

CB

Citizens' Band

Britain's Leading Communications Magazine

95p

SAFE CB

Taking your CB on holiday

SERIOUS CB

Where have all the jokers gone?

SUNWARD CB

Your holiday frequency checklist

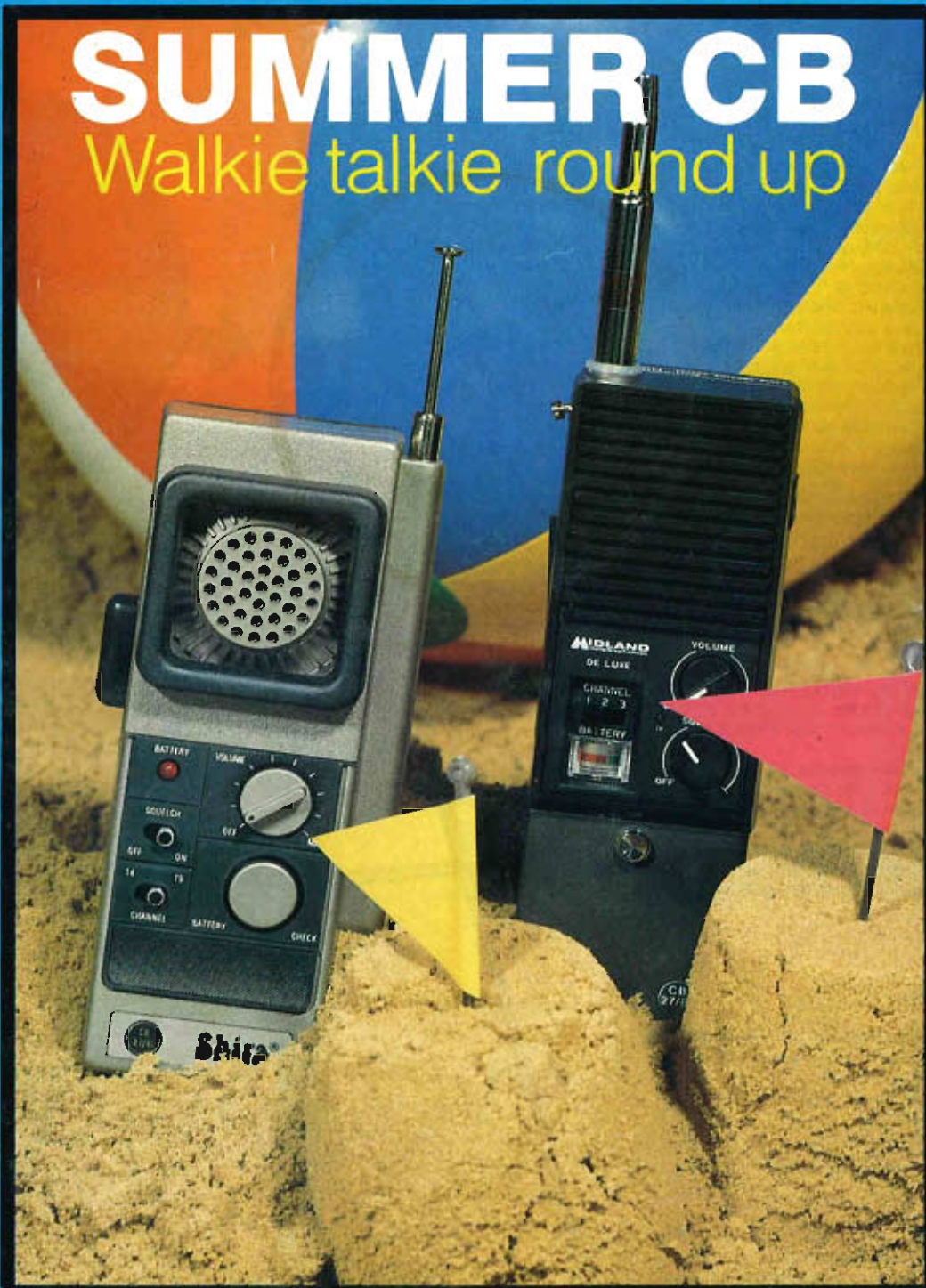
STYLE FROM BT



The Hawk cordless phone reviewed

SUMMER CB

Walkie talkie round up



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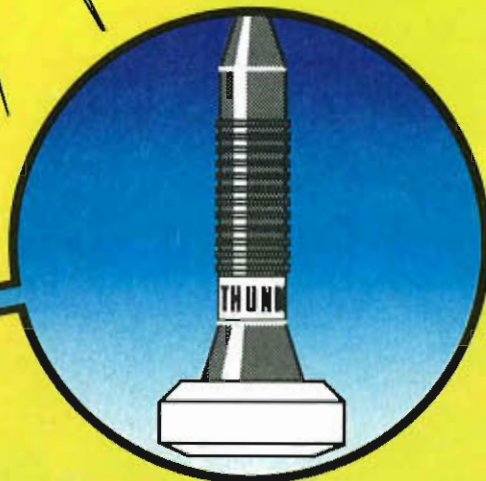
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Citizens' Band



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Cover This Month

The rigs enjoying the sun on the cover are all reviewed in this month's Rig Test. The cordless phone is the BT Hawk, also reviewed.

... Well, I'm still here. I went to the Financial Times but they said that writing the cover credits on Citizens' Band, whilst an honourable job in itself, didn't give the necessary qualifications to write incisive exposes of the world banking system. I told them that anyone who could manage my finances and make head or tail of the bank statements could cope with any financial contingency, but they weren't convinced. So here I am, back into harness, as it were, still trying to think of ways of filling this space in a way that will make you all gasp with admiration and not just yawn and turn to the next page

..... hang on a minute,

.....

.....

I'll think of something

..... wait a sec,

.....

.....

... have you heard the one about the

... Englishman, Irishman and Scotsman

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JULY 1984

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UPDATE

NEWS FROM THE WORLD OF CB NEWS FROM THE WORLD OF CB NEWS FROM THE WORLD OF CB

Reading Keith Townsend's article on wind ups made me think back to some of the ones that I have been a victim of in the past.

Although my credibility level is not as low as some others that I can think of, I am rather gullible and likely to believe anything that is said with great authority.

Not long before my first flight to America on holiday, I was talking to two local breakers on channel and explaining that I didn't really understand how a lump of metal could safely transport nearly 400 people over 3,000 miles — I just couldn't see how the plane generated enough power to do it. My two 'friends' gave me a long, detailed and very technical explanation of how it was done and I listened carefully. On the flight I regaled my husband and the three people nearest to us with this explanation — and felt very proud that I had remembered it with such expertise. A while later, my husband asked me where I had got the explanation from, as it was 'the biggest load of rubbish that he had ever heard from me — and that was saying something'. Very red faced I gave the two culprit's names — which Pete reckoned explained everything. Nice lads, but a warped sense of humour.

The whole thing went from bad to worse too, as one of my enthralled audience, it transpired, worked as an engineer at British Aerospace . . . I still break out into a sweat when I think about it!

Even if you aren't the subject of a deliberate wind up, once things about you become generally known you're never allowed to forget it. After a spectacular but not serious crash in my car, when I went off the road, down a ditch and up a tree, I was known variously as 'shunt 'em Sharp', 'Stirling Moss' and 'the Wrecker' on channel. Other breakers asked me if I

thought I was driving a JCB, if I had got fed-up of driving on the road and whether it was a ruse to get a new car (if it was, it didn't work as I got the same one back but cobbled together.) This went on for months.

But as Keith points out, all of this type of leg pulling is very light hearted and is very rarely meant to wound or hurt. CB users have always been very tolerant of the wind up and it has played an integral part in the development of the CB system that we have today. I do wonder, though, whether this free-and-easy attitude hasn't been our undoing in some way. Our tolerance may have led the person-we-love-to-hate, the wally, into thinking that CBers are prepared to put up with any behaviour. This seems a bit far fetched I know, but consider this. Say you bought a CB, but didn't know much about it. You connect it up and listen for a while. Everyone seems to be having a good time and a laugh. This leads you to think that CB is for

you to use as you wish, especially if you don't know about channel 9 and the effort that some breakers put into providing a service for their fellow CBers. You see CB as a way of expressing yourself — whether that means relaying Radio 1 or abusing other CBers, particularly if you only bought a CB as a novelty in the first place and you are not too bothered about its future.

I'm not suggesting that we should all be solemn — far from it. We have all enjoyed a joke on CB and it's marvellous how other breakers can cheer you up if you are a bit down. But we should show what we are prepared to put up with and what we won't tolerate. Flying up in the air won't do it, or forming hit squads either. It's a matter of example and making it very clear when we talk to other breakers what is expected.

Doesn't sound much like fun? Well, what would you rather have?

Sue Sharp

Money For Old Stamps

The Senior Officer at Dartmoor Prison has written to explain a scheme that the prison has for fund raising for the R.N.L.I. Volunteers from among the prison staff and inmates repackage used postage stamps that are then sold to raise money.

Since the start of the project in July 1983 packets have been made up with the sales value of over £6,000. The stamps are either sold through dealers or charity outlets for collectors.

All the men give their

time freely and the scheme doesn't form part of any rehabilitation project or prison work.

The officer concerned points out that they are badly in need of raw materials and asks if readers could forward quantities of used, undamaged postage stamps. Although the letter doesn't say, I don't think there is any need for you to remove the stamp completely from the envelope, just remove the surplus.

Stamps should be sent to the R.N.L.I. Stamp Scheme, H.M. Prison Dartmoor, Devon, PL20.

Grandstand Review

Eagle eyed readers have been giving us and Grandstand a hard time over an error that crept in to the LA 83 review. (Due to a slip of the illustrator's pen, the TX mode diagram showed the 'TX enable'

leading from the power amp. rather than the mixer, which is actually the case. Sorry to disappoint all you 'tweaking' enthusiasts, but you don't actually get the number of channels you thought you might. Only the permitted 20 are available.

Hamfest 84

The Lincoln Short Wave Club will be holding the third Lincoln based Hamfest on Sunday 23rd September at the Lincolnshire Showground and Exhibition Centre.

Apart from the obvious radio-devoted members organisers will also be including stands and attractions for other tastes including plenty for the computer enthusiast, the CBER and younger or less radio-devoted members of the family with model aircraft displays, a fair ground, children's motor cycles and military displays. There is plenty of parking for cars and caravans and refreshments and a licenced bar.

Although this is the third show event, the Hamfest

dates back to 1923 when the Lincoln and District Amateur Wireless and Scientific Societies held a similar show.

Anyone wanting more details should contact The Lincoln Short Wave Club, c/o City Engineers Club, Central Depot, Waterside South, Lincoln.

Editor's note. Would other clubs and organisations wanting publicity for events please take Pam Rose of the Lincoln Short Wave Club as their example! This information arrived in April, fitted neatly into the July issue, and gives everyone plenty of notice of the event. Not quite so essential, but very useful, was the typewritten information and the history of the club and the show. Forward planning helps all of us.



GREY BEARD'S GLEANINGS

Hello again, it's me here, in the 'chair'. Following on from my request for information on special equipment suited to our needs; I had the opportunity to use a "Rotel" RVC-230 that was fitted with a spoken channel indicator (a back-chat!). This is a definite boon to disabled CBERs; or those who have movement difficulties.

Lyn White of 'The CQ CB Shop' in Gravesend notes the lack of special equipment for us, however, he is able to offer 'back-chat' boards that are suitable for most rigs. Lyn has offered to attempt to sort out, or at least, advise anyone that contacts him (please remember the stamped, self-addressed envelope. He isn't running a charity!).

An important point to bear in mind, if you are disabled/housebound, is the need to get into the habit of

NOT giving your address or telephone number over the air — not everybody is 'clean and green'.

Of interest, initially, to would be and existing CBERs in Essex is the "Disabled on Channel Society", registered office: 19 London Road, Braintree, Essex CM7 7LD. Briefly, this society is made up of a 12 man committee drawn from the local CB clubs, who organise fund-raising activities to enable them to put local disabled/housebound people on the air. Local in their sense is 236 square miles including three towns of 20,000 plus populations and numerous villages.

Club secretaries who wish to learn more about this excellent scheme should send a large SAE and 50 pence to the above address and I'm quite sure that Lumberjack will prove to be his usual helpful self.

If there are other similar organisations in your area, please let me know as much information as possible, so that I can see that they get the mention that they deserve.

Following a recent feature on the Westward

PT2 I thought that I would like to add my comments on this subject, especially since this rig appears to offer more of 'all things to all men' than many more expensive sets on the market.

Because of the inbuilt 12 volt battery, the possibilities of truly extended portable use at last are really available in a self-contained package.

My own rig is used from my wheel-chair, my 'chauffeur's' car, and of course as a base-station next to my bed when the need arises.

The manufacturers modestly claim that 3 x 8hr working days can be expected from a fully charged battery. I've had up to 60 hours working out of mine on several occasions!

I use a head-set/boom-mike similar to the one currently on sale from Telecomms, though I would like to try out their throat/vox mike, at least in my 'chair'.

As well as the 'rubber-duck' that comes with the 'PT2', a magmount and, best of all, a custom designed stainless steel whip antenna, are optional

extras that deserve more than a little thought. The genuine leather carrying case is a real beauty that sets the rig off exactly right, especially as it is hand-stitched!

Unfortunately, I am unable to compare the rig in the base mode other than when I use the whip antenna, as I have been singularly unable to discover just which is the best base CB antenna, though I am led to believe that when used in conjunction with a certain imported 7/8 FCC type twig, the results can only be described as phenomenalll (No, it wasn't me, Officer!)

As the technical tests were evaluated in the Nov '83 issue, I'm not going to rehash them again, suffice it to say that for me the Westward Electronics team have got all my needs and wishes together in their 'PT2'.

Well, I've run out of paper once again, so that's your lot for this issue, and let me know just what it is that you want to see in 'your feature'!

Take care. cause we care, 73s.

Greybeard

Breaker Jamboree

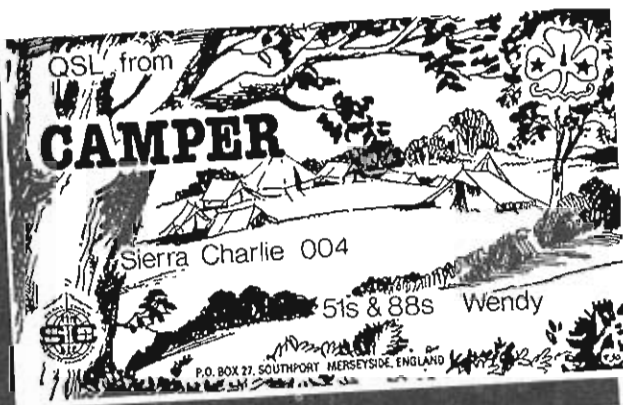
Wendy, or Camper, of Merseyside has sent details of a Breaker's jamboree on the 23rd and 24th June at Southport Beach, the Weld Road entrance and she says that all breakers are welcome.

Saturday evening will feature a bonfire and sing-a-long whilst the two days will have sideshows, raffles,

games and commemorative QSL cards. There are car parking, refreshment and toilet facilities available.

Invitations have gone out to clubs to come along to this eyeball and it is hoped that clubs will also be having stalls.

More details from the Eyeball Committee, T.P. 83, PO Box 27, Southport, Merseyside.



EMS Mercury

EMS Communications in Wantage phoned to let us know that the Mercury has been improved and modified to include a speech processor and limiter at no extra cost. These are done during assembly and are internal modifications. The price of the Mercury remains at £105 plus VAT.

Because EMS design and manufacture the

Mercury in their Wantage factory, they will be pleased to discuss any special features for individual systems. Options available include the Cat Call sel. call accessory.

EMS aren't exactly saying what they have up their sleeve at the moment, but plans for new products are afoot and since it's summer and a lovely area, I might well drive up and see what's going on.



QSL Appeal

The Tool Town Breakers Club are supporting the Tyneside Leukaemia Research Association by organising a QSL appeal and auction to raise funds for the association.

Operators are asked to send two or more QSL cards and a stamped addressed envelope and they will be return QSLed with a special edition Currie QSL card. Five or more cards would be even more appreciated! Cards should all be made out to the Ghost Rider Appeal.

The club have got involved in this fund raising appeal through Stephen Gray (Ghost Rider) who suffers from leukaemia and is an honorary member of the club.

Although he has been lucky enough to have a bone

marrow transplant, the National Health Service is very short of funds and the T.L.R.A. supplied money for drugs and support the research necessary for this type of treatment.

All the cards received will be auctioned at the beginning of next year in Stanley, Co. Durham and the proceeds donated to the Association. Batches of cards will have a reserve price of £1 per 100.

For more information on the Ghost Rider QSL Appeal, send a stamped addressed envelope to Norma, TTBC Treasurer, 38 Third Street, South Moor, Co. Durham DH9 7HA. Overseas readers should send two I.R.C.s. Donations can be made directly to the Ghost Rider Appeal, Account 41197363, Barclays Bank, Front Street, Stanley, Co. Durham.

Telecomms team

Those awfully nice Telecomms people in Portsmouth have welcomed aboard James Finch of Solid State Electronics as technical design consultant. He has been working with Telecomms for some time now on the design of the Nevada range of 27MHz and 934MHz CB accessories.

On top of the range already described in the May 93Forum, Telecomms will be marketing an

antenna co-phaser for 934MHz. and a mobile low noise pre-amplifier.

The prices for the Nevada range weren't available in May, but these have now been passed on to us. The HPS 900 SWR and Power meter costs £79.95, the HRA 900 Mast Pre Amp £129.00, the mobile antennas are £38-£39 and the base colinear £59. More details on these and the 27MHz. accessories from Telecomms, 189 London Road, North End, Portsmouth.

Radio Amateur's Exam

Paddington College will be starting a course leading to the City and Guild's R.A.E. in September at Paddington College, 25 Paddington Green, London, W2. In common with other similar courses, it covers the syllabus for the examination but has the added advantage of the facilities of the Electrical Engineering Department, allowing students to carry out practical experiments in electronic theory.

Don't let this put you off

if you are a newcomer to radio though, as it is all pitched at the student with no previous experience. Because of the increased content of the course, classes are held twice a week between September and May 1985 and fees are a little higher than usual. Special rates are available for the unemployed, full time students and pensioners who come from the I.L.E.A. area.

Enrolment is on the 10th, 11th and 12th of September between 1-4 p.m. and 6-8 p.m. at the college.

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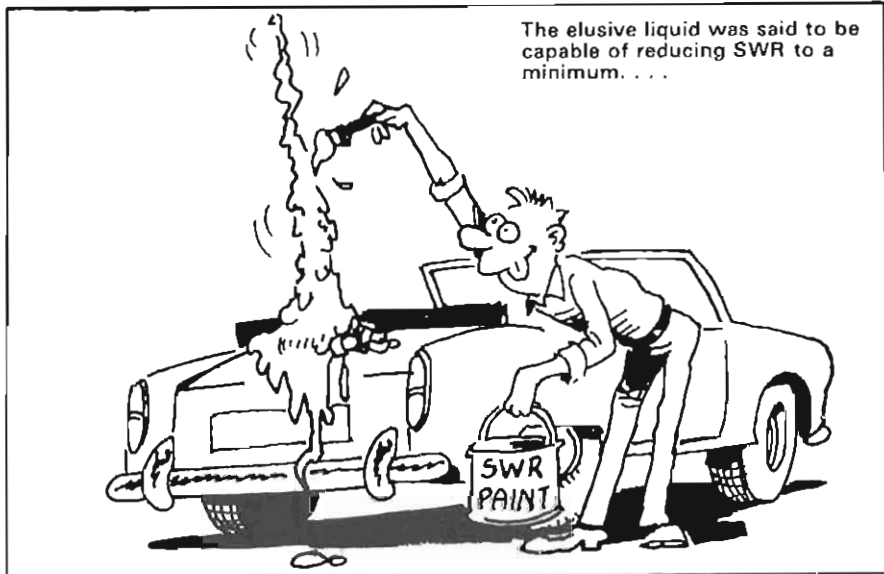
Whatever happened to the good old wind up? Is it a thing of the past, or am I just listening in the wrong places, asks Keith Townsend.

WIND WIND

Once part of everyday entertainment on the air, the innocent leg pull, usually a mixture of good natured fun and somewhat faulty logic — seems to have become a thing of the past.

At one time such things were commonplace. You know the sort of thing. Hands up all those who changed their aerial with legalisation because some joker had claimed very convincingly that an AM aerial was not really suitable for FM. How many people actually believed the story circulating for months before legislation, which said that red Firestiks were for AM and only the grey ones would do for SSB? I even heard it suggested that Firestiks used on a car should be mounted with the seam in the rubber sheath facing backwards. The apparent reasoning was that no RF was transmitted in the direction of the seam and directing it towards the back of the car would ensure maximum signal output in the forward direction. Sounds unlikely? In those days at least eight out of every ten cars sporting Firestiks had the seam at the back!

Many a hapless breaker spent a fruitless Saturday morning going from one shop to another in search of the ever elusive "SWR paint". Possessed of some magical property, this elusive liquid — reputed to contain RF reflective granules — was said to be capable of reducing SWR to a minimum on almost any kind of aerial and to dramatically improve performance. The great pity was that every dealer approached claimed to have difficulty in obtaining supplies, but felt sure that the next shop, just a couple of miles away, was bound to have some. Equally hard to obtain, and perhaps not quite as well known, was "RF dust". Reputedly obtainable only in small sachets at an exorbitant price, due to the high cost of mining, RF dust was meant to be sprinkled lightly over the face of the microphone, then left for about thirty minutes to penetrate the signal path from rig to antenna. This done, keying the mike would immediately cause the dust to radiate from the antenna, showing instantly the pattern and strength of the outgoing signal. Its only apparent drawback was that on receiving, the dust tended to be reflected back to the



UP! UP!

further problems, having accepted his neighbour's advice to reverse the polarity of his house by removing all fuses from the consumer unit and re-inserting them upside down!

More than one wind-up began innocently enough and one in particular reminded me just how dangerous a little knowledge can be. About one o'clock in the morning and feeling rather tired, I was in QSO with an old friend who told me that he was not staying on air for long, as his PSU was getting a bit warm. Knowing that he was most unlikely to do anything of the sort, I suggested that he keep it cool by running it in a bucket of water. In answer to his assertion that doing so might blow the fuse, I retorted that fuses were cheap enough anyway and that, to my certain knowledge, he had a stock of spares. "True enough" says he, and the QSO continued. In making a couple of fatuous remarks, it had not crossed my mind that others might

anyone suggested openly that they might both be using the same rig and even then the suggestion was hotly denied by others.

Among the most instantly effective wind-ups I ever heard happened to two breakers in the Midlands. The first sign of trouble was the sudden appearance of a small amount of interference, upon which they made no more comment than to continue their conversation. They decided to change channel only when asked to do so by a 'Telecom Engineer' who informed them that he had been given the task of repairing the faulty channel. Out of sheer curiosity, I moved with them, and was more than a little surprised to hear them praising BT for its prompt attention to the fault.

Prize for panache

Not all wind-ups were of a technical nature and, without a doubt, the prize for panache, inventiveness and tenacity must go to a lady breaker. Flicking around the band as I drove around one Wednesday morning, I happened to alight on channel thirty, where I heard a pleasant female voice enquiring whether anyone was interested in joining a nudist club. She was quickly assured that there were those out there who might be interested, and promptly began to assemble a list of their handles. It was some five minutes before some curious soul enquired as to the precise purpose of the list and he seemed totally satisfied with her explanation that it would be used to send written details of her club to all enquirers. One adventurous gentleman even asked whether his wife might be allowed to join, and, armed with an assurance that membership was open to both ladies and gents, wandered off to ascertain whether his spouse was indeed interested. He returned a minute or so later and merrily added his wife's handle to the steadily growing list. And make no mistake, our lady was making a list, for she was able to relate handles long after they were suggested to her.

During the course of the conversation, one or two breakers had the temerity to suggest that she was, in fact, guilty of a wind-up, at which point our heroine grew very hot under the collar and assured such doubters in no uncertain terms that she had been trying for a very long time to establish a properly organised breakers nudist club, and if they did not share her enthusiasm, then she would be grateful if they would vacate the channel and allow her to get on with it. Neither was she thrown by the only immoral suggestion of the afternoon, which she deftly countered with the information that nudism was a serious pursuit and that its adherents had no time for those with a warped sense of humour.

Enquiries as to time and place of the club's meeting were adroitly handled with the information that since the majority of its founder members were shop workers in the



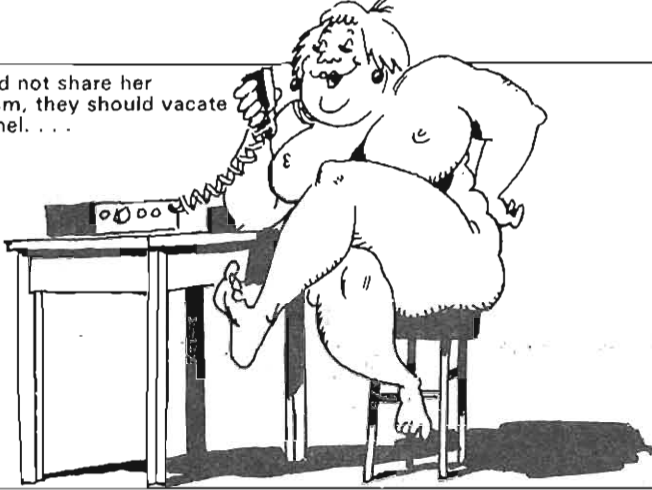
mike and, since it had been heated in the process, it left rather a sticky mess around the PTT.

In those days technical wind-ups abounded and it never ceased to amaze me to learn of the lengths to which some of the perpetrators would go. I will always remember listening to one conversation in which a breaker was reckless enough to admit that this was his first attempt at base station operation. Those on channel with him soon elicited from him the information that he had taken the rig from his car and was running it through a perfectly ordinary PSU. Unfortunately for him, our breaker had absolutely no knowledge of electrical theory, so that he became quite concerned when it was suggested to him that since his rig had been designed to run in a car having a negative earth, he should have it checked to make sure that his house observed the same polarity before commencing transmission. But how could he tell? I was somewhat surprised when he happily accepted the suggestion that he check with a neighbour, but that was nothing to my amazement when he reappeared on channel a few minutes later, happy in the knowledge that he would have no

be listening, and I was more than a little surprised the following morning to be asked whether my suggestion would work. Having gone to great lengths to convince the enquirer that electricity and water do not mix, I spent the rest of the day worrying about who else might have been listening in the small hours.

What really amazed me throughout the majority of wind-ups was just how much people were prepared to take at face value. Man is indeed a trusting animal. For example, I once listened to a QSO which appeared to consist of a local station and one overseas. The halting English and the odd word of Spanish supported the illusion and it was not long before the channel was full of complaints about the fact that forty channels were barely sufficient for local working without having them cluttered up with a high powered DX. It appeared to occur to only a very small minority that the two stations were being received at exactly the same signal strength and, had they listened more closely, one or two might have detected a slight tone which appeared with the carrier from both stations. Despite these obvious give-aways, it took quite a few minutes before

If they did not share her enthusiasm, they should vacate the channel. . . .



much too seriously, or has the technical knowledge of the majority of breakers risen beyond the point at which a good wind-up will work? Certainly today's breakers have a far greater understanding of the hobby than did their early predecessors and, in general, are far less likely to be taken in, but that is not the whole answer. Breakers seem less inclined to ad-lib these days, and there seems less chance of an innocent question or remark turning into the kind of full-scale wind-ups in which as many as a dozen breakers might participate, each adding one more piece of unlikely information to what had gone before, and I freely admit that I miss them.

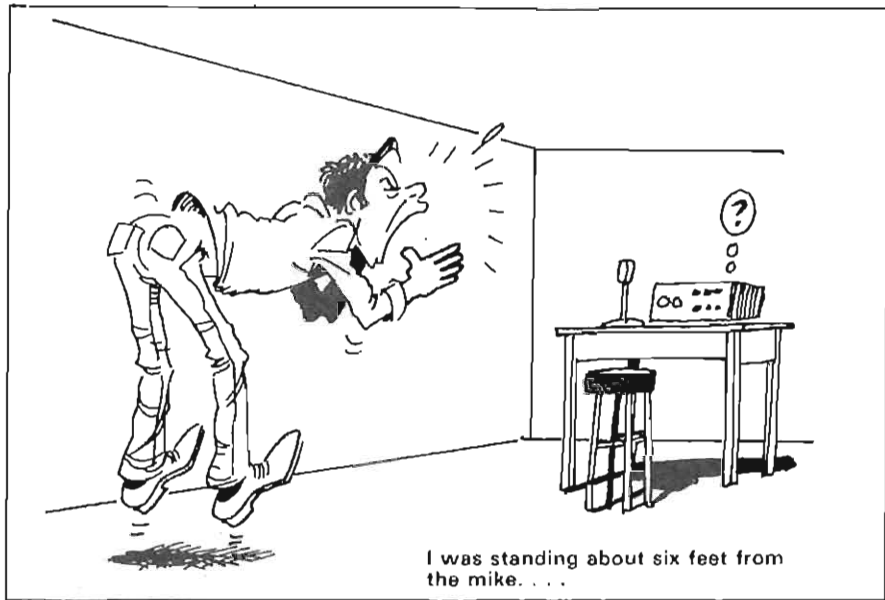
I have been guilty of starting wind-ups, and I have been taken in by them. I once fell prey to the suggestion that the quality of my audio was not all that it might be, and that it might improve if I were to hold the mike further from my mouth. As I did so, I was assured that a small improvement had been detected and advised to try just a little further away. Eager to improve my signal, I complied with the request each time until, after a few overs, I was standing about six feet from the mike and holding the PTT open with a rubber band. Then, and only then, did I begin to suspect that I was being had. I got my own back a few days later!

vicinity who closed on Wednesday afternoons, meetings were to be held at a local beauty spot at three o'clock each Wednesday. Now anyone who heard the conversation, and I assure you it really took place, and who knows the area, should have smelt a rat at this point if not before. Were I a nudist I could not, even in a nightmare, imagine a more inhospitable setting. The highest and most open point for miles around, it is invariably very cold, being subject to winds from all quarters. Neither would it afford much privacy, being beloved of both hikers and a ragged assortment of breakers and hams who use its elevation for obvious reasons.

With lunchtime rapidly approaching, I listened in fascination as the lady concerned displayed a sales talent which would have been the envy of any insurance man as she systematically overcame each successive suggestion that she might be less than genuine, until, after about thirty minutes, she informed her audience that her list now contained sufficient handles from which to create an enrolment list and assured them once again that she would be writing to them in due course. With a word of thanks to those who had taken her invitation seriously, and a few caustic comments about those who had not, she signed off.

I had not entered the conversation, preferring to sit back and learn just how far she was capable of continuing what, to me, was such an obvious, if well thought out deception. Somewhat disappointed that events had come to a close, I resumed my former occupation of scanning the channels for anything of interest, only to find that the saga was not yet over by any means. Tuning to channel twenty-five, I discovered a steadily escalating argument between those who had not been fooled by our heroine and a roughly equal number were convinced of her sincerity. I only hope that she, too, was listening, and enjoying the fun as her would-be members refused to yield to even the most incontrovertible logic. It was, apparently, not their concern that her chosen location provided few comforts for her intended pursuits. Nor were they over-impressed with the oft repeated argument that a mere list of handles was precious little from which to

compile a mailing list. More than one breaker was adamant in her defence and the argument ranged back and forth for about fifteen minutes and I spent some time in debating with myself whether to drive to the spot mentioned at the appointed hour, simply to see how many of her acolytes turned up. My ultimate decision to forego this pleasure was rationalised by the thought that numbers might be considerably increased by others of a similar mind. Anyway, you can bet your life that once the wind-up was fully realised every breaker for miles around would swear to being there out



I was standing about six feet from the mike. . . .

of curiosity. I never did discover the identity of the lady concerned, but if she reads this and is looking for a selling career, I can promise her a bright future.

Not all wind-ups have been as elaborate as hers, and few can have met with such enthusiasm from those upon whom they were perpetrated, but I will never cease to be amazed by the sheer inventiveness of the average breaker, nor by the sheer scope of his sense of humour. I don't know who it was said that you can fool all of the people some of the time and some of the people all of the time, but CB has sure proved him right!

So what has happened to these once regular bits of good natured spoof? Are we now taking our hobby

It might be possible to see some of the wind-ups as slightly cruel, but I suspect that they were accepted with good humour in nearly every case. Sadly, they now seem to have become a thing of the past. Where have they gone? What has happened to the inventive, if somewhat warped sense of humour on which the band once thrived and where have all the con artists gone?

No prizes, but come on fellas. Put your thinking caps on and let's hear the band come alive occasionally to the sort of friendly dispute that was an integral part of the early days. Not that I have quite finished with the subject yet, I still have just one single card up my sleeve so don't believe all that you hear or read.

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QUESTIONS & ANSWERS • QUESTIONS & ANSWERS • QUESTIONS & ANSWERS • QUESTIONS & ANSWERS • QUESTIONS & ANSWERS

Smart Alec sharpens his pencils and gets himself prepared to answer the next batch of queries and puzzles for perplexed readers.

Modulation And Mics

116 WW 55 (no names, no pack drill!) from Scotland wants to know about microphones and their effect on modulation.

Q Could you please help all breakers by telling us about power mics, compressor mics and processor mics on FM. Do you think that any of them make any difference on FM, as surely the standard mic is tuned for maximum modulation in the factory? Is it possible to tweak the modulation side for an improvement, or is the answer an alternative mic?

How about an article or test on H100 co-ax cable for CB use?

A The simple answer is that none of the mics that you mention will do anything for FM as they are designed for use with AM or SSB. Amateur radio rigs that have a 'built-in' compressor automatically cut it out when FM is selected.

Unfortunately 'modulation' has passed into common useage amongst breakers and it causes a lot of confusion as it is only properly applicable to AM and SSB. An FM signal is transmitted by a slight variation of the central frequency. A signal at 27.6MHz. would actually vary between

Although there is a huge selection of microphones available, not all of them will benefit an FM signal.

27.5997.5 and 27.6002.5MHz. and the audio is a product within this narrow band, rather than an addition to it.

This movement in frequency is called deviation and if you were to check the deviation of many CB rigs you would find that not many were accurate and if you have doubts about signal it is worth having the rig checked and properly set if it requires it.

Under deviation reduces intelligibility of the transmitted signal whilst over deviation distorts it. Only the correct setting will give good results.

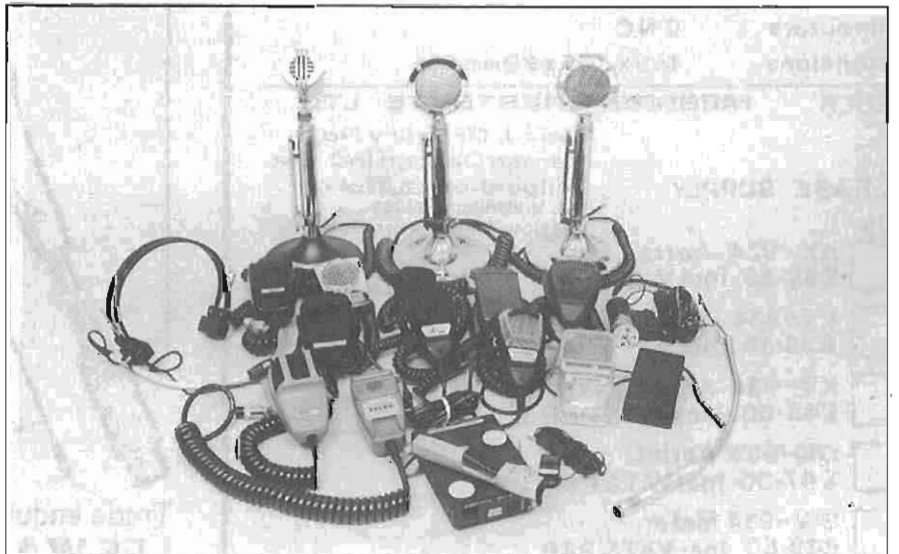
The only way of increasing the output is to tweak the p.a. transistor, but since this might exceed its design capabilities and will only offer an insignificant increase in signal, it doesn't really serve any purpose.

H100 is super cable, but is only really required for higher frequencies when cable loss can be a real problem. It's not necessary for 27MHz. especially as it is very expensive (about £1 per metre). It is best used for 934MHz. CB.

SA

Meter Moan

David Shipley in Selby is getting some curious readings (or some confusing ones) from his SWR meter and wants to know if he can do anything about it . . .



Q. I have just bought a Murphy CBH 1500 home base and there seems to be a faulty meter on it.

From channels 1 to 14 the SWR meter reads 1.8:1 and shows about 4.5 to 5 pounds.

On channels 15 to 40 the SWR is 1.6 — 1.7:1 and the signal strength 9. When I used a separate SWR meter the readings were 1.0:1 and 1.1:1, yet on the meter on my set the reading had gone up to 2.5:1.

My previous rig gave a reading of 1.0:1.

Could you please advise me and give me some instructions on how to rectify the problem.

A I doubt if there is anything seriously amiss with either of the meters. I bet if I tried a dozen different meters on your rig I would get a dozen different readings, and even the length of the patch lead can make a difference.

From your comments I would guess that the aerial is not properly resonant. Ideally you should get the best SWR at band centre and it should be slightly higher at channels 1 and 40. Try lengthening the aerial slightly and putting the antenna on the roof if it is currently in the loft.

Any SWR meter which shows 1.0:1 across the band is fibbing. As channel 1 and channel 40 are 0.5MHz. apart, there must be some variation but many of the cheap meters are not sufficiently sensitive to detect the differences and need a really significant change before they will register anything at all. The BBC pay nearly a £1000 a time for an SWR meter!

SA

Rig Recording

O. R. Ballard in Luton wants to know how to record CB transmissions . . .

Q. Could you please tell me if there is any simple circuit which would match and attenuate the output signal from the external speaker of a standard FM CB set in order to feed into a tape recorder at either the radio or microphone input.

The object of the arrangement is to enable a direct recording of the incoming signal to be made without too much loss of quality. I would also like to check on the quality of my outgoing signal, using a spare rig, rather on the lines of Bakerman in Dorking, but avoiding the problem of audio feedback.

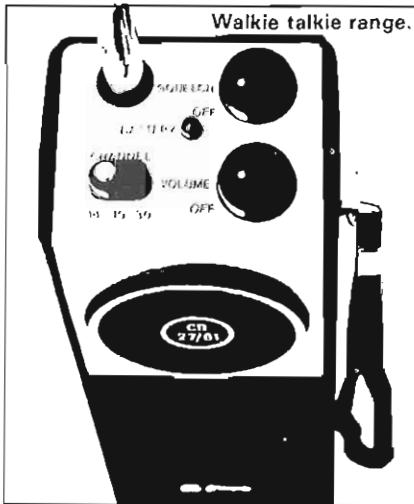
A If you mean to record the signal from one rig via the speaker of another in the same place, I suspect that you are wasting your time. Your mention of audio feedback seems to suggest that this is the case. The signal will so overload the receiver of the second rig as to make any comparison meaningless.

It can be done over a normal transmission distance and it seems to be a lot of work for a little return, but here goes. Feed the tape recorder input from a wire across the speaker



contacts and if you are worried about voltage, place 100 ohm and 4.7 ohm resistors in series with 4.7 ohm to earth. Feed to the tape should be taken from a point between the resistors. It is unlikely that the voltage at the speaker will be so high as to require the resistors.

SA



Faulty co-ax?

A. K. Bryant, or Snowman, has a list of questions, so we will kick off with that familiar problem of SWR and antennas . . .

Q. I seem to be having trouble with my G.A.P. Avenger as it does not seem to be performing as well as my other aerial. It is mounted on an 18ft. metal pole and when plugged into my rig seems to quieten down the background FM noise. The SWR is 1.9:1 on channel 1 and 1.7:1 on 40.

I've been told that it could be faulty ground plane or something wrong with the outer braid of the co-ax. Is it worth changing the co-ax to the thicker RG8 type?

What is the range of hand held walkie talkies?

Are LCL still trading? If not where can I get spares for my LCL Communicator?

I can get hold of crystals to convert my LCL rig to a 29MHz. set.

A dozen different readings from a dozen different meters?

What is involved in the conversion?

A Firstly, is the metal mounting pole insulated? If it isn't then you have something like a twenty-odd foot antenna and goodness knows what frequency it is transmitting on.

The fact that the signal readings and reception are low suggests that the signal is being attenuated in some way. Check the condition of the co-ax plugs and connections, the installation of the aerial and see that the co-ax isn't damaged or wound in a loop.

The SWR suggests that the antenna is too long and you should try retuning for a better result. If you do have a long co-ax run, RGB might improve the situation.

As far as your question about walkie talkies goes, how long is a peice of string? Range depends, as with all radio communications equipment, on power, terrain, the quality of the set, atmospheric conditions, the condition of the power supply (if batteries) and whether there is an 'r' in the month! The figures you mention in your letter are a bit over optimistic, I would say.

LCL are no longer trading, but it depends on what spare you need as to where you get them. Components should be obtainable from specialist or hobby electronic shops, including chips as a few common varieties are used in most sets. If you need something that you cannot seem to replace then try Globe at 168 Brooker Road, Waltham Abbey in Essex, as they distribute similar sets.

Are you going to be taking your R.A.E.? If this is the case then members of an amateur radio club and specialists publications will be able to help with the conversion that you mention. Apart from that, there's not a lot of help I can give as I certainly cannot encourage you to break the law!

SA

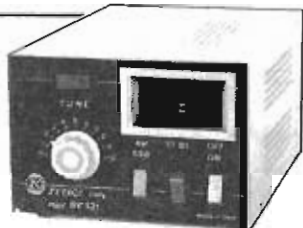
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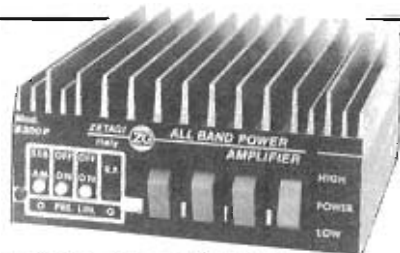
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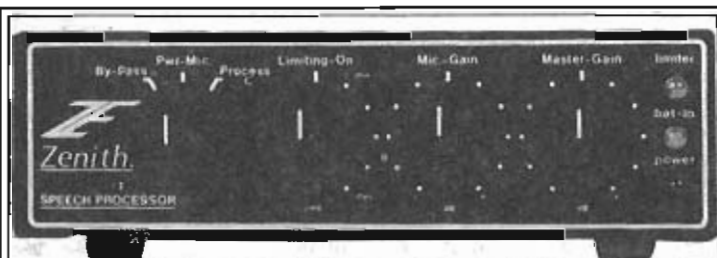
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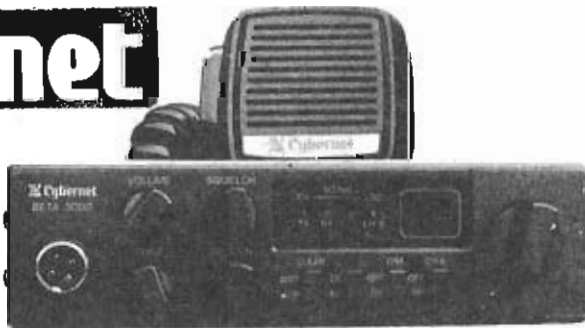
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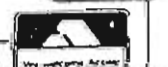
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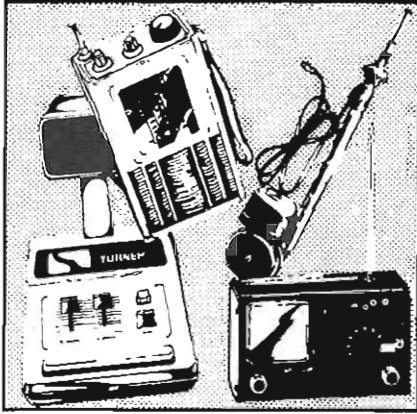
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Equipment Review



Sue Sharp plugs in the Hawk, the BT entrant in the cordless phone race, and reports on what you get for your £155.

I'm not as gadget minded as some people. My fingers don't start twitching when faced with knobs and dials and my attitude to new technology is quite often to run and hide — working on the logic that if it can't see you, it can't hurt you.

So I wasn't straining every nerve to get the Hawk home and plugged in although, as new technology goes, it is remarkably simple to install and set up for use. The telephone connection is made by plugging in the telephone line cord into a BT phone socket and the power supply connects into the domestic mains supply.

There are two aerials, one telescopic and the other a length of wire. One transmits, the other receives and setting these up is explained in the accompanying booklet.

BT do emphasize that the handset should be charged for 24 hours before

The Hawk comes in a stone grey colour.

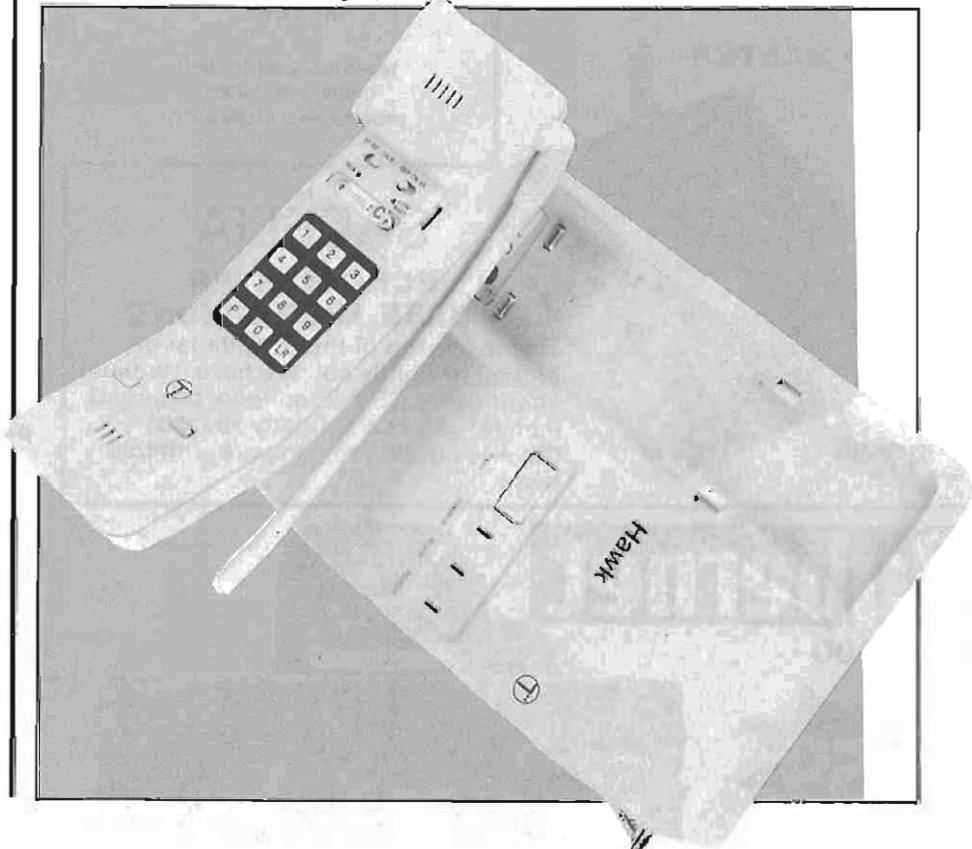
FLYING HIGH

use and I can vouch for the necessity of that after getting more carried away than I expected — I was left with a dud phone and an anxiety neurosis that someone important might be trying to call.

Into Action

As I said, I had been initially underwhelmed with the thought of a cordless phone. I could well see the need for some people, but since the Sharp household isn't extensive and I am not usually to be found lounging by the swimming pool, I didn't see that it would serve any more purpose than my current form of telephone alert — leaving all the doors open.

Which goes to show how wrong you can be! A cordless phone is very useful indeed. Great in the bathroom so you don't have to dash though the house, dripping, draped in a towel,



great when gardening or having a barbecue and particularly good (personal note here!) when you are trying to phone your other half who you know d**n well is down the garage but can't usually hear the phone. Give other half said handset and there is no excuse!

Most of these comments apply to all cordless phones, so what about the Hawk in particular? Although it is very easy to take swipes at British Telecom (particularly when the phone bill arrives) they are now putting a lot of effort in the design and operation of their telephone equipment and this shows in the Hawk.

Facilities

The actual handset and base unit is a stone/grey colour, which I liked better than some of the cream units that are currently available and, although obviously made of plastic, it doesn't have that nasty 'plastic-y' look and feel. It looks neat and robust and it would be unfair to expect imaginative styling or colour from a product that has to sit in offices and homes of different styles and tastes.

The telephone handset has a 'rubber duck' antenna rather than the telescopic type used on the base unit and many other cordless phones. This is more convenient to use and is less likely to poke out your loved one's eyes but carries an attendant risk of reduced range but more on that later. Other handset features are standby/talk switch, off/on/hi volume switch, talk and low battery indicators and of course the dialling pad.

The calculator type keypad is like most others that are small, you have to be fairly deliberate in keying in the number and it's more difficult if you have fingers like bananas or very long nails. But these buttons have a positive feel and as long as you don't let yourself get carried away with punching buttons too fast, you shouldn't experience any problems.

The Hawk has last number redial — which is a boon for engaged numbers, as you can redial the number by pressing one button without going through all digits in the number, and a scratch pad facility. This is operated by pressing 'p' during the course of the conversation, say with directory enquiries, punching in the number you need and then automatically dialling it by using the last number redial. This is useful but still doesn't give you a permanent record of the number, so the humble pen and paper are not redundant yet.

The 'hi' volume setting didn't increase the volume by that much and the handset seemed rather sibilant on 'S's, so that it lisped back at you at times, but after experimentation, this seemed worse with some voices than others.

One thing I definitely did like was the ringing tone and call tone. This started out softly and increased in volume as the tone carried on. This is

particularly good if you have the phone by the bed, as it doesn't wake you up with an earsplitting shriek! The call tone works on the same principle and is operated by a button on the base unit and notifies the handset holder that he-she is needed. This was also good for alerting the aforesaid other half in the garage.

Range

This has been seen as a bit of a stumbling block with approved cordless phones and I haven't been over-impressed with the ranges quoted or achieved in the past. The Hawk quotes a 100 metre range 'under the best possible conditions' and I set out for a walk with some scepticism. As I approached the 100m limit the line got noticeably crackly and noisy, but I could still hear the caller and could still dial out. As I neared the quoted radius the line got noisier but I kept in contact with the caller. The only problem was that it got more difficult to make a call and after walking in different directions and pointing the handset towards my home, it gave up at just beyond the 100m mark. This was considerably better than I expected from the limitations of the antenna and the parameters set for approved phones in this country.

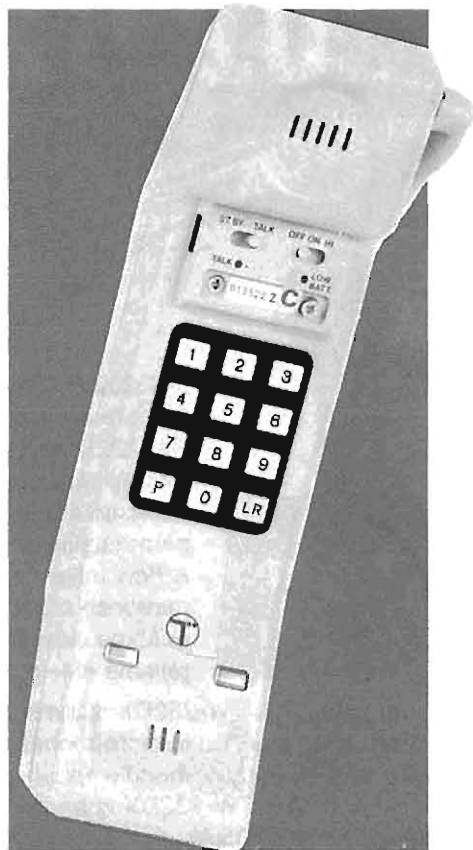
BT do point out that the range and operation can be affected by different factors, so I don't know if I was lucky and that more built up areas would show worse results — I suspect that this is the case.

Criticisms

I don't have any major criticisms of the Hawk, although a few things irritated me. The handset is held onto the base unit by a clamp — good for wall mounting but not so good if you are trying to pick up the handset in a hurry or your hands are wet. The rubber duck antenna, if folded against the handset, also made it clumsy to pick up. The clamp means that you have to replace the handset very positively or the set won't recharge as the charging points don't make contact.

A minor niggle is the standby button. On a couple of models I have seen, the button can either be switched to talk manually by sliding it across, if the handset is being carried around, or, if the phone is being used as a normal instrument, the button is released by the phone being lifted. This means that answering the cordless phone is like lifting the handset from the cradle of an ordinary phone and you are immediately connected. This isn't the case with the Hawk and meant that answering the phone could be a bit of a performance as you wrest the phone from the clamp then flick the switch.

Apart from these grumbles, I finished with a favourable impression of the Hawk and felt that at £155 it was a strong contender in the approved



The hand set has last number redial and scratch pad facility.

cordless phone race. Remember that you will need a BT socket to use it and current regulations mean that it can't be your major phone and that you must notify the local BT office that you have it (why, I'm not sure!). The Hawk is available to rent but this is an uneconomic and I wouldn't recommend it. Instructions are concise and easy to follow and the Hawk comes with a belt clip for the handset.

CORDLESS PHONE REVIEW DATA PANEL

Model Hawk
Distributor British Telecom
Typical Price £155

Features	Yes	No
Rechargeable Batteries	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IN USE Lamp	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intercom Facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Auto Redial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Privacy Button	<input type="checkbox"/>	<input checked="" type="checkbox"/>
External Antenna Facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Security Code	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hand Free Operation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Range	100m	

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1.6 — 1.7 MHz

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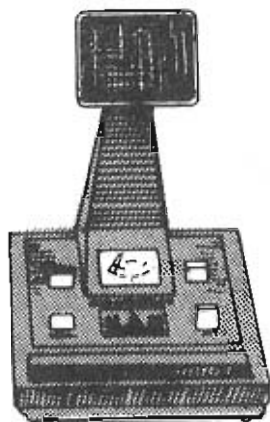
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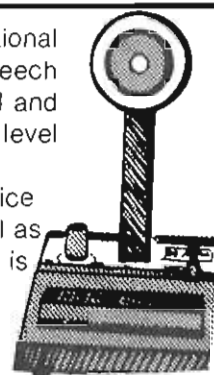


BIG PUNCHER. High-class base station microphone with built-in speech compression pre-amplifier. This dynamic type microphone is provided with volume and tone controls, and a meter for reading both audio output and battery condition. Powered by a 9V battery, but can be used with an external power source. A small trimmer enables adjustment of the maximum audio output to your transceiver, while the very responsive tone control allows microphone adjustment to the user's voice. Frequency response is 300-5000Hz. The BIG PUNCHER is universally wired both for relay and electronic switching.

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TW-232S . The TW-232S is a versatile, omnidirectional base station microphone with incorporated speech compressor amplifier. Excels not only by its rugged and elegant design, but also by the high modulation level capability. It is provided with a high quality dynamic element, and a special lock-switch. The extreme voice clarity makes this microphone very suitable for local as well as for DX-communication. Frequency response is 200-5000Hz. The TW-232S of almost legendary reliability can be used with all types of transceivers.

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TWONG

JOHN RICHARDSON

LOOKIT OUR HERO! HIM BORED SO HE AMUSIN' HIMSELF...



HELLO, L'L SPIDER! DO YOU WANT TO GO TO HEAVEN WHEN YOU DIE?

WE'LL GO THEN...



HELLO, L'L CATTYPILLAR! DO YOU WANT TO GO TO HEAVEN WHEN YOU DIE?

MEANWHILE, UP IN HEAVEN, ZEUS IS GETTING SOME EAR-BEATING...



DO SOMETHING!

THIS SO-CALLED PARADISE IS BECOMING A WHOLE MESS OF BUGS 'N' THINGS, AND THEY'RE ALL IMMORTAL TOO!

IT'S THAT WALLIE WITH THE WIERD LIPS THAT'S DOIN' IT!

HE GOTTA BE STOPPED!

HOKAY, HOKAY!

HE'S DAILY DOIN' IT 'COS HE'S BORED...

YOU GOTTA KICK NOW!

YOU OUGHTA SHOUT HIM OUT!

HELLO, L'L HEDGEHOG...

... THEREFORE, I WILL OMBRE HIS BOREDOM WITH A GOOLY GIFT!



AN' IF THAT DON'T WORK YELL THEM HIS WALT FINE OFF!

I GOTTA GIFT FOR YOU FROM ZEUS! HE SEZ TO TELL YOU THAT FROM NOW ON YOU GOT THE GIFT OFF...

HOPE YOU'RE READY FOR THIS...



AN' SURE 'NUFF...

... THE GIFT OF MUSIC!

FATOM!



HI, TWONG! HEY, THAT'S A NICE TUNE!

DOOWHAP-TITTYWHAP-FROODLE DANG-TOOT!

REAL CATCHY!

SO'S HERPES!

RICKI-TAKI TOOT-TOOT WALLA-WALLA-DANG

I CAN'T STOP!

FABULOUS!

YOU OUGHTA BE ON THE RADIO!



ARE YOU TRYING TO BE FUNNY! DOOWHAP A BUMADIDDY-BUMA DIDDY!

ISEE!



BUT...

OUR HERO... GODLING OF G.B... HASN'T REALISED THAT HE IS ON THE AIR...

DOO WHAP-TITTYWHAP-FROODLE DANG-TOOT!

WHAT THE...?



CHA-POO! CHA-POO! CHAPIM-DICKY DANCE!

AN' PRETTY JODU EVERYONE WAS SINGING TRUCKY'S SONG...

DOOWHAP-TITTYWHAP...

FROODLE DANG-TOOT!



DOO...

WOW! IT'S HIM!

IT'S HIM!

IT'S... IT'S BOY TWONG!



GRAB HIM!

WOW!

WOW!

WOW!



HEY! LOOKIT THE LOONY HAVING A GOOD TIME DOWN THERE!

I THOUGHT THIS WAS SUPPOSED TO BE HEAVEN!

DO SOMETHING!

YEAH! MAKES ME FEEL BORED!

FRIGADIDDY FRIGADIDDY BUM-BUM BUM!

LAFF!

WINDS!

GROPE!



FATOM!

AW, WHAT A SHAME! HE'S GIVEN UP SINGING TO BE A DRUMMER!

POUND POUND POUND

HAPPEE!

AND NOW FOR SOMETHING REALLY BORN...

A Twong POSTER FOR A MEASLY... £2.00

BIG EIGHTEEN BY TWENTYFOURISH SIZE! SPARKLIN' BLACK'N' WHITE STRIP POSTER TO COVER YOUR DAMP BITS! £3.00 YOU CAN HAVE 2 POSTERS OF TINA TAILPIPE + SUPER C.C. FOR £3.00 ALL 3 POSTERS FOR £4.00 IF YOU'RE INTO PORNO-WALLS! (HEH-HEH)

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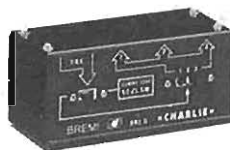
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Input voltage: 24 V DC (20 V min. - 28 V max.) - Output voltage: 13.8 V - Output current: 2 A - Stability: 1% with rated voltage and current - Protection: current limiter, thermal overload block - Possibility of connection in parallel to multiply the available current - Dimensions: 155 x 80 x 25 mm - Weight: 250 gr. - 30/10 Aluminium case. RRP £12.85



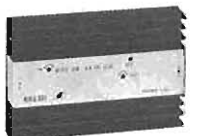
STABILIZED POWER SUPPLY MOD. BRS 27
Input voltage: 220 V a.c. 50 Hz - Output voltage: 13.8 V d.c. - Current: 3 A max. - Stability: better than 0.1% with mains variations of 10% or load variations from 0 to 3 A - Protection: electronic with current limiter - Ripple: 1 mV at 3 A load - Dimensions: 155 x 135 x 65 mm - Weight: 1.5 Kg. (240 V a.c. supply available). RRP £12.75



CB ANTENNA SWITCH 3 OUTPUTS WITH DUMMY LOAD MOD. BRL 5 "CHARLIE"
Impedance: 50 Ohm - Frequency range: 0 - 50 MHz - Max power: 500 Watt AM - Insertion loss: 0.2 dB - SWR: better than 1.2 - Connectors: SO 239 - Dummy load: 50 Ohm, 5 W max. It connects by means of the front panel selector - Weight: 0.32 Kg. - Size: 121 x 84 x 60 mm RRP £9.55



ANTENNA MATCHER MODEL BRL 15
Frequency range: 25-40 MHz - RF power: 100 W max - Weight: 0.32 Kg. - Dimensions: 120 x 55 x 55 mm - RF power loss: under 5% 0.2 db. RRP £7.50



CB LINEAR AMPLIFIER MOD. BRL 35
Input voltage: 12 - 15 V d.c. - Max current: 4-4.5 A - Input power: 0.2-5 W R.F. - Output power: maximum 50 W AM - Frequency: 26 - 30 MHz - Operation: AM - FM - SSB - Input SWR: better than 1.3, externally adjustable - Dimensions: 120 x 79 x 40 mm - Weight: 0.3 Kg RRP £32.50



LINEAR AMPLIFIER MOD. BRL 600
Output power: 600 Watts AM maximum, depending on the input power - Input power: 0.5 - 6 W AM - Input voltage: 220 V 50 Hz - Frequency: 26-30 MHz - Operation: AM - SSB - FM - Input SWR: better than 1.3, internally adjustable - Instrument: class 1.5 mobile coil instrument - Output and SWR indicator, internally lighted - Controls: STAND-BY, AM - SSB, output power switching 250/500 W, SWR reading, instrument switch (reflected, direct power, Watt) - Protection: mains with 5 A fuse - Vacuum tube set: 5 x EL519 common grid connected - Cooling: by fan - Case: made of 10/10 sheet with two front handles and two handles on the upper cover - Dimensions: 400 x 220 x 210 mm. - Weight: 20 Kg. (240 V a.c. supply available). RRP £296.95



STABILIZED POWER SUPPLY MOD. BRS 35
Input voltage: 220 V a.c. 50 Hz - Output voltage: 13.8 V d.c. - Current: 0-10 A - Stability: better than 3% with mains variations of $\pm 10\%$ and load variations from 0 to 10 A - Protection: electronic with current limiter - Ripple: 1 mV with 10 A load - Weight: 4.2 Kg. - Dimensions: 180 x 105 x 300 mm (240 V a.c. supply available) RRP £57.75



CB LINEAR AMPLIFIER MOD. BRL 31
Input voltage: 12 - 15 V d.c. - Max current: 2 - 2.8 A - Input power: 0.2-5 W R.F. - Output power: maximum 28 W AM - Frequency: 26 - 30 MHz - Operation: AM - FM - SSB - Input SWR: better than 1.3, externally adjustable - Dimensions: 120 x 50 x 40 mm - Weight: 0.2 Kg RRP £16.50

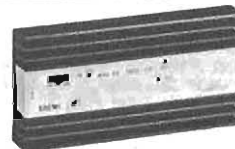


DIGITAL FREQUENCYMETER MOD. BRL 8100
Direct insertion between RF source and antenna - Display: 6 digits - Power requirement: 11 - 15 V d.c., 150 mA - Resolution: 0.1 KHz - Data time: 1 sec. - Minimum RF input - power: 0.25 W - Max RF input power: 100 W - Range of frequency: 10-150 MHz - Dimensions: (LUIP) 112 x 38 x 152 mm. - Weight: 245 g. RRP £53.65

DIGITAL FREQUENCYMETER MOD. BRL 8150
Direct insertion between RF source and antenna - Display: 6 digits - Power requirement: 11 - 15 V d.c., 150 mA - Resolution: 1 KHz - Data time: 0.1 sec. - Minimum RF input - power: 0.25 W - Max RF input power: 100 W - Range of frequency: 10-150 MHz - Dimensions: (LUIP) 112 x 38 x 152 mm. - Weight: 245 g. RRP £53.65



LINEAR AMPLIFIER MOD. BRL 210
Output power: 10 Watts AM maximum, depending on the input power - Input power: 0.5 - 10 Watt AM, 1 - 20 Watt PEP SSB - Input voltage: 220 V 50 Hz - Frequency: 26-30 MHz - Operation: AM - SSB - FM - Output impedance: 52 OHM - Input impedance: 52 OHM - Input SWR: better than 1.3, internally adjustable - Instruments: output power indicator and modulation percentage indicator - Control: stand-by, AM - SSB - Protection: mains with 2 A fuse contained inside - Vacuum tube: EL509 - Dimensions: 174 x 100 x 257 mm. - Weight: 4 KG. - It is advisable to use a RG 58 cable 70 cm. long. RRP £86.85



CB LINEAR AMPLIFIER MOD. BRL 40
Input voltage: 12 - 15 V d.c. - Max current: 7 A - Input power: 0.2-5 W R.F. - Output power: maximum 75 W AM - Frequency: 26 - 30 MHz - Operation: AM - FM - SSB - Input SWR: better than 1.3, externally adjustable - Dimensions: 180 x 79 x 40 mm - Weight: 0.39 Kg RRP £36.95



SWR METER-WATTMETER MOD. BRG 22
Range of frequency: 3 MHz - 150 MHz SWR meter, 26 - 30 MHz Wattmeter - Input and output impedance: 52 Ohm - SWR and Watt Indicating Instrument: 1 cl mobile coil, 50 μ A f.s. - Connectors: SO 239 - Measures of the R.F.: up to 1000 W in 3 ranges 0 - 10.0 - 100, 0 - 1000 W - Weight: Kg 1 - Dimension: 217 x 118 x 63 mm RRP £29.95

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- **UP TO 1000W P.E.P.**
- **PERFORMANCE COMPARABLE WITH 5/8th WAVE**



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YOUR LETTER HEAD FOR PROMPT ATTENTION

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ADDRESS _____

TEL No. _____



Filly finds that holidays don't always get off to a good start, especially when the begin on the A3. .

LADY BREAKERS

One thing about Citizens Band radio, it does help to while away a long and tedious journey. It also helps to break up marriages, but that's quite beside the point! It only came close to breaking up mine because I was silly enough to insist on driving my husband in the mini down to the Isle of Wight for our summer break.

It's a peculiarity of the male, I find, that he does not like to be driven. So I suppose it was needlessly provocative of me to insist that since we were taking my mini (his macho Lancia Beta was having its annual service), I should drive. It's my car, after all.

It was a steaming hot summer's day, and the roads were packed. We were quarrelling within about 10 minutes of leaving the house (mostly because he was amusing himself by criticising my driving), and by the time we reached Kingston to pick up the A3 I was thinking wildly of divorce.

"I can't find the dratted A3", he was grumbling, peering at the map. "Someone's moved it. Anyway, reading maps isn't my job." He glowered at me.

"Well, I'll ask someone," I snapped, reaching for the mike. "You wouldn't recognise the A3 if it got up and smacked you in the face. Hello, hello, anyone for a copy?"

"Gimme that!" he snarled, grabbing the mike from my hand. "You watch the road. Try and stay to the left of that white line in the middle of the road there. Hello, anyone for a copy, one-four for a copy."

"Hello, hello there, breaker, you've got the Admirable Creighton, Admirable Creighton here," said a plummy voice (it was Kingston, after all). "Who is that, please?"

My husband was staring awestruck at the mike. "Ask for directions!" I hissed.

He got the necessary instructions, eventually, and after only 20 more minutes of touring Kingston we found the A3 and shot off south. He amused himself with chatting up every young lady breaker within reach and by the time we ran into a traffic jam at Peterfield, I was considering flinging his suitcase out of the car, and him after it. Except that all my clothes were in the suitcase too.

After sitting in the jam for half an hour, he decided to start arguing about goldfish — we has exhausted politics, religion, sport etc. soon after leaving London.

"I tell you", he said, "goldfish are bred from carp, rudd and tench. The golden varieties, of course. *Women drivers!*" As the latter remark seemed to be directed at the car in front I refrained from hitting him. I picked up the mike instead. Why not make the debate public?

"Anyone out there agree that goldfish are bred from carp? This is Philadelphia Judd asking if goldfish are carp. C'mon, Hampshire breakers, who knows about fish?"

We were nearly an hour in that jam and by the time we were out of it we had the whole of the county at each other's throats arguing about goldfish. And I won the argument on a vote, which cheered my husband up no end. Well, I could afford to be magnanimous — I let him drive for a bit.

Five minutes later, he noticed that we were nearly out of petrol.

"You stupid woman!" he flung at me. "Don't you ever look at the gauge? I suppose you'll expect me to push you all the way to the nearest garage when we grind to a halt... give us the mike". He lunged for it, took his eye off the road and nearly swerved into a passing lorry. I sniggered. He scowled at me and asked, none to politely, if anyone knew where the nearest petrol station was. As he forgot to give our position, no one was able to help, but someone told him to mind his manners. He nearly threw the rig out of the window.

The only reason that he didn't was that it was too well installed — by him. And that, of course, just about finished him off. He proceeded to lose his temper in spectacular fashion and drove the rest of the way to Portsmouth at a speed that had me clutching the side of my seat and sent everyone else on the road flying for cover. Then I told him that the petrol gauge was in fact broken and that we actually had plenty of petrol. . . .

Yes, it was an enjoyable drive. Nothing like a good row to liven up a long, dull journey, and nothing like CB to escalate it. When we next go on a long journey together in the Lancia, I will have to make sure we install a rig. Or we'll both be bored stiff!



Hello again from Dave Shepherdson, from the depths of his post bag.



COMMUNICATION THE

QSL WAY

Hi once again and I'd just like to say thanks to all the people who wrote in to say how much they enjoyed reading this part of Citizens' Band magazine and that I hope you will keep doing so!

OK, I'll start this month with a correction to an error in another magazine. I've had a letter from Linda Hanscome of the Cheese Eaters QSL Club, Virginia. In it she complains that this other magazine had reported that the Cheese Eaters had folded. I can assure you, this is NOT the case! Due to steep rises in postage over there, Linda has now asked for \$5 along with 10 signed and dated QSL cards for membership. I know from personal experience it is worth it. She also has a club stamp for \$3 and a roster for the same amount. Linda's a lovely lady (even when she's angry!) and runs an excellent club. Keep up the good work Linda!

While we are on the subject of errors, I've been informed that although I said in the April issue that call signs on envelopes to Spain were not allowed, since then legalisation of FM has occurred and now call signs are acceptable. There should be no problems with any QSLs to Spain now because of call signs. Many thanks to Norman for this update and for the CB 11 magazine (in Spanish!).

News now of a DXing contest run by the Sea Dragon QSL Club. It's open to all SD members and is FREE! The aim is to make the most contacts with other SD members and confirming these with a QSL. It will run from the 1st July until the 31st of December and the first prize is an Amstrad 901 Rig. For entry form and rules, please send an S.A.S.E. (Self Addressed Stamped Envelope) to Ken, SD 001, NOT me!

Next a few names from the postbag, and first a couple of people who are moving and have asked me to let you know their new addresses. Norman (Blue Mac's) McDaniel's has moved from the Keeper's Lodge and

Pat (Blue Girl) has moved to a new house and asks for all post to be sent to a PO box number. No sooner said than done, lady and gent.

Michael (Zodiac) Webb of Preston wants to see his name, John (Jet Liner) Bass of Bradford sends a really well stamped card, Brian (Road Runner) WM 41 has a really excellent plastic card, well worth QSLing for, but no photocopies or scrap paper QSLs please! Elaine and Harold Murphay ask to be included as does Mike (Doc Pepper) of Bradford. Ianto Davies (Yellow Canary) of Wales sends a nice card and finally for just now, Mark (Ben Gunn) of Dorset sends an interesting card through.

I just want to remind folk that when sending out QSLs to check the weight before posting! I've had two this week with 20p to pay! So, while a single or first class stamp is sufficient for one or two cards, most QSLers send out 5 or more cards, extras, club forms, tourist information leaflets and so on. These soon slip the packet over the 60 gram limit. Also, can I ask you to make sure that your return address is on the envelope so that in case of any problems, the envelope can be returned to you intact.

I've received news of two newish clubs on the UK QSLing scene. One is the Sierra Charlie of Southport, and the other is the Freightliner of Essex. Both of these clubs send out excellent packages, well thought out and very well packed. The SC of Southport was started in 1981 as a local CB club but turned into a QSL swap club last November. To join this very good club, send 10 personal signed and dated QSL cards and £2. In return you will receive your SC number, certificate, ID card, exchange cards and invites and 15 large gloss club cards. Also available is a mounted stamp for £3 and the club cards at £4 per 100.

The FL of Essex has two different ways to join. Method one is for 5 signed and dated personal cards with an S.A.S.E. to get your FL number, ID



QSLer Addresses:-

- Dennis Bell *RDY 100*
- Norman *Service One*
- Mike & Wendy
Camera Blue & Pork Slice
- Terry Chaplin *Cactus Man*
- Paul *The Ant*
- John Bass *Jet Liner*
- Tony Penny *Black*
- Mike *Pepper Pot*
- Ianto Davies *Yellow Canary*
- Harold & Elaine Murphey
Rodeo & Song Bird
- Mark Ben Gunn
- Brian *Road Runner*
- Michael Webb *Zodiac*
- Norman McDaniels
Blue Mac's
- Pat *Blue Girl*
- Charles & E. Smith
Double Six & Domino
- Rod & Janet Smith
Slatter & Slowcoach
- Ron Brooker *Top Dog*
- Dave & Linda Young
The Covenanter & Red Hen
- John Thoroughgood
Jumbo Jet
- Andrew *The Goalie*

106 Westgate Wallbank,
Whitworth, Rochdale,
Lancs
PO Box 257, Ca'n Pastilla
(Mallorca), Spain
59 Alexander Drive, London,
SE19 1AW

21 Shillitoe Close, Bury St
Edmunds, Suffolk, IP33 3DU
Dingley Dell, Sowton, Exeter
EX5 2AE

34 Parkside Terrace,
Cullingworth, Bradford,
W. Yorks BD13 5AD

21 Kingsley Road, Farn-
borough, Hants GU14 8SU
28 Farmill Road, Thorpe
Edge, Bradford, BD10 8ED

28 Glen Peris, Caernarvon,
Gwynedd, North Wales

51 Pitt St., St Helens,
Merseyside WA9 1NB
PO Box 136, Wimborne,
Dorset

PO Box 23, Brentford,
Middlesex TW8 9NF

49 Westmorland House,
Preston, Lancs PR1 1LL

14 Ellsiton House, Welling-
ton Street, Woolwich, London
PO Box 13, Burntwood,
Walsall, Staffs WS7 8FE

26 Edward Street,
Hartshorne, Burton-on-Trent
Staffs

80 Audens Way, Midway,
Burton-on-Trent, Staffs

31 Lyppincourt Road, Brentry,
Bristol BS10 7JF

95 Tollohill Drive, Kincorth,
Aberdeen, Scotland AB1 5DJ

11 Scotts Terrace, Hetton le
Hole, Tyne & Wear, DH5 9HZ
PO Box 311, Kings Norton,
Birmingham B30 2TZ

card, club cards, exchange cards and invites. Method two requires five cards (as above) and £2. For this you get your FL number, ID card, and excellent certificate, cloth patch, bumper sticker, club cards, postcards, exchange cards & invites, several lists, tourist information and stickers galore. It took me almost half an hour to sort through it all! Two different mounted club stamps are also available. A truly excellent package.

Another club to appear is the **Tower Bridge of London**. For five cards, PLUS an S.A.S.E. (why an S.A.S.E. as well as £1, I don't know) you get your TB number, ID card, exchange card and invites, viewcard, 'Q' codes, smallish gift certificate, five club cards and some stickers.

From **Mansfield** comes the **Kilo Mike Whiskey DX/QSL Club**. For five plus of your signed cards, 50p and an S.A.S.E. (again, why an S.A.S.E. as well as money?) you receive your KW number, ID card, RST and 'Q' codes, 30 stickers, invites, exchange cards and invites and some QSL tips.

Another club sending out a massive package is the **Skip Questors of Kent**. For £6 and five personal cards you get your SQ number, ID card, unmounted rubber club stamp, or for '10' and RST codes, phonetic alphabet, tips, roster, frequency charts, tourist information, exchange cards and invites. Also until 25th December, an S.A.S.E., £1 and five cards will get you a SQ number, exchange cards and invites and an unmounted rubber club stamp, for for an S.A.S.E. and five QSL cards you can have a SW number.

I've had a letter from someone telling me off for recommending Currie Printers for QSL cards, although he agrees that they are good value for money. He goes on to say that there are many other printers who deserve a mention. I'm sure there are, but apart from Des Currie who keeps me up to date with his offers and so on, there is **ONLY ONE OTHER** printer who lets me know how things are going! That's **Dave Buckingham of Birmingham**, the UK agent for POMA full colour cards. For details of POMA's excellent cards which start from around £48 per 1000, drop Dave a line, but remember to enclose an S.A.S.E. for a reply. Dave regrets that without an S.A.S.E he cannot guarantee a reply.

As for **Sundown (USA)** and **Radar (Holland)** I have now been waiting for over two months for replies and proofs of some cards. I've had some letters from some people who have been waiting since November for cards, and I therefore feel that I can only recommend printers that I personally have had good experience of.

Okay, a mixed set of cards from various QSLers all over England is next in line. From **Scotland** hails Dave (the Covenanter) and Linda (Red Hen) Young of **Aberdeen**, a Currie card in a pack from Terry (Cactus Man) Chaplin of **Suffolk**, and an unusual one from Tony (Penny Black) of **Farnborough**. From **Exeter** hails Paul (the Ant) and a pair of colourful cards from

Charles and Elizabeth Smith, and Rod and Janet Smith of **Burton-on-Trent**. That's father and son (with XYLs). Continuing through the postbag a massive package from **John (Jumbo Jet) Thoroughgood** with a two colour gloss Currie card, very nice one **John**. An excellent black and silver

card comes from **Ron (Top Dog) Brooker of Bristol**, and from **London** a super collection of black and white and colour cards from **Mike (Camera Blue)** and **Wendy (Pork Slice)**. They will swap colour for colour and B&W for B&W. Drop them a line and please mention where you spotted their names. In fact whenever QSLing, why

FREIGHTLINER

73
51
88

DX AND QSL SWAP CLUB ENGLAND

not mention where you received a name from? Much more personal than a tick against one of those "Got your name from a friend" or "Please send card and thanks" ready printed sections that the Americans seem so keen on, but which so many UK QSLers find very impersonal.

Last name for now, as I want to cover a few of the clubs that are twisting my arm for a mention, is nine year old Andrew (The Goalie) of Birmingham. He is the fourth winner of the Currie Printers 1983/1984 QSLing Awards and gets a free log book. He's still saving up to get 200 Currie cards for the 1000 free cards and jumbo log book!

Right, I'll run through the clubs in alphabetical order, all are genuine and most keep in regular contact with me so here goes. First up is the Boomerang Radio DX/QSL Club of Wolverhampton. For £6 and 10 signed and dated personal cards you get your BR number, ID card, certificate, club stamp, 20 mixed club cards, roster, tips, stickers, pen key fob, exchange cards and invites. The Bravo Bravo International of Northern Ireland offers a BB number, ID Card and exchange cards and invites for five cards and an S.A.S.E. plus £1. (Again, why an S.A.S.E. as well?) Also, any used postage stamps are welcomed as they are collected for charity. Next, two clubs run by Johnny Lund in Denmark. First, the Delta Kilo DX & QSL Club. For £1 and five cards, you get your DK number, certificate, exchange cards & invites. An excellent club at low cost. Johnny's other club is the Wild Horse International. This one is more expensive at £10 plus 5 to 10 of your cards. For your money you

get your WH number, ID card, certificate, mounted stamp, 15 club cards, viewcard, tourist information, exchange cards and invites, with your XYL free.

News from Jim (JB 001) of Reading, to the effect that for a first class stamp and your address, he will send you a free Juliett Bravo Unit number and details of the JB club package. Jim also asks for any information on rip off clubs! He is compiling a register and wants full details if you have had experiences of this sort, and he will write to the clubs concerned.

From the Lima Whiskey DX-QSL Club of Hertfordshire comes a letter from Steve (LW 001) letting me know that he is about to top the 1000 mark with the membership and that due to problems with the UK customs and getting his club stamps from America (you are not alone in that problem, Steve) he has changed his suppliers and should by now have sent all delayed orders out. If you haven't received yours, please write to Steve. The LW club package is £6 plus 10 cards and is too long to detail here as I'm nearly out of space, but I think you will like it.

A short note from the RDX of Glasgow to say that member number

1000 was Dennis Bell of Rochdale. Membership of the RDX is available for 10 personal signed and dated QSL cards and an S.A.S.E. Last for this month is the Saxon Skippers of Fareham. For 10 QSL cards plus £7 a bumper package is yours or for five to ten cards plus an S.A.S.E. you can have a SS number and a 1-4-1 swap of cards.

Okay, last item for this issue is club poll time! I asked you to vote for your favourite three UK clubs, one overseas and to give a booby prize. In reverse order, the top three UK clubs are:- 3) Viking Radio of Shetland, a tie at number 2) Fistral Bay of Newquay & The Zulu Whiskey of Brighouse and in top position for this month, the Anglo American International Magna Carta Sidebanders of Newquay. The overseas is, purely by coincidence considering the first item this month, The Cheese Eaters of Virginia with twice as many votes as any other club. There were several booby prizes, but none were outstanding. Finally, if you have any praises, moans or just want a mention, then drop me a line at the Dragonrider Club address and we'll see what happens. If you'd like to vote for your favourite clubs, then jot the five names down and send them to me. Again, so no one shouts "Cheat!", the Dragonriders Club to be exempt. If you want a reply, then please enclose either an S.A.S.E. or return postage, thanks. If you'd like to join the DRs, then five personal QSL cards and an S.A.S.E. with your full name will do the trick. I do try to reply by return of post to all who send an S.A.S.E. and most of the time I manage it! That's it for another month, catch you again next issue; take care, Dragonrider One.



QSL Club Addresses

Anglo American	PO Box 13, Newquay, Cornwall TR7 2PA	Sea Dragon DX QSL Club	PO Box 2, Sheringham, Norfolk, NR26 8TY
Boomerang Radio	PO Box 156, Wolverhampton, West Midlands, WV6 9DX	Skip Questors DX Club	PO Box 14, Sittingbourne, Kent ME10 2RZ
Bravo Bravo Int'l QSL Club	27 Manse Road, Carrowdore Co Down, Northern Ireland BT22 2EZ	Southport DX & QSL Club	PO Box 27, Southport, Merseyside PR9 0AA
Cheeseaters QSL Swap Club	3514 Peronne Avenue, Norfolk, Virginia 23509, USA	Tower Bridge QSL DX Club	PO Box 522, London, SE8 5HH
Delta Kilo & Wild Horse	PO Box 201, DK-6541 Bevtoft, Denmark	Viking Radio DX & QSL Club	PO Box 31, Lerwick, Shetland, Scotland
Fistral Bay DX Club	PO Box 2, Newquay, Cornwall TR7 1ST	Dragonrider QSL Club	3 Tarn Villas, Cowpasture Road, Ilkley, West Yorkshire, LS29 8RH
Freightliners DX/QSL Swap	PO Box 314, Braintree, Essex CM7 7ND	Zulu Whiskey International	PO Box 14, Brighouse, W. Yorkshire, HD6 2SE
Juliett Bravo International Kilo Mike Whiskey DX/QSL Club	PO Box 123, Reading, Berks 43 Spencer Street, Mansfield, Notts NG18 5LR	Please remember, when writing to ANY club for information, to enclose an S.A.S.E. for reply.	
Lima Whiskey DX-QSL Club	PO Box 62, Waltham Cross, Hertfordshire	Curries Printers	89 Derwent Street, Blackhill, Consett, Co Durham, DH8 8LT
Romeo Delta X-ray DX QSL Club	10 Wallace Street, Ruther- glen, Glasgow, Scotland G73 2SA	POMA, c/o Dave	180 Sommerfield Road, Woodgate Valley, Birmingham
Saxon Skippers International	PO Box 31, Fareham, Hampshire, PO16 9PD		

AUTOSCAN 5000

'The technical performance is unimpeachable...
...the designers have got it right.'
CB Magazine JUNE 1983

CB MAGAZINE VOTES THE AUTOSCAN 5000

TOP RIG OF THE YEAR

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- British designed and tested in British conditions
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Mic control automatically searches for busy or free channel!

What CB Magazine said in April...

All in all, we have to say that this is the best rig we have tested to date.

At no time during testing was there the slightest evidence of swamping, blocking, cross-modulation, bleed-over in spite of 4 giant twigs within a 200 yard radius.

The transmitted audio quality was excellent, crystal clear with real punch to it making any sort of power or processor mike totally unnecessary.

Inside, you will find the kind of construction normally found in computers and professional equipment. A marked contrast to imported rigs.

The performance has been a revelation compared to anything we have seen before, and what's more it's BRITISH!

...and in June.

The technical performance is unimpeachable, with an exceptionally high degree of immunity to bleed-over.

The designers of the Magpie Autoscan 5000 have got it right and during our tests we could detect no signs of desensing, bleed-over or any other misbehaviour despite severe provocation.

From the mailbag

J.W. from Sheffield

"... I must congratulate you on your Magpie. I did not think it possible to obtain anything of this standard. It has cut out bleed-over which here in Sheffield is one big problem..."

S.A.M. from Suffolk

"... My son brought an Autoscan 5000 for me to try... Breakers came in from all over the place and remarked on the 100% clear modulation. How soon can you let me have one?..."

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Mack Chat

Mack's let loose on the UHF airways again and goes copy chasing and rig chasing to discover the latest.



Beggars can't be choosers goes the old saying. As you may know I have been waiting to get on the 934 frequency again, so when Sue said that I could borrow the Grandstand LA83, I was quite thankful as it gave me the opportunity to discover how the scene was progressing. The Grandstand rig, or I suppose I should say rigs, work well. Other 934 stations can hear me and I can hear most of them but this leads to the first hitch that I found with the equipment. Because of the operating channel width (10KHz) of the rig, any other station slightly off frequency makes the Grandstand deaf to them. As Chris Peterson observed in his test of the LA83, the transverter also needed pugilistic surgery once in a while to get it transmitting, but this isn't a common fault as the other stations that I spoke to using Grandstands (3 of them) didn't suffer from this problem. I did find it tiresome every time I keyed the mike to check that the power meter was registering.

It's a pity that Grandstand don't sell the transverter on its own as they originally planned as I found that, attached to my own Uniace 200 and with a Protel mike, it made a significant difference as reports from other stations revealed. The only other problem I found, as was prophesied some time ago, if any local breaker comes up on channel 1 on 27MHz, the whole of the 934 channels become unusable. But I only encountered this problem once during the time that I was using the Grandstand.

The antenna that I first used with the LA83 was the Beeware 1/4 wave ground plane that came with the rig. It looked ridiculous mounted on my pole at the regulation height but it worked well. The best copy that I had with it was from my home (Chingford, Essex) to a station square wheeled in a car park in Guildford (Surrey).

Since last year when I borrowed the Reftec there has obviously been an increase in the number of people now on the frequency, so there was no shortage of 934 users willing to help me with my evaluation of the Grandstand. Knowing that I would have to give the Grandstand back at any time made me desperate to obtain my own 934 rig. Like most people my problem was lack of cash, so I sold some of my amateur equipment, worked longer hours, cut down on unnecessary luxuries such as food and clothing and sent the kids out with their begging bowls. Alas, as I write this there is still no sign of the Warlock I hoped for. I can't blame George Cole of Everite for its non appearance. I am just as disappointed as George. I have waited 5 months for the 'Warlock' to materialise and I couldn't wait any longer, so I went and bought a Reftec 934/2. As you may have gathered by some of my earlier comments I was not over impressed with the first Reftecs, but the latest models have been improved tremendously as I found by using another station and talking to other owners.

Just one of the interesting things that I learnt about

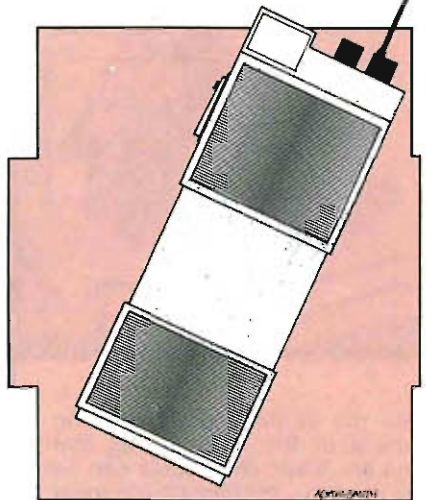
Reftec rigs is that even the earliest models can be modified to the equivalent of the latest model and whenever improvements are made old models can be updated. By the time you read this, the latest 40 channel Reftec should be available. They are, for the present, capable of receiving on the 40 Euro channels as they have now been named, but will only transmit on the 20 channels that we have been allocated in this country. (How infuriating if you were to hear a Swiss station and can't reply!)

I have heard rumours (here we go again) that Uniden are to produce a home base dual-bander as well as a dual band mobile, but all I'll say for now is that I will believe it when I see it. I also heard some time ago that Reftec were putting a 934 home base on the market. It reached my ears that one was on show at a certain shop on Canvey Island, so on a Saturday morning a few weeks back I headed that way. Selectronics is the name of the business run by Michael and Mary Machin, and their shop at 203 High Street, Canvey, although quite small, is crammed with CB, amateur, and other radio equipment. But really it's more like a club than a shop, as during the 2 1/2 hours that I spent there many people turned up just for a waffle with the coffee flowing freely. I even had the pleasure of meeting again the man from Reftec, Jeff Smith, who happened to turn up with a supply of rigs for Mike. As I had been warned by others that have visited Selectronics, I found it difficult to tear myself away because the owners are very friendly people. Many of the CB shops that I visit I find that the proprietors are what I call 9 to 6 CBers, only interested in CB whilst their shops are open. Not so with Mike and Mary. I found that they are real radio enthusiasts. Selectronics are not only dealers for Reftec but full service agents and Michael's workshop proved that they have the equipment to confidently service and repair most problems that might arise with your 934 Reftecs.

I'm almost forgetting my real reason for my Canvey trip and that was to view and try the Reftec homebase rig — which I did and was very impressed. It has many useful features like scanning for clear and busy channels and delta tune for tweaking in those stations that could be a little off frequency. The built-in SWR meter is an absolute necessity for 934 and on the rear of the unit is an auxillary power-out socket for accessories such as mast head preamps which should be arriving on the market soon, with finally my old favourite that I like to see on base stations, a 13.8 volt power-in socket so that the unit can be used in the mobile mode, caravan or where no mains voltage is available. It's a lovely rig and I would dearly like one but the price is £450!

I must send my thanks to Les Wallen for sending me both the base and mobile 934 antennas to try. They are working well, Les and doing the job. It is hoped that in the future, test reviews of 934 antennas will be published in this mag.

Rig Review



Andy R. Giles takes a look at some of the handhelds that are currently available and describes some of the joys of portable operation.



I think that it is still fair to say that the majority of CBers operate mobile rigs and mobile rigs far outsell base stations, probably because they are more versatile. They can be mounted in a car or, with the aid of a power supply, used indoors so it seems an unnecessary extravagance to buy a dedicated base station when a mobile rig will do the job. Now however, there is a third type of rig that should be seriously considered when shopping for a new one. A good portable CB has several advantages over a mobile. Some of the better ones have a full forty channels and four watts output with the added advantage of a built-in source of

telescopic whips as a reasonable compromise between efficiency and convenience.

It is often quite handy to have a radio with you, even one with a reduced range. Hikers (or backpackers as Americans prefer to call them) could even have their lives saved by having a portable CB with them. Every year we read about intrepid walkers who have lost their way on some deserted moor or hill only to be found days later with broken limbs or suffering from the effects of exposure. Their chances of surviving such an incident would be greatly improved if they were to carry a radio.

It is also very pleasant to sit on the

WALKABOUT

power that allows them to be carried around. They may also have a jack socket that allows you to use an external power supply so that they can then be used in a car or at home without running down the batteries. Some also have an external antenna socket for plugging in a decent antenna instead of having to rely on the telescopic whip that is usually supplied. This means that it is quite possible to own just one decent portable rig that will work as a portable, a mobile and a base station.

Operating portable brings a new perspective to the world of CB even though most hand-held rigs do not get out as well as mobiles. This is not because they are in any way inferior, it's just that the telescopic whip that is usually built into these units is a fairly inefficient antenna and when a decent antenna is used, they will get out as well as any other rig.

Unfortunately efficient antennas are quite cumbersome and not the sort of thing that you would want to carry around with you so the manufacturers of portable sets fit

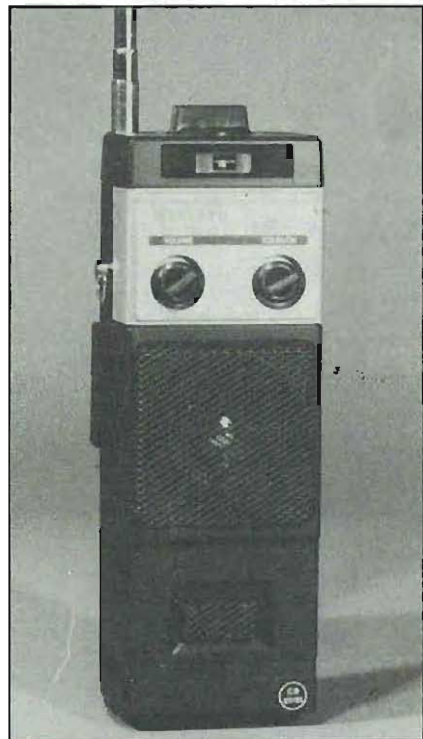
top of a hill on a sunny day munching sandwiches and chatting on the radio. Far better than listening to a tiny little tranny and inflicting Radio 1 on everybody in the vicinity.

Unfortunately technology has progressed beyond the £2.99 pocket radio and it is now possible to physically move the lower intestine of anyone who is foolish enough to stand within 50 yards of a modern high powered, dual speakered, shiny silver, shoulder carried ghetto blaster that is playing a tape of tunes that seem to consist entirely of bass notes. How much nicer it would be if everyone played with a portable CB instead!

Portable CB sets can also be very useful to the other sort of hikers, the ones with the prominent thumbs. Instead of standing by the roadside in the pouring rain, they can now sit in the comfort of a cafe and contact passing truckers who are going their way. This also ensures that they get a lift from a fellow CBER.

There are several other uses for portable CB rigs. I have heard of one helpful husband who takes a rig with

him when he goes shopping so that he can contact his wife to make sure that he is buying the right things. Other people have been known to use them when they go out shooting to let everyone else know where they are so that they are not mistaken for a giant rabbit. Rally drivers use CB to keep in touch with their crew who are equipped with portable rigs. Golfers have been known to use them as have cyclists, fishermen, joggers, aerial riggers and even bored office workers sometimes keep one in a desk drawer so that they can have a chat in their lunch break. A portable CB is certainly a worthwhile investment. Here's a rundown on just some of the models that are currently available.

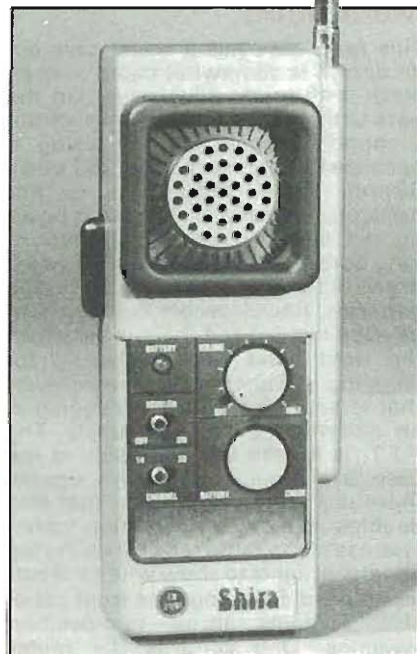


Harvard H-420

The Harvard H-402 has a quoted output power of 4 Watts and is powered by 8 x 1.5V UM3 batteries but as the current drain is 800mA it would be a good idea to use rechargeable ones. There is a charger socket on the right hand side of the case. There is also an external power supply socket just underneath it and that should be used whenever the rig is used in the car or indoors in order to save the batteries. Underneath this socket there is another one for an external antenna and above those three is an attenuator switch. The built-in antenna sprouts from the left hand corner of the top panel and the rest of the panel is taken up by a massive rotary channel selector switch. This rig covers all forty channels. The channel display is on the front panel just above the rotary On/Off Volume and Squelch controls and it is tiny. The P.T.T. is on the left hand side of the case. I liked the look of this radio, especially the open mesh that is used to cover the speaker and the microphone. It costs £48.95.

Shira WT-622FM

The Shira is a very bright radio. The front of the plastic case is finished in pseudo-metallic silver that is certainly eye catching, if nothing else. The styling is also distinctive and I'm sure that some people will love it, even if I don't. It is slightly larger than the Cheiza but is still quite comfortable to hold. It also has two channels (14 and 19), an On/Off Squelch switch, a two position channel switch and a belt hook on the back. The Shira's P.T.T. switch is on the left hand side of the case and its rotary On/Off Volume control is on the front panel. Also on the front panel is a large red LED that lights whenever the enormous silver Battery Check button is pressed, if the PP3 type battery is alright. The r.f. output is 250mW and there is a built-in telescopic antenna. This is the sort of rig that you either love or hate but again reasonably priced at £15.95 a pair.



Midland 75-720UK

This radio has a quality feel about it. It is not cheap at £24.95 (although Dixons have had it on special offer) but it certainly seems to be worth the money. It has a metal case which is always a good sign and it feels heavy, which always impresses me, even if it is due to the 8 x 'AA' size 1.5V batteries that it contains. The battery holder can be replaced with a nickel-cadmium battery pack and there is a socket on the right hand side of the case that allows 12V to be inserted to charge the batteries. The same socket also allows the rig to be run from an external power supply so that it can be used in the car or at home. The P.T.T.

switch is on the left hand side of the case and all of the other controls are on the front panel. There are two rotary controls, one for On/Off Volume and one for the Squelch. There is a three position channel selector switch (14, 19 & 40) and a small Battery Condition meter that continuously monitors the state of the batteries. Just next to that there is a tiny red LED that lights on transmit. The small silver button on the front is the catch for the battery compartment. This rig has a quoted e.r.p. of 2 Watts and has an enormous built-in thirteen section telescopic antenna. It comes complete with a carrying strap and a nicely made case.



Merit 6000

This radio also has a metal case but its design is somewhat dated — matt black with bright silver trim. On the back of the case there is a belt hook but I cannot imagine anyone using it because the rig is very large, 251 x 84 x 63mm, even though it is not particularly heavy at 0.95kg. It has a quoted output power of 4 Watts, a long built-in telescopic antenna and it draws its power from 8 x UM3 type batteries. Rechargeable batteries can be used instead and there is socket on the right hand side of the rig for plugging in a charger. Just underneath that is another socket for plugging in an external 12V power supply. The P.T.T. is on the left hand side of the case. In the middle of the front panel there is a large S/RF meter that also doubles as a battery condition meter. There is also a large red LED on the top panel that lights to show when the batteries need changing. The front panel also contains three two-position switches. One controls the meter function, either S/RF or Battery condition, the middle one is the 10dB attenuator and the last one is a High/Low Mic Gain control. The two rotary controls, On/Off Volume and Squelch, are on the top panel, as is the rotary channel selector. This unit has six channels and they are labeled A, B, C, D, E and F but there was no indication of which frequency or channel they are on and the handbook offers no clues. The only way to find out is to take the back off the rig and read the frequencies that are marked directly on the crystals. Surely the importers could make up a little rubber stamp and mark the outside of the box and save everyone this trouble? The Merit 6000 costs £36.95.



Harvard H-410

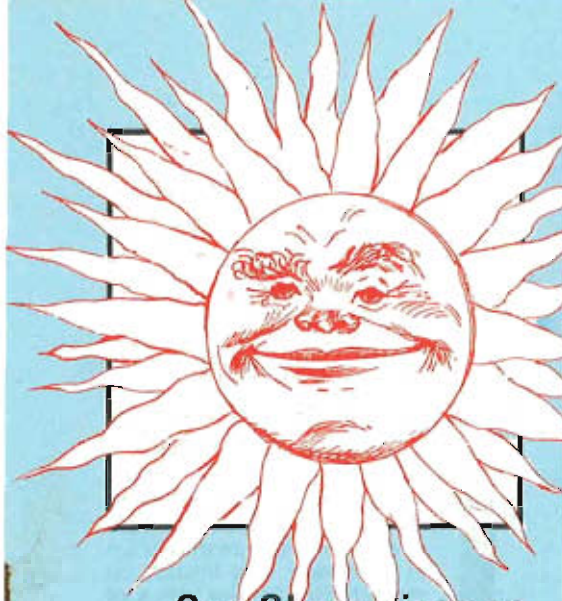
The Harvard H-410 has a lot of features for a hand-held. It has a proper red LED channel display on the front panel and just underneath that is a S/RF meter that also doubles as a battery condition meter. Also on the front panel there are two small LEDs, a green one that lights on receive and a red one that only lights when the Call facility is used. This is a tone that is transmitted whenever the red button that is built into the P.T.T. switch is pressed. On the top panel there are the usual two rotary controls for On/Off Volume and Squelch and a rotary channel selector. This rig provides a full forty channels. Also on the top panel is a pushbutton that illuminates the display which is not left on all of the time in order to save the batteries. Next to the display button is a bright red pushbutton that instantly switches the rig to channel 9. In the left hand corner of the top panel is the long built-in antenna and immediately next to it is a 3.5mm socket for plugging in an external one. The unit is powered by 8 x 1.5V UM3 type batteries but rechargeable ones can be used instead as there is a charger socket on the right hand side of the case. The RF output power of the H-410 is quoted as 2 Watts. There is an attenuator switch but as it is inside the battery compartment and a screwdriver is needed to turn it, I can't see many people using it. The Harvard H-410 is supplied complete with a case and a carrying strap and costs £38.00.

We would like to thank Modulations Communications of Abingdon, Oxon and Globe in Watham Abbey, Essex for the loan of the equipment used in the review.



Cheiza CB-516

This is a compact basic two channel (14 & 30) unit that has an output of 200mW, powered by four UM3 type 1.5V batteries that fit into a small compartment in the base. There are the minimum of controls; an edgewise mounted rotary On/Off volume control on the right hand side of the case, a two position channel selector switch, an Off/On Squelch switch and a Push To Talk switch that is just above the volume control. The front panel has a small red LED that lights up on transmit and there is a built-in telescopic antenna. On the back of the rig there is a belt hook that is an integral part of the plastic case. This is a nice small (187 x 62 x 27mm) rig that is reasonably priced at £21.95 a pair.



SUN- WARD CB

Sue Sharp gives an update on the CB situation in Europe for tourists and visitors who want to take their CB equipment with them.

On the face of it, taking your CB on holiday abroad is an attractive idea. Help with routes, unfamiliar road-signs keeping in touch with another car making the same journey — it seems like a good idea. BUT there isn't a European CB standard and the British system is not compatible with any other in Europe, so unless you come across someone else with a British rig it's going to be very quiet on the airwaves.

And that's if you actually get your rig into the country of your choice. Since the British frequencies aren't used anywhere else, customs officials might well confiscate the set until you return to Britain, or perhaps permanently!

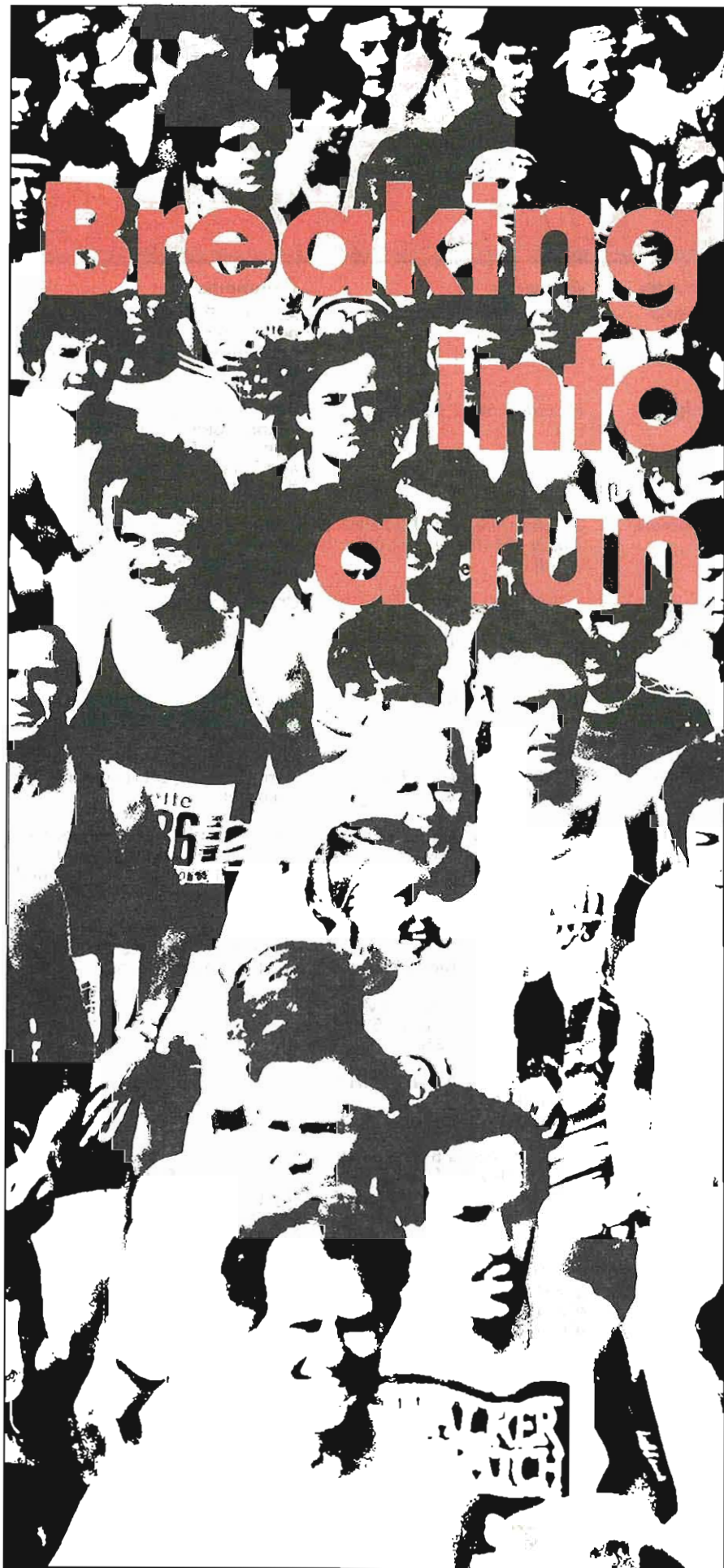
It will be difficult, if not impossible, to buy a CB set for, say, France in this country. As far as I am aware, there aren't any specialist suppliers who can supply equipment for other countries — and there would be legal difficulties too so what sounds good in theory won't work out so well in practice. It would be a miserable holiday if you got nicked by a gendarme for illegal CB!

It might be possible to rent CB equipment as you enter the country concerned, if you can find a shop that provides this service. The other alternative is to buy the equipment (at the cheaper end of the scale) and sell it as you leave but remember that it won't be worth as much as when you bought it!

To be honest, there is something that approaches a European standard and that's the American FCC allocation, but this is illegal in virtually every European country. As in Britain, this doesn't stop people from having them, especially the DXers, but you have to be prepared to take the risks that go with using illegal equipment.

Country	Allocation	Comments*
Austria	12 channels, 0.5W 27MHz. AM & FM	Austrian Post Office may permit temporary importation and limited use. Enquire before journey.
Belgium	22 channels, 0.5W 27MHz. FM	Enquire about a special licence (before journey) from General Manager, Telegraph and Telephone service in Belgium.
Denmark	23 channels, 0.5W 27MHz. AM & FM (lower part of band)	Enquiries to be directed to: Post og Telegrafvaesenet, 1 Tekniske Knotor, Favergade 17, DK Copenhagen K.
Eire	40 channels, 4W 27MHz. FM (lower part of band)	
Finland	23 channels, 5W 27MHz. AM	Special licence obtainable from the General Manager of the Post Office
France	40 channels, 4W 27MHz. FCC. AM, FM & SSB	Apply for temporary importation document.
Holland	40 channels, 2W 27MHz. FM (lower half of band)	Until recently, even temporary importation was prohibited, but enquire if this has changed permitted with official
Italy	12 channels, 5W 27MHz. AM FM & SSB (lower half of band)	No information available, enquire for more details from Customs authorities.
Norway	22 channels, 0.5W 27MHz. FM and 26 channels, 5W 27MHz. AM & SSB	
Spain	10 channels, 0.5W 27MHz. AM & FM (lower half of band)	
Sweden	24 channels, 3.5W 27MHz. AM on all 24, FM on 21. SSB on 1	Temporary licence available from Mrs. G. Carlstrom, S.T.A. Radio Services, Licencing Office, S-123 B6, Farsta, Sweden.
Switzerland	12 channels, 0.1W 27MHz. & FM. AM 40 channels 8W 934MHz. FM	More information available from the Swiss Post Office. Some concessions available.
West Germany	22 channels, 0.5W 27MHz. FM	Unit likely to be sealed at entry but worth checking before journey.

*These comments refer to arrangements that may be made to take British CB equipment into European countries, particularly if the unit is permanently fitted into a vehicle. The Embassy of the country you are visiting will be able to give the address of the Postal or Telecommunications dept that you should approach for more advice. Some countries may insist on the equipment being removed or sealed before entry, some will permit temporary importation and limited use.



Breaking into a run

Sue Sharp gets up early and drives into Oxfordshire to see CB in action at the Abingdon Marathon. She discovers an entirely new meaning to 'communications on the move'.

The Sunday morning calm and the normally-peaceful atmosphere of the Oxfordshire town of Abingdon was broken on the 6th May by the influx of 1,400 runners for the third Abingdon marathon and the attendant organisers, marshalls, spectators and fun fair. Coming close to the London marathon, this is an important event in the runner's calendar, as it is a good warm-up for the 'big one' and although there were plenty of locals taking part, the programme showed entrants from as far away as Scotland and Devon. As well as the athletic importance of the event, the Abingdon marathon also raises funds for both local and national charities, with over £30,000 raised in the past two years.

The organisation and co-ordination of this large number of runners (which included veteran and disabled athletes) on the day and looking after their welfare poses a major problem for the organisers, but has been handled since the race was established by CB radio and the Alpha Tango club, in conjunction with Modulations Communications CB shop of Abingdon.

Anyone who has doubts about the effectiveness of CB would have had them wiped away if they could have seen CB in operation at the marathon. As this is the third year for the Alpha Tango group, they have built up experience that has culminated in this year's expertise, although there were times when it seemed chaotic in the control caravan!

For the breakers involved in the exercise, the day started rather early for a Sunday morning at 8.00 a.m. as they assembled to check out the CB equipment and install the large base station antennas at the major control points. These control points were housed in two caravans, one at the start of the race and one at the finish. The caravan at the end of the course was busiest after the race had started and was positioned near the information van and the organisers to keep a constant stream of information back and forth.

Apart from the control centres, the communications team consisted of 30 cars with two operators each, parked at regular intervals or hazard spots around the course. There were also five mobiles to pick up stray runners who wanted to drop out, deliver supplies to the 'feeder' stations and mark out the last of the runners. A patrol motorbike toured the course to check traffic conditions and the

Just some of the 60 plus breakers who helped make the marathon such a success. Val Black is second right, John is between the two cars.



Photo courtesy of Oxford Mail

safety of the runners and, incidentally, deserves some thanks for rescuing me as I drove, lost, around the town for the fourth time!

John and Val in the 'finish' control van handled (and at times were engulfed by) a steady stream of messages covering a range of problems and topics. They were able to keep the race commentator completely up to date with the position of the principal runners and this added enormously to the tension as the race neared its close. Operators along the route were also able to keep a particular eye out for the two disabled 'wheelchair' runners and the veteran runners, who could have run into trouble along the route. As the last runners came through points along the route, operators were able to move to another part of the course where they were needed.

The Police and St. John's Ambulance staff were able to utilise the Alpha Tango group to locate injured runners and as each operator was at a specific, logged point, locations were exact. This also helped when pinpointing the position of runners as the controllers could refer to the course map and the location list of the breakers and identify an individual runner and his position.

The control van also had two young 'runners' who were kept constantly busy running messages to the organisers, the information van, the police and medical services. At times, they couldn't get back into the van without another message being thrust into their hands and off they were again.

Although the winner (a local man) beat the previous course record and finished in less than two and a half hours, the work of the group went on all afternoon as the less professional athletes battled round the track. One of the wheelchair racers almost came to grief with a broken wheel but Alpha Tango members were able to sort this out and get him on his way again.

Safety

One of the more mundane, but very important duties of the operators towards the end of the course was to radio in the numbers of runners just about to finish. This meant that marshalls could find and have ready the clothing and possessions of each runner as he/she completed the course — otherwise not an easy task,

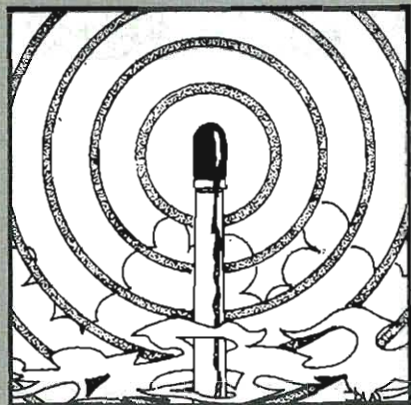
as 1,400 bags of belongings make a sizable mountain!

All the CB operators involved used their own equipment (apart from that in vehicles owned by the marathon organisers — this was supplied by Modulations Communications) and, except for some antennas that looked a fraction over 1.65 metres to me, was standard equipment, fitted and maintained by the breakers involved.

The contribution to the safety of both the competitors and the spectators that the Cbers made cannot be underestimated. Much of the route for the marathon runs down small country lanes and the CB operators, able to get into action quickly on the receipt of a message, minimised the danger to both runners and watchers.

It is difficult to see how the marathon could have been organised so well, or been so enjoyable for the people of Abingdon without the efforts of the Alpha Tango group. For many people, this will be their first experience of CB in action, and what better introduction could they have?

Antenna Review



Carrying on with our reviews of centre loaded antennas, Brian Wright has a look at the new Thunderpole Mark 3.



THUNDERPOLE

STRIKES AGAIN!

The change in antenna regulations for U.K. CB has certainly caused a flurry of activity among antenna manufacturers, as many of them seek to change over to the more efficient centre loaded design that is now allowed. Because the majority of manufacturers of base station antennas will probably, initially, fit centre loaded elements instead of base loaded ones onto their existing groundplane assemblies, it could be quite interesting to compare the performance. One of the high performance base station antennas that we tested around 2 years ago was the Thunderpole Mk 1, by Freeman and Pardoe. This was quickly succeeded by the Thunderpole Mk 2, which has proved to be very popular. This month we have tested Freeman and Pardoe's latest base antenna — the centre loaded Thunderpole Mk 3, which is essentially a new design centre loaded radiator on the Mk 2 groundplanes.

The groundplane assembly of the Thunderpole Mk 3 is of the 3 angled down 'legs' type, which has now

become fairly standard with a few slight variations by individual manufacturers. Each of the so-called legs are assembled by entering the lower thinner aluminium tube into the upper larger tube and securing the two with a self tapping screw through a predrilled hole. At the top of the thick tube is a factory fitted brass thread with a hexagon for tightening with a spanner. Supports, in the form of a short piece of tube and a plastic moulding, are provided for each groundplane. The support moulding should be slid up onto the thick tube before entering the self tapping screw described above. The other ends of the three support tubes fit on to a central moulding with a large hole through which the mounting pole is passed.

The loading coil and lower half of the radiating element are supplied assembled to the aluminium central mounting boss. The central boss has the usual 3 threaded holes for the groundplanes and the 1 1/4 inch hole for the mounting pole or mast. Inside the large hole is the SO259 socket for connecting the feeder coax. The coax has a split central portion which grips

the plug pin nicely (unlike some antennas that we have tested) that require the plug pin to be deformed to obtain a good connection.

The quite fat 20mm diameter lower tube of the radiator is fitted to the boss on a very short insulator. At the top of this tube is the 300mm long, 18mm diameter, helically wound loading coil, which has an aluminium stub with two threaded holes, protruding from the top. The top half of the antenna is supplied separately and is comprised of two pre-assembled tubes, the top 10mm diameter tube being retained in the lower 13mm diameter tube by a collar with a grub screw. This upper assembly fits over the stub protruding from the coil and is retained by two machine screws (not self tappers), shakeproof washers are provided for these and other machine screws and nuts. The reason that this upper half is in two parts is that, whilst the Thunderpole Mk 3 is pretuned as supplied, some users request adjustment for tuning to other frequencies, the manufacturer claims (probably radio hams on 28MHz, of course).

The Thunderpole 3 is erected by first passing the coax and PL259 plug up through the mounting mast and connecting to the socket on the underside of the central hub or boss. The mast is then passed through the groundplane support moulding and up into the large recess in the boss where it is retained by an M6 screw. The coax plug and socket are therefore completely protected from the weather.

SWR adjustment

The SWR, with the antenna as supplied, was 1.4:1 on channel 1 and 1.7:1 on 40, a little high at the top end but quite useable. However we decided to use the adjustment provided and obtained around 1.3:1 from 1-40 at the first try.

On test the Thunderpole Mk 3 performed very well and contact was maintained even when the mobile test vehicle encountered a strong signal on the next channel in our notorious blackspot. The performance of the Mk 3 seemed to be about one S point better than the Mk 1 at readings below S5 but it is difficult to be precise due to the need to take test readings at exactly the same position and it is some time since we tested the Mk 1.

In conclusion we consider the Thunderpole 3 to be strong and well constructed, top performance antenna and priced at £25 it is no more expensive than the original Thunderpole of 2 years ago, which must be good value. Freeman and Pardoe also supply an additional groundplane kit priced at £15, which they claim will increase performance still further, for those breakers with lots of space to erect it.

A similar antenna in appearance and performance that we have tested would be the Skybreaker 2.

Our thanks to Freeman and Pardoe for supplying the test sample.

ANTENNA REVIEW DATA PANEL

SPECIFICATIONS

Model Thunderpole III

Type Centre loaded base station

Length 1.64M whip 2.7M g/planes

Frequency Range 26.5 — 28.5MHz (see text)

Max Power Handling 500W

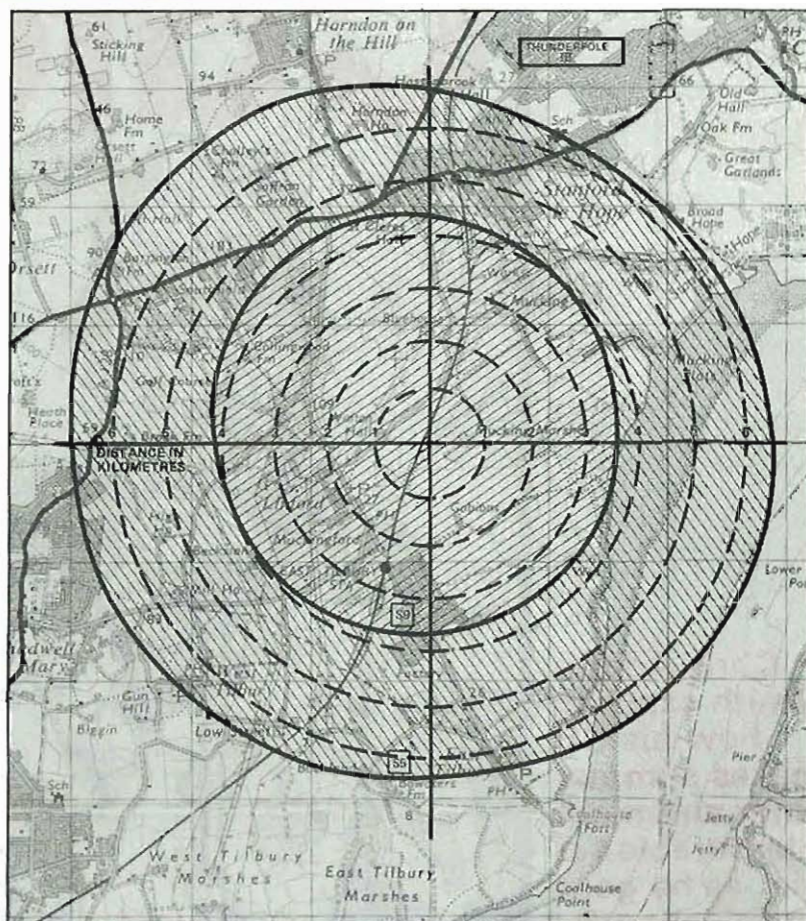
Impedance 500ohm

Cable Supplied None

Mounting Details 1¼ inch mast

Supplier Freeman and Pardoe

Typical Price £25



REVIEW VERDICT

Performance XXXXX
SWR Adjustment XXXX
Construction XXXX

Installation XXXX
Instructions XXX
Value XXXX

We rate our samples on a scale of one to five. Five crosses is the highest rating, three and four stars are average to good and one and two crosses mean it's not doing so well.

The Tests

We have used our standard test procedure to assess the efficiency of this antenna. Just to bring new readers up to date this involves two tests: one static and one mobile. Our test sample is fitted to a stationary mobile and a second mobile follows a pre-arranged route that orbits the stationary test vehicle, sending and receiving signal reports at measured intervals. This is then repeated with the test antenna on the mobile test vehicle and the signals are sent and received between a stationary vehicle. A standard rig and antenna is used in all the tests. With the results obtained we are able to draw up the radiation pattern shown here. This is simplified to make the results more easily understood. The antenna is also subjected to a series of 'lab' tests to assess their durability, quality and construction, etc and finally we hand it over to a panel of CBers for comment.

Safety Catch

ADAM-SMITH



Chris Adam-Smith explains how his CB makes summer safer and more pleasurable for him as he goes huntin', shootin' and fishin'.

My mobile rig sits on a shelf in the garage gathering dust. Like the Mitchell reel and the box of spent shot gun cartridges, it awaits my summer attention. I removed it from the car nearly a year ago when I chopped the old Citroen in for a new Renault. I just haven't had the heart or felt the inclination to drill holes in the new motor just so I can listen to rubbish coming in from wally land. That doesn't mean that I no longer use CB radio — quite the opposite in fact.

I have perfected the art of tailoring CB to suit my own particular needs. I use it now because I need to. No longer do I blast out asking for a random copy — chat to other drivers when

homeward bound in the evening rush hour — or play the night owl with

Actual Ace. No, now I use CB like any other tool or piece of sporting equipment. It fulfils a particular function during a specific activity and gives me considerable peace of mind.

CB also saves me a lot of walking. Woodpigeon shooting over a fifty acre field sown with spring peas and with very little surrounding cover can be quite a challenge. When you are responsible for that chunk of land and all that goes on there it can prove to be quite a headache. The landowner isn't really very interested in what pleasure you get from the days spent on his land — all he wants and expects is a safe gun and lots of dead pigeons. CB helps

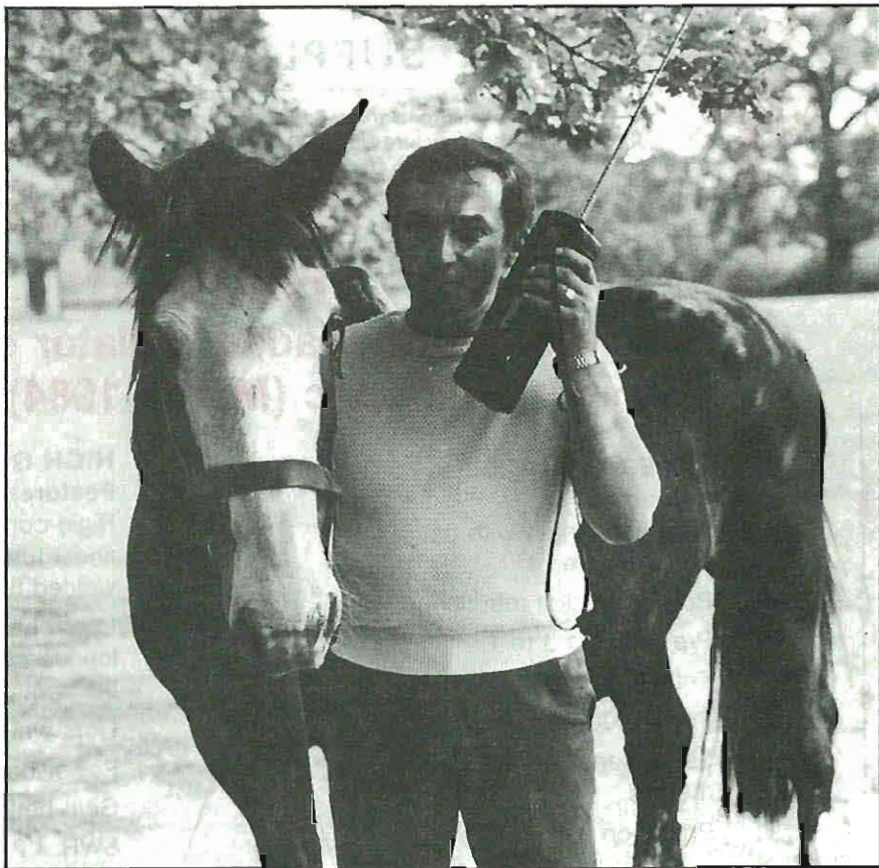
to achieve both of these aims.

Two or three reasonably priced handhels can do wonders for the bag, save an awful lot of unnecessary wandering around and add that extra safety factor to the day. Accidents — turned ankles, cut hands, dead cows — can be reported quickly. The movement of people and birds can be monitored and, best of all, you can all pack it in at the same time and judge the time of your trek to the pub so that you are not the first one in the chair — very important that!

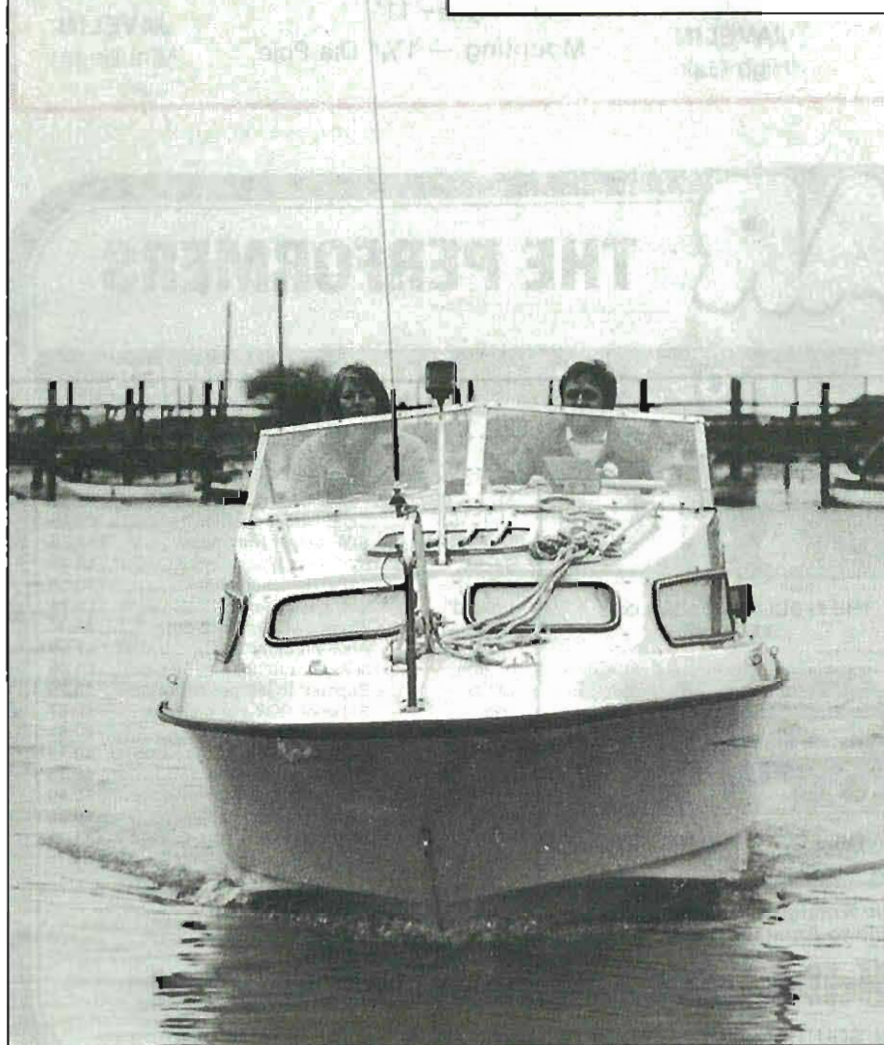
When I removed the car rig — around about that time when boats also go under their winter covers and are dragged up on to the hard ground of the local marina — I also removed a tiny mobile from the motor boat that I

wished I had never bought. Good boat, cheap boat, economical, fun . . . mooring prohibitive! Trudging her up and down the river to charge the winter flat battery and to drive out the wildlife that had wintered in the cabin, I was suddenly aware just how vulnerable I was if something nasty should go wrong. On the river of course, it wouldn't be too bad. Tie the thing up at the nearest tree and hike off to the nearest pub with a phone; pubs seem more numerous in the country than do working telephone boxes. Out at sea it would be a little different as I haven't yet quite got the knack of walking on the water. I can't afford a marine radio — or the time to obtain a licence for its use — and that special seabound CB with marine channels promised so many years ago, never came my way.

A CB radio out on the briny, for inshore boats, is as necessary as a life jacket and a box of flares. Not only could it come in very useful should your craft want to play submarines but 'out there' is one of the few areas where a little light conversation is both fun and informative. There are a great number of CB radios floating around our shores at the moment. Breakers



Almost any activity can benefit from CB, especially in the summer when less experienced enthusiasts are around.



with boats obviously go for them but they are catching on with folk who would consider it daft to have a two way chit chat radio in their car. One of the great problems has always been the lack of a ground plane on a fibreglass boat. It was never a problem on mine. A Thorobred on the pulpit rail and an antenna matcher worked perfectly well. Now I don't even bother with that. My handheld Realistic plugged into the cigar/cigarette lighter provides ample range for inshore working.

Nice to know where the fish are as well!

Handheld CB radios are useful in most outdoor pursuits. They add a safety factor to most out of the way activities and put you in touch with another human being at a time you are most likely to want to communicate. Boating, shooting, hiking, camping, bird watching or just plain out of sight — a CB in the pack is money in the bank.

CB radio, portable or otherwise, is no substitute for safety precautions or common sense. It is only an aid to the many other skills that you will probably have obtained by simply being an 'out of doors' person. Don't let the radio give you a false sense of security — you still need to know where you are going, how to get there and how deep the water is.

*One important note to boatbound CBers — the Coastguard do not monitor CB radio. In your area it is possible that there is an active REACT station listening in but don't count on it. Your best safety aid at sea is good old common sense. Never muck about in boats!



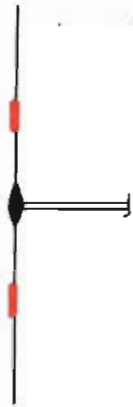
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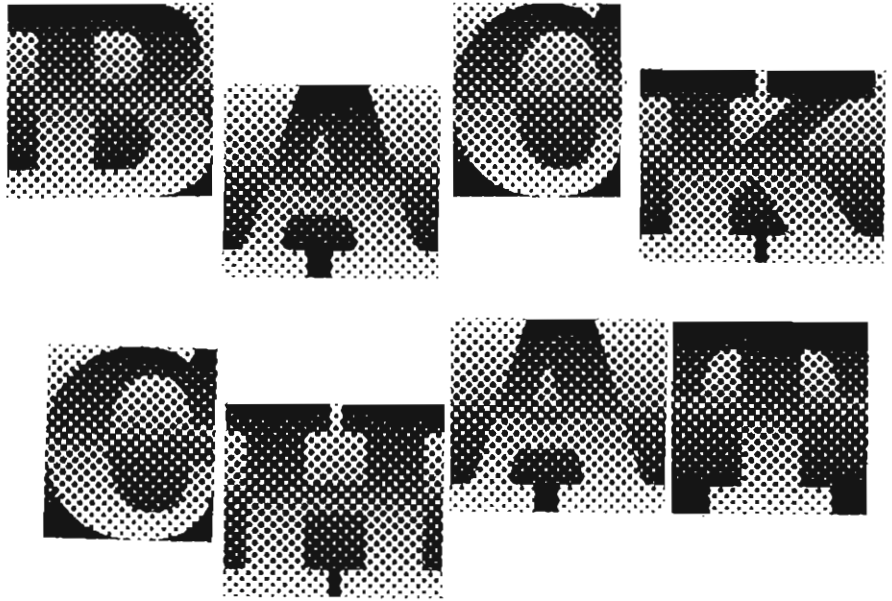


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Still lots of letters arriving on the vexed question of channel use and abuse, but we'll give it a rest this month to look at some different subjects.



CB Newsletter

For any breaker that has been regretting the lack of technical information on their equipment, good news follows . . .

Our company (S.E. Services) feels that there is a need for more technical information on the repair and modification of CB radios.

To serve the needs of the hundreds of 'rig doctors' across the country, we intend to produce a quarterly newsletter.

Technical explanations of various rig improvements will be given. Although we shall try to keep the explanations simple, we hope to provide sufficient information to guarantee success.

We hope, also, to review electronics accessories for CB. (Offers from suppliers will be welcome).

The quarterly newsletter will be available by subscription only, at a cost of around £7.50 per annum.

Although the newsletter will be directed mainly at those whose business is to repair rigs, enquiries are welcome from anyone who can wield a soldering iron.

Please send a S.A.E. to the address below for further details.

S.E. Services, 14 Hazle Court, Aislew, Bedale, North Yorks. DL8 1UX.

Calling Stoke-on-Trent

Reg Thomas in Penkhull, Stoke-on-Trent wonders if anyone can extend a helping hand . . .

I would appreciate your publishing my request in Back Chat at the earliest possible convenient time.

As a middle aged disabled chap who is interested in CB radio and intending to set up my own station, I have become a little puzzled as to what equipment to buy. I am having trouble with this as I live in a ground floor flat

in a block of six and I have read in previous issues about interference etc. I would appreciate any information regarding the correct type of equipment to buy and the location of the nearest club.

If anyone could help locally I would appreciate it very much.

If a local breaker or club could help Reg, perhaps they could get in touch with me for his address and phone number. I am sure that the personal help a fellow breaker could give would be much more value than my printed advice.

Acting Classes?

Alan Lewis of the Lema Echo Mike Group has some comments on the ever-present problem of wallies and a possible solution . . .

Much has been said in Back Chat about wally breakers that have no thought for anybody else but themselves, and that we pay our licence fee of £10.00 and get little or no assistance from British Telecom (or from the Dept. of Trade and Industry, for that matter) in solving the above problem.

My own research on this problem over the past year has proved that if a group of responsible breakers get their heads together off the airwaves, they can get some results. If they put on a simulated exercise of a British Telecom movement over a pre-determined period (say fourteen days), the so called wally goes into a period of hibernation, leaving the well behaved breaker and monitors a period when they can use their equipment without harassment. A little acting on a pre-selected FM channel does the trick!

It seems more than likely that quite a few, if not all, wallies are operating on unlicensed sets. If this is so, it's time that 'nom de plumes' of call signs or skip codes are outlawed and

replaced by a compulsory call sign that is issued with your first CB licence and each forthcoming one. The call sign and user's address should be placed in a directory and be available for inspection at local libraries in the same way as the electoral roll. Misuse of the issued call sign by any other breaker should carry a minimum penalty of £1000.

We at the Lema Echo Group monitor with the intention of offering assistance to breakers in distress but if we have to turn into policemen to get respectability back, so be it. Otherwise the government are likely to kill off CB at the stroke of a pen and then we all lose. We need to take the bull by the horns before it is too late.

Plenty to think about there, Alan. But is taking the law into your own hands the answer? A bit of playacting is fine, but £1000 penalties? We all regard CB as something important and necessary but I think this may be a bit over the top. Would other breakers support these massive penalties?

Lima Victor 2001 Back Again

Fans of Back Chat will remember a letter from Lenny in New York in the March edition of the magazine. He's back for more . . .

Many thanks for printing our last letter to you. I have received many QSL cards and all of my contacts on FM say that they have purchased the magazine. Since we last wrote we have made a few hundred more contacts on channels 37 to 40. Every QSL card that was sent out by us also had information on my letter in your magazine and asked to pick up the copy. I hope it will again be possible to print yet another letter to my UK breakers.

Since our arrival on your legal CB channels at the end of last October we have several hundred contacts and received many more reception reports from all over the UK, including the Channel Islands of Guernsey and Jersey. The Lima Victor 2001 cannot thank you all enough for your kind words and great reports.

We are getting near the time of year when our DX to your part of the world ends, until this September, but we hope to QSO with all of you again and all of the stations that did not make the trip.

As you can see, all you need is four watts to get over and conditions in your favour. A directional twig will help get over but it's not essential. The main thing for FM is a good clean but strong audio and a lot of courtesy to your fellow breaker.

The 2001 is moving our home QTH in May but no new address yet. We do not plan to move out of our area and my PO box will always be open for mail and I hope to hear from all my friends during the non-DX summer. The 2001 will return again in the fall, louder and stronger than ever. We plan to install a



larger beam and work our station all season. 10-10 till we meet or QSO again. Good luck and good DXing!

Lenny, or 'the 2001' can be contacted at PO Box 212, Islip Terrace, New York, 11752.

Mini Chip Chips In

D. Bunn, aged 12, in Great Yarmouth is getting pretty fed up with CB's sins being blamed on the younger breakers . . .

Why, why, why must people (even Buzby) always blame the music playing and keying on us younger breakers?

I agree that some of us are at fault, but there's a 50/50 chance that the breaker is over 14 and doesn't need an adult with them anyway. Many of the keyers are children using a rig for the first time and they need to be told how to use their rig properly, not be bucket mouthed at.

I have often, on hearing a key or music, just sat back and tried to talk properly to these breakers. So please, next time, don't blame us younger good buds!

I quite agree, Mini Chip, that the younger breakers cop the blame for many things that aren't their fault. If my area is anything to go by, quite a few older CBers could learn a lesson in good manners and radio operation from some of the more junior breakers.

Card complaints

G. J. Jennings, alias The Inspector, of Cheltenham, wants to add his voice to the moans about non-QSLers . . .

Probably one of the biggest moans of breakers is the non-return of QSL cards. At the moment I have 67 outstanding cards sent in 55 envelopes — on postage alone this amounts to quite a lot of money. With

some of these, I sent two different cards of my own, plus cards from breaker friends and some local view cards. The most annoying thing is that quite often returned cards are the only proof of the copy (as I do not swap).

I have cards outstanding from Clithero, Poole, Minehead, north and south Wales, Wolverhampton, Bristol, Newbury, Derby, Swindon, Birmingham, Calne and Telford. All of these breakers QSL 100%, so they say!

I am in the process of making a list of these breakers and intend to pass it on with any QSLs sent (on receipt) and maybe then some breakers will be spared the expense and disappointment.

I'm all for anything that prevents breakers from being disappointed but please be careful how you compile the list, Mr. J. I'd hate someone to be included, and therefore blamed, for something that perhaps wasn't their fault.



Letters intended for publication should be addressed to: Backchat, Citizens' Band, No. 1, Golden Square, London W1R 3AB.

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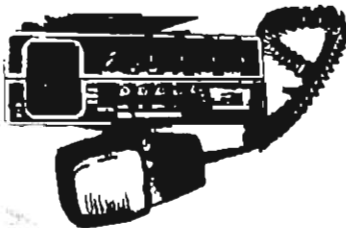
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CLUB NEWS

Lots of news from new and established clubs all over the country, plus two similar complaints from over the water.

Maidstone Modulators

How about a mention for the Maidstone Modulators AM/FM club based at the Market House in Earl Street, Maidstone?

This exciting new club meets every Thursday under the watchful eye of Mustang and the ever-so-lovely Black Cat, not to mention

modulation by Dave (EB2), Chris (EB3) and also Keith (EB1) who helped by monitoring the channel. After the modulation they had copied 353 breakers from all over England and North Wales. We got a very good write up the local press and it's nice to point out to people that CB isn't all bad.

Stephen Burgess (EB9),
Echo Bravo Club,
P.O. Box 1,
Ellesmere,
Shropshire.

Hampton Court (Hotel Charlie) DX & QSL Group

We have formed a new DX group in the Hampton Court area, which started in August 1983, and at present has 45 members and increasing steadily. The main aim of the group is to provide DXers in the area with a P.O. Box and QSL cards.

Membership is £5.00 per annum and group QSLs can be purchased separately.



Hampton Court
DX & QSL
Group

We meet on the first and third Tuesday of every month at the Paddock Public House, Hurst Road, West Molesey from 8.00pm onwards and breakers are welcome to attend.
Richard, Hotel Charlie 10
P.O. Box 50,
East Moseley,
Surrey,
KT8 9QH

The YOU HAVE JUST BEEN **EYEBALLED** *by*

Original
Great Gonzo
Celebrity & Super Star

Mote Lady, 'cause she never mentions me.

Everybody is welcome so come along and meet your friendly local superstars.

Chris Stimpson,
Maidstone Modulators,
Market House,
Earl Street,
Maidstone,
Kent.

Echo Bravo Club

I would like to inform you of the Echo Bravo Club in Ellesmere.

This club, which was set up last July, has over sixty members. We have eyeballs every fortnight at the Black Lion Hotel, where we discuss forthcoming events such as discos, CB foxhunts, day trips and other activities.

In December the club donated £150 to the town's sports council after a 24 hour sponsored

Bravo Bravo International QSL Club

As a regular reader of your magazine I have noticed very little recognition of CB clubs in Northern Ireland, which is, after all, where most of Aunt Mary sets came from in the bad (good?) old days.

I would like to bring to your attention our club, which although it may not be the 'fastest growing' is

international friendship and 100% QSL.

The annual membership fee is £1 and this includes the use of the P.O. Box, rubber stamps and QSL certificates or scrolls.

Pepe,
United Kingdom Thames Estuary DX Club,
P.O. Box 62,
Southend,
Essex.

Romeo Tango's Group International

As vice chairman of the Romeo Tango's I should like to have our club mentioned in the magazine. We were formed in August 1983 and we have a total of 57 members so far.

As there were no CB clubs in Aylesbury, myself, Black Panther, and Hot Black decided to put Aylesbury on the map. Printing this letter will mean a lot to the members and all our CB friends in Aylesbury and around the world. Ron (Black Panther), Romeo Tango's Group International, P.O. Box 206, Aylesbury, Bucks HP21 8XS.



growing steadily with well over a hundred members worldwide. We meet on the air (14 FM or 41 USB) and for a fee of £1 and an S.A.E. we offer membership, ID cards, stickers, clubs QSLs, other members' cards and invites to this and associated clubs. Offers include an official club rubber stamp and another with the member's name and address.

We collect used postage stamps for charity so any received would be useful.

Any enquiries, QSLs and stamps will be gratefully received and I will answer by return.

Martin Edwards,
27 Manse Road,
Carrowdore,
Newtownards,
Co. Down.
BT22 2EZ, Northern Ireland.

Thames Estuary DX Club

I am writing to you for a mention in Club News. We have formed a club called the United Kingdom Thames Estuary DX Club, 'Tango Echo'. This was started in November and was formed with Isle of Sheppey and Essex breakers. The founders are Toy 1 (Sheppey), 007 (Southend) and myself, Pepe from Sheppey.

Mention should also be made of a young breaker who has contributed a lot to the formation of the club. The club now has over sixty members and we are looking for more! Our aim is to be a prestige club with the theme of national and

Great Island Breakers CB Club

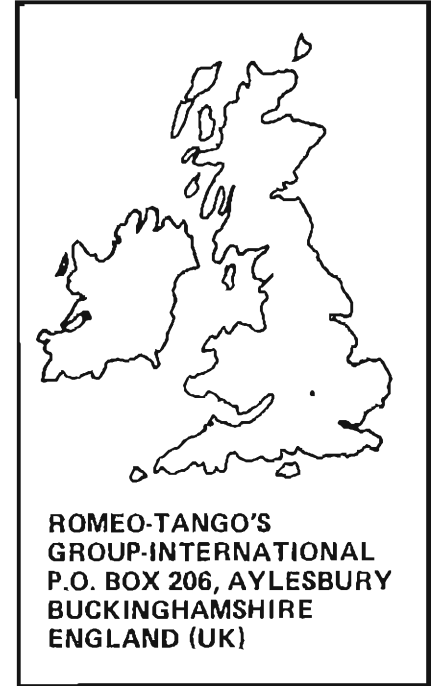
Having been in existence for almost five years as a CB club, I would very much like it if you could give us some space in your magazine. As there are no CB magazines published in Ireland we really look forward to getting your one. I have yet to see a CB club from the Republic mentioned in your publication (don't get me wrong, they may not have contacted you!).

Anyway, about our club. It is called The Great Island Breakers CB Club and we are based in Cobh overlooking the beautiful Cork harbour. We are not a very big club in comparison to others but the members we have are all very dedicated and that's what counts. We have done a lot for charity — last year alone we made £1500 for diabetic research.

I have been the club chairman for the past four years and I would like to take this opportunity to thank all the members for their support through the years.

Our meetings are held on the last Wednesday of the month at the Rinn Ronian Hotel in Cobh. We would love to hear from other CB clubs and hopefully we will now after being in the magazine.

E. Lalor (Chairman),
Great Island Breakers Club,
St. Rita's,
High Road,
Cobh,
Co. Cork,
Ireland.



Rampant Lion CB Club

As P.R.O. for the Rampant Lion CB Club I would like to draw the attention of breakers to our activities.

The club was formed in January of this year and meets every second Thursday in the Oakwood Lounge, Sauchie, at 7.30pm.

We have planned an Easter Bonnet Dance, visits to other CB clubs, beetle drives, Game for a Laugh and various activities through the summer.

The club also plans an outing to Blackpool in October if sufficient breakers are interested.

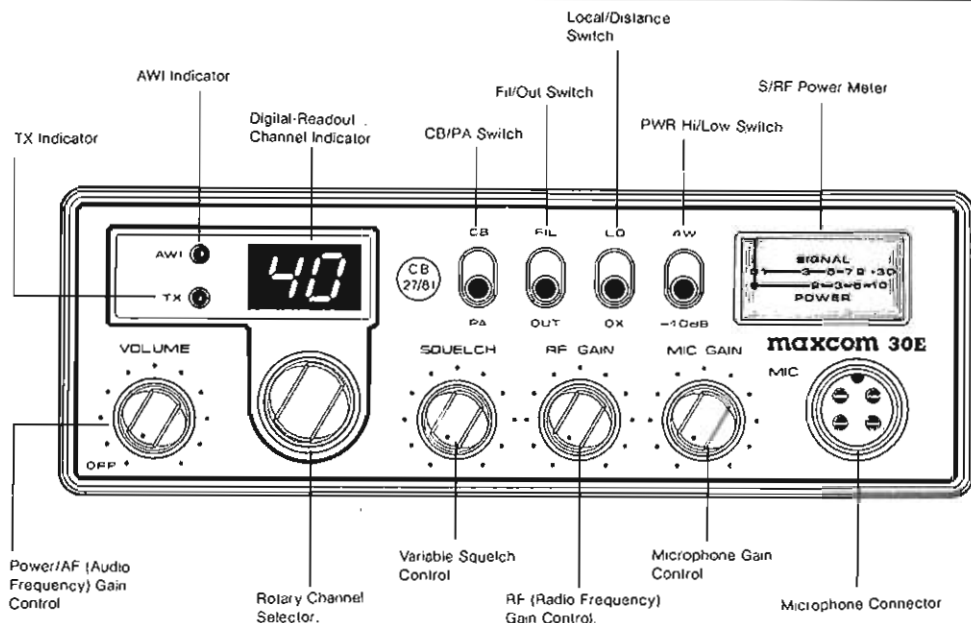
Membership of the club is open to all breakers aged 18 or over and costs £2.00 a year.

As we are a new club, new members and visitors are very welcome.

Moonraker,
Rampant Lion CB Club,
P.O. Box 2,
Alloa,
Clackmannanshire,
Scotland.

Citizens' Band

REFERENCE SECTION



A CB SET AND ITS CONTROLS

VOLUME

Sometimes called *Audio Frequency Gain* control. Usually combined with the 'power on' switch. The volume control will only increase or decrease the loudness of the incoming signal — it won't alter the strength of it or affect the transmitted signal.

CHANNEL SELECTION

For choosing the channel you transmit and receive on.

CHANNEL INDICATOR

Displays, usually by LEDs, the channel you have selected. Some channel displays are of liquid crystal or fluorescent. The digits are normally bright red, green, orange or blue and visible in all but the most direct sunlight.

SQUELCH

The squelch control is used for quieting background hiss or the babble of distant signals. The control is turned slowly, usually to the right, until the background noise disappears. The squelch circuit will then only open to let through a stronger signal than those you have quieted out. As soon as the stronger signal goes, the circuit closes. Care must be taken not to turn the squelch control up too far, as then only a very strong signal will open it.

SIGNAL/RF METER

On most sets this is of the 'moving needle' type against an analogue background. Some sets do have a bar of LEDs that light up to show the strength of either the received signal or the transmission. It shows the *relative* strength, not a reading in dB or Watts. These meters cannot be 100% accurate and different rigs will give slightly different readings for signals of the same strength.

RF GAIN

This controls the reception sensitivity of the set. When decreased the set is less sensitive, and when increased the set is more sensitive to weaker signals. Reducing the gain helps prevent overloading when talking to someone who is very close.

Some sets, instead of having a suitable rotary control, have a flick two position switch marked *local* and *distance*. Full sensitivity is the distant position.

MIC. GAIN

Adjusts the sensitivity of the microphone amplifier circuit and controls the audio from the microphone that is used to modulate the signal.

CB/PA SWITCH

This switch turns your CB set into a low public address amplifier, when an external speaker is fitted into the socket on the back of the rig. Anything said into the microphone is amplified and broadcast through the speaker and not transmitted from the antenna.

tone or Filter Control

This can either be a rotary or flick switch. It controls the tonal quality of received signals in accordance with the user's preference.

POWER ANTENNA

Reduces the transmitter power from 4Watts to 0.4Watts. The attenuator should be used if your antenna is mounted more than 7 metres above the ground.

RX/TX INDICATORS

These light emitting diodes light up to show if you are receiving (RX) or transmitting (TX).

ANTENNA WARNING INDICATOR

This a warning indicator which is activated by trouble in the antenna system e.g. a bad mismatch or damage to the antenna or cable. You should stop transmitting if this lights up, and correct the problem.

Your set may also have the following controls . . .

CHANNEL 9 SWITCH

This is an 'over-ride' switch that will immediately select channel 9 without using the channel selector to find it. It is fitted to save time in an emergency.

DELTA TUNE

This is not a common feature on British sets, where frequency and stability are closely specified. It is a fine tuning device for tuning in stations that are operating slightly off frequency.

DIMMER

Works on the same principle as a domestic light dimmer, and reduces the amount of illumination on displays and dials on the CB set. A few sets have an automatic dimmer built in, which measures the lighting level through a photo-electric cell and adjusts the illumination accordingly.

ANL/NOISE BLANKER

The Automatic Noise Limiter or Noise Blanker is designed to reduce interference from a car's ignition system by desensitising the receiver slightly. If the ignition circuit is already adequately suppressed it will not make any difference.

CHANNEL BUSY/FREE INDICATOR

This is usually a LED that illuminates when a particular channel is in use or is free. This is gauged by the amount of 'traffic' on the channel which has to be at a certain level before the indicator is activated. Sets have either a 'free' or 'busy' indicator, not both.

This listing includes most of the rigs available for FM CB. Some rigs are still not on the market, but may be picked up second-hand or may be found in old stock at some shops. The prices quoted are recommended retail prices or typical price — they may vary considerably from shop to shop and area to area.

MOBILES

					TX IND. LIGHT	RX IND. LIGHT	CH 9 SWITCH	MIKE POSITION	COMMENTS	ADDRESS	NAME
				SL	●				Report Feb '82	Amstrad Consumer Electronics, 1-7 Garman Rd., London N17	AMSTRAD
				SL	●					Telecomms, 189 London Rd., North End, Portsmouth	AUDIOLINE
									Report Feb '82		AUDIOLINE
					●						AUDIO LINE
				FL						K B & Co Ltd., 202 Cheetham Hill Rd., Manchester	COLT
				FL		●				Roger D., 831 Mansfield Rd., Notts	COMMTRON
				FL							COMMTRON
				SL						Goodmans Loudspeaker Ltd., Downley Rd., Havant, Hants PO0 2NL	CYBERNET
				FL	●				Report May '83		CYBERNET
				FL	●	●			Report September '83		CYBERNET
				FL					Report July '82		DNT
				SL					Report December '81	Fidelity Radio Ltd., Victoria Rd., London NW10	FIDELITY
				FL		●			Report March '82		FIDELITY
						●			Report September '82		FIDELITY
				SL						Bee-Ware Ltd., Ripon Way, Harrogate, N. Yorks	GRANDSTAND
				SL	●						GRANDSTAND
				SL							GRANDSTAND
				SL	●					Telecomms, 189 London Rd., North End, Portsmouth	INTERCEPTOR
				FL	●						INTERCEPTOR
				FL	●						INTERCEPTOR
				FL					Great GT868 chassis	Star Warehouse, Chalk Farm Rd., London	JOHNSON
				FL						Roger D., 831 Mansfield Rd., Nottingham NG5 3GF	LAKE
				FR					Report April '83		LAKE
				FL	●				Report March '83	Lowes Electronics, Matlock, Derbyshire	LOWE
				FL		●			Report November '82	Maggie Electronics, PO Box 35, Andover, Hants SP10 2LQ	MAGPIE
				FL						AM House, 9A Old's Approach, Tolpits Ln, Watford, Herts	MAXCOM
				FL		●					MAXCOM
				FL		●					MAXCOM
				FL		●					MAXCOM
				FL		●					MAXCOM
				FL					Report Jan '84		MAXCOM

REFERENCE



NAME	MODEL														
		RETAIL PRICE	NO OF CHANNELS	SUPPLY VOLTAGE	SQUELCH	NB SWITCH	ANL SWITCH	MIKE GAIN	RF GAIN	STONE CONTROL	S/RF METER	S/RF LED R/O	HI/LO OUTPUT	PA FACILITY	EX. SPEAK
MERCURY	10 40	N/A	40	13.8VDC	•				•		•		•	•	•
MURPHY	DS-602	£25	40	13.8VDC	•						•			•	
MUSTANG	CB1000	£49.95	40	13.8VDC	•						•			•	•
MUSTANG	CB3000	£59.99	40	13.8VDC	•				•	•	•			•	•
NATO	40M	£69.95	40	13.8VDC	•			•	•	•	•			•	•
NATO	2000	£189.95	40	13.8VDC	•	•	•		•	•	•			•	•
OSCAR	OSCAR I	£85	40	13.8VDC	•						•			•	•
OSCAR	OSCAR II	£49	40	13.8VDC	•						•			•	•
REFTEC	934	£300	20	13.8VDC	•						•				•
ROTEL	RVC 220	£50	40	13.8VDC	•						•			•	•
ROTEL	RVC 230	£70	40	13.8VDC	•						•			•	•
ROTEL	RVC 240	£90	40	13.8VDC	•			•	•	•	•			•	•
SIRTEL	SEARCHER	£40	40	13.8VDC	•						•			•	•
TANDY	TRC2001	£80	40	13.8VDC	•						•			•	•
TANDY	TRC2002	£70	40	13.8VDC	•						•			•	•
TANDY	TRC2000	£100	40	13.8VDC	•			•	•		•			•	•
TANDY	TRC1004	£79	40	12VDC	•						•			•	•
TANDY	TRC2003	£130	40	13.8VDC	•						•			•	•
UNIDEN	UNIACE 100	£69.95	40	13.8VDC	•						•			•	•
UNIDEN	UNIACE 200	£89.95	40	13.8VDC	•			•	•	•	•			•	•
WAGNER	9000	£59.95	40	13.8VDC	•				•		•			•	•
WAGNER	COMPACT 40	£25	40	13.8VDC	•						•			•	•
WESTERN	COMPACT 40	£34.50	40	13.8VDC	•						•			•	•
WESTWARD	P.T.2	£159.95	40	13.8VDC 240V	•						•			•	•



NAME	MODEL														
		RETAIL PRICE	NO OF CHANNELS	SUPPLY VOLTAGE	SQUELCH	NB SWITCH	ANL SWITCH	MIKE GAIN	RF GAIN	STONE CONTROL	S/RF METER	S/RF LED R/O	HI/LO OUTPUT	PA FACILITY	EX. SPEAK
AUDIOLINE	345	£139.95	40	240VAC	•			•	•	•	•			•	•
COMMTEL		£65	40	240/12V	•						•				
DNT	B40	£TBA	40	240VAC	•						•			•	•
DNT	B2740	£TBA	40	240VAC	•						•			•	•
DNT		£TBA	40	240VAC	•				•		•			•	•
FIDELITY	CB 3000M	£125	40	240VAC	•				•	•	•			•	•
GRANDSTAND	BASE	£220	40	240VAC	•				•		•			•	•
HAM INT.	JUMBO	£254	40	240VAC	•		•	•	•		•			•	•
HAM INT.	CONCORDE II	£164	40	240VAC	•	•	•		•		•			•	•
HARVARD	H401	£149.95	40	240VAC	•			•	•		•			•	•
MIDLAND	76-200	£150	40	240VAC	•						•			•	•
UNIDEN	UNIACE 300	£149.95	40	240VAC	•			•	•	•	•			•	•
WAGNER	BASE	£150	40	240VAC	•		•		•	•	•			•	•
WESTWARD	P.T.2	£159.95	40	240V/12V	•						•			•	•

MOBILES

PER JACK	TX IND. LIGHT	RX IND. LIGHT	CH 9 SWITCH	MIKE POSITION	COMMENTS	ADDRESSES	NAME
•	•			FR	Report July '83	E.M.S. Communications, Grove St, Wantage, Oxon LX21 7AD	MERCURY
•	•			FL		Murphy Electronics, Wembly, Middx	MURPHY
•	•			FL		K.B. & Co Ltd, 202 Cheotham Hill Rd, M/cr	MUSTANG
•	•	•		FL			MUSTANG
•				FL		Roger D, 831 Mansfield Rd, Nottingham NG5 3GF	NATO
•				SL	Report January '83		NATO
			•	FL	Cybernet 134 chassis rep. April '82	S.M.C Runbridge St, Totton, Hants SO4 4OP	OSCAR
				FL	Report Oct '83		OSCAR
•				FL		RF Technology, Leyton Ave Ind Est, Mildenhall, Suffolk	REFTEC
•				FL	Cybernet chassis	Rotel Hi Fi, 2-4 Erica Rd, Stacey Bushes, Milton Keynes	ROTEL
•	•	•		SL	Cybernet chassis		ROTEL
•				SL	Cybernet chassis		ROTEL
•				FL			SIRTEL
•	•			SL		Tame Way, Tower Bridge St, Walsall, Staffs	TANDY
•				SL			TANDY
•				SL			TANDY
•				SL			TANDY
•				SL	Report Nov '82		TANDY
•				SL	Report Sept '82	Cravenmaster Ltd, Unit 8, Ind Est, Llandudno Junct, Gwynedd	UNIDEN
•	•			FL	Report Feb '83		UNIDEN
•	•			FL		Knight Communications Ltd, Unit 19, Britannia Est, Leagrave Rd,	WAGNER
•	•			FL		Luton, Beds	WAGNER
•	•			SL		Western Electronics, Fairfield Est, Louth, Notts	WESTERN
				FL	Report Nov '83	Westward Electronics, The Mill House, Westward Tuckenhay, Totnes, Devon 086423 336/370	WESTWARD

BASES

PER JACK	TX IND. LIGHT	RX IND. LIGHT	CH 9 SWITCH	MIKE POSITION	COMMENTS	ADDRESSES	NAME
•						Telecomms, 189 London Rd, North End, Portsmouth, Hants	AUDIOLINE
				FR	Report December '83. Also comes with telescopic antenna		COMMTEL
•				FL	Rewiew May '82		DNT
•		•		FR	Report May '82		ONT
•		•		SR	Report May '82		DNT
			•	FL		Fidelity Radio Ltd, Victoria Rd, London NW10	FIDELITY
•				FL		Bee Ware Ltd, Rippon Way, Harrogate, N Yorks	GRANOSTAND
•				SL		Telecomms, 189 London Rd, North End, Portsmouth, Hants	HAM INT.
•	•	•		FL			HAM INT.
•				FL			HARVARD
•	•			FL			MIDLAND
•				FL	Reviewed August '83	Cravenmaster Ltd, Unit 8, Industrial Est, Llandudno Junction, Gwynedd	UNIDEN
•				FL		Knight Communications Ltd, Unit 19 Britannia Est, Leagrave Rd, Luton LU3 1RJ	WAGNER
				FL	Report Nov '83	Westward Electronics, The Mill House, Tuckenhay, Totnes, Devon Totnes, Devon 080423 336/370	WESTWARD

REFERENCE



NAME	MODEL	RETAIL PRICE	NO. OF CHANNELS	SUPPLY VOLTAGE	SQUELCH	NB SWITCH	ANL SWITCH	MIKE GAIN	RF GAIN	STONE CONTROL	S/RF METER	S/RF LED R/O	HI/LO OUTPUT	PA FACILITY	EX. SPEAKER
DNT	HF 12/3	£47.55	3	BATTERIES	•										
KAISER	CBX40	£80	40	BATTERY	•					•		•			•
MAXCOM	7E	£49.95	40	BATTERY	•							•			
MIDLAND	75-720	£59.95	40	12VDC	•							•			
TANDY	TRC1001	£119		BATTERY	•					•		•			•
WESTWARD	PT2	£159.95	40	Int. Batt.	•					•		•	•		•

PHONE CHECKLIST

NAME	MODEL	PRICE	FREQUENCY	RANGE	RECHAR. BATT.	IN USE LAMP	INTERCOM	AUTO DIAL	EXTERNAL ANT.	SECURITY CODE	HANDS FREE
A-PHONE	TP125	£80	49MHz., 1.6-1.8MHz	230m	•	•		•			•
FIDELITY	WANDERER	£170	47MHz., 1.7MHz	200m	•	•	•	•	•	•	
FREEDOMPHONE	3500	£199	49MHz., 1.7MHz	200m	•	•	•	•			
HANDY PHONE	HP 1001	£199	49MHz., 35MHz		•	•	•	•	•	•	
MAXCALL		£116	49MHz., 1.7MHz	100m	•	•	•	•			•
MAXCOM	MCP150A	£89	49MHz., 1.6-1.8MHz	800m	•	•	•	•			
MAXCOM		£99	49MHz., 1.7MHz	200m	•	•	•	•			
PACER	7800	£149	49MHz., 1.7MHz	500m	•	•	•	•			
SUPERFONE	CT600	£115	49MHz., 1.7MHz	100m	•	•	•	•			
SUPERFONE	CT650	£199	49MHz., 1.7MHz	230m	•	•	•	•			•
SUPERFONE	CT505	£299	49MHz., 70MHz	1Km	•	•	•	•	•	•	

PORTABLES

TX IND. LIGHT	RX IND. LIGHT	CH 9 SWITCH	MIKE POSITION	COMMENTS	ADDRESS	NAME
					Solid State Electronics (UK), 41 Twyford Ave, Shirley, Southampton (Tel: 0703 7803 780335)	DNT
					A.T.M., AM House, 9A Old's Approach, Tolpits Ln, Watford Herts	KAISER
					Plustronix Ltd., Hempstalls Ln, Newcastle-under-Lyme, Staffs	MAXCOM
					Tame Way, Tower Bridge St, Walsall	MIDLAND
			FL	Report Nov '83	The Mill House, Tuckenhay, Totnes, Devon 080423 336/370	TANDY
						WESTWARD

The range of telephones and communications accessories available to the consumer is increasing rapidly. Not all equipment is approved by British Telecom — so look for the tag with the green dot if you want 'BT Approved' accessories.

CORDLESS PHONE

STANDBY	BATT. IND.	PRIVACY BUTTON	COMMENTS	ADDRESS	NAME
			Report Feb '84		A-PHONE
			Report July '83 BT Approved	Fidelity Ltd., Victoria Rd., London NW10	FIDELITY
			Report May '83		FREEDOMPHONE
			Report Aug '83	Thanet Electronics Ltd., Reculver Rd., Barking, Kent	HANDY PHONE
			Report June '83		MAXCALL
			Report Oct '83	Maxon Group, AM House, 9A Old's Approach, Tolpits Ln., Watford, Herts	MAXCOM
			Report May '83		MAXCOM
			Report May '83		PACER
			Report April '83	Superfone Communications, London NW2	SUPERFONE
			Report April '83		SUPERFONE
			Report April '83		SUPERFONE

ANTENNA CHECKLIST

Here's a brief intro

Name

All antennas have a number or name. Or both. Here we tell you what it is.

Construction

Most mobile antennas are made of stainless steel and most home based ones are made of aluminium. This is not always the case though. There are fibre glass mobiles

The Home Office specs for CB antennas are lean and bordering on the mean. Still within that basic framework manufacturers have come up with some good designs. This newly laid out antenna checklist should help you

NAME	ADDRESSES	MODEL	CONSTRUCTION						PRICE RANGE
			CONSTRUCTION	LENGTH	MAX. POWER	TYPE	MOUNT		
AERIAL SUPPLIES	Aerial Supplies, 9 Wilkes House, Bromsgrove Rd, Redditch, Warks. (Tel 0527 62620)	Silver Star	AL	1.5	100	B	Pole	D	
		Silver Arrow	AL	1.5	100	B	Pole	R	
ANTENNA INC		CBA 1500	SS				Various	C	
		12510 Telecomm Super Persuader	SS	0.9		M	1/2"ths	D	
ANTENNA SPECIALISTS	Antifence Ltd, Aylesbury, Bucks HP19 3BJ	MR511	SS	1.5		M	Mag	F	
		M710	SS	1.2		M	Mag	G	
		AS M125	SS	1.5	150	M	1/2"ths	C	
		AS M 128	SS	1.14	150	M		C	
		AS M131	SS	1.14	150	M	gutter	D	
		AS MR440	SS	1.2	100	M	mag	O	
		AS MT17B	SS	1.2	150	M	mag	O	
		AS M510	SS	1.2	200	M	1/2"	O	
		AS M2000	SS	1.5	150	M	1/2"	O	
		AS 9B12	SS	1.2	150	M	mag	D	
ANTLER	Shakespeare, Performance Antennas, Belton Rd., Marke Drayton, Salop	IC 20	SS	1 1/2		M	roof	D	
		IC 30	SS	1 1/2		M	gutter	R	
		IC 40	SS	1 1/2		M	mirror	E	
		IC 80	SS	1 1/2		M	mag	C	
		IC 15	SS	1		M			
ARCHER	Tandy Corp, Tans Way, Tower Bridge St, Walsall, W. Mid	21-904	SS	0.5	50	M	1/2" snap	D	
ARMSTRONG	Sexton Trading Ltd, Audley Ave, Newport, Shropshire	SAM 10	SS	1.06	1,000	M	surface	F	
		SAM 20	SS	1.06	1,000	M	surface with spring	F	
		TAK 10	SS	1.06	1,000	M	boot lip	F	
		TAK 20	SS	1.06	1,000	M	boot lip with spring	G	
		MAG 10	SS	1.06	1,000	M	with spring	G	
		MAG 20	SS	1.06	1,000	M	magnetic	G	
		BDY 20	SS	1.06	1,000	M	magnetic with spring	G	
PEC 20	SS	1.06	1,000	M	side & fold over & quick disconnect	G			
AVANTI	CB Radio Centre Ltd, 377 Kenon Rd, Harrow	AV 241 (Moonraker)	SS	1.22		M	stud	D	
		AV241 T	SS	1.22		M	trunk	F	
		AV241 M	SS	1.22		M	mag	F	
		AV241 MM	SS	1.22		M	super mag	S	
BADLAND	Badland, Rothen Ind, Ex, Providence St, Lye, Shropshire	B10	SS	1.22			mag	G	
BANDIT	Telecomms Ltd, 189 London Road, North End, Portsmouth, Hants	B10	SS	1.42		M	mag	G	
		B15	SS	0.61		M	mag	F	
		B15	SS	1.22		M	mag	F	
		B20	SS	1.42		M	mirror	F	
		B30	SS	1.42		M	drill thru	I	
		B30	SS	1.22		M	drill thru	I	
		B40	SS	1.42		M	various	D	
		B40	SS	1.22		M	various	O	
		B50	SS	1.42		M	various	D	
		B50	SS	1.22		M	various	D	
C. BRIT	C Box Unit 3, 5 East Lane, Wembley, Middx	Stingray Whiplash	AL	1.5	500	B	pole	G	
CT INTERNATIONAL	CT International, CTE (UK) Ltd, Unit 3, Micham Ind, Ex, 85 Streatham Rd, Mitcham, Surrey	MG27	SS	0.91		M	mag	C	
DIAL-A-MATCH	WTA Electronics Ltd, 111 Coney Rd, Halesworth, Norwich (Tel 0608 47894)	Rubber Duck	R	0.3		M	1/2"	P	
		630 (Cherokee)	SS	0.61		M		C	
		631 HBF	SS	0.51		M		F	
		631 SMF	SS	0.61		M		E	
		640	SS	1.22		M		E	
		641 HBF	SS	1.22		M		E	
		641 SMF	SS	1.22		M		E	
620 (Halfbreed)	SS	1.27		M		C			
DIGITEK UK LTD	178 181 Streatham Rd, Mitcham, Surrey	Falcon 27	SS	1.5		M	various	D	

duction to the world of antennas and what we tell you in our checklist.

and stainless steel home based antennas.

Length

The longer the better is always my motto. As long as it's not over 1.5 m. Otherwise it's illegal. We tell you the exact length.

Maximum power

This is given as a guide only. The law allows for a maximum

two watts. However, the higher the maximum power figure given the sturdier the antenna will be.

Type

It's no use buying a home base antenna if you want to use your rig from the car. We tell you which are which Mobile or Base. At the moment the number of mobile

antennas far outweigh the number of home based ones. But there are more and more home base antennas coming onto the market.

Mount

The majority of mobile antennas are held in place by a magnet - these are called mag mounts. Others are at-

to the boot or edge of the roof. Some are drill-through antennas which are just the same as normal car radio aerials.

Home based antennas are poles, tripods or gutter mounts. Tripods are free standing and gutter mounts are attached in a way similar to trunk or bootmounts.

Key:	C: £10 - £14.99	G: £30 - £39.99	AL - Aluminium	B - Base
Price Bands	D: £15 - £19.99	H: £40 Plus	FG - Fibreglass	
A: £1 - £4.99	E: £20 - £24.99	Construction	Application	Note: Prices are given as a guide only.
B: £5 - £9.99	F: £25 - £29.99	SS - Stainless Steel	M - Mobile	

NAME	ADDRESSES	MODEL	CONSTRUCTION						PRICE RANGE
			CONSTRUCTION	LENGTH	MAX POWER	TYPE	MOUNT		
DIXONS	Dixons Photographic	Harrier	SS	0.9	-	M	Mag	D	
HOT ROD 200	Hot Rod 200, Stateside Trading Ltd, Audley Ave, Newport, Stroudshire	FM UK	SS	1.27	-	M	Mag	B	
FREEMAN & PARLOW	Freeman & Parlow, Tything Rd, Alden Forest Ind. Est., Alcester, Warwick	The Invader The Thunderpole	AL AL	1.5 1.5	250 500	B B	pole pole	E F	
CB SERVICES	97, Crick Lane, Harrogate, N. Yorks HG1 3BD	Bullwhip Knuckleduster	SS AL	1.5 1.5	-	M B	various	C O	
MIDWEST		Dial-a-tune Dial-a-tune	SS SS	0.61 1.22	500 2	M M	various various	C O	
MODULATORS	Lee Walton Manufacturing, Parkside Works, Sandwich Rd., Sandwich, Kent	MOBILE LC MOBILE SC MOX LC MOX SC 934 BASE 934 MOBILE VHF MOBILE VHF BASE 27 L/C BASE 27 OX BASE	SS SS SS SS SS FG FG SS SS AL AL	1.3 1.3 1.5 1.5 1.5 1.5 1.3 1.3 1.5 1.5 1.5	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	M M M M M B M M B B B	various Pole Gutter Pole Wall Pole	C C C C H G C D D D	
MOTOROLA	Motorola, Tachly Rd, Stotfold, Hitchin, Herts	EC10BM	-	-	-	M	-	F	
OCT	Unit 1 Earlsfield Lane Ind. Estate, Grantham, Leics	K40 Z27	SS SS	1.4 1.45	500 200	M M	various various	G B	
PANORAMA	Panorama, 73 Wadham Rd, London SW15 2LS	CB27	SS	1.22	-	M	mag	B	
PRIODOW		KT40	-	1.5	-	M	trunk	C	
REVCO	Telecomms, 188 London Road, North End, Portsmouth, Hants	Revco	SS	1	100	M	various	B	
SHIRA		SYS 206M SYS 203C MA 62	SS FG M	1 0.75 0.91	-	M M M	mag trunk -	C C C	
SIRTEL	Sirtel, 24 Alton Sq, Or Maxwell Rd, Woodson Ind. Est, Hibernborough	GP Messenger GP Signal Keeper	SS SS	1.5 1.5	-	B B	clamp tripod	E F	
SMC	S.M.C., Runbridge Street, Totton, Hants SO4 4DP	Oscar Base CBA 11GP Oscar Base HVHS Oscar IICM Oscar IICE Oscar IINE Oscar IISE Oscar IMCAS	SS SS SS SS SS SS SS	1.5 1.5 1.2 1.2 1.5 1.5 1	-	B B M M M M M	mag foldover base 'pull-up' locking collar foldover base trunk	F F D B C C B	
SPYDER		Spyder	AL	1.5	-	B	pole	B	
TAGRA	CB Radio Centre Ltd, 337 Kenton Rd, Harrow	T40	SS	1.4	500	M	various	E	
THOROBRED	Oct 1, Unit 1, Earlsfield Lane, Grantham	251 227 Locktune	SS SS SS	1.5 1.5 1.5	-	M M M	various various	C B C	
WITCHSTICK	23M Motor Factors, Hill Farm Ave, Levensham, Welford, Herts, 05273-74645	Witchstick homebase	AL	1.5	-	B	-	E	
WTA ELECTRONICS	111 Coombe Rd, Melbourn, Newmarket, Suffolk	Wor Pole Wor Mag	AL SS	1.5 1.5	-	B M	pole mag		
VAN DINDT	Van Dindt, Knight CB Specialist, 208 Dunstable Rd, Luton, Beds	Audio King AKO 100	SS	1.5	2,000	M	-	G	

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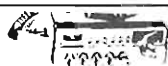


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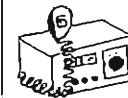
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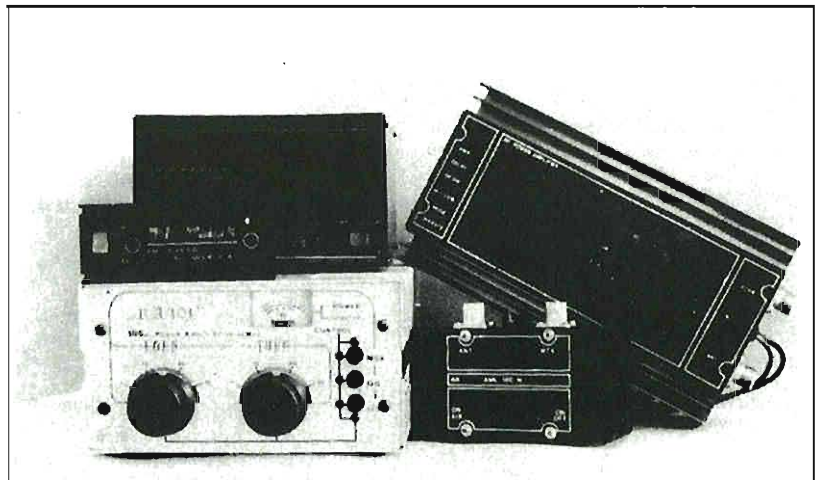
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