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A Christmas Wish

EDITORIAL

It is going to be somewhat difficult for husbands, wives and sweethearts to disguise one of your Christmas presents this year should it be a CB antenna. No amount of gift wrapping paper and Christmas tinsel will hide it's tell-tale dimensions. Those same tell-tale dimensions are revealed to all with or without Christmas wrapping paper as you bomb down the M1. So as always, we have to remind you that the use of CB equipment in the United Kingdom is still illegal. Our Christmas wish is that by next Christmas you will be able to open your Christmas presents knowing that instead of accessories you can now own real life sized rigs. Rigs manufactured possibly in the United Kingdom but more probably in Hong Kong, Japan, Singapore and Korea — Those unofficial member states of the E.E.C.

You will see that in our current issue we have given space over to the Government's Green Paper and if you were beginning to think that the good fairy was beginning to forget all good buddies let me quote from their summary:

"The Government is in principle in favour of the introduction in the United Kingdom of freely available personal two-way radio communication to be known as Open Channel. This would be of limited range and rather different in kind from what is thought of as "citizen's band" in other countries; but it could offer certain social benefits to people in all walks of life, quite apart from simply giving pleasure to those who wish to communicate on a two way basis with their fellows".

In September, when we published our first edition of CB NEWS we were proud that we were the first monthly magazine for CB enthusiasts. We were pleased that we were in the market place on a national basis providing a magazine which would be easy to

understand yet informative. We think that you will agree that whilst we made a few mistakes our magazine has lived up to its word as being the only publication which allows much of its content to be given over to the thoughts and comments of its readership. CB NEWS is your magazine. It now seems that everyone with a publishing company is bringing out regular CB publications which is great for the campaign but not too easy on the pocket. We will not take any stand, some may say that we spend most of our editorial comment and time sitting on the fence, but at least we are here for you. Your editorial contributions will be always welcome. So give us your support PLACE A REGULAR ORDER FOR CB NEWS WITH YOUR NEWSAGENT.

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CB NEWS advises all readers that to operate an unlicenced radio transmitter in the United Kingdom is an offence. It is also illegal to own, import or install such equipment. This publication should in no way be considered an incitement to own CB equipment prior to legislation.

THE EDITOR

In 1944, the OSS rushed agents into Nazi Germany to insure a speedy end to¹⁰ * the war; with them went a secret weapon that was the ancestor to the CB rig under your dash. Here are some of their exploits. . . .

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OSTENDE

On a cold night in November, 1944. Lieutenant Commander Stephen H. Simpson, Jr., sat huddled in the back of a British DeHavilland "Mosquito" bomber cruising six miles above the earth near Ulrum, in Nazi-occupied Holland. He listened intently to a radio in front of him, then picked up the microphone.

"Steve to Bobby. Steve to Bobby. Can you hear me Bobby?"

After a few moments came a voice through the static. "I can hear you Steve. Am all right." Simpson gave a sigh of satisfaction. The voice in his headset was the first positive indicator, the first sign that his unique groundto-air radio system. "Joan-Eleanor."

was working. Simpson, an officer in the U.S. Office of Strategic Services (OSS), knew he had latched on to a vital espionage tool. With the system, an agent on the ground, equipped with a miniature battery-operated transceiver, could speak with an operator in an airplane flying overhead. Intelligence could be transmitted quickly and efficiently, without fear of Nazi radio-directionfinding equipment. Simpson smiled to himself, his next plan already in his mind.

He would use the system to invade Germany itself.

At the time preparations were underway for the Joan-Eleanor project, in mid-1944, the war tide was beginning to turn; the Axis advance had been checked and the Allies mounted an offensive which some thought would end the war in a matter of months. In

Epino

June, Allied forces were ashore at Normandy and Patton was ready to make his dash across France. In the East, the Russians were mounting its largest assault to date, headed for Berlin. Americans were in Rome, pushing northward, and the invasion of Southern France was close at hand. From three sides, the Allies had closed in on Hitler's "Fortress Europe." The war was clearly in its final stages. Reah

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The OSS, along with British intelligence-gathering units, had played a vital role in obtaining information for military strategy. Allied agents had achieved considerable success in occupied France, gathering data on German troop movements and military installations.

Sending spies into Germany would be an entirely different matter. France was an occupied nation; the resistance movement was strong and there was great hatred of the Nazis. An agent in France never had trouble finding a "safe house" where he could set up his bulky radio gear to communicate with London. Members of the resistance considered OSS agents heroes, treating them royally. Germany, however, was the enemy; and few German citizens would have any doubt about what to do with an American agent. Communications, too, would pose a problem. There weren't many safe houses in which to hide radios, and Gestapo scrutiny coupled with direction-Per finding equipment would make the use of conventional OSS "suitcase radios" almost impossible.

For a while, the OSS delayed sending agents into Germany for fear of heavy agent losses and with hope that the war would soon be ended. But to cover all possibilities, it had a plan ready to go by Fall of 1944. It proved a smart move because in December German forces retaliated at the som Battle of the Bulge in a last-ditch

Intimate

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effort to keep the Allies out of the Fatherland. Overnight, hopes for an easy Allied victory were crushed. Fortunately, the OSS had gone ahead with its full scale

intelligence, then radio the information to an airplane which flew overhead at an appointed rendezvous time. In the plane, the message was captured on a wire



penetration of Germany a few weeks before the Bulge erupted.

It was in this atmosphere of urgency that the Joan-Eleanor (J-E) radio system was perfected. J-E overcame some of the problems of conventional spy radios. The OSS "suitcase radio", was powerful and portable, and had been used extensively in France. But it was too large to carry into a country where persons were routinely searched by Gestapo agents. The radio also needed an outside power source. The Joan-Eleanor transceiver carried by OSS agents was small (about the size of a modern-day 100mW. walkie talkie), light-weight, and easy to conceal. Its operation on 260 MHz permitted the use of a small, directional dipole antenna which



recorder (a forerunner of the modern-day tape recorder) to insure accuracy.

In the Fall of 1944, final preparations were made for the J-E missions. A number of British DeHavilland "Mosquito" bombers were obtained to fly the missions and the tail section of each plane was modified to accommodate a Joan-Eleanor operator and his equipment.

The Mosquito proved an excellent choice. A small, extremely fast aircraft, the Mosquito was constructed almost entirely of plywood. It had all the necessary speed and maneuverability to outwit the powerful German 88 mm. anti-aircraft guns which could punch a one-foot hole in an aircraft at a distance of several



The DeHavilland "Mosquito" was a key part of the Joan-Eleanor radio system. Short-range mini-sets on the ground could avoid German detection; recording equip-

would frustrate German radio detection equipment. And its selfcontained battery pack made it completely portable. An agent using the J-E system could gather ment on the speedy aircraft captured a message and had it in London within a couple of hours.

> miles. With all extra equipment stripped (including its guns), the Mosquito would have the range to fly to Germany and have fuel to spare for circling while talking to

the J-E operator on the ground.

Selection of agents for J-E missions posed problems. They had to speak fluent German, of course, but anyone posing as a German citizen was liable to be drafted. It was decided the best agents to infiltrate Germany would be those posing as foreign workers who had been admitted to the country on special permission.

Agents, after training, were sent to OSS holding areas to await assignments. There, cover stories were rehearsed, equipment was repacked and checked, and agents were treated royally by OSS personnel in order to build confidence. Finally, in November, the word came from London: Joan-Eleanor was about to prove her worth.

J-E operations in Europe began on November 10, 1944, when a 27year-old Dutch engineer named Anton Schrader checked his parachute harness, joked with an OSS officer about "a hell of a way to be going home," then jumped through an open hatch and into the night air over Ulrum. occupied Holland. His mission: to establish an underground railroad by which Allied agents could be transport ed to Germany.

Schrader, who carried the code name "Bobby," landed in a ditch, quickly buried his parachute and



The Joan-Eleanor clandestine radio system used by OSS agents in Europe, 1944-45. Earphones are at left, battery pack at right. Dipole antenna gives directional signals. Total weight: about 4 pounds.

set off for Ulrum in the midst of a driving rain. After spending a night in a farmer's barn, he made his way to the city and located a friend, Johannes De Woelf,* who provided him with lodging and contacts with the Dutch underground.

"Bobby's" first two attempts at using J-E were unsuccessful, and OSS personnel in London began to worry that he had defected to the Nazis or been captured. But on November 21st, Lieutenant Commander Simpson, operating a radio in the back of a Mosquito, heard 'Bobby's' voice in the static.

"I landed in a big ditch and lost about half my luggage," he reported. "I am ready to receive my friends." The pre-arranged code signal meant that "Bobby" had made arrangements for housing other agents.

"Bobby's" voice became clear as the plane homed in on the target area, and the agent requested supplies including tires for a car he had acquired from a member of the resistance, and then signed off. The system had worked perfectly. Over the next few weeks "Bobby" had several more J-E contacts and fed the Allies information on troop movements, German plans to flood the Polder River, and damage suffered during Allied air raids.

But his luck was not to last. Members of the underground had confused "Bobby" with another Allied agent, often called "Bobby of the seaman's house," who had defected to the Nazis. This agent would enlist the friendship of persons in the Dutch underground, gather information from them, and then turn them over to the Nazis. Predictably, he was a hated man. Early in February, members of the underground sent an assassination party to De Woelf's house. But the party was stopped short by Gestapo officials who arrested the would-be assassins, interrogated and searched them, and threw them in jail.

Then the morning of February 10, 1945, four armed men knocked on the door of Johannes De Woelf and asked for "Bobby." When De Woelf asked why, they thrust a



piece of paper in his hands. It was a letter from the leader of the Dutch underground.

"Permission to get rid of the man mentioned in your letter," it read. "Enclosed is a revolver. Carry out the execution. If necessary inform the local committee in Ulrum and ask for help. Make sure he is killed."

De Woelf stared at the letter in disbelief, sputtering that "Bobby" had always been a loyal member of the underground and would never think of working for the Nazis. But the officials would have none of it. "We need proof that the man is really an Allied agent," one of them said.

De Woelf went to the piano, opened the cover, and triumphantly held aloft "Bobby's" J-E equipment.

ment. "You've told us all we need to know," the leader of the group said. He reached for a small black wallet and flashed his identification.

"Abweir," Johannes De Woelf beaten senseless. He was lucky he'd been caught by agents of Abweir, the Nazi secret service. Had it been the Gestapo, Simpson said later he'd have been slaughtered."

The Germans decided to turn "Bobby" into a double agent. He went along, telling of his hatred of the underground, and he cursed the Americans for treating him poorly. He offered to work for the Nazis, using his J-E equipment to send misleading information to the Allies.

For several nights in a row, "Bobby" was taken to his prearranged rendezvous site and ordered to make contact while guards stood over him with machine guns. Soon he got through, and asked the Allies for some additional supply drops—coffee, cigarettes, and chocolate—which the German officers had requested. But there was something unusual about his messags.

"It's damned bad standing here in the cold," he radioed. "But this is a damned good place for a drop." OSS officers in the plane above him understood the message: profanity was an agent's code for indicating that he had been captured. From February to mid-April, "Bobby" sent false intelligence under Nazi control, but the Allies, who knew that he was operating under duress, disregarded it. Instead, they fed "Bobby" false information about Allied plans, which the Nazis eagerly copied down. "Bobby," in effect, had become a double-double agent.

"Bobby" gained the trust of the Gestapo by feeding them bits of truth (nothing they didn't already know) mixed with his outrageous lies. Soon they placed so much faith in him that he was allowed to cross the lines to deliver an unusual proposal to OSS in London.

The proposal called for a meeting between the OSS and Gestapo leadership. The Germans wanted to make a deal: they would turn over all information they had on Japan if the Allies would lessen the push on the Western front. Thus, the Germans hoped they would be able to devote themselves to defeating Russia.

Agent "Bobby" reached Canadian lines May 3, 1945, only four days before V-E day. His sixmonth mission had been a personal failure. But it had been a striking victory for the Joan-Eleanor project, and ample testimony to the usefulness of the device—particularly in the hands of the clever agent.

A long-hoped-for missionpenetration of the city of Berlin by American agents-was put into action on March 2nd, 1945, when **Czech agents Paul Land and Toni** Ruh of the OSS HAMMER team parachuted from a field near Alt Friesack, some 50 kilometers northwest of the capital. Posing as Czech tool-makers fleeing the Russian advance, the two were to gather information on industrial developments which would become targets for Allied bombers.

A personal undertaking of Lieutenant Commander Simpson, the HAMMER project had been meticulously rehearsed. The long distance of the flight had necessitated replacing the British Mosquito with the Douglas A-26, a speedy American fighter-bomber. Land and Ruh carried expertly forged documents provided by





OSS-London, including papers exempting them from the draft as skilled laborers and Nazi Party membership cards. Their cover stories had been carefully rehearsed.

The two agents, after taking a train to Berlin, found lodging at the home of Paul Land's parents, who soon had them in contact with several members of the resistance movement. They found Berlin a city torn apart by American Bombs. Dozens of raids in the last few weeks alone had left the city in shambles, with a third of all buildings destroyed.

The agents, along with their recruits from the resistance, wandered the streets of Berlin, eyeing factories and talking with soldiers. Most of their information was reported to OSS in a lengthy J-E contact on March 28th. 'Hammber reported that the Klingenberg power plant on Rommelsberg lake was fully functioning and was furnishing electric power to factories," the official project report stated. said: 'We "Hammer need medicine that soliders can take to become ill. We need four pistols and three knives."' The team went on to give location of the city's functioning railroad facilities, then asked the OSS to send regards to their wives and children, and signed off.

Three days later, Joan-Eleanor's major fault surfaced. The agents, having spent a night in a field waiting for a supply drop, awoke to the sound of voices. Their J-E contact point, it seemed, had become an army outpost! Without a conventional radio, there was no way the agents could contact London and change the rendezvous point.

The agents ran to a nearby woods and found a road back to town. On the way, an SS agent confronted them and demanded to see their papers. Then he pointed to the sack Toni Ruh was carrying on his shoulder.

"Open it," he ordered.

The sack contained the team's Joan-Eleanor set and some intelligence papers. But as a precaution, Ruh had put the items in the bottom of the sack and filled the rest with extremely dirty laundry. He slowly took out each piece of laundry and held it to the officer's face. Before he reached the bottom, the officer had had enough. We wrinkled his nose and roared off on his motorcycle.

At the end, the two agents were caught up in the desperate street fighting as the Russians entered the city. Their mission ended on April 24th, when they came upon a group of Germans defending a bridge from Russian advances. They overpowered two of them, grabbed their weapons, and began firing upon the others. The bridge was destroyed by an artillery blast, but the agents were cited for helping the Red Army; the next day they turned themselves in to the Russians. After interrogation, they were released to the U.S. Army.

The CHAUFFEUR Team—Success on a Milk Run

The team that eventually gave the Allies some of the most valuable information of the war, ironically, had the least promising beginnings.

Parachuted south of Nurenberg on March 31st, 1945, the two Belgian agents of the OSS CHAUFFEUR team made an odd pair. The elder, a 35-year-old veteran of the French foreign legion, was a former businessman who had fought for the Canadians on the Western front. His partner, a 23-year-old veteran of Belgian intelligence, had a keen knowledge of German operations, having once posed as a Gestapo agent in his occupied homeland. The two were to pose as foreigners searching for work and report back on industrial developments and troop movements.

At first, it appeared their mission would be a dreadful failure. After they had picked up their supply drops and buried their parachutes and jump equipment, the two agents went quickly to a pre-arranged safe-house in nearby Regensburg. They arrived to discover that the owner had moved, and the new resident threatened to turn them over to the Gestapo. Shortly afterward they were arrested by the Volkssturm, the German home guard, and tossed into a barn to await interrogation the next morning. Fortunately, the OSS documents section had done its job well; the Germans found nothing amiss and released the agents. They took to the woods and lived on their rations, then walked into the city when their food ran out.

That proved to be their lucky break. When they approached a milk-truck driver in Regensburg and asked for a bottle of milk, the driver revealed that he was a Belgian POW forced to work at a German dairy. The agents climbed into the truck and rode to the dairy, where nine other Belgian and French POWs labored under the sluggish eye of. a German sergeant. The agents slipped into the basement of the dairy, where they established an intelligence headquarters.

The CHAUFFEUR team was different from the other loan-Eleanor missions in that, in addition to its J-E equipment, it had managed to get a standard "suitcase radio" past the eyes of German officials. The combination proved especially successful. With the help of the POWs, the agents set up the "suitcase radio" in the basement of the dairy-the first permanent radio installation by OSS agents in Germany-and established contact with London. Each morning the younger agent rode along on the milk trucks and. through idle talk and observation. gathered military intelligence. The "suitcase radio" helped the agents to arrange successful J-E contacts. When a potential rendezvous site was overrun, or a specified time was no longer practical for J-E contact, the agents contacted London and new arrangements were made.

CHAUFFEUR's most useful intelligence, though, came directly from the German high command. One of the agents met up with two French girls who had been forced to work in a brothel frequented by German officers. The agent asked the girls if they would like to work for the resistance; they readily agreed. While the girls serviced the customers, the agent sat in a closet, at a small lighted table. and transcribed the boastful tales of military conquests as the girls listened in mock admiration. One offhand remark by a German general proved to be particularly valuable; it was relayed to the Allies in a J-E contact on April 12, 1945: "The General Staff is at Regensburg, Hotel du Parc, Maximilianstrasse. The street facing the station, first house on the left. In permanent residence are at least four to six generals.

Over time the CHAUFFEUR team provided the Allies with information about supply depots, troop movements, and locations of air squadrons. Regensburg came under Allied control shortly thereafter, and the two Belgians were taken to London—having accomplished a great feat in the face of terrible danger. They owned it all, seemingly, to a change of luck.

Final Missions

As Germany collapsed, there was no doubt that espionage had hastened the country's demise. And saved hundreds of lives on the battlefield. Agent losses had been low: Of 200 agents dropped into Germany, 36 were reported as killed, missing or captured.

CHAUFFEUR Besides and HAMMER, there were two other missions successful J-E in Germany, PICKAXE, dropped into Landshut near Munich, reported extensively on troop movements and munitions centers. LUXE I, dropped into Weilheim in Southern Bavaria on April 4th. 1945, radioed details on an aircraft works where captured Frenchmen made parts for the German Me-252, then holed up in a church steeple in the village of Unterstillern until the area was overrun by American tanks on April 29th.

In all, hundreds of productive missions had been flown by American and British bombers to targets spotted by J-E contact agents. The project, had it been developed earlier, might have played an even greater role in securing Allied victory—but some of its most important implications were to surface after the war. In a short five years, the OSS had OUR photograph shows Al Gross holding one of his early designs of radio sets (the other photograph shows the internals of the set).

Al is a specialist engineer on the staff of Parsons Peebles — Electric Products inc., of Cleveland, Ohio the recently acquired Company which comes under the managerial control of Parsons Peebles Motors & Generators.

It is no exaggeration to say that Al Gross started Citizen Band radio in America which developed



from his early pioneering work on portable two-way radio and accelerated by his involvement with the USA Army in World War II on improving communications within combat forces and for counter-intelligence work.

He holds Certificate No. 1 issued by the USA authorities for the use of Citizen Band radio and has travelled the world meeting senior government representatives and discussing the implications of introducing CB Radio. grown from a disheveled bunch of intelligence operatives into one of the most sophisticated intelligence operations in the world. Projects like Joan-Eleanor, which foreshadowed the age of electronic espionage, were to have an important role in the coming Cold War.

On June 1st, 1945, President Harry S. Truman circulated a memo among members of the OSS: the office was to be terminated as of September 30th. Seemingly, the Joan-Eleanor system was to become a part of history, locked away in the vaults of the newlyorganized CIA until such time as the organization saw fit to release it to the public.

But that was not to be. In July, 1945, an article in the Saturday Evening Post by FCC commissioner E.K. Jett outlined the possibilities for a new Citizens Radio Service, whereby an American citizen over the age of 18 could obtain a license to operate a lowpower VHF transceiver. The seed of his idea had been a meeting about a year before with a Cleveland electronics engineer named Al Gross. Gross, an engineer on the Joan-Eleanor project who had done some earlier experiments with VHF radio, had talked briefly about his work on the project, and Jett had been intrigued.

On September 10th, 1945, the FCC issued an experimental Radio Station Construction Permit, call sign W8XAF, to Al Gross. The permit authorized him to build an experimental radio, on "frequencies that may be assigned by the Commission's Chief Engineer," for submission to the FCC as a pilot citizens radio project. Gross' radio, submitted for type

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approval the following May. operated on 465 MHz. (while Joan-Eleanor had operated on 260*), but the similarity between the two systems is striking. The FCC, in granting type approval to the transceiver, stated that the possible uses for the Citizens Radio Service were "as broad as the imagination of the public and the ingenuity of the equipment manufacturers can devise." Joan-Eleanor, which had played such a crucial role in warfare, had found her place in peacetime.

We extend our thanks to AI Gross for allowing us the opportunity to publish the above feature.

NEXT MONTH

In our next issue we tell you of Al Gross' recent activities in Europe together with the reproduction of a letter which was written to the Rt. Hon. William Whitelaw M.P. offering invaluable technical help in the field of CITIZEN'S BAND RADIO. Similar letters were sent to Whitelaw's counterparts all over Europe who accepted the free offer of assistance from Mr. Gross. Mr. Whitelaw however did not even have the courtesy to reply. Also in our next edition we publish a transcript of the War Report of the Office of Strategic Services, only recently declassified and highlighting the use of Mr. Gross' invention.

PLACE A REGULAR ORDER FOR CB NEWS TODAY !!!

Readers Paper Work · · ·

MODEL AIRCRAFT FUSS

In your Headlines in your first issue you state in block capitals, BREAKERS COULD CAUSE DEATH CLAIM. This is utter nonsense as breakers pull the big switch when they are near where models are flown. Modellers themselves are the danger. The Grimsby Evening Telegraph had a story on Monday October 20th that a radio controlled model had crashed near my home. When the modeller was found it was confirmed that he had just bought the kit and was trying it out. It went, in his own words, "better than I expected" and he lost it. In my opinion this is where the danger lies not from a group of people that have found an affective way to enjoy themselves. And, after all the folk that I know are into CB are responsible persons who would not put life at risk for their own enjoyment.

R. F. HARRISON, Grimsby

EDITORS COMMENT: We have had many letters along

CB STICKER OFFER Let Smokey know that you've got a rig in your vehicle. Advertise the fact that Buzby can confiscate your equipment by sending for bumper stickers from our new range. Choose from the following saucy slogans:-1. Got My Pedal to the Metal. HIS IS 2. CB for GB REAVER SPOTTER 3. I am a CB **Brother Trucker** B COUNTR 4. CB 4 Me 5. I can't wait to modulate, GOTAN legalise CB HI Radio PEDAL TO THE MATTAL 6. CB Beaver I drive my truck spotter like the Rubber Duck 7. I drive my truck like the Rubberduck 8. CB rules the airwaves Keep the bugs off your glass 9. CB Bear hunter Hite and the bears off your ass 10. Keep the bugs off your glass All the above stickers are approximately 10" by 2" and are self adhesive crack-back style. Or, you might like to choose from **Б.В.4 Ме** our glitter range:-11. CB for UK 10-4 12. This Is CB Country C.B. FRULES THE AIPWAVES 13. UK CBers C.B.Bear Hunter (All the above are priced at 35p each plus GH. a stamped addressed envelope or any three for a £1 including post and packing Send your order to: **CB** News Stickers, 115a Radford Road. Hyson Green, Nottingham. a la cara

Cheques and postal orders made payable to "Crofts". these lines but it would appear from the letter published below that your views are not shared by the Ashton Model Aircraft Club!

MODEL MAKERS FURY

After reading your magazine we, at the Ashton-u-Lyne Model Aircraft Club, commend you on your responsible and realistic attitude towards CB, but, as a club, we must record our complaints to CB on 27 MHz. As some of the 'breakers' seem to have had no complaints, how about 120 complaints, one from each of our members, to be going on with.

Because of the illegal activities of those using 27 MHz the club has found it necessary to purchase £200 worth of monitoring equipment, giving a visual display of the section of the 27 MHz band used by modellers. Consequently we have conclusive proof that models have been caused to crash or suffered serious interference by CB transmissions. As a result of this interference, to differing degrees, our members are becoming actively anti CB.

Take the example of a member who had spent over three months building a superb scale model, installing the best radio control equipment he could find and being caused to crash by some 'person' pressing the 'big switch' instead of pulling it near our field. He then contacted the G.P.O. and was told, "If you can find who is responsible we will take action". Our member, who has had in excess of £100 worth of radio and model spread all over the local flying field, is not going to be too choosey which 'breaker' he gets - he is only human.

There, of course, is a compromise. You will note that we only monitor the section of 27 MHz band used by modellers, which in CB terms is roughly



channels 1 to 25. Therefore we suggest that the CB fraternity use the other 15 channels. We realise that we are asking for the lion's share of the band but with our equipment it is not as easy to change channels as with most CB sets. We could state that we are legal users of the band and demand CB'ers move over, but waving the big stick never did anyone any good. So we are asking the present CB users to move up the band, especially during day-light hours.

Some of the more technical may say that the frequencies between channel 1 and 25 do not always coincide, this is true but out of the 12 model radio control channels we use, at least 7 are spot on CB channels. Plus the fact that the modelling fraternity have agreed on a minimum of 25 kcs spacing between our channels for the sake of safety. Therefore as all of the model channels are considerably less than 25 Kcs from the nearest CB channel and when you consider that our transmitters are limited to a maximum of under 1 watt output by law and the output of CB sets are unlimited, the consequent spacings are too close to be safe, as our experience is proving. The area around CB channel 19 is the worst.

The present situation where the authorities are hounding the illegal CB users, surely is bad enough, and to bring down the wrath of 80,000 modellers as well would make things immeasurably worse. Therefore compromise and move over a bit as the modellers of Britain whole-heartedly support the battle for an exclusive CB frequency and will continue to do so as long as we can operate without CB interfering with our transmissions.

Yours sincerely, J. F. RICHARDSON (Assistant Secretary) Ashton Model Aircraft Club

EDITORS COMMENT:

I am sure this isn't the last letter we will have in connection with 27MHz and model aircraft. Oh no, it's not as we hand you over to Sidewinder ...

ANOTHER STONE ON THE FIRE

I think your mag is a big 10-4. You may have noticed that my 10-20 is local. I am pleased to see CB being brought to the public's attention and to show what CB is all about and how it saves life in the case of an accident.

I know model aircraft are also on 27MHz and they say they have used this frequency longer than CB but surely it is more easy to repair or even to rebuild a model aircraft than it is to rebuild a human body or save someones life. A few winters ago people in snow covered cars and trapped in with no way of raising help needed CB. So lets have CB now before more life is lost.

Keep the big one between the ditches and the little one in your britches.

SIDEWINDER, Heanor

EARLY WALKIE TALKIES

I was very pleased when I saw your first issue of CB News and found it most interesting to read. I fully support the movement towards the use of CB in the UK.

I own a set of walkie talkies and would like to know more about them, are they legal? what range? I will write out what is written on the back of the transceiver: "The manufacturer of this unit hereby certifies that this device complies in all respects with the requirements of part 15 subpart E of the rules of F.C.C. when used with a primary power of 9 volts D.C. and A single element antenna of 5ft maximum length and crystal controlled Channel No.9 Frequency 27.065 MHz"

It seems that they are made by Juliette and fairly old. I hope you can help.

C. BOTTOMLEY, N. Humberside



EDITORS COMMENT:

The equipment you refer to is in fact illegal in the UK although approved for use throughout the United States and other parts of the World. The penalties for using unlicensed walkie talkie sets are just as severe as for illegal mobile based rigs.

JOIN THE CAMPAIGN

You can help the campaign to make 27 MHz legal by joining NATIONAL 10-44 (the association for Radio communication enthusiasts). By marshalling under our banner we will become one voice, and be heard. You will receive badge, membership card, regular newsletter and details of how to help our campaign. Send NOW for details to: NATIONAL 10-44. The Limeburners Arms, Park Lane. Kirkby in Ashfield, Notts.

Clubs send for details of our affiliation scheme. Absolute discretion to all replies.

ARMOURLITE M16, National 10-National 10-44, Notts.

CONGRATULATIONS

Many thanks and congratulations on the first issue of CB News.

If success is to continue we do need facts. Not the ideas given in the article, "Potential Use In The UK". Salesmen, truck drivers, taxis etc who are already catered for by a radio telephone system far more sophisticated than anything in the USA. It is much cheaper too and in the case of vachts and similar vessels equipment can be hired by the day. Indeed this, together with PCM paging systems is the real reason for the reluctance to introduce CB into this country. Perhaps what is needed by CBers

is the need to accept the need for training, not perhaps to the standard of a "ham" but an acceptance of reasonable procedures and a rejection of the often sadly American ideas too prevalent amongst the present illegal breakers.

Our dear cousins, the radio hams do have a marvellous series of competitions for fun and training, they also have some pretty efficient emergency systems fully integrated with the police and armed services. Couldn't we learn a thing or two from them?

Best of luck with the magazine.

M. PRICE, N. Yorkshire

EDITORS COMMENT:

We feel that our editorial and contents are much improved now and will continue to keep CBers in touch with all happenings providing you, our readers continue to give us both information and support.

THANK YOU AGAIN

Congratulations on your first issue which I have just read one or two errors but let's hope these are only teething troubles.

I like what the magazine stands for and your efforts to get CB legalised have my support. I haven't got a CB transmitter but I have a receiver that will pick up CB and I do a fair bit of listening. The truck drivers seem to use their CB radios sensibly and I reckon it does a bit of good. A lot of the local breakers can be heard at night indulging in fairly harmless local chat, However, I have heard a few obscenities (the source of which I don't know) and this worries me for the future of CB. I'm no prude having served six years in the Army but I object to barrack room language on the air when my wife and daughter are listening. If we are going to

get a legal CB system some discipline on the air is essential and perhaps you can make the point in a future issue.

Looking forward to your next issue.

JAMES, Cheshire

EDITORS COMMENT:

We have had an increasing amount of mail in connection with discipline on the air. Only recently, the fire chief in Leicester complained nationally that the girls operating their own wireless communication equipment were having to listen in to CB users' obscenities. Track 'em down good buddies and tell Buzby. This is the only way to ensure a growing good reputation.

JOIN OUR CLUB

We have in our club around 400 members to date and increasing every week. We hold our meetings at the Earl of Doncaster Hotel each Thursday at 8pm. All are welcome. Just contact me, Secretary, D.V.B. on Doncaster 52266. I will be only too pleased to help or to give any information I can.

Thank you for a great mag with a glossy front that can't help but draw attention to CB Radio. I think the Government are keeping things very quiet regarding making CB-Open Channel legal. The more people we can educate the better. We down, we gone.

V. LOWE, DON VALLEY BREAKERS, Doncaster.

UK JIVE TALKING

I very much enjoyed the first issue of CB News which was clear and informative. Yes, I think we need CB Radio in this country.

WHY JUST WATCH TV WHEN YOU CAN WATCH THE WORLD?



Whilst we are still arguing about 27 MHz in the United States communications are well advanced at a domestic level. Stateside you can now have a satellite tracking disc to receive television pictures from all over the world. I wonder when we will start campaigning for CB TV for UK.

The alternative seems to be an influx of illegal radio sets irresponsibly operated (anything carrying a £400 fine has got to be irresponsible.) However, the mind boggles at the thought of the mountain of red tape that will be involved. Registration fees, licences, 18 digit call signs and other associated bumph. Good grief, they might even bring it into the driving test: "And now madam, I'd like you to call your good buddies for a Smokev report

before reversing round this corner keeping an even distance from the kerb".

If enough of us survive the machinatios of officialdom I look forward to the evolution of an English CB language. Certainly, the American technology is colourful and entertaining however, having diligently rehearsed, I regret to report that a lot of it just doesn't sound right in a Black Country accent. (I tried talking American but it merely sounded as though I had adenoid trouble). It would be a shame if those first official CB exchanges sounded like cowboy night at the Wheeltappers and Shunters Social Club. Perhaps readers could come up with a few ideas in readiness for the great day. I have a few suggestions of my own based on existing slang eg:

Jam samdwich:— motorway police patrol car

Big Ears:— policeman listening in to CB broadcasts

Riding Shotgun:- back seat passengers

Maternity Benefits:- children and so on.

Seriously though the benefits of CB are many and varied and for once I think we can learn a lot from our American neighbours.

SUE SKINNER, Telford

EDITORS COMMENT: Come on readers lets have your contributions for British CB jive.



READERS PAPERWORK SHOULD BE SENT TO: THE EDITOR, CB NEWS, EMPIRE HOUSE, EMPIRE ROAD, LEICESTER.

When writing to CB News, enclose a stamped self-addressed envelope if you require a reply.

We are pleased to hear from CB societies all over the United Kingdom and we certainly look forward to reporting about your activities.





Accessory Shop

J.W.R. back 'Breakers' with stock

For C.B. Radio to really start moving in the U.K., several things need to happen. The legal angle needs to be finalised for a start, but one of the other areas is the need for someone to come in wall to wall with C.B. goodies.

This has now happened, because J.W.R., Europe's largest supplier of custom accessories and American Auto hard parts, have become the U.K. stockist of the complete range of C.B. radio accessories made by the Oklahoma based Mr. C.B.

Mr. C.B. is part of the Trice Electronics group and they have been making C.B. Accessories for 5 years. Their range is probably the most comprehensive available in the U.K. at present, and includes many useful items not available from other manufacturers. A total of about 130 different accessories are listed, all competitively priced. From 3.5mm phono plug right through to 5/8 wave fibre glass twin truckers. The Lightning Rods have a very attractive price tag.

As you would expect from J.W.R., quality was a prime consideration in the selection of the Mr. C.B. range. They are all precision engineered with strict quality control and performance test standards. The range can be merchandised easily, so shops all over the U.K. can handle the product with relative ease, so making it more likely that your local supplier has stock. Most of the carded items have instructions on installation and use printed on the reverse of the card so new 'Breakers' can easily 'copy'. There's even a set of five C.B. manuals available.

Contact J.W.R. at their work 20 for more details. You'll find them at Woolfe House, Norse Road, Bedford. Tel: 0234-41441 or at Staples corner on the Big Circle, Smokey Town, N.W.2. Tel: 01-450-6231. Threes and eights. Don't feed the bears. Bring it on back.

CB SONG ON DISC

Cavalcade Records have produced "C.B. Independence" which has been adopted by The National Committee For The Legislation Of Citizens Band Radio for the legalisation of C.B. Radio in the United Kingdom.

Right from the start Cavalcade decided that any project they were going to get involved in would have to involve the making of an authentic record which would stand up on it's own



The producer of the record is Ron Liversage, a well known figure in the music industry and country music for over ten years. In that time Ron has been associated with many important country artists and indeed administers the catalogue which contains compositions by one of the foremost country artists in the world i.e. Don Williams.

Ron decided to 'beef up' the sound of 'Roadrunner 10-4' (aka Chris Roberts Band) by introducing a pedal steel guitarist — the legendary B.J. Cole, and in addition one of the foremost female vocalists in the U.K. did agree to do the back up vocals on the understanding that she would remain anonymous. Richard Town, who is also GLC member for Bexley. Erith and Crayford, joined the group for this session and plays rhythm guitar.

However, sound and ability alone are not good enough in the competitive record market, other factors and especially sleeve design are of major importance. Therefore, great care was taken in designing a sleeve which would be both eyecatching and at the same time synonymous with the product which it is promoting i.e. C.B. Radio. Therefore, one of the foremost sleeve designers, B. Clough was brought in to design the sleeve for the project.

Even all these factors cannot guarantee a hit record and now it is hoped that the public will respond to both the cause of C.b. and also to the record.

The results are there for all to hear — a truly outstanding and credible country record. In your record shops now, or send £1.30 to Cavalcade Records, 138 New Bond Street, London W1Y 9FB.



Throughout the United States there are CB "Good Buddy" Societies located in most major 3/ towns and cities, and it's the 21 intentions of CB News to both link up with these organisations, and later next year to visit them. So if you would like to "explore the roots" of CB, why not come on this, the first CB News excursion to the United States. Our provisional itinerary - set for the second two weeks of September 1981 - is located around the "deep south", so come with us and join up with the rednecks who have made CB what it is today.

DAY 1 We depart London and fly across the Atlantic on a 747 Jumbo directly to ATLANTA, Georgia. During the flight you will have time to familiarise yourself with your tour escorts and fellow CB'ers. There's a chance to enjoy an inflight movie, and a full meals and beverage service will be included. Our arrival in Atlanta will be scheduled for early drive north to Chatanooga to afternoon when our group will arrive in time for an early lunch be transfered to our first w stop. Whilst in this city — the Holiday Inn hotel. In the evening we'll have a reception with the local CB chapter.

NEWS'err TO

DAY 2& DAY 3 Two full days to enjoy the state capital. There will be the opportunity to visit the giant Coca Cola factory to see just how Coke is manufactured - we understand the work force has it's own CB society - and you'll see the world's first satallite TV Station, "The Super Station", home now for Radio 1 DJ Kid Jensen. We'll include a guided City sight seeing tour plus the chance to visit "Six Flags over Georgia" - a massive amusement park, and it's these parks the American's excell with, so lets all be kids again for the day. There will also be evening functions with local CB'ers.

DAY 4 We leave Atlanta and

drive north to Chatanooga to arrive in time for an early lunch home of the famous Choo Choo - we'll take you to the railway station which in 1880 was the culmination of the rail link between the North and South. After lunch we'll take the incline railway to the top of Look-out Mountain to view the sight of the legendary civil war battle. We rejoin our coach transportation at around 4.00pm to continue our journey to Music City USA -NASHVILLE Tennessee. Evening free.

U-S-A

DAY 5 & DAY 6 We commence our stay in Nashville with a guided sightseeing tour visiting the theatre once known as the Grand Ole Opry, now called the Ryman Institute, and the Country Music Hall of Fame. You'll see the stars homes, and the trip will finish at Opryland — a theme park with lots of

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shows and spectaculars. Opryland now boasts WSM TV's "Grand Ole Opry" theatre, and here you'll have the chance to see the taping of an Opryland TV show. There will be a CB'ers treasure hunt with the local chapter the following day.

Wat

ietta

DAY 7 Today we are MEMPHIS bound, and federal regulations at the time permitting we'll ensure that our journey includes communications with the area CB radio operators from our coach. On the way we'll stop at Radio Shack super store. Our arrival will be just in time for lunch. Afternoon and evening free.

DAY 8 & DAY 9 Lots to see and do in Memphis. Take a guided sightseeing tour and visit Beale Street — home of the Memphis Blues, and take a trip on a real stern wheeler along the mighty Mississippi. For those who wish it there's an Elvis Presley tour which finishes up at the late star's mansion Graceland, where he and his family are buried. Libertyland is yet another amusement park, and there will be a farewell party on the last night in association with the local CB group — that's if you can still stand upright after our tour of the famous Slitz Brewery.

DAY 10 At lunch time we reboard our coach for a short transfer to Memphis airport and our flight back to the U.K. via Atlanta. Dinner will be served inflight during our transatlantic journey.

DAY 11 Our arrival back into London will be around 10.00am bringing our first spectacular CB NEWS USA visit to a close. Isn't it about time all Breakers deserved a break? Come on, and join us.

No finalised itinerary will be published until airline prices are finalised for 1981, but if you would like further information please write to us enclosing a stamped addressed envelope. Those readers who enquire immediately will be given first opportunity for space on the tour. We expect the price to be around £490, and that should include flights London-Atlanta, and return Memphis-Atlanta-

London; coaching Atlanta-Chatanoogo-Nashville; and Nashville-Memphis; and 9 nights first class hotel accommodation at Holiday Inn locations throughout, based on two persons sharing twin room accommodation. All rooms with private bathroom, colour TV, telephone and air conditioning. The temperature in September in this area will be between 80 and 90, so you'll need the air-conditioning and the hotel pool - standard at all our locations. The price will include the services of experienced tour escorts. Not included - meals, (except for those served in flight), telephone calls and personal items such as loundry, drinks etc.

Hardwick

Send for full details now by writing to CB News, enclosing a stamped addressed envelope. Address your letter to:

USA VISIT, CB News, Empire House, 6 Empire Road, Leicester.

COPYING THE MAIL

'The Radiogram Kid' breaks into CB News

If you think that things are a bit quiet on the C.B. front, take heartl! Many an electronics manufacturer has Large Plans Laid, and the day that the Government says O.K., the stuff will start leaving the factory. One of the retail trade papers played a merry jest on its readers recently, by showing a highly technological production line busy churning out 'C.B.'. However, readers, told to look at the end of the magazine, were informed that C.B. stood for Circuit Boards which are as common as old valves in a radiogram sale. My guess is that, when the Government Gaffer shows the green light, Japanese car manufacturers will have a sales campaign offering free C.B. rigs in their new models. Beat that, Mini Metro, if you can'l Why is the Government delaying (at least, just a little?). Maybe some of those clever chaps in the Home Office think that C.B. stands for Channel Bridge, and are currently standing on those legendary white cliffs, sticking moistened fingers in the air - to see if the wind is too strong for the structure. Remember, in the good old U.K., the phrase 'it will be given careful consideration' can mean 'we will let it steam away in the In Tray for some months - and maybe folks will forget'. Or maybe those hardworked government advisers, bless them, have listened in to some of those U.S. truckers and are still trying to get an English translation. Anyway, be patient!! Good times are comingII

* * *

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A lot of nice folk will benefit from Open Channel. Shut ins, blind

folk, and those who have problems about going out. Quite a lot of people have 'agoraphobia' (a stress ailment that includes attacks of panic when out in the open). Open Channel would be a godsend for these people (so if you know a shut-in, tell him/her about it, and this magazine). If you feel à little stressed yourself, reflect on the problems facing a railway guard the other day, faced with the problem of getting a message to the authorities without stopping the train. He solved the problem in a true British Technological Way, by writing a message on a piece of paper, fixing it to a potato with a rubber band, then hurling it out of the window, as the train went through a railway station. A spokesman for British Rail interviewed later on B.B.C. Steam, agreed that it would be nice to have two-way radios on trains, as is the case in other European countries, but 'cash limits' prevented it. At least, no Open Channeller is going to hurl a King Edward spud through the ether - not unless he is in training for a job with British Rail. We mention this to show that any presumed antipathy towards Open Channel is probably imagined. When anything resembling real progress appears on the British scene, it is naturally put in guarantine, and, if necessary, painted battleship grey.

I reckon that the driving test will, one day, include examination of the applicant's competence with a C.B. rig, including his/her ability to use it without taking either hand off the steering wheel. So keep your teeth in good repair. The Highway Code will include a section of Truckers' Terminology that you'll just have to know, if you want to drop those bright L plates. Suitable terms for your driving test, as you try to

EQUIPMENT FEATURED

The equipment featured in this issue is of course not legally for sale in the United Kingdom and the use of such equipment is still on offence. The illustrations in issue number 3 show the type of CB equipment currently on sale in the United States. At this point it should be stated that the electronics industry Stateside favours an impressive arowth with regard to the manufacture and marketing of cordless telephone equipment and again it should be said that such equipment is also not legal in our country.

please the examiner, will include: "Say, I ain't no tailboard artist" (i.e. someone who thinks he drives perfectly); "I sure am a Mister Clean" (very cautious driver) and "I always wuz a Rolling Road Block" (driver going under speed limit and holding up other traffic). If you've got a driving test ahead, you might try the phrases when things get a bit tight. It might work. On the other hand, you might get the Sign Off, "Thanks Peg Leg - you're plain C.B." Stands for Confined to Bicycle; a Peg Leg, as you know. is a driver that breaks and accelerates in such an erratic manner that the traffic gets discomknockerated, as Ken Dodd would say. No CBer should be without his tickling stick, which bound with copper wire makes a great antenna.

* * *

Strangely enough, the Radiogram Kid used to work with long distance lorry drivers in the old days — not merely before C.B., but before C.C. (Compact Cassette). They used to meet up near Oxford, and then tear away, in a convoy, in a sort of competition to see who was nabbed by the police. One of the lads lost his licence that way, and was put in charge of a store back at the firm. When the place caught fire, one day, and he fled from the flames, he earned a Hero's Reward when he plunged back into the black smoke - to rescue his bicycle. The Radiogram Kid had to figure out where the drivers had dropped their loads of furniture (they could not always remember where!) and having Open Channel in those days would have solved a whole lot of trouble and trying to figure out their bad handwriting. And those more wayward blokes who gave lifts to ladies of the road 'so they could have someone to talk to' could have had no excuse more's the pity. One chap I spoke to, says that the firm now has base-to-driver radio, and it is a great advantage, because, he said, "I know what I have left behind, and should have had on, before I get back". I always thought that truckers were the silent type. The vocabulary just shows they're poets all the time. Incidentally, when folks asked how I got the name, I explain that I used to be a salesman in a smart hi-fi store, and had a speciality in selling radiograms. One day, I was having trouble with a customer who insisted loading a radiogram in the back of his British Leyland Music-Mobile. Finally, we got it in, mainly by wedging the thing diagonally across the car, and wedging his ma-in-law in the back. Still don't know if he ever got it out again. Fellow looking on at all this shoving asked if I was fixing the customer up with C.B. "Yes," I said. "Can't Budge".

A doctor chum of mine expressed interest in C.B. as he gazed into my ears the other day. After agreeing that my ears were still okay for stereo, he declared that Open Channel would save him a lot of time — and that he could pass along important messages during his rounds. Nice to know that those clever gents in the medical profession are for it, and



since a lot of their time is taken up with folks who feel depressed. C.B. in the home would also save some of their time in prescribing those peaceful green pills. Which reminds me that the Radiogram Kid found a good line in a new U.S. book on C.B .: "Neither the Federal Communications Commission nor the radio dealer ask whether the prospective licensee or buyer is sane. Unfortunately, some are not." I'm not all that sure a crazy man would tell you he was not sane, if you asked him. Any man who works in retailing long enough knows that some folks are quaint; inclined to pour detergent into their music centre 'to give it a good clean', or to leave their cassettes in the sun window of their cars on a very hot day. If you want a good quote for your Open Channel conversations - when you're allowed to start them stick with this column. We've got plenty. That kindly old brainy gent, Professor C.M. Joad, came to little old Loughborough some years ago, and gave his views like this: "Men of genius by the

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dozen, men of talents by the hundred, laboured in order that radio might be. With what result? The ultimate ether vibrated to the sound of frantic music and wireless waves transmitted such announcements as, 'Ladies and Gentlemen, Sid Atkins will now sing, 'Tripe and Onions'...'' And Professor Joad hadn't even heard Tony Blackburnl Well, you don't tune in to the truckers' C.B. to get a good intellectual conversation, but they sure give plenty of good advice.

* * *

Maybe we need to recall that C.B. (or, as we may learn to call it, Open Channel) will probably be as popular in the home, farm or school, as on the road. And, apart from the basic terms, you don't need to know all those florid terms to join in. British folks who go to the good old U.S. of A., and use C.B. for the first time, get involved fast, and, once grasping the elements of 'breaking' and signing off, join in. An old chum used to say he avoided

'Americanizationisms' but he was no great conversationalist. C.B. is simply people to people radio, a sort of caring and sharing way of life - and the press abounds in examples of good deeds done through C.B. involvement by noble citizens. Maybe the Government will introduce a new medal - the O.C.B. (Order of Citizens Band) for those who save a life, lend a helping hand or otherwise show themselves to be Outstanding Good Buddies. Incidentally, with all those gallant gallic gents on our roads, trundling Golden Delicious and other delights from the Continent, will C.B. on the road involve learning French, Spanish and a smattering of German? Poor old rookie rig man, stuck there and wailing, "I can't understand that C.B. lingo in English, let alone in French". Stick a sign in the back of your car when you've figured it out : 'lci on parle C.B.' (Here someone speaks C.B.)

A final note of warning. Seems that when you install C.B. in your car, you are just a little more likely to have a visit from Mister Pinchitt. The U.S. catalogues are full of anti-theft devices, and (naturally) you can buy car security outfits in this country. A great idea would be to have a gadget that automatically played back (very loudly) tapes of Des O'Connor singing, whenever anyone tampered with the rig. Indeed, a sign to this effect would no doubt deter those Mister Pinchitts, because they can't stand good music. And wouldn't 'Mister Dimples' be a great choice as President of Open Channel, when we get it?

> Ten bye byel THE RADIOGRAM KID

R·E·A·C·T-UK

CORDLESS : Unseatrated messeners

Amazing Telephone Breakthrough!

Cordless Handset Gives You

Walk & Talk" Convenience

Without Tangling Cords!

Shack ET-350 m the first of

NEW

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50-Foot

Range!

CORDLESS . Mit sorre to much int Minet

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It is well known that REACT in the States offer the best community emergency service, but what of REACT in the UK? CB News is pleased to report that the British REACT teams are all set to become as famous as their American counterparts as being a vital part of community life.

The REACT Supporters Club is an independent, non profit making Public Service organisation which has been established for many worthwhile reasons. Firstly, they intend to develop the future use of the Citizen's Band Radio Service as an additional source of communications for emergencies, disasters and not forgetting to be an emergency aid for individuals. They are going to plan and develop a 24 hour monitoring service for emergency calls and hope that there will be an officially designated emergency channel for CB users. Highway safety is also high on their list of priorities and it is hoped that they will be able to provide information to motorists — useful if accidents are to be prevented.

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CORDLESS : The year phone sain

Ente Unit

REACT UK wish to co-ordinate their efforts with other perhaps better known groupsb (at present anyway) such as the Red Cross, St. John's Ambulance, Civil Defence as well as the local and national authorities in cases of emergency and disaster. They are going to embark on a public information project to demonstrate and publicize the potential benefits of Citizen's Band Radio and it's proper use and these projects are planned to take place at various organizations as well as hopefully in factories and other places where people gather. Finally, the REACT Supporters Club aims to encourage participation in crime prevention activities in cooperation with the law enforcement agencies when Citizens Band has been legalized.

For any organisation to be efficient it has to have rules and regulations for it's members to follow. REACT UK being no exception to the rule formulated and agreed their rules at a Committee meeting on the 21st June, 1980 and the outcome of that meeting was as follows:—

1. The REACT UK SUPPORTERS CLUB is an independent non profit making service organisation to benefit all United Kingdom communities.

2. The sole purposes of the REACT UK SUPPORTERS CLUB shall be for the promotion, education and training of future team concepts with the principals as laid down by REACT INTERNATIONAL INC., in no event, at any time, will there be any formation of REACT TEAMS to form or operate as separate units, until legislation of a General Public Radio Service has been enacted and accreditation of the future REACT UK National Office has been accredited by REACT INTERNATIONAL INC.

3. Promotion materials, such as Training and Information Movies, Stationery, Jackets etc. shall be provided by the REACT UK co-ordinators office at cost, to Area and County co-ordinators who will ensure that there shall be no unauthorized use or reproduction of such materials.

 In all cases, specific guidelines and standards established by REACT INTER-NATIONAL INC. must be met, and in the event the REACT INTERNATIONAL INC. wish to modify these rules and regulations of the REACT UK SUPPORTERS CLUB, such modifications shall immediately be enacted, with advice to all parties involved as required.

5. FINANCE: funds raised by membership fees or donations are to be used for the sole purpose of coverage of expenses, due to REACT INTERNATIONAL INC., supplied stationery, printing, mailing costs, telephone use on Club business, travel and accommodation costs for club business and for the purchase of promotional material as approved by REACT INTERNATIONAL INC.

6. In the event of legalisation of General Public Radio Service, the affairs of the REACT UK SUPPORTERS CLUB shall be terminated and any funds still in credit deposit shall be transferred to the future REACT UK National accredited office.

7. Any funds in excess of £1,000 (one thousand pounds) accumulated at any given time shall be donated to a registered charity or charities, the decision of which shall be decided by vote from all committee and non-committee members.

 All funds must be received by cheque or postal order only in the name of REACT UK SUPPORTERS CLUB.

In readiness for legislation the REACT UK SUPPORTERS CLUB has appointed area co-ordinators who are in charge of their particular membership. Accoring to your area letters, enquiries and requests should be forwarded to your nearest area co-ordinator:

SOUTH WEST

Ivan Francis, REACT UK Supporters Club, 28 The Coots, Stockwood, Bristol, Avon BS14 8LH

GREATER LONDON

R.C.A. Kendall, REACT UK Supporters Club, 130 Drysdale Avenue, North Chingford, London E4 7PE

NORTH

Brian D. Low, REACT UK Supporters Club, 1 Brendjeane Road, Morecambe Lancs LA4 5SE

WALES

Ray Hughes, REACT UK Supporters Club, 10 Hendred Close, Capel Hendre, Ammanford, Dyfed SA18 3NN



RADIO EMERGENCY ASSOCIATED CITIZENS TEAMS

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

REACT International Inc 111 E Wacker Drive, Chicago. IL 60601

SOUTH EAST

Godfrey Bunce, REACT UK Supporters Club, 56 Parsonage Road, Cranleigh, Surrey GU6 7AJ

MIDLANDS

Paul Thompson, REACT UK Supporters Club, 130 Chester Road South, Kidderminster, Worcs. DY10 1XE

SCOTLAND

Ron Warbrick, REACT UK Supporters Club, 10 Manse Road, Stonehouse, Lanarkshire ML9 3QP

When Citizen's Band Radio is legalized in the UK most people will be eager to try out the American jargon on their newly acquired rigs. REACT, however, is a professionally organised emergency organisation and to retain it's respectability REACT believes that CB jargon should be discouraged on the emergency channels. REACT UK will no doubt have the same objectives and like their International friends will use plain language and the official 10-codes and international phonetic alphabet when acting in their official roles as REACT members.

For those people who have never had need to use the phonetic

INTERESTED IN REACT?

Then why not join the REACT UK SUPPORTERS CLUB?

If you have interests and desires for an unequalled proven internatinal concept of the highest standards of a General Public Radio Emergency Service, join the REACT UK SUPPORTERS CLUB and help to support and plan your near future REACT team. Annual membership of the REACT UK SUPPORTERS CLUB has been set by the unanimous agreement of the Committee and area Co-Ordinators with the realisation of the present and future costs at £5 per year. For this annual subscription you will receive a monthly magazine and free REACT promotional items, with additional material to be supplied at COST PRICE ONLY on request:

JOIN NOW AND BECOME PART OF YOUR LOCAL COMMUNITY PUBLIC SERVICE

Membership Form for REACT UK SUPPORTERS CLUB 28 The Coots, Stockwood, Bristol, Avon BS14 8LH

Please find enclosed my Postal Order/Cheque made out for: (please delete which do not apply) ANNUAL MEMBERSHIP (£5 each) DONATION CONTRIBUTION SPONSORSHIP CONTRIBUTION

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Address	Address
and the street in the state	

If a receipt is required please enclose a stamped addressed envelope

alphabet we reproduce it below — you never know when you might need to give the REACT team the 10-20 and registration number of a stranded vehicle.

A.	Alpha	N.	November	
Β.	Bravo	0.	Oscar	
C.	Charlie	Ρ.	Papa	
D.	Delta	Q.	Quebec	
E.	Echo	R.	Romeo	
F.	Foxtrot	S.	Sierra	
G.	Golf	T.	Tango	
H.	Hotel	U.	Uniform	
L	India	V.	Victor	
J.	Juliet	W.	Whiskey	
К.	Kilo	Χ.	X Ray	
L.,	Lima	Υ.	Yankee	
M.	Mike	7	Zulu	



THE REACT GOAL by Dorothy M. Johnson

REACT is the helping hand Of Faithful volunteers Providing their assistance Whenever need appears.

If there has been a drowning, A loved one has been lost, The REACT Club stands ready, No matter what the cost.

Accidents sometimes occur -Help soon is on its way, Relayed by REACT members On duty night and day.

A need for blood was urgent, REACT on channel nine Made calls throughout the evening Becoming a life-line.

The volunteers of mercy, Man a roadside coffee break, This keeps the weary traveller Alert and wide awake.

REACT grows by team-work, And love for fellow man, BE a REACT member, The best one that you can.

Citizen' Band And Public Service

Apart from REACT in the United States there are two other prominent public service organisations.

COMMUNITY RADIO WATCH

Throughout the States groups of people interested in the welfare of the Community join together to become members of Community Radio Watch or CRW as it is commonly called. Their objective is to assist the local police by spotting crime and handling communications traffic with the help of the police during an emergency. In each CRW group there is a team leader who serves as a liaison between the local police and the CB community. When requested by the police it is his job to alert his volunteers who are then ready and willing to serve the community in a number of different ways.

If a specific area suddenly becomes a 'high crime' location the police may ask the team leader to set up a patrol service. If, for example a shopping centre suddenly becomes the prime target for vandals the patroling CBers keep a sharp watch on the centre and advise the police of any suspicious activity. This patrol may be scheduled and on a rota basis or CBers may just be asked to hold an informal patrol which is just another way of saying, "keep your eyes and ears open if you're passing". CBers taking part in the CRW scheme are told to notify the local. authorities at the first sign of suspicious activity - they are not however under any circumstances allowed to apprehend the suspect.

Other CRW activities include providing communication links when the normal power supply is disengaged or assisting in the evacuation of the area during natural (or man made) disasters.

The CRW scheme brings to mind the London teenagers who have decided to assist the police in keeping law and order on the London Underground. As yet they do not have the approval of the Metropolitan police but it is hoped that with compromise on both sides London's own CW could become quite effective — I say CW as as yet the London version does not use radio communication and would find it somewhat difficult to do so underground!

THE AFFILIATED LEAGUE OF EMERGENCY RADIO TEAMS

ALERT is a national organisation comprising of members who are involved in community radio activities. To become a member of ALERT the two conditions you must sign your name to is that you are over 18 years of age and that you do not use profanity on the air. Membership to this organisation in the States costs an annual subscription fee \$9.50 and members receive four club magazines, a membership card and representation by headquarters in Washington. Most of the CRW branches are approved by ALERT and there is a reduction in the membership fee for those people who are actively involved in CRW.



UK-CB, I/ It Really On The Card/?

The call for CB radio in the United Kingdom has grown steadily since 1976, culminating in the current, almost deafening clamour for legitimisation. Yet at a time when Open Channel is clearly commonplace in the United States and most parts of the free world, the Home Office remains steadfastly noncommital about legislation.

This cautious approach was predictable. of course. The implications of a legalised CB in common use are pretty farreaching. A radio service of this nature is open to abuse and anything vulnerable will inevitably attract its share of rogue operators, as evidenced abroad where the sheer weight of numbers of stations using Citizens Band has rendered effective enforcement of the rules difficult. This is a situation many individuals have taken advantage of, boosting the power of their stations above prescribed limits and otherwise flouting regulations, all to the detriment of legitimate users. There is, additionally, the risk of serious interference to established services as well as putting all the



advantages of CB at the disposal of the criminal fraternity, though on the latter point it may be argued that they will conduct their business regardless of legislation anyway.

The other side of the coin presents a case for introducing CB to UK that is hard to resist. Properly organised and monitored, and used with personal discipline, it offers enormous benefits in areas where communications by other means are limited, disaster areas, floods and the like, It would, for example, be useful to know how many serious road accidents occur miles from the nearest means of contacting the emergency services. At such times. CB can be a lifesaver, as it has proved to many a mobileminded American. And how many of us would at some time have given all for just such a facility - to summon help when a delinguent vehicle has left one stranded miles from home, to ask directions, to report an overturned vehicle or an injured accident victim.

The formidable CB network in the States has handled millions of such calls on a purely voluntary basis as well as contributing to relief efforts in areas of disaster. There can be little doubt that, given the chance, some sort of organisation based on similar lines would flourish here. To deny the private citizen the benefits of such a desirable facility could arguably be called an encroachment of his personal liberty. Would that the issue were that simple, for it is a far more vexed and complex question than freedom of the individual.



The Home Office would doubtless prefer CB "hobbyists" to operate in the same vein as amateur radio with all its attendant training, technical know-how and licensed progression. Yet CB as a hobby offers only limited possibilities. It is more of a vehicle to assist people as they go about their daily business than a mere hobby. Now that the CB lobby has gained weight and credibility. one can only hope that this point is not lost on the U.K. licensing authorities.

The Home Office's August statement on the issue ('Open Channel - A Discussion Document', referred to in CB News number two) appears to offer at least some sort of eventual compromise rather than the ideal CB set-up that enthusiasts want. Certainly, it gives little reason to expect that Open Channel will soon be with us in a form that will please the majority of users. CBers have viewed the proposals with less than enthusiasm, the chief bone of contention being the surprisingly high frequency band, about 928 MHz

The proposals, on the other hand, do go some way towards introducing a CB system that would cause the minimum ofinterference to other communications networks, radio and television reception and radio amateurs. At the same time, it would make the sociallydesirable aspects of CB available to the man-in-the-street, albeit in somewhat diluted form, subject to the inevitable licence requirements.

Manufacturers of equipment would be required to certify that such equipment satisfied Home Office technical specifications, though these are not yet finalised. Otherwise, restrictions on use made of facilities would be kept to a minimum.

Clearly, though, the Government will not willingly give the goahead for CB on 27MHz in U.K. Indeed, they could well modify the Wireless Telegraph Act to make it illegal for anyone to sell or advertise for sale equipment for the 27MHz band.



The August discussion paper concedes that 928MHz would severely restrict range, usually to "line-of-sight" situations or, in city streets, to a mile or less. This factor alone makes 928MHz very much a second-best alternative, but as the document so forcefully insists, lower frequencies invite problems related to interference with existing services. Moreover, the document claims, the 928MHz frequency can nevertheless serve to provide an acceptable mobile radio service.

To be fair, it must be admitted that amateurs on 1300MHz have demonstrated the feasibility of Open Channel contacts across hundreds of miles under certain weather conditions. Additionally, the line-of-sight contact range. from hill-top to hill-top for example, should be acceptable under all normal conditions. Unfortunately, of course, hill-top to hill-top situations are not the norm and neither are freak weather conditions so it hardly seems fair to cite them as arguments for the higher frequency.

Indeed, the 928MHz band could prove something of a headache for an industry that would have to develop the equipment necessary to cope with it. Which brings us to the question of cost. Modern U.H.F. power transistors capable of a 5 watt output at 928MHz with crystal-controlled stability are prohibitively expensive. Self-excited superregenerative equipment would push costs down to an acceptable level but the government has yet to make provision for such equipment. An alternative could be to massproduce comparitively inexpensive S.A.W. (Surface Acoustic Wave) oscillators yet even they raise the question of power amplification.

In Australia, where CB frequency is 250MHz, Phillips have introduced a 5 watt mobile transceiver with frequency synthesiser. This equipment has been modified for use by British Amateurs at 432MHz and costs around £250. The likelihood is that the equivalent 928MHz would cost nearer £350. That, of course, would discourage some



enthusiasts but the signs are that current CBers, operating illegally in U.K. are quite prepared to pay that sort of money. Possibly the mere illegality of it all adds to the attraction and one hesitates to guess what the man in the street would fork out for his CB in the event of legalisation.

It is equally difficult to foresee if the U.K. CB "network" would grow in to the phenomenon it has become in the States where the extraordinary and admirable 'Radio Emergency Associated Communications Teams' have become an integral part of the nation's emergency services. Clearly, though, the Home Office

are anxious to minimise the "cowboy" aspects of CB and to avoid the risks inherent in the 27MHz frequency. As the August document declares: 'If an individual wishes to use sophisticated equipment to communicate over long ranges ... he should become a licensed Radio Amateur by taking the appropriate examination'.

Since any narrow-band equipment for 928MHz is sure to be fairly sophisticated, the message is slightly ominous. A workable compromise is perhaps the best that can be hoped for. That, at least, is a distinct improvement on what U.K. CBers have been able to look forward to until now and as such they might do well to welcome it.

Nick Everett

ABSITIVELY AND POILUTELY: definite agreement ADVERTISING: marked police car with it's lights turned on ANKELBITER: very young child, unruly child ATTILA THE HUN: bad mechanic

JIVE TALKING Nº Three

BABY TALK: school operators tying up the channel BALLS-OUT: an extreme effort (he's making a balls-out run for Motor City before dark) BALLOON FREIGHT: lightweight freight BAMBI: innocent or naive motorist

0

30

THANK YOUBIG BOY

JUMPS AND THE BUMPS AND

STAY BETWEEN THE

TRUCK ALL OVER THE

HUMPS

BANANA PEEL: yellow stripes on the road

BAO BAB: extra wide load BATMAN AND ROBIN: unmarked police car with sit-up dummies

BEAN PUB: coffee shop BEAR DEN: police station BEAR HUG: police using handcuffs or other restraints BEARDED BUDDY: police of any kind

BEAST: CB rig

youb

BETTER SMILL AND

FCXY LADY - THERE'S A

KOJAK WITHA KODAK BY

THAT MILE MARKER 188

COMB YOUR MAIR

BEATING THE BUSHES: lead car in a convoy looking for speed traps

BEAVER PATROL: looking for women

BEAVER WITH A BADGE: female state trooper BEDBUG HAULER: household removal van BETTER COOL IT: slow down BIG SKIP LANE: heaven BIG WHEEL: someone who thinks he is important BIRDSEED: food BLACK CAB AND SEVEN **DWARFS: funeral procession** BLESSED EVENT: new CB radio **BLOOD BOX: ambulance** BLOW THE DOORS OFF: to pass another vehicle **BLOWN PUMPKIN: tyre blow out** BOAST TOASTIE: a self appointed CB expert - one who thinks he is an expert BOLL WEEVIL: inexperienced truck driver BOONDOCKS: a place that seems to have been avoided by civilisation, way out away from any town or city BOOTLEGGER: unlicenced CBer or one who uses false call-sign BOTH FEET ON THE FLOOR: vehicle is moving at fastest possible speed BRANCH BANK: armoured vehicle BREAK BUSTER: a CBer who asks for a channel and then does not speak BREEZE IT: disregard what I said **BRIGHT EYES: vehicle following** too closely BROKEN TONGUE: a liar BULLET LANE: overtaking lane BUFFALO: man or husband **BURN THE GIGGLE JUICE: drive** at desired speed BURN YOUR SHOES: walk BUSHES ARE ALIVE: police are everywhere BUSTED ZIPPER: unlocked or open rear door BUYING AN ORCHARD: looking at the landscape and not the road BUG OUT: to leave a channel CACKLEBERRIES: eggs CAMERA CAR: police vehicle with radar CANCER STICK: cigarette CARTEL: group of CBers hogging the channel CATS AND DOGS: heavy rain

CELL BLOCK: location of base station CHANNEL 25: telephone CHECKPOINT CHARLEY: toll gate CHICKEN COOP: truck weighing station CHICKEN INSPECTOR: weigh station inspector CHIPPY: teenage woman who giggles and acts silly when talking to truckers CHOP HOUSE: restaurant or cafe CHRISTMAS CARD: speeding ticket CITY PITTY: city police CLAYHEAD: CBer who has no electronic knowledge CLEAN AS A HOUNDS TOOTH: road is clear of obstructions and police COFFEE BREAK: unorganized CB social get together COLORADO KOOLADE: Coors Reer COMIC BOOK: truckers log book COMPADRE: fellow CBer COTTONPICKER: used in place of stronger terms COUPON: speeding ticket COW PASTURE POOL: golf COWBOY: reckless driver COWBOY CADILLAC: Ford Ranchereo CROSSING THE HUMP: going over a mountain **CROTCH ROCKET:** motorcycle DEAD PEDAL: slow moving vehicle DEEP WATER: wet road conditions **DESPAIR BOX: CB repair box** DING-A-LING: CB who speaks without thinking first **DIRTY THIRTY: obscene word** DO IT TO IT LIKE SONNY PRUITT: sign-off DOG: truck without much power DOUBLE NICKEL: 55mph speed limit DOUCHE JOB: washing a vehicle DREAMER: hitchhiker DUMMY: unmanned police car DUMP CHUMP: driver of a dump truck (dustbin lorry)

police DUSTED MY BRITCHES: passed

EIGHTEEN WHEELER: tractor-

me

ADVERTISING ENQUIRIES If you wish your products and services to be advertised in our next issue please contact our editorial office for a rate card. Whilst it is obviously the intentions of the publishers to accept advertisements for CB rigs once legalised, on no acount will advertising for such equipment be accepted prior to legalisation.

trailer truck with any number of wheels

EVEL KNIEVEL: motorcyclist FAT LOAD: Overweight load FEDERAL CANDY COMPANY: F.C.C.

FEATHER FOOT: driver moving too slowly

FEED THE HORSES: lose money at the horse races

FINGERS: CBer who hops from channel to channel

FIREWORKS: police car with flashing lights

FLAG WAVER: road worker

FLIP A DICK: turn around

FLIP FLOP: U turn or return trip FLOATER: truck driver who doesn't have a steady job FLOP STOP: place to sleep

FLY BOY: speeding driver

FLYING HAWK: a police helicopter

FOOT REST: accelerator pedal FOXY JAWS: CB operator with a sexy voice

FRUIT LOOPS: dangerous curves FUNNY BOOKS: pornography

GARBAGEMAN: litterbug GEAROLOGIST: truck driver GEORGIA OVERDRIVE: neutral gear

GET A PAN AND PICK EM UP: get paper and pencil and note GOING HOME HOLE: high gear GOODYEAR BLIMP: police helicopter

GOT THE BLUES: stopped by

GRANDSTAND JOCKEY: driver who is careless and shows off GRASS: central reservation of a motorway



GREEN APPLE: inexperienced CBer GREEN STAMP ROAD: toll road GREEN STAMPS: speeding ticket, money GRIZZLY: police GROUND CLOUDS: fog GUNNYBEGGER: friendly term CBers use to each other

H & D: hate and dissent HAG FEST: group of female CBers on the channel HAIRCUT PALACE: low bridge HAMBURGER: American CBer HAMMER: accelerator HANGAR: garage HAVE A 36-24-36 TONIGHT: sign-off HAVE YOURSELF A GOOD DAY TODAY AND A BETTER DAY TOMORROW: sign-off HOLE IN THE WALL: tunnel HOME 20: where you live, home town

HOPPINS: stolen vegetables HOW ABOUT YOUR VOCAL CHORDS?: is your set operating? HUNDRED MILE COFFEE: truckets extra strong coffee

IN THE DOG HOUSE: under the bonnet IN THE HOLE: pulled over by police

JAMBOREE: large organized gathering or convention of CBers JOHN LAW: police of any kind JOY JUICE: alcohol JUNK BUZZARD: bum KEEP THE SHINY SIDE UP AND THE DIRTY SIDE DOWN: drive safely, sign-off KEEP YOUR NOSE BETWEEN THE DITCHES AND SMOKEY OUT OF YOUR BRITCHES: drive safely and look out for speed traps, sign-off KICK DOWN: change to lower gear KICK IT BACK: answer back KNUCKLE BUSTER: fight

LAY ON THE AIR: put on the brakes LETTUCE: money LIFE SAVERS: tyres LIL' OL' MODULATOR: CB set LOAD OF SAILBOAT WIND: truck running empty LOAD OF STICKS: truck hauling cut timber LOCAL SMOKEL: local police LOCAL YOKEL: local police LONG GREEN WITH A SHORT FUTURE: paper money LOST WAGES: Las Vegas LOOSE BOARDWALK: rough or bumpy road

MAIL: overheard CB conversations

MAMA: wife MAN IN WHITE: doctor MANIAC: garage mechanic MERCY SAKES: used in place of swearing on the CB MODULATED MILK BOTTLE: TV set MOTION POTION: fuel MUFFIN: cute girl

NAP TRAP: motel NERD: inept CBer NIGHTCRAWLERS: police everywhere NINE-TEN POUNDS OF GAR-BAGE: heavy background noise on overcrowded channel NIXON'S REVENGE: Ford cars NORDO: without a CB

OASIS: truck stop OFF STOP WATCH: behind time OIL BURNER: vehicle that is smoking ON THE SIDE: listening ON YOUR MUDFLAPS: following too closely ONE WAY CAMPER: hearse OVERSIZED GRASS

GRASSHOPPER:

PANHANDLERS: nurses PAPERWORK: speeding ticket PARTY TWENTY: location of a party PAVEMENT PRINCESS: truckstop hooker PEDAL PUSHER: bicycle rider PEELING OFF: getting off the motorway PEOPLE CAR: bus PIECE OF THE ROCK: insurance PORTABLE PARKING LOT: car transporter lorry PRESCRIPTION: F.C.C. regulations PULL YOUR HORNS: slow down PUT THE HAMMER IN THE TOOL BOX: slow down RATTLESNAKE: CBer who uses obscene language

obscene language REEFER: refrigerated truck REMBRANDT: house painter ROCKING CHAIR: middle vehicle in a convoy

ROGER RAMJET: driver of a car going well above the speed limit RUBBER LIPS: one who talks too much

RUN THROUGH THE RAIN-DROPS: take a shower

SALT AND PEPPER: police of any kind

SAVAGES: CBers who hog the channel

SHAKE THE TREES AND RAKE THE LEAVES: front CB vehicle to



watch ahead for police and obstructions, back vehicle watches behind SHEEP HERDER: inept driver SHICK RAZOR ON WHEELS: road grater SIX WHEELER. car towing caravan or trailer SKATING RINK: slippery road SKID LID: motorcycle helmet SLAUGHTER HOUSE: Channel 11 SUPER SKATE: sports car SUPER SLAB: expressway

TEAR JERKER: CBer who tells sad tales on the air THREES AND EIGHTS: hugs and kisses, best wishes THERMOS BOTTLE: tanker truck T.H.E. MAN: police in general TRUCK 'EM EASY: drive safely TWISTER: highway crossroads

ULCER: traffic jam UNDER THE THUMB: unable to pass

VITAMIN A: milk

WALKED ON: interfered with by another station WASSAHOPS?: what's happening on this channel? WE QUIT: sign-off WEAKY WEAKY: weak signal WILLY WEAVER: drunken driver WINDOW WASHER: rainstorm

X-Y-Z: male homosexual

YOUR TURN: your turn on the channel YOUNGVILLE: young children on the channel

ZIP: nothing



Why It' A Big IO-7 For 27

In the States, sheer geographical space demands a capability to communicate over what we might call long distance. But when popping down to the supermarket might mean a 100 mile round trip, and when your next door neighbours live on the fringe areas of your transceiver, distances become relatively shorter. Under such circumstances, C.B. has come into its own. Other types of communication may be limited, or might, in fact, simply not exist. Major cities are also sufficiently well spaced out for C.B.'ers of one city to be unable to walk-over those of another.

Needless to say, things are somewhat different over here. And the potential range of 27MHz, the frequency chosen for American C.B., is likely to be the biggest single reason why it will be banned in Britain. Some of the problems that can be encountered with 27MHz in urban areas is indicated by the stringency of American regulations with regard to what you can or cannot legally do near population centres of 200,000 or more. Other countries have already come up against similar problems with C.B. in towns, and the day may eventually arrive when they might regret having expediently adopted a system simply because equipment was readily available.

The problems arise from the phenomenon known as tropospheric propagation. In other words, the ability to bounce signals off the ionosphere in order that they may be received at a greater distance. Although that might not be the intention, once a signal leaves the antenna, it is radiated at a distance determined by prevailing weather and ionospheric conditions. That's the trouble with radio-waves. You can't effectively control them. And if the possibilities of single-sideband transmission and beam antennas are exploited to the full, the limit of 150 miles presently prescribed in the States could quite easily be exceeded.

In severe freak, or skip, conditions, which might inevitably occur all too frequently as a result of the vagaries of the British climate, a base set up near the geographic heart of England, and with an elevation equal to that of, say, Wolverhampton or Lichfield, would be ideally placed for a nationwide C.B. news service. Not to mention the intercontinental possibilities opened up by home-grown, souped-up, illicit rigs that will likely proliferate from every boffin's back-room once C.B. finally gets the big 10-4.

Communicating over long distances can be fun, of course, but is not so funny when you get



splashed-on by every big time operator and goon squad who happen to own a better set of vocal chords than you do. With an estimated six to eight million potential C.B.'ers already standing-by for the official go ahead, those with some experience of conventional radio-telephones will appreciate the extent to which bedlam will be rampant on the air-waves should 27MHz be allowed. With a range of only fifteen miles, and only forty mobiles operating on one channel, getting a breaker to base can sometimes take hours. Transmission times for C.B. will be limited, of course, but let's face it, there will be plenty of bull-jockeys around who will grab an extra minute or two whenever they can.

More channels might seem the obvious solution, but a few minutes spent with a calculator will reveal that it isn't really. Something like 75 channels would be required to cope with eight million C.B.'ers transmitting for only two minutes in every twenty four hours if a maximum range of 150 miles is allowed. That's assuming calls are regularly and evenly spaced throughout the day - and also that C.B.'ers are similarly distributed throughout the country. How many channels would you need to cope with airtraffic at peak hours in London alone? Even if you can solve that problem, Birmingham, Leicester, and Nottingham C.B.'ers are not likely to take kindly to being perpetually Lambeth-walkedover. And during times of really good reception, no doubt Sheffield, Lincoln and Leeds will be eating the bolognasandwiches served up by every horizontal-mama from Mile-End to Mayfair. Chances are it would not be so much an 'us' versus the Smokies situation here, but more a case of 'us' versus THE BIG SMOKEies.

Those who have illegally sampled the joys of C.B. wall to wall and tree top tall will no doubt disagree. But when everybody has their glory-cards they might find walking the dog is then a completely different story. And when they have also experienced the inconveniences caused by those who perversely get their kicks from button-pushing, or discover the only time they can get a breaker is when everybody is down at the salt-mines, they might soon be hollering for some other pipeline.



But the question is do you really need the range that 27MHz can give? Look at it this way. You and your good-buddy might already be 150 miles apart. When he transmits to you, he can probably also be heard for 150 miles the other way — that's 300 miles from where you are. Likewise when you hit him, you might also be heard for 150 miles in the



opposite direction. So your yap will effectively monopolise the channel over a 450 mile area. Can such an extravagant use of air-space be justified? Even if you are putting out a may-day, a buddy some 150 miles away will be unlikely to be of any assistance — no matter how good a buddy he happens to be.

So what's the alternative? 928MHz has been mentioned, but everybody knows that's at the junk-end of the radio spectrum. Only suitable for walkie-talkie toys. But is it? Who can object to S.S.B. and beam-antenna here? Transmission power limits might also be more generous up there. But that's not much consolation when practical working is limited to line of sight. Not to mention the argument that the cost of developing equipment for such a frequency will deter manufacturers from going into production for such a limited market.



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ONE SIZE COLOURS BLACK, NAVY or RED Pin Badges 3 for £1-00 Choose from: Whats Your Handle?- I'm Pushing Big Wheels - Whats Your 20?- Lady Breakers Have More Fun - Super CBer I Monitor Channel 19 - My Dad/Mum is a CB Operator	ORIGINAL AMERICAN CB and STATE EMBLEMS Proffessional Beaver Hunter · Bet Your Sweet Ass Im A CBer · Drive Naked Give A Trucker A Thrill · Super Schmuck · US Dollar — Large variety of states · Breaker Thats No Rubber Duck 3 for £1:20
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But we have yet to see what British enterprise can do. Many small manufacturers might see C.B. as just their cup of tea. And when he is really up against it the small man often comes into his own. A good example of what can be done in restricted circumstances is provided by stripedsound on 8mm film. In the mushy, wowing early sound days of the seventies, it would have been easy to condemn 8mm as a useless unworkable gauge. But ten years later, the genius of certain small firms has made it virtually impossible to tell the difference between sound on amateur super-8 and that of the more professional 16mm gauge. The price of equipment is likely to be another major drawback with 928MHz, but when you really want something money is usually no object. A price deterrent might, in fact, keep the

air-waves clear for bona-fide C.B.'ers. After all, it is C.B. we want, not just bootlace amateur radio.

Hopefully a less challenging frequency than 928MHz will be found. But whatever the alternative happens to be, we are still going to have a 27MHz v ? situation. That's inevitable. It happens whenever anything new is suggested in place of something already established. Remember the N.T.S.C. v SECAM shindig we had before our own colour T.V. service was introduced? It was a situation very similar to that which C.B. now faces, N.T.S.C. and SECAM receivers were also piled high in the warehouses ready to flood the market as soon as the Government gave the go ahead. But we decided we were going to do things differently. Going to do

things our own way. We decided that PAL would be the system for us. And what did we get? Only the finest C.T.V. system in the world. A C.T.V. system that has since become the envy of the world.

Perhaps it will be the same for C.B. What we are experiencing now are not even the birth pangs of C.B. There's much more pain in store. The Government might wish to legalise C.B. as soon as possible but will, no doubt, also wish to legislate to contain it. It will be up to us to prove we can operate C.B. efficiently and responsibly. We will have to prove it's not just walkie-talkie toys we are after. When we have done that, maybe more bands will magically open for us. Maybe then G.B. will mean C.B.

Government Paper Work · · ·

This year, following pressure from individual bodies the Home Office produced a Green Paper entitled, "Open Channel", this is in the form of a discussion document and as such was published to solicit opinions from the general public en masse prior to possible legislation of a system of short wave radio communication available to everyone in the United Kingdom, All views in response to this leaflet were to be received by 30th November and now this time has passed bodies within the Civil Service are analysing comments from all over the UK together with submissions from those broadcasting and licencing organisations from those countries who already enjoy the freedom of this communication. No time table has been confirmed for this possible legislation but it is thought the discussion will open in Parliament in the Spring, For those of you who were not able to obtain the Green Paper we give you the opportunity to read a resume of this publication:



The Home Office is responsible in the United Kingdom for licensing the use of all radio transmitters, and when a licence is granted, the frequency or frequency band to be used is stipulated. Because of the interference which can be

caused to other users, the policy has until now been to make private mobile channels available to business or commercial users, and to keep interference to a minimum through close control. It would therefore be a new departure to make two-way radio communication channels available to the general public. While there is no great upsurge of public demand in this country for such a personal radio service there is a respectable body of opinion which supports it. The experience in countries where it is available shows that there is abuse of the service and interference to other authorised users of radio. On the other hand, it can fulfill a useful social function. and in some cases be helpful in emergency conditions as well as affording a good deal of pleasure to those who use it. The Government's view is that in the interests of personal freedom it would be right to grant facilities provided that this does not prejudice the wider public good. After careful consideration, they have therefore come down in principle in favour of the introduction of a personal short range radio system in this country. The Government believes, however, that wider discussions of the issues involved would be helpful before any final decisions are taken.

WHAT SORT OF SERVICE?

A useful definition of the kind of service in question was given in the 1978 Report of a Working Party set up by the National Electronics Council. They defined it as:

"A short range radio communi-

n discussi Channel discussion document

cation service available to private users (but not excluding the small business user) at an acceptably low cost and with the minimum of formality. The quality and reliability of the service and the probability of achieving the desired contact need not be as high as is required by emergency services or for security or major business communications. Ideally, it would be introduced in such a way and with such characteristics that with little or no policing it did not cause unacceptable interference to any existing radio service or to other electronic equipment".

Citizen's Band Radio used abroad is almost entirely in the 27MHz band, but the Government remains convinced that this frequency is not appropriate for the United Kingdom. First, the band is already allocated to legitimate uses, such as hospital paging systems and model control. Moreover, other services outside the band - such as broadcasting, emergency services communication, old people's alarms and aircraft landing systems - can be affected by illicit 27MHz transmissions. In recent months there have been proven cases of interference to a hospital paging

system and to police and fire service communications, and a significant number of model aircraft have been driven out of control with a clear risk to members of the public. Secondly, certain technical characteristics of the band make it possible to communicate over long distances - even internationally - particularly if amplifying equipment (which increases the potential interference) is used. Such effects are no part of a personal radio service. If an individual wishes to use sophisticated equipment to communicate over long ranges and make international contacts. he should become a licensed radio amateur by taking the appropriate examination. Most advocates of the facility in this country would accept that a range of 15km (10 miles) would be adequate for the service.

It is important to emphasise, however, that the usable range of any piece of radio equipment depends upon a number of factors such as the frequency band used, the height of the aerial, the radiated power of the signal, the radio noise environment and the propagation path. The range achieved in flat country is unlikely to be matched in a crowded city. In addition, messages passed from mobile to mobile (car to car) or hand portable to hand portable will cover a significantly lower range than messages passed from or received by fixed stations with high aerials and operating with greater powers. In terms of actual social usage, however, most people's expectations will probably not extend beyond communication in traffic jams or on motorways; for ship to shore communication from small pleasure boats and for communication between groups of climbers or walkers - a distance of approximately 3 miles. In a crowded urban environment such a range will

often be the maximum in any case — particularly if the equipment is cheap and the usage of channels is heavy, and if the equipment in question is for mobile or hand portable use. Most of the social advantages claimed for a personal radio service would be achieved with a range of about 15km (10 miles) in favourable conditions such as a rural environment — e.g. for use in certain emergencies.

The service which the Government is considering therefore is guite different from that advocated by those whose ideas are based on the experience of other countries. It would have to avoid as far as possible the admitted excesses which have occurred elsewhere under the title of "citizen's band", and provide an alternative service which offers a useful facility to individuals. It should permit two-way contact over limited ranges, and should meet most at least of the social needs which have been canvassed. But long range or even international communications are better served by amateur radio or telephone systems. To continue to refer to such a service as "citizen's band" is thus misleading and the Government suggests that "Open Channel" is a better description for it.

If a new personal radio service is to be acceptable both to the enthusiasts and the general public for whom it is intended, it must be neither too expensive nor shackled by over bureaucratic regulations. If equipment costs too much and if an aspiring user has to clear a series of complicated administrative hurdles before he can go on the air, much of the attraction is lost. Indeed the purpose is arguably defeated. On the other hand, after careful consideration the Government would not feel able to abdicate from all control over the new service. First, in order to

provide a likely level of service (such as 15 kilometre range and a given probability of establishing contact) certain minimum technical standards would have be set.

The Government however would seek only to ensure that those standards should not in themselves have the effect of lowering the service below a certain level of quality. Second, the service could not be permitted to cause undue interference to any other radio service or to other electronic equipment, and this in its turn presupposes some form of regulatory control, at least over the standard of equipment to be used.

The following conclusions stem from this brief analysis:

- a. Open Channel equipment need not exceed a range of 15 kilometres in favourable circumstances;
- b. the service should be as simple and cheap as circumstances allow:
- c. technical standards would have to be set, but the Government's responsibility to the users of Open Channel would be confined to ensuring that a certain standard of service can be obtained rather than ensuring it is obtained.
- d. minimising the risk of interference to other users of the radio spectrum presupposes some form of regulatory control.

REGULATORY CONTROL

The extent of the regulatory and administrative problems which could accompany Open Channel depends on the likely demand for the service. This of course is difficult to estimate and will be affected by the price at which commercial manufacturers produce equipment. Figures that have so far been putforward have drawn heavily on experience in, for example the United States. This may not however reflect the position in the united Kingdom, where a geographically compact area is combined with a well developed network of other forms of communication. The report of the National Electronics Council Working Party suggested that there might be a market for 3 million sets in the United 300,000 a Kingdom or some year. We believe that these figures probably represent a considerable over estimate. In any case it would probably take some time to work towards the steady market level. If Open Channel were to be introduced however, it would be as well to plan on the basis of say, 150,000 sets in the first year.

The Wireless Telegraphy Act 1949 provides that any apparatus used for wireless telegraphy must be licensed, but also gives the Home Secretary power to exempt certain equipment. The Government has given careful study to this possibility because of its general aim of reducing regulation whereever possible. The Government attaches particular importance to getting a new service of this kind off on the right foot. If Open Channel were exempted from licensing, the individual user's responsibilities would not be made clear to him. There would be no satisfactory means of measuring the growth of its use; the power to deal with interference and abuse would be much less effective; and the provision of a source of revenue to offset costs would, without a licensing requirement, require primary legislation.

The Government proposes therefore to combine the simplest possible licensing system with a limited technical control. As an example, regulations under the Wireless Telegraphy Act could set out the technical requirements for Open Channel equipment which manufacturers would have to meet. They could make manufacturers liable to certify their products as conforming to those requirements; the onus would then be on the user to ensure that he used only certified equipment.

The technical requirements would cover such matters as the modulation system, the power and frequency stability of the transmitter and spurious radiation. The licensing system would be flexible, simply authorising a named user, or a person acting with his permission, or a person to whom he had hired equipment, to use Open Channel. It would not suffer from the drawbacks of exemption outlined previously and revocation of a licence would in addition offer a form of sanction, short of prosecution, against deliberate illegal use. Experience in other countries has shown that if the new service were introduced, problems within the band allocated to it could be expected. The use of the frequency for anti-social purposes, obscene language and deliberate jamming are all well documented occurrences elsewhere. The licence would therefore, set out conditions of use, with the aim of preventing interference, obscene or abusive transmissions and broadcasting or the reproduction of music. If however, these abuses particularly those resulting in interference - were widespread within the band, it must be recognized that a small army of officials would be needed to make any significant impact upon them. The Government therefore takes the view that it would be their responsibility to create the technical conditions for a reasonable Open Channel service, but that it could not accept the responsibility for, or commit additional resources to, the resolution of abuses within the band. The power to revoke licences and to prosecute for unlicensed use would of course

provide some safeguard. The Government will also consider whether a suggested code of practice might be sent to each new applicant for licence.

The Government has given a good deal of thought to suggestions that records should be maintained so as to keep track of individual pieces of equipment, and that each equipment should incorporate a unique identification code. Such measures would however be extremely expensive in terms of manpower, and the limited benefits would not be justified. The proposed combination of a simple licensing system together with clear technical criteria would be the most economic method of regulation. It would be much less restrictive than the normal system of licensing control over private mobile radio, where licence applications are checked to ensure that only equipment which has been tested against performance specifications is installed. Licences would be renewable annually and unlicensed transmissions would constitute, as now, an offence under the wireless Telegraphy Act.

Further costs would of course be implicit in any system of control. A few additional staff would be required, and the issue of licences on the scale envisaged could only be met with the aid of data processing. But the licence fee would be set so as to offset the administrative costs, and the level of the amateur radio licence fee may form a useful yardstick.

THE CHOICE OF FREQUENCY

The maximum number of channels which would be needed if Open Channel were to be introduced is 40, although they would not all be necessary at the outset. This would require only a small part of the radio spectrum. If the frequency chosen was in the V.H.F. band, a band width of 121/2 KHz would be suitable, but if a frequency high in the U.H.F. band were chosen 25KHz would probably be necessary. The maximum spectrum requirement would therefore be about 1MHz.

Despite this apparently small requirement, the service could only be introduced at the expense of other radio facilities since the spectrum is effectively fully committed to existing services. The outcome of the World Administrative Radio Conference in 1979, while in general helpful, will not remove problems of frequency congestion, at least in the short term.

In addition to the rising demand for use of the spectrum, there are other constraints on frequency policy grounds. We must take into account our international obligations when choosing a frequency and it would be useful if we could choose one with at least some prospect of international standardisation. This would give British industry the prospect of competing in a larger market, with concomitant economies of scale. Next, the timescale in which a frequency band could become available is important. The decision has already been taken to close down the 405 line television service in the frequency bands 41-68 MHz and 174-216 MHz, but it will be some years before any other services can be located there. Open Channel would also require the allocation of an exclusive frequency band suitable for use throughout the whole country. As a service it would be free from close control. Its operators would not know that they were causing interference, and they would lack the expertise to minimise it. Thus, finally, and most significant of all, any frequency band chosen must offer the prospect of creating the minimum interference to other

authorised users of the spectrum throughout the United Kingdom.

Against this background the Home Office has carried out a detailed examination of the spectrum between 68 and 960 MHz to see what possibilities exist. We have looked particularly closely at the bands in the neighbourhood of 225 MHz which supporters of the new facility have canvassed in the past. There were valid objections to the possible choices here on the basis of general policy, but more significantly, in each case the risk of interference to domestic television receivers was extremely high, and this could only be dealt with by adapting the Open Channel Transmitter, (The interference arises from harmonic signals, which are direct multiples of the fundamental transmitter frequency, and other spurious emissions generated by the Open Channel transmitter, and from intermodulation of these emissions in the input of the television receiver). This would be impracticable, given the likely scale of Open Channel use. The interference could be so severe and intractable as to lead to the dropping of certain television channels. This could not be contemplated in the context of European television planning, guite apart from the effect on the broadcasting authorities.

This examination has therefore led us to conclude that the only suitable frequency band is in the new mobile radio allocation around 900 MHz. The United States and Canada are giving consideration to setting up a personal radio facility in this band, and authorities in Western Europe are also strongly interested. If a frequency above 928 MHz were selected, interference could be kept to a minimum, since there would be no direct frequency relationship between the Open Channel service and the television services. The precise frequency would require some further study to ensure that meteorological and aircraft services at higher frequencies were not prejudiced.

It must be stressed however that while the use of a frequency above 928 MHz would minimise interference to other authorised users of radio, it would never eliminate it. Break-in television receivers and other domestic electronic equipment arising from the use of Open Channel transmitters is possible whatever frequency is chosen. Since Open Channel would be likely to operate much more widely in residential areas and high rise flats than existing mobile radio, the additional interference could be significant. Deficiencies in, say, television or hi-fi receivers which hitherto operated guite satisfactorily might be revealed. This type of interference can generally be dealt with by fitting filters to the

affected receiver, but some television viewers or audio equipment users would be put to inconvenience and personal expense.

The performance of Open Channel around 900 MHz is difficult to estimate in the absence of a precise technical specification but we briefly summarise this later on information that is available from C.C.I.R. sources (the International Radio Consultative Committee of the International Telecommunication Union.) and from a series of tests carried out by the Home Office Directorate of Radio Technology in and near London. All the available information suggests that ranges of up to 7KM may be obtainable in suburban and urban environments using fixed equipment, and in open country in ideal conditions, ranges in excess of 15KM should be obtainable. Hand portable equipment will obviously have a lower range, but should offer communication over 1-2KM in the largest cities.



Doesn't time go slowly when you're waiting for the Government to legalise CB?

There is little doubt that in most circumstances - although not all - Open Channel in a lower frequency band would allow communication over longer ranges but the interference penalties would be unacceptable. Bearing in mind the ranges required to meet the claimed social uses of Open Channel, we regard the performance in the 900 MHz band as satisfactory. The introduction of Open Channel would create new manufacturing opportunities, which the Government is confident British industry will grasp. As far as cost is concerned, American experience suggests that 900 MHz equipment might be about 20% more expensive than comparable private mobile radio equipment in say, the 200 MHz band; but given the likely level of demand, it would be reasonable to assume that the cost of equipment would reduce as economies of scale took effect.



Conviderations Affecting The Choice Of Frequency For Open Channel

The introduction of a new radio service must always be carefully planned to achieve the best balance between performance and minimum disruption to other services, existing and planned. This would be particularly important in the case of Open Channel, given its countrywide application, and its potential scale of use. To put this matter into context, it is helpful to examine past statistics of interference. Interference was at its height in the United Kingdom in 1955 when there were 169,000 complaints of inter-

ference from all sources. Since that time, very large sums have been spent to ensure adequate suppression of interfering devices, and to achieve better coverage from radio and television stations. Despite the growth of television viewing and of other forms of the use of radio and the large increase in the number of electrical appliances in use, the number of interference complaints has now fallen to about 35,000 a year. The investigation of these is a time consuming and expensive process and while the

introduction of Open Channel must generate some increase in the number of cases, it is essential that this be kept to a minimum.

In general the problems of interference to other services are less troublesome with increase in frequency. We deal here with the interference problems which would arise from the use of three representative frequency bands:

- 1. around 225 MHz
- 2. around 450 MHz

2

3. around 900 MHz

Since any frequency allocation to Open Channel within the UK would have to be on an exclusive basis, consideration of interference to existing services may be restricted to the spurious output, including harmonics, of an Open Channel transmitter, the spurious responses of receivers and direct break-in to audio and vision frequency stages and blocking by relatively high level signals. Interference of this latter kind can be caused by any form of transmission and can occur in any band. It is essentially a function of power and proximity, and the root cause is deficiency in the receiver. Since Open Channel is likely to function much more widely in residential areas than most other forms of radio transmitting equipment, some increase in the limited number of cases of interference caused by break-in may be expected. Protection would be afforded however by quite modest separation distances, and where interference is nevertheless caused, it can generally be simply dealt with by adding a filter to the affected receiver.

The current private mobile radio specification MPT 1301 limits the spurious output, including harmonics, at the transmitter to 2.5 uW: and it is assumed that a similar value would be appropriate to Open Channel.

INTERFERENCE TO SERVICES OTHER THAN BROADCASTING

An examination has been made of the interference that might be caused to fixed and other services by the use of the three frequency bands specified above. These services include private land mobile radio, marine radio, fixed services, radio astronomy and satellite services. All the possible bands pose some risk of interference to different services

B

but we are satisfied that these risks are relatively small.

INTERFERENCE TO BROADCASTING

UHF television receivers in the bands 470-582 MHz and 614-854 MHz will be susceptible to interference from harmonics of Open Channel transmissions which fall within the television channel. The harmonics second and third in the frequency range being considered may well meet a stringent specification, but could still be at a level where interference may occur because of the proximity of the transmitter to the television receiver or aerial and because nothing can be done at the receiver to avoid the interference. Interference would also occur due to the spurious responses of the receivers themselves.

OPEN CHANNEL IN A BAND AROUND 225 MHz

The third harmonic of the Open Channel transmitter would come within the range 669-675 MHz and reception of television channels 45 (662-670 MHz) and 46 (670-678 MHz) would be potentially affected. As far as channel 46 is concerned, if the transmitting aerial of a fixed Open Channel station were 10 metres from a UHF television receiving aerial, we have calculated that up to 1.9 million television installations receive a television field strength which is less than that necessary to avoid interference. The problem would be still more serious if the separation distance were less. Up to 1.1 million installations could be affected by transmissions from vehicle mounted Open Channel equipment or portable equipment with intergrated aerials. In the first case, interference would generally be short-lived but would by definition be virtually impossible to trace; in the latter, while the risk would be small provided a separation distance of more than 1½ metres were maintained, actual interference would probably be longer lasting. The usage of channel 45 is much less, but reception of that channel would be similarly affected.

Interference of this sort is particularly serious since filtering is ineffective. The only remedy is to deal with the offending transmitter, which would almost certainly be impracticable given the countrywide use of the facility: and any effort to tackle the problem at the manufacturing stage could add considerably to the cost of Open Channel equipment.

OPEN CHANNEL AROUND 450 MHz

1. Below 450 MHz: Reception of television channels 64, 65, 66 and 67 would be potentially affected by the second harmonic of the Open Channel band. Using a similar analysis to that for the 225 MHz band, it is estimated that up to 1.7 million television receivers could be affected, depending on which precise frequency band is chosen. As in the case of the band around 225 MHz, the interference caused would be particularly difficult to deal with.

2. Above 450 MHz: The problem in this band is one of spurious responses in television receivers tuned to channels 23 and 24. It is estimated that up to 2.6 million installations receive a television field strength which is less than that necessary to protect them from the transmission of fixed Open Channel equipment. The risks from mobile equipment may be discounted; but portable equipment would also place a large number of television installations at risk since the assumed reduction in transmitter power and the protection

afforded by, for example, intervening walls would be more or less balanced by the likely closer proximity of the aerial to the television receiver. Interference of this type can be alleviated by fitting filters to the affected receiver, but the possible scale of its occurrence renders this band unattractive.

OPEN CHANNEL IN THE 900 MHz BAND

1. Up to 928 MHz: Open Channel frequencies in this range would potentially affect the reception of television channels 59-68 inclusive due to two different forms of spurious response. It is estimated that up to 1.8 million TV installations receive a lower field strength from main stations than would be necessary to protect them from nearby Open Channel transmitters. As in the case of the band above 450 MHz, this interference can be successfully dealt with by filtering, but the scale of the possible problem is daunting.

2. Above 928 MHz: There are no frequency relationships which would be likely to cause interference to television services if a frequency band just above 928 MHz were chosen for Open Channel.

THE PERFORMANCE OF **OPEN CHANNEL EQUIPMENT** IN THE 900 MHz BAND

The band selected for Open Channel must enable the desired transmission range (15KM) to be achieved in most environments without excessive transmitter power, thus minimising local interference, enabling frequency channels to be re-used and at the same time avoiding long range propagation interference.

The date related to propagation curves at 150 MHz, 450 MHz and 900 MHz, were first presented by Okumura et al (1968). For all

distances in the range 1-50 KM, the field strength increases as the frequency is reduced. The table below gives the range in kilometres obtainable in urban conditions assuming an effective radiated power of 25 Watts and using the minimum protected field strengths recommended in CCIR Report 358-3 and the results of Okumura.

severe at the higher trequencies.

Handportable operation in large cities is likely to be possible at median ranges of 1 to 2 km in all the bands considered.



	Handportable stations	Mobile to fixed station	Fixed to mobile station
225 MHz	11 km	18 km	24 km
450 MHz	7 km	11 km	16 km
900 MHz	5 km	6 km	8 km

(Handportable stations are not likely to utilise 25 W erp)

In another study (Federal Communications Commission alternatives for future personal radio services. May 1978) a computer simulation of typical propagation paths for the personal radio service in the USA, between base stations (8W erp, aerial height 10m) and mobile stations (aerial height 2m) at 200 and 900 MHz, produced median values of service area radii of 7 km at 200 MHz and 6 km at 900 MHz for cities with populations of greater than 3 million.

A limited series of tests has been undertaken in and near London to provide some additional data at 900 MHz. From these tests it was estimated that with 25 W erp, a sensitive receiver and with aerial heights of 4 and 1.5m, the range in urban and suburban environments would be from 3 to 10 km and that in open, flat country with no trees it might approach 20 km. Some comparisons with equipment operating at about 200 MHz showed that, for similar equipment the range at 200 MHz could be up to twice that at 900 MHz although on occasion, the 900 MHz results could be marginally better. The effect of trees in reducing the communication range becomes more



The Phone Ranger

The cordless phone that works like a regular phone up to 300 feet from your house. Use it in your own back yard

I live on five acres. And I keep four horses in my back yard. Used to be, if I got a call while I was down at the corral, one of the kids would yell out the kitchen window and I'd do the hundred-yard dash to the nearest house phone.

No more. With The Phone Ranger I can groom Laird, my Palomino gelding, with one hand and call my broker with the other.

Take or make calls up to 300 feet away.

Maybe you don't keep horses. But if you've got a pool, patio, garden, workshop, tennis court or garage—and you'd like the phone to come to you instead of you going to it—this is the answer.

Doubles as an extra extension phone.

When you're not using it outside, use it as an extra extension phone without paying monthly charges to the phone company.

Works so simply.

Plug base unit into phone jack and into AC house current. Then plug The Phone Ranger into base unit to charge battery. Now unplug The Phone Ranger and you're ready to use it to take or make calls up to 300 feet away (750 feet if you choose the



deluxe version). Red indicator light tells you when it's time to recharge.



If you don't have a phone jack, the phone company will install one for a nominal onetime charge. If you have an old-fashioned, 4prong jack. The Phone Ranger comes with an adaptor you can use. Even if you live in an area with rotary dialing, the pushbutton system on your Phone Ranger will work. And the entire unit is FCC approved.

Includes amazing "last number" memory!

No need to re-dial when you get a busy

signal. Just press the # or the * button and The Phone Ranger automatically redials the last number you called!

(A great security idea: "program" yourphone to your local police number before you go to bed. The touch of a single button alerts police in case of emergency.)

Roy Thomas

A ASSOCIATES, INC. 733 Lee Street, Dept. 15-2200 Des Plaines, IL 60016 In our first edition of CB News we reported how basically simple it was to operate CB equipment. For the benefit of first time readers please bear with us whilst we take them through the simple steps yet again.

Control/

Whilst it is not legally possible for you to own a CB rig at present, you will see that we have illustrated throughtout our magazine pictures of the kind of equipment available in the United States. This is for your interest only and as previously outlined equipment manufactured for the potential British market may well be of a different design to satisfy our nations requirements. However, we would like to briefly mention the controls of the CB equipment which will highlight the simplicity of operation:

1. ON/OFF/VOLUME

Just like a normal transistor radio all CB rigs have a switch to turn it on or off. These are normally located on the front of the set.

2. SQUELCH

Unlike a normal transistor radio, CB transceivers (transmitters/ receivers) have an additional knob which is used to adjust the sensivity of the receiver portion of the set. Without this control one would experience a scratchy static sound which would be caused by the receiver itself. All this control does is to eliminate the squelch allowing the incoming signal to be heard, silencing the background noise.

3. CHANNEL SELECTOR

Assuming that we have more than one channel to broadcast and receive on, our sets also will have a channel selector rather like those multi-position knobs located on early VHF television stes. On some American equipment the channel selector



has been located on the microphone housing facilitating one handed control possible a boon to the motorist.

4. AUTOMATIC GAIN CONTROL

"AGC" is a term which is used by CB freaks. It is a feature of the circuitry to prevent over loading the receiver when in the vicinity of a third party transmitter. In other words, if you had the volume turned to maximum to receive a very weak signal then if you did not have this control you would have your head blown off when a strong signal was received.

5. AUTOMATIC NOISE LIMITER

The ANL acts as a filter. It reduces the static between signal input substituting silence in place of man made static such as near by machinery, car ignition or other electrical and mechanical engine interference. Generally, the ANL is an on/off switch and manually controlled. Some sets also have a "Noise Blanker" which is a more complicated version of the ANL and can also eliminate pulsating noises from your equipment.

6. S. METER

More expensive sets have

meters which determine the strength of the in coming signal in S. Units from one to nine. An S1 signal is weak and an S9 signal is strong, The meter measurement is decibels. Some equipment also has a RF meter which monitors the power of your own signal when transmitting and indicates the efficiency of your equipment.

7. DELTA TUNE

This is a three position switch allowing the user to correct the receiver for off-channel signals and to receive the signals best for their frequency with the minimum of distortion.

8. DX - LOCAL CONTROL

This facility is ideal for town work giving the operator the choice to receive local shortrange calls or DX long distance communication at the slide of a switch.

9. TONE CONTROL

This is nothing more than a treble/bass control like a kind found on normal AM radio and stereo record players.

10. MICROPHONE

There are two main kinds of microphone available - one the

hand variety or more convenient for the driver, head sets and microphone similar to those ones used by telephonists. The latter is more suitable for operators of public service vehicles.

Some equipment manufactured in the States will also have indicator lights advising the user whether they are in a broadcast or receive situation. microphone gain control to vary the percentage of modulation, and even a CB/PA switch giving sets the capability of the user talking through the microphone to those people on the sidewalk by public address. Police radios already have this facility in the UK but it is unlikely that the general public will be able to enjoy this facility in this country.

BACKNUMBERS

Did you miss our first issues If so, send 60p plus 15p post and packing. To ensure you receive your copy of CB News regularly every month place a standing order with your newsagent or take out a postal subscription for one year (12 issues including post and packing) by sending a cheque or postal order made payable to Crofts Publishers Limited for £9.00 to: CB News, Empire House, Empire Road, Leicester.



Hey, Big Buddy -Meet Al Gross, Inventor of CB



Showing both front and rear (cover removed) views of the J-E transceiver.

The J-E transceiver. Receiver is regenerative; microphone is carbon-button, like in a telephone.

He First Discovered the Joys of Radio On a Lakes Boat Bound for Buffalo

H IS CB "handle" is Phineas Thaddeus Veeblefetzer. Sometimes he cuts into Channel 14, used by kids with their hand-beld walkietalkies, and says: "This is Commander Kirk. We have established standard orbit and w'll await your report on the inhabitants of this planet..."

But Al Gross of Cleveland could easily call himself "Daddy-One" or "CB Inventor" because he did just that.

A cheerful, talkative man of 59, Mr. Gross invented citizens band radio during World War II while working on a contract with the OSS, the cloak and dagger outfit that predated the CIA.

Mr. Gross even got a patent on the invention in 1950, but that had run out when the big boom broke during the 1973 fuel-trucker crists.

Mr. Gross likes to say that his love for radio started on a trip to Buffalo, aboard the old Lakes steamer C&B (is that a dramatic foreshadowing?) when be was 9 years old. "It was 1927 and we were headed from Cleveland to visit relatives. The radio shack was open and the operator was taking code.

"He let me in and answered all my questions, showed me everything . . . I remember that day as clearly as if it were yesterday."

So Mr. Gross started reading radio books and building crystal sets. By the time he was 17 and in high school, he passed his "ham" requirements and began sending Morse on a radio which he built.

"In those days you had to build almost everything — and I was not happy sending code. I wanted to talk, to use voice communications."

H E SUPPORTED himself through case Western Reserve University by working part-time in a radio store, and as a graduate electrical engineer, be went to work there full-time in 1339 — the best he could do in those relatively moncommunicative days.

By that time, he was playing around with very small, hand-held, high-frequency radio sets. Eventually be published articles about one model that measured 1½ by 2½ by 8 inches — about the size of the transistor walkie-talkies now sold everywhere.

Of course these sets used "peanut tubes" and probably ate batteries for breakfast, but the OSS called him in and under their wing he developed the "Joan-Eleanor" system that allowed an agent on the ground to conceal a tiny transceiver for contact with a plane that took the message down on a wire recorder while retransmitting it overseas.

This system reached for 50 miles, operating about where Channel 13 is on today's television sets.

At a Federal Communications Commission meeting in 1944, commissioners Jack Jett and Roswell Hyde started talking about the development of a "citizens band" for low-power, short-range talk after the war.

"It was going to be personal, two-way radio," Mr. Gross says, "and even then we realized what a tremendous thing this could be."

He got licensed and paid to experiment with the system from 1945 through 1948, testing CB in every possible circumstance. In 1950 he got that patent. Mr. Gross never made much money from the idea though he made "a living" off it before the boom — but his biggest regret is that the FOC did not take his advice about frequency.

"I wanted to use 460-470 megabertz, instead of 27. That would have put it between Channels 13 and 14 on today's TV, and you'd have had absolutely no problem with the static and 'hash' you bear

on most channels, now. And range would have at least doubled, if not tripled.

"But there was politicking. My set would have cost \$75 to produce at that time, and the potential manufacturers said they had to go to lower frequencies to build cheaper."

As it turned out, the transistor and the current boom would have wiped out that difference for the most part. Interestingly enough, the FOC is now considering going above Channel 83 for the pext generation of CB radios.

M R. GROSS later worked for a number of people, including the various military services. He developed a few more civilian items, too, these also a bit too early for public acceptance.

He built the first digital readout pocket adding machines — later to become those ubiquitous calculators — and he was awarded a patent for a "pocket pager," a one-way radio device "that you couldn't give away even to doctors, then."

He invented the helmet radio now used by all military pilots and banned by the National Football League after Cleveland's Paul Brown used it for a season to tell Otto Graham what plays to run.

And he is annazed at how useful CB has become in such a short time. Of course, he had predicted it.

"Back in 1945 Jack Jett and I wrote an article for the Saturday



Another book on Open Channel Jones? Don't you ever think of pretty girls?

Only if they've got a good rig with squelch and automatic noise limiter Sir.

Evening Post in which we told how people would be able to radio from car to car, car to home or business. We foresaw the use by criminals and conmen, and we foresaw the good, too, the helping hands, the emergency services in times of disaster.

"But I never dreamed than it would happen in my lifetime.

"C B DOES 'homogenize' society in a way, but it also brings people closer together," Mr. Gross adds.

"That wild world of CB is the only place I know where a person's race, sex or politics has no place. It is being used as we intended. In Cleveland, there are at least 800 groups formed around CB. It's so popular, it's unreal.

popular, it's unreal. "Why, the company threw a CB jamburce down at the plant in Andersoaville, S.C., a city of 65,000. More than 3,500 cars showed up -caravans of CBers from all over the south -- just to meet me, if you can believe that.

"No, the invention is doing more good than harm. It is being used as it was intended: to help people, help keep them in touch. Senior Citizens for CB — imagine that! They're trying it in housing projects in the Cleveland area right now...."

Some Advice From the Top

Al Gross thinks everyone should have a CB radio — even if his patent on the machine ran out long ago. He thinks the day will soon come when people will carry shirt-pocket mini-radios everywhere, using them at work or school, in their cars, or hiking outdoors.

He says there's little you can do about the "hash" that filters through the current sets, but notes that new circuitry is being developed that will quiet newer CB radios within the next decade, at the latest.

He also believes that the current discount prices of about \$50 for a mobile transceiver are about rock bottom.

And for antenna shoppers, he suggests they look for one at least 36 inches long — either a "top-load" or "tunable tip" model. "That's what truckers use, and they get out pretty good," he says.

SO MUCH Glory!

Pirate radio Broadcasting

It's easy for free radio fanatics to dwell in the glorious days when off-shore pirate radio stations ruled the (air)waves, and the disc jockoy to dream of the chances he missed by not joining the seasick spinners. However, it's all gone, and unless Radio Nordsee sets sail again, you can forget the "boats" once and for all. Dreaming of what you could have achieved, won't give you a chance when Radio Anglia begins to audition, and setting Radio London on a pedestal as an all-time great docsn't mean a thing, unless we start now, to examine its successes and failures in broadcasting. OK, I'll admit that ex-Caroline DJs, Tony Prince, Tony Blackburn, Tommy Vance, Dave Lee Travis, Keith Skues, Simon Dee, Johnny Walker, Rosko and Bob Stewart have "made it" on British radio, but why? And what about the other ninety per cent who didn't make it? There were well over a hundred DJs who passed through Radio Caroline's ship-board studios.

Free Radio types have continually said that if it wasn't for the pirates. Tony Blackburn, Tony Prince & Co. wouldn't be what they are today, but although Caroline played a great big part in their career, are we sure that it was such a big thing to them? You see, for any DJ it's just as much a matter of education, and hard work, as it is to get the "breaks." With hard work and persistence the "breaks." With the work and persistence the "breaks." With hard work and persistence the "breaks." Born the set hard been around there would have found another way to get into radio. Don't think that the successful pirate Joks needed Caroline — they needed work on radio — Caroline just happened to be around. But it did HELP.

The first off-shore station to serve the British Isles was, of course, Radio Caroline, transmitting from the motor vessel Caroline. It began broadcasting off the Essex Coast on Good Friday 1964, just a month ahead of rival station Radio Atlanta, based on the *Mi Amego* ship. Both using 10kW transmitters, serving the same audience, with Caroline copping all the listeners, Atlanta was doomed. A liaison was needed and directors Ronan O'Rahilly (Caroline) and Alan Crawford (Atlanta) joined forces and the M.V. Caroline sailed around Great Britain to anchor in Ramsey Bay, Isle of Man, becoming Caroline North, with Atlanta using the callsign "Caroline" and still broadcasting to the South of England. O'Rahilly gained complete control of both stations, and he had an exclusive "network" covering a good percentage of the British Isles, with a potential audience of about 37 millions.

Radio Sutch was under way, but using an ex-army twenty-five quid transmitter on a disused war-time fortress in the Thamos estuary eight miles from Whitatable. Kent, a ten mile range on a good day hardly touched O'Rahilly's monopoly, even though readings



-

"Caroline" anchored off the English Coast — the first of the "Pirates"

from Fanny Hill were part of the chaotic programme format. Radio Sutch lasted all of three weeks, and our screaming Lord friend sold out to his manager Reg Calvert, who had other plans. Sutch had proved to Calvert that broadcasting from a Government disowned Fort was on, and much more stable than a ship. A new transmitter was installed, and Radio City was the first real O'Rahilly competition. There was more than one fort, and up popped Radio Invicta, but following the death by drowning of two DJs and a station manager returning to land from the station, Invicta died. Disc jockey Mike Raven, who hosted the very popular programme "ALL SYSTEMS GO" on Radio Atlanta, but left the station following change of management, with a couple of friends went out to the Invicta fort to see if it could be once again an operational radio station. Living on baked beans for a month (and if that isn't hard work, I don't know what is) Radio K-I-N-G was born, and began to make money. A financial backer was found, and following a new transmitter and aerial system, KING closed, and Radio 390, Britain's first all day sweet monts to follow an audience figure in excess of one million.

However, the two Carolines still maintained listener interest, mostly because of signal strength, making the stations easy to listen to within a 50 mile radius, and up to one hundred miles on a good receiver. Reports of the success in pirating British airwaves spread around the world and in September, 1964, a group of American businessmen bought a disused US Navy minesweeper, the Galaxy and sailed her to the Bahamas. She was fitted out with a generator, capable of producing a transmitter output of 50kW (five times greater than the 'two'Carolines), and the most modern studio equipment. "Wonderful Radio London" was on the air Christmas Eve with an impressive DJ lineup. It couldn't fail, and with outside sponsored interests in dances, motor racing, and additional financial activities, during 1965 Radio London captured the majority of Caroline South's listeners plus a huge slice of the listeners who before couldn't receive pirate radio.

The winter of '65 was hard on the fragile transmitting equipment, and Radio London began to be off the air more times than on, and during the Christmas period DJ Tony Windsor put out a distress call for drinking water to be brought out to the station. In February 1966 the Galaxy during transmissions broke anchor and drifted for two miles into British limits, and couldn't broadcast until back into international waters. The following week, Caroline South drifted on to Frinton Beach during a gale, and had to be hauled off by the British Navy. Transmitters were silent.

The Mi Amego was taken to Holland amidst a cloud of mystery as to whether she would return. During this period the shares of Planet Productions, the Radio Caroline holding company, dropped, and O'Rahilly needed additional financial backing. It was found, and Philip Solomons became a partner in the Caroline consortium. On April 3rd, 1966 Radio Caroline South was back with a new 163' 0" high antenna and a 50kW transmitter. (During the interim period Caroline was given the then illegal Radio Sud ship M.V. *Cheetah*, once a Radio and TV pirate station operating off the Swedish Coast; to use as a stand-by station. Their power, however was poor, and their range wasn't much in excess of 15 or 20 miles). With new DJs, Rosko, Tommy Vance and Tony Prince, along with Caroline originals Tony Blackburn and Tom Lodge — recalled from Caroline North to help build up audience figures — and a 50kW transmitter the fight was on. London and Caroline South were on equal standing, and it was the DJs who in July built Caroline's audience to over 8,730,000 beating the Big L by 430,000 listeners.

In the meantime two other stations opened, although not in direct competition with the big boats. Radio Scotland, based on the *Comet*, an Irish lightship, and Radio 270 operating off Scarborough from an old fishing trawler no less, called the *Oceanne*, both had their own, "private" sizeable audiences.

The biggest bid to gain the Caroline and London strongholds, came from yet another American business venture. A ship, M.V. Laissez Faire (formally the Olga Patricia) sailed from Miami via Lisbon arriving just a mile from Radio London in June of 1966 - the waters off Frinton are very shallow and easy anchorage is attainable outside of the major Harwich - Hook of Holland, Harwich — Ostend shipping lines. Two stations emitted from the L.F., SWINGING Radio England — a 24 hour pop station, and Britain Radio a sweet music station after Radio 390's one million listeners, but they were too slick, too fast, with an uncomprehensible broadcasting format, which brought confusion to the British listener, even though the transmitting power was in excess of its major rivals, with a capacity of reaching 100kW output. Advertising became in short supply and Christmas 1966 saw the close of Radio England, re-opening as Radio Dolfijn offering a challenge to the then eight year old Dutch pirate Radio Veronica. When Radio 390 was forced to close along with two other fort-based stations following a court ruling that they were within British waters, ex-390 station chief Ted Allerbury, became manager of Radio 355 (previously Britain Radio). Radio Dolfijn didn't do too well even after changing its programme content and the station name to Radio 227, and on Saturday, 5th August, 1967, both 227 and 355 closed — both financial disasters !

The Marine Offences bill became law and at the end of August, 1967 only the two defiant Radio Caroline ships were still broadcasting, and operating, as far as the British staff and DJs were concerned, illegally. They lasted until February 1968. The era of British pirate radio was dead.





Driver Aid, Information And Routing

Of all the USA based organizations involving the public use of Citizen's Band Radio, perhaps one of the most ambitious is Driver Aid, Information and Routing (DAIR) which does not rely on CBers monitoring the airwaves to achieve its objectives. DAIR was developed by General Motors engineers and offers four basic functions:

- a. Communications between a vehicle and aid/information centre. This allows a motorist to obtain road information and to summon assistance if required.
- b. The audio sign which allows the vehicle to receive messages regarding traffic conditions and emergency situations on the road ahead.

- c. The visual sign minder. Roadside traffic signs can be reproduced on a special display inside the car.
- d. A Route Minder this can be used by a driver who doesn't know his way and he will be directed along a route to his destination without the need for maps and route signs.

At present DAIR is in the experimental stages and makes use of CB receivers merely because in the majority of cars in the States they are already present, but in the future it may not make use of the bands presently allocated.

The equipment installed in the vehicle for the DAIR system is a control console, a display panel to give read outs and a magnet

sensor. The console houses a data processor for decoding the signals generated by magnets placed in the roads (which can be used to operate certain in-car displays), a CB transceiver for aural contact and a punched card reader to store route turn directions and a dial encoder to preserve the security of RF transmissions when calling for assistance. The readout panel displays traffic signs which are on the road ahead. Turn directions for routing are also displayed. When a car passes over the road magnets the appropriate display is illuminated and a bleep alerts the driver to look at his display for information.

The highway authority provides the aid/information centres, message relay stations, magnet





triggering traps and low power roadside CB transmitting equipment. A Central control console is in each aid/information centre and this consists of a CB transceiver, a decoder aid messages and a print out which permanently records the incoming call. These aid/information centres are spaced about 25-30 miles apart and are sometimes integrated with other services.

Low power CB transmitters along the roadside are used to transmit pre taped messages concerning traffic conditions. These audio signs may also be used to control traffic in an emergency. To be able to receive these messages however a vehicle must pass over the magnet trap of the proper code.

From the experiments which have been and are still taking place, it has been found that if two or more motorists dial for assistance at the same time to the same information centre problems occur and it seems that there is a need for monitoring the coding channel with a pushbutton before dialing.

It has also been found that in some cases motorists have been receiving messages half way through and some refinement in this area also is necessary. The design of the route minder used in the DAIR demonstration equipment decodes every intersection of all demonstration routes, therefore, the punched card used to programme the routes need contain only turn information for each intersection on the route. In a nationwide routing system this solution is practically impossible because of the large number of intersections involved. The route data storage medium must include intersection identification coding as well as turn direction coding.

It is anticipated that a minimum of 25 data bits would be required

to code highway on a national scale and in the States this would allow in excess of 4 million intersections each with up to 8 approach roads to be coded. A preliminary investigation has revealed that an ordinary 1/4 inch magnetic tape cartridge is perhaps the most economical method of storing this information.

The demonstration of DAIR has stimulated a great deal of interest and in the foreseeable future the American motorist may have yet another aid at his fingertips — one which although sounding feasible would no doubt be very expensive in the initial stages.



lessons from The Past · · · · · · · And A look To The Future

Even the most general study of history reveals, unfortunately, a series of glaring errors which have resulted in tragedy. Mans inhabitance of this earth can only be described as one long catalogue of disaster. To index such events would be immeasurably beyond the capacity of this article, but I feel it may be worth mentioning a few to give you the general idea and it will help your comprehension of the essence of this dissertation if you bear in mind the lack of communications.

Custers last stand: an awful example of the left-hand not knowing what the right-hand is doing; the charge of the light brigade involved far more than just concentrated egotism on the part of it's central character: Napoleon's ill fated excursion to Moscow - a terrible waste of human life; the bombing of Pearl Harbour; the Torry Canyon; the Titanic; Dunkirk; the Labour Party: The Boar War: the decline of the Roman Empire: the Liberal Party: Auschwitz; Watergate; the Franco-Prussian war and indeed all wars; the Pentrich revolution; Scapa-flow: detente and of course the Conservative Party. As if this was not enough, England miss out on the European Nations Cup Final through a penalty. If only Ray Clemence had known that Van der Elst always puts his spot kicks to the keepers' left. I could go on but I think by now I have made my point. The list is endless.

It is quite evident from the above that man's constant habit of getting it all wrong is directly attributable to communication, or, without putting too fine a point on it, lack of communication. This is rapidly becoming a dangerous social disease. How often have you walked through the city and not spoken to a soul? One can observe a busy, bustling centre crammed solid with shoppers on a Saturday afternoon two weeks before Christmas (surely a time for good will if ever there was one) and no one communicates on any other level than, "Oh no, we can't afford that" or "look darling do hurry up, they kick-off at three" or even, "Oh yes, that will go nicely with the Chesterfield". It is increasingly apparent that we simply do not communicate. Our little story of history (ancient and modern) has proved that we never really have. What can we do about it? How can we reduce the potential of disaster and improve the quality of life by redeveloping our transactional skills in the process.

One very simple answer, and I believe that this is vitally important to our survival as a race, would be for Citizen's Band Radio to become legal worldwide. It is quite obvious that the dramatic series of tragedies and mankinds' failure to even notice the impending perils lying before him could guite easily be averted with all the benefits offered by CB. Whilst it is worth pointing out that our technological resources did not exist in Caesars reign, this cannot be offered as an excuse. The human race has constantly treated methods of improving communications, and hence relationships, with trepidation. After all, they did have messengers in the earliest recorded days of history, and probably before that. And, so it is with CB Radio.

Here we have a wonderful tool at our disposal. A system that can benefit us all in such a way as to bring back the joy to living, which utilises all the latest in digital electronics and which will mean that no one need ever be alone again. Just think what it would have meant to our ancestors to have an "emergency channel". The disasters mentioned earlier could all have been avoided if the opportunities we now have had



been available then. General Custer could have taken a far more balanced view of things and got out while the going was good.

Brian Cohen need never have been mistaken for the Messiah. Josephine may well have been pleasantly surprised to hear Napoleon say, "Oh alright then!" Nixon could have been forewarned and resigned earlier. Ceasar may have discovered the real intentions of his so called friends and what is more, I could have told Ray Clemence to dive to his left and it would have been us in the final and not Belgium!

Yes, CB really is that good. Had I been Ceasar or Custer, I would have jumped at the chance of such a system. But no, as I said earlier any method of improving communications is always treated with trepidation. Even the messengers were treated like slaves! Are we afraid to contact our fellow man? Have we not walked through city centres without speaking to a soul for long enough. Have not enough of our motorists fallen asleep at the wheel through sheer boredom at the prospect of God knows how many more miles of motorway. Surely it is in our interest to point fingers, hammer on tables and shout from the roof tops, "Enough is enough, we will take no more!" Our very survival depends on ending the doom that even history. has failed to sufficiently impress upon us as being both imminent and ongoing.

I would hate to have to say that my confidence in human intelligence and rationality was diminishing, but at times I do wonder. This, however, is only straightforward paranoia which I am quite certain is not at all uncommon. I am certain that this condition is entirely due to the people who lead us. During the last election the Conservative Party pledged themselves to bring in legislation to authorise some form of 'Open channel broadcasting' or, as we prefer to call it 'Citizen's Band Radio'. In my opinion, as a result of this policy they won that election and, therefore have a mandatory duty to ease my paranoia and save us from the total destruction that lies ahead.

The campaign has encountered difficulties in the past, but progress has been made and this must continue if we are to have the freedom and security that is our birthright. Current debate concerns the pro's and con's of a variety of frequencies, 27MHz, 928MHz and various VHF channels are being bandied about. There are of course, many considerations in selecting an appropriate frequency not least our aero-modelling colleagues, but provided there is give and take on all sides, there is no reason why legislation should not go ahead. No one is fool enough to believe that one can please all the people all of the time. Ask Ceasar! But, at least we can look forward to all the benefits and all the fun of talking to people, and who knows, we may be able to say "hello" to people in busy, bustling centres crammed with shoppers on a Saturday afternoon two weeks before Christmas. Man will be able to sleep soundly in his bed without the fear of impending gloom and England may even win the next World Cup.

THE SLIPPERMAN

What' Your Duty Tutti Frutti?

In the States everybody has a handle or nickname for use on the air. The nice thing about having a handle is that you can be as anonymous or as well known as you care to be and that you can change your handle whenever you wish. It is wise to choose a handle that is easily remembered and that cannot be mis-heard on even the poorest of receivers. Not everyone, however can be a Rubber Duck or Foxy Lady so many people as a last resort use their profession as a handle.



Here then are a few "occupational handles" which are often used:---

Loan Arranger: Bank Manager Medic Man: Doctor Panhandler: Nurse Diesel Doctor: Vehicle Mechanic Mother Hubbard: Nursery Teacher Liquid Engineer: Plumber Green Doc: Groundsman Greenfingers: Gardener Electric Bill: Electrician Kilowatt: Electrician Penny Pincher: Investment Banker Tooth Fairy: Dental Assistant The Happy Booker: Author Pop Eye: Optician Wood Butcher: Carpenter Word Nut: Librarian Rug Rat Controller: Teacher Music Man: Musician

Although handles make speaking on the air that much more interesting they also serve a useful purpose. They are more easily understood and remembered than a call sign — a useful factor perhaps in the case of an emergency. It must be remembered however, that the handle is not a substitute for the call sign and that in the States it is an offence to speak with a CBer who does not first give his call sign at the beginning and end of

Big Daddy Silver Fox **Devil Woman** Early Bird Rubber Duck Sandspur Batman Wheeler Dealer **Bald Eagle** Babysitter Rose Bud Chocolate Chip Pancake Woman Bushwacker **Red Baron** General Karnage Mad Dog Cottonpicker Foxy Lady



each transmission. This law is constantly abused by some crazy CBers who think it fun to be abusive on the air but it is hoped that when CB is legalised in Britain it will not be spoilt by such bucket mouths. When a base station is involved the station and all mobile units have the same licence number and call sign but the full number must be used by both units when communicating — it is not allowed just to say "Unit One to base".

Handles often project an image of the CBer even if this was not particularly intended. A CBer called the Jolly Joker is hardly

Single Swinger The Cookie Monster Charlie Brown Soda Pop Kid Goldielocks Dum Dum Society Jim Deputy Dog Plain Jane Cherry Lips Love Bear Gadabout The Dragon Eager Beaver Steaming Demon **Passion Fruit Captain Fantastic** Hub Cap **Big Mamma**

likely to be popular if he sits at the eyeball meeting with a face like thunder and is unpleasant to all and sundry. The question is bound to be "why on earth did he use that handle?" So, when CB is legalised in Britain it is worth spending a little time dreaming up a good handle for yourself you never know who you might rub eyeballs with at the local greasy spoon!

If however your mind goes a complete blank and you just cannot think up a relevant handle why not try one of the popular American handles as listed below:

Snake Eyes Black Widow Sugar Daddy Wild Man Blondie Lucky Lady Snoopy Crown Prince Blue Angel Cat Woman Road Runner Goldfinger Powder Puff Dragonfly **Orphan Annie** Crackerjack Kid Greasy Joe Lady Bug

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