

C B RADIO

STILL ONLY 60p

Vol No 2. ISSUE No 17
NOVEMBER 81
60p Monthly
IRISH REPUBLIC 86p

AMSTRAD

• A PRACTICAL TEST •



EQUIPMENT

• WHAT'S AVAILABLE •

LICENCING

- WHAT IT MEANS •
- LICENCE FORM ENCLOSED •

THE FIRST, THE ORIGINAL, THE MOST INFORMATIVE & THE MOST COPIED..

NOW IT'S LEGAL

WE STILL LEAD... OTHERS FOLLOW!

CB TRADERS COMPARE



If you are already a C.B. wholesale Trader or are thinking of expanding into this field in time to take full advantage of CB becoming

legal, Now's the time. Make sure that your getting the best Service and the best range of quality products at realistic prices.

- * Biggest, most comprehensive selection always in stock.
- * Normal delivery within 24 hours.
- * Free delivery on most wholesale orders.
- * Most competitive prices.
- * Over 8,000 sq.ft. of warehouse.

- * Own transport fleet.
- * All leading and most popular brands.
- * F.M. Legal sets available soon (Details Now)

Simply compare the service we offer with the services you could get elsewhere, then pick up the phone and talk to Ged, Dave, Elliot or Chris.

**SERVICE
& VALUE
FROM**

CB Traders —
Compare the service
you get now with
the service we offer

Mura

|||||

295-297 HIGH ROAD,
WILLESDEN,
LONDON NW10
TELEX 8956073 MURA UK-G

01451-4141-2-3



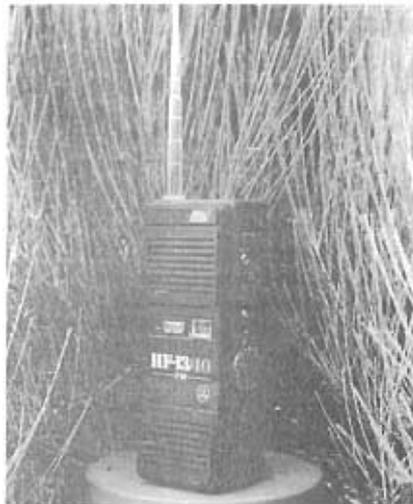
RIG TEST
 Inside Amstrad..... page 30



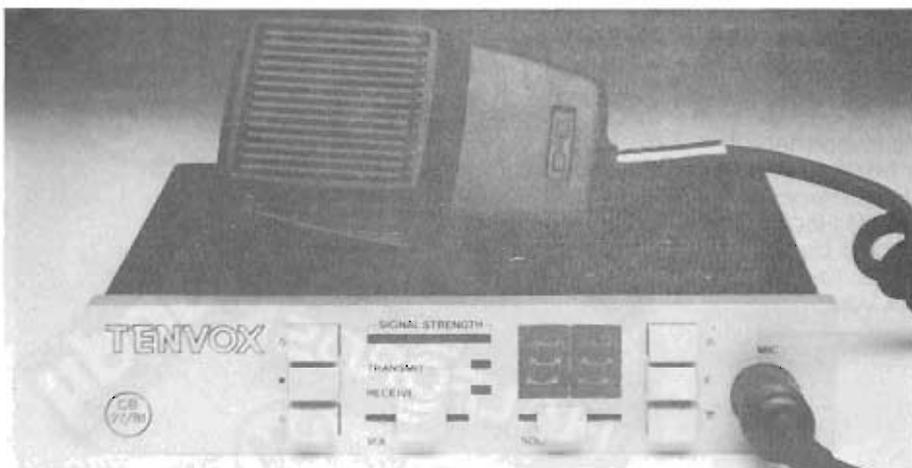
NEWS RELEASE

HOME OFFICE
 FM Press Release..... page 50

LEGAL RIGS
 The German Answer..... page 12



AMERICA TODAY
 Now the Boom is over..... page 72



27 FM PRODUCTS..... page 20

CB Radio Magazine
 British Breaker Productions
 Tudor Works, Beaconsfield Road, Hayes,
 Middlesex, UB4 0FL..... 01 561 5778

IMPORTANT
 AS A MAGAZINE WE CANNOT CONDONE THE USE OF
 ILLEGAL 27MHz EQUIPMENT NOR IS THIS PUBLICATION
 INTENDING TO ENCOURAGE THE USE OF SUCH OR ANY
 OTHER ILLEGAL EQUIPMENT CAPABLE OF TRANSMIT-
 TING OR RECEIVING. WE DO NOT ACCEPT RESPONSIB-
 ILITY FOR ANYTHING PUBLISHED WITHIN OUR PAGES
 NOR ANY DAMAGE HOWEVER CAUSED. IRRESPONS-
 IBLE AGENTS WE!

Director..... J. O'Hara
 Editor..... The Englishman (JOH)
 Editors Secretary..... Carole Robertson
 Photography..... Colin Downs
 Advertising..... Sue Sharp
 Features..... Paul Carter
 Production..... Maurice Kenney
 Production Manager..... A. M. Lawrence
 Designer..... Ian Coombs
 Technical Adviser..... F.C. Judd, F1STC, WMOA Assoc IPSE.

© COPYRIGHT CB RADIO 1981. ALL RIGHTS RESERVED.
 REPRODUCTION IN WHOLE OR PART IS FORBIDDEN
 SAVE WITH THE EXPRESS PERMISSION IN WRITING OF
 THE PUBLISHERS. PUBLISHED BY CB RADIO MAGAZINE
 LIMITED.



November 2nd - Legal..... 2
Antennas and Transmissions..... 4
SSB Transmissions..... 8
Legal Rigs..... 12
DX QSL International Club Spot..... 16
27 FM Products..... 20
Readers Write..... 26
Rig Test - Amstrad..... 30
Rufneck..... 36
Round Up..... 42
News Review..... 46
Home Office Press Release..... 50
REACT..... 52
CB Radio Project Kits..... 56
Vultures on the Side..... 60
Club Spot..... 62
The Law and You..... 64
Clubs Unite..... 68
America Now..... 72
Classified Advertisements..... 76

ADVERTISERS INDEX

Acorn Trading (CB) Ltd..... 71
 Acton CB Centre..... 74
 A.O.S..... 37,40
 Antenna Specialists..... 35
 Antilock Specialised Services Ltd..... 67
 Astrom Products Ltd..... 14
 Bixaway CB..... 14
 Bob Mackay..... 49
 Breakers Paradise..... 27
 Breakers Yard..... 74
 Brew Brothers..... 75
 Caladonian Copiers..... 74
 CB Centre..... 44
 CBC Telecom..... 10
 CB Radio Diary..... 6
 CB World..... 75
 Channel Jive..... 48
 Chelmer CB..... 24
 Connections..... 3,59
 Crystalpoint Ltd..... 25
 Custom Equip..... Inside rear cover
 David Allen Insurance Services..... 41
 Europa..... 44
 Eurosonic..... 67
 Franklin Brenel Ltd..... 34
 Freeman and Pardon Ltd..... 64
 Georgia Bulldog..... 35
 Halcyon..... 32,33
 Hammersmith CB Centre..... 34
 John Wocle Racing Ltd..... 14
 Kent Open Channel..... 86
 Kerrow Audio and Sound..... 34
 K4D..... 38
 Kona Publications..... 39
 Leather and Suede..... 17
 Leibar Albrecht..... 15
 Leibar Albrecht (I.O.M.)..... 29
 Lucky Members..... 85
 Major Ltd..... 7
 Master T..... 14
 Mayday..... 49
 Maccam..... 11
 Mara Electronics (UK) Ltd..... Inside front cover
 New Force Ltd..... 49
 North Herts CB Centre..... 66
 OCT..... Rear cover
 OCT Scotland..... 19
 R.T.A..... 44
 R.T.C..... 75
 Shellpool..... 81,83
 Simpity CB..... 14
 Skylab CB..... 71
 Sound Around..... 65
 Strutt Ltd..... 74
 Sunbeam CB..... 71
 Superagis..... 45
 Sweet Shops..... 59
 Thames Valley..... 75
 Transcom..... 25
 Truckers Paradise..... 71
 Truck King..... 54
 20-27 Promotions..... 45
 Wall to Wall..... 48
 Zenith..... 11
 ZL Communications..... 18

November 2nd legal

At last our prediction of 1st November has been confirmed by the Government!

By the time you read this FM CB will be legal. This is the first time this statement has ever appeared in CB Radio Magazine.

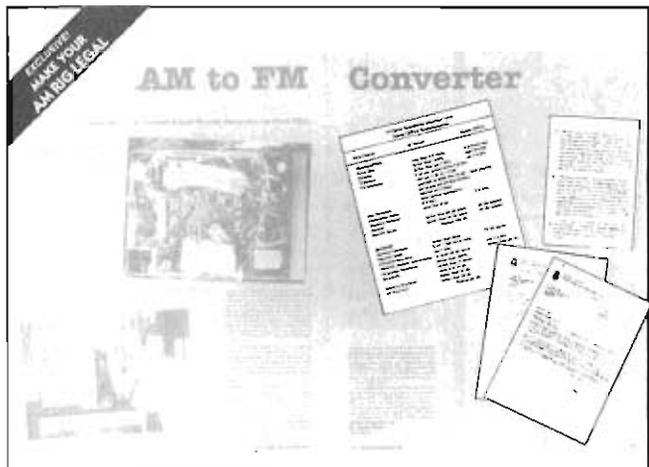
Unlike other publications WE GET IT RIGHT!

Well almost, since August we have been saying that CB will be legal on November the 1st. However, nobody in our offices checked the calendar to find out that November one is a Sunday. You can't expect us to be, intelligent as well as clairvoyant, now can you?

We would very much like to welcome all the new readers of CB Radio Magazine. If you are looking through this issue while standing in W. H. Smith's and not sure which magazine to buy on CB radio, look no further. Forget all the imitations, we were the first and we are still the best. We don't rely on half-clad young ladies to keep your attention, we don't write about car cassette decks, we don't print pictures of fighter planes but what we do is to bring you, the British breaker, the facts about CB and nothing else! So, if you are still browsing, put your hand in your pocket, extract 60p, walk to the cash desk and buy the most informative magazine on the subject. If you want to read about all those other things I mentioned, Playboy is on the top shelf, next to Mayfair.

Rig transversions

As we predicted, the Home Office announcement on CB has made allowances for AM breakers to have their sets converted to FM (CB Radio Magazine Sept.). Ever since we published that article, we have been bombarded with calls about where to get this service, or more precisely, the telephone number of Finelms Electronic (Warrington). To save you having to make two phone calls, the number is (0925) 574691. It is most important that if you are considering having your rig transverted from AM to "legal" FM, you get a receipt for the back duty and that the rig is stamped with the CB27/81 logo. Unless the set has had the back duty paid and bears that stamp it will still be illegal to operate, regardless of what the person doing the transversion tells you.



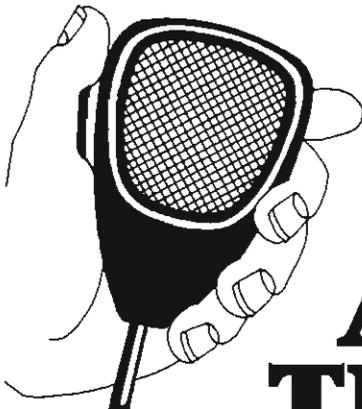
Where to buy your set

If you are madly rushing round trying to buy a legal CB rig, slow down because it's quite likely that you won't be able to get the model that you want or any model at all. This isn't the fault of your local CB store but the fault of the Far Eastern producers of CB. They have all had such a short time to develop new integrated circuitry that the demand has completely outstripped the production capabilities. Out of the 3 million sets that should be sold during the coming year, only a fraction of this number will be ready before Christmas. At least Santa's sack will be a bit lighter than he thought! If you are trying to buy an ALL BRITISH CB rig you can almost forget that because to date there are only three or four intending British manufacturers out of the 30 or so companies producing the product.



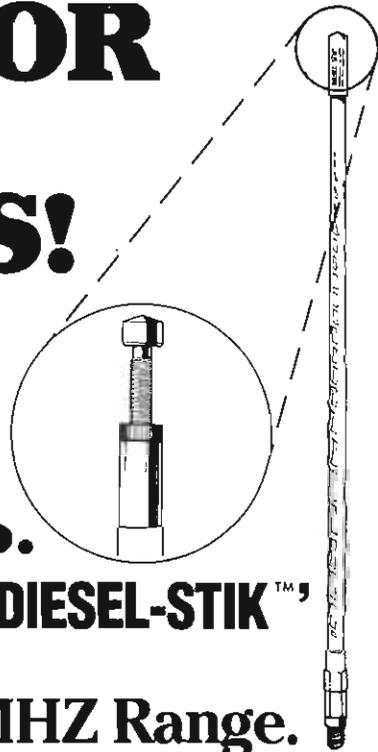
Next month

This month we are carrying a small selection of rigs, twigs and bits that you will legally be able to use. Next month will see a massive issue consisting of all the legal equipment we can get hold of. There will be at least two rig reviews of legal sets and how they perform plus antennas, mics and much more. Order your copy now!



THE FIRST TUNABLE TIP ANTENNA FOR THE BEST OF BOTH WORLDS!

Introducing 'Diesel-Stik',
the revolutionary
antenna concept from
the 'Firestick' Antenna Co.



'DIESEL-STIK'™

-  Tunable over the full 27MHz Range.
-  Operates on existing A M and the New British F M as well as SSB.
-  NO TOOLS REQUIRED. Simple hand adjustment.
-  Power Rating - 1000 Watts.

**Only available from Connexions,
sole UK Distributors for**

Furrow Way, Cannon Lane,
Maidenhead, Berks. SL6 3NY.



Trade Enquiries welcome. Tel: 062 882-4338/9.

Connexions

Antennas and Transmissions on CB frequencies

by F.C. Judd, FISTC MIOA. Assoc. IPRE - Part 13

This series of articles have so far dealt almost entirely with the function of antennas, radio wave propagation and the more practical aspects of matching an antenna to a transmitter with a suitable cable of a type known specifically as a *radio frequency transmission line*. However, virtually any cable used to carry power from a source to a load could be regarded as a transmission line. For example a pair of wires connected to a battery at one end and a lamp at the other could be considered as such. If the transmission line is long then power will only be lost because of the *self resistance* of the conductors. When power is fed from a transmitter to an antenna at radio frequencies there is the added problem of inductive and capacitive reactance which, together with self resistance, causes all transmission lines to have what is known as a *characteristic impedance*. Since we are also dealing with transference of power at different frequencies, other factors such as wavelength and velocity come into the picture and which to some extent control the physical aspects of transmission lines. Although purely resistive loss cannot be nullified because this is inherent in all conductors, steps must be taken to prevent radiation loss by suitable construction and which is accomplished by using two conductors arranged so that they are close enough together for the electromagnetic fields from each to cancel out ie: so that they do not radiate. A transmission line will radiate anyway if the characteristic impedance of the line is not exactly equal to the impedance of both the source and the load.

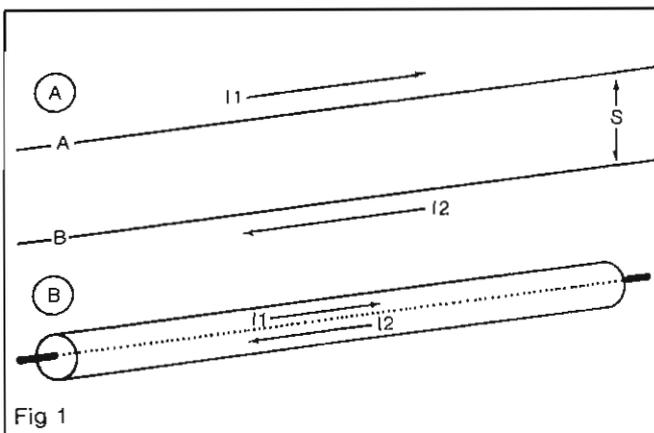
Types of transmission line

The most simple type of transmission line normally consists of two parallel conductors spaced a very small fraction of a wavelength apart. The most commonly used nowadays is the coaxial cable in which one line is in effect shielded by the other. Parallel conductor lines and coaxial cables otherwise behave in much the same way electrically. The configuration of each is shown in Fig. 1 in which currents I_1 and I_2 are flowing. If the current I_1 at point 'A' on the open line has the same amplitude as current I_2 at the opposite point 'B', then the fields set up by the two currents will be equal in amplitude and since they are flowing in opposite directions as the arrows indicate, the field from I_1 will be 180 degrees out of phase with the field created by I_2 . In practice the fields may never be exactly 180 degrees out of phase and there will always be a small amount of radiation from the line.

The second type of line, shown in Fig.1 is the coaxial or concentric line consisting of a single conductor surrounded by its companion conductor in the form of a tube. The principle of operation is the same ie: because of close spacing the field due to current in the inner conductor is cancelled by the field due to current in the outer conductor. Coaxial lines have another property however, which is called *skin effect* because current flowing along the inner surface of the outer conductor does not penetrate through to the outer surface. The total field outside the cable is therefore negligible because in effect the outer conductor also behaves as a shield.

Line Velocity

It is important to remember that although radio waves in free - space travel at approximately 300,000,000 metres per second, they do not do so in conductors. In fact the velocity of travel is slower. In coaxial lines the presence of dielectrics (insulation) other than air, reduces wave velocity very considerably. Open wire air-spaced conductors are not so effected and the velocity factor is generally close to unity. Since wavelength depends on velocity the length of transmission line will otherwise be shorter in terms of wavelength than an equivalent length or distance in free space. A typical velocity factor for coaxial cable is 0.66 of the free-space wavelength in use.



Characteristic Impedance

All transmission lines have what is called *distributed* self inductance and capacity. This means that each unit length of line has its own small amount of capacitance and inductance so a transmission line could be regarded as shown in Fig. 2A. Each small section of inductance limits the rate at which each small section of capacitance charges up and the effect is to establish a relationship between voltage and current flowing in the line. Thus a transmission line has an apparent resistance to alternating power or what is called the *characteristic impedance*. (Impedance is to AC what resistance is to DC). The symbol for impedance is Z. The inductive values of a transmission line decrease with increased conductor diameter and the capacitive values decrease with increased spacing between the lines. Hence a line with large diameter conductors closely spaced will have a relatively low characteristic impedance whilst a line with wide spacing and thinner conductors will have a high impedance. The common impedances of open twin conductor lines are between 200 and 800 ohms and for coaxial lines between 15 and 175 ohms with 50 and 75 ohms being most used for radio application.

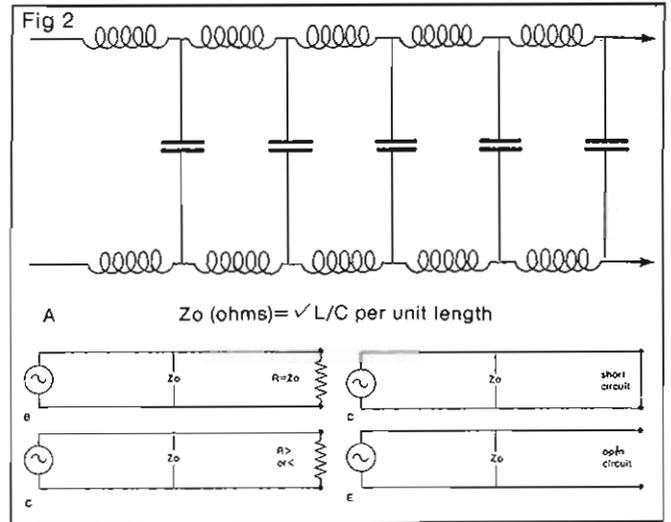
Line Matching

If we take a transmission line of a given impedance and connect one end to a generator having the same impedance and the other end to a purely resistive load (R) but also equal to the line impedance (Z_0) as in Fig. 2B, then current travelling down the line will flow into the resistance which as far as the current is concerned is simply an extension of the line itself. Since a pure resistance has no inductive or capacitive reactance the line in this case would be perfectly matched ie: none of the power ($I^2 Z_0$) flowing into the load will be reflected toward the generator. An infinitely long transmission line with the same impedance throughout its length would behave in the same way but the power would eventually all be dissipated by the natural resistance of the line conductors. If the load resistance R does not equal the impedance of the transmission line (fig. 2C) then power which is not dissipated by the load will be reflected along the line to the generator. The greater the difference between R and Z_0 the smaller will be the amount of power absorbed by R and so the mismatch will become greater. Power flowing through R is called the *incident* power and that returned to the source is called *reflected* power. We can therefore talk of the ratio of reflected to incident power which becomes larger as the impedance mismatch increases. For instance, when R equals a short circuit as in Fig. 2D then all the power is returned as is also the case if R equals an open circuit as in Fig. 2E.

When a mismatch occurs power in the form of a travelling wave is moving in both directions along the line ie: forward and backward. The amplitude of the reflected power is however dependent on its difference in phase to that of the forward power, both of which interact and set up what is known as a *standing wave* on the transmission line and this is what is measured by a VSWR meter.

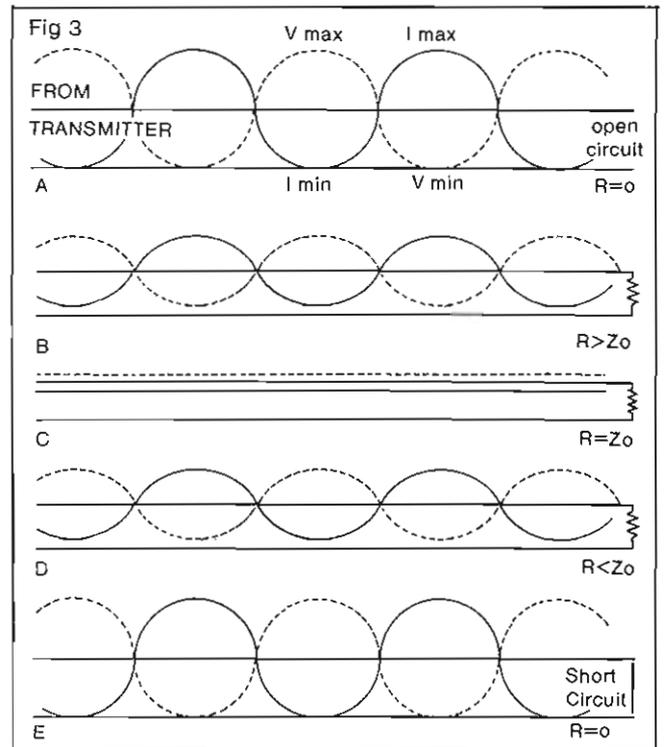
Standing Waves

The diagrams in Fig. 3 illustrate how a standing wave is created and in (A) we have an open circuit at the end of the line which prevents current flowing out. The circuit wave form at this point has zero amplitude and thus in effect cancels itself because of a reversal of polarity ie: the phase is reversed. The



current is travelling *along* the line but the voltage is *across* the line and is therefore not reversed by this reflection. The electric fields of the forward and reflected waves therefore add up to twice the amplitude (very high VSWR). The diagrams Fig. 3D and (D) denote conditions where R is *not much greater or smaller* than Z_0 and thus a standing wave of lower amplitude is produced because only part of the forward power is reflected (VSWR not acceptably low enough). Fig. 3(C) shows the situation when R equals Z_0 ie: when no power is reflected since it all flows into the load and we have a uniform travelling wave (near perfect 1 to 1 VSWR). The remaining diagram (E) illustrates a short circuit across the line and here the standing wave amplitude is the same as for an open circuit condition (very high VSWR).

The *ratio* of maximum to minimum voltage of the standing wave is called the **VOLTAGE STANDING WAVE RATIO (VSWR)** and which is also equal to the ratio of the mismatch R/Z_0 . In simple terms, if the match is perfect then the VSWR is 1 to 1. The greater



Antennas and Transmissions on CB frequencies

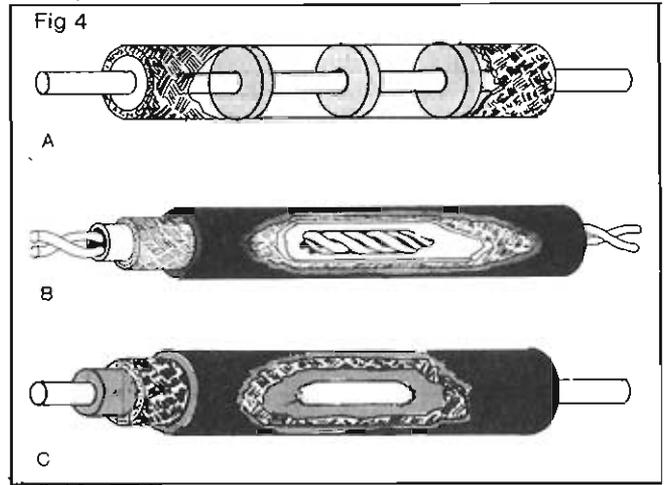
the mismatch the higher will be the VSWR and this becomes more or less infinite with an open or short circuit condition which incidentally should be avoided as high reflected power can damage transistorised transmitter output stages as well as creating a high level of radiation from the feed cable itself.

Coaxial Cable

The open wire transmission line has virtually no application in CB radio, particularly as all CB sets and antennas have the now universal matching impedance of 50 ohms. Therefore, coaxial cables only will be dealt with and which are available in a number of different types. For example, ultra low loss and almost fully airspaced cables as shown in Fig. 4A are very expensive and in any case little used except for certain very high frequency applications entailing long cable runs. Next there are the semi-air spaced types as in Fig. 4B in which the inner wire conductor is interwoven with a polythene line both being loosely enclosed in an insulating tube, usually polythene as well. Outside this is the shielding braid which for protection has a final outer cover of PVC. Semi-air spaced cables have a fairly low loss and

need only be used for 27MHz if the cable run is very long e.g. more than 100 feet. The most commonly used coaxial cables are those which have either a single or stranded wire inner conductor moulded in a solid dielectric (insulating surround). The screening braid outside that with of course a PVC protective outer cover as shown in Fig. 4C.

The continuation of this article next month will deal with suitable coaxial cables for 27MHz and include essential technical data e.g. loss and velocity factors, power rating and application etc. on those normally available. Coaxial cable plugs and their proper connection to cables will also be dealt with.



**Wallets Contain
Breaker Message Pad
replacements available**
3 for £1.00

2.99
INC. POST.

5.99
INC. POST.

1.50
INC. POST.

2.99
INC. POST.

NEW

1 REAL GALE WALLET (BLACK OR RICH TAN) INCLUDING:-

- Breaker Message Pad
- CB Code Card
- COMPARTMENTS FOR:-
- Licence
- Insurance
- Membership Cards
- Bank Cards
- Notes
- Stamps

2 GENUINE BUFFALO GRAIN CASUAL FLAT WALLET (BLACK OR RICH TAN)
As Large Wallet excluding Stamp Pocket.

3 MEMBERSHIP/BANK CARD CASE. GENUINE BUFFALO GRAIN LEATHER (BLACK OR RICH TAN) Seven Compartments

4 LADY BREAKER PURSE/NOTECASE. GENUINE BUFFALO GRAIN LEATHER (BLACK OR RICH TAN)

CB
BREAKER
GOLD FOIL CARTRIDGE
IN ALL COLORS
MADE IN POLAND

50p
per word

**NOW AVAILABLE
on any of these items
ONLY**

**Have your HANDLE
Club HANDLE or
gold foil embossed
on any of these items
ONLY**

**Leather
goods**

DIRECT FROM THE FACTORY

CLUB ENQUIRIES WELCOME 10% DISCOUNT. PLEASE SEND PDR CLUB ORDER FORM.
FOR ANY FURTHER ENQUIRIES TELEPHONE (0922) 37544

NAME
HANDLE
HANDLE
HANDLE
ADDRESS

Tel No
Cheque/P.O. enc. for £

PLEASE MAKE CHEQUES/P.O. PAYABLE TO:-
LEATHER & SUEDE. P.O. BOX No. 9 WALLSALL WSC2 8PD
Please allow up to 28 days for delivery

Large Wallet Black/Rich Tan
Flat Wallet Black/Rich Tan
Card Case Black/Rich Tan
Purse/Notecase Black/Rich Tan

Black/Rich Tan
Black/Rich Tan
Black/Rich Tan
Black/Rich Tan

ARTICLE No's
1 2 3 4

AVOID DISAPPOINTMENT



major CB RADIOS

It is probable that once CB radios become legal, there will not be enough sets to meet the demand.

That is why we are prepared to reserve you a set now.

Major is already an established name and its radios are probably continental Europe's most popular sets. They are manufactured by Cybernet, which ensures not only very high quality and reliability, but also long term availability of parts and accessories.

Major Model 4000 Base Station

Features include: walnut cabinet, volume with ON/OFF switch, squelch control, tone control, delta tune, DX/LOC switch, phone jack, on-the-air light, receive light, S/RF meter, channel selector.

Only £115.00



Major Model 2000 Transceiver

Features include: volume, squelch, LED read-out, channel selector.

Only £68.00

Major Model 3000 Transceiver

Features include: volume control with ON/OFF switch, squelch control, channel selector, CB/PA control, RF gain control, delta tune etc.

Only £76.00



Major CBs are simple to install and operate. They come complete with microphone, mounting brackets, cable and instruction manual.

- frequency coverage 27.60125 – 27.99125 MHz FM
- PLL digital logic synthesizer circuitry
- dynamic microphone with push-to-talk switch
- manufactured by Cybernet
- built-in circuit protection
- easy to install and operate
- four models to choose from

Major CB radios meet all the Home Office regulations relating to CB radio.

They operate on 27 MHz FM.



Major Model 5000 Transceiver

'Up-market product' features include: volume, RF gain, squelch, tone, CB/PA, Channel 9 priority, ext/int speaker switch, d/tune, channel selector, S/RF meter, Tx and Rx lights.

Only £84.00

BY ORDERING NOW

include a 50% deposit with this order coupon (see below). You will be sent a receipt and be notified when the balance is due.

Cheques/POs should be crossed and made payable to Major (UK) Ltd. We will send you your set as soon as possible after the law permitting the use of CB radio is passed (expected to be November 1981).

All Major radios have a 12 month guarantee. Prices include VAT, postage and packing. FREEPOST. No stamp necessary. Fill in your name and address in capital letters.

50% deposit included for (please tick):

Model 5000 (£42) Model 4000 (£57.50)

Model 3000 (£38) Model 2000 (£34)

Total enclosed £ _____

Name _____

Address _____

Major (UK) Ltd FREEPOST
 Unit 2, Station Yard,
 Wilbraham Road,
 Fulbourn,
 Cambridge
 CB1 5ET.

SSB TRANS

by E. A. Rule. Part 2

This month we shall take a look at the power ratings of SSB transmitters which would at first sight seem fairly obvious, after all ten Watts is ten Watts, isn't it? Well it all depends on what you mean by ten Watts! It could be ten Watts RMS, or ten Watts Peak, or ten Watts Peak to Peak, or ten Watts Average, or ...etc. All this means that the SAME transmitter could be rated at powers of 4, 8, 32 Watts for exactly the same output with an AVERAGE power rating anywhere in between!! No wonder the sales technical writers have a field day.

Power is calculated by multiplying the voltage present by the current with a given load. With direct current this is easy, just multiply the two together, (V x I). With alternating currents the RMS values (root, mean, squared) of voltage and current are used. For Peak power measurements the Peak voltage and currents are used, while AVERAGE power uses the average voltage and current present over a certain period of time. Providing you know which one is being used all can be correct. The problem is when you see a rig specified at say ten watts output without saying what type of watts!! Confused? Good! We will now try to clear things up.

The BASIC power rating of any SSB transmitter is

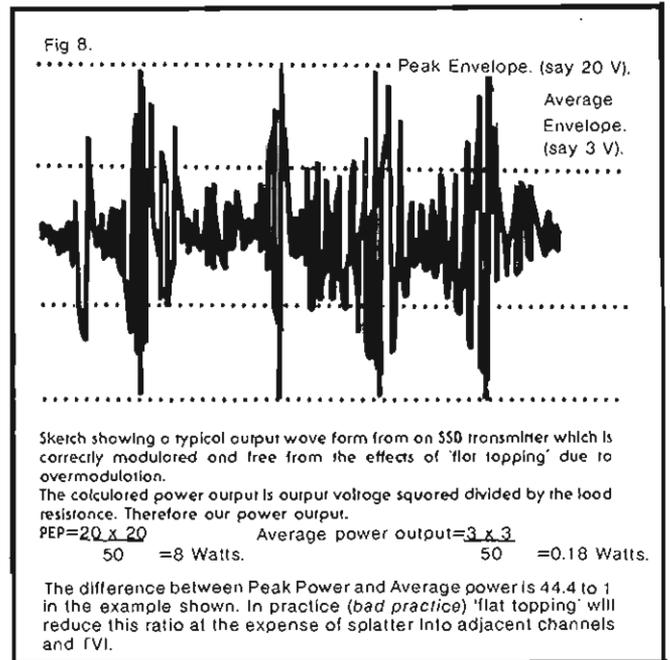
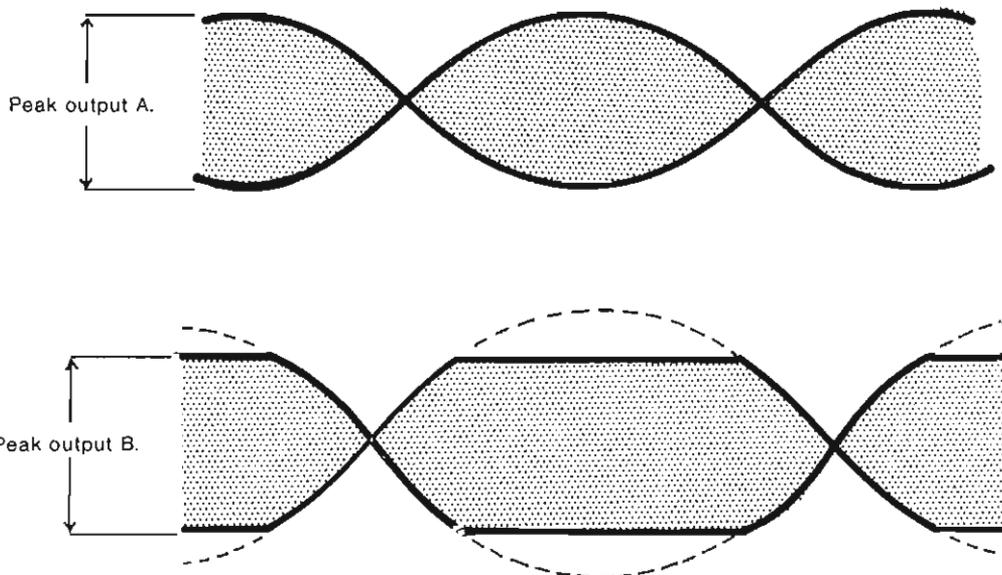


Fig 9.



Showing how if the amount of audio signal is increased beyond the amount that produces Peak output from the transmitter there is NO further increase in PEAK output. The tops of the signal 'FLATTEN' due to the distortion present, increasing the risk of TVI and splatter into adjacent channels. However the

transmitter output meter (because it cannot follow these fast peaks) would show increased output as it can only 'average' the power, this is why in practice the meter reading on normal speech should not be more than one third the possible maximum. (see text).

MISSIONS

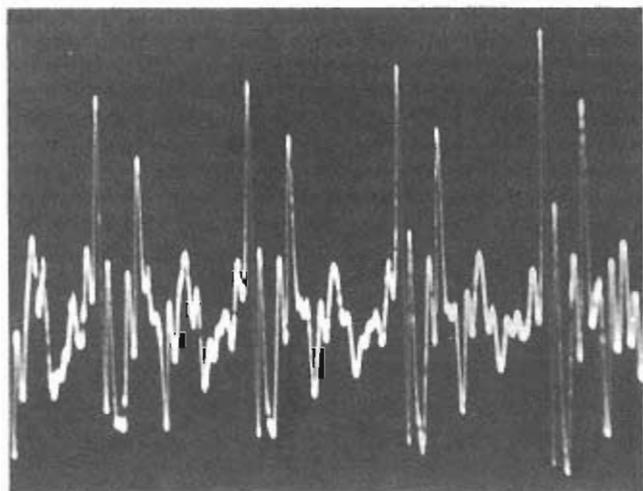
the power contained in the signal at the MAXIMUM PEAK AMPLITUDE and this is the PEAK ENVELOPE POWER Fig 8, or PEP. This PEP will be relative to the amount of distortion considered acceptable and a level of 5% is the just acceptable maximum. Lower figures are required if splatter into adjacent channels is to be avoided, (note, we are referring to RF distortion, not audio). Once the PEAK AMPLITUDE has been reached the effect of trying to increase the output further will only cause the top of the envelope to 'flatten', Fig 9. At this point there is NO further increase in PEP but a very considerable increase in the distortion produced and the interference caused to adjacent channels and television sets. The ONLY way to increase the AVERAGE power output without 'Flat topping' is to use a correctly designed speech processor, (this is not a power mike which is something completely different and could in fact make the 'flat topping' worse). A correctly designed speech processor will remove the peaks from the speech waveform and allow the average level to be increased without flat tops appearing on the peaks.

The actual amount of improvement will depend to a small extent on your voice as these differ between one person and another in the ratio of the Peaks of the speech waveform relative to the average level. Nevertheless, quite considerable gains in AVERAGE power output can be obtained but the PEAK OUTPUT REMAINS THE SAME.

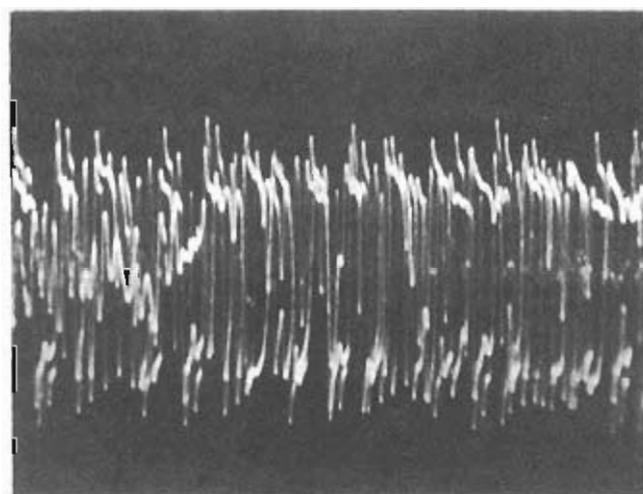
A good 'rule of thumb' test for setting up your modulation is to first whistle into your microphone and see what the ABSOLUTE MAXIMUM reading obtained on either the rig's output meter or your SWR bridge. Make a mental note of this maximum reading. Now, while speaking into the microphone with a normal conversational voice at a distance of four or five inches from it, adjust any microphone gain controls so that the average reading on the output meter is NOT MORE than ONE THIRD of the maximum reading obtained on the whistle test. The reason for this lower setting is that the meter is a mechanical device and simply CANNOT FOLLOW THE PEAKS of the speech waveform, it isn't quick enough, the peak has happened before the meter pointer can move and due allowance must be made for this. 'Talking up' the output meter is one of the main reasons why so many transmissions sound distorted and also why they splatter into adjacent channels. It may give you more talk power, but only at the expense of other operators' enjoyment and to say the least, it is unsocial behaviour. If you must have maximum talk power, use a properly designed speech processor which will allow the required increase in AVERAGE power without the 'flat topping' of over-driving. Fig 10 is an actual photograph of a speech waveform with and without a speech processor (the

Persuader) in circuit, the increase in AVERAGE power 'speaks' for itself!

Fig 10.



Actual photograph of a speech waveform without any processing as would be presented to the microphone input of a transmitter. Note the very high peak amplitude compared with the 'average' levels.



This photograph shows a correctly 'processed' speech waveform. Note now that the 'average' is very much higher than before but that the peaks are in fact slightly lower. This would mean a considerable increase in average power output but without the risk of 'flat topping'. Compared to a normally and correctly modulated transmitter the gain in 'talk power' can be as high as 32 times in practice.

SSB TRANSMISSIONS

Apart from the increase in distortion already mentioned, 'flat topping' greatly increases the risk of TVI due to the increased harmonic content of the signal and a good operator will use the rig so that the maximum output on peaks is slightly below the absolute maximum that can be obtained. A reduction of only 0.5 dB will often completely prevent TVI and such a small reduction would not be noticeable at the receiving station. Coupled with a good speech processor the overall effect would be a general reduction in splatter into adjacent channels less likelihood of TVI yet with an overall increase in transmitter range. Worth thinking about?

To be certain that maximum power is obtained from any particular rig it is very important that attention be given to its power supply. Simply connecting up any old 12/13 volt supply will not do. Although an SSB transmitter only draws a low current on average its PEAK current demand can be relatively high and if the power supply cannot meet this peak demand the transmitter output will be limited and the risk of 'flat topping' increased. The current demand will be even more on average when a speech processor is used so always make sure that the power supply is rated to a current of at least the rig's maximum current which is



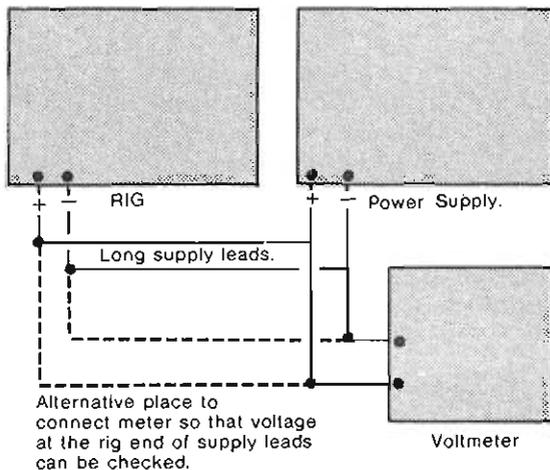
An example of a commercial speech processor which connects between the existing microphone and transmitter input. Units of this type can give considerable gains in average power output without causing the rig to suffer from 'flat topping'. See text.

normally given in its instruction book. If in doubt, a typical ten watt rig should have a power supply of at least 3 Amps continuous current rating.

The power supply should also have a stabilised output and this would normally hold the voltage (13.8 volts) steady over its full current range. Connect a volt meter across the output of the power supply and measure the voltage present both off load and on full load (a whistle into the mike), if the voltage drops more than a fraction of a volt it is unsuitable or poorly stabilised. Very long supply leads between the rig and power supply can also cause a voltage drop on load and the same test should be carried out but with the volt meter across the rig end of the supply leads. Leads with a relatively high resistance (and here we are talking of fractions of an Ohm) can ruin the best regulated supply power supply. Fig 11 shows how to check the supply voltage.

Flickering panel lamps when modulating are a sure sign that all is not well in the power supply department (although on some rigs where the power supply is integrated with the rig this may not be true). Remember, a poor power supply can be one cause of TVI and splatter into adjacent channels, something that is often overlooked as a cause of these problems.

Fig 11.



First connect the voltmeter across the power supply output and measure the voltage both with the transmitter on standby and then on full power (see text). Next repeat the measurement but with the voltmeter connected across the supply leads at the rig end. If voltage drop is present, use either thicker leads or shorten them.

CB TELECOM
CBC • SPECIALISTS IN FM CB •

LOOK FOR YOUR LOCAL
CBC STOCKIST
He has been carefully selected to give you
SERVICE

CB TELECOM
CBC • SPECIALISTS IN FM CB •

LOOK FOR YOUR LOCAL
CBC STOCKIST
He has been carefully selected to give you
SERVICE

OUTPERFORMS ANY SIMILAR ANTENNA INCLUDING K-40 ON PRICE AND PERFORMANCE.

Persuader Antennas

FROM MOCOM

A major advance in antenna technology from the Antenna Pros field tested and field proven by thousands of CBers.

- ★ Super good looking low silhouette design.
- ★ Hand wound hand tuned coil in the cup, protected against damage and the weather.
- ★ Tested at 500 Watts rated at 100 Watts continuous.
- ★ 60" stainless steel tapered whip – no spring – increases performance and distributes shock evenly.
- ★ Choice of cup colours to complement your vehicle.
- ★ Complete with Super Mag the magnet mount with 300% more holding power than conventional magnets.



Full range of antenna incorporated base loaded antennas and mounting hardware available.

DEALERS REQUIRED – PHONE CALL OR WRITE.

Persuader Antennas made by **Antenna** from

MOCOM

140 Sandy Lane, Camp Hill, Birmingham.
Tel: 021-772 1994

NEW

- ZENITH QUALITY
- ZENITH VALUE
- YOUR SAFETY



D.C. STABILISED POWER SUPPLY

Made in UK by ZENITH

- ★ Meets current UK Health & Safety Regulations (BS415)
- ★ Input 240V, 50 cycles, AC mains
- ★ Output 13.8V, DC stabilised at 2 amps continuous
- ★ Fused, electronic current limit, thermal overload protection
- ★ Robust, compact and attractive enclosure
- ★ Carries Zenith's usual 12 months guarantee

Price: Only £16.50 inc. VAT
PLUS £1.75 Postage

ZENITH
POWER CONTROL

The Zenith Electric Company Ltd.,
Wavendon, Milton Keynes, England
MK17 8AT. Telex: 825020

Phone: Milton Keynes (0908) 582531

Please send me O.C. Stabilised Power Supply Unit(s)
at £16.50+£1.75 postage. I enclose cheque/P.O. value £.....

I wish to pay by ACCESS/BARCLAYCARD/VISA

Please charge the following amount to my card account:

Credit Card No.

£..... Signed

NAME

ADDRESS

POST CODE

LEGAL RIGS!



German ingenuity & Japanese manufacture - Jersey importer - Rigs Now.

We have been hearing for many months now of all the people who will or will not be supplying 'Legal Rigs' for the British market. Although all of the people who's transceivers have been featured have every intention of supplying the equipment, many of them have come across a common problem; where to get the necessary I.C's (integrated circuits or chips) from in large enough quantity to meet the demand on day one of legalisation. The problem has been so acute that some companies have had to resort to using crystals for their prototypes that don't work.

Chip shortage in the Far East

Most electrical equipment on sale in this country originates from the Far East regardless of who's name appears on the box. The same is true of most of the Citizens Band radio equipment destined to reach our shores later on this year. It is in the Far East that the shortage of British Specification integrated circuits has occurred. With only months (rather than years) to develop completely new circuitry and with a limited amount of factories capable of producing 'chips' it is not at all surprising that a drought exists.

German ingenuity

DNT of Germany have approached the chip problem from a different angle. As designers and distributors of CB equipment for over 19 years for the European market they have undoubted experience in radio communications. Ever since the release of the Home Office Draft Specification for CB transceivers DNT's engineers have been working on their own rigs using their own methods. Rather than having to rely on new chips, the engineers have taken a Motorola output stage and added an extra chip of standard design and availability and a crystal. This method has given DNT the correct channel spacings and output (40 channel 4 watts FM) and means that the rigs are ready for sale. Even though the Germans have designed these new rigs for England, it is in the Far East that production models have been manufactured.



Above the B-40FM with built in mains power supply and hinging legs this is the ideal answer to base station operation

Rigs to England via Jersey

Well of course its no good having stacks of equipment sitting in Japan which are ultimately destined for sale in Great Britain. So it was that on the 4th August 1981 that Radiotechnik of Jersey were appointed sole UK distributors for DNT CB products. Radiotechnik was formed specifically to market the DNT product by Mr John Walton who's previous task was to launch the National Panasonic range of audio products in the UK. Via their agents in Southampton, Radiotechnik are setting up a network of national distributors. A tour of the country is currently underway and Radiotechnik are showing DNT rigs (to trade only) at a series of hotels during this month.



The interior of the M40FM the experienced may just sp of the extra IC on the PLL output circuitry



Above the 40 channel HF-13/40, this is due to be released some time in December. If you are lucky it could be the answer to that Christmas present. Right the M40FM mobile, a neat, compact and reliable use of circuitry. Incidentally these were the first 27FM transceivers passed by the H.O.

The equipment

The M40 FM is DNT's mobile transceiver which while being compact is well styled with all the important functions incorporated. The channel select, Squelch and Volume controls are all separate. A DX/LOC switch is also incorporated to either bring in distant stations or block them out as required. As is standard with all mobile rigs the M40 FM can, with the addition of a regulated power supply, be used as a Home Base rig. If you read the MPT 1320 you will see that Home Base aerials should not be higher than 7 meters without the signal being attenuated by 10db (0.4 watts) and the M40 FM has an attenuator switch located on the front panel.

The B40 FM is a virtually identical unit to the M40 FM with the addition of a regulated power supply and a stand to make it operational as a home base station. Once again the set features the attenuator switch on the front panel.

DNT are also manufacturing 2 Walkie Talkies. The HF 12/3 is a 3 channel FM set with 0.5 watts output and is powered by 12v battery either dry cell or rechargeable. Both of the sets have built in loudspeakers, microphones and telescopic aerials. A 40 channel Walkie Talkie will be available in the near future.

All the DNT rigs are based on existing European designs which have now been available in France and Germany for sometime. The modifications make all the equipment legal to operate after CB UK day and all the sets will carry the CB 27/81 logo.

**Radiotechnic,
Grove View,
Bel Royal,
St.Lawrence,
C.I.**



YOU

can be instantly recognised with your own design proudly displayed on Quality Tee Shirts and Sweatshirts

- ★ Fast Service
- ★ Substantial Quantity Discounts
- ★ Minimum Quantity only 25
- ★ Full Art and Design Facilities
- ★ Best quality garments ensure minimum shrinkage
- ★ Wide choice of Colours & Sizes

For the very best in printed Tee Shirts & Sweatshirts contact **MASTER TEE** Today!

Master Tee of Leicester, Mail Order Division
FREEPOST, NORWICH, NR3 3BR
Tel: (0603) 619411

MASTER TEE

OF LEICESTER

Please send me your FREE Brochure & Price List for T-Shirts & Sweatshirts printed with my own design

Name (I AM OVER 18)

Club, Company etc.....

Address

Tel No.....
(BLOCK CAPITALS ONLY)

55

FREEPOST
NO
STAMP
NEEDED

THE PE RANGER

27FM CB PORTABLE

THE RANGER CB rig has been designed to fit the new legal Home Office specification, and starts off as a hand held unit complete with aerial, mic., and rechargeable batteries. The unit plugs into the mains, 12V car outlet, or runs on built-in rechargeable batteries (built-in charger). Up to 5 miles range in town to keep in touch with family and friends.

SPEC.
R.F. Power Output 1/2 Watt
AF (internal speaker) 1/2 Watt
Modulation: FM; freq. 27.6MHz-28MHz (CB Band) (excellent speech quality)
No. of channels (max): 6
Fully protected against bad aerial connection

**KITS EX-STOCK
INTRODUCTORY OFFER**

£49.95

(+ VAT £2.95 P.P.)

£97/matched pair
(+ VAT £5.90 P.P.)

This offer price includes rechargeable batteries, mic., aerial, mains lead and 2 channels.

Extra channels £2.25 each + 50p P.P. + VAT
Extra aerials £3.95 each + 80p P.P. + VAT
(Postage free with kit)

Tunable Whip aerial magnetic or permanent car mount (state which)

Permanent £13.95 - P.P. £1.00
Magnetic £15.95 - P.P. £2.00

Ready Built Units
Available Now. Ring for Details

PHONE YOUR ACCESS/BARCLAYCARD ORDER FOR FAST SERVICE
(SAE FOR FURTHER DETAILS)

Autumn Products Ltd.
Park Drive, Baldock, SG7 6EW. Telephone: Baldock (0462) 894848.

Simply C.B.



We Know how to turn You On!

WE ARE BACKED BY THE LARGEST
WAREHOUSES IN THE COUNTRY
EVERYTHING IN STOCK
FITTING SERVICE

37 Station Rd, Rickmansworth
Hertfordshire
Tel: RICKMANSWORTH 70634

OPEN SEVEN DAYS
8.30am-7.00 pm Mon.-Sat., 10.00 am-4.00 pm Sun.

© CB Radio.

TAKE IT UP A CHANNEL

write for details of our CLUB DISCOUNT CARD

With JWR's Big Range for Breakers. Over 450 listed items

Send £1 for Accessory Catalogue

JWR

John Woolfe Racing Ltd., Woolfe House, Horse Road, Bedford, MK41 0LF England.
Telephone: 0234 41441. Telex: 825483.

27 FM LEGAL RIG DEMONSTRATIONS BY APPOINTMENT ONLY



Radios for all frequencies and 400 accessory parts available from the European Specialists:

Albrecht Electronic GmbH
Lothar-Hahn-Straße 7A
D-2077 Trittau GERMANY
Phone: 04154/3055
Telex: 218 9406 Agru d

The supplier of RADIO SETS and ACCESSORIES to authorized agents

DX QSL

INTERNATIONAL

CLUB SPOT

More news on the DX QSL scene

Greetings to you all.

In its short history, the UK DX/QSL club scene appears to have given birth to three distinct type of clubs.

The DX/QSL type, e.g. Eng. Int. DX Club, Big Ben DX/QSL club, etc., the QSL swapping type of club, e.g. British Concorde and the DX type.

It's in this third category that the United Kingdom (International) Radio Group would like to be classed.

The UK (Int) RG was founded in February 1981 by "Arthur". A man of mystery - no surname! Actually I do know Arthur's surname but seeing as it appears nowhere on any of the Group's stationary, application forms, QSL cards or whatever he must want it kept QRT so I'm not going to be the one to let you know! Perhaps one day Arthur will unleash his dreaded secret on the world! The address of the UK (Int) RG is

Arthur,
P.O. Box 13,
Long Eaton,
Nottingham NG10 1BU.

Membership to the group is £5 (+ £1.50 for overseas airmail). This will bring you a fine package containing; 10 Club QSL cards, a rubber stamp, 10 adhesive decals, a lapel badge, a UK folder and maps, etc. Some very nice extras are also available at quite reasonable prices; printed patch 50p, embroidered patch £1.50, lapel badge 40p, Club log book 75p, printed tee shirts.

In fact the UK (Int) RG is a very professional and well run organisation and it is this very thing which disturbs me slightly. This is my own personal thoughts, not influenced by anybody or anything else. Could this group be the first of many clubs run as a money-making business, rather than as a club? I hope not.

A Refreshing Sight

It's a sad fact of life that any craze, new thing, cult, call it what you like, drags along in its path a huge bunch of get-rich-quick whizz kids, cowboy outfits, rip-off merchants, etc. We've all seen this happening with the DX/QSL scene. Well just by way of a refreshing change I came across an unexpected

exception the other week. I was at a local CB Rally/Eyeball the other week and was naturally attracted to the stalls displaying QSL cards, log books, etc. One stall really attracted me and the thing which caught my eye most of all were the prices. Rock bottom! Most unusual. QSL cards from £17.00 per 1,000, gloss finished cards about £28.00 per 1,000, log books (refillable) in very smart clip board type folders around £3.00 and something I've been searching far and wide for, Pictograms. A Pictogram is a combined airmail envelope/letter thing. You write on one side, fold it up sort of inside itself and it turns into a letter. Very nice, plus a bonus of it being covered in views of the UK.

I was really pleased to see this stall. My faith has been restored in human nature. I was beginning to think that all printers were getting very rich, very quickly on the backs of UK QSLers.

Anybody interested in finding out more about some rare bargains drop a line to Arandel, 4 Tintagel Road, Hindley Green, Wigan, Lancs.

The Coon Ass QSL Club

The Coon Ass club was formed about seven years ago by Perry and it is very well established and respected, unlike a lot of the here today, gone tomorrow type of set-ups which appear to be springing up every day. Perry has been involved with QSLing for quite a lot longer than most of us over here. Would you believe 18 years?

Membership of the Coon Ass at the moment stands around the 700 mark. Perhaps one of the reasons for this seemingly low number considering the age of the club is possibly the membership fee. At \$17.00 plus \$3.00 air mail for outside the USA it's not cheap. But you do get a slightly better than average package.

Apart from the usual QSL cards, rubber stamp, certificate, etc., you will receive a smashing Coon Ass T shirt (see card and photograph) and a special bonus, membership to the Worldwide QSL club including certi-



English International QSL AD's

Richard Topp (Blackbeard) 85 Kirkby Rd Sutton in Ashfield Notts NG17 1GG	Ian Howell (Moondog) 13 Ceri Ave Rhoose Nr Barry South Glamorgan South Wales
Gary Morrow (Bot Wheels 501) 2 Robert St Newtownards Co Down N Ireland	Greg Newman (Mr Lazy) 7 Swainswick St Giles East Whitechurch Bristol BS14 0AH
Malcolm (Lancor Man) 3 Stone Croft Penwortham Preston Lancs	Kenn Gerry (Donald Duck) Raabersstr 44 3812 Gross Siegharts Austria
Paul Jukes 100 Dudley Rd Top Flat Tipton W Mids	Jurgen & Christa Schurig (Whiskey Bars) Erlenrode 1 5600 Wuppertal 2 West Germany

All Genuine Guaranteed 14.1 QSL

Sandcastle QSL AD's

Hello, my name is Ian Shador, President of the Sandcastle QSL club. I will be supplying addresses and QSL cards from all over the world to this column. If you would like to exchange cards with me, please send an International Reply Coupon to: P.O. Box 167, Pacific Beach, Washington 98573, USA.

Trevor Brown (Wave Hanger) 20 McDivil St Manurewa New Zealand	Jean-Luc Vabres RC Aras P.O. Box 714 Valence 26000 France
Bert Turner (Kwai 1) P.O. Box 83020 Te Atatu South Auckland 8 New Zealand	Graham Habler P.O. Box 260 Maryborough, QSD 4650 Australia
Maneco P.O. Box 21161 01000 Sao Paulo Brazil	Garry Microsoft P.O. Box 43, Buleen Victoria 3105 Australia
South America Charley (India Tanager) P.O. Box 1174 Athens Greece	Claus Weber (Laubrosch) Kofl 42 7441 Pilgersdorf Austria
Salvador Rodriguez P.O. Box 1109 Old San Juan Station San Juan Puerto Rico 00902	Heinz Schulz (Orkan 1) Post Box 53 3174 Meine West Germany
Egbert Hielen (Donald Ducks) P.O. Box 368 7900 AJ Meppel Netherlands	Sigurd Swanson (India Sierra) P.O. Box 28 820 Eyraarbakka Iceland
Peter Withinson (Peter) 10 Paisley Street Invercargill New Zealand	Sylvia Boulter (S.C. 633) Devonport 7310 P.O. Box 525 Tasmania Australia

ificate and rubber stamp. In effect - two clubs for the price of one. Looked at in this light, the membership fee is not too bad at all.

I suppose all along your thoughts keep returning to that weirdo name - "Coon Ass". A bit strange innit? In actual fact all that it is, is nothing more than a name given by Americans to the people who live in a particular region. Much in the same way as over here we have a Scouser, Cockney, or as in my case, a Geordie. This was confirmed to me by my pal Dave Prichard (Mission Control SSB) who should know. He lives in Pasadena, Texas. According to Dave, people in Texas call people from South Louisiana "A Coon Ass" (Coon as in Raccoon, Ass as in !!!!).

Apparently this stemmed from the fact that a lot of South Louisianians were Acadians, that is, to use Dave's words, part French, part black, party everything. There's a tie-up in there, somewhere, but I'm not going any further into that little lot, thank you very much! Anyway, to carry on, it was originally meant as an insult, a slur, but nowadays it's all in good fun. So much so, in fact, that Louisianians appear to have adopted the name for themselves! Well, so much for the social history lesson. Anybody interested in becoming a Coon Ass and also a member of the Worldwide QSL club at the same time, get in touch with Perry at P.O. Box 278, Monroe, Louisiana 712101, USA. Apart from the \$17.00 plus \$3.00 air mail, send a photograph

Coon Ass QSL Club				
Star Rating	Yes First Class	Fair Second Class	Third Rate	No
1	★			
2	★			
3	★			
4	★			
5	★			
6	★			
7	★			
8				★
9				★
10				★
11				★
12		★		
13	★			
14				★
15				★
16				★
17	★			
18	★			
19	★			
20	★			
Total Star Rating		12	1	7

of yourself and 20 of your personal QSL cards. One last thing, don't forget to state what size T shirt you want.

P.S. Dept. Keep those cards coming in with your favourite/best DX/QSL club listings and all those genuine 100% 1-4-1 QSLers who want to get

their name and AD onto the "CB Radio" QSL list. Let's hear from you.

That's it, folks. Best regards to you all.

And remember, "If you can't use the mike, use the pen".

Charlie Hotel - Echo India - 25 Clear.

ACT NOW

To Secure Your 1982 CB RADIO DIARIES



Containing 32 Pages of up to Date
CB Information Which any
Breaker

**NEW or EXPERIENCED WILL
FIND ESSENTIAL READING**

★ 16 Pages of CB Information For
Both F.M. & A.M. Operators.

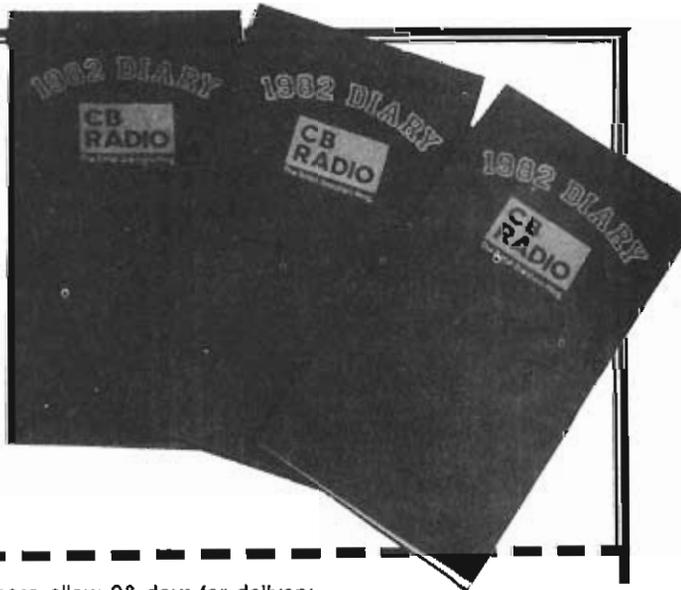
★ 16 Pages of DX Logs, Club Logs
& Relevant Codes

★ History of CB &
What the Controls Do

★ Recommended Retail Price
of £2.25 « 35p p&p

★ **YOUR COMPANY NAME
CAN BE PRINTED ON THE
ATTRACTIVE BLUE FRONT COVER**
(Minimum of 100 Diaries)

This
Diary
is only
Available
from
CB
RADIO
MAGAZINE



Please allow 28 days for delivery.
Trade and club prices available on application.

Please send me..... 1982 CB Radio Diary(ies) and I
enclose cheque/PO for £..... (Price each £2.25 « 35p p&p)
Make cheques payable to CB Radio Diaries, Tudor Works,
Beaconsfield Road, Hayes, Middx. UB4 0FL

PLEASE PRINT CAREFULLY AS THIS FORM WILL ADDRESS YOUR ORDER

NAME

ADDRESS

Ferroline 27 Mobile Antenna

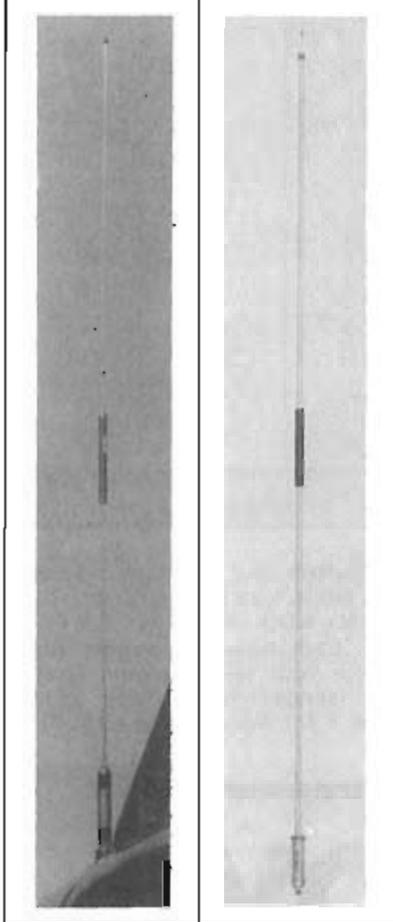


BASE STATION
ANTENNA

A new FREE-SPACE resonant HALF-WAVE mobile antenna with DOUBLE VSWR ADJUSTMENT. Only 1.5 METRES LONG and with these special features:

- * Tuneable to required bandwidth
- * Stainless steel elements
- * Fully weatherproofed
- * Low angle radiation
- * Standard 50 ohm impedance
- * Suitable FM, AM, SSB. 25 watts
- * Can be used on fibreglass vehicles
- * Base socket supplied

PRICE £29 including VAT, postage and packing. (SAE further details)



An UNOBTRUSIVE and efficient FREE-SPACE base antenna. Only the GENUINE BIG JIM 27 has these features:

- * Low angle radiation
- * No radials
- * Newly designed matching unit
- * Suitable FM, AM, SSB. 25 watts Adjustable for low VSWR
- * 50 ohm protected input
- * Mast bracket and 'U' clamps supplied
- * Fully weatherproofed

PRICE NOW ONLY £50 including VAT, postage and packing (SAE further details)

TRADE ENQUIRIES

FERROLINE 27 Mobile Antenna	C-BrIt 01-908 2726
BIG JIM 27 Base Antenna	WRENPRO 0493 700245

The FERROLINE and BIG JIM 27 are BRITISH MADE

BIG JIM is a registered trade name. Beware of imitations.

BOOKS ★

CB RADIO ★

ELECTRONICS

CB BIBLE. Still the biggest and best. Everything about CB radio £5.60

HOW TO SELECT AND INSTALL CB ANTENNAS. Excellent book for the beginner. How to use and choose. £3.55

CB ACCESSORIES YOU CAN BUILD. Many DIY projects for the home constructor £3.50

BIG-D GUIDE TO CB RADIO. The most popular book for the beginner. The original. £3.25

CB RADIO CONSTRUCTION PROJECTS. More DIY projects to make at home £3.00

CB'er's HANDY MANUAL OF SSB. Sideband operation explained in simple terms. How to run SSB rigs £1.50

CB HANDY DICTIONARY. Dictionary of terms, 10 codes and operating etc £1.00

AN INTRODUCTION TO RADIO DXing. Long distance reception on all short wave bands from 160 through to 10 meters (including 27MHz). Amateur and broadcast. Also VHF. How to QSL, 'Q' codes, many other items on DXing. £2.15

99 WAYS TO IMPROVE YOUR CB RADIO. How to really get the best out of your CB rig and antenna. Operating techniques and aids £2.50

CB JARGON. Written by CB'ers for CB'ers. Jargon/Directory. First British book £1.15

MODERN CB RADIO SERVICING. Recently published. An essential book for the serviceman. £5.30

CB DICTIONARY. Comprehensive CB guide to 10 codes, jargon, equipment and operation £1.60

HOW TO MAKE WALKIE TALKIES. Circuits for low power handheld and portable sets for CB and amateur radio £1.70

HOW TO BUILD ADVANCED SHORTWAVE RECEIVERS. Constructional details for a number of receivers with high level performance £1.30

SOLID STATE SHORTWAVE RECEIVERS FOR BEGINNERS. Simple and relatively inexpensive designs for several solid state SW receivers £1.35

D and A AMATEUR RADIO. How to become a radio amateur. Full details RAE Exam etc. etc. £1.95

TWO-METRE ANTENNA HANDBOOK. For radio amateurs. Contains many practical designs for two-metre antennas. Propagation, matching and performance. £4.20

GUIDE TO BROADCASTING STATIONS. Latest 18th edition covers long, medium and shortwave stations of the world. Complete listeners guide £3.25

MASTER IN-CAR ENTERTAINMENT. Everything about mobile broadcast radio, audio tape players and car antennas etc £3.00

RADIO CIRCUITS USING IC's. Receiver circuits for either amplitude or frequency modulated signals. Voltage regulators etc. £1.50

EASY-GUIDE TO CITIZENS BAND RADIO. Equipment, antennas, installation, procedures and maintenance. £2.50

Many other books on radio, audio and electronics. 20p stamp for full catalogue. PRICES SHOWN INCLUDE P & P



ZL COMMUNICATIONS
Cantley, Nr. Norwich, Norfolk NR13 3RT. TEL: GT. YARMOUTH (0493) 700821
9-5.30 weekdays - callers only by appointment



OCT

At last OCT are now in the north of England and Scotland. The CB company of integrity from Newcastle to John O'Groats



CHEROKEE



TELEX

K40

hy-gain

TURNER

BREMI

For service north of the river Tay, please contact Alan at Johnstone Communications/OCT and for your service south of the Tay and Ireland contact Tom at Central Scotland/OCT.

If you do not have our current price list please telephone or write to your nearest OCT distributor in your area. We also operate a van delivery service, so please call for more details.

South of the Tay
Central Scotland OCT
13 Ferry Road
Leith
Edinburgh
Tel: 031 554 9933
031 554 3733
Telex 727385

North of the Tay
Johnstone Communications OCT
Low Wood Road
Stonehaven
Tel: 0569 64618

These are your distributors for the North of England, Scotland and Ireland

Mail Order Welcome C.O.D.



Pricelist Available on Request

Mobile Range

COLT 210
COBRA
JAWS
C.B. MASTER
HAM MAJORS
TRISTAR 747
HAM MULTIMODES
HAM CONCORDES
SUPERSTAR 2000
EXPERT 320
WALKIE TALKIE 40 CH A.M.
WALKIE TALKIE 80 CH A.M.
BASE HAM JUMBOS

Accessories

Our range of accessories is so large that it is very difficult to list the full range, but if you want it then we will probably have it. IF NOT WE WILL GET IT. Because we import direct our prices are good so you can afford to give the customers a better deal. ALL OUR CB RADIOS HAVE BEEN LEGALLY IMPORTED AND CARRY A VAT PAID SERIAL NUMBER.

Our retail department is open to the public where you will be able to purchase your radios and accessories at realistic prices and remember everything we sell is covered by the 777 GUARANTEE.

27 FM

All the CB transceivers featured in this article are legal FM sets which comply to the Home Office specification 1320. When you read this article it should be possible to actually go out and buy some of the sets which we are featuring and assuming that you are in possession of a CB Licence, you will be able to modulate to your heart's content. Cosmetically, some of the equipment is now different to that which the manufacturers or importers originally intended but the insides of the sets remain the same. Amstrad and Binatone are examples of companies who have changed the look of their transceivers since 'prototype' days.



Coaxial Cable

Whilst most aeriels/antennas come supplied with a length of coaxial cable to attach to the rig, some do not. A good quality cable is essential to prevent unwanted radio breakthrough and this can be purchased by the metre from most good CB shops. For reasonably

The sets in this article have been chosen at random and only represent a small percentage of the equipment that will be available from legalisation day. Next month we will be featuring a far wider range of rigs which will either confuse the issue or give you, the reader, a wider choice of what to buy.

Accessories

To get on the air you are going to need more than just a transceiver, the following items should give the new breaker a few hints.

Antennas

Very few available antennas actually meet up to Government licence specification which states "27MHz apparatus with provision for connection of an external antenna, shall be connected to a single element rod or wire antenna with a base mounted loading coil; overall length of the antenna, excluding the loading coil shall not exceed 1.5 metres".

How this is going to be construed is anybody's guess but, our interpretation is that an aerial looking similar to our diagram is the only type that will be legal to use.

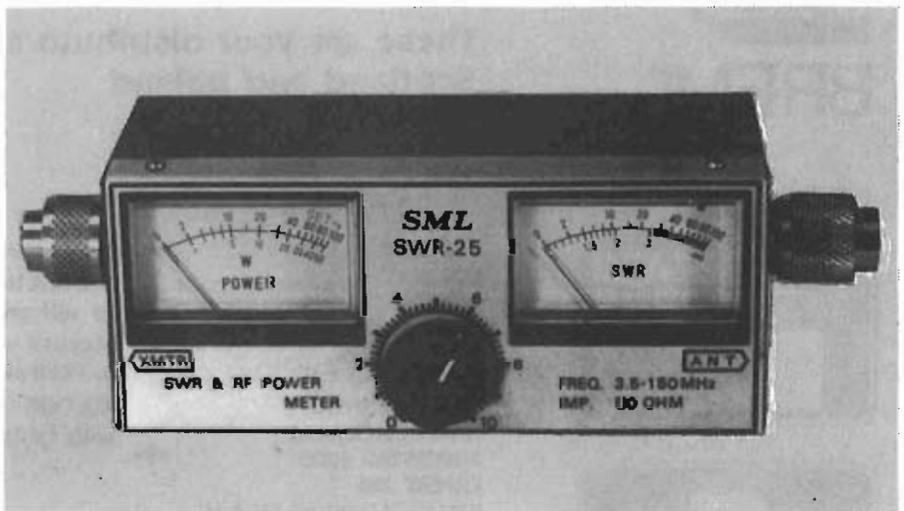
Power Supply

Is only needed if you intend using your mobile rig indoors as a home base station. This is a transformer which converts 240 A/C into approx 13.8 volts DC so that you can run your transceiver from the mains. Most home base stations have a built-in power supply.



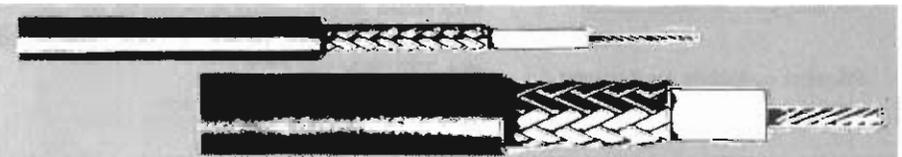
SWR meter

An SWR meter is the device by which you tune your antenna to your transceiver. As the meter is really only used when originally setting up your rig and twig and only needed again when you feel like checking or relocating your equipment it may be advisable to buy one between a group of you.



short runs RG/58 is normally used (this is an American type cable for other

British choices see this issue Antennas & Transmissions).



Products

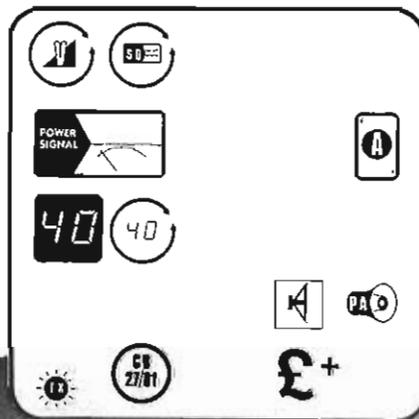
Microphone

Nearly every rig comes supplied with a mic. However there are more effective types of microphone available which will give either extra sensitivity or clarity. When buying any separate microphone make sure that it has the appropriate plug to fit the socket of your rig.



Realistic TRC 2001

This rig will only be available through Tandy's nationwide stores as Realistic is their own brand. Tandy are one of the world's largest electrical retailers with over 8,000 shops to their credit. Known as Radio Shack in the United States, Tandy have been selling CB equipment for years and are very knowledgeable in this subject. The rig itself is of straightforward design and looks fairly simple to operate.



GLOSSARY OF SYMBOLS

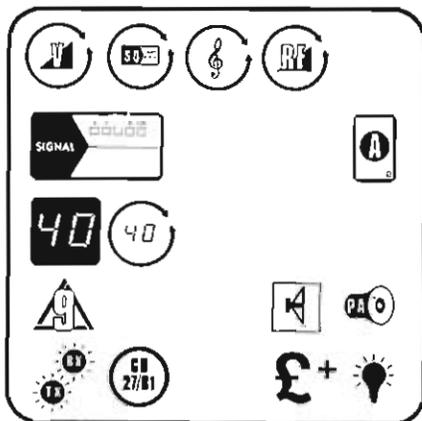
-  Volume Control
-  Squelch Control
-  Tone Control
-  Radio Frequency Gain Control
-  Microphone Gain Control
-  Signal Strength/Power/SWR Meter
-  Tone Switch
-  Local/Distance Switch
-  Attenuator Switch; Front or Back Panel
-  Amount of Channels
-  Channel Change Control
-  Channel Change on Microphone
-  Channel Change; Push Button
-  Channel 9 Select Switch
-  Delta Tune Switch
-  End Transmission Signal (Roger, Etc.)
-  Extension Speaker Facility
-  Public Address System
-  Transmit/Receive Indicator Lights
-  27MHz FM
-  934MHz UHF
-  Panel Light Dimmer Switch
-  Over £70/Under £70 (Retail)

© British Breaker Productions 1981/1982

27 FM

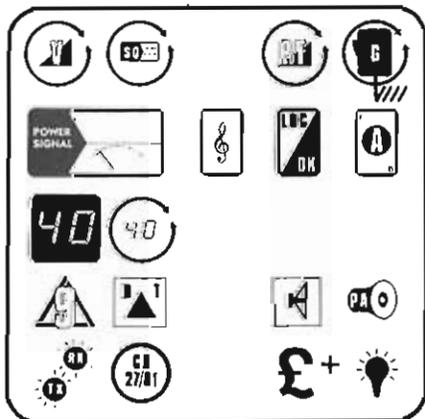
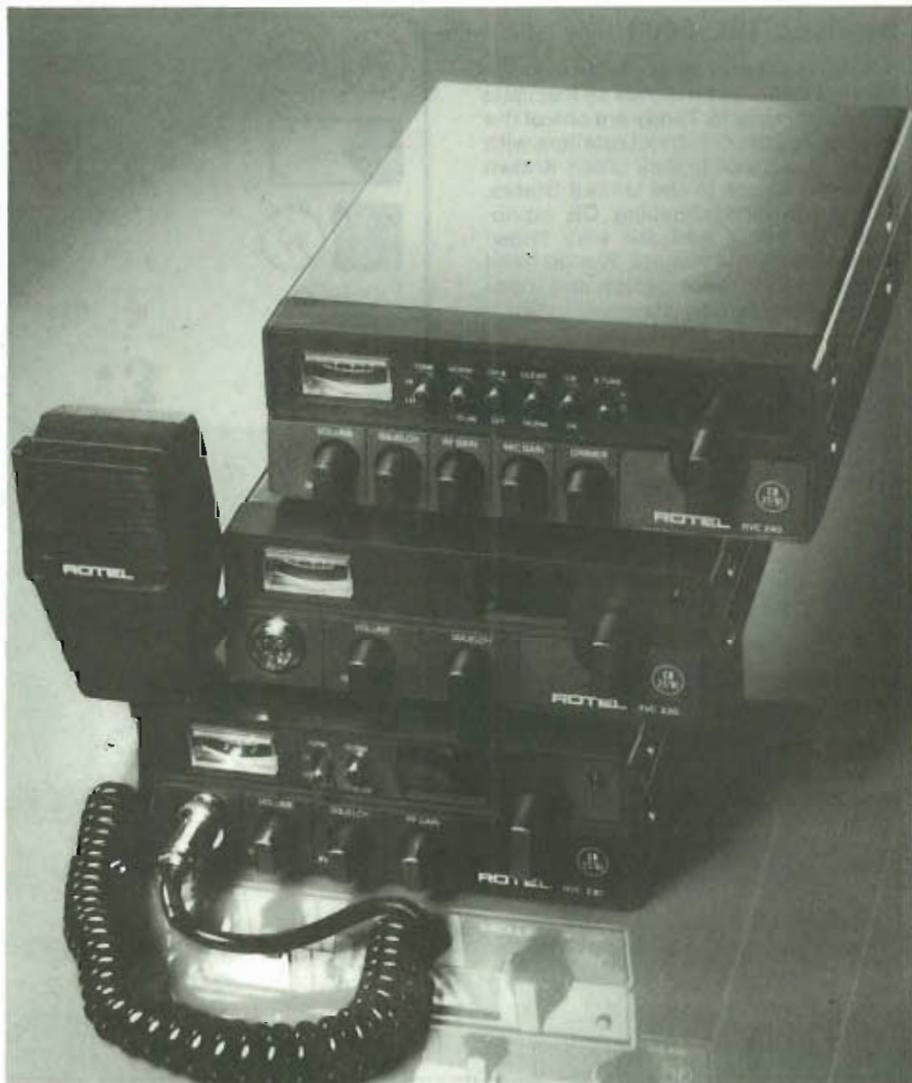
The Radiomobile 202

Radiomobile have established themselves as brand leaders in the In Car Entertainment industry and CB to them is a natural extension of their business. Radiomobile's policy has been to aim for better quality and better styling in a slightly higher price bracket. Both of the sets from Radiomobile are 'good lookers' without being too fussy. Although Radiomobile are a British company their equipment is made for them in the Far East.



Rotel RUC 240

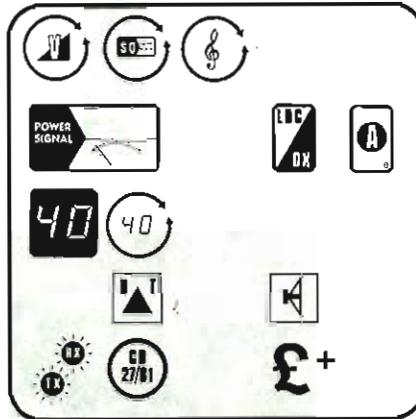
Late entrants into the legal CB race, Rotel have been producing quality Hi Fi products in Japan since the early 1960's. Rotel are based in the new town of Milton Keynes where all servicing will be undertaken. Their national list of dealers is almost endless and the CB equipment will be available through this network as well as from the mere specialist CB shops. If this equipment is anywhere near as good as their Hi Fi, it is worth serious consideration from any intending purchaser.



Products

Major 4000 Base Station

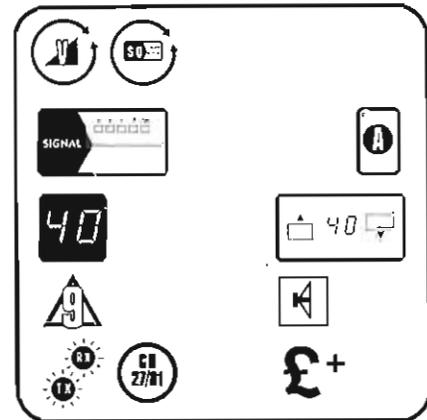
Major (UK) Ltd. has been established to distribute Major 27MHz FM CB equipment in this country. The fact that this company comprises of CB specialists who will only be supplying CB and nothing else should guarantee a good sales and service back up. Major equipment has been available in Holland under the PTT mark and also in France and although all the equipment is made in the same place, intending purchasers should make sure that the equipment they buy bears the required CB 27/81 mark. Any equipment without this mark is illegal to use and of limited capabilities when compared to British FM.



Tenvox

Voxon Audio have designed a totally new-looking rig which is completely built in the UK. Slider controls and push buttons replace the now standard knobs and dials to make the styling of this rig one of my personal favourites. I'm happy to see a British manufacturer doing something positive at last. The loudspeaker on this rig is not built into the case but supplied as a separate item for shelf or under dash mounting.

TENVOX



CHELMER CB ACCESSORIES

50 DUKE STREET
CHELMSFORD
ESSEX
Tel: 0245 351359

ALSO AVAILABLE
FROM CHELMER DEALERS

BASE STATION MODEL XCB-71



Available
exclusively on mail order from

CHELMER CB ACCESSORIES

FEATURES INCLUDE

- ★ Sensitive Dual Conversion Circuit with PLL
- ★ Automatic Noise Limiter (ANL)
- ★ Converts to Public Address System
- ★ SWR Switch and Meter
- ★ 4 Watts Audio Output
- ★ Delta Tuning Switch
- ★ 8 Ohms Extension Speaker



Most average size rigs
fit neatly into the case
dimensions:
(19.5cms x 6.5cms, depth 23cms)

ALL THIS FOR ONLY

£39.95 + £3.50 p&p

Please state 2- or 3-pin leads when ordering.

I enclose £ PO/Cash/Cheque or charge my

Access or Barclaycard number

Please allow 14 days for delivery

Name

Address

.....

.....

.....

.....

Send order form to

CHELMER CB, 50 DUKE STREET, CHELMSFORD, ESSEX
Chelmsford (0245) 351359

A & S Car Accessories
237A Dock Road,
Tilbury,
Essex

Big Rigs
Arterial Road,
Rayleigh,
Essex

Base Station
210 Horchurch Road,
Hornchurch,
Essex

Braintree CB Centre
Bradford Street
Braintree,
Essex

Clacton Electronics
Mordith Road,
Clacton on Sea,
Essex

Colchester CB Centre
12 Barrack Street
Colchester
Essex

Car Radio Services
London Road,
Ipswich,
Suffolk

CB Cavern
Holt,
Norfolk

Denver Autos
Livery Road,
Troston, Bury St Edmunds
Suffolk

Delta Electronics
972 Eastern Avenue,
Newbury Park, Ilford,
Essex

DB Warehouses
Rangelagh Road,
Ipswich,
Suffolk

Essex CB Distributors
Cambridge Road,
Sawbridgeworth,
Essex

Essex CB
Main Road,
Broomfield, Chelmsford,
Essex

Eastham CB
High Street,
Eastham,
Essex

Estury CB
Victoria Avenue,
Southend-on-Sea,
Essex

**P Flapman
Motor Cycles**
Felixstowe,
Suffolk

Mura Electronics
295-297 High Road,
Willesden,
London

Channel One
Parade,
Rochford,
Essex

PHS
107 Southchurch Road,
Southend-on-Sea,
Essex

Stadium CB
285 Sulton Road,
Southend-on-Sea,
Essex

Saffron CB Accessories
11 Debdon Road,
Saffron Walden,
Herts

Suffolk Aerials
5 Heigham Drive,
Lowestoft,
Suffolk

TNT Distributors Ltd
3 Kirkhurst Close,
Brightlingsea,
Essex

Wall to Wall CB
Polters Bar,
Herts.

Whight Electric
816 London Road,
Leigh-on-Sea,
Essex

Dave Wallace Car Radio
322 Spring Road,
Ipswich,
Suffolk

Wavelength
69 St Mathew Street,
Ipswich,
Suffolk

Halstead CB Shack
Inc Estate,
Halstead,
Essex

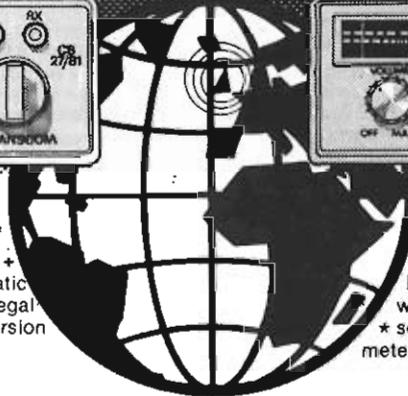
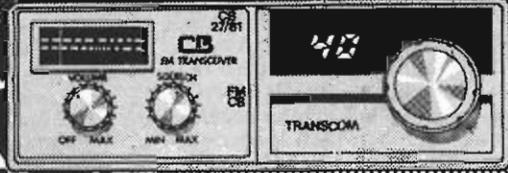
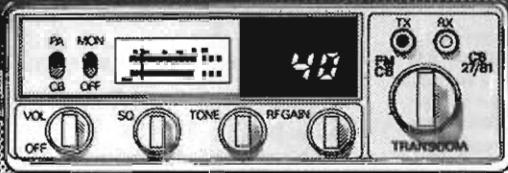
Halperin CB
18 St John Road,
Clapham Junction,
London SW11 1PN

TRADE ENQUIRIES WELCOMED

TRANSCOM International



FM CB



MODEL GBX 4000

Just look at these features * 40 channel LED display * True FM for transmission and reception * Built in roger beep * IC circuitry + 2nd IF circuit * FET front end * ALC (Automatic modulation limiter) * Absolute maximum legal power output * PLL synthesizer * Dual conversion super-Heterodyne system with RF stage. CONTROLS - volume on/off - squelch LED 40 channel selector - RF gain CB/PA switch - Monitor off - Illuminated S-RF meter - TX and RX - Indicators 4 pin mike jack - ext spkr jack - PA speaker jack complete with microphone/hanger installation, kit and instruction manual.

MODEL CBX 2000

FM circuitry 19 transistor 3 IC 23 diode 2 FET 1 crystal PLL synthesizer * 40 channel LED * PLL controlled dual conversion super-Heterodyne system * dynamic 600 DHB mike with Push to talk. CONTROLS - on/off volume * squelch * channel selector * illuminated S-RF meter.

LOOKS GOOD TOO!!
In keeping with the 1980's, all our unit fascias are finished in Brushed Aluminium.

*This will be
Britain's
best selling
CB range*

TRANSCOM ...OUT OF THIS WORLD
International

1-12 MARKET STREET, BRACKNELL, RG12 1JG
TELEPHONE: BRACKNELL (0344) 55308. TELEX: 848448

TRANSCOM reserve the right to change specification without prior notice.

CB

MAIL ORDER SPECIAL OFFER

ONLY
£16.95
INCLUSIVE
of P & P

This 5 amp fused and earthed, 3-core wired power supply yours for only £16.95 inclusive. Nothing else to pay.



All goods advertised are ex-stock and will be despatched on clearance of your payment.

Please rush me your special offer, I am over 18 and I enclose a cheque or P.O. made out to CRYSTALPOINT LTD.

NAME.....
ADDRESS.....
Qty..... enclosed £.....

CRYSTALPOINT LTD. PO BOX 6, HAYES, MIDDX UB4 0SS

CBR1

Readers Write

Dear Sir,

Having 'run' a number of American-style rigs for some time now, I was really looking forward to getting a new legal CB radio, built for the UK market, designed for use in RIGHT-HAND DRIVE cars, and eliminating the hassle caused by a mike lead which appeared to have a mind of its own by ending up wrapped around the gear stick, steering wheel and the seat-covers appendages. However, I find, from the vast amount of pre-launch literature which is now falling on my mat daily, that NO ONE, I repeat, NO ONE, has thought to change the mike lead to enter the rig on the RIGHT side. Surely this, for safety, should have been a prime consideration. Even the fact that many mike leads needs re-threading after periods of use, causing kinks in the lead, must have made prospective new-rig manufacturers think this over.

What do other breakers think about this? Surely it would not take much to have the lead on the UK side?

Three Legs (Reading)

Take a look at our rig info page. There is at least one with the lead on the right.

Dear Sir,

Why does our Government have to be different to everybody else? E.g. Driving on the left-hand side of the road instead of the right; 240 volts mains instead of 110 volts; UHF television instead of VHF television and now CB on FM 27.60125 to 27.99125. WHY?

If AM CB interferes with hospitals' kidney machines and heart machines, etc., then why do the caller devices that alert the doctors of emergencies in hospitals work on AM? (Channel 2 in the case of our local hospital). Surely they would interfere if CB does?

Every local breaker I know stays clear of channels 1, 2 and 3 so as not to interfere with the hospital channel and all visitors are told that channel 2 is the hospital channel.

If the Government do so dearly want CB on FM, I wouldn't make any fuss if it was FM 26.965 to 27.405 (the same frequencies as AM but on FM).

Then it would only cost about £10 to £15 to convert an AM rig to FM, none of this £30 to £50 or buy a new rig attitude that the Government is giving us at the moment.

Please leave the 27.60125 to 27.99125 and 934.025 to 934.975 to all the businessmen who think they're onto a good thing with the legalisation of CB and are going to bung up the airways with business deals and give the British CB enthusiast FM 26.965 to 27.405 (and perhaps sidebands for DX-ing at a later date).

Yours faithfully,
CB Crusader (David Brown) (Cornwall)

The problem with existing frequencies, i.e. AM but converted to FM, would be AM breakthrough which would virtually negate the use of FM. If you really do want FM then like it or not legal FM is a better bet. Quite honestly, your worry about businessmen is totally unfounded. Many other publications have harped on about small business use, mainly for something to write! Imagine, if you can, attempting to run a business with a CB next to your secretary and all the rubbish of CB blaring over. One-four for a copy, break for a radio check and so on. It simply won't work without illegal coding or selective paging! Businesses would be better advised to save their money and buy a RT.

Dear CB Radio,

In response to your article 'On a Serious Note' in September edition of CB Radio and in particular the section headed "Civil Disorder and CB", we feel we must point out the section that was taken on the Wirral during the weekend of the main rioting on Merseyside.

After Mr. Anderton's criticism in the Press that CB was used to benefit the rioters and looters in Manchester, The Wirral Citizen Band Association and The Apollo CB Club held a joint meeting on the Friday evening before the rioting was expected. We were determined that Merseyside would not be criticised in the way Manchester was and we agreed that there was one of the two courses of action open to us, either:

1. Completely wipe out the 27 megs band plus some of the 26 and 28 megs band or

2. Monitor every channel which could possibly be used.

Eventually it was decided that it would not be fair for responsible CB'ers to wipe their hobby out for a complete weekend, so monitoring services were set up to cover 26 megs through to 28.3 megs. This service commenced 8.00pm on the Friday evening through to 8.00am the following Monday morning without any break whatsoever.

As a result we can safely assure Mr. Oxford (Chief Constable of Merseyside) and Mr. Whitelaw (Home Secretary) and for that matter, any other interested parties, that in no way was CB radic used on Merseyside to organise rioting.

I and all my colleagues feel that the operation was a complete success and although many boring hours were spent monitoring we have peace of mind in the knowledge that nobody can criticise Merseyside CB'ers.

In hindsight, the only mistake we made (call it an oversight rather than a

mistake) was that the 49 meg walkie talkie band was not covered.

Yours sincerely,
D. J. Rimmer
(Wirral Citizen Band Association)

Dear Editor,

AM is dead. Unfortunately the UBA don't think so! It is an outdated mode. FM is better.

UBA have fought a great fight against the powers that be but are living in the past. AM is not for the '80s, FM is!

We want a national organisation for CB users, not a hotchpotch of so-called associations otherwise mayhem will prevail. The behaviour on the bands at the moment is disgusting. Swearing is rife and having only one calling channel is stupid.

I propose the following that must be done for CB to last:

1. Good set of rules to adhere to.
2. One organisation controlling CB.
3. One net channel and three calling channels.

4. Forty channels FM and 80 channels SSB by 1983 or 120 channels FM. nels FM.

5. The use of the amateur 28.5 band in conjunction with the RSGB.

6. A working party to promote ideas and thrash out some sort of solutions with RSGB and the National CB Association.

Yours cheerfully,
Chris Lee (Romford)

P.S. Latest rumour - by Easter AM will be legal. What a joke!

Dear Sir,

Seeing as though the Government wanted FM, why not FM 26.965 to 27.405? It would have been a lot easier than FM 27.60125 to 27.99125.

Then all the AM breakers would have to do was to fit an FM conversion board (which cost about £8 to £10) to their rigs.

Seeing as though we're stuck with the new frequencies, why doesn't a company bring out a rig with AM 26.965 to 27.405 and FM 27.60125 to 27.99125 on it?

So what if the AM part is illegal, most things you do these days are.

I mean, who cares if somebody with only AM sends out a 10-33 and the breakers on FM can't hear and vice versa? (Well, I do).

At least if someone has a rig with both wavelengths and the right frequencies on it they can relay the message to breakers who only have FM or only AM.

continued . . .

LUTON

BREAKERS **P**ARADISE **D**EMOLISH
PRICES **A**ND **O**PPPOSITION !!



★ Legal CB's From £55 inc. v.a.t.★

PLEASE CALL IN FOR OUR
COMPREHENSIVE CATALOGUE & PRICE LIST.

**BREAKERS PARADISE,
84 WELLINGTON STREET,
LUTON. Tel:(0582) 33625**

Readers Write

continued . . .

I still haven't decided what type of rig to buy (AM or FM). I don't want to buy two rigs as this would cost too much and take up too much space.

So please, someone bring out a rig with both wavelengths and the correct frequencies on it. (Or is there one already?)

Yours faithfully,

David Brown (Penzance)

Yes, here it is illegal, fetches around £300 and we must tell you not to purchase one. It's a Ham International Jumbo or the Excalibur, they're both similar and tune across mid 25 to 28MHz with AM/FM and SSB modes.

Dear Readers Write,

From the October issue of CB Radio I am pleased, no, super satisfied, to see that our knight in shining armour, Sir Patrick Wall, has actually cornered Mr. Whitelaw into admission of pressure from the EEC over his oddball open channel idea of CB - note my printed letter of Speak Out, July 81!

Incidentally, the "Consultants" are Euro Consulting Engineers Luxembourg (GDL), Rue G Schnieder 38, Luxembourg. A Sig. Mario Corvi Lazzeri is the co-ordinator.

Now should you want Euro CB to be AM SSB and FM with at least 120 channels and freedom to DX to your Greek or German friends, sensible power limits like 25 watts or 75 watts SSB then rise from your apathy and get those pencils working.

You can bet your life that Mr. Whitelaw has put up all his biased arguments to the detriment of AM and SSB, not to mention his hatred for the conventional channel frequencies. Such negative propaganda can only be countered by letters, letters and more letters to these consultants.

Your Euro MP and the Secretariat of the Commission are worth pushing also.

For your Euro MP, write c/o The European Parliament, Brussels, Belgium.

For the Secretariat of the Commission, 200 Rue de la Loi 1049, Brussels, Belgium.

The latest info from CB-land beyond 'the pond' - direct from the FCC no less - is that dear Uncle Sam is close to allocating a further 25 channels for exclusive SSB. The FCC can foresee continued oversubscription and may be willing to extend the basic AM provision as well. From the tone of their letter it would seem that they have done what they can to influence our H.O. into accepting 27MHz AM. Probably to the point of severed relations, as I have been asked to forward all and any news of progress in the UK! They had not even seen MPT 1320 but should have a copy by now - blow the Crown Copyright, Rank Xerox

provided the goods.

Still, whatever your preferences are, AM v FM, no one can rightly disagree that 2 watts ERP 40 channels on oddball frequencies and cut down twigs at near enough ground level is still open channel and not by any means effective CB. Don't let us be conned into buying "Whitelaw rigs" when next year could well see the end of them!

The article "B & P Don't Mix" is ranking as one of the most responsible answers to RF interference so far printed. Having for some years been involved with the use of highly sensitive electronic monitoring equipment where fluctuations of ± 0.1 mill volt are significant and micro volts are common units, I have NEVER had reason to suspect CB as a source of interference. Despite an international road freight yard next door and colleagues modulating in the adjacent car park. Every single spurious response on the equipment has been positively traced to such things as air compressor switch gear, 'spikes' in the 440v three-phase circuits and CEGB supply, even dodgy fluorescent light units have been proven guilty. Hospitals and the like are only too ready to blame CB for malfunctions in equipment that is far more likely to be due to other equipment of their own. Hospital equipment manufacturers have a world-wide market and exactly the same equipment is found in French, Italian, American and even Kenyan hospitals and no question about it RF screening is an absolute No. 1 consideration in its design - after all, 27MHz page systems are not exactly hen's teeth in hospitals! Yet time and again any Tom, Dick or Harry of a hospital spokesman can blame AM CB and the media splash it as headline news without question.

2 I can't over emphasise the importance of individual effort in killing off one way or another this despicable sham for CB. I refer to Mr. Whitelaw's 'Open Channel MPT 1320. The authorities here and in Europe MUST hear our aspirations or else we will get just what our apathy deserves.

Yours sincerely,

Martin E. J. Wright (High Wycombe)

Dear Sir,

Thank you, from the bottom of our hearts, to all you lovely breakers. On 17 September, our daughter, Mini Bitch (Karen), aged 10, was admitted to Ward 9, Wexham Park Hospital, Slough with heart failure caused by damaged kidneys. Some of our local good buddies took a collection for her and another lent her a monitor which we put beside her bed. This was tuned to channel 34 for the local breakers to say "Hello" to her when travelling to and from work.

Word spread to the truckers on channel 19 and before we knew what was happening she had cards, telephone calls and flowers. Thank you all very much for your concern and all the lovely things you have sent. It is nice to know that there are an awful lot of caring people around. The good news is that Karen is better and coming home every weekend, although her treatment won't end for some time yet and she will have to have a kidney transplant in the future. Thank you, again, for everything.

73's, 51's and 88's to you all.

Mini Bitch, The Bitch and Plastic Rabbit

Dear CB Radio,

I bought the August 1981 CB Radio, more curious about what was going on regarding legality than anything else, but I finally got round to reading about the Birmingham and Cornwall convoys and the surprising finish to this article. For the Cornwallites to make their protest in London was doomed from the start. They should have used one of the W.S.W. cities where supporters could have been drawn in from all directions. As it was they could only crusade en route. But more important (organisers take note) is the different attitude of the London public to provincial demos plus the 'curious' situation regarding the two London police forces, which are under the control of the Home Secretary and not a Chief Constable who could report to a Watch Committee. This isolates the London forces from the public and as these forces are used primarily to enforce Government measures the people of London are not eager to upset these forces by supporting any provincial fracas. Added to this is the biased ignorance of Londoners towards CB generally (and here I might add that a 10-1 to CB publications is not out of place, as their fear of the law is anathema to breakers, who are law breakers).

The CB mags must give more publicity to the London CB clubs. Also these mags should be asking direct questions of the Government as to why it is determined to continue to ignore the rights of the people to use a natural phenomenon to their advantage. Daylight was a similar situation hindered by a window tax.

A. Prowse (London N9)

May I suggest that you ensure any London club that you are associated with registers with us. For we have never been afraid of the Law, hence we are the only magazine running a 'The Law and You' spot. The National Club Register will contain the stance of AM and/or FM clubs, thus communication between clubs should be easy and the Birmingham turn out obtained!

IF YOU HAVE SOMETHING TO SAY WHY NOT WRITE . . .

LOTHER ALBRECHT

LTD

1 AVONDALE COURT, ONCHAN, ISLE OF MAN. PHONE 0624 28847

HERE AT LAST

The European Communications Specialists with all types of Radios & Accessories – 400 stock items always available.

SUPPLIERS TO AUTHORISED AGENTS IN EUROPE AND NOW HERE IN THE UNITED KINGDOM



FROM WAREHOUSE 1

In the middle of England we can despatch your supplies to 95% of UK to receive goods next day.

WAREHOUSES 2 & 3

With negotiations currently under way for warehouse 2 in North London and warehouse 3 in Scotland we can cover all you need fast.

CREDIT FACILITIES

For traders with suitable references and proving three months' steady cash trading.

WE OFFER MORE YET

Guidance from our years of experience, free delivery anywhere in UK, fully warranted accessory stocks, 90 days' warranty on all radios.

ARE YOU SURE

Of your radio supplies? If you are thinking twice then apply in writing for our price list.

WORRY NO MORE

For those who already import CB Radio Equipment we are here with many specialist items. No need to tie up currency now with large stocks. Get all you wish in smaller quantities and still at our best prices.

WITH CB FREE

Now you must spend your time selling, not wasting valuable time in import and customs documentation.

WE ARE THE EXPERTS

We have solved all the problems for you. Your customers need you most now, and having seen legalisation in other countries, we can promise you that. You have to keep your stocks flowing.

GOOD BUSINESSMEN

Know that to keep customers satisfied you must have selection of goods. We have the biggest selection. Your customers will not leave you for other shops who hold only few items.

**PHONE LOTHER ALBRECHT THE EXPERTS
OUR CB RADIOS ARE WAITING TO BE DELIVERED**

Rig Test



Amstrads 900 and 901, a practical test

Now that CB is legal we thought we should kick off our rig spot with one of the first companies to approach us claspable operable 27 FM transceivers. Obviously with the short time in which companies have had to prepare for legalisation, it is inevitable that equipment first launched or announced would be modified, improved or even totally changed.

Amstrad have actually restyled their 900 and 901 quite considerably since their first announcement. So beware of older reports detailing features, they may be out of date. The difference is quite easy to spot.

Firstly, the original prototypes did not carry the CB 27/81 mark and thus this does not appear on any photos. Secondly, Amstrad have improved their 900 considerably, adding two controls, a tone and an RF gain. The LED signal strength meter has also been re-styled from round, sunken LED's to square, flush fitting. This enhances the whole appearance of the rig.

With the 901 the same two controls have been added, tone and RF gain, the LED's are again changed to flush and re-styled to balance, with the PA and Roger LED's side by side offsetting the RX, TX (receiving and transmitting) LED's. The prototype 901 showed five push buttons. Now with the addition of the tone, RF gain as variable controls, this has left just three push buttons, a PA-CB, a Roger tone and a channel 9 switch. These have been moved closer together and placed neatly between the channel change and the RF gain control.

With these improvements both the 900 and the 901 are now very smart, clean and professional-looking rigs.

A practical test

The decision to eventually legalise 27 FM was unfortunately a Government compromise made only because 27 AM exists and is in wide legal use. Arguments by the Government used against breakers have always quoted interference as the reason for not legalising AM. In retort, existing breakers have argued that FM is useless and will not work.

Therefore the tests we carried out were practical and designed to set the record straight or at least let you decide who is right.

Base to mobile

The Amstrad 900 was set up as the base station using an antenna mounted on a flat roof with its base just under seven meters from the ground. Thus attenuation at the base station was not legally required.

The Amstrad 901 was placed in our Escort van and connected to a Cherokee Half Breed mounted centrally on the roof and an SWR reading of 1.1 to 1 was easily achieved.

Using channel 20 signal readings were taken over a given route of a known distance. The readings were taken at each end, both base and mobile. For the purposes of the test only good intelligible readable signals were recorded so the feasible operable range could be determined, not maximum range.

Ranges Obtained

All distances quoted are point to point across country, not road distances. The terrain is medium to flat, reasonably well developed with a high building density, average height 35ft.

Base Receiving	Mobile Receiving	Distance (miles)
+20	+20	.1
+20	+20	1½
20-	+20	2
+9	20	2½
+7	+9	3
7	9-	3½
7-	+7	4
5	7	4½
+3	5	5

Beyond this range an intelligible conversation proves difficult operating a legally-placed base station antenna not more than 1.5 metres in length and 7 metres high.

From the table one can see that conforming with all the legal requirements, three to four miles base to mobile range is easily obtainable. However, whilst testing we came across someone testing another 27 FM rig, using an Avanti Sigma IV mounted over 28ft high. With this a range of over 13 miles was easily obtained from our mobile at Teddington to his base at Croydon with strength 7 reception.

Mobile to mobile

For this the Amstrad 901 was left in the Escort van connected to the Cherokee Half Breed and the Amstrad 900 was placed in an Escort Hatchback using a magnetic mounted Cherokee Dial a Match. Again a 1.1 to 1 SWR was obtained on channel 20 and we set off in opposite directions giving signal tests at known landmarks. Expecting a great reduction in range, the first pleasant surprise was that the squelch control could be fully on, thus losing all the background hush, yet retaining a nice clear signal strength.

901 mobile	900 mobile	Distance (miles)
+20	+20	½
+20	+20	1
+20	+20	1½
20	20	2
+9	+9	2½
7	+7	3
5	5	3½
3	5-	4
3-	3-	4½

Beyond and around 4 to 4½ miles distance, depending on terrain, audibility became lost in what AM breakthrough there was.

Having used illegal AM in this country more times than I should admit to, I can honestly say that the quality of reception was very good. The squelch control could be left fully clockwise leaving us with no background hush or interference for some 75 to 80% of the range testing. Audability was good, although the FM signal was slightly more prone to hilly terrain. The results we obtained compare favourably with mobile AM operation.

Repeated again

Not satisfied with our original results and being of a doubting mind we carried the tests out again in daylight hours and at night. The night tests proved that the normal laws of physics apply to FM and our ranges obtained were improved slightly.

It was whilst driving mobile to mobile that we copied another 27 FM mobile. Fidelity were testing various antenna in the Denham area. Again the ranges obtained with a three-way conversation were around three miles with a reasonable strength signal.



Later we arranged a three-way test with Fidelity One using a base station in Denham, the Amstrad 900 as a base in Hayes and the Amstrad 901 mobile just past Feltham.

Denham base receiving	Hayes base receiving	Mobile receiving
+9	*	
3		*
*	9	*
	+5	*
*		+3
	*	5

The stars indicate which station's signal was being received and the strength of that station is indicated in the receiving station's column.

The distance from our mobile to Denham was around 11 miles, from our base to Denham is seven miles and from our mobile to our base five miles.

AMSTRAD

Manufacturer's Specifications

Type of Emission: F3
 Channel Spacing: 10KHz
 Frequency Composition: PLL Synthesizer
 Power Source: 12V DC Negative or Positive Earth (nominal)
 Operating Temperature Range: -5°C - +45°C

Electric Specifications

Receiver Section

- a Receiver System Dual Conversion Superheterodyne
- b Intermediate Freq. 1st IF: 10.895MHz
2nd IF: 455KHz
- c Sensitivity 0.5uV (20dB S/W) nominal
- d Adjacent Channel Selectivity (@+10KHz) 45dB for Standard
- e Squelch Threshold Sensitivity less than -10dB NO level (approx. 0.15 to 0.2uV)
- f Squelch Tight Sensitivity 50uV maximum
- g Spurious Response 60dB nominal attenuation
- h Image Rejection 45dB nominal
- i Receiver Spurious Emissions less than 20nW
- j Audio output power (@10% THD at 1KHz) 4 watts at 4 ohm
2 watts at 8 ohm
- k Audio Freq. Response +2 to -8dB per 6dB/OCT at 0.3 - 3KHz
- l Current Drain Stand-by 0.25A nominal
Receiving max. 0.8A nominal

Transmitter Section

- a RF output power 4 watts (MPT-1320)
 - b Freq. Deviation @ 1KHz ±2.5KHz max.
 - c Audio Freq. Response +2 to -5dB per 6dB/OCT at 0.3 - 3.0KHz pre-emphasise
 - d Spurious emission less than 50nW
- 80-85MHz
87.5-118MHz
- 135-136MHz
174-230MHz
470-882MHz
Other Freqs. less than 0.25uW
 - e Adjacent channel power less than 10uW
 - f Current drain @ 12.0V 2A nominal



Conclusion Amstrad!

The equipment is very neat, compact and gives good performance. It is attractively presented in a black casing with easy-to-understand LED readouts. A legal requirement that is fitted is the attenuator, which is easily accessible and positively switching

thus power cannot accidentally be reduced unknowingly.

For the intending purchaser of 27 FM, Amstrads 900 or 901 must not be left unconsidered. We were personally impressed with their appearance and performance.

THERE ARE GOING TO BE A LOT OF CHEETAHS ON THE ROAD THIS YEAR



The Halcyon Cheetah is the most advanced mobile FM station on the market.

It will operate with unfailing precision on any of the 40 channels allocated for CB use.

To ensure this kind of performance Halcyon engineers have gone to great lengths to develop a soundly designed, reasonably priced system that can be easily installed even by a first timer.

What makes the Cheetah unique—and what will also make it very popular—is that it comes as a complete package including a slide mount, microphone holder and a specially designed Halcyon Searcher antenna that conforms to Home Office requirements.

At the heart of the package is our elegantly styled, ultra-sensitive trans-receiver and a power mike that will give years of reliable performance either as a mobile rig or as a home base station.

We also include a step by step guide for first time CB'ers as well as a cassette that tells how to put it all together, and a manual with all the technical details.

And to back up our claims we're offering a full, no-quibble guarantee.

So is it any wonder that we think the roads will soon be full of Cheetahs? And if you're smart, a lot of them will be seen leaving your shop.

The Halcyon Cheetah.

**We Believe Our Citizens
Deserve the Best.**

**DEALERSHIPS
NOW AVAILABLE**



Halcyon  **CHEETAH**

Halcyon CB, 395-397 Albany Road, London S.E.5.



TRUCK KING
867 ST ALBANS ROAD
GARSTON, WATFORD, HERTS

09273-61673



CB Accessories

Probably the cheapest in the country. Don't waste your time and money with butchers and bakers, we are a longstanding CB Shop run by breakers for breakers. We have a fitting, SWR and repair service and give free, sensible advice. Some of our accessory prices are listed below, most of them compare with UK WHOLE-SALE PRICES. We don't run loss leaders to get you to come in - ALL OUR PRICES ARE LOW. (Quoted CB accessory prices are 'over the counter'. Please phone for Mail Order quote).

2-3.5A POWER PACK.....	£8.65
3-5A POWER PACK.....	10.50
5-7A POWER PACK.....	16.25
SIGMA IV.....	49.95
STARDUSTER.....	17.50
BIG STICK.....	21.95
GPZ 5/8 WAVE.....	28.00
GPZ 1/2 WAVE.....	21.00
STD 1/2 WAVE DIPOLE.....	9.95
CITY STAR 1/2 WAVE.....	18.95
FIRESTIK UFO BASE ANTENNA.....	25.00
WHISKY 4.....	12.95
ASTRO 8 BASE ANTENNA.....	7.95
LOFT/OUTDOOR ECONOMY ANTENNA.....	5.95
GROUND PLANE KIT.....	5.95
BASIC SWR.....	5.95
SWR/FS/POWER METER.....	9.50
SWR/FS/POWER/DUMMY LOAD/ MODULATION/CRYSTAL METER.....	25.00
60W AM/SSB BURNER.....	45.00
100W SKIPMASTER.....	85.00
150W SKIPMASTER.....	110.00
100W ZETAGI MAINS BURNER.....	95.00
MATCHER.....	3.60
SPLITTER.....	4.20
MOBILE RETRACTABLE.....	6.95
DV27 (SIRTEL).....	4.90
DX 27.....	8.20
K27.....	8.95
T27.....	7.20
K27 TRIBAND AND SPLITTER.....	12.95
K40 ANTENNA.....	26.95
2' FIRESTIK.....	5.95
7' FIRESTIK.....	9.95
TWIN FIRESTIK.....	34.00
ECONOMY MAG MOUNT.....	5.95
DX 5/8.....	13.50
4' HYGAIN GYPSY.....	5.95
RG58 COAX.....	25p YD
RG6 COAX.....	45p YD
PL259.....	0.45p
49 MHz WALKIE TALKIES.....	13.95
GUTTERMOUNT.....	3.95
MIRROR MOUNT.....	3.95
CB/AM/FM MONITOR AND RADIO.....	15.25
REPLACEMENT MIKES.....	3.95
ECONOMY POWER MIKES.....	4.95
TURNER - 2 MIKE.....	22.00
HAM MASTER 4500.....	29.95
K40 SPEECH PROCESSOR.....	26.95
PA HORNS.....	4.95
PA/ALARM HORNS.....	6.95
EXTENSION SPEAKERS FROM.....	3.25

SPECIAL OFFERS THIS MONTH

To make way for new stock we offer the following at super low prices-

*Black Power tripod indoor antenna £12.95. *Firestik UFO home base antenna - 6dB gain £16.95. *Comant Silver Rod £19.50. *Economy half-wave dipole £8.95. *Ground plane kit £4.95. *4' Rebel 500 £5.95. Boman CB lockmounts £2.50. Zetagi 1 kilowatt boots £285.00. Zetagi 100W AM/200W SSB burner £64.95. Zetagi 50W AM/100W SSB £44.00. Zetagi 30W AM/SSB £19.95. Big Dummy's Guide £1.95. Firestik mounts, Disco Disc, Standard, Trunk Lip, H/Duty spring, Quick disconnect fitting, Mirror mount £3.25 each.

N.B. All advertised CB accessories marked with an asterisk are too large to post, so callers only for these. For all other CB accessories add 50p per item. Tee shirt, cap and badge prices are all quoted inclusive of postage.

Coll. Cobra, Hygain, President, GEC In stock at present from £55. Good range of SSB usually available - please phone.

Cheques/PO with order to

TRUCK KING, 867 St Albans Road, Garston, Watford, Herts
Access/Visa TKII Orders Tel: 09273 61673

ORBITER

BASE STATION ANTENNA

MINIMISE TV I

WITH THE ORBITERS

UNIQUE ADJUSTABLE IMPEDANCE MATCHER

Impedance:
50 OHM - ADJUSTABLE
 Frequency
26-30 MHZ AM, FM, SSB
 Gain
±4DB
 Bandwidth
1.5 MHZ
 VSWR
Less than 1.5
 Max. Power
500 W
 Total Length
19' 0"
 Mounting
1-2" mast tube
 Connction
S 0239 Socket
 Weight
1.9K



Telephone
 Enquiries:-
0789 762673

Freeman & Pardoe Ltd.,
 Tything Road,
 Arden Forest
 Industrial Estate,
 Alcester,
 Warwickshire.

£22.95
 inc. V.A.T.
 Chimney Lashing Kits,
 Brackets, cable etc.
 always in stock

TRADE ENQUIRIES WELCOME

CB & TRUCK STOP
GEORGIA BULLDOG

ENGLANDS LARGEST SUPPLIER OF
SPECIAL CLUB BADGES TO ORDER.



C.B. PATCHES, BADGES AND CAPS
C.B. CLUB ENQUIRIES WELCOME

56a MILLIGAN ROAD, LEICESTER LE2 8FA

TEL LEICS (0533) 835782 (OFFICE HOURS)
VAT REG 115 7704 78

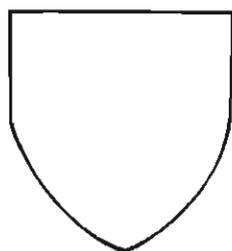
FROM AN ESTABLISHED AND RESPECTED COMPANY

**YOUR OWN EXCLUSIVE EMBROIDERED
CLUB BADGE**

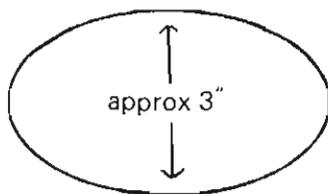
IN UP TO 6 BEAUTIFUL COLOURS

ONLY
50p
EACH
including V.A.T &
first class postage

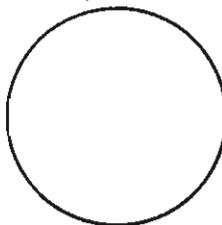
MINIMUM RUNS OF 220



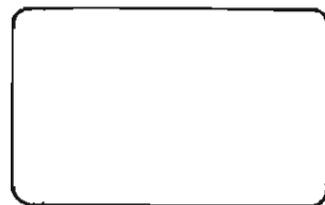
SHIELD



OVAL



CIRCLE



RECTANGLE

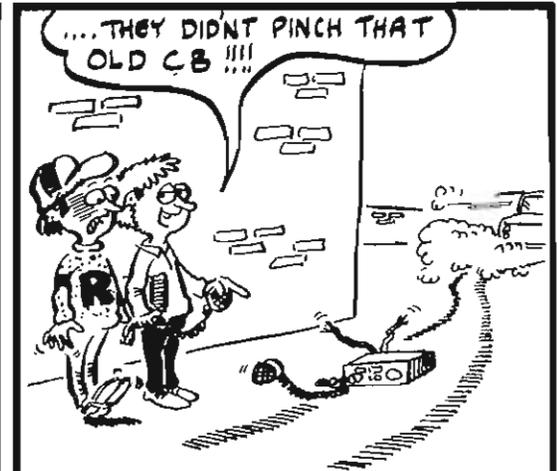
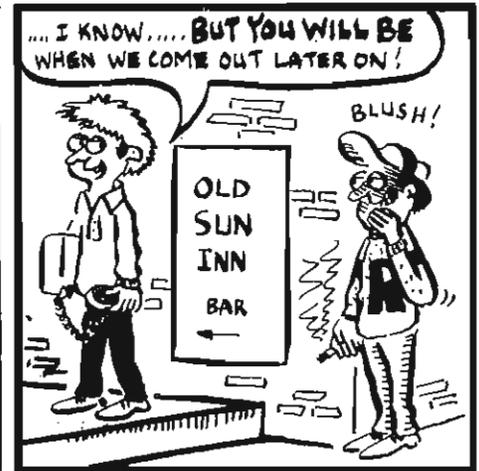
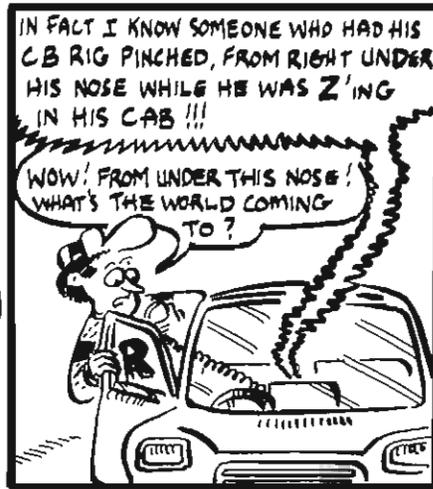
CHOOSE ANY OF THESE SHAPES, THEN SKETCH YOUR DESIGN AND SPECIFY:

- (1) WHAT COLOUR BACKGROUND
- (2) WHAT COLOUR TRIM AROUND THE EDGE
- (3) WHAT FOUR COLOURS OF STITCHING

SEND FOR A FREE SAMPLE SO THAT YOU CAN JUDGE THE QUALITY!

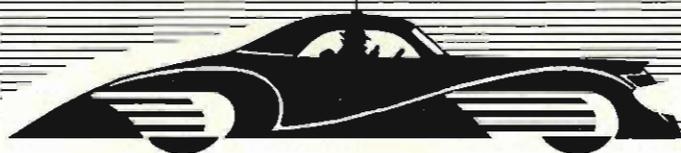
YOUR BADGES WILL BE READY FOR DESPATCH WITHIN 4 WEEKS OF ORDER WITH CHEQUE
FOR £110.

IF YOU NEED ANY ASSISTANCE WITH THE DESIGN OR YOU NEED EXTRA INFORMATION
PLEASE TELEPHONE AND WE WILL BE ONLY TOO PLEASED TO HELP.



CB

Radio Distributors



are pleased to announce
their new FM range —

850 MODEL



other models available:

LAKE
MANXMAN 950
SOLE UK DISTRIBUTORS

 **Cobra**

MAIN UK DISTRIBUTOR

Colt CB



295
SOLE UK
DISTRIBUTORS

COMMITRON

40 CHANNEL
SOLE UK
DISTRIBUTORS

SOLE UK TRADE DISTRIBUTORS:

A.D.S. ELECTRONICS

SHOP & OFFICE — 239 DICKSON ROAD,
BLACKPOOL, LANCs, Tel. 0253 21173/21296
Telex 677583



MAIL ORDER:
CB RADIO DISTRIBUTORS
UNION MILLS,
ISLE OF MAN.
Tel. 0624 851140/180
Telex 629026

In one year our **K40** antenna has become the largest selling CB antenna in the world!

1. It's more expensive ...

£29.95

suggested retail
vat included

And when you pay more, you expect more!

MORE PERFORMANCE:

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

MORE FLEXIBILITY:

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

MORE QUALITY:

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

*Including optional mounts at extra cost.

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

DOUBLE GUARANTEE

GUARANTEE I: The K-40 will transmit further and receive more clearly than the antenna it replaces or the customer will receive a prompt and full refund from the Registered K-40 Dealer who installed and tuned it.

GUARANTEE II: Unconditionally guaranteed for 12 months. Guaranteed against cracking, chipping, or rusting. Guaranteed against mechanical failure. Guaranteed against electrical failure. Guaranteed against accidental breakage. No exclusions. No gimmicks. For a full 12 months.

2. It's made better...

3. It's proven best!

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



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

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

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

"... in every case, the K40 either equaled or out-performed its competitor."

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

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

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

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

—J.H. Collett, 207 McFee, Bastrop, LA

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

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

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

—John A. Blum, Box 446, Zelenople, PA

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

—H. Bacher, Jr., 15 King Rd., Park Ridge, NJ

HUSTLER: "Compared to my Hustler XBLT-4, the K40 can consistently transmit 40% further and the reception was better. The K40 is the perfect way to complete a CB system."

—Jerome R. Brown, 7800 S. Linder, Burbank, IL



PERFECT FOR FM TOO!

(SPECIAL NOTE) IF YOU'RE A BEGINNER:

Our K40 Dealers will be happy to sell you any of the older style and less expensive antennas that are great bargains for any beginning CB'er.

AMERICAN ANTENNA
ELGIN, IL 60120 U.S.A.

© COPYRIGHT AMERICAN ANTENNA 1979

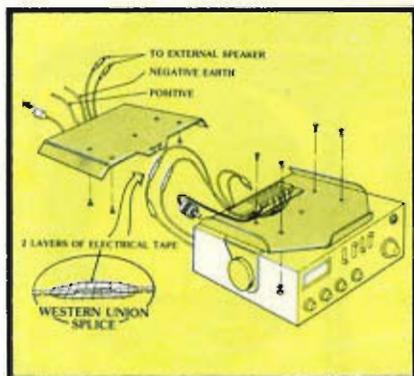
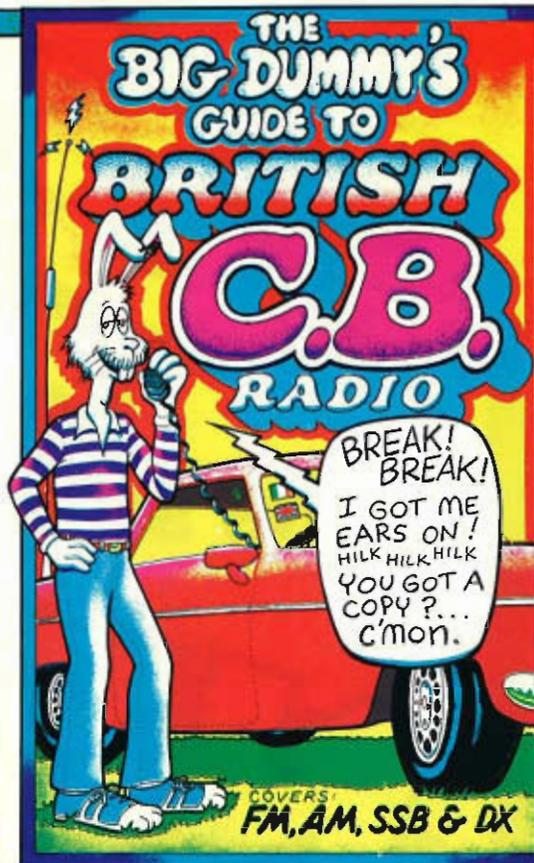


K40 POWER!

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

THE BIG DUMMY'S GUIDE TO BRITISH C.B. RADIO

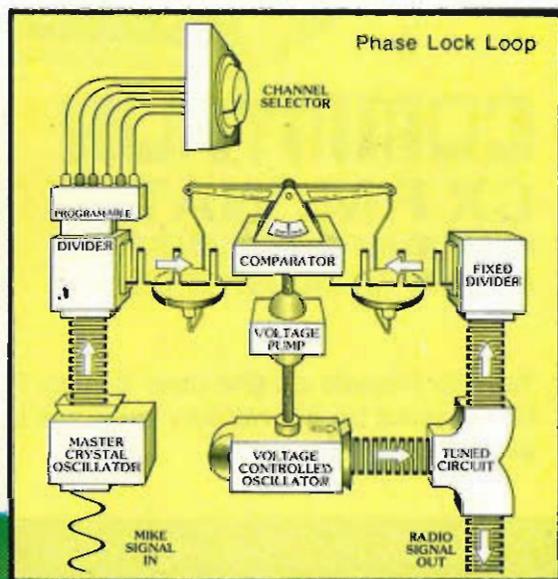
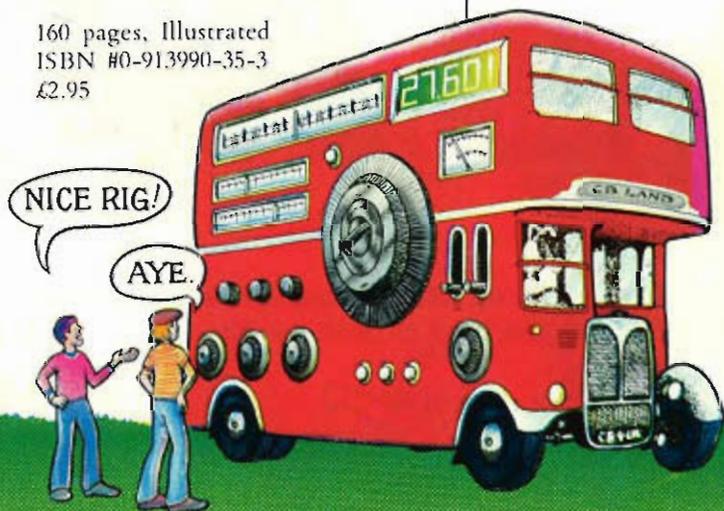
The new British version of the million seller
"CB book that broke the breakers in,"



Installation of Slide Mount

160 pages, Illustrated
ISBN #0-913990-35-3
£2.95

contains the latest information about FM, AM, SSB, HAM, SKIP and DX. This is a humorous and down-to-earth manual that covers CB slang and how to talk on the air, buying and installing radios and antennas, troubleshooting your rig, Home Office regulations, do-it-yourself antennas and emergency procedures. It includes new charts, codes, graphs and reference guides that no radio enthusiast should be without. Whether you are a casual beginner or an experienced breaker, *this book is designed to help you get out!*

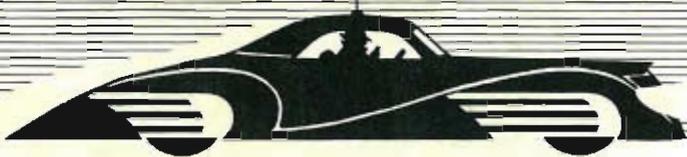


"ON CHANNEL, BREAKER?"

Kona Publications, London E.C. 1, TEL: 278-6914

CB

Radio Distributors



**Sole UK Supplier of
the set everybody wants**

NEW



**COMMTRON
CX F.M. 'NATO'**

80 AM 80 FM EUROPEAN SPEC.
40 AM 40 FM BRITISH SPEC.

NOW WE HAVE IT

Talk to friends on the new British F.M. and breakers on the European AM spec now being used by 2½ million breakers in the UK, have the best of both worlds in one set.

SOLE UK TRADE DISTRIBUTORS:

A.D.S. ELECTRONICS

SHOP & OFFICE — 239 DICKSON ROAD,
BLACKPOOL, LANCS, Tel. 0253 21173/21296
Telex 677583



MAIL ORDER:
CB RADIO DISTRIBUTORS
UNION MILLS,
ISLE OF MAN.
Tel. 0624 851140/80
Telex 629026

ATTENTION

Legal or Illegal Rigs, It doesn't matter, Crime is on the increase
Can you afford to loose your Rig - The answer must be NO.
Then insure it Comprehensively, its not expensive; Example a
£100 rig (F.M.) would cost £10. Don't waste time, fill in the
application Form below and send with cheque or postal order.



David Allen (Insurance Consultants) Ltd.

24, QUEEN STREET, HUDDERSFIELD, WEST YORKSHIRE HD1 2SP Tel. No. 0484-47027/8

**ARE PLEASED TO ANNOUNCE AN ALL RISKS INSURANCE FOR C.B. EQUIPMENT
BASE & MOBILE CAR STEREO'S/RADIO SYSTEMS. COVER IS ARRANGED WITH
LLOYD'S OF LONDON, BRIEF DETAILS ARE LISTED BELOW:**

COVER — All Risks of physical loss or damage on this type of equipment.

PREMIUM — 10% on the value of each rig — plus (if required) £7.00 (mobile) £5.00 (home) for confiscation risks.

EXCLUSIONS

- (1) Claims occurring in respect of equipment installed in open vehicles or vehicles whose upper body is of plastic canvas or similar materials.
- (2) Claims occurring whilst vehicle containing insured item is left unattended unless such vehicle is locked and windows closed.
- (3) Claims the basis of which is damage resulting from Wear, Tear and Gradual Deterioration, Mechanical or Electrical Derangement or Breakdown.
- (4) Damage arising out of the installation or repair of insured items.
- (5) The first £5 of each and every claim not to apply where underwriters admit a total loss by Fire/Theft.
- (6) Storm/Tempest damage to aerials on premises.
- (7) Damage to aerials mounted on vehicles.
- (8) Loss of or damage to Cassettes/Tapes.

GENERAL CONDITIONS

- (1) It is a condition precedent to consideration of a claim for Theft hereunder that the Assured shall have reported the circumstances to the police within 24 hours of such Theft.
- (2) Cover may be cancelled by Assured or Underwriters by giving 15 days notice in accordance with NMA355, plus Terms, Exclusions and Conditions of Lloyds Standard D Form NMA2001.

Note: Confiscation Cover is not provided by Lloyds of London but a Swiss reinsurer.

If you require this insurance please complete below and send to the above address with cheque for the correct amount. A Certificate of Insurance will be issued upon acceptance.

(Tear off)

PROPOSAL FOR CB INSURANCE

Name Have you had any claim that would give rise to claim under this insurance now proposed — YES/NO
Address *(If YES full details are required)*

.....
.....
Date of Birth Occupation Has any Insurer declined to accept, cancelled, refused to continue or agreed to continue only on special terms any insurance for you or any other person to whom this Insurance would apply? If so full particulars are required.

Club Membership No.
(if applicable)

DETAILS OF EQUIPMENT

Make Model Year of Manufacture Serial No. Type
(Base/Mobile)

PREMIUM CALCULATION

1.	Value £	@ 10% = £	Plus confiscation (if required) £7/£5	TOTAL £
2.	Value £	@ 10% = £	Plus confiscation (if required) £7/£5	TOTAL £
3.	Value £	@ 10% = £	Plus confiscation (if required) £7/£5	TOTAL £
				CHEQUE ENCLOSED £

I/We declare that I/We have not withheld any material information and that all statements made on this form are true to the best of my/our knowledge and belief and that the articles and property described belong to me/us, and that no other person has any interest thereon whether as owner, mortgagee, trustee or otherwise.

Signed Date

NOTE — The information contained in this proposal will be treated in the strictest of confidence between the Brokers and Lloyd's Underwriters ONLY.

Round Up

Available now – no licence needed!

Hot on the market is this pair of CB walkie-talkies, completely legal and available through thousands of shops. Competitively priced they are of rugged construction and can be operated without a licence.

These walkie-talkies conform to the Government specification and regulations and require no batteries or power supply. Guaranteed not to cause TVI they can be operated almost anywhere. One of the most important features is the plastic antenna which is telescopic and only measures 3.5" when fully extended.

Before you grab your wallet or purse and dash out to the shops, a few more details. Output from each set is zero and they are operated by unwinding the string that connects and pulling it taut (SWRring is very simple). Price is 65p per pair and your kids could have a lot of fun with them!

I'm surprised they haven't got Government approval as they sound like just what the Home Office had in mind.



Last Gasp Rally

Unfortunately we didn't receive this information in time for last month's issue and by the time you read this, the rally will be over and done with. How successful it has been will have to wait for next month as the dreaded copy date has interfered again.

I can't do better than quote the leaflet sent to us

"This is an 11th hour attempt to persuade the Government that some CB enthusiasts still feel strongly about wanting legislation of 27MHz AM and consider their decision to introduce a system on FM as a futile and worthless attempt at appeasing the wishes of an established fraternity."

NORTH EAST DERBYSHIRE 10-4 CLUB HOSTS THE PRO-A.M.

LAST GASP RALLY

27mHz A.M.

The rally took place on 25 October in Chesterfield and hoped to prove to the Government that there is a large number of breakers prepared to remain united.

S.W.A.T. a bucketmouth

Almost every breaker we speak to complains of bad manners, bad language and misuse on channel and it seems to affect every area. Many

breakers say why can't we, the magazine, try and do something about it but this is very difficult as the people daft enough to do that sort of thing are not likely to take notice of us telling them not to.

Breakers in South Wales have taken the problem into their own hands and formed the South Wales Action Team and, aided by sophisticated DF equipment, try to track or trace offenders. They hope as the problem decreases they can act as a back up for emergency networks in the area. S.W.A.T. are eager to emphasize that they are not a heavy mob and are not trying to set themselves up in judgement on others. Anyone interested in joining or helping should ring Speedbird on Llantrisant 225190.



Easy as ABC

When we open the post in at the offices we are often amazed at the professionalism of many clubs. Beautifully designed logos, headed letter paper and obviously a well-organised committee. All this seems to apply to the All Breakers Club of Deptford, South East London – just look at their club logo.

Although only recently formed, the club has adopted a charity and all their fund-raising efforts will be directed to helping that charity – the Infantile Hypercalcaemia Foundation. The information on the Foundation that came with ABC's letter indicates that the charity is only small and very short of funds, so its nice to see the support that the club has pledged.

P.S. The club meets at 190 Evelyn Street, London SE8 if you would like to go along.



C.A.R.T. before the horse?

Another group of enterprising breakers based in Derbyshire have formed 'Catch a Rig Thief' or C.A.R.T. Concerned at the number of rigs being stolen, their aim is to register the models and serial numbers of stolen sets and have secondhand sets available for sale checked against this list. They also hope to include a list of confiscated rigs to check if they are resold.

C.A.R.T. are having considerable success in their own area and membership is available to anyone so they hope their cover will spread. Representatives are appointed on meeting strict requirements as they are responsible for holding the area's 'stolen' list and for checking rigs.

Anyone interested should contact P. Duggan at 72 Wood Street, Ilkeston, Derbys.



Ello, ello, ello

Red Razor of Shepton Mallet sent us a news clipping from his local paper entitled 'Police Corner'. He thought it might be suitable for News Review but since that was full we couldn't resist putting it in Round Up.

Supt. John Lee comments on the number of rigs stolen in the area and that many are not reported as the owners are reluctant to own up to their illegal hobby. However, Crime Prevention Officer Sgt. Paula Wheeler urges breakers to report thefts to the police as "they are really interested in the thieves who steal the rigs".

Sgt. Wheeler adds further advice for avoiding rig theft and adds "Leaflets concerning car alarms are available from your local bear caves".

I am sure Sgt. Wheeler is perfectly sincere and it is nice to see that the police are taking an interest in CB but the 'slanguage' used made us all giggle a bit. Somehow it seems all wrong coming from a police officer!



POLICE CORNER

By Supt. John Lee

MANY thefts of Citizens' Band radio equipment are not reported to the police because the owners are embarrassed to admit they have been using equipment which is, in the eyes of British Telecom and Customs and Excise, illegal.

But the theft of any property is crime, even if it is CB radio equipment.

Sergeant Paula Wheeler, a crime prevention officer with the Somerset police, has written the following advice for breakers.

"Just lately, we have had a large number of rig thefts from breakers' wrappers," she says.

"I am only speaking to those who understand. I have been speaking to 'Loose Goose' and he says: 'Go to the police; they

are really interested in the thieves who steal the rigs.'

"That is certainly right," says Sergeant Wheeler.

"I am concerned about the increasing thefts from you breakers. My advice is — hide your rigs, use a disguised twig (you can get them locally) and don't leave your rig in your wrapper at night — take it to bed with you!

"Disconnect your twig, even if you leave the wrapper for a short while. OK, I know it is a nuisance — but it saves you losing £100."

"Loose Goose" says: "No eyeballs at present, unless you know the breaker."

And Sergeant Wheeler adds: "If possible, check to make sure it is a real smokey. Ask to see warrant cards. If in any doubt, put out a 1033 for assistance.

"At night, be more careful where you go on your own, especially on high ground or in

locations, and try not to go alone.

"Lock your wrapper and stay in it if approached until you are sure it is a real smokey. If it is not a marked wrapper, say you will follow them to the nearest bear cave or they can follow you. Police will cooperate. Of course, only take this action if you don't know it is the local smokey."

"So many breakers make no attempt to hide their rigs. This is so foolish. It is an open invitation to have the rig nicked, just like leaving a window open in your house.

"Please hide the rig in the glove compartment or under the seat, or in the boot when you leave your wrapper. Better still, install a car alarm.

"Leaflets concerning the car alarms are available from your local bear caves." Ask for Sgt. Brian Henley if you live in the Mendip area or Sgt. Wheeler if you live near Yeovil.

Newark Breakers Club do their bit

Newark Breakers Club in Nottinghamshire have been fund raising for the Newark Mentally Handicapped Society and recently presented a cheque for £1,000 to the Society.

The money was raised through a sponsored walk which, with a lot of blisters and twisted muscles, started the account with over £600. A Summer Fayre raised the rest of the money, which was presented to the Society by the Lady Mayor, Mrs Dobson.



CBC * CBC * CBC * CBC * CBC * CBC



CB CENTRE



HAVE MOVED THEIR RETAIL & WHOLESALE TO NEW & LARGER PREMISES
20c SELSDON ROAD. SOUTH CROYDON. SURREY



01-680-4503



WE BUY DIRECT FROM ABROAD & CUT OUT THE MIDDLE MEN

DIRECT IMPORTER

AND PASS THE SAVINGS ON TO YOU

DIRECT IMPORTER

We are now K40's Main Distributor for their products throughout the south of England
So to promote this success we are offering for a limited period

K40 Speech Processor Mike	£24.95
K40 Mobile 500W Antenna	£24.95

These prices include VAT + P&P
You can order and pay by Access & Barclaycard



FULL RANGE OF C.B. ACCESSORIES AVAILABLE
FOR FREE CATALOGUE SEND A S.A.E.
HELP & ADVICE GIVEN ON ESTABLISHING NEW CB OUTLETS
WHOLESALE ENQUIRIES 01-680-4503



CBC * CBC * CBC * CBC * CBC * CBC

THE IDEAL GIFT

Personalised Playing Cards
IN PRESENTATION CASE

**GOLD BLOCKED WITH YOUR CHOICE
OF HANDLE/NAME ON EACH CARD**

ONLY

£3.95

per pack
inc. p&p



Send cash
with order
stating handle
or name to:

**EUROPA
PRODUCTS**

54 Queens Road
Hastings, E Sussex

**BONUS
50p VOUCHER
SENT WITH EVERY PACK ORDERED**

R.T.A.

185 STREATHAM ROAD,
MITCHAM,
SURREY

COMMUNICATIONS

STOCKISTS OF MOST MAJOR BRANDS
OF CB EQUIPMENT



& RETAIL SALES

Rigs and Accessories

OPEN MON-SAT 9AM-6PM

Telephone 01-648 4797/3661

BRITAIN'S BIGGEST NATIONAL EYEBALL

Hosted by the Chertsey 20-27 Club

at Thorpe Park, Chertsey, Surrey

Due to the vast growing interest in CB radio, many CB clubs have formed all over the country. Due to this interest, added to the legalisation of CB radio from 2 November 1981, Tony West and the Chertsey 20-27 Club, one of the biggest CB clubs in the south, have got together to organise 'Britain's Biggest National Eyeball'.

It's being held on Sunday, 22 November 1981 between 2.00pm and 11.30pm at Thorpe Park in Chertsey.

The event is aimed at both entertaining and informing anyone interested in CB. During the afternoon there will be trade exhibitions, stalls, a visit from the Radio 210 CB programme, Cinema 180, roller skating and amusements with food and bar facilities.

In the evening there will be lots of CB fun, with a visit from Radio 1 DJ Steve Wright, The Phil England Radio Luxembourg Roadshow, a dance troupe, big prizes, free parking all day and lots more.

Says Tony West: "This is going to be the CB event of the year with the best entertainment available. We're offering discounts for clubs and party bookings."

Tickets are only £2.00 per person. Groups of 20 or more £1.75 per person.

For more details or tickets write now to:

20-27 Promotions, 33 Church Road, Chalvey Down, Ascot, Berks

PT Promotions, 59 Alma Road, Windsor, Berks SL4 3HH

or phone Steve Tyler on Winkfield Row 5845



C.B. MONOGRAMMING SERVICE

Copy your C.B. Breakers! Personalise your handle. Indicate your call sign. Come on get that individual sweater now! Give us the details you require and we will do the rest.

IN EITHER

100% Acrylic Raglan v-neck sweater at £9.95 OR
100% Lambswool v-neck FF sweater at £11.95

COLOURS

Navy
Black
Wine
Lt. Blue
Bottle

SIZES

S-XL

Plus £1.00 post and packing. 6 garments or more carriage paid. Cash with order.



Handle required

Please send:

Quan..... Type..... Sizes..... Col.....

Name

Address

..... Tel.....

PO or cheque No

Catron Emroidery (Dept CB)

17 Newton Terrace, Catrine,

Ayrshire KA5 6SA

CB RADIO MAGAZINE NEXT MONTH

WILL BE A BUMPER ISSUE

100,000 NEW BREAKERS WILL BE AFTER A COPY

IT WILL BE HARD TO GET!

AVOID DISAPPOINTMENT

ORDER YOUR COPY NOW!

Take this form to your
local NEWSAGENTS.

STILL ONLY

60p

Dear Mr Newsagent, please order CB Radio Magazine for me
each month until further notice.

NAME.....
ADDRESS.....

Newsagent, you can obtain CB Radio Magazine from
SM Distribution, 16-18 Trinity Gardens,
London SW9 8DX
If you have any difficulty obtaining
CB Radio
Tel: 01-274 8611 or
01-274 7421

NEWS REVIEW



More what the papers say!

By the time you read this article, 2 November, the date confirmed by the Home Office for the introduction of legal CB, will be only a few days away. Although feelings about the new system are varied, the one thing that cannot be denied is that this will be the biggest break that British CB has had to date. Whether the vast majority of existing breakers are willing to accept the legal system or not it is certain that there will be a massive boom in trade. The revenue mainly coming from members of the public who have been up to now afraid to use CB because of its illegality. This will eventually result in CB radio cornering a greater slice of the community and rendering its advantages far more beneficially to the general public.

What has all this got to do with "News Review"? The main area of interest will be in comparing the amount of press coverage given to CB related activities before and after the big day and also whether the charity events will be as frequent as they have been over the past 12 months. Whatever the consequences, by reading this series it will be possible to observe over the coming months the changes, if any, to the public image of the average breaker.



As can be seen from the above collage, most of the newspapers were dealing with the 2 November announcement.

Seeing as how this has already gained more than its fair share of coverage by us this month, the rest of the news items are on the general AM coverage.

It will be interesting to note if there is any distinction made in future press coverage.

Daily Telegraph

Father's CB fire call could have cost girl's life

This is only one of several articles that appeared following this incident, which occurred in the early part of September. After trying three times to rescue his three-year-old daughter, Gail, from a smoke-filled bedroom, without success, Mr. Kevin Hutchinson, of Wade Street, Sheffield, put out a call for help on his CB set. Meanwhile, Gail was rescued by a neighbour and luckily was not seriously hurt. Fire Station Officer Frank Breatly described the father's action as "irresponsible". He said that when Mr. Hutchinson was relying on someone actually hearing this message and getting the correct address and information, it was a dangerous thing to do and it could have cost the little girl's life.

In defence of his action, Mr. Hutchinson said that it is at least three minutes to the nearest telephone box which is invariably out of order, and that none of his neighbours are on the telephone, and also that if it had not been for his CB radio his little girl would not be alive. His wife, Diana, said that her husband could not take the risk of running to a phone box only to find it out of order and that as it was the ambulance and fire brigade were present within minutes of the CB call going out.

Squeeze of CB Python

By REGINALD WHITE



Chris Perry, wife and boa yesterday.

CB FAN Chris Perry put the squeeze on a youth he was interrogating.

He dropped a boa constrictor into his lap—and terrified him into talking. Perry—call-sign Python—wanted the names of people he believed were persecuting him, a court heard yesterday.

He claimed a feud developed over membership of a CB club he helped to run.

And he was furious when milk bottles were hurled into his garden at Rectory Road, Blackpool.

Boa

He invited 16-year-old Warren Myerscough to his home in a bid to sort things out.

An argument developed and Perry,

struck Warren about the head.

Then he reached into a tank containing four pet snakes—and produced the 2ft boa.

Butcher's assistant Perry admitted assaulting Warren, of Vicarage Road, Blackpool, and was fined £50 by the town's magistrates.

Afterwards he said the boy had never been in any danger.

"So long as they're well fed these snakes are harmless," he added. "My two kids play with them."

Preacher's CB wife runs off with "Love Machine"

The wife of a church minister has vanished with a man known as "Love Machine". Jean Lewis, from Amblecote, West Midlands, found herself on the same wavelength as "Love Machine", more commonly known as David Allport, after buying her CB radio little more than a month ago.

Jean, whose handle was "Blue Angel", had become interested in CB through her 18-year-old stepson, Keith, and became so hooked that she would sit up until 5.00am in her car outside the flat talking to other breakers.

Jeff, a minister with the Universal Life Church of America, said that although he had used the set a couple of times he soon became fed up with the way it was dominating Jean's life. Jean vanished after setting off to pay some bills. Shortly after, she was seen with David and Sandra, her seven-year-old daughter by a previous marriage.

Keith said, "I got her hooked on CB. It's all my fault, but you can't really blame a little black box for what happens in two people's minds."

Daily Express

A channel for charities

"Eight CB radio enthusiasts are heading for a new channel battle," we are told by the "Express", "but not with the Government." The breakers from Downham Market, Norfolk, hope to raise hundreds of pounds for charity by crossing the English Channel on a raft made from aircraft tanks bolted together.

The crossing is being organised by Nick Allen, alias "Soldering Iron", who is quite certain that the raft will stand up to the journey.

Daily Star

Bad buddies' nude romp at roadside

A nude romp in a layby sent a woman pensioner and her friend round the bend.

They watched in horror from behind the curtains of their caravanette as eight young CB radio fans pranced naked in the moonlight. (It intrigues me to know how they knew they were breakers); The two women said yesterday that they did not think that people did this sort of thing. Police at Stafford say that they would like to interview eight men about the incident.

RAF takes aim at CB radio

With only days to run before CB radio becomes legal in Britain, both RAF Strike Command and the Civil Aviation Authority have issued warnings that its use interferes with the vital radio beams which guide aircraft to land at airports.

The RAF confirmed on Friday that a CB transmission had closed down the instrument landing system at a military air field in the early part of September. A spokesman said that if there had been aircraft approaching at the time the consequences would be potentially dangerous. Strike Command subsequently issued warnings to all personnel.

The Civil Aviation Authority strongly opposes the proposed legal CB system because of the problems which arise from the harmonic echoes about the 27MH frequency, i.e. 54 and 108MHz.

Daily Mirror

Squeeze of CB Python

"CB fan Chris Perry put the squeeze on a youth he was interrogating," we are told by the Mirror. "He dropped a boa constrictor into his lap - and terrified him into talking." Perry, whose handle is "Python", apparently wanted the names of people he believed were persecuting him. The feud developed over membership of a CB club that Chris helps to run which resulted in milk bottles being thrown into his garden at Rectory Road, Blackpool. To try to rectify the situation he invited 16-year-old Warren Myerscough to his home. The ensuing argument resulted in Warren being struck about the head. Perry then reached into a tank and produced a 2ft boa constrictor. In the following court case, Perry admitted assaulting Warren and was fined £50 by local magistrates.

Afterwards he stated that the boy had never been in danger and that as

long as the snakes are properly fed they are harmless.

Western Morning News

Radio gift to lifeboat

Five hundred pounds has been raised by the North Devon CB operators to buy a new ship to shore radio for the Ilfracombe lifeboat. The money was presented on 1st September by the North Devon Breakers Club. The money was raised by a sponsored three-legged pub crawl. (I bet it ended up as a legless pub crawl) through Combe Martin. They each drank a pint of beer at each of the resort's nine pubs and then repeated the course backwards to double the tally (18 pints? I was right, it was legless). The club's original intentions were to donate the money to the Lifeboat Institution, but on realising that this would have gone into a national pool, they decided to donate directly to the lifeboat.

Birmingham Evening Mail

Keith will help breakers to get on air

Turnes Green School, in Longbridge Lane, Northfield, is to be one of the first schools in the country to offer evening classes in CB radio, provided enough people enrol. The course of 11 weekly 1 1/2-hour lessons will be chaired by CBA Secretary Mr. Keith Townsend. He will teach pupils the tricks and technicalities of CB in preparation for legal CB. Mr. Townsend, who holds one of the Government's Testing Licences, hopes to have examples of the new legal sets to show his classes.

The first couple of lessons will be fairly basic graduating to the finer points such as installation which can be covered as soon as licences are issued.

Father tells why he didn't dial 999

Fire girl saved after CB call



MICHAEL HARRIS: Picked up S.O.S.



ANDREW WAINWRIGHT: Ran through smoke.

SHEFFIELD father Kevin Hutchinson, criticised for using CB radio instead of a 999 call when his toddler daughter was trapped in their smoke-filled home defended his actions in court.

Angry firemen hit out at 21-year-old Mr Hutchinson and said he could have risked two-year-old Gail's life after she was overcome by smoke in her blazing bedroom at Wade Street, Grimsthorpe.

Broadcasting a CB appeal instead of dialling 999 cost valuable time, said fire station officer Frank Breatley who attended the incident.

But Mr Hutchinson, who was three times driven back by smoke when he tried to reach his daughter, said if it had not been for his CB set Gail might not be alive.

The family is not on the phone and after attempts to reach the child failed, Mr Hutchinson called out on his CB set: "Someone get me an ambulance and a fire engine."

The call was picked up by CB fan Michael Harris at his home in Daffodil Road, who contacted the fire brigade. Meanwhile a neighbour had dragged Gail unconscious from the bedroom.

Mr Hutchinson said: "It's at least

three minutes to the nearest phone box and invariably it's out of order. None of the neighbours near us are on the telephone. I believe that had it not been for my CB set my little girl would not be alive.

His wife Diane, 22, agreed: "I totally support what my husband did and disagree with the fire officer. He could take the risk of running to the phone box only to find it was out of order.

"As it was, the ambulance and the brigade were here within minutes of the CB call going out.

Mr Breatley described the father's action as irresponsible. He said: "It's no good messing about on a CB set hoping that someone will be listening and might get the message right."

"Leave it to the professionals. Like the emergency services where experienced people are waiting to deal with such matters.

"CB sets have their uses in country areas, but we don't want enthusiasts arriving out of hand in the city."

He praised the action of Wade Street neighbour Mr Andrew Wainwright, who plunged through thick smoke several times before plucking the unconscious Gail from her bed.



FRANK BREATLEY: "Value his time lost."



* CHANNEL JIVE CB CENTRE'S *

THE BEST IN THE WEST

For

K40, TURNER, AVANTI, VALOR, BREMI & LEMM

South Western Agents for Big Jim Antennas

WE NOW OFFER A VAN SALES/DELIVERY SERVICE COVERING THE SOUTH WEST AS WELL AS OUR NORMAL CASH & CARRY AT RADSTOCK. IF YOU WOULD LIKE OUR VAN TO CALL ON YOU PLEASE TELEPHONE MIKE ON RADSTOCK 36168.

COULD YOU BE A CHANNEL JIVE AGENT?

SOME AREA'S STILL AVAILABLE IN THE SOUTH WEST

BONA FIDE TRADERS PLEASE TELEPHONE MIKE ON RADSTOCK 36168

MON - FRIDAY 10.00 a.m. - 6.00 p.m. SAT 9.00 a.m - 5.00 p.m. SUN -

WALL TO WALL CB CENTRE

£1 P&P Items over £1
P&P Free under £1

73's



88's

33 Moreton Road
Ongar Essex
CM5 0AP

Telephone: 364742

ANTENNAS

DV 27	£5.00
K 27	£6.95
T 27	£8.10
Retractablemoba 5500s	£11.36
Base Load GPO	£16.45
C.B. 5000	£20.50
Half Breed	£12.50
Dial a Match	£13.00
Warrior	£14.65

BASE ANTENNAS

Silver Rod	£22.70
Sitell GPZ 27	£19.50
Boomerang	£17.00
SWR Meter	£6.50
SWR Power	£12.50
+3B Mike Base	£30.00

AMPS

25 Watt	£18.50
---------	--------

ACCESSORIES

DV Base	£2.30
DV Firestick	£1.10
Spring	£4.50
Mag Mike Holder	40
Fire Stick Base	£3.30
5 Amp Power Supply	£11.00
7 Amp Power Supply	£15.00
Extension Speaker	£5.00
P.A. Horn	£6.00

RIGS

FM Rigs	£65.00
Eyeball Badge	50
Electric Eyeball Badge	£2.50

MAIL ORDER 24hr DESPATCH

BIGGER PRICE LIST AVAILABLE - SEND SAE

NEW FORCE Ltd.

ARE YOU OFF CHANNEL?
LOOK!!
ALL IN STOCK NOW

★ CRYSTALS, ALL FREQUENCIES AVAILABLE ★
★ COMPREHENSIVE REPAIR SERVICE OFFERED THROUGH OUR
ASSOCIATE 'RIG DOCTORS'

78L05	0.75	TA7130	1.70	2SC1969	2.60
3SK45	1.30	TA7204	3.55	2SC2028	1.85
2SK33		TA7205AP	3.52	2SC2029	2.40
1.12		TA7222	3.75	2SC2078	2.70
2SK19	1.00	TA7310	2.58	2SC2091	1.15
2SA715	1.80	TBA810P	2.35	AN214Q/124	3.80
2SC495	0.95	UPC575C2	3.86	AN240	3.64
2SC496	1.20	UPC1001H	4.50	LA4031P	3.00
2SC1096	1.52	UPC1025H	3.52	LA4400	4.40
2SC1172Y	2.65	UPC1158H	3.95	LC7120	5.00
2SC1173Y	1.59	PLL02A	8.00	LC7130	8.15
2SC1306	2.49	BDX33C	2.00	M1513L	3.40
2SC1307	2.75	145106	8.00	M51515L	3.95
2SC1449	1.47	HA1366	3.00	MB3712	4.51
2SC1678	2.47	AN7150	3.50	MRF450A	12.95
2SC1945	2.75	78L08	.80	MRF475	3.25
2SC1953	1.34	2SC2075	2.50	MRF477	10.45
2SC1957	1.31	2SC2166	2.50	TA7120	2.75
		2SC2314	1.40		

MAIL ORDER
CHEQUES & POS
INCLUDING 50p P&P
PLUS 15% VAT TO
NEW FORCE LTD.

SUMMERHILL LODGE
IDEN GREEN
BENENDEN
KENT
Tel: (058082) 386

WE BUY BIGGER YOU BUY CHEAPER

MAY DAY? MAY DAY?

May Day CB supplies Dublin - London
Be sure of your Xmas stock in the following rigs:

Cobra 148 GTL DX
Colt 210
Ham International
Midland AM FM
Comtron 40 AM FM and more
Coronal FR360 AM SSB
Pacific 240 AM SSB 80 FM



Phone us today and we'll deliver within 24 hrs
100 miles outside London. Any quantities,
small or large. Contact our London office
through Dublin 312738.

ASK FOR JOHN MAY



BOB MASSEY



CAP & EMBLEMS

PRODUCERS OF TDP QUALITY EMBROIDERED EMBLEMS

We have now established ourselves as one of the largest suppliers of CB emblems in the UK and our emblems can be seen on breakers' jackets from Lands End to John O'Groats. So to all you new breakers joining us in November, don't miss this opportunity to get your own personal county emblem and British CBER.

British CBER Copyright No. 999956.



Price 85p each

CB EMBLEMS

WE MONITOR CHANNEL 14
WE MONITOR CHANNEL 19
FORGET THE 10.38, BUY A WATCH
WATCH THE BEARS
SMOKEY TAKING PICTURES
76'S
88'S
27MHz LICENSED OPERATOR
CB FOR UK

CB UNION
UK CB OPERATOR
GIVE US A BREAK, BUZZY

No. 1 SKIP TALKER
SIOEBANDER OF GREAT BRITAIN
INTERNATIONAL DX-ER
JUNIOR BRITISH CBER
THIS IS CB COUNTRY UK
TEN 4 27MHz
SSB 11 METERS
UNITED KINGDOM STANDING BY
DRIVE NAKED, GIVE A TRUCKER A
THRILL

LICENSED CB OPERATOR
CB COUNTRY

Price 80p each or

any 3 for £1.50



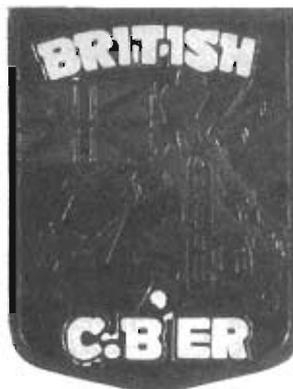
Price 80p each



Counties not shown:
Lancashire, Nottinghamshire, Wiltshire, Lincolnshire, Dorset, Hampshire, Cornwall, Gloucestershire, Derbyshire, Essex.

All the above emblems are on a black background, with three-colour embroidery.

EXCLUSIVE TO BOB MASSEY CAP & EMBLEMS



THE BRITISH CB'er LAPEL BADGE

Beautiful three-coloured enamel metal pin badge, with polished edges and tie tack fixing makes this one a must for all CB'ers.

PRICE 65p EACH

Actual size 3/4" x 3/4"

TRADE ENQUIRIES ALWAYS WELCOME

BOB MASSEY CAP & EMBLEMS
SEAWALLS, PILNING, Nr BRISTOL
Tel: (045 45) 2601



NEWS RELEASE

50 Queen Anne's Gate London SW1H 9AT
Telephone 01-213 3030/4050/5050

New service legal next month

The new UK Citizens' Band radio service will start on 2 November. Licences to use CB will be obtainable over the counter at Post Offices from that date. Licence application forms are also being packaged by some manufacturers and distributors with new legal CB equipment which will be shortly on sale.

For an annual fee of £10, prospective CB users will be able to license the use of up to three sets using the 27MHz or 934MHz FM bands. Each additional payment of £10 will cover up to three more sets.

The licence governs:

- who can operate sets under the licence,
- the conditions of use,
- permitted types of transmission, and
- specified types of antennae.

The licence also carries examples of the mark of compliance that sets sold for the new legal service must carry on the front panel, a circle containing the legend CB 27/81 or CB 934/81.

The 27MHz AM sets being used illicitly at present will remain illegal because of the harm they cause to television, radio and the emergency services. They may, however, be modified to meet the specification of the new legal service, and HM Customs and Excise will shortly announce arrangements under which this will be possible.

Mr. Timothy Raison, Minister of State at the Home Office and the Minister responsible for the CB service, said: "We welcome the beginning of the new legal CB system, which will give everybody a chance to use a personal radio communication service at work or at leisure. The frequencies we have allocated will meet the needs of CB enthusiasts; the system will be reasonably cheap and will cause much less interference to other users of the radio spectrum. We wish the new system well and hope it will be entertaining and successful."

What is CB?

CB is a personal two-way radio service available on two wavebands, 27MHz and 934MHz. Initially, 27MHz will probably be used by the vast majority of CB operators because of

the availability of equipment.

The 27MHz CB service, which is for speech only, will provide 40 FM (frequency modulated) channels between 27.6 and 28MHz with a transmitter power of 4 watts; a combination of power and channels which is better than any of its European counterparts. Maximum range will be 10-12 miles, depending on terrain.

Who can use CB?

Anybody whose equipment meets Home Office performance specifications and the licence conditions, and is covered by a current licence, can use CB. A licence also covers: anybody who lives at the licensee's home; employees of the licensee using sets on his business; and anybody who hires sets from the licensee for not more than 28 days.

One licence fee of £10 covers up to three sets, and any number of additional fees can be paid to cover extra sets the same basis.

What can CB be used for?

Apart from a ban on advertising or soliciting goods or services, and on obscene or offensive language, CB messages are unrestricted. CB is a service for speech only, however, so it can't be used for the transmission of music or morse code, for instance.

There is no bar on business use, so if firms want to use CB for office-to-site or shop-to-van communication, for example, they are free to do so.

What sort of equipment does CB use?

The equipment for the service is relatively simple and intended for use by people who are not necessarily technically skilled.

Typical sets include:

—base stations, comprising mains-powered sets fitted in homes or offices;

—car sets, which are generally units about the same size as a normal car radio and are almost as easy to fit; and

—hand-held portables (walkie-talkies), generally of lower transmitter power and covering fewer channels than the other types, which will be of particular

interest to anybody on the move on foot.

All these types of set will of course, be able to contact the others if they have access to the same channels.

Sets for the new service will have to carry a *mark of compliance* with Home Office specifications; this is explained below.

Do CB sets have to meet certain standards?

Home Office standards for CB equipment are designed to provide an effective radio service while keeping to a minimum interference with other services (such as TV and radio).

They are set out in two Home Office performance specifications: MPT 1320 (which deals with 27MHz equipment) and MPT 1321 (which deals with 934MHz equipment). Both are available from HMSO, price £1.95. All sets sold for the service will have to carry a *mark of compliance* on the front panel showing that they conform to MPT 1320 or MPT 1321. The mark is a circle carrying the legend CB 27/81 or CB 934/81, and examples are shown on the licence form.

Among other details on the licence form are antennae specifications. In the case of 27MHz FM, which is likely to be the initial choice of most CB users, the antenna is limited to a straight rod or wire up to 1.5 metres long with a base mounted loading coil. (The coil improves the efficiency of the antenna).

Will 27MHz AM sets be legalised?

No. Sets using the 27MHz AM (amplitude modulated) system, are causing widespread interference to television and radio and are, at times, putting the emergency services at risk. More than 1,000 complaints of interference from AM sets are being received every week.

There are companies who are prepared to modify AM sets to meet the new criteria. From the interference point of view, the new legal FM system should be 10 times better.

Many AM sets are still on the market, so when buying a CB set the best safeguard for people who want to buy approved equipment is the *mark of compliance*, described above.

Will the UK service meet European standards?

There is no European standard. The European Conference of Postal and Telecommunications Administrations (CEPT) recommendation made several years ago allows only 22 channels and ½ watt transmitter power, as opposed to the UK's 40 channels and 4 watts which is comparable to the American AM system in illicit use in this country. Furthermore, France, West Germany and The Netherlands allow only FM, as does the UK.

Much equipment in use in other European countries is confined to its particular country. French equipment, for instance, with a higher permitted power than many other countries in Europe, may only be used in France, and the illicit American equipment is not allowed in any of the major countries of Europe. European countries which permit CB do not prohibit FM – the UK system – but the same is not always true of AM, so any possibility of a common standard is likely to rest on the use of FM.

Long term Objections

The European Commission has asked member states of the EC about their CB specifications, to examine their effect on trade. The UK will be represented in any future discussions. The Home Secretary said on 24 June, 1981 that the long-term objective was to adopt the specification recommended by CEPT.

CB is a short-range system, not intended for international communication. People who want to use radio for that purpose can become licensed Radio Amateurs.

THE CB CODE OF PRACTICE

READ YOUR LICENCE - It tells you what you can and cannot do. The conditions have deliberately been made simple with few restrictions. It is up to you to develop this service as you wish for the benefit of all. This means having consideration for one another and recognising that no-one has preferential rights at any time or place or on any channel. **MATCOLCBAR**, the Parliamentary CB Working Party, and representatives of industry have in consultation with the Home Office prepared this simple code of practice. If you work to it you will help the system to help you.

HOW TO OPERATE

1. **LISTEN BEFORE YOU TRANSMIT.** Listen with the Squelch control turned fully down (and Tone Squelch turned off if you have selective call facilities) for several seconds, to ensure you will not be transmitting on top of an existing conversation.
2. **KEEP CONVERSATIONS SHORT** when the channels are busy, so that everyone has a fair share.
3. **KEEP EACH TRANSMISSION SHORT** and listen often for a reply - or you may find that the station you were talking to has moved out of range or that reception has changed for other reasons.
4. **ALWAYS LEAVE A SHORT PAUSE BEFORE REPLYING** so that other stations may join the conversation.
5. **CB SLANG ISN'T NECESSARY** - plain language is just as effective.
6. **BE PATIENT WITH NEWCOMERS AND HELP THEM.**
EMERGENCIES AND ASSISTANCE
CHOICE OF CHANNEL
7. **AT ALL TIMES AND ON ALL CHANNELS GIVE PRIORITY TO CALLS FOR HELP.**
8. **LEAVE CHANNEL 9 CLEAR FOR EMERGENCIES.** If you have to use it (for instance to contact a volunteer monitor service) get clear of it as soon as you can.
9. **IF THERE IS NO ANSWER ON CHANNEL 9,** then call for help on either channel 12 or 19 where you are likely to get an answer.
10. **IF YOU HEAR A CALL FOR HELP, WAIT.** If no regular volunteer monitor answers, then offer help if you can.
11. **THERE IS NO OFFICIAL ORGANISATION FOR MONITORING CB AND NO GUARANTEE THAT YOU WILL ALWAYS BE IN REACH OF A VOLUNTEER MONITOR.**
12. **RESPECT THE FOLLOWING CONVENTIONS:**

Channel 7:

Only for emergencies and assistance.

Channel 14:

The calling channel. Once you have established a contact, move to another channel to hold your conversation.

Channel 19:

For conversations among travellers on main roads. (Remember, if you are travelling in the same direction as the station you are talking to, not to hog this channel for a long conversation). Give priority to the use of this channel by long distance drivers to whom it can be an important part of their way of life.

Other:

You may find that particular groups in particular areas also have other preferred channels for particular purposes.

SAFETY

13. **USE COMMONSENSE WHEN USING CB** and do not transmit when it could be risky to do so. For example, don't transmit when it
 - a. when fuel or any other explosive substance is in the tankers are loading or unloading, on oil rigs, or at quarries.
 - b. when holding a microphone may interfere with your ability to drive safely.
 - c. with the antenna less than 6 inches from your face.

INTERFERENCE

14. **INTERFERENCE** can be caused by any form of radio transmission. Avoid the risk. Put your antenna as far away as possible from others, and remember that you are not allowed to use power amplifiers. In the unlikely event that your CB causes interference, co-operate in seeking a cure using the suggestions from a good CB handbook. Moving the set or antenna a few feet may cure the problem.



REACT

MONITORING

The Official Launch

Saturday the 12th September saw the official launch of REACT UK at a reception held at Harold Hill in Essex. Although using the same name and some of the promotional material REACT UK is in no way related to REACT in the United States. However REACT UK does owe a lot to the Stateside organisation on which many of its ideas are based.

The late Ivan Francis, who was one of the original REACT (UK) organisers, spent many years as an Emergency Monitor both in the states and Canada and it's his experience which has made the inception of REACT UK run so smoothly. REACT (U.S.) was started in 1962 and they successfully lobbied

for a channel 9 emergency system and have since been monitoring and reporting on that channel 24 hours a day.

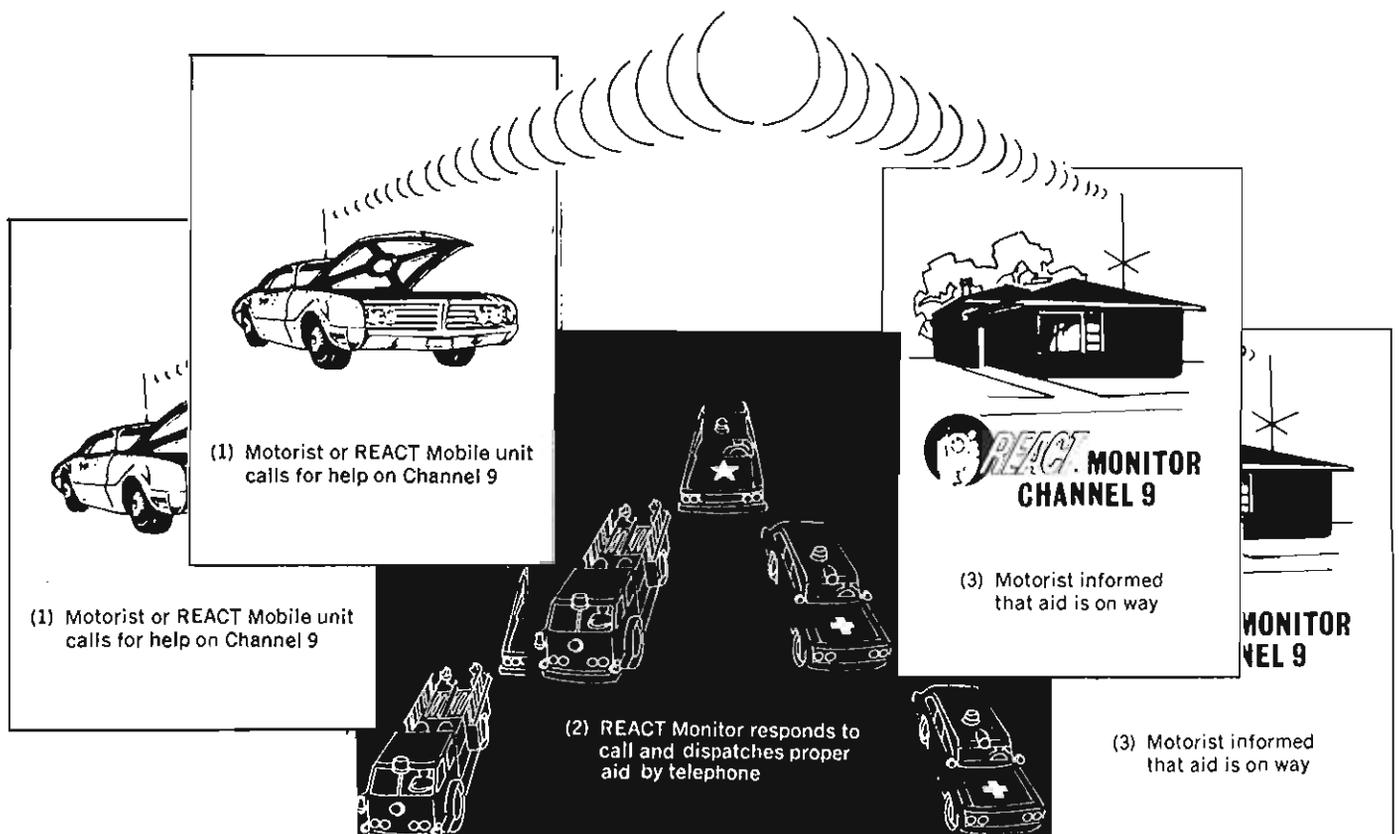
REACT Abides by the Law

REACT UK has always wanted a legal CB system in the United Kingdom and has not been monitoring the currently illegal AM CB frequencies. The main reason for their reluctance has been that REACT UK wanted

official recognition for their activities and with legal CB now upon us this has paid off. Official recognition has come as a result of REACT UK's responsible attitude towards training its Reactors (emergency channel 9 monitors). REACT UK feels that recognition is essential to ensure close relationships between REACT UK and the more 'conventional' emergency services.

The Home Office are fully aware of REACT UK's dialogue with local emer-

When you need help on the highway... call REACT on citizens radio emergency channel 9...



agency co-ordinators (found at the local town halls), the Red Cross, fire brigade, ambulance service, St-John, etc., and have taken into consideration the qualifications of individual Reactors (i.e. first aid) which are not part of the React Training Course.

Local Organisation

REACT UK, whilst not being operational, have spent a lot of time setting up local monitoring stations and are now prepared to monitor the whole of the country from legalisation date, 2 November. They have divided the British Isles into seven regional zones which are the responsibility of seven regional co-ordinators who in turn have a number of County co-ordinators liaising with them. Although REACT UK have a national approach to emergency monitoring, each region and county will make their own decisions regarding local monitoring policy.

How It Works

The main emphasis of all REACT UK's work is on the team element. At the moment there are approximately 1,500 full members of the organisation and they are organised into teams to provide a 24-hour monitor of channel 9.

Trained to extract information from anybody making an emergency call and process this information to the appropriate emergency service, each team's HQ will be equipped with 2 x 27MHz FM rigs one in permanent use and one as a back up in case of failure. A telephone and maps of the local area are the other two main requirements. The station is then manned by a rota of Reactors.

One thousand five hundred people alone will not be capable of monitoring channel 9 for 24 hours a day, 365 days a year for the entire country. REACT (UK) have had a lot of enquiries from CB clubs who have expressed interest in starting their own teams. The majority of these clubs are well organised which means that training could be undertaken on a wholesale basis to groups of people who already know each other. A full REACT (UK) service could be feasible by mid 1982.

REACT (UK) and Money

As you can imagine, running and equipping an organisation like REACT (UK) requires a lot of finance and the money so far has come from members paying a joining fee. A source of income which REACT (UK) are working at securing, is sponsorship by manufacturers of CB equipment. The approaches are currently being made to the larger companies involved in CB and some will be packing REACT (UK) information into the boxes containing CB transceivers. Purchasers of this equipment will find advice on how to join REACT (UK) and how to make a call in case of emergency.

There are many other emergency monitoring services who are currently



RADIO EMERGENCY ASSOCIATED CITIZENS TEAMS

A full-scale volunteer civilian emergency radio service that meets the modern need to communicate... REACT Team members using their own Citizens Two-Way Radios, monitor Official Emergency Channel 9 to assist the public.

REACT International, Inc.
75 E. Wacker Drive, Chicago, IL 60601

*An Independent Non-Profit
Public Service Organization*

covering the existing AM CB frequencies, some of whom have approached REACT (UK) for talks or possible mergers or take overs. Although REACT (UK) are willing to talk about such prospects they will only co-operate with teams who are willing to toe the REACT (UK) line. REACT (UK)'s stance while seemingly one being 'Holier than thou' is concerned about keeping their standard of training high.

REACT (UK) are the only monitoring service to have applied for and been granted an Evaluation and Test licence for the MPT 1320 Home Office Specification CB equipment. This is obviously helping REACT (UK) to assess the suitability of different rigs for their own purposes. If REACT (UK) find a rig which impresses them enough it is likely that it will be given the REACT (UK) seal of approval.

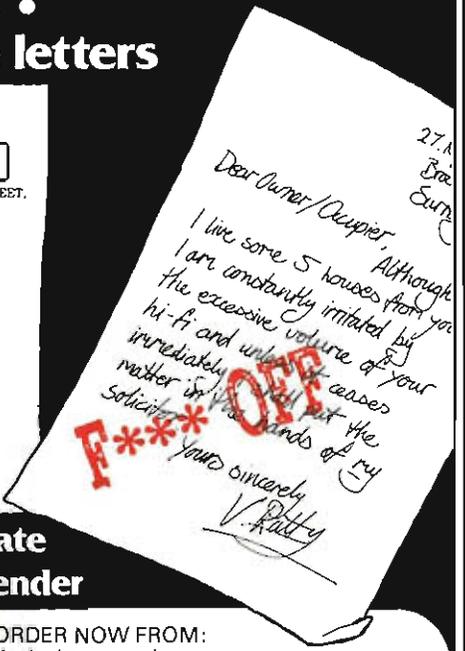
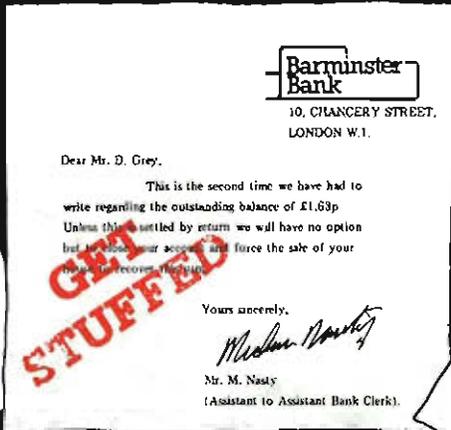
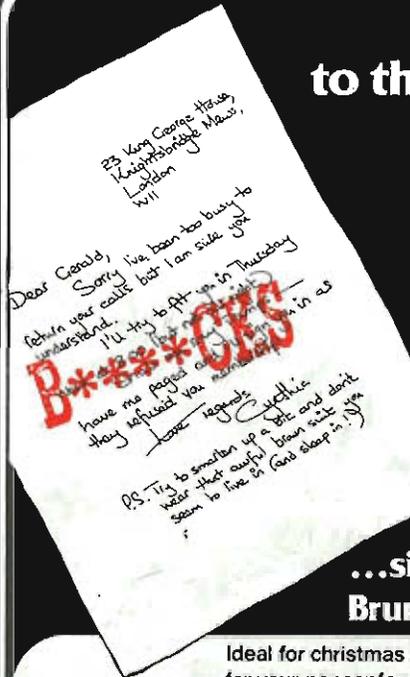
How To Join REACT (UK)

REACT (UK) are still looking for new members and are now only accepting applications from teams, clubs or groups. However, individuals who wish to join an existing team can contact A. MACKAY (EXECUTIVE MANAGING DIRECTOR), Tel. (0203) 383005.

Other Teams

If you either belong to or are forming your own emergency monitoring group we would like to hear about it. Any details about your group's activities are needed (whether AM or FM) for a feature on the 'Independents' in a future copy of CBRM.

The answer! to those unanswerable letters



...simply apply the appropriate
Brunel stamp and return to sender

Ideal for christmas and birthday presents
for your nonconformist friends.

Actual size of rubber stamp — 3" long
Each set of 3 stamps includes a bright red ink pad.
The rubber stamps are not shown in full at the
request of the publisher.

Why not stamp unwanted Christmas/Birthday cards & Invitations — RSVP? TRADE ENQUIRIES WELCOME

DON'T DELAY, ORDER NOW FROM:
Franklin Brunel Ltd., (Dept. B7)
Freepost, Bromley, BR1 1RW
1 set £ 8.75p inc. P & P.
2 sets £16.50p inc. P & P.
4 sets £29.50p inc. P & P.



KERNOW AUDIO + SOUND

WEST COUNTRY
WHOLESALE AND
RETAIL CB SPECIALISTS

Large stocks of full range of accessories
always available.

Watch out for our special monthly offers
in local press.

81 MINA RD,
ST. WERBURGH'S,
BRISTOL 2

Tel: (0272) 541254

FREE DELIVERY SERVICE IN S. WALES & WEST.

HAMMERSMITH CB CENTRE First with the best



Interceptor FM Transceivers

The only make with built-in SWR and
polarity protection from £79.95
Book your set now with £10 deposit and be the
first with a legal rig of quality.

FREE BOTTLE OF CHAMPAGNE FOR 1st 100 RIGS
BOOKED.

We also have a large selection of mobile and
base accessories at very good prices.

Mail order list available

Trade enquiries welcome

Service and repair facilities available

HAMMERSMITH CB CENTRE, 216 King Street,
Hammersmith, London, W6 Tel. 01-748 6982

Open seven days a week



® "Stripes of Quality"

IN 25 YEARS WE'VE NEVER BEEN OUTDISTANCED.

ANTENNA SPECIALISTS

CB ANTENNAS

BOTH OF THESE ANTENNAS MEET HOME OFFICE SPECIFICATION MPT 1320

MR125



Features

High-efficiency base load design, with waterproof loading coil and mount for maximum reliability.

17-7 PH stainless steel (finest grade available) taper ground for resiliency and low wind resistance. Bends full circle without taking a set.

Static ball tip for less noise.

Stainless steel shock spring minimizes damage from obstructions.

Ample 17' coax cable with attached connector.

Mounts securely and easily on any flat metal surface.

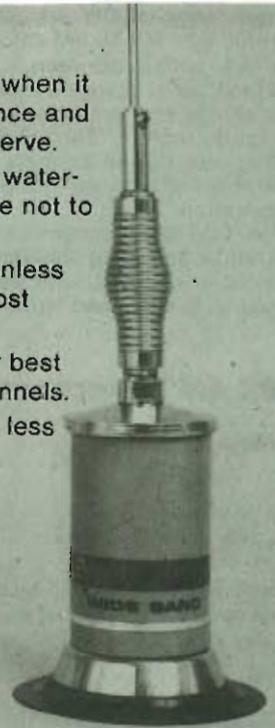
Waterproof design.

Requires 3/8" hole.

Specifications

Model MR125
Whip 17-7 PH stainless steel, taper ground
VSWR 1.5:1 or better, channels 1-40
Cable 17' RG58U coaxial
Connector 3/8" hole mount
Total Height 47"
Power Handling 150 watts

MR510 "Big Momma"



Features

Sweetheart of them all when it comes to big performance and enormous power reserve.

Super heavy duty coil, waterproof, guaranteed for life not to burn out.

Tapered 17-7 PH stainless steel whip for utmost resilience.

Wide band design for best VSWR over all 40 channels.

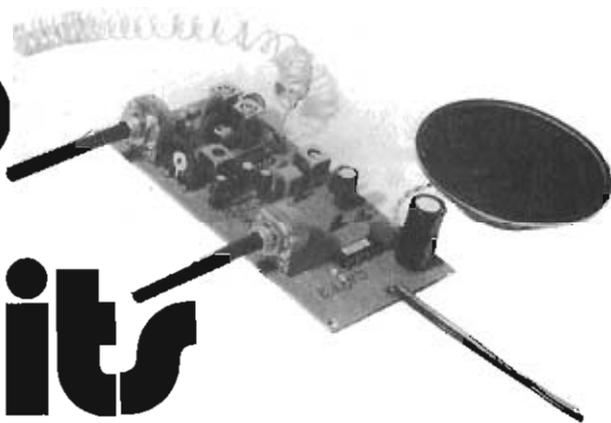
Anti static ball tip for less noise.

Specifications

Model MR510
Whip 17-7 PH stainless steel
VSWR 1.5:1 or better, all 40 channels
Cable 17' RG58U with miniature in-line connector
Connector PL-259
Mount 3/4" hole or Quick Grip™ no-holes trunk lip
Total Height 51"
Power Handling 500 watts

IF YOU WANT THE BEST LOOK FOR THE 'STRIPES OF QUALITY'

CB Radio Project Kits



Two more kits to build yourself

The two kits featured this month from our range of DIY electrical and electronic kits are an AM CB receiver and a mini police car siren.

The receiver is powered by a 12 volt power supply and is a compact board with loudspeaker. The radio chip included with the kit controls a lot of functions of the receiver—for example, rf amplification.

The KT608 when assembled makes an authentic sounding 'American' two-tone electronic siren sound. Very good for playing Starsky and Hutch!

KT382 AM CB receiver

Technical Specifications

Supply voltage	12v DC
Max current drain	140 mA
Input sensitivity	2 μ v
Max audio output	1.2W into 8 ohms
Tunable range	26-28MHz approx
Reception type	AM

Description

When assembled the KT382 is a complete AM receiver that will continuously tune from approx 26 to 28MHz depending on how it is set up. The front end tuner uses a varicap diode. The TCA440 ic is a radio chip that does most everything else, i.e., RF amp, converter and detector. The low level audio output from IC1 is fed to the, TAA611B audio amp chip. The receiver sensitivity is good and selectivity is increased by the ceramic filter (FC in the circuit schematic).

How to identify coded components

Resistors	First colour	Second colour	Third colour	Tolerance
R1 3 Ω	orange	white	black	gold 5%
R3 100K Ω	brown	black	yellow	gold 5%
R5 8.2K Ω	silver	red	red	gold 5%
R6 39K Ω	orange	white	orange	gold 5%
R7 12K Ω	brown	red	orange	gold 5%
R8 15 Ω	brown	green	black	gold 5%
R10 27 Ω	red	mauve	black	gold 5%
R11 33 Ω	orange	orange	black	gold 5%

Ceramic capacitors

Markings	Value
22	22pF
104	100KpF
56K	56KpF
151	150pF
103	10KpF
47	47pF
332	3.3KpF

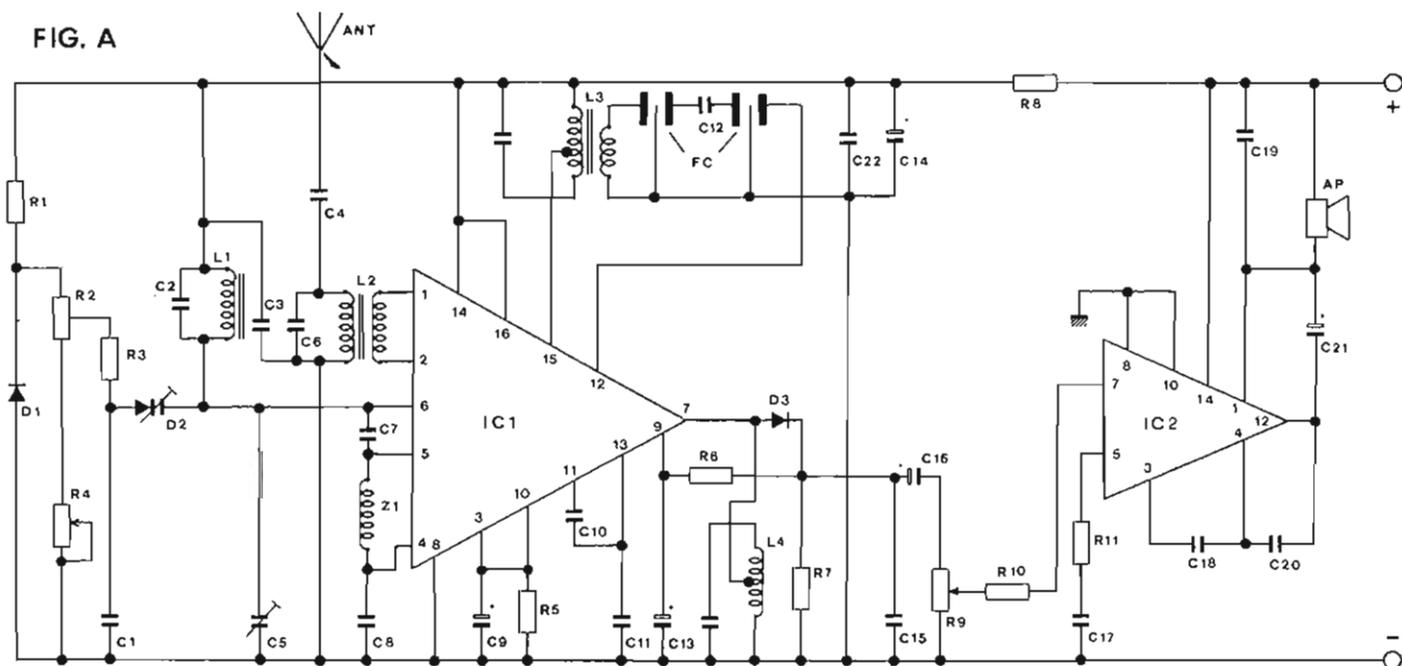
Miscellaneous

Z1 180uH inductor	This inductor is enclosed in a ceramic blob with black and brown spots on top
FC 455KHz ceramic filter	The filter is enclosed in an orange plastic case marked SFZ 455 A
R2, R9 100K potentiometers	Variable resistors (volume controls)

Putting it together

Lay out and identify all the components. All components are inserted from the top of the printed circuit board into their pre-printed positions. Mount the components as close to the pc as possible, long wire ends are untidy and stand the chance of picking up stray, unwanted, signals. Switch on the soldering iron and . . .

FIG. A



List of Components

Quantity	Code	Description
1	R1	1/4W 39 ohm resistor
2	R2, R9	100k ohm potentiometer
1	R3	1/4W 100K ohm resistor
1	R4	10K ohm trimmer
1	R5	1/4W 8.2Kohm resistor
1	R6	1/4W 39K ohm resistor
1	R7	1/4W 12K ohm resistor
1	R8	1/4W 15 ohm resistor
1	R10	1/4W 27 ohm resistor
1	R11	1/4W 33 ohm resistor
2	C1, C4	10pf ceramic capacitors
1	C2	22pf ceramic capacitor
4	C3, C8, C19, C22	100Kpf ceramic capacitors
1	C5	4-20pf ceramic trimmer
1	C6	56pf ceramic capacitor
2	C7, C20	150pf ceramic capacitors
3	C9, C13, C16	4.7uf electrolytic capacitors
2	C10, C11	10Kpf ceramic capacitors
2	C12, C18	47pf ceramic capacitors
1	C14	220uf electrolytic capacitor
1	C15	3.3Kpf ceramic capacitor
1	C17	47uf electrolytic capacitor
1	C21	1000uf electrolytic capacitor
1	Z1	180uH Inductor
1	IC1	integrated circuit type TCA440
1	IC2	integrated circuit type TAA611B
1	AP	8ohm loudspeaker
1	L1	see text
1	L2	see text
1	L3	455KHz coil (white)
1	L4	455KHz coil (black)
1	FC	455KHz ceramic filter
1	D1	7.5v 1/2W Zener diode
1	D2	BA102 varicap diode or equivalent
1	D3	AA119 detector diode or equivalent
2		BR coils with metal screens
1	pc	printed circuit board 0.2-0.4mm self soldering enameled copper wire
60cm		flat wire, red/black length of solder
50cm		
1		

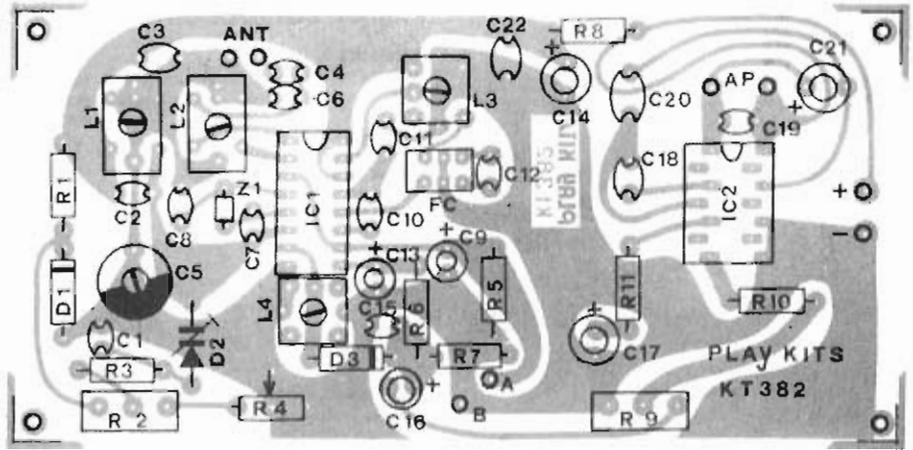
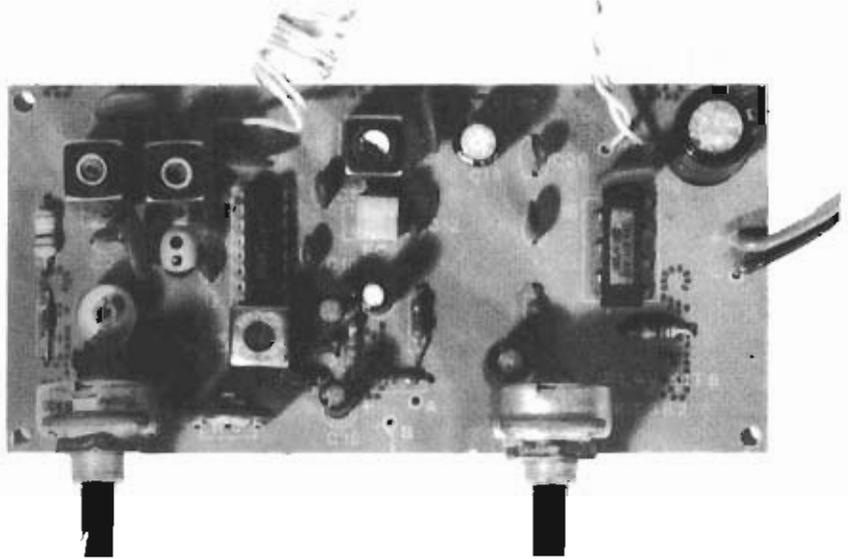


FIG. B



Connect the leads to the loudspeaker and solder.

The kit is now complete and ready for testing.

Notes on winding

L1 9 turns on the plastic support. Fit to the pc board so the coil is connected across C2.

L2 Primary: 9 turns on the plastic support, solder the wires to the outside two of the side with three terminals.

L2 Secondary: From the side with two terminals wind 6 turns on top of the primary.

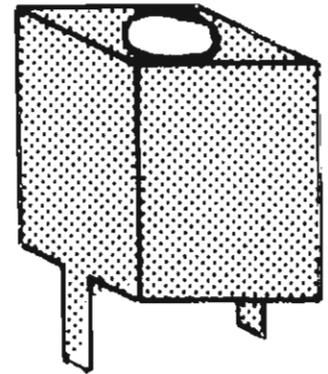
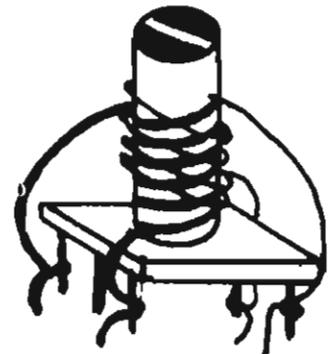


FIG. C

Testing

Connect a 12 volt power supply to the red and black power leads. Using a plastic or non-inductive screwdriver adjust coils L3 and L4 alternatively to obtain the maximum sound from the loudspeaker. Connect an antenna. For the best results from the receiver, the longer the better. By alternately turning the tuning knob and adjusting C5 the CB band should be located. If difficulty is found in finding the CB band the tuning of L1 may have to be adjusted slightly. When the CB band is located tune in to a station, re-adjust L3 and L4 for maximum volume.



Assemble in the following order:

Refer to fig b at all stages.

Insert and solder the potentiometers. Insert and solder the ceramic capacitors.

Insert and solder the electrolytics (observing polarity marked on case). Insert and solder C5 (ceramic trimmer).

Insert and solder the ceramic filter. Insert and solder the diodes, check for correct polarity.

Insert and solder the ic's. Make sure the notch on the ic is lined up with the notch printed on the pc board.

Insert and solder the inductor. Insert and solder the coils L3, L4. Check L3 - white, L4- black.

Prepare the coils L1, L2 as shown in fig c.

Insert and solder L1, L2.

Insert and solder the power supply leads, loudspeaker leads and antenna wire.



CB Radio Project Kits

KT608 mini police car siren

The KT608 is a complete set of parts to make a mini siren. When assembled the sound produced is very similar to the two-tone electronic siren used by American police, now to be used in Britain.

How it works (see fig A)

The siren is made up of two oscillators and an audio pa. Transistors Q1 and Q2 form a high frequency oscillator, Q3 and Q4 a low frequency oscillator. Q5 is the audio amp. The output of Q1, Q2 is coupled to the bases of Q3, Q4 to vary the frequency of the high frequency oscillator. The output from this stage is amplified by Q5 to drive the loudspeaker.

List of components

Resistors

Quantity	First colour	Second colour	Third colour	Tolerance
1 47 ohm	yellow	mauve	black	gold 5%
1 500 ohm	green	black	brown	gold
2 3.3K ohm	orange	orange	red	gold
1 5.6K ohm	green	blue	red	gold
2 10K ohm	brown	black	orange	gold
1 18K ohm	brown	silver	orange	gold
1 500K ohm	green	black	yellow	gold

Capacitors

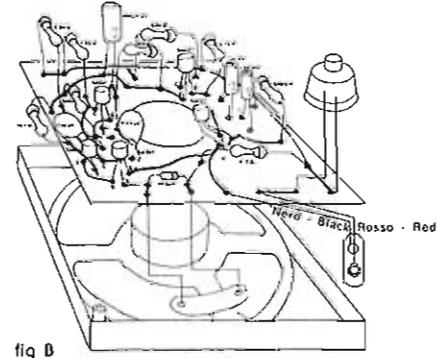
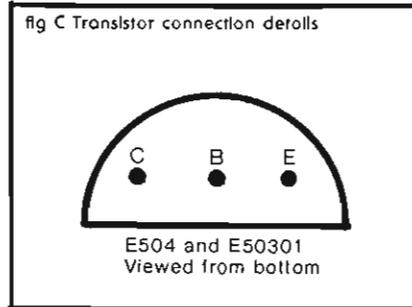
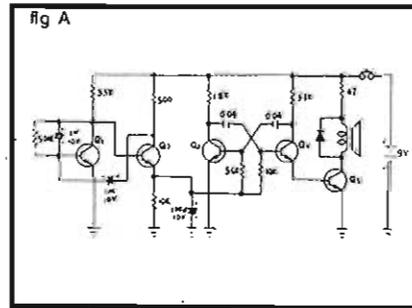
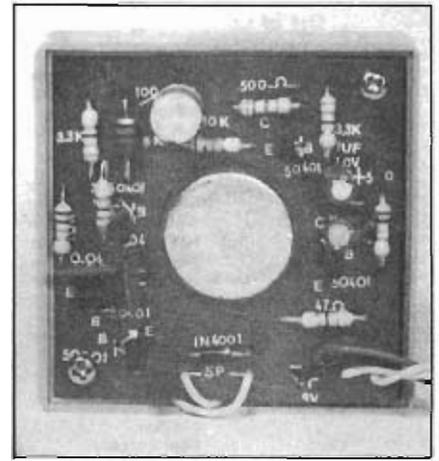
Quantity	Markings	Type
2 0.04 uf	403	ceramic
1 100 uf	100 uf 10v	electrolytic
2 1 uf	1/10	electrolytic

Transistors

Quantity	Type
4 Q1, Q2, Q3, Q4	E5G4 01C1
1 Q5	E50301 H

Miscellaneous

- 1 1N4001 diode
- 1 loudspeaker and case
- 1 battery clip
- 1 push button switch
- 2 self tapping screws
- 1 printed circuit board



Putting it together

Lay out and identify the various coded components on a piece of paper and write their value underneath. Using a soldering iron with a small tip solder the small components into place first, see fig B for details. Start with the resistors, then the capacitors, diode and transistors and finally the leads for the push-button, loudspeaker and battery clip. The kit is now completed and can be fitted to the loudspeaker enclosure with the two self tapping screws.

Testing

Fit 9v PP3 battery and push button.

HOW TO ORDER YOUR CB RADIO - PLAY - KITS

Please send me.....KT 382 (CB Receivers) @ £15.10 & 55p p&p and.....KT 608 (Police Siren) @ £3.90 & 45p p&p

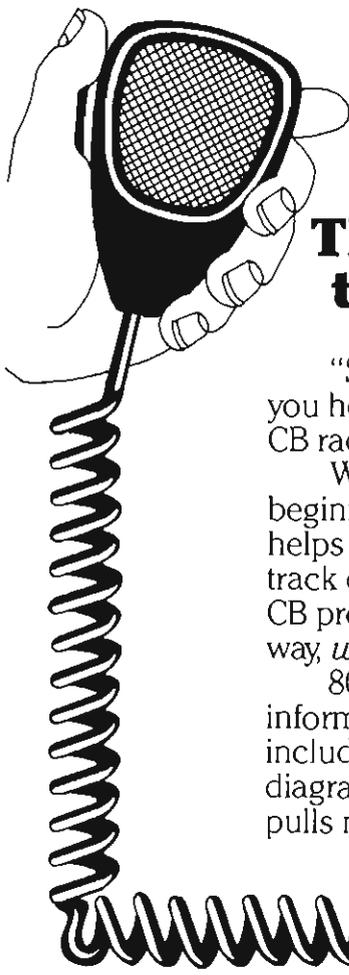
I enclose a cheque/P.O. value £.....made payable to CB Play Kits.

Send cheque/P.O. with order form to: CB Radio Magazine, Tudor Works, Beaconsfield Road, Hayes, Middlesex UB4 0FL.

Please allow 28 DAYS for delivery.

NAME
 ADDRESS

Also Available: KT 311 (Morse Key) £9.40 & 55p p&p, KT 417 (SWR/Wattmeter) £23.30 & £1.25 p&p, KT 307 (Timer) £6.50 & 40p p&p



THE SCREWDRIVER EXPERT'S GUIDE to peaking out & repairing CB RADIO

"Supersparks" Lou Franklin tells you how to get the most out of your CB radio in his US best seller.

Whether you're an expert or a beginner this acclaimed 1981 edition helps you maximise performance, track down faults and solve 95% of all CB problems in a logical, step-by-step way, *without spending £££s.*

80 pages packed with essential information and practical tips including 20 pages of easy to follow diagrams. It's straightforward and pulls no punches. As Franklin says,

"YOU DO NOT HAVE TO KNOW HOW SOMETHING WORKS TO BE ABLE TO FIX IT!"

Read this guide and you'll find he's right.

Available from major CB dealers, price £2.95.

Or send direct for your copy to Connexions, sole U.K. distributors, at 8 Furrow Way, Cannon Lane, Maidenhead, Berks.
Tel: (062-882) 4338/9.

TRADE ENQUIRIES WELCOMED

Connexions



50% Cotton
50% Polyester

AMERICAN T-SHIRTS

COLOURS: Black, Navy, Royal, Denim, Sky, Beige, Burgundy, Grey, White, Kelly Green, Lemon.

Sizes: T-Shirts, 34-36, 38-40, 42-44, 46-48.

£2.75
+35p

AMERICAN SWEATSHIRTS

COLOURS: Black, Burgundy, Beige, Grey, Sky, Navy, Royal, Denim, Red, Yellow, Kelly Green, Pink, Lilac, Purple.

Sizes: Sweatshirts, 34-36, 38-40, 40-42, 42-44.

£5.50
+55p

LETTERS

J 1 in. Size Red, Royal, Black, White, Pink 6p. each

R 1 3/4 in. Size Black, White 10p. each

a 3/4 in. Size Black, White, Red 5p. each

Our professional designers will lay your name up in the most suitable way, unless you have a preference — but remember, we do it for a living and can often give your *HANDLE* the personality it deserves!!



HOW TO ORDER

EXAMPLE

Royal Blue Sweat, Med	5.50
"Superstar" 10-4, 1 in. Red Letters	72
C.B.A. Print left sleeve 3/4 in. Red	15
Post & Packing	55
Total	£6.92

CLUB SCREEN PRINTING

Our services are renowned for high quality screen printing. We draw your Artwork 'FREE' when you place your order - we design from your rough drawing - your shirts come individually packed. Minimum order 12 shirts.

SEND FOR DETAILS NOW!!

SWEATSHOPS

316, LONDON RD., BENFLEET, ESSEX.

South Benfleet (03745) 56496

ACCESS & BARCLAYCARD WELCOME

Vultures on the Side



Two police officers pose as courting couple

Lately this feature seems to have concentrated on individuals and their brushes with the law. This is not to say that the breakers are the only people getting busted, as local CB dealers are finding out. We have had several reports in the past few months of CB shops having unwelcome visits from the authorities. To redress the balance, this month we cover the sad story of Roger D in Chiswick, London.

Situated in a busy side street in Chiswick Roger D opened its doors at the beginning of August. The shop stocks a large range of accessories, books and a nice line in CB Christmas cards and is run by Ian Brown for Roger Wright, the owner.

Very soon after opening, Ian was getting fed up with his customers asking if he stocked rigs. Because of 'public demand', Ian started to keep a few popular rigs in very small quantities. However small the quantities it was unfortunately enough to attract the attention of the local police, since they kept an eye on the shop.

On 17 August, amongst his other customers, Ian had a 'courting' couple visit the shop and look around the stock on display. They also asked if

there were any rigs available and Ian showed them the microphone section of a 'one-hander'. At 5.45pm the same day two men entered the shop, identified themselves as Customs and Excise Officers and asked Ian if there were any rigs on the premises. Ian immediately said "No", but they, of course, searched the premises anyway, even taking up loose floorboards. They fairly quickly found four sets under the counter in the shop and the 'one-hander' in Ian's briefcase.

Sudden reappearance

To Ian's surprise, the 'courting couple' came back and identified themselves as plain clothes officers from the Crime Squad. They helped the Customs Officers search the whole property. Ian was also questioned about his car and another set (bringing the total to six) was found in the car.

Ian had to shut up shop and drove his car to the local police station, accompanied by a Customs Officer. All the details of the rigs were taken and everyone then proceeded to Ian's home to search there. Nothing was found, so Ian went back to the police

station where he was further questioned and given an official notice of seizure. The GPO were called to verify that the sets were, indeed, CB and Ian was released on unconditional bail to re-appear next Wednesday at the station.

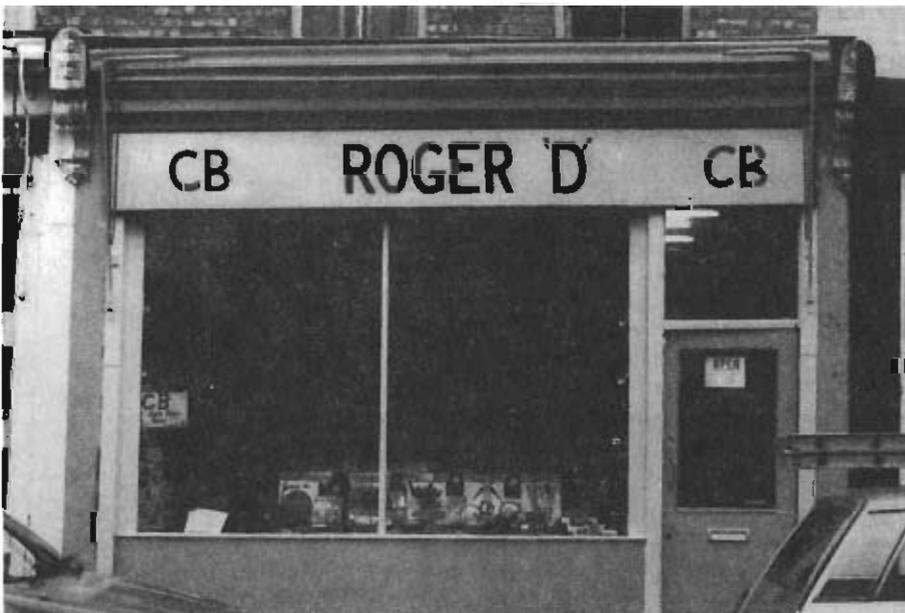
"Keeping certain goods"

When Ian went back to the station he was charged with two offences against Section 170 of the Customs and Excise Management Act 1979. That is "intent to evade the prohibition or importation imposed by the Radio Telephonic Transmitters (Control of Manufacture Order 1968) made under the Wireless Telegraphy Act 1967 and was concerned in keeping certain goods". So now you know! He was fingerprinted and photographed and went home to wait for the summons.

Ian appeared at Acton Magistrates Court on 28 September (remarkably quick, compared to other cases). He had obtained a good solicitor and had been granted legal aid but felt it best to plead guilty as the circumstances were unarguable - the prosecution by a Customs Official who explained about the illegal importation of CB equipment and the claimed interference caused by AM CB. One of the police officers concerned also made a statement about the events of 17 August. In return, Ian's defence emphasized Ian's unfamiliarity with the law and personal aspects of the case.

The magistrate, while not very familiar with CB, was obviously worried about the interference and asked Ian if he was aware of this 'side effect'. Since Ian had pleaded guilty, the magistrate fined him £25 for the set in the car and £75 for the five found in the shop. The prosecution were not awarded costs and Ian was given time to pay the fine.

Compared to many other cases we have heard of, this is very lenient. Did the individual magistrate not consider the offence too serious? Or maybe generally there is less pressure and interest in illegal CB. Whatever the reason, Ian and Roger D have learned their lesson and will now only be stocking duty-paid rigs and legal FM.



Deal in America's No.1 CB radio-Colt*

There'll be a big choice of CB radios—the difficulty will be selecting the winner.

COLT has already proved itself in the tough American market—now it's to be introduced to the U.K. so we are looking for dealers.

The COLT has a great track-record for quality, reliability and back-up service. The price is right, too.

What's more, we'll be supporting COLT very strongly with national advertising, window stickers, posters, customer leaflets—the lot.

The profit potential is tremendous. You can join this COLT bandwagon. Simply complete the coupon below and post to: Keith Johnson, Shellpost Limited, 185 The Rock, Bury, Lancashire. 061-797 7146



SHELLPOST LTD — the electronic source.

*COLT is the registered trademark of Colt Communications Inc., Illinois.

I am interested in Shellpost's distributor network for COLT.
Name _____
Address _____
Post to Shellpost Ltd.,
185 The Rock, Bury,
Lancashire.

CLUB SPOT

H.H.O.T. Breakers

Just a short note to tell you about our local club that has been running about three months. The H.H.O.T. Breakers (Hunters Heath and Orchard Town) of Broadheath and Tenbury Wells have a membership of 100+.

The club's aim is to promote CB Radio, as well as enjoying ourselves. This has been achieved through disco's fox hunts, carnival floats and treasure hunts, all of which have enabled us to donate £200 to the local hospital.

The club meets every fourth Wednesday for official business at Hanley Village Hall, but has several drinks nights throughout the month. Any new members can contact me at the above drinks 20 or by calling for a "HOT" Breaker on channel 14.

Sigging off with 73's.

TALLY WHISTLER (Treasurer)

Scottish Truckers' Club

This is to advise you all that a new club has been formed up here in bonnie Scotland exclusively for truckers. The membership is open to HGV holders only as that is the way the members want it, otherwise we would not be able to cope with the flood of requests for membership; do I hear a rumble heading towards Stirling already?

The club was formed because there was felt a need to unite all truckers, especially in Scotland, to a common interest. Their aims, oops... our aims, are communication with each other in order to promote a closer harmony between each other and to set up a national system of assistance throughout the UK to all members. A special code detailing road conditions is already being passed round to members which will help any message to be passed clearly to each other.

However, the club is not just a club for CB'ers but is open to any HGV holders. A social calendar is being set up to start a pool and darts teams and to organise dances. As the club is still largely in its infancy, things are bound to take a bit of time but we should be really geared up by the end of September at the latest.

The club meets at the Bruce Inn in Stirling at 2.30pm every three weeks to allow for shift work/rotas and the next meeting is due on Saturday, October 31 at 2.30pm. Remember if you're coming along then you must bring your HGV licence and the membership fee is only £5 per annum.

Well, that's about it for the moment but we'll keep you in touch with what is happening up here and should you wish any further information then please get in touch with Jim Cairns at

the address below, who'll be pleased to help. If he's in, that is!

Yours faithfully,

A. R. MILLNER (Hon. Press Secretary)
Jim Cairns (Club Secretary)
c/o 3 Coronation Crescent, Bridge of Allan, Stirling, Central Region

N.I.S.D.X.C.

The Northern Ireland Shamrock DX Club, probably better known as the Northern Shamrock Club, was formed by a dedicated band of DX enthusiasts around Christmas 1980. At the onset it was decided to restrict its membership to 50 radio operators who were practically hand picked as the founder members were anxious to promote a good impression of Northern Ireland over the international airwaves.



The aims of the club are to make the hobby of DXing as cheap as possible for its members and to establish good relations with other operators worldwide. Already the club's call sign, North Shamrock, is recognised in countries including Europe, America, Africa, New Zealand, Australia, the Far East, Hong Kong, and many of these contacts made by its members have enrolled as associate members with even more applications being processed at present. Due to the vast increase in overseas members, the club has printed an International QSL card to accompany its original club card. All members receive an 11 x 8 colour certificate, membership card, roster of members, etc.

At present the club is running an award scheme whereby any DXer having contacted 10 or more different countries by QSO and QSL can qualify for a certificate. Anyone interested please forward 10 QSL cards plus £1 to the Award Manager, P.O. Box 25, Newtownards, Co. Down, Northern Ireland BT23 4XE, or contact any club member on 27.605 L.S.B. (channel 16).

Best wishes to all readers and contacts, hoping to hear from many more!

GORDON MISKIMMIN (Secretary)

Coaltown Breakers' Club

We are the Coaltown Breakers' Club, based in Cannock, Staffs. Our club has been formed since February 1981 and our membership to date is 350 and growing steadily.

We hold our Eyeball once a week every Wednesday at the London Square Public House.

May I, on behalf of all our members and committee extend an invitation to any Breakers or truckers passing through Cannock on Wednesdays to break on 1-4 and ask for directions, where they will be made very welcome.

Your sincerely,

CAPTAIN SCARLET (Secretary)

Zebra County Breakers

We wish to be recognised as a new breakers' group. We go under the name of Zebra County Breakers. We are located between Great Yeldham on the A604 and Earls Cross on the same road, Braintree and Great Bardfield. Capital is Hedingham in which the breakers meet once a week on a Sunday night.

The club was formed in late February with 36 breakers and at the end of April the club had over 100 members, all breakers.

The President of the club, Charley Farley, has been a breaker for over four years, the Chairman, Hunter, has been a breaker for 2½ years.

Each district in the county has its own steward who is responsible for introducing new breakers and giving assistance wherever possible.

Profanity is strictly forbidden on channel and is upheld by the membership. All breakers in the county are aware of their legal position in regards to the use of their equipment.

Any outside breaker is welcome to attend our meeting and refreshments are available. The club has a good social programme with film shows, visits from prominent speakers and electronic experts, etc.

We are to be recognised and are putting floats into most of the local carnivals this summer advertising the club and CB in general.

Dances and other outside activities will be organised in the near future. The aim of the club is to benefit deprived children by taking them out for days on excursions. A news bulletin once a week, there is also a polling unit in the club to make certain breakers behave properly at all times. We break on channel 14 and 5 is a reserve; 8, 9 and 10 are avoided as they are used by the local breakers' emergency service operated by Suffolk Ears.

WINNIE THE POOH (Club Liaison)

Shellpost Ltd., HMP's sole U.K. agent, offers you a golden opportunity to become part of the dealer network and take advantage of lucrative sales.

As an HMP retailer, you'll be selling the brand that's recognised throughout Europe as the cream of CB antennas.

For quality, reliability, price and back-up service, HMP antennas are top of the range.

They'll be supported by national advertising and an impressive show of promotional material—point-of-sale, window stickers, consumer leaflets and posters.

COMMUNICATION
ANTENNAS ↓ ↓ ↓



Become part of this profitable dealer network and establish yourself in the CB antenna market NOW by posting the coupon

below to: Keith Johnson,
Shellpost Ltd., 185 The Rock,
Bury, Lancashire.
061-797 7146



**Give your
customers
a better reception.
Stock HMP
antennas.**

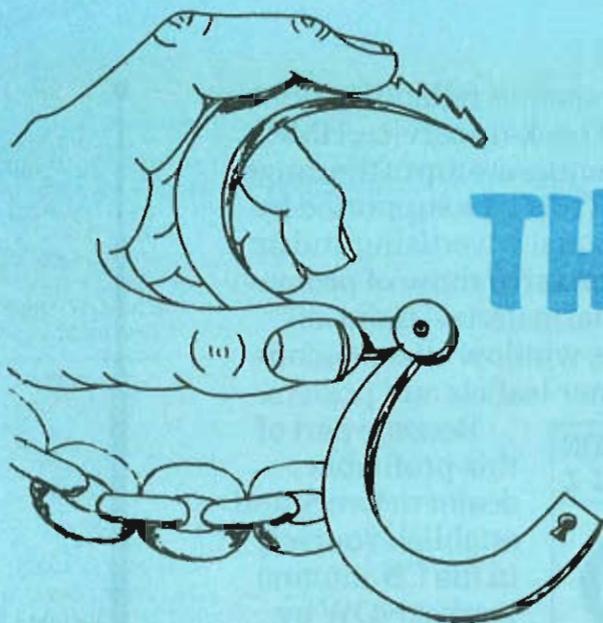
I am interested in
Shellpost's distributor
network for HMP.

Name _____

Address _____

Post to Shellpost Ltd., 185 The Rock, Bury, Lancashire.

SHELLPOST LTD
- the electronic source



THE LAW AND YOU

The Citizen Band Radio Licence

FOR OFFICIAL USE ONLY

Expires with Last Day of Month Year

Fee on Issue £

Licence Number **00490001**

Initials of forenames

Surname

Full Postal Address

Postcode

CITIZENS' BAND RADIO LICENCE

How many sets do you need this licence to cover? (Place a tick in the appropriate box)

Up to 3 4 5 6 7 8 9 10 11 12 13 14 15 More than 15 state number above

If this is a renewal licence place a tick here

WIRELESS TELEGRAPHY ACT 1948

TO NOTIFY CHANGE OF NAME OR ADDRESS PLEASE TAKE THIS LICENCE TO ANY POST OFFICE FOR AMENDMENT

Licence Fee Stamps to be stuck in this column (Each fee stamp covers up to 3 mes.)

MPT 1320 and/or MPT 1321, provided that the licensee is hereby licensed subject to the terms, conditions and limitations set out below and in the Schedule, to establish and use up to 15 transmitting and receiving stations for wireless telegraphy using the frequencies specified in the Schedule, to establish and use one or more such stations in accordance with the provisions of the Act and to use any such station in accordance with the provisions of the Act, subject as aforesaid, to a renewal fee in respect of this licence as follows: This licence shall, subject to clause 10 below, continue in force up to and including the date of expiry specified above and thereafter as long as the licensee pays to the Secretary of State in advance in each year on or before that date such renewal fee as is prescribed by regulations made under Section 2(1) of the Wireless Telegraphy Act 1948.

Issued on behalf of the Secretary of State for the Home Department

To be completed by the Post Office. To see Note opposite

A licence similar to this should be enclosed in this copy of CB Radio assuming it has not decorated the floor.

CB01 406 370224

It is a pleasure this month to be able to write about some positive aspects of the law rather than what to do in case you get busted. As FM CB is now legal in this country it makes a change to be able to tell you what you can do, rather than what you can't.

Most official forms are a nightmare to understand and fill in; the CB radio licence form is no exception. As we said last month, the licence is very similar to the one currently used for television reception equipment.

The licence is a three-part carbonating set which is laid out with the instructions on the front, the actual licence as the second copy and the licencing centre's file copy on the back. The form is available in all Post Offices and you may only use a CB set when you are in possession of this licence. The fee has been set at £10 per year and this covers the purchaser for up to three sets. One licence can only be used for up to 15 sets and anybody wishing to use more than 15 rigs

must apply on the same form but by post to CB Licensing Unit, Chetwynd House, Chesterfield, Derbyshire. The licence is the application form and is only valid when the licence fee stamps are attached and the form has been initialled by the issuing officer.

What the licence covers

The licence provides for the operation of FM transceivers which comply to MPT 1320 and MPT 1321 Home Office specifications. This means that only sets which have either CB 27/81 or CB 934/81 stamped or engraved on them and the only sets which should have these marks are ones which electronically conform to the specifications. How long will it be before a business flourishes in stamping illegal sets?

Licence conditions

1. The licence only covers the use of equipment by the licence holder or the following categories of people with the licensee's permission:

a) Any person who resides at the licensee's usual place of abode. (Well, the budgie will be OK).

2. Any employee of the licensee acting in the course of the licensee's employment. (In other words, your staff).

c). Any person who hires the apparatus from the licensee for a period not exceeding 28 days. (Will Radio Rentals actually start living up to their name?).

2. The licence is not transferable. (No, you can't borrow mine).

3. The apparatus shall be so designed, constructed, maintained and used that its use does not cause any undue interference to wireless telegraphy.

This paragraph is delightfully vague because one man's Crossroads and to be quite honest, I think it will be very difficult to trace a source of interference accurately enough to revoke somebody's licence. However, interference is going to be a major problem.

4. The apparatus and this licence shall be available for inspection on demand by a constable or a person acting under the authority of the Secretary of State.

Yet another loose piece of phraseology. Does this mean that any constable can enter your home to inspect your rig and licence without a search warrant which is currently required by law? Such measures are normally reserved for terrorists and drug smugglers. Persons acting under the authority of the Secretary of State presumably means Buzby (Post Office) and does that make them legally entitled to enter your home without a warrant as well?

5. All transmissions other than selective calling signals or digital transmissions designed solely to identify the transmitter, shall be in plain speech.

Which means in plain English that you can talk and Roger Bleep to your heart's content.

6. The equipment may not be installed or used in any aircraft or airborne vehicle.

7. No transmission which is grossly offensive or of an indecent or obscene nature may be sent.

8. The apparatus shall not be used

7. This suitable equipment may be recognised by the presence of the following authorisation or stamped on the front panel of the equipment.

8. Equipment should be certified by manufacturers as complying with the appropriate electromagnetic regulations.

LICENCE CONDITIONS

- Use of the apparatus is subject to the conditions that the apparatus may be operated only by the licensee or the following persons with the licensee's permission:
 - any person who resides with the licensee at the licensee's usual place of abode;
 - any employee of the licensee acting in the course of the licensee's employment;
 - any person who has the apparatus loaned to him for a period not exceeding 28 days and use of the apparatus otherwise than in accordance with the conditions that may be authorised by the licensee.
- This licence is not transferable.
- The apparatus shall be designed, constructed, maintained and used so that it will not cause any undue interference to wireless telegraphy.
- The apparatus and this licence shall be available for inspection and demand by a constable or a person acting under the authority of the Secretary of State.
- All transmissions, other than radiotelephony signals or digital transmissions designed solely to operate the transmitter, shall be in plain speech only.
- The equipment may only be used in or on any aircraft or other airborne vehicle.
- No transmission shall be of a grossly offensive or of an obscene or abusive character, shall be sent in a language which is likely to be understood by persons in the vicinity of the transmitter, or shall be sent for the purpose of advertising or selling goods or services of any kind.
- The Secretary of State may at any time after the date of issue (or revocation) of this licence or vary the terms, provisions or limitations thereof by a notice in writing served on the licensee, or by a general notice published in the London, Edinburgh and Belfast Gazettes, or in a newspaper published in London, a newspaper published in Edinburgh and a newspaper published in Belfast addressed to all holders of Class 1, Class 2 and Class 3 licences or to all holders of Class 1, Class 2 and Class 3 licences, or by a general notice published by the British Broadcasting Corporation addressed to all holders of Class 1, Class 2 and Class 3 licences. Any notice given under this section may take effect forthwith or on such subsequent date as may be specified in the notice. A licence which has been revoked by a notice in writing served on the licensee shall be returned to the Secretary of State.
- In this licence "Secretary of State" means the Secretary of State for the Home Department and except where the context otherwise requires, expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 1926 and regulations made thereunder.

THE SCHEDULE

- Combined Apparatus**
Apparatus conforming to Home Office specification MPT 1331 may be combined with apparatus conforming to Home Office specification MPT 1329, but such apparatus may not be combined with any other wireless telegraphy apparatus.
- Power Limits**
The 1329 frequency group is specified in the relevant MPT specification for apparatus with provision for connection of an external antenna and the effective radiated power specified in the relevant MPT specification for apparatus with an integral antenna may not be exceeded.
- Antennae**
 - 27 MHz apparatus with provision for connection of an external antenna shall be connected to a single element rod or wire antenna with a base mounted loading coil. Overall length of the antenna, including the loading coil, shall not exceed 1.5 metres.
 - The antenna for 93.4 MHz equipment with provision for connection of an external antenna shall consist of a maximum of four elements, none of which may exceed 17cm in length.
 - Where an antenna for use with Class 1, Class 2 and Class 3 equipment is mounted or used in or on any structure of a height above ground level exceeding 7 metres for 27 MHz equipment or 10 metres for 93.4 MHz equipment with a 10 dB attenuator shall be fitted between the transmitter and the top of the mast or the top of the antenna switch provided by the manufacturer shall be used to reduce the gain.
- Other**
Power amplifiers and antennas other than those specified in paragraph 3 of this Schedule are not permitted.

Penalties — It is an offence under Section 1 of the Wireless Telegraphy Act 1926 to install or use Class 1, Class 2 or Class 3 apparatus except under and in accordance with this licence.

Enquiries — Enquiries about the issue of this licence should be addressed to CB Licensing Unit, Chislehurst House, Chislehurst, Barking, S20 1PF.

for the purpose of advertising or soliciting goods or services of any kind.

The last three points make common sense and should hopefully leave the FM airway free for the enjoyment of all (except pilots) without having to be bored with bucket mouths or boring advertising.

Section 9 of the licence is written in gobbledegook, a language which I fail to understand despite having read numerous books on the subject. Rather than bore you by copying it all out the gist of it is that the Secretary of

State can revoke everybody's licence after having given notice. The Secretary of State needs to give no reason at all.

The rest of the licence consists of a section called *The Schedule* which reiterates sections of the Home Office specification.

The Section 3 of the schedule relates to the type of antenna that the Home Office will permit and nothing new has emerged.

1. The antenna must be of the base loaded type.

2. The element must be a single element rod or wire type.

3. The overall length of the antenna must not exceed 1.5 metres in length.

This means that only a minority of the aerials in current use will be within the specification (see our Guide to CB). Does this mean that anybody in possession of any other type of antenna will be subject to prosecution? Think how many potentially illegal twigs your local CB dealer has in stock.

The 93.4MHz aerial may consist of up to four elements, none of which may exceed 17cm in length.

If you are using a home base set, the aerial for such a set must not be affixed to a point any higher than 7 metres above ground level (10 metres for 93.4MHz). If you go higher than specified you must attenuate the signal by 10dB. All legal sets must have a switchable attenuator for this mode of operation. Just don't forget to flip the switch.

Antennas of other types must not be used and neither must power amplifiers.

The CB licence is generally aimed at making CB use sensible. By virtue of the way it is worded it does pose some very serious questions and raise many potential loopholes. Interpretation of the licence by law enforcement agencies is going to vary from area to area and we will be interested to hear from you if you encounter any difficulties whilst operating CB under the auspices of this licence.

© CB Radio

Lucky Numbers

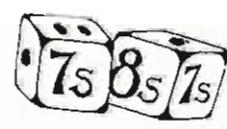


WE TURN PRICES
UPSIDE DOWN!

RIGS AND ACCESSORIES

For a comprehensive stock of rigs and accessories at very competitive prices, visit our new premises at:

**62 East Avenue
Hayes
Middlesex
01-573 4848**



© CB Radio

SOUND AROUND

**CAR RADIO AND STEREOS
SUPPLIED, FITTED & REPAIRED**

01-575 5030

**SOUND AROUND FOR
ALL YOU REQUIRE IN CB
OR IN CAR ENTERTAINMENT**

CB ACCESSORIES

**SOUND AROUND
114 RUISLIP ROAD
GREENFORD
MIDDLESEX**

© CB Radio



KENT OPEN CHANNEL Present The CB'ERS DIARY 1982

Also available from

- Geotech Communications Ltd. 30-32 Burnley Road, Acrington, Lancs. Tel: 0254 292266
- CB City, 85 Ash Hill Road, Ash, Basingstoke, Hants. Tel: 0252 218141
- CB City, 1 Reading Road, Chineham, Basingstoke, Hants. Tel: 0256 53900
- Coe Bee Unlimited, 1 Hamilton Court, 5 Alum Chine Road, Westbourne, Bournemouth. Dorset. Tel: 0202 768676 768787
- CB Paradise, 59 Our Northgate Street, Bury St Edmunds, Ipswich. Tel: 0204 400403/396 506
- CB Cruise Ltd, 48 Stratatoun Road, Cleve, Chesire. Tel: 0270 863883
- SSE Surrey Sussex Electronics, 27 Meadowcroft Road, Dorking, Surrey. Tel: 0336 825316
- CB City, 37 Queens Road, High Wycombe, Bucks. Tel: 0494 20125
- Waddy Communications Ltd, 111 West Wycombe Road, High Wycombe, Bucks. Tel: 0494 447093
- Breakers Yard, 22 High Street, Kewham, West Yorkshire. Tel: 0534 47028
- Good Builders CB Discount Shop, 156 Jarrom Street, Leicester. Tel: 0533 340641
- C. J. Robins & Co., 167 Park Lane, Macclesfield, Cheshire. Tel: 3422 25353
- Paul's Electronics (Video Centre), 33 Manchester Road, Dorton, Manchester. Tel: 061 220 4350
- CB City, 44 Chapel Street, Worsley, North Devon. Tel: 0439 252026
- Kent Open Channel, 58 High Street, Green Street Green, St. Ervington, Kent. Tel: 0669 58377
- C.O.O.X. Communications Ltd, 47 Church Street, Preston, Lancs. Tel: 0712 58375
- Dave Winward CB Accessories, 16 York Square, Preston, W. Preston, Lancs. Tel: 07475 4770
- Neo Vision, 247 Barton Road, Mansfield, Nottingham, Salford 6. Tel: 081 736 5021
- Micromat Audio, Market Ground, Westway, Shaw, Lancs. Tel: 0706 649318
- Southport CB Centre, 218 Liverpool Road, Southport, Merseyside. Tel: 0704 68422

Don't be Dissapointed—order today!

To KOC, 58 High Street, Green St. Green, Orpington, Kent, BR6 6BJ.
Please send me CB'ers Diaries 1982 @ £2.95(+ 50p p&p) each.
I enclose my cheque/postal order for £ or debit my Access/
Barclaycard No.

Name

Address

Signature

To order by phone, ring 0689 58737 and quote your credit card number.



CB RADIO ACCESSORIES

BLAZEAWAY CB

**LYNX TRADING ESTATE
LYSANDER RD
YEDVIL 71792**

SHOP ENTIRELY DEVOTED
TO BREAKERS FOR BREAKERS
(CLUB RATES)

OPEN MON-SAT
9-30AM-5-30PM
LATE NIGHTS WED, THURS
AND FRIDAY

NIBZ

NORTH HERTS CB CENTRE

8 MELBOURN STREET, ROYSTON, HERTS. TEL: 42295

Are pleased to announce the launch of the Brand New all British 934 MHz UHF CB. These rigs will shortly be available from the Sole Distributor N.H.CB.C. and will of course conform to British Specification. Registered dealers who are interested in becoming stockist of this exciting new product, should write to Mick Eldred at address above for further details.



REFTEC 934 Rigs will be made to an extremely high Technical Specification and it is hoped will out perform any existing A.M. equipment.

We are also stockists of a large selection of CB equipment. Registered dealers requiring Wholesale Price List, Please write to Paul Eldred at the above address.

ASS

AUTOLOCK SPECIALISED SERVICES LTD.
48, Wistaston Road, Crewe,
Cheshire. Tel: 0270 661674

WHOLESALE ★ NORTH WEST ★ WHOLESALE ★ NORTH WALES
TOP QUALITY PRODUCTS AT VERY COMPETITIVE PRICES

BREMI - VALOR - LEMM - SKIPMASTER - SIRTEL - HMP
TURNER - TELEX - AVANTI - K40 - ALCOM - FIRESTICKS

And many others

DISTRIBUTORS FOR O.C.T. Ltd.

IF YOU ALREADY RETAIL OR ARE THINKING OF RETAILING
C.B. ACCESSORIES (& RIGS WHEN LEGAL) THEN GIVE US A CALL
FOR FULL DETAILS AND AS MUCH ADVICE AS YOU WANT

★ ★ **STOP PRESS** ★ ★

NOW OPEN RETAIL SHOP

CB (CREWE) LTD. TEL: 663643 ADDRESS AS ABOVE

EUROSONIC Citizen Band

We are now the SOLE distributor of tagra
Antennas & Accessories and offer competitive
prices on our full range of products.

Dealerships are now available for most areas from

Trade
enquiries to:-

Europasonic (U.K.) Ltd
Britannia Works Buildings,
Sherbourne Street,
Manchester M3 1EF.
Tel:- 061 834 8818
Telex:- 668652 Eusoni.

Clyde Importers Ltd
24/32 Coburg Street,
Glasgow G5 9JF.
Tel:- 041 429 2058

- * DV27 Antennas
- * K27 Antennas
- * Avanti Moonraker
- * Firestik
- * Electric Aerial
- * Fully retractable CB Aerial
- * Walkie Talkie
- * K40



EUROPASONIC Now sole U.K. Agents

Clubs Unite

When we launched the idea of Clubs Unite last month, we never imagined that your response would be so positive or quite so speedy. Although this initial success has rather overwhelmed us, we are still capable of handling and collating more replies to our National Club Register.

To those of you who read last month's article and replied, thanks. To those who either didn't reply or read the article, it is time to read on and to take some decisive action.

The future of your club

Now that it is legal, I'm sure that debates and arguments are raging furiously throughout all the CB clubs in the land. Many a pint will be sunk whilst discussing the pros and cons of FM versus AM because at last FM is available on which to lose a factual argument rather than relying on myth.

If, as a result of your experiences with legal CB your club is changing its policy and is now in favour of FM, let us know. If, on the otherhand, you will tolerate both FM and AM breakers and expect your club to grow as a result, also inform us. Many clubs will doubtless remain purely for the AM enthusiast. We still want to know.

With more people becoming aware of CB as a means of communication, it is almost certain that SSB will be one area of CB breaking that will grow. When FM breakers realise the limitations of their sets, SSB will be the medium through which the "radio bug" can really fulfill his hobby.

National Club Register

Regardless of choice and frequency preference, registering your club will be important, new 27 FM clubs will spring up along with 934 clubs, each with its own aims and ideals.

Therefore we have decided to start a totally separate publication intending to register every possible CB club, group or organisation.

FM Clubs will find it an advantage to register their name and address, it should stop confusion & identical names in the same area, it may even prevent them from choosing a similar name in the first place. It will also let other clubs

know of your existence, how to contact you and what channel you break on. Being registered will also have a spin off advantage, for instance many rig insurance schemes now mail the clubs with preferential offers on rig theft insurance.

AM Clubs will find registration essential because the Government want to make you extinct. They will succeed unless you openly proclaim your support, communicate with similar active clubs and unite in any protests or demonstrations. National Club Directory will contain information that an organiser of any demonstration would need to know, how to obtain police permission and who to contact, planning the best possible route, the time scale and how to plan your support, suggested media contacts and promotional hints, tips on money saving with banners and posters, along with artwork for suggested campaign literature, (the most expensive part of any campaign). In other words everything you and your club should need to stage an effective protest or demonstration.

SSB Clubs. Amongst all the other possible clubs, Single Side Band is without doubt the major argument for AM preference. Yet to date the Home Office have never mentioned the subject and totally ignored its existence. True we all know 27AM, SSB, long distance contact is illegal the world over, but is it that far removed from 28 MHz operation that there is no argument for legalisation? Many Hams cast CB'ers aside as unlicensed pirates, yet more and more we have noted a tendency by some amateurs to ask why isn't the RSGB pressing to incorporate it!

Registration for the QSO Club should be an advantage, other local SSB clubs will know your frequency and either give you a clear band or be able to contact or at least try British working with you.

Information listed would be reasonably explicit, i.e. frequency, area, attitude, DX local or long distance, the membership response to QSL, if a purist QSO or DX QSL Swap considered. Whether the club is active, interested in legalisation or just simply here full stop.

DX - QSL Swap Clubs can incorporate information about themselves in a semi advertisement form and enhance their membership, listing their club package, QSL rate i.e. 100% or 1-4-1, enrolment fee and even printing in the register their Club QSL card.

BIRDINGTON MOSS BREAKERS
Venue: The Castle on the Hill
Birdlington Moss
Castlehill View
Birdlington
Every Tuesday 8.30 - 1.30
Contact: Meril Straight
Evlín Vaughn Green
Ridge Castle Road
Birdlington
Area: Shakey Tree Town
Break: 14
CLUB: 17
Registered: AM ACTIVE

BROOKFIELD MARSH STOMPERS
Venue: The Marsh Inn
Brookfield Marsh
Nr Broadlanders
Every Sunday
Contact: Mike Stalmond
12 The Larches
Oakfield Marsh
Broadlanders
Area: Stompers Green
Break: 14
CLUB: 11
Registered: FM

BUS STOP DX QSL
P.O. Box 32
Flanders
S. Suxeth
Personal: Mike Roger, unit 001 President
Frequency: 27.585 LSB
Registered: SSB PIRATE

The above are examples of how the listings will appear. Please fill in your form with care, think of the details you wish to be printed and compare it with the above.

Certificate of Registration

In order to collate all the information we hope to receive, computer time will be booked, therefore we want to use only genuine and correct information about your club, body, organisation or group.

For this reason there will be a registration fee, this will cover collation of data, issue you with an "Official Wall Certificate" which is proof of registration made out to the registered club showing its official stance i.e. AM-FM, SSB or DX QSL Club, Organisation or fighting group. The registration fee will also allow us to send you a photo-stat of how your listing will appear. This can then be checked to ensure that all the information is correct.

The Registration fee will be £1.00 for all clubs, organisations or groups, additional space will be available for the more prominent clubs, fighting organisations or DX-QSL Clubs wishing to promote themselves.

JOH

The publication will take some time to collate but it is envisaged that it should be ready early in the new year, that will let us have a Christmas break, yes it is almost here already

JOH

CB Radio Magazine

NATIONAL CLUB REGISTER

Please fill in details carefully and comprehensively. Print in block capitals only.

FOR OFFICE
USE ONLY

NAME OF CLUB
VENUE
ADDRESS in full:
Day & Date

Contact/Personal
Address
Phone No

Area or County
Area or County Handle
Breaking Channel
Club Channel

(see below for choice first)
Club Registered as:
Club favours:
DX/QSL/QSO/or 1 - 4 - 1
(Applies only to 100% QSL)

CLUB FAVOURS (either);
FM: Covers all legal FM
AM: 27MHz Illegal
SSB: Single Side Band
ALL: CB Illegal and legal

CLUB REGISTERED AS (either);
ACTIVE: Fighting for AM or SSB
SUPPORT: Interested in all demos
LEGAL: Happy with the legal frequencies
PIRATE: Illegal to the end

I wish to register the above club and details:

My Name is
Position in club/group etc
Address
.....
Phone No

I understand that this information is personal and not for printing, unless it is the same as above

I enclose the registration fee of £ 1.00p Cheque or P.O. to British Breaker Productions, Tudor Works, Beaconsfield Road, Hayes, Middlesex, UB8 0PL

Certificates of registration will be despatched with a photo stat 'proof' of your insertion as it will appear, as soon as possible.
Please allow for the collation time involved and expect to see this early in the New Year.
If you do wish to receive your Certificate earlier enclose a large S.A.E. with this form.

FOLD ON LINES ONE, TWO, THREE AND FOUR TO MAKE AN ENVELOPE AND TUCK FLAP 'A' INSIDE POCKET 'B'.

FLAP 'A' TUCK INSIDE 'B' TO SEAL ENVELOPE



FOLD

FOLD

PLACE
STAMP
HERE

FOLD FOUR

National Club Register.
British Breaker Productions,
Tudor Works,
Beaconsfield Road,
Hayes,
Middlesex,
UB4 OFL.

FOLD ONE

FOLD TWO

FOLD THREE

FOLD

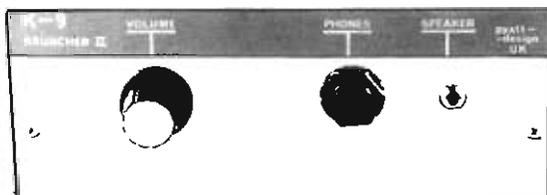
FOLD

OPEN POCKET 'B'

mz - j om r h o b o z o g > h c o

The **K9** **KRUNCHER** has it all

At last—
the magic box
you've been straining
your ears for!



The K9 Kruncher is a speech processor that fits on the output of your transceiver. Its prime purpose is to maintain the audio output at an absolutely constant level. This eliminates those annoying bursts of high level signals you don't want to hear and reduces fading effects, especially on DX copies. The net result of this function is that you can concentrate on a particular signal without having constantly to adjust the volume control — particularly when using headphones — and DXing becomes even more satisfying for you. Why put up with poor copies when the K9 Kruncher will bring them in loud and clear, for only £19.95 plus postage and packing?

To Skylab CB, 2c Kelghley Road, Crossflatts, Bingley, W. Yorks.

Please rush me a K9 Kruncher. I enclose cheque/P.O. for £21.45 (£19.95 + £1.50 p&p)

Name

Address

.....

Full money back guarantee

EVERY ORDER IS DEALT WITH QUICKLY - AND IN COMPLETE CONFIDENCE!



A
PYATT
DESIGN

BREAKING INTO CB AT HEATHROW

SUNBEAM CB warehouse has just flung open its doors and we're going hell for leather to keep up with the demand for low cost CBs and accessories

- RIGS & MIKES
- ANTENNAE
- SPEAKERS ETC.



WAREHOUSE (FELTHAM)

CONCORDE HOUSE · ST. ANTHONYS WAY
FELTHAM · MIDDLESEX

01-751 5967

LATE NIGHT FRIDAY — OPEN SAT. MORNING

There are other ways of making money...



Like cashing in on Citizens Band from

ACORN

THE LEADING CITIZENS BAND WAREHOUSE
WE STOCK THE LOT!

FORGE YOUR
SIGNATURE
BELOW

K40 TRADE ENQUIRIES ONLY

BE A REGISTERED ACORN DEALER BY RETURNING COUPON TODAY
SPECIAL FREE GIFT OFFER FOR ALL NEW ACCOUNTS

Name

Company

Address

Tel.

Position

ACORN TRADING (CB) LTD.

CBR 11

UNIT 43, OFF ROMAN WAY, COLESHILL, INO. EST. COLESHILL, BIRMINGHAM B46 1JT. TEL: (0675) 64136

10, Marshalsea Rd., London SE1 1HL Tel: 01 403 1777

2 GREAT TRUCKIN' MUSIC CASSETTES

Sip one of our new tapes in your cassette player and you will find yourself sitting behind the wheel of one of those amazing, American Big Rigs — well, almost. With 10 tracks on each tape and such finger-snapping hits as Convoy, Phantom 309, White Knight and Little Joe, you'll soon see why trucking music has become so popular, both in the States and over here. Choose from Convoy or TEDDY BEAR **£1.95** EACH +30p P&P

SLANGUAGE LANGUAGE

Slanguage Language is one of the all-time best selling C.B. books in America and it's now available in a new, British edition. There are 250 pages packed with C.B. slang, 10-codes, British town handles and much, much more.

£1.95 +30p P&P

THE BRITISH C.B. BOOK

Here at last is the book that you've been waiting for. It has been written especially for the British C.B.er and covers just about everything that you could ever want to know about the subject including how to buy equipment and install it, the history of C.B. in this country, C.B. and the law, etc. Over 200 pages and hundreds and photos, diagrams and cartoons showing the lighter side of C.B. radio.

£2.95 + 50p P&P.

This book is a must for every C.B.er.

£1.95 +30p P&P

To: TRUCKERS' PARADISE, 10, Marshalsea Road, London SE1 1HL

Please send me the following goods:

Quantity	Name	Price
.....	Convoy Cassette	£2.25
.....	Teddy Bear Cassette	£2.25
.....	Slanguage Language	£2.25
.....	British C.B. Book	£3.45

Name

Address

.....

I enclose a cheque/P.O. for £..... made out to Truckers' Paradise.

All prices include postage, packing and VAT. Note: We cannot accept Irish cheques or P.O.'s. We can take orders over the phone using Access or Visa cards.

America Today



Citizens Band Radio after the boom

Generalisations can never be successfully made about any country the size of America, so whilst I would have liked a year or so to travel the States and report, I had to be content with a few days in California and Arizona.

CB started in America way back in 1945 and was introduced for the public's use in 1947. Since then its frequency has changed from 460MHz to its present 27MHz. This change happened in 1958 but it alone did not cause the American CB boom. That came in 1974 with the introduction of the 55 mile an hour speed limit. Almost every one wanted a CB and at its peak over half a million sets were sold each month.

Now in 1981 the boom is long gone and CB is just a means of communication there to use if you feel like it. The original users of CB, the truckers, have almost got back their exclusive use of mobile CB.

From all those millions of breakers that purchased and used a rig in the seventies only the diehard enthusiasts remain and the greater majority of those use 40 channels AM purely as and when it suits them.



A speeding truck, caught here in the mirror just before he was pulled in.

The Ultimate Insult

Most British breakers will have heard of the CB jargon but how many actually realise why it started? In the early days of American CB the truckers had the frequency to themselves. Prior



It is the Highway Patrol's job to prevent accidents like the one pictured below, where all the occupants died



to, and with the boom, their channel 19 had become crowded with normal ordinary members of the public. For the breakers it was annoying and unwanted so they developed a code which they hoped no one but other truckers would understand. However, that was short lived and with the boom came books on CB and its magical lingo. Soon everyone was into speaking on 'the old CB' in cotton-picking jaw-jacking terms and with the friendly nature of CB 'Good Buddy' became the means of addressing fellow CB'ers.

Now with the quieting of the basic 40 AM channels few of the old CB lingo is used, the tendency now is to talk in plain American. Thus the term Good Buddy has become the ultimate insult, without wishing to upset readers by being explicit, its meaning is a member of the male sex who prefers members of his same sex and in particular a

The Active CB

Single Side Band (SSB) is not illegal to use or purchase, however, long distance (DX) communications are.

Basically CB was designed to be purely for local communication, or at least that is what the American FCC (Federal Communications Commission) thought. However, as most British CB'ers are aware, due to something known as Skip, SSB transmissions can travel right round the globe; For the uninitiated this (Skip) effect happens because the ionosphere becomes charged by sunspot activity and thus acts as a mirror bouncing the signals back down to Earth. Long distance communication using this form of transmission is nothing new to frequencies that are low, the sunspot activity, however, follows an 11-year cycle and at its peak one can talk right across the world with very low power. At present the activity is on the decline and although it picks up slightly in winter, places like Australia and America will eventually become unreachable from Britain except in freak conditions.

For America at the moment Australian signals are rolling in loud and clear and naturally every American DX operator is breaking the law.

The Other Illegal

It is certain that Citizens Band Radio is without doubt destined to be illegal in some shape or form the world over.

As well as basic 40 channel SSB operation long distance, American CB'ers are getting really fond of high high or low low illegal modifications. So much so that these channels carry a very high volume of users.

This and SSB DX communication accounts for a vast amount of illegal operation, combine this with the outlawing of high power and one can see that the greater majority of American CB, like around 90%, is totally illegal.

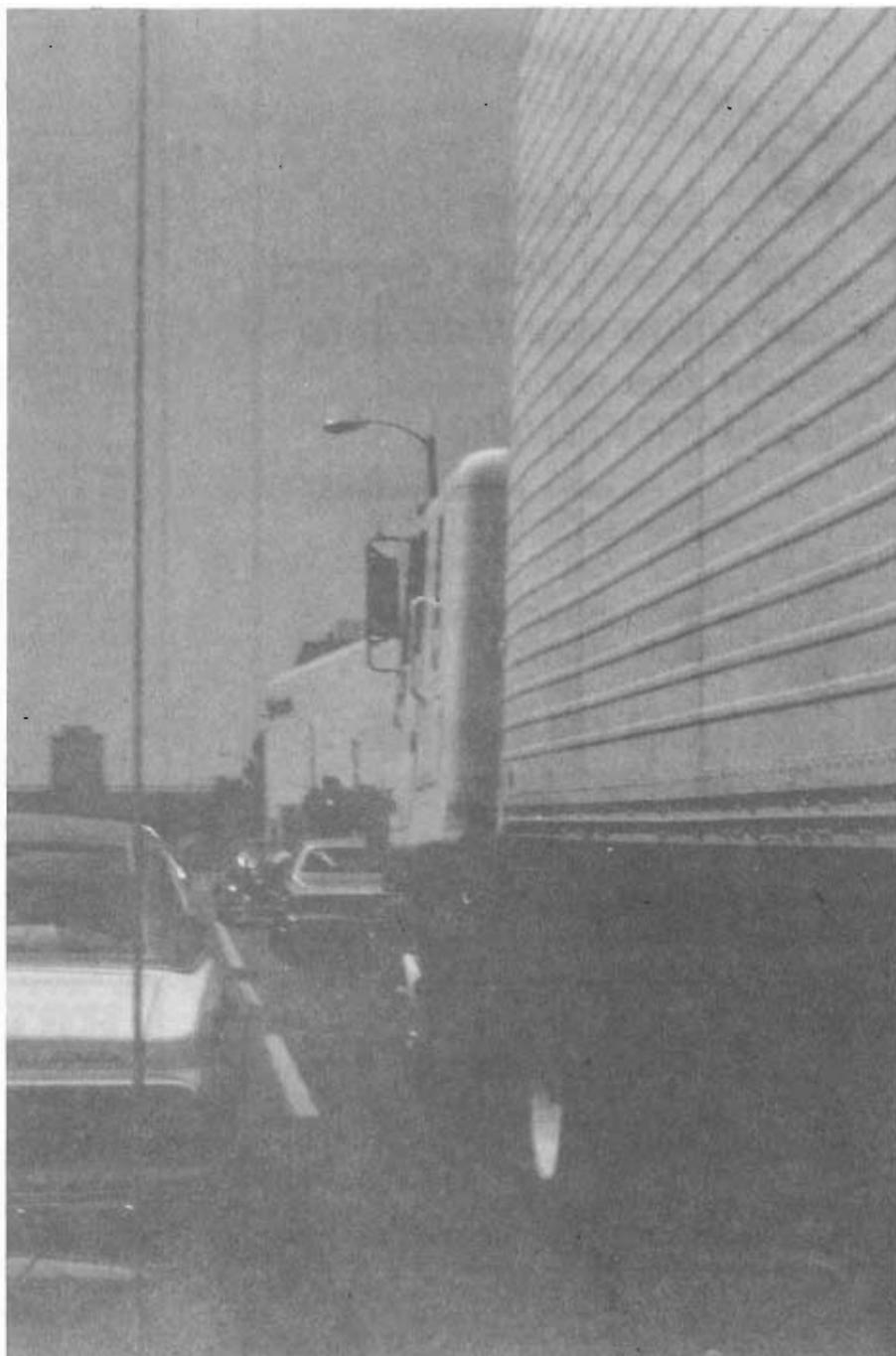
Linear amplifiers are banned, a CB shop is not allowed to stock or sell them, yet like our own illegal system almost all of the specialised shops do. Popular makes like Tornado, Hurricane and even Cobra, are openly available from under the counter. Pricewise a 150 watt Cobra would cost \$159.95 or \$139.95 for a 125 watts.

As a comparison on legal-illegal American CB, most smallish retail outlets will sell an average of 2-3 basic 40 channel sets compared with around 10 side band sets with modifications each week. For a price guide a Cobra



Top: A 500 watt burner readily available from this anonymous dealer.

Above and Right: The main users of basic 40 channel CB, the American Truckers.



148 GTL retails at \$215.95 and the upper range base station at \$310.95, modifications to these rigs are, like the linear amplifiers available and negotiated as an under the table deal.

Popular Pirate Frequencies

Initially the use of illegal frequencies must have stemmed from the desire by many to escape the highly overcrowded 40 channels, for regardless of AM or SSB an American FCC approved transceiver has only 40 channels.

PLL (Phase-Locked Loop) Modification is the in thing in America and although its not quite this simple it entails swapping the existing PLL and popping in a new crystal.

Once done, depending on the PLL and the crystal used, frequencies from 25MHz up to 28 can easily be ob-

tained. Needless to say if such a modification is carried out on or with a kc (kilocycle) shift in circuit then almost any frequency within reasonable parameters can be locked onto.

The standard US 40 channel 27MHz frequencies are from 26.965 to 27.405MHz in units of 10 kc's spacing. Using combinations of different PLL's and crystals American pirates operate on a vast amount of frequencies eg: 25.725 to 26.765, 26.065 to 26.355, 27.475 to 27.915 and 27.945 to 28.385 to name but a few.

Incidentally those last two cover the new British frequency range! So don't be surprised if an American Side Binder appears in the background on legal British FM.

JOH

*Courtesy of the PLL Data Book' by Lou Franklin, author of the Screwdrivers Guide.

Connexions
AUTHORISED DEALER

West London

We've Got You Covered
*Everything you'll need to
get on the air ,
Yes EVERYTHING!*

SWR'S - BASE ANTENNAS -
MOBILE ANTENNAS -
POWER SUPPLIES - P. A.
HORNS - RECEIVERS ETC.



SADELTA MICROPHONES
NOW IN STOCK.

ACTON CB CENTRE

17 Old Oak, Common Lane,
ACTON,
London W3
Tel: 01-743 5306



CB



ICs and TRANSISTORS for TRANSCIVERS

	1+	50+	100+
2SC 1306	.98	.89	.83
2SC 1307	1.64	1.48	1.38
2SC 1957	.48	.44	.41
2SC 1969	1.94	1.76	1.64
2SC 2028	.93	.85	.79
2SC 2029	.93	.85	.79
2SC 2126	1.65	1.50	1.40
AN 612	2.80	2.54	2.37
AN 7150	3.33	3.02	2.81
BA 521	1.56	1.41	1.31
LC 7120	7.03	6.37	5.93
MB 3712	1.28	1.16	1.08
PLL 02A	5.32	4.82	4.49
TA 7205P	1.25	1.14	1.06
TA 7222	1.56	1.41	1.31
TA 7310P	1.04	.95	.88
UPC 1156-H2	2.56	2.32	2.16
UPC 1182	1.67	1.51	1.41

ALL PRICES EXCLUDE VAT

Please send 50p for Carriage for all mail orders.
Send SAE for full list.

STRUTT LTD.

3d Barley Market St., Tavistock, Devon, PL19 0JF
Telex 45263

Caledonian Copiers

44 Petworth Gardens, Hillingdon, Middlesex. UB10 9HQ.
Telephone: Uxbridge 54781/ Windsor 58642

**SUPPLIERS OF MOST
LEADING BRANDS OF
PHOTOCOPIERS**

PURCHASE PRICES START FROM £200.00
EFFICIENT AND QUALIFIED SERVICE BACK UP
15% EXTRA DISCOUNT FOR THE C.B. TRADE
GUARANTEES OF UP TO 5 YEARS



Telephone COLIN or GORDON on
UXBRIDGE (89) 54781

BREAKERS YARD READING

**WE ARE WELL CONECTED
WE ONLY SELL THE BEST . . .**

EVERYTHING

CB

**GOOD PRICES
GOOD SERVICE
BREAKERS YARD**

Traders Arcade
Station Road
READING

Berks

Connexions
AUTHORISED DEALER

Connexions
AUTHORISED DEALER

R. T. C.

CB RADIO ----- AMATEUR RADIO
HOBBY COMMUNICATIONS

OVER 1,000 sq FEET OF SHOWROOM
BASE STATION INSTALLATION
SPECIALIST
SPECIAL OPENING OFFER
ON ANTENNA ROTORS

We Now Stock The
**REVOLUTIONARY
SADELTA
MICROPHONE RANGE**

CALL IN AND SEE US AT
R. T. C.
148/149 Manchester Road,
SWINDON Wilts Tel: Swindon 34136



NEW! SEE BREW FOR C.B.

Yep, everything you want to know about C.B. Radio can now be found at Brew.

Our new department stocks aerials, handbooks, instruction packs, microphones. We'll give you expert advice on fitting, on use and on operation to ensure that you get the most out of this great new sensation. So get yourself down to Brew and learn a thing or two about C.B. Radio now: We open Mon-Sat 8.30-5.30 Sun 9-1.

COMMUNICATIONS ANTENNAS LTD
hmp

avanti

K40

MASTERCARD Access VISA

BREW for

C.B. Centre in the Motorist Shop behind the showroom at 133 Old Brompton Road, South Kensington SW7. Tel: 373 3333.



MAIN DEALER

C.B. World BIRMINGHAM




021-784 4523
37 Coleshill Road
Birmingham B36 8DT.

A SHORT PRICE LIST FROM A BIG SELECTION OF CB GOODIES

ANTENNA		MIKES	
DV27	£4.95	BASE AND MOBILE BY TURNER,	
DSG27	£9.95	K40, LESON, ELECTRA, MIRANDER,	
K27	£9.95	CB MASTER AND HY-GAIN	
VALOR 541SMF	£24.95	POWER SUPPLY (transformers)	
VALOR 531SMF	£23.95	BRS 31 5AMP	£17.50
VALOR 560	£17.95	BRS 28 3AMP	£13.40
VALOR 520	£15.95	BRS 27 3AMP	£14.40 (de-luxe)
TURNER SIGNAL KICKER	£29.95	BRS 35 10AMP	£39.95
SYLVANIA SOUND STICKS	£37.50	ACCESSORIES	
AVANTI RACER	£21.83	SWR	from £5.50
MOONRAKER (MAG)	£37.50	ANT MATCHER	£5.95
MOONRAKER	£33.53	ANT SWITCHER	£6.95
ROADRUNNERS FROM	£33.50	PA HORNS	from £3.85
UFO TWIN TRUCKER	£19.95	SLIDE MOUNT	£4.83
BASE ANTENNAE		POWER REDUCER	£18.95
SIGMA IV	£49.00		
SKY LAB	£18.12	COMPLETE STOCK OF ALL PLUGS,	
DPA2VR	£19.95	CABLE, FUSES, TV FILTERS AND	
SILVER ROD	£19.95	ANTENNA ACCESSORIES.	
WHISKY	£16.83	new super digital	
SHAKESPEARE 4061	£25.95	u.f.o. scanner	
3 ELEMENT BEAM	£48.00	Transform your 40CH rig to 25.995-	
LINEARS		28.000MHz in 5kHz/steps. 7 SEG LED	
BRL26	£19.43	display. This will give you 400CH	
BRL70	£41.10	for only	£95.40
SKIPMASTER 100	£89.70		
BREMI 200	£115.00		
CP100	£85.00		

OPENING TIMES: Mon to Fri 11am-7pm-Sat 9am-6pm-closed Sunday
WE WILL ALSO TAKE ALL REPAIRS. 24-HOUR SERVICE ON MOST ITEMS

Trade Inquiries always welcome. Phone: 021-784 4523

© CB Radio.

Thames Valley & Citizens Band Centre

**Aerial Centre • Accessories
Communications Specialists**

TV and FM Stereo Aerials Installed

All accessories DIY from our shop

**PDS AERIALS
1 WINDMILL PARADE
GEORGES HILL
WIDMER END
HIGH WYCOMBE
High Wycombe 711769
Marlow 73219**

Connexions
AUTHORISED DEALER

CLASSIFIED ADVERTS

10 Pence per word. (No minimum or maximum.) Display boxes £13 per 20mm depth (maximum 50 words per 20mm depth). Payment must be sent in advance with order, along with your name and address.

AUSTRALIAN CB RADIO NEWS: the only amateur CB magazine published in Australia, specimen copy airmailed £1 cash. Classified advertisements 30 words £1. CB Radio News, 18 Malvina, NSW 2260, Australia.

CHEAP, CHEAP, Fluffy Yellow CB Bird. Ideal gift for your YL. Will hang in wrapper, size approx. 8" x 7". Only £2.00 including postage and packing. Cheque or P.O. to Fleet Promotions, 7 Sycamore Close, Lepton, Huddersfield HD8 0EP.

HEAT SEALED CLUB CARDS

HAVE YOUR CLUB CARDS SEALED IN TRANSPARENT PLASTIC, UNBREAKABLE WATERPROOF, SMART AND LONG LASTING
10p each (quantity discount available)
Suggested Retail Price 25p each.

SEND FOR DETAILS OR ORDER c/a THIS MAG.

Ten days delivery on all orders.



BREAKER BREAK Good Buddy, 10-12 Learn CB Slang with Hypnosis, all you gotta do is get horizontal with your cassette tape and improve your memory. Other tapes available on relaxation, slimming, how to stop smoking etc. £5 each, postage inclusive. Irene Ramsden, BFT, Therapist, Bio Aid Healing Centre, 10 St Thomas Street, Penryn, Cornwall. Penryn 72411.

10/4 ROGER BLEEP latest microchip circuitry, simply fitted to any rig in minutes. Fully tested and guaranteed. £4.99 post free. Cheque/PO to AARDON ELECTRONICS, 43 Gourlay Street, Kircaldy, Fife. (0592) 703401. Trade enquiries welcome.

MORSE CODE TUITION AIDS. C.90 Cassette 1-2 w.p.m. for amateur radio examination. Morse Key and Buzzer unit for sending practice. Cassette (including booklets), £4.75. Morse Key and Buzzer, £4.75. Prices include postage etc. MH ELECTRONICS (Dept 7), 12 Longshore Way, Milton, Portsmouth PO4 8LS.

AMAZING ELECTRONIC PLANS. Laser - super powered, burning, cutting, rifle, pistol, light shows, ultrasonic force fields, satellite, TV, super giant Tesla, solid state rocket, super fireworks, surveillance, many more. Catalogue 75p. PLAN-CENTRE, 16 Mill Grove, Bilbrook, Codsall, Wolverhampton.

SEND YOUR country flag with your next QSL. Union Jack, Irish tricolour, St Andrew's cross or the Welsh flag. 1 1/2" x 1" on sticks. 50 flags £2.90 inc p&p. Send cheque/PO to Wilcur Enterprises, 35 Woodview, Pinecroft, Douglas, Cork, Ireland.

PLASTIC MEMBERSHIP CARDS



EXACTLY LIKE A CREDIT CARD

Same size, shape & material Printed any colour

INCLUDING DESIGN, ARTWORK, SETUP, PACKING, POSTAGE.
ONLY 75p per 100
FOR £16.00
FREE SAMPLES & ORDER FORM ☐ phone 0344 - 84455

or write to Data Printers, 113 Liscombe, Bracknell, Berks

IC's, TRANSISTORS crystals at trade prices. TA7205 £2.20, MB3712 £2.30, 10.240 crystals £1.75, 27MHz crystals £1.50 pair. Send sae for full price list. All prices + p&p. PP Electrical & Electronics, 2 Stoke Avenue, Blackpool, Lancs.

CB TELEPHONE link £25.00. CB 27MHz FM 40 channel de luxe rigs, built to Home Office specifications, direct from factory to you £43.00 plus VAT. Sae for details. Ex-rental telephone answering machines £49.00. Johnson Electronics, Star Warehouse, Chalk Farm Road, NW1. 01-286 6119, 01-485 3918.

BREAKER BREAK, build your own CB rig (27MHz AM transceiver). Circuit diagram, parts list, etc. All components readily available. Send a large sae and £3.95 to P. Sherwood, 8(A2) Aylestone Walk, Manchester M10 9NU. I'm down.

BARGAINS: 25C2078 £1.40. TA7205 £1.99. Plus CB accessories. P&P 50p. Electrocure, 179 High Street, Northallerton, N. Yorks.

CB MINI TOOL KIT. Keep it in your car for those times when you need a quick radio repair job. Size 160 x 200mm. Stiff, strengthened zip-up case. One pair radio pliers insulated, 1 pair cutters insulated, 1 screwdriver, 1 crosspoint, set 5 vanadium BA spanners. Top quality £24.00 inc p&p. Kltronics, 7 The Meadows, Berwick-upon-Tweed.

EYEBALL
T SHIRTS & SWEATSHIRTS
£3.25/£4.99
YOUR HANDLE
PRINTED FREE!
IN FLOCK LETTERING
phone FAGINS
on RYE (STD 07 973)
with your requirements
DISCOUNT ON BULK

BREAKERS CLUBS: be recognised. UK-made CB club sweatshirts printed with your individual club badge or name. Black, navy, red, denim, green, S, M, L, XL only £6.95 inc p&p. Minimum order 25. Send sketch and wording with your cheque/PO and name and address to: Burbage Textiles, Unit 1C, Stapleton Lane, Barwell, Leicestershire.

DART FLIGHTS. All dart playin breakers, have your own personalised handle printed onto dart flights, only 49p per set of 3. Minimum order 10 sets. Please allow 3 weeks' delivery. Please send cheque for £4.90 to Peter Royce UK Ltd, to include packaging and postage. 107 Park Road, Farnborough, Hants.

CB ACCESSORIES. Switched RF attenuator including 10dB step to conform to Home Office spec £11.95. 'Scarem' anti theft alarm protects rig and antenna, sets off car horn £10.50. VSWR monitor £8.95. Speech processor £22.50. Powersupplies supplied to any current rating at 13.5V, price on application. All units need 75p post and packing. Cheque/cash with order. Allow 21 days delivery. All units designed and built in Britain to highest standards. Trade enquiries welcome. Barra Services, 12 Horsecroft Place, Pinnacles, Harlow, Essex. (0279 30923).

YOUR HANDLE or illustration turned into a button badge for 50p! Send sae with details of handle to RG Electronics, 64A Oxford Street, Whitstable, Kent. Whitstable 262319.

MAKING - NOT BUYING BUTTON BADGES SHOULD BE YOUR OWN BUSINESS
Write or phone for details

Enterprise Products

Freeport, Dept CA, 36 Ridgeway Road, Redhill RH1 6ZA
Phone 0737 72183

Demand is considerable. Our British equipment complete with components for use on small table in confined spaces. Costs only £88.00 to set you up in your own profitable business. Whatever you see potential customers are all around you.

THE MOBILE CB radio fitting service. We come to your home 20, anywhere in the south-east. Mobile and base stations. Big base station aerials rigged. Cars, motorcycles, boats, trucks, houses, airplanes. Tel: 01-467 6334.

CB REPAIRS, most rigs and accessories available. Good colour teles from £65.00. Friendly advice. Plastic Plg, 4 Wells Park Road, Sydenham, London, SE26. 01-291 1435.

MAKE £1,000+ a month with the Amazing CB Radio Related Product. Free info for a stamp. JM Promotions, 53 Joss Street, Invergordon IV18 0AP.

EYEBALL, EYEBALL, eyecatching personalised 55mm diameter button badge. Hand drawn and fully coloured. Send only £1.00 cwo. NF. 67 Yniscledwyn Road, Ystradgynlais, Swansea SA9 1BH.

CB CAR BADGES with CB logo and your handle. Ready to fit £3.50 post paid, cwo. SAE for illustration, colour choice, etc. Also lapel badges with handle 55p + sae.

THE CB MODIFICATION HANDBOOK is crammed with previously unpublished up-to-date information on the world's most common CB radios. Everything from 'a few extra channels' to full-house pirate conversions covering over 5MHz. Information includes slides, broadbanding, 5KHz steps, increasing power, etc. An absolute must for any serious pirate or DX'er. Price £11 including registered airmail. The Linear Amplifier Handbook has 13 complete sets of transistor amplifier plans. HF, VHF, UHF, from 15 watts to 1,000 watts. Complete parts lists, circuit descriptions, component layouts and full-scale printed circuit negatives. £12.00 including registered airmail. This is not a rip off. We guarantee delivery. (We've been at the same address since 1969. We're not planning any sudden trips to Brazil with your money). If sending cash, use registered mail for your own protection. South Pacific Radio, PO Box 500, Fortitude Valley, Queensland, Australia 4006.

NATIONAL GUARD number plate. Genuine. Plus North Carolina one. Offers over £25.00. Collect or registered mail. Tel: Stevenage 61565.

Display Signs

OPENING?
A SHOP?
Need a Sign!

call THE SIGN MAN
01-848 0705

Rapid Service

APPOINTED DISTRIBUTORS FOR
HMP. ANTENNA SPECIALISTS.
KHI. ALPINA. EURATRONIKA.
ALBRECHT EDGEWORTH
ELECTRONICS.

**NOBODY SELLS FOR
LESS THAN CUSTOM
EQUIPE.....**

**Look at other importers
prices, if you can buy
the same product for less
than our list price,
PROVE IT!**

**Then we will not just equal
their list price we will cut it!
Thus making it IMPOSSIBLE to
buy cheaper in the UK.**

Special offers excluded

BULK ORDER DISCOUNTS ON APPLICATION



CB RADIO ACCESSORIES

DISTRIBUTORS OF TELCO
PRODUCTS. AVANTI. TURNER.
MIDLAND. HAM MASTER. GC
ELECTRONICS. ZETAGI. CTE.
BREMI. CB MASTER. HAM
INTERNATIONAL AND MANY
OTHERS.

TRADE WAREHOUSE

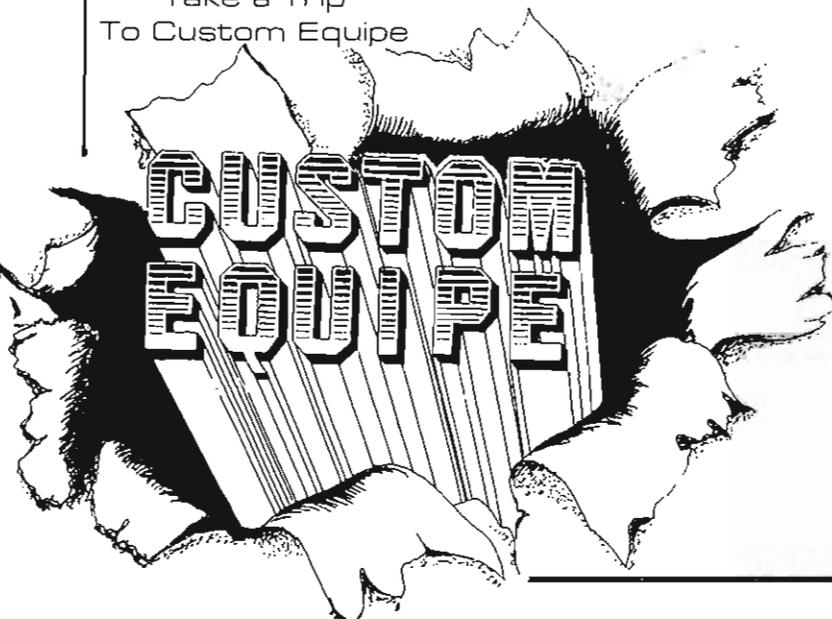
over 44,000 square feet packed with
stock, at :-

38 GARDNERS CRESENT, EDINBURGH.



**EXPRESS
DELIVERY BY
OUR OWN
FLEET**

"Take a Trip"
To Custom Equip



SUPPLIERS TO THE TRADE
AT THE LOWEST UK PRICES
TRADE ENQUIRIES
TO OUR WAREHOUSE AT:-
38 GARDNERS CRESCENT,
EDINBURGH.

Open
MTECH
Channel
CUSTOM EQUIPE
Communications
8 ONE

133 FOUNTAINBRIDGE EDINBURGH
EH3 9QG TEL. 031-229-8830
TELEX 727053 OMTECH G TRADE SUPPLIES

131 FOUNTAINBRIDGE EDINBURGH
EH3 9QG TEL. 031-229 8830
RETAIL SALES

129 FOUNTAINBRIDGE EDINBURGH
EH3 9QG TEL. 031-229-B202
RETAIL - MAIL ORDER

OMTECH I.O.M. Ltd. + Ass.Co.s

There once was a great Cherokee witch doctor who spoke to the spirits without sending smoke signals. His secret is now with us . . .



CHEROKEE®

- A TOUGHER BREED OF ANTENNA

THE CHEROKEE® DIAL-A-MATCH™
THE ORIGINAL AND THE BEST.

THE CHEROKEE® HALFBREED™
IT'S LIKE MAGIC.

Conforms with legal
requirements for New 27 FM
Unbeatable for AM & SSB Modes



Distributed by:

Breaker 1-9, 4-5 The Arcade, Hitchin, Herts. Tel: 0462 57826

OCT, 10, Victoria Street, Newark, Nottingham. Tel: 0636 74688

OCT, 407, Lordship Lane, London, N17. Tel: 01-808 5656/7 Telex: 922 488 Ref 133.