and other equipment will become more sophisticated and better designed. This, in turn, will help develop CB into what it should have been all along. Hams will never get together with we CBers, he says, "because the users are of different characters." Well, that's true, sir.

A seventy-year-old retired forester from Berwick on Tweed doesn't give us his handle, although he admits to using AM channels, and for this reason we won't publish his name. Like many other readers though, he says that his special interest is helping blind and disabled people, while also monitoring emergency channels. "I sincerely hope that amateurs will begin to get together with CBers," he adds, and continues that CB could well develop into a medium that helps lonely people who are isolated and live alone. "It's a boon to folk like myself," he says.

An unusual, but very interesting possibility is put forward by Unique Lady of Cleveland, a 34-year-old married woman whose job is described as a residential social worker. She says that she sees CB being used in conjunction with TV and local radio stations. More decisive than most other readers on the ham question, she states: "Many CBers will take the RAE (Radio Amateurs Examination), but will then keep their CB rigs for local modulations." Interesting.

Red Brick, of Crawley, Sussex, thinks that CB will develop into a "possibly news, weather report mode, and possibly a 'leave-a-message' channel. How about a recipe channel?" Romeo Echo (sometimes known as Quebec Alpha One) is 24 years old, and says he wants to read about how to arrange a Citizens' Transmission Association. Don't quite know what that means, but if RE would like to get in touch by letter, we'll be interested in his comments. Otherwise, he sees CB developing into an integrated private radio service in the future. He thinks also that 27-27.6MHz and 29.310-29.7MHz should be a shared allocation with amateurs, and this sort of arrangement would result in ham radio enthusiasts and CBers getting together.

Bus Stop of Northolt, Middlesex, thinks that amateurs are anti-CB because of the "toilet mouths" and wallies on channel at the moment. When they get off the air, then there might be room for co-operation.



515 & 735

O.S.L.
from

Unique Lady
Kath

9 Abbotsford Road
Linthorpe
Middlesbrough
Cleveland
TS5 5JD

On CB's future, Bus Stop says that it should be a major public service which would be free of all charges. "Because in these times, help in many of its forms, comes too late to be of any use." And so say all of us.

Andromeda of Olney, Bucks is a married man of 35, and uses a Fidelity 2000 with super modulator, plus a Binatone Long Ranger 40 with halfbreed on ground plane. He's been interested in CB for between two to three years, and says he's interested in DXing, "particularly unaided, ie, straight 4w into legal twig." His comment on amateur radio co-operation is that hams already use 10m AM, and sideband, and that some CBers are licensed hams anyway. Good point, Andromeda, and perhaps the Home Office should begin to realise that taking the RAE doesn't necessarily mean that people move away from CB. There are many CBers with amateur callsigns that we know of.

"I see the 934MHz range of rigs being the CB of the future," he says. "With a larger number of channels, and a national repeater network. So, DXing will be made simple with the use of repeaters." Another good point, once we manage to get over the problem of getting CB recognised and established in the eyes of the powers that be.

You'd think that a reader of Radio and Electronics World, Wireless World, ETI, and EPN (and OTS . . .) would have something technically excellent to say, wouldn't you? Well, here it is then. Doctor, of Felixstowe, is an engineer (T2A) with British Telecom research labs, and runs a Harvard and a "highly modified receiver." He spends some of his time designing quality CBs, "instead of putting up with crappy sets."

A sensible possibility regarding the co-operation between amateurs and breakers is put forward. He suggests we will get together with hams, mainly through a joint licence covering a limited number of bands. Well, it's worth a try. What do other readers think?

How will CB develop in the future? Doctor's answer to this one is TV; in other words, reasonably fast slow scan, which can be updated only with parts of the picture that change (dynamic compression). This can be transmitted, he says, with 2.5kHz deviation and still be of good quality. Would Doctor like to write an article on this for us?

Entertainment is the way that CB should go, according to Nooky Bear. He says, simply, that CB will have more channels, maybe a news channel, and one exclusively devoted to music. The Oscar looks at things from a positively opposite point of view, and thinks that CB will become more split than before, and eventually there will be an underground following, and an "overground" following. This 34 year old youth worker spends much of his time DXing the UK, but adds that CB will probably develop (on the legal side) into a mode of communication between companions and companies, countries and communities. A good line, Oscar, and one that could well win you the prize for the best slogan. We'll see!

Pessimistic is what Red Bomber is. His main interest is DXing to the States, and thinks that if the Government has anything to do with CB's future, it won't develop. "But I would like to see AM and SSB legalised," he says. Black Five of Cumbria sees a future

CBI
Retail Department

PAMA
Wholesale Department

*The largest stock of C.B., Antenna and C.B.
Accessories in the U.K.*

433 WILMSLOW ROAD, WITTINGTON, MANCHESTER M20 9AF
Telephone 061-445 8918

with better quality equipment, especially better channel separation, and improved Tx — and hopefully legal AM. His speciality is helping people in emergencies with direction information, road conditions and chat. See you down the line, Black Five.

Primecut (guess his occupation) drives a Maxcom 4E, bought his licence in April, and has the running of the community at heart. I quote: "Hams will get together with breakers in the future in order to help the police and emergency services." Probably got a point there — many people say that an "official help" arrangement might be the only way to bring the warring factions together. A quick point here; if this did happen, I wouldn't mind guessing who would be the more conscientious when it came to monitoring and maintaining a good relationship with the authorities!

Jagermeister of Accrington thinks, on the other hand, that "I don't see a future for CB; not until the airwaves are rid of planks etc. CB will kill itself, and the Government will sit back and let it happen. I could go on, but there isn't the space. . ." This FM-only bus driver adds that he uses CB just to talk to people near and far, and also likes to QSL. Sixty-five-year-old Shooter of Cambridgeshire is a British Telecom telephonist, and thinks that hams could link with breakers. "The parent bodies, NATCOLCIBAR, REACT, RSGB etc, should meet at intervals and discuss the implementation of a mutual policy for clean and useful airwaves, friendship, and advice on the use of equipment and procedures."

Shooter puts up a reasonably thought-out system where the two organisations might also co-operate. "There should be a nationally-controlled (by CBers and hams only) network for relaying messages, and contacting friends, talking to relatives abroad, along with a national and multi-national patch link network."

On that note we'll leave you. Any thoughts?

**Please mention
ON THE SIDE
when replying to all
advertisements**

The RSGB will not take over CB

G3GWD says that the RSGB will remain the only credible organisation capable of dealing with the licensing authority on a national basis.

I have just obtained a copy of your new magazine and am very interested in two articles, in particular 'Campaign for Real CB' and 'Ham & CB – will we ever get together?'

As a radio amateur of over 30 years standing I would like to deal with the second article first. It would appear that a lot of CB breakers have got a very large chip on the shoulder about the relationship between the CB fraternity and the RSGB amateur movement. It has to be put on record that if it were not for the vast amount of commercial 'black boxes' now available at quite low prices CB would never have got off the ground, because anybody seriously interested in radio communication would have either built their own equipment (at least the transmitter and possibly the receiver) or possibly modified ex-military or commercial gear to suit the amateur need.

In so doing, they would most probably have joined RSGB or one of the short wave listeners societies ie. BSWL or ISWL, and eventually obtained their amateur licence. In the view of many amateurs, CB operators have 'short circuited' the route to satisfactory radio communication by pretending to be DX operators in the amateur mode with, in the main, no qualifications whatsoever. I think that if CBers were content to remain as low power short distance novice operators and keeping strictly within their own allocated

ON THE SIDE

Please deliver On the Side every month.

Published by Knight & Forster, 129 Water Lane, Leeds LS11 9UB

Name

Address

.....

Please complete and hand to your Newsagent

Distribution by **Comag Ltd.** Tavistock Road, West Drayton, Middx.



frequency spectrums, there would be no problems.

I would, however, agree with you that at one time, particularly between the two wars, transmitting amateurs did I believe have the kind of image to which you refer on page 12 and it was of course very difficult at that time to obtain a full transmitting licence because of the very conservative views of the General Post Office. However it did mean that very high standards of technical knowledge and operating ability were maintained, which as you can imagine proved very useful to the country during the period 1939–45.

It may interest you to know that one of the main reasons for the reluctance of the Post Office to be too liberal in the issue of licences was their fear of loss of revenue to the telephone service. Judging by some of the conversations to be heard on 27MHz I don't think they were very far wrong!

As far as I am aware, the RSGB will never entertain any liaison with CB groups as such (and rightly so) in matters of radio communication administration as you seem to suggest as an hypothesis on page 13. Please remember that RSGB was fighting for better licence conditions for genuine radio experimenters over 60 years ago and of course still is, and will remain for the foreseeable future the only credible organisation capable of dealing with the licensing authority on a national basis.

With regard to your first article in connection with NATCOLCIBAR and the new Telecommunications Bill I am not surprised that the authorities are going to take a firmer hand in the manner described. It brings me back to my first comments about 'black boxes' being so freely available to unskilled people. There has to be proper control of the radio spectrum and by and large radio amateurs have always abided by the rules and maintained their own code of conduct on the amateur bands. I think and sincerely hope that genuine CB operators, should they wish to progress further in the hobby, will always be able to call upon licensed amateurs for help and advice.

**M. G. Pavely, G3GWD,
Beckenham, Kent.**

PS: You refer on page 29 (May issue) to the Ham RST code. I'm afraid that you are wrong in stating that Strength 5 appears to be the maximum signal strength report. The amateur code starts from S1 going up to S9 with most S meters calibrated to 40 or 50dB over S9. Strength 5 is only used by military and commercial operators to indicate maximum signal strength.

You are correct, of course, that Strength 5 is not the maximum signal strength report, although I did qualify that by saying that "These are part of the RST code." If we have misled readers, then we're sorry—editor.



***Compare and check our prices
Delivery by our own transport fleet to retailers throughout
the U.K.***

**433 WILMSLOW ROAD, WITTINGTON, MANCHESTER M20 9AF
Telephone 061-445 8918**

Q— codes

ON THE SIDE

This is the international code, used by the vast majority of those on two way radio, including amateur radio hams and long distance specialists, such as CB DX. Unlike the other codes, you can use the Q codes as questions, or answers. For example: QRL could mean either Are you busy, or I am busy. And so on. So, this is the international code, although there are several you shouldn't need to use, such as QUM, QUR and QUT . . .

QSO Communication with contact.
QSP I will relay message.
QSX Listen to (name) on channel . . .
QSY Change frequency.
QSZ Send each word more than once.
QTH Location.
QTJ What is your speed?
QTN What time was your departure?
QTR What is the correct time?
QTU What are the hours your station is open?
QTV Shall I stand by for you on channel . . .?
QTX Will you keep your station open for further info?
QUA What news of (name)?
QUD Did you get emergency signal from (name)?
QUF Did you receive distress signal from (name)?
QUM Is the distress signal finished?
QUO Shall I look for (name)?
QUR Information on survivors wanted.
QUS Have you spotted wreckage survivors?
QUT Is position of incident marked?
QRA Your station number?
QRB How far away are you?
QRD What's your destination and where do you come from?
QRE What's your ETA?
QRF Are you going back to . . .?
QRH The frequency varies.
QRL Are you busy?
QRM Interference from other stations?
QRN Natural interference
QRO Increase power from transmitter.
QRP Decrease power from transmitter.

QRQ Transmit at a faster rate.
QRS Transmit at a slower rate.
QRT Stopping transmission.
QRU Have you anything for me?
QRV Are you ready?
QRW Shall I tell (name) you're calling him on channel . . .?
QRX Stand by. Call back later.
QRZ Who is that calling me?
QSA Readability of message.
QSB Fading signal.
QSL Acknowledge receipt.
QSM Repeat the last message.
QSN Did you read me on channel?

Many Q codes, Morse, and other codes become abbreviated with use. They also become "informalised".

Such as these examples here.

QRM Interference from stations.
QRN Interference from atmospheric or nearby apparatus.
QRO High-power.
QRP Low-power.
QRT Close(d) down.
QRX Stand by.
QSB Fading.
QSL Verification card; confirm a contact.
QSO Radio contact.
QSY Change frequency.
QTH Location.

Transmitting or receiving

ON THE SIDE

Here you'll find the phonetic alphabet, information on how to pronounce the figures, along with the appropriate Morse equivalent, and details of how to tell someone their signal strength, readability and tone. They're all useful if you're copying a weak signal.

If somebody asks you: How are you receiving me? you should give them a strength number. These are part of the ham RST code.

Readability

- R1 – Unreadable.
- R2 – Barely readable, occasional words.
- R3 – Readable with difficulty.
- R4 – Readable with practically no difficulty.
- R5 – Readable.

Signal strength

- S1 – Faint, signals barely perceptible.
- S2 – Very weak signals.
- S3 – Weak signals.
- S4 – Fair signals.
- S5 – Fairly good signals.
- S6 – Good signals.
- S7 – Moderately strong signals.
- S8 – Strong signals.
- S9 – Extremely strong signals.

Tone

- T1 – Extremely rough hissing note.
- T2 – Very rough ac note.
- T3 – Rough, low-pitched ac note.
- T4 – Rather rough ac note.
- T5 – Musically modulated note.
- T6 – Modulated note, slight trace of whistle.
- T7 – Near dc note, smooth ripple.
- T8 – Good dc note, just a trace of ripple.
- T9 – Purest dc note.

CBI

Retail Department

PAMA

Wholesale Department

*The largest stock of C.B., Antenna and C.B.
Accessories in the U.K.*

433 WILMSLOW ROAD, WITHERINGTON, MANCHESTER M20 9AF
Telephone 061-445 8918

Cable: SHARMA

Telex: 665

**IMPORTERS &
WHOLESALE
DISTRIBUTORS**

**SHARMA
WHOLESALE**

OPEN: Mon.-Fri. 9.30am to 6.30pm



ES-880 IC Echo Chamber

**TWO OF C
OF EX
CB PR
AVAI
THRU
Y
LC
DEA**

EXTENSIVE RANGES OF C.B. EQUIPMENT

STRICTLY T

Distributors for:



HARMA

BETTER SERVICE THAN BEFORE. A comp

46 Sharma G

Telephone: 061-834 9571

MAN'S LESALE

3 BURY NEW ROAD,
MANCHESTER.
M8 8FW

Sunday 9.30am to 2.30pm

OUR RANGE
EXCLUSIVE
PRODUCTS
AVAILABLE
THROUGH
OUR
LOCAL
CB
DEALERS



SL 250 DX HF/Broad Band Linear Amplifier

IN STOCK AT THE BEST PRICES FOR YOU.

TRADE ONLY!

YARD®

MIDLAND
INTERNATIONAL



Complete delivery service – telephone for details.

Phonetic alphabet

ON THE SIDE

LETTER	PHONETIC	PRONOUNCED	MORSE
A	Alpha	Al-fah	— —
B	Bravo	Brah-voh	— — —
C	Charlie	Char-lee	— — —
D	Delta	Del-ta	— — —
E	Echo	Ek-koh	— — —
F	Foxtrot	Foxstrot	— — —
G	Golf	Golff	— — —
H	Hotel	Hoh-tell	— — —
I	India	In-dee-ah	— — —
J	Juliet	Jew-lee-ett	— — —
K	Kilo	Kee-loh	— — —
L	Lima	Lee-mah	— — —
M	Mike	Mike	— — —
N	November	No-vem-bah	— — —
O	Oscar	Oss-cah	— — —
P	Papa	Pa-pah	— — —
Q	Quebec	Keh-beck	— — —
R	Romeo	Ro-mee-oh	— — —
S	Sierra	See-air-rah	— — —
T	Tango	Tan-go	— — —
U	Uniform	Yew-nee-form	— — —
V	Victor	Vik-tor	— — —
W	Whisky	Wiss-kee	— — —
X	X-ray	Eks-ray	— — —
Y	Yankee	Yang-kee	— — —
Z	Zulu	Zoo-loo	— — —

Pronunciation of figures

0 – Zero. 1 – Wun. 2 – Too. 3 – Thurree. 4 – Fower. 5 – Fyve. 6 – Sicks. 7 – Sev-en. 8 – Ate. 9 – Niner. 10 – Wun-zero. 11 – Wun-wun. 500 – Fyve hundred.

Note: When describing a number, use the word “figure” and make sure similarly pronounced figures (ie, five, nine) are distinguished by the above recommended pronunciations.

Have you got a useless knob?

or how to make your "mike gain" actually do something

by Repairman

Many top-of-the-range CB rigs have a control marked "mic gain". However, this control often seems to be completely useless and what it does in actual fact, is turn down the mic. And what we all want to do is *turn up the output*, don't we?

Imagine how nice it would be if you operated your rig with the mic control turned up only half way, leaving all the extra gain on the control available for DXing.

Well now, it can be done, and all you need is a handful of components, and a little practice with a soldering iron. The following circuit can be described as a "power mic" then. However, most "power mics" tend to become muffled when they are turned up fully. The circuit contains a built-in "treble boost" to minimise this effect and add clarity to the modulation.

Fig. 1 shows the circuit for this unit, and with a little care it can be constructed on a board only two centimetres square, but for most rigs you can make it a lot bigger, and still fit it all in. All the parts to build this unit should be easily obtained at a "ham" radio shop; you will need four 0.25 watt resistors. When you get these you will find they have coloured stripes. These tell you how many ohms resistance they are. The four resistors with there colours are as follows:

1000 ohms (brown, black, red, gold)

2200 ohms (red, red, red, gold)

27000 ohms (red, violet, orange, gold)

100,000 ohms (brown, black, yellow, gold)

You also need four capacitors, but these have the values printed on them, so are not so difficult to identify.

You want:

Two: 0.01 microfarad 25 volt disc ceramic

One: 1 microfarad 35 volt tantalum

One: 22 microfarad 6.3 volt electrolytic

The transistor you want is a BC 109, which is a low noise audio transistor, ideal for use in microphone circuitry. The only remaining item is a piece of 0.1 inch type strip board, to mount the bits on. A piece two centimetres by four centimetres will give you plenty of room to fit it all on

Before you begin construction, take a good look inside your rig to see the method used to mount components. You may notice that there are two ways used for mounting resistors: either lay them flat on the board, or stand them up on one end. On this circuit all the resistors are stood up on one end, but it does not matter which way round a resistor is mounted.

Two of the capacitors, the 1 microfarad and the 22 microfarad are polarity-sensitive, and must only be fitted the correct way round. The 1 microfarad has a + mark near one of its wires, and the 22 microfarad has a - mark near one wire, the remaining two capacitors can go either way round. The only remaining part is the transistor and this has to be fitted as shown on fig. 2. Try not to use too much heat from the soldering iron on any of these parts, as they are easily damaged.

If you have not built anything before, it would be a good idea to buy more stripboard than you need, and practice soldering bits of wire to your spare board to get the hang of things.

Now to the construction. Refer to fig. 2 for component placement and for convenience a grid reference is used for the board, the holes on the board are numbered 1 to 14 from left to right, and vertically A to G from top to bottom. Take the 27000 ohm resistor, bend the lead at one end right back, so that you have both ends together. Fit the resistor on the board, between holes D1 and F1. Fit the 2200 ohm resistor in the same way between holes B2 and C2. Very carefully open the legs on the tantalum capacitor, so that it fits between D3 and G3 with the wire marked + at D3. It is best to grip the leads on this capacitor close to the body with a pair of long nose pliers or tweezers, and gently bend the other ends of the wires apart. Any attempt to just bend the wires apart, will probably crack the capacitor body, so take care.

Now fit the transistor in holes C5, E5 and D6 with the small lug on the transistor facing the tantalum capacitor. Fit the 1000 ohm resistor between E7 and F7. Fit a 0.01 microfarad capacitor between A8 and C8. Fit the other 0.01 microfarad capacitor between F9 and G11. Fit the remaining 100,000 ohm resistor between B10 and D10, and the remaining 22 microfarad capacitor between E12 and F12 with the wire marked " - " at F12.

Now all you have to do is fit the completed unit inside your rig, and for this you will need to know the microphone connections. For a Cybernet rig (an example) the mic live is

SUBSCRIPTION ORDER FORM



I would like to receive a copy of *On The Side* CB Club Magazine by post and enclose my personal subscription for the next 12 issues.

12 Issues
U.K. £12.50
Overseas £14.50
Air Mail £28.00

Cheques etc. payable to Knight & Forster

I enclose

Cheque	£
Postal Order	£
International	
Money Order	£

Please complete below in BLOCK CAPITALS

Name (Mr/Mrs/Miss/Ms)

Address

.....

.....**Postcode**

Signature**Date**

Cut out and post to *On The Side* 129 Water Lane, Leeds LS11 9UB.

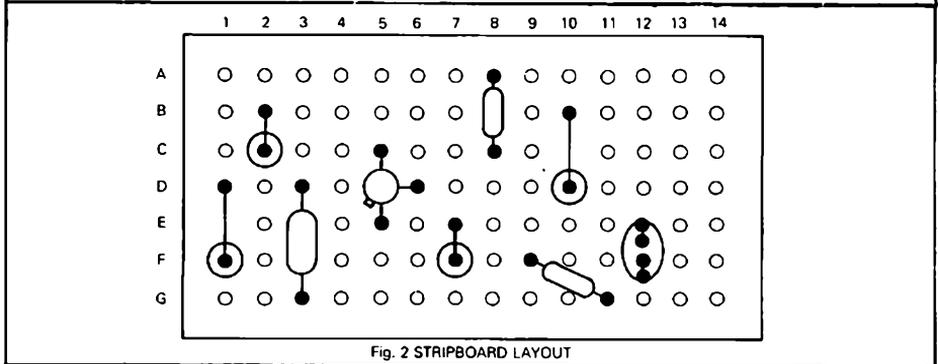
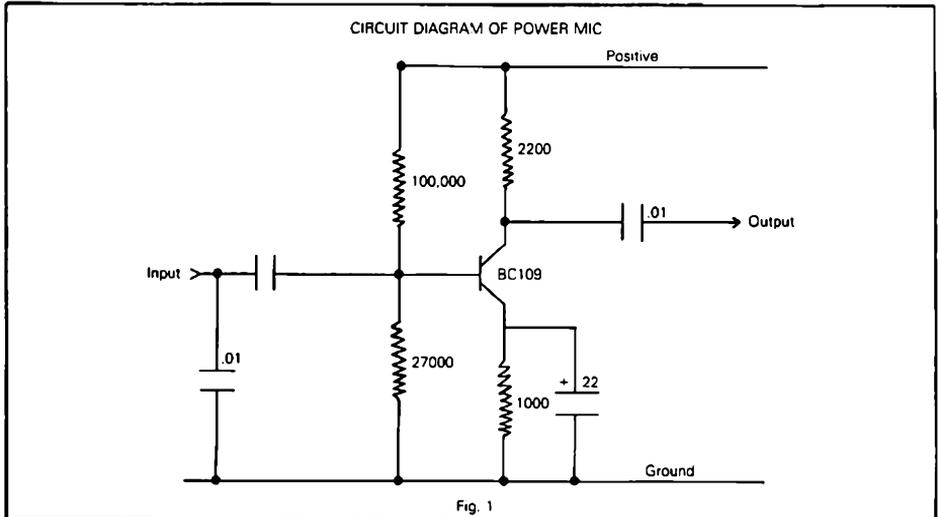
pin 1, and ground is pin 2. You will find a wire running from pin 1 on the mic socket, to the connections on the mic gain control. This wire might be "screened". That is, it might be a smaller version of your coax cable, or it could be an ordinary wire.

Having found the wire from the mic socket to the mic gain control, you will have to cut it. If it is a screened lead, carefully strip it, and solder both screens to F14. If not, take a short wire from F14 to the ground connection on your mic socket. Connect the wire that goes to the mic socket live to G14, and the wire that goes to the mic gain control to A14.

The only remaining connection is power for the board; connect a wire from B14 to a 12 volt point on your rig. If your rig is a mobile type, then the easiest place to pick up 12 volts is on the back of the on/off switch, usually a red wire. If it is a mains rig, look for the red and black wires going from the power supply board to the main board. The red wire should be the 12 volt positive, but if you are in any doubt seek qualified help.

The only remaining thing to do is fit your board inside the rig, when you do this make sure none of the connections on your board touch anything inside the CB rig. If you can't find a way to mount the board, try wrapping it in a polythene bag, or even put it in a matchbox. It may not look very pretty but at least it won't touch anything.

If you have difficulty obtaining the above parts, I understand that Equestrian Electronics, 3 Llugwy Road, Kinmel Bay, Rhyl, Clwyd will supply everything for £2 including postage, but only by mail order, no callers please for the above kits.





EQUIPMENT ANALYSIS

HARRIER CB

First of a series about CB equipment — from rigs to amplifiers, by our special consultant, Ray Pobgee. The first feature doubles as a basic introduction for newcomers to the CB hobby and as you'll notice our system is not to explain in long, technical detail what the equipment is all about, but to discuss handling, and impressions of the equipment reviewed.

When making comparisons between any number of items, or as is the case here, a single CB rig, it is necessary to state a base line from which all equipment can be judged.

For the first piece of equipment survey in this new series, I have chosen one of the most basic mobile transceivers on the CB market. It is a rig that fulfils a basic requirement operationally for the potential user. The Harrier CB, sold by the Dixon Group, can only be adjudged as a basic transmitter-receiver for mobile use.

The tests are all subjective — no 'professional' test equipment, signal generators, oscilloscopes etc. are used, but I have used methods that are used by every 'breaker' — the ears, eyes and fingers. The operational requirements revolve around a job necessitating long road journeys, and a second occupation closely associated with rallying or other motor sport. The needs therefore are working with other mobiles and home bases seeking:

- (1) Road and traffic information
- (2) Road conditions.
- (3) Weather conditions.
- (4) Receiving and transmitting accident information.

In the motor sport area, all of these are used, but the equipment is virtually a home base on a rally stage that may be half way up a mountain, in a quarry or forest, and often in diabolical weather conditions!

Simplicity is the keynote

The Harrier has fulfilled all of these requirements without complaint; simplicity is the rig's keynote. When driving fast, and on one's own, the road ahead needs the driver's full attention; the most sophisticated control on the rig is the squelch, so the driver's concentration is not constantly distracted by the need to operate switches — other auxiliary controls or flashing attention-getters. A quick glance at the illuminated S/Rf gain meter or at the clear LED channel display assures the operator that all is well. The front of the set also houses an on/off switch volume control, and the one luxury I could do without, a small indicator that tells me I have the press-to-transmit button closed. The set houses a built-in speaker that has quite a crisp, clear sound. An extension speaker socket is provided on

the rear of the set. In the car I found that the internal speaker provides about 1.5 watts output and there is no need to go to the hassle of reaching round the back of the set to push home a jack plug and fit an external speaker. The built-in speaker provides adequate volume under all normal road and driving conditions.

Modulation is more than reasonable. Quality, of course, is dependent upon so many variables, range of receiver from transmitter, microphone and even the weather and car position. Certainly I have not had 10-9 called, although I have worked the equipment under very variable conditions. Rain, heat and cold have not affected it. The equipment specification talks about an operating range of -5°C to $+45^{\circ}\text{C}$, although in this country the lower level could be expected externally. Within a car it is unlikely. And if it reaches $+45^{\circ}\text{C}$ in your car (that's about 100°F), sun bathing would be more appropriate than breaking. I have found no problem in transmitting from the Harrier over ranges of up to nine miles.

A dynamic microphone is supplied. It is good and strong, comfortable to hold with a nice PTT switch on the side. It connects to the left hand side of the rig by means of a four-pin, self-locating plug with screw ring. The microphone is black plastic, the rig black stove-enamel finish.



Operational

The clear LED channel display is easy to read in most circumstances. Only when high intensity lights or direct sunlight hits the front of the equipment does it prove difficult. I found it took next to no time to find and remember the correct switch position on the channel change switch for channels 19 and 09, a refinement could be to mark the knob and put a spot on the front face of the transceiver if you have any difficulties. See page 48. From 19 and 09 I generally find I count clicks to get any of the other 38 channels available. The equipment does suffer from bleedover in some circumstances, extending two channels either side of the selected one. This is a drawback and could be due to the sensitivity of the set, which seems to be high. There could be some considerable differences between individual sets on this score.

Both transmission and reception could be affected by the choice of antenna; for the equipment under survey, the Harrier magnetic base antenna was selected because of its convenience. For general running it is fitted to the rear of the boot on the offside of the car. It is steady at speeds considerably in excess of the legal limit. The makers suggest 100mph but take my word for it when I tell you "and a bit more besides". As a base station the antenna is moved to the car roof. I found difficulty setting the SWR for the antenna; the directions (provided with the equipment and the SWR meter) suggest that: "Performance may be peaked by slightly adjusting the length (1/8" to 1/4") using the SWR meter". I tried, but the antenna is a steel wire held in place with an allen screw at the base. Try cutting steel wire of that thickness! You will need to use your Bullworker first, and even then you are more likely to take chips out of the cutting face of the tool. It is no easier to cut with a small hacksaw. On reflection I suggest it is better to fit an adjustable twig, but bear in mind that SWR is affected by frequency. In other words if you set the SWR in mid-band, say channel 20, the odds are that it will be substantially incorrect at each end. The antenna is connected to the rear of the transceiver by a SO-239 coaxial connector accepting a PL259 plug.

The rear of the rig is also the location of DC power socket by means of a two-pin non-reversible plug which is provided complete with a cable and 2amp in-line fuse and fuseholder. The external speaker jack accepts a 3.5mm plug and the usual RF attenuator switch. The equipment, of course, is built within the Home Office specification of CB 27/81.

Fitting

We fitted the Harrier into an Escort RS2000, a representative vehicle. The rig comes complete in a box with comprehensive fitting instructions, diagrams and the brackets with screws. We were delighted to find the only tools required were a drill or something to make four small holes to accept self-tapping screws, a pair of pliers, screwdriver and some cable joiners. A bulb or test meter could be useful and the whole job takes less than an hour. One tip not in the instruction leaflet; locate your power source preferably on the ignition switch and choose a position that requires you to turn on the ignition. You won't then leave the set on all night (and all day) when you jump out of the car. Consumption is, on average, about 1.3amp so it could flatten your battery overnight.

Check the polarity of the supply and your rig to make sure they are compatible. Disconnect the battery before carrying out any wiring alterations and additions. It can save you the cost of a new loom! On completion of the wiring, check again with a bulb for correct functioning of the power supply after reconnecting the battery, but before you install the equipment. If you have made a mistake it may cost you a fuse or a piece of wire, but not the rig or loom. Ensure your earth is a good one.

Decide where you are going to fit your antenna. If you intend to make it a permanent fixture, stick a piece of masking tape in place on the surface where you intend to drill. This will help prevent skidding your drill across the paintwork. Run the lead through to the

equipment, avoiding areas of electrical activity, ie avoid the alternator, relays etc.

Once the bracket is fitted, the rig is put into place by two knurled screws. It is virtually on its own antivibration mounting and is stable when fitted.

Conclusion

The Harrier is a basic transceiver that fulfils a requirement for a cheap, reliable and easy-to-operate rig for the mobile enthusiast. It has a comprehensive specification, no frills and apart from some bleed-over, no vices. Price is all-important and you will have to go a long way to beat this one. Dixon's price is £29.95 for the basic transceiver.

Nominal specification

General

Channels:	40 digital PPL synthesised.
Frequency range:	27.60125 MHz (1) – 27.99125 MHz (40) 0.01 MHz separation.
Operating temperature range:	–5°C to +45°C
Power source (DC):	10.8v to 15.6v Reversible ground. (13.2v DC nominal).
Current drain:	Transmit 1.5a (nominal) Receive 1.2a (nominal)
Dimensions:	Width 162mm — Height 55mm Depth 201mm

Transmitter

Emission:	6F3 (FM)
RF power:	4w
Frequency tolerances:	Greater than ± 1.5 kHz.
RF power attenuation:	Less than 10dB
Frequency response:	500 to 2500Hz
Frequency deviation:	Less than ± 1.5 kHz at 1,250Hz audio
Adjacent channel power:	Greater than 10 microwatt

Receiver

Dual conversion:	Superheterodyne
IF 1st	10.7MHz
IF 2nd	455kHz
Channel display:	Digital 7 segment LEDs
Audio output:	Less than 1.5w into 8 ohm
Sensitivity:	Greater than 1 microvolt at 20dB signal/noise.
Adjacent channel rejection:	Less than 40dB
Squelch sensitivity:	1 to 10 microvolt.

DXing... WE

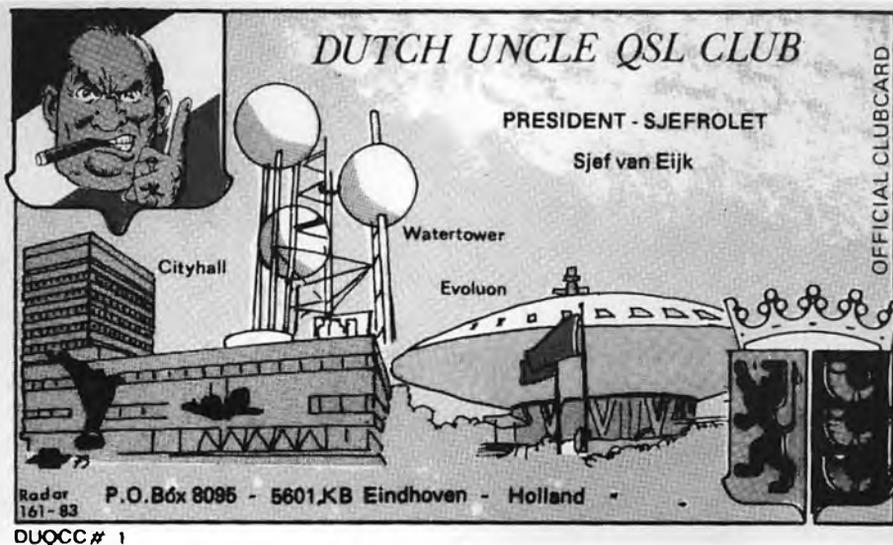
Hi there again and welcome to the one of the most controversial columns on DX and QSL printed, after this article it will be anyway. Many thanks also for all the cards and letters that have been coming in. I will try to answer you all as quick as I can, but I must ask you to include a SAE for a quicker reply.

Now some of you are writing asking if I have changed my name, because QSL cards of the Duke are being received with Colin signed on them. Well just to put the record straight, as you know, last month I announced that I had handed the Big Ben QSL Club over to Colin Light which included all my QSL cards. This was simply because the cards had "President of BB" on them. However, Colin is known as the Decorator and obviously that is where the confusion lies. However, I am having new full six colour cards being made and will send them off when they

arrive.

Sjef, Dutch Uncle no. 1 from Eindhoven has promised me an up to date report on the QSL scene in Holland and the rest of Europe so that should make interesting reading. Also an American friend of mine has promised me news and views on the States side from New York. So *On The Side* has roving reporters all over the place.

Before I get to some letters, lets finish the How to DX and QSL section. So far we have covered setting up station, and a rough guide to DXing. Now we come to QSLing which is very important. First of all you will have to decide on a good QSL card because when QSLing abroad you will receive cards from not bad to absolutely brilliant cards. Have a card designed for you by a friend or local artist, include details like AM/FM Handle call sign, and home address. You should have an idea



QSL, YOU QSL

from cards you have received. If you belong to any well known QSL clubs then include your Club call signs as well. Then send your design off to a reputable QSL Card designer. Someone like PA PA Bravo QSL Club or Happy Cobblers QSL Club will print your cards in full colour for around £40 per 1,000. This includes full artwork, printing and postage. Also you might like to try having your cards made abroad, like the USA or Europe. Let me know and I'll send details with addresses to you. Having now got your cards, you will be ready to fill one in to either confirm QSO or just swap. On the back of your card is printed a layout to fill in. It is quite simple just put who it is to and of course use the date. Add details of your working conditions and if it is confirmed QSO, then time and what frequency or channel you were on. Advise also whether base or

mobile. Underline, ring or tick the "Please QSL" part and add some polite exchange of greetings. If it is your first QSO abroad, then also state this as you may be in for a pleasant surprise, but don't quote me!! If just swapping, state how you got the address or card you are QSLing and in both cases sign the card.

There are a few points that I would suggest you remember, when QSLing.

1. Don't keep people waiting for QSL cards. You wouldn't like it.
2. If you receive mail first class, return the same.
3. Always send more than one card, your extras will be passed on to other QSLers to QSL you.
4. When joining clubs, ALWAYS sign, date and ensure your address is on the card. Saves the club President or Secretary doing it for you.



DXing...WE QSL, YOU QSL

5. When QSLing to P.O. Box Nos. abroad, never use CB Station or personal name on envelope. Some countries just return the mail.

Please remember these tips are only hints on QSLing and nothing official. I am sure you will find your own methods as you go on. It is worth noting, if you belong to any major QSL club that uses a rubber stamp then stamp your cards and put your unit no., some clubs offer awards if a QSO is confirmed between two stations at home and abroad.

If you decide to swap souvenirs abroad, i.e. spoons, key rings, post cards, stamps or whatever, then when sending use a custom declaration form on the envelope stating you are sending a gift. They are free from all post offices and saves your package being opened. Anyway that is roughly about it on tips for DXing and QSLing, but if you want a copy of these

tips along with a selection of QSL cards then drop me a 20p stamp along to the address at end of article.

Now to your letters. Had a query in from Adrian Hall from Windsor who asks "I am using a 200 watt linear, is it illegal and how far can I get?" Good one Adrian, CB Handle Guitar Man. Well, first of all, owning a burner or linear is not illegal, but using one no matter what the power is a different story altogether. You see the authorities in their wisdom decided when legalising CB to recommend an output of only 4 watts of power on a CB. It is an offence to use a linear for the purpose of DXing or anything else. And you are liable to confiscation of your burner plus a fine of up to £400 if caught. So my advice is yes they are good for getting out but that brings us to part two of your problem Adrian. You will only get as far as your antenna allows you and of course you

GREETINGS from: **RHEIN MAIN SIDEBANDERS**
KFW 9445 SSB 349A **GERMANY** KBLL 6250 SSB 0481



RMS #245 Pat - Vice Pres.
5330 Goslen Rd.
Ft. Wayne, Ind. 46818

RMS #1 Jerry - Pres.
FMC TMP 1 Box 43
APO 09710, N.Y.

SUN DOWN
PHOTO SERIES
#4982

SUNDOWN PHOTO SERIES • STAR RT BOX 251 • SPIRIT LAKE, ID 83869

will need some good skip to go really long distance. Providing you have the right equipment there is no real reason why you shouldn't make stateside and even Australia providing conditions are O.K. Unfortunately you never said what antenna you are using but regardless of what sort of make always check your SWR meter against the rig. As you know, above $\frac{1}{2}$ and you could blow a rig's output transistor. In the near future, Adrian, why not send me your first QSL from your QSO's, it will make interesting reading.

Dermot Ryan of 7 Meadow Court, Mullingar, County Westmeath, Ireland, asks quite simply would I include his address for people to QSL to as he is coming over to England later this year and would like to visit some English QSLers. Over to you.

Colin Matthews of 47, Rickhayes, Wincanton, Somerset BA9 9BJ sent in his homemade card asking for comments. Well Colin, er, what can I say. I suppose something like, haven't received a card like that before would help. You see, I am dead against homemade QSL cards and always have felt that making the effort to have them printed will result in a good response from people wanting extras.

Perhaps, Colin, you could fill in more of the card by adding maybe another plane being shot down and put a Union Jack somewhere. Also a signature and date on the back wouldn't go amiss. Anyway, I have included your card along with this month's selection.

Highwayman or Linda Beveridge at 29 Sheardale Drive, Coalsnaughton, By Tilli-coultry, Clacks., Scotland FK13 6LN must qualify for the longest address award. She just wants loads and loads of QSL's sent to her and promises to return hers on receipt. Linda, could you write again and explain why you are the HighwayMAN!! Puzzles me.

Mr. D.J. Lloyd (no relation to my bank) from Herefordshire wonders why he can only receive on his Tristar 777 and can't get back. Well, Dennis, it could have something to do with where your house is situated. If you have hills around you, then your signal will not travel quite so far. Certainly the GPA27 should have no problems but perhaps you might consider switching to a beam antenna.

Dave, 1E08 of PO Box 69, Walsall WS3 2BN just wants everyone to know he is a 100% QSLer and will answer all mail

87MH₂ FM

73's & 51's



Colin Matthews,
47, Rickhayes,
Wincanton,
Somerset BA9 9BJ.

QSL

DXing...WE QSL, YOU QSL

received via *On The Side*. However, I am not sure if Dave has a QSL card because he forgot to send it to me. Oh well, never mind.

Roger EK 91 of PO Box 81, Canterbury, Kent just had to get a mention. Just look at his QSL card! Printed by CBC Club Lexington NC 27292 USA. This is a full colour QSL card and well worth adding to your collection. I certainly am pleased to have one. This brings me on nicely to the QSL card of the month award. Each month I will be giving away a rubber stamp incorporating *On The Side* mag. to the person I consider to have the best card, as well as that card printed in the mag. All you have to do is send in your card, not artwork or just a drawing, but a finished product that you actually QSL

with. The winner will also receive a free copy of *On The Side* mag. with our compliments, so start sending them in. I must say, they have to be personal QSL cards and not club cards.

Now for my dig of the month, this is where after a month of nagging from the wife and having to work a 25hr day without a tea break and pay the boss for the privilege, I get my own back on someone. First of all, why do people send out all those thousands of name and address labels with please QSL for regular card. It beats me why people don't just send a QSL card in the first place. Please don't send any more labels to me, I have already had to black my goldfish's eye for laughing at me. As far as I am concerned those labels are only good enough for keeping

EK-91

ROGER

P. O. BOX 81

CANTERBURY, KENT

CT1-2XG ENGLAND

'THE BATTLESHIP'



QSL GREETINGS FROM KENT 'THE GARDEN OF ENGLAND'

DX-QSL CLUB FUTURE

#1 President
RADAR
Jan J. Kruizinga
P.O. Box 411
3130 AK Vlaardingen
The Netherlands



Radar 15/8/82

OFFICIAL CLUBCARD QSL DEPT.

DFCC #1

the backs of envelopes stuck down. Anyone gonna dig back??

Secondly, what has happened to that great, bril, terrific British Concorde QSL Club. Yes, the club who promises to QSL quicker than the airplane. They don't even answer any letters that are sent. Even after a recorded delivery. Julie and Sally Newbold, President and Vice-President,

are daughter and mother respectively. Julie is only 15 and her mum a housewife with a club that a chap called Medic man decided to get going. Now, after two years, I can quote Sally once saying to me over a phone conversation how she wished it never got started in the first place. It would appear that interest is not there anymore as you will see from the club package. It is the same as the first day, the pack mainly explains how wonderful BC is with news, that regular newsletters and updated rosters would be sent every 3 months. This never materialised yet they advertise. Sorry Sally, Julie, this is a club that I am advising QSLers to steer well clear of. If you want to say anything please contact me here or via *On The Side*. I am sure your letter will be printed in full.

Well folks thats about it for now, except to say, stay lucky and good QSLing. Thanks for all your letters, especially from those of you sending their best wishes regarding Big Ben QSL Club. Some of the things you said were very touching, I just hope you will give the new President all the support you gave me, SNIFF SNIFF.

Hey did you hear Andrex are making QSL cards for the Argies.

Ta Ra

Duke 001

WE QSL YOU QSL.
PO Box 14,
Godalming, Surrey.

433 WILMSLOW ROAD, WITTINGTON, MANCHESTER M20 9AF

FOR SERVICE AND REPAIRS

Delivery service to retailers by our own fleet of transport

CB1

Retail Department

PAMA

Wholesale Department

Telephone 061-445 8918

Analysis of a "Bust"

Sam Smeeton, a 19-year-old from Chorley, Lancs, pleaded not guilty to the charge of using illegal CB gear. This is how he got on in, and out of, court.

Say "nowt" — that's the message, says Zeppelin.

Many breakers who are in the unfortunate position of finding a summons drop through the door for illegal use of CB radio, just don't know who or where to turn to. The majority of CB clubs these days seem to be under the impression that a CB club's role in CB is simply to try and teach their members how to trip the light fantastic at the local eyeball each week.

The procedure is not hard to understand. Firstly, you should by now (if you have been reading *On The Side*) realise that the majority of Cbers who end up in court are there because they said too much in the first place. My friend and colleague Steve Donohue has pointed this out in the previous issues of *On The Side*. The message is in broad Lancashire terms: say "NOWT". I will give you some good advice from the Law Society and the solicitors with which I work with concerning WT offences.

J. S. Sierzant of Chorley, Lancs, sums it up when replying to Jim Leight, and I can assure you that statement comes from previous experience in dealing in WT cases.

OK a little bit about Legal Aid. Firstly it is very difficult to obtain aid for the magistrates court, so the best and first line of defence is simply go into the mags court and represent yourself. Sit down and listen to what the prosecution are saying; about what happened on the day; then at the right time, if you said nowt you should be able to stand and address the bench saying something like: "**The law in this country is quite precise and it is up to the prosecution to prove that the set was installed and that I used it.**" And if you said nowt there should be no case to answer. If it's more difficult than that don't admit to anything, as you should be thinking about the appeal in Crown by then and Legal Aid is easier to get for Crown. You can always contact myself, or Steve, and we will advise you to the best of our ability.

LEGAL AID

Have you got a legal problem? Are you putting off going to a solicitor for fear of running up a huge bill? Even if you're earning the average wage, your chances of getting legal aid are good, though your savings are taken into account. A list of legal aid firms in your area will be in your library, town hall or Citizens Advice Bureau. Your solicitor should be able to tell you straight away whether you qualify for legal aid and assistance, also known as the green form scheme. He'll ask you for details of your earnings and your wife's (or husband's) earnings, unless you're living apart or seeking advice on marriage problems, your tax and national insurance, and an allowance for each dependant will be subtracted from your gross pay.

If the nett total is less than £40 you'll get free advice and assistance; between £40 and £85, you'll have to contribute something towards the cost of his help; over £85 (or with savings of more than £600) you won't be eligible. But even if you're too well off to make use of the green form, going to a solicitor needn't cost you a fortune.

For a fixed fee of not more than £5 (including VAT) you can buy up to half an hour of a solicitor's time — enough to get general advice about your rights or to discover whether your problem is a legal one, and if so, what can be done about it. The fixed fee is offered by about 85 percent of legal aid firms, and it's not a means test.

HOW IT ALL BEGAN... SAM SMEETON, 19-YEAR-OLD FROM CHORLEY, LANCS —

"At around lunchtime, a knock came to the front door and when I went to answer it I found

two men on the step. They identified themselves as Home Office Officials and told me they had come in answer to a complaint from my neighbour of TVI caused through my CB radio. They asked could they inspect the set.

"I invited them in and offered them a cup of tea, which they refused, saying they had already had tea with the neighbours. As I had been in the process of clearing out my wardrobe, I asked if I could just slip upstairs to clear the bedroom floor. They agreed and I showed them to the lounge for a few minutes. I went back to my room and picked up the bundle of clothing and pushed it roughly back into the wardrobe; I popped into my mother's room to tell her they were at the house. I then ran back down to the men and showed them to my room. I had only left them for about two or three minutes at the most.

"The men accompanied me to my room and the conversation went as follows:

Home Office: "Where is your Transceiver?"

Sam Smeeton: "Here, on my bedside table."

Home Office: "Do you have a licence?"

Sam Smeeton: "Yes, it's downstairs."

Home Office: "Will you get it please?"

I went down and brought the licence up and showed it to the men.

Home Office: "What kind of antenna do you use?"

Sam Smeeton: "A B27 with a GP4 ground plane."

Home Office: "Is this the only transceiver you have?"

Sam Smeeton: "Yes."

Home Office: "Where is your AM transceiver?"

Sam Smeeton: "What AM transceiver?"

Home Office: "The one you were using for the past few months or so."

Sam Smeeton: "I did have one in the past, but I no longer have it."

Home Office: "Where is it now?"

Sam Smeeton: "I hadn't used it for a while so I sold it."

Home Office: "When did you start to use the earlier set?"

Sam Smeeton: "When I first got it."

Home Office: "When did you get it?"

Sam Smeeton: "About 18 months ago."

Home Office: "When did you last use it?"

Sam Smeeton: "I last used it about three weeks ago, but that was only to sell it. I had to sell it to afford the new set."

Home Office: "Who did you sell it to?"

Sam Smeeton: "I don't know the man's name."

Home Office: "How much did you sell it for?"

Sam Smeeton: "£20"

Home Office: "What kind of set was it?"

Sam Smeeton: "A Tiger 40A"

CB1

Retail Department

PAMA

Wholesale Department

We have the **EXPERTISE - KNOWLEDGE - CAPABILITY**
and the largest CB, Antenna and CB accessory range in the
U.K.

433 WILMSLOW ROAD, WITHINGTON, MANCHESTER M20 9AF
Telephone 061-445 8918

Home Office: "How many channels did it have?"
Sam Smeeton: "40"
Home Office: "How many did you use?"
Sam Smeeton: "All of them."

At this point I realised I still had the empty Tiger box in my cupboard and, thinking the men might see it and think there was a radio inside, I said: "I still have the old box here," taking it down and handing it to them.

Home Office: "If you sold the set, why didn't the box go with it?"
Sam Smeeton: "I couldn't find the box when I sold the set. I found it later."
Home Office: "What were you doing in your room alone before you showed us up?"
Sam Smeeton: "I was tidying my floor. I told you. Look these were on the floor when you knocked" (I opened the door of my wardrobe and showed the men I had bundled the clothing quickly inside) "I did ask you if I could tidy the floor and you agreed."

Home Office: "You do realise we can get a search warrant?"
Sam Smeeton: "Yes I know, but you are quite welcome to search the house here and now if you wish. I promise you there is no other rig here."

The men declined. At this point the men asked me to allow about five minutes, then start "To key the mike" to enable them to sort out the problems with next door's TV set. Then, just as they were leaving.

Home Office: "Think about something while we're gone. If you give us your old set now, we will take it away with us and you have our promise you will have no charges brought against you, but if you don't give it to us we may take you to court and things will take their course from there."

Sam Smeeton: "How can I give you my old rig if I don't have one, and I promise you I haven't." The men then left.

After a few minutes I started keying the mike as requested and after a further five minutes or so they came back and told me the trouble had been sorted out and the TVI stopped. Then the men went to their car and drove away.

Toward the end of their visit, the men had cautioned me, telling me that anything I said could be used in evidence against me. They then asked me if I would like to make a statement. Because by this time I was a bit worried about their attitude (they didn't seem to believe anything I said about the sale of my old set) I thought it better to say nothing else at all, so I merely answered: NO I DON'T THINK SO."

THE COURT CASE

Mr. R. Jampson, Technical Adviser, opened with a brief, but to-the-point speech. He said the investigators were out on routine investigations in the Scorfell area of Chorley, following up complaints of TVI.

SAM SMEETON APPEARS

Magistrate: "Are you S. Smeeton, of 12 Scorfell Road., Chorley?"
Sam Smeeton: "Yes."
Magistrate: "What is your date of birth Mr Smeeton?"
Sam Smeeton: "29.9.64."
Magistrate: "The charge against you is that you from the 1st July to 25th November used apparatus not within and not under accordance with the WT Act of 1949. Do you fully understand the charge?"
Sam Smeeton: "Yes."

Magistrate: "And how do you plead?"
Sam Smeeton: "Not guilty."
Magistrate: "Please take a seat Mr Smeeton."

INVESTIGATING OFFICERS QUESTIONED

R. Jampson: "Would you please tell the court your full name, then tell them what happened when you visited the home of the accused."
A. D. Clayton (I.O.): "My name is Alan David Clayton, of Moor Lane, Preston. May I refer to my notes please?"
"On Thursday 25th November 1982, while carrying out routine duty in the Chorley area, we visited the premises of the defendant. We showed our ID cards. We were invited into the lounge and asked to wait there while Mr. Smeeton went upstairs to tidy up his room. We were kept waiting for four or five minutes, in which time we believed the defendant to be possibly removing an AM-type transceiver.
"We were shown upstairs and viewed a legal set that was in accordance with the licence provisions; we asked Smeeton if he had a licence for the set which he produced. We inspected the licence and found it to be in order. We also found an AM cardboard box for a Tiger straight 40 set. I started to ask Smeeton questions.
"What is your full name?"
Sam Smeeton: "S. C. G. Smeeton."
Clayton: "What is your date of birth?"
Sam Smeeton: "29.9.64."
Clayton: "Is this the only set you have?"
Sam Smeeton: "I used to have an AM set which I sold. I only use this one now."
Clayton: "When did you first get the set?"
Sam Smeeton: "About 18 months ago."
Clayton: "When did you last use the set?"
Sam Smeeton: "About three weeks ago."
Clayton: "Have you got a callsign?"
Sam Smeeton: "Yes."
Clayton: "What is your callsign?"
Sam Smeeton: "Sambo."
Clayton: "What happened to the set?"
Sam Smeeton: "I sold it."
Clayton: "How much for?"
Sam Smeeton: "£20."
Clayton: "I cautioned him and then myself and Mr Philips (the second officer) left about 12.15pm."

SOLICITOR J. SIERZANT CROSS-QUESTIONS MR CLAYTON

Sierzant: "How did you come to visit the house?"
Clayton: "We visited the house because of TV1."
Sierzant: "Yes, but how did you know which house to go to?"
Clayton: "Because of the distinctive type aerial used by AM stations."
Sierzant: "Oh, so the aerial is the type that can only be used on AM?"
Clayton: "Well no. It can be used for both."
Sierzant: "So therefore it really can't be classed as being a distinctive type."
Clayton: "Yes, because it doesn't comply with licencing provisions."
Sierzant: "But that is not the reason you went there, is it?"
Clayton: "No."

Sierzant: "So would you agree the aerial could be used also for FM as well as AM?"

Clayton: "Yes, I would."

Sierzant: "Thank you. What did you say when you rang the bell and someone answered the door?"

Clayton: "I said good morning. We're from the Radio Investigating Services, and have come to inspect the CB station. Then I showed my ID card."

Sierzant: "Tell the court what kind of CB you inspected."

Clayton: "After being made to wait we inspected an FM set."

Sierzant: "Is this one of the legal ones?"

Clayton: "Yes."

Sierzant: "Did you ever see an illegal set?"

Clayton: "No we did not."

Sierzant: "Did you say you went there because of an interference problem?"

Clayton: "Yes."

Sierzant: "What kind of problem was it?"

Clayton: "TVI."

Sierzant: "Tell the court, do FM sets cause interference?"

Clayton: "Yes."

Sierzant: "Therefore the TVI could have been coming from the FM set."

Clayton: "No."

Sierzant: "But you just said FM sets also cause TVI didn't you?"

Clayton: "Yes, but not this type of TVI."

Sierzant: "Did you see the TV that was getting the interference?"

Clayton: "No. I was told about it."

Sierzant: "So therefore it was hearsay."

Clayton: "Yes."

Sierzant: "Well I am sorry but we're not here to discuss hearsay. Just proof that is concrete. Can you prove it?"

Clayton: "No I can't."

Sierzant: "I have here the cardboard box they refer to. Mr. Clayton, will you please examine the box and tell the court if it's the same box."

Clayton: "It looks like the same box, but I can't be sure of it."

Sierzant: "You can't be sure of it. Have another good look Mr. Clayton."

Clayton: "Yes, I think it's the same box."

Sierzant: "Does it say, anywhere on that box, anything about it being an AM transceiver?"

Clayton: "No but it does say 'Tiger 40A', and the A probably stands for amplitude."

Sierzant: "Is it also possible the A stands for some sort of series or serial for instance. Do you know that they haven't made a Tiger 40B, or a 40C?"

Clayton: "Yes it is possible they could have made a Tiger 40B or 40C."

Sierzant: "Is it also possible that Tiger 40A is a box for an FM set?"

Clayton: "Yes, I suppose that is also possible."

Sierzant: "And you have no evidence or proof to suggest otherwise?"

Clayton: "No, I have not."

Sierzant: "And you have not even contacted the manufacturers to gain the necessary proof or evidence."

Clayton: "No I have not."

Sierzant rises to address the court, not wishing to question Mr. Philips, and submits that there is no case to answer due to there not being any evidence or proof against his client.

The magistrates retire and after about 10 minutes, return saying: Samuel Smeeton, we find there is a case against you to answer, and we will hear the case.

J. S. SIERZANT ADDRESSES THE MAGISTRATES

Sierzant: "The law in this country is quite precise, and whilst I do not intend to try and tell the court how it should be carried out, I must make strong protest to the point of there being no proof or evidence. It is up to the prosecution to submit that evidence or proof so that the court can make judgement based upon it.

"I do not propose to call my client as it is not necessary to do so. As you have heard, my client did admit the use of the so-called illegal set that has never been seen. My client is not a radio expert and must not be looked upon as one. He does not understand the valves, frequencies and millions of wires that go together to make a set. I feel that because of an admission at a time when he was under pressure, my client is the victim of modern day technology.

"What I am trying to say is, just because somebody said something about sophisticated equipment which is what we're dealing with in this case, it's taken for granted they know what they're talking about when they're not qualified to do so. It's up to the prosecution to find the proof or evidence to convict my client and they have none. They also have no proof about TVI; just hearsay.

"They have no proof about the box, and have not tried to gain any; they admit it could be an FM box. Also they admit it could be FM interference. If there is any doubt whatsoever in your minds, and it is not 100 percent concrete, then there should be no case to answer. And should you find there is a case, we plead mitigating circumstances."

THE VERDICT

The magistrate asks the prosecution: Are there any claims for costs? Reply: Yes, costs of £66.

The magistrates retire and return after being out for 20 minutes or so and then say: Samuel Smeeton, we find the case against you proven, and find you guilty.

The fine: £20

Costs: £10

Total: £30

Payable at £2 per week

COMMENT BY "ZEPPELIN" — WHO ATTENDED THE COURT TO REPORT THE CASE

The solicitor appointed, in my opinion, was first class and worked hard to establish the fact that there was no proof or evidence to convict Sammy of the charge brought against him. But once again, as in so many cases in the past, I feel the outcome was more political than British justice, solely because of the fact we are fighting the system.

One interesting point did emerge and that is: If it is not a crime to be in possession of an AM rig, then surely the box is irrelevant. Remember, don't be caught like Sammy. Keep 10-7 (no comment). It would seem they only need that admission from you.

**For the BEST C.B. products at the BEST prices
With delivery and excellent back-up service.**



**433 WILMSLOW ROAD, WITHINGTON, MANCHESTER M20 9AF
Telephone 061-445 8918**

COPYING THE MAIL

continued from page 9

NICE MONITORS!

I want to comment on the item in your June issue headed "Grassing on your Friends".

This organisation is not a new one in South Wales, just one that has not had much success with breakers — because your headline is correct, and not many breakers like "Buzby super-grass". I know that bucket-mouths are a problem, but this sort of organisation is not the answer. Mind, until Natcolcibar can persuade the Home Office to do something about it legally, I don't know what the answer is.

But I can tell you now, that if someone from an organisation such as the one mentioned, called at my house telling me — or "advising" as they put it — they would go away with more than they bargained for. By the way, it is not only FM breakers breaking licencing rules that are "shopped", it's AM breakers as well.

Most monitoring organisations have an excellent reputation for helping persons in distress or in need — this one unfortunately has given monitoring a very bad name among breakers in South Wales, and is something CB can do without.

Keep up the good work. The mag. is fab!

**Peggy Sue
Mrs. Peggy Tapper
38 Amroth Walk,
St. Dials, Cwmbran,
Gwent.**

PS: I bet you don't print this.

See? — Ed.

LANGLEY CB ASSOCIATION

Following the closure of a local pub used as an Eyeball Club, Lemon Hart and Dennis the Menace formed the LCBA last October, and found premises in Langley, Slough to provide a social centre for local breakers.

Members must be over 21, although younger breakers (including children) are welcome as guests of members. There is

an annual fee of £2, with a weekly admission charge of 50 pence (guests 75p, children 25p), which includes unlimited free tea, coffee and squash, and usually cakes or biscuits as well. In addition hot pies etc. are sold. We cannot sell drinks, but members may bring their own. Music is provided on tape, and the facilities include darts, pool, table football, table tennis and space invaders, with lots of table games like chess, draughts, cards, mastermind etc., and there is a large collection of assorted magazines which members may borrow. A weekly raffle is also held, and club members can use the club address for QSL cards.

Last year two day trips to France were run, and a dance was held at Xmas, where for the admission charge, unlimited beer, tea, coffee, squash and food was provided and over twenty gifts were handed out. A charity raffle was held which raised £44, and this sum together with the prizes (which were donated by the winners) was handed to the children's ward at Wexham Park Hospital. We also compiled a 16 page year book for each member.

Already this year, events have included a convoy to the New Forest in January, a valentine's fancy dress dance in February, a day trip to France (Boulogne) in March and a visit to a TV show in February. Future events being planned include two or three more day trips to France, a couple more visits to television shows, day trips to the coast, and dances every three months etc.

The club is open each Friday evening at 2000 hrs, and more members are welcome. Any local breakers interested can write to Lemon Hart, Horsemoor Green Community Centre, Common Road, Langley, Slough, Berks for an application form.

In addition, we should like to hear from other clubs who might be interested in darts matches, reciprocal visits etc.

**Lemon Hart,
Langley.**

Channel 9 or 19

Mike Lang, G4DUK, explains how to alter the emergency channel readout. Mike (Dog and Bone Man) chose the Maxcom Rig because the readout blanks out when the channel 9 switch is thrown.

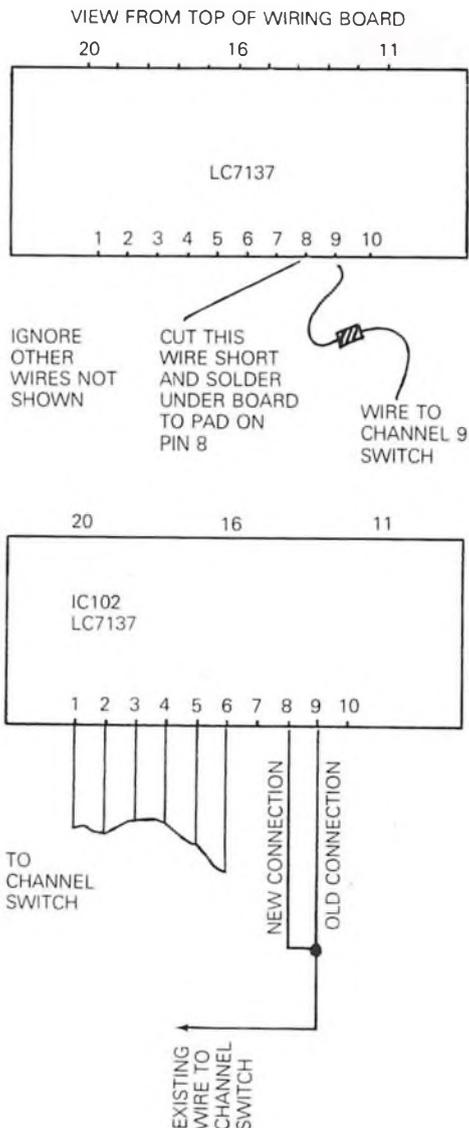
MODIFYING THE MAXCOM 20/21E

Most CB transceivers on the market at the moment use the Sanyo LC7137 synthesiser chip to control transmit and receive frequencies. Some of these offer the facility of *instant* switching to channels 9 or 19, or both. On the LC7137 this is easy to do because the in-built programming offers this facility; by putting pin 9 to the chip voltage supply line, for instance, it will give instant channel 9. Mind you, it is also desirable to disconnect the power to the channel switch.

One useful modification to a rig is to change the channel 9 facility into a channel 19 facility, or vice versa. On the Maxcom 20E and 21E, it's possible to do this by changing the position of just one wire. First, remove the top and bottom case halves by undoing the four screws on each side of the rig. Then locate the LC7137 integrated circuit at the front left-hand corner of the printed wiring board. Just to the right of pin 10 is a wire coming out of the board and going to the channel 9 switch. Cut this off close to the board and leave the other end connected. This done, turn over the rig and locate the printed wiring pad associated with pin 8, and solder the free end of your loose wire to it. If it won't reach, lengthen it, being careful to insulate the join. The mod is now complete.

Operating the channel 9 switch will instantly put your rig onto channel 19, although don't forget to label the front panel to stop confusion. If you change your mind at a later date, or want to sell the rig, you can always put things back as they were without difficulty.

There is scope for a version of this mod on many other rigs but here, the display would need altering, so before you get too ambitious I recommend that you consult your local rig doctor.



CLASSIF—ADS

**THE ANGLO AMERICAN
SIDEBANDERS DX MANUAL IS NOW
AVAILABLE TO ALL CBers**

Full of DX info. **£1.50** to P.O. Box 13,
Newquay, Cornwall TR7 2PA

New members always welcome

CLASSIF—ADS

Only **£10** per issue or 6 issues for **£48**
cash with order.

20mm Deep.

On The Side

129 Water Lane, Leeds LS11 9UB

— MEMBERS CORNER MART —

A free service to club members to help
turn surplus equipment into cash.

FOR SALE — COBRA 148 GTL. DX Switch on/off
Roger bleep, £120. Contact SLM 137, P.O. Box 999,
London S.E.26 4EP. Leave Telephone Number.

QSL's — HANDLECARDS — MANY DESIGNS — Personalised service, send £1 for 50 Handlecards, £2 for 50 QSL's, £3 for 50 of each. T. Smith, 22 Sheapecoate House, Charlemont Farm, West Bromwich B71 3PP.

FOR SALE — HARVARD 407 HOME BASE. Under guarantee £80. Alex Harrison Kilgrammie Cottage, Nr. Girvan, Ayrshire. Tel. 046-581 349.

QUICKSILVER, QSL 100%, SWAP 1-4-1. Please send QSL Cards to: Mark, 12 Hillside Close, Harwood, Bolton, Lancashire. All cards replied to.

MIDLAND 150 M RIG Part exchange CB gear, ie mikes etc., plus cash either way. What's your offer? Sierra Echo c/o Flat 4, 33 Southbank Road, Hereford.

FREE ADS SERVICE FOR CLUB MEMBERS

Sell your CB equipment and spares for profit!

ON THE SIDE Classified Order Form

NAME

ADDRESS

Telephone No

To: On the Side, Classified Dept., 129 Water Lane, Leeds LS11 9UB

The Advertisement Manager reserves the right to alter, reject or suspend an advertisement without assigning any reason. Advertisements are accepted subject to approval of copy and to the right of the Advertisement Manager to alter, reject or cancel any order or part of order without explanation. The Proprietors are not liable for any loss from any cause whatever, nor do they accept liability for printers errors. The Advertisement shall indemnify the Publishers in respect of any claim, costs and expenses arising out of any libellous or malicious matter or untrue statement in any advertisement published for the advertisers, or any infringement of copyright, patent or design therein. The placing of any order will be deemed to be an acceptance of these conditions.

IT'S AWFULLY LONELY BEING NO.1



MISSILE SOUND POWER
MICROPHONE (right).
ECHO SYSTEM POWER
MICROPHONE (left).



U.K. DEALERSHIPS AVAILABLE

24 Alfric Square,
Off Maxwell Road,
Woodston Industrial Estate,
Peterborough, PE2 0JP.
Tel: (0733) 236010/233955

IT'S AWFULLY LONELY BEING NO.1



MODEL 3/5 POWER SUPPLY
For home office approved
CB transceivers



24 Alfric Square,
Off Maxwell Road,
Woodston Industrial Estate,
Peterborough, PE2 0JP.
Tel: (0733) 236010/233955

U.K. DEALERSHIPS AVAILABLE