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S9 HOBBY RADIO

AMERICA'S OLDEST AND LARGEST CB MAGAZINE

VOLUME 20 NUMBER 12

DECEMBER 1980

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EDITORIAL & PRODUCTION STAFF

Tom Kneitel, KBAR3956/K2AES

editorial director

Rand Wesker

assistant editor

& production manager

Bill Sanders, KBAH6794/SSB-295

Rick Maslau, KNY2GL

Marc Stern, KBFS8072, SSB-OA71

C. M. Stanbury II

John Santosuosso

contributing editors

Lynn Tyler, XM17-294

Canadian editor

"Zulu Mike", SSF-10A (France)

European correspondent

Lori A. Ressa, KBH2503

production consultant

Eileen Lucey

classified advertising manager

William H. Travis

art director

Karen Jensen-Richards

associate art director

Elizabeth Baile

designer

Susan L. Krupp

staff artist/production assistant

M. D. Crowell

type coordinator

BUSINESS STAFF

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advertising manager

Janet Kurtz

circulation manager

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CB NEWSWIRE

YOUR CB NEWSPAPER

DECEMBER 1980

Ripoff Turns Into Refunds—Finally!

If you were talking over a Citizens Band radio between 1970 and 1975, Uncle Sam has some money he wants to return to you.

Four years after a federal court struck down its licensing fee schedule, the Federal Communications Commission is ready to refund \$31 million to an estimated 2.4 million CB and ham radio enthusiasts and others.

The fee refund program stems from a December, 1976, decision by the U.S. Court of Appeals, in which the FCC was found to be charging fees that generated more than it cost to process license requests.

The biggest problem, according to the FCC's Richard J. Keller, will be making sure that the 13 million to 14 million Americans who received a CB license after March 1, 1975, and who thus paid only \$4, understand they are not eligible for a refund. Even if the commission succeeds in getting that point across, the agency expects a flood of applications. Private radio chief Carlos V. Roberts estimates there were roughly 1 million CB radio users by early 1975 who could be eligible for a \$17.99 refund by filling out an FCC form.

The commission published a special

public notice outlining who is eligible for a refund and what they have to do to get it. The guidelines specify:

- The fee refund program covers 12 different categories of radio licenses, issued between Aug. 1, 1970, and Feb. 28, 1975.

- Those licenses cost \$20 or less but more than \$4. Until March 1, 1975, for example, a CB license cost \$20.

- Besides CB radio licenses, the program covers restricted radio telephone permits that cost \$8; ship station and other maritime licenses that cost \$20; aviation radio service licenses that cost \$20; industrial land transportation and public safety radio station licenses that cost \$20, and microwave station licenses for cable TV systems that cost \$15.

Also included are ham radio licenses that cost \$8; duplicate station licenses that cost \$6 for all those licensed by the safety and special radio services bureau; certain required notices from cable TV systems that cost \$10 to file, and certain "type-certification" requests for electronic equipment that cost \$15 to submit to the FCC's office of the chief engineer.

The size of a refund varies with each type of license.

To receive a refund, an individual or company must obtain the official Phase II Fee Refund Program Form by visiting or writing the nearest FCC field office (check your phone book); or by writing to the FCC at P.O. Box 19209, Washington, D.C. 20036.

Once you've got the form, if you can't remember your call sign or the proper dates, make an educated guess and the FCC will try to verify your eligibility, although that will take additional time.

Most eligible applicants can expect to receive their check within six weeks. If you're not sure you should request a refund form, you can phone 800-424-2901 for additional information. You have until Dec. 15, 1982 to file your fee refund request, but the commission is urging you to file before Sept. 1, 1981.

"New" Discovery Re-Invents The Telephone!

Brockville Cable Telecommunications Inc. and the Cable Telecommunications Research Institute (in Ontario) have announced a joint venture agreement on an experimental project—the first of its type in Canada—that will allow residents of Brockville to communicate by CB radio through their cable television system.

The two participants in the project said that several households will be supplied with small transmitter-receiver units that will be hooked into the cable network.

By the time the experiment is in full swing, officials said, they hope to have as many as 1,000 households involved.

"The main aim of the project is to expand the scope of a conventional cable television network by transmitting voice traffic similar to that of Citizens Band radio," said Kenneth Eland, general manager of Brockville Cable.

Eland said one cable channel will be set aside for the experiment.

In addition to being able to talk with one another, Eland said the hook-up also will allow subscribers to communicate with operators of mobile CB radios. But unlike

CB'ers, the cable subscribers will not need licenses to operate their system.

While it is "a purely experimental exercise," Eland said if successful, the system may someday become a "national party line" for hobby groups and clubs.

Eland added that it has the potential for a more important use, noting it could provide an immediate mass communication network in the event of an emergency.

Those chosen to take part in the experiment, which has been approved by the Canadian Radio-Television and Telecommunications Commission, won't have to pay for the extra service. Eland could not say how much subscribers would pay if it becomes a regular service.

Officials for Brockville Cable and the Cable Telecommunications Research Institute, an Ottawa-based research and development organization funded by cable companies throughout Canada, will decide later if the experiment was a success.

S9 readers may recall that we discussed this idea in our pages about 4 years ago! At that time we suggested that the whole idea was little different than the telephone.

If you're really serious about CB, put your money where your mike is.

Serious CB operators who want to get the most from their transceivers have been setting aside the microphones that came with their radios and replacing them with Turner Microphones. In the United States, they've been doing this since the 1950's. Now they are doing it in 33 countries around the world.

Why?

Radio manufacturers, in order to keep the cost of radios competitive, have designed simple, inexpensive microphones that are just that and nothing more. Turner amplified mobile mikes, on the other hand, with 0 to 15 dB gain controls can supply the extra "talk power" that will fully modulate the radio. Noise cancelling Turner mikes eliminate the unwanted background noise in truck cabs and tractors while delivering clear modulation of the desired signal. Amplified Turner desk mikes with gain controls, push-to-talk switches and lock levers allow the base station operator ease of operation, flexibility and much more "talk power" than the original microphone.

So, if you want to improve your radio's performance quickly, inexpensively and effectively, then get serious and put your money where your mike is — on a Turner Microphone.



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This is an outstanding base station mike for SINGLE SIDEBAND operations. The Super Sidekick power mike has two gain adjustments to match the sensitive input requirements of both high and low impedance transceivers. If you're a sidebander — you'll be QSA-5 with this mike.



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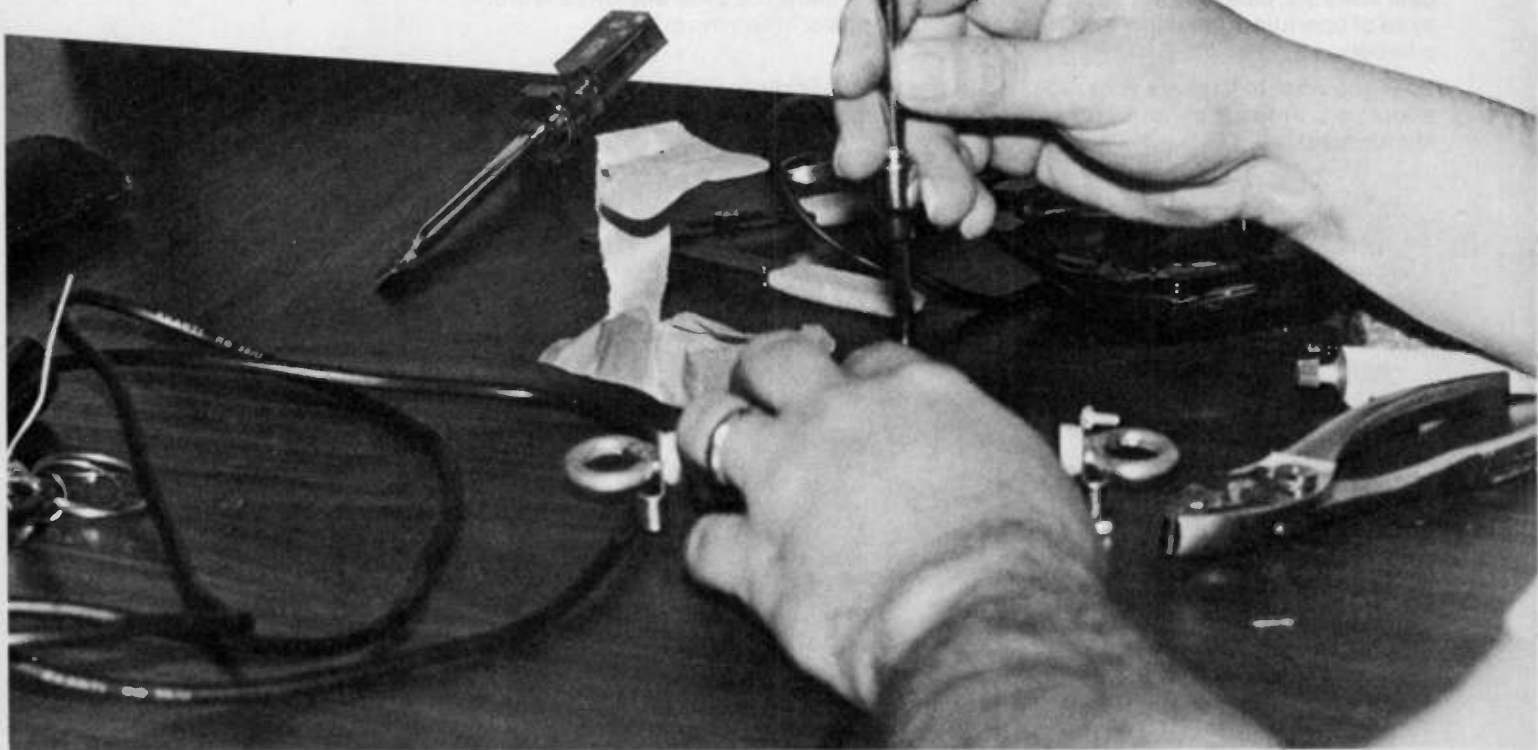
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Build *Your Own* CB Dipole Antenna

By Marc Stern, KBFS-8072/SSB-0A71



A most important part of your CB system is your antenna.

How many times have you heard that old statement? If you're like me, you've probably read it at least 10 times in your CB'ing career, probably more. But isn't it the truth?

Now that your season of R/Ving is over and you've taken your recreational vehicle or trailer off the road, it's a good time for some experimenting. Antennas are probably among the easiest of places to start.

You can buy a super-beam antenna and you'll have yourself one fine

system but you can also (or in addition to that store-bought antenna) make your own—at least a simple one!

LOOKING BACK

Before I get into antennas, I think it's wise to set out some background. Back in the early days, radio people couldn't go out to an electronics specialty store and buy a good antenna. They had to make their own, and they used all varieties. Some experimented with vertically polarized antennas (Marconi-type) while others

experimented with horizontally polarized antennas (Hertz-type). As experimentation into radio proceeded, antenna design became much more sophisticated. However, all the new designs were aimed at getting out the best possible signal, with a minimum power loss. There were Dr. Yagi's experiments (yes, there really was a Japanese gentleman named Yagi, who did a great deal of work with directional antennas) and there were other experiments with other types of beams and directional antennas.

YOUR TURN

Still, despite all the work done by the radio pioneers of the early part of this century, the basic system remained the same—a transmitter tied to a piece of wire to get a signal out, and a receiver tied to a piece of wire to get a signal back. (This, of course, is a very simplified way of stating it.)

You can still be like one of the early radio pioneers with your own antenna experiments. One of the simplest antennas to experiment with is probably the half-wave dipole antenna. A few months ago S9 ran an article on a different signal concept, circular polarization, but a dipole takes us back to one of the earliest antenna configurations, a horizontally polarized gain antenna.

Why is it a *gain* antenna? That's easy to explain. As opposed to a vertical antenna, the signal radiation is more concentrated into the ground wave, rather than the part that heads skyward. This puts more of your signal to work in one direction, since the maximum output is focused broadside to the orientation of a dipole antenna. If you want to picture this, draw a length of line between two objects. That, essentially, is how a dipole antenna looks. Now, from this line, draw lines arcing outward from both sides of the line. This is how the signal pattern looks. It's at maximum at the middle of the antenna lines and falls away toward the ends. Thus at the north and south poles—if you will—the signal is weakest. Any signals received obliquely to this type of antenna will be weaker, too.

A dipole antenna is actually bidirectional since it puts out a signal from both sides of the antenna wire.

You're probably thinking that this type of antenna is limiting, and might consider it so if you only use one dipole. However, using two at right angles will give you all the coverage you could want—360 degrees from your station site.

Dipoles can be among the most inexpensive antennas around. All you need are a couple of insulators, some wire, a coaxial cable connector and a length of coaxial cable.

The first step in cutting a dipole antenna is considering the frequencies you're going to be operating on. Since you want broad coverage of all the CB bandwidth, I'd suggest cutting the antenna for center band. It should work well all the way from Channel 1 to Channel 40. Its lowest SWR, though, will be right at Channel 20.

How do you go about finding the right length? Since CB communications are actually in the 11-meter

band (wavelength), you can assume the length of a full-wave dipole would be 11 meters long (roughly 36 feet). However, you don't need a full length dipole because one-half carries all the radio information that the other

half carries. (A radio wave consists of positive and negative components, each of the same height and each carrying the same information. Thus you can cut out one-half a wave and still have an efficient antenna. Radio



You'll have to separate and braid both the inner coax conductor wire and the outer copper shield when you make up a kit center connector like this B & W unit.



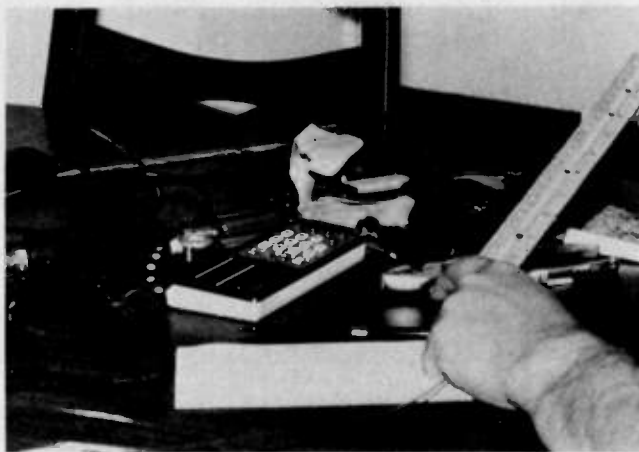
Most kits require some soldering to get a proper connection between the antenna wire connectors and the coax inside the connector.



It's easy to make up a kit, and this B&W unit is no exception. You have to snug down the halves with about 14 screws when you're done.



You can determine the length by using the formula described in the text of the article.



Take time and measure the quarter-wave sections of the dipole carefully.



One of the final steps is connecting the insulators. They keep your antenna electrically isolated from other metal objects or ground.

waves, if you could see them, would look much like the waves you see at the beach.)

So the antenna length you'll need is *roughly* 5 meters long, or 16 feet. A dipole antenna is still split further in-

to quarter wave segments, each roughly eight feet long.

This is the basic makeup of a dipole antenna. Now we'll discuss the exact measurements you'll need. Since you want to "peak" it toward

the center of the CB frequency band, I'd suggest cutting the antenna to mid-band at Channel 20—27.215 MHz. Thus each half of the dipole's two lengths would be 8'7" in length. However, cut your antenna closer to 8'10"—I'll explain why soon.

This antenna should resonate with a very low SWR right on Channel 20 and tend to head up on either side of this frequency.

Which type of wire should you use? Probably a Number 22 braided copper is a good choice, although you can use a covered type of copper wire (it should help with weather protection, too). The vinyl covering won't interfere with your transmission.

The first step in cutting the antenna is measuring the copper cable to the desired length. Once you've determined the exact length you want (it can also depend on which frequency you do most of your ratchet-jawing on), simply cut the cable with a pair of wire cutters.

Now the job becomes somewhat harder. Go to a nearby electronics parts shop (which may cater to hams) and buy a T-connector (or Balun) for the coax.

Following instructions, put this together, and attach a length of RG58/U, RG59/U or RG8/U coax to the female plug on the connector assembly (other types of T-connectors may require some soldering and permanent coax attachment). Remember, though, that you're going to need a length of coax fitted with double PL259 male connectors, one for the back of your transceiver, the other for the T-connector.

Once you've completed construction of the T-connector, it's time to attach the quarter-wave dipole segments to the connector itself.

Okay, you're almost ready to put it up, but where and how will you accomplish this? The first thing to remember is the size of your lot. If you've got plenty of space and some trees, then the choice is relatively simple—you can put it just about anywhere you choose (within reason—after all you're going to be limited by the length of coax you attach).

I'd suggest putting up your antenna as high as possible so your signal will be as high as possible. *Remember to watch out for power lines and be sure that you keep clear of them.* Since you're working with a relatively short antenna structure (37 feet and change for Channel 20, remember). You'll probably want to use part of your home as one anchor of the antenna. The other end could be a nearby tree, or lamp post or other free-standing object.

If you decide you don't want the antenna near your house you're going to have to consider a super-low attenuation coaxial cable. This is because you're losing signal the further you go. Try and keep the coax as short as possible.

Another consideration is the direction in which you do most of your communicating. If you work primarily east-west, then place your antenna north-south. (This is because of the directional nature of the signal. It's broadside to the direction of orientation.)

With all this in mind, it's now time to put the antenna up and tune it. At first, I'd suggest installing it temporarily, so you can later take it down for tuning up.

The next step in installing your antenna is attaching a couple of insulators. Don't wrap the wire lengths around themselves to form loops—use the insulators. These keep the supporting structures (house, water pipe, etc.) from entering the picture. They also keep the signal in the antenna and stop it from feeding into the ground.

To one side of the insulators (which are also available at electronics stores) attach the copper quarter-wave length of wire. To the other side attach a piece of insulated rope, something like nylon water-skiing rope. This makes sure the antenna is as electronically isolated as possible.

Now carefully attach the rope to a screw eye or some eye bolts at one end. At the same time, have a friend run up the other end similarly at the other point you've chosen.

I recently saw a good suggestion you might want to consider—running the length of rope through eye bolts, all the way to the ground, and tying it off. This makes it easier to lower the antenna should you want to work on it.

There are some other considerations before you tune up your antenna. You should always have some extra stress relief for the antenna. The insulators will help take some of the strain off the wire, but they can't do it alone. I'd suggest using some more lengths of nylon rope tied to other objects like other trees or poles to help take up some of the strain. This guying should help protect your antenna from breaking or stretching in a high wind. If you run it along your roof, you might want to use some stand-off insulators for stress relief. Alternately, you can slant the antenna and it will work as well (a "sloper").

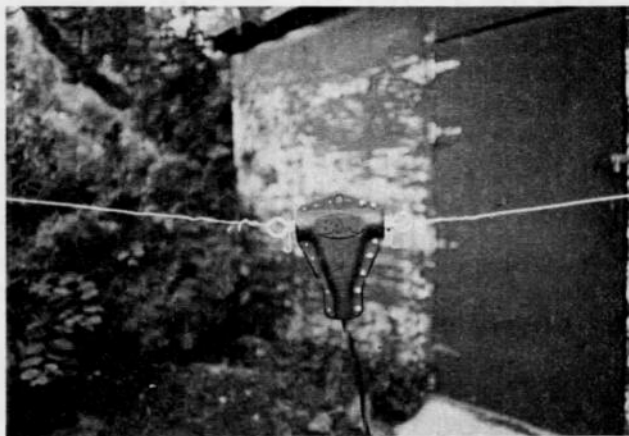
Now it's time to go back into the house and tune the antenna up, and



These are some of the tools you'll need to complete your antenna project.



We ran a mobile test of the antenna and found it was directional and most incoming signals were roughly S7 to S9 and very sharp.



This is what your antenna will look like at the center connector.

here's where the extra length of wire you left attached will help. To peak the antenna to the desired frequency (27.215 MHz in this example), you'll have to shorten the quarter-wave lengths to 8'7". But don't snip the three inches all at once with your wire

cutters. Do it gradually and observe what happens when you key the CB rig. You'll have to put an SWR bridge in line with your antenna and rig for this. You should notice the match start dropping as you shorten the antenna. *(continued)*

Remember always to cut in small amounts because in this area of the frequency spectrum an inch may be good for 1 MHz.

Once you've got your antenna tuned properly, you can go on the air and see what a dipole antenna can do. You might also see why the extra length of rope on both ends can come in very handy, especially if you have to tune it more than once.

A dipole antenna should operate quite satisfactorily over the range of CB channels you're likely to talk on. But, if most of your ratchet-jawing is done around Channel 1, then you're going to want the dipole tuned for that area. In this case the frequency is 29.965 so the antenna should be trimmed closer to 8'8" (the lower it goes, the longer it gets). However, you can see that the frequency space where CB operates is relatively narrow and an antenna cut for Channel 20 should perform reasonably well for Channels 1 and 40.

If you're worried about burning up your finals from an incorrect impedance match, you might want to try an antenna tuner (also available from hobby radio stores). With this device you can make your CB rig think there's a correct match, even though the antenna may not be totally in tune.

But why try a dipole in the first place? I think one of the key reasons is that it's fun to experiment with radio. It also gives you an advantage because, since the antenna is horizontally polarized, it will help you cut out interference. The signal will be more concentrated in your ground wave signal and a dipole gives you a gain of roughly 1 to 3 dB over unity. It helps you get out better.

Simply look in your Part 95 regulations booklet or your CB's instruction booklet and locate the frequencies covered by Channels 1 to 40. Channel 1 is 26.965 MHz, while Channel 40 is 27.405. The spread between the channels is 10 kHz.

Next, take this figure and divide the frequency into 468, and this should give you the length of a half-wave antenna in feet. Simply divide this figure in half and you've got the exact dimensions for your dipole antenna. The rest is a matter of construction and tuning.

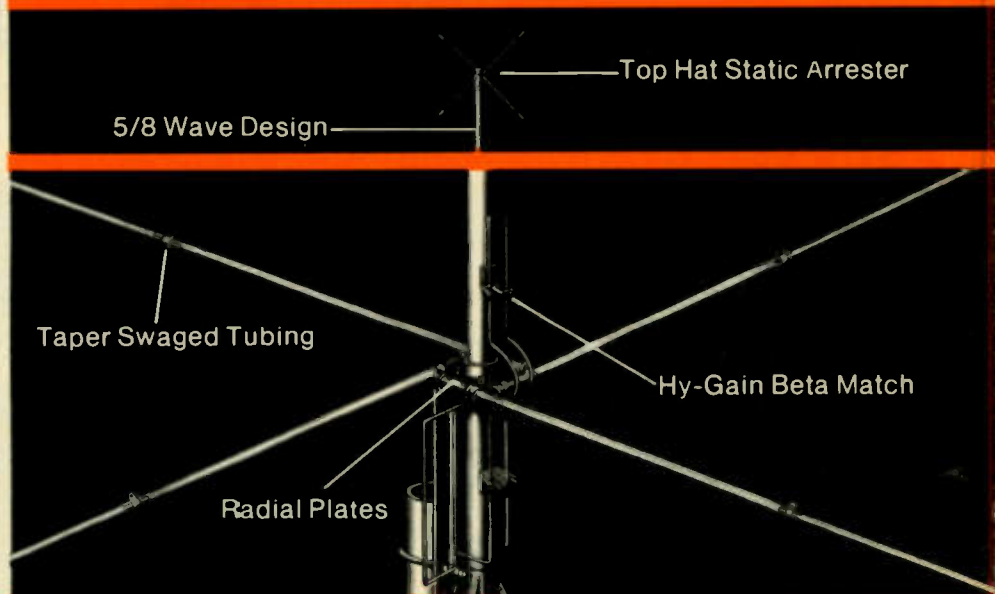
Now, where do you get the center connector? You should be able to pick one of the connectors at a reasonably well-stocked electronics supply house. However, there's an alternative you can make. Get a couple of extra end insulators and build your own.

(continued)

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This powerful 5/8 wave base station antenna design was an original Hy-Gain concept. Efficiency is increased substantially over conventional designs. Furthermore, Hy-Gain's CB antennas are subjected to the same demanding requirements established for amateur, military and commercial antennas.
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The world's most popular CB base antenna! Hy-Gain was the first to design a 5/8 wave collinear antenna. It was the ultimate omni when we invented it and it still is. Its impressive 5.3 dB gain in all directions has become the industry standard that other 5/8 wave omnis are measured against.

The Penetrator's signal is compressed at the horizon for extra power and distance because of its extra long 22' 9" (6.9m) radiator length. Its unique top hat discharges static buildup to nearly eliminate noise. This is not just another ground plane antenna; its superb design and heavy-duty construction will handle 1500 watts of power with no problem because there are no power-robbing loading coils to burn out.

Model 500 The Super Penetrator

- 5.3 dB gain
- 1500 watts power handling capability
- Low signal-to-noise ratio
- Compressed signal for extra power

Model 473 CLR II

This is the most copied 5/8 wave colinear antenna on the market. The CLR II achieves a powerful, no-nonsense 4.2 dB gain at the horizon, and a big 500 watts of power handling capability. This is, by far, the best value in Base Station Antennas available today.

This five-element yagi with 24' (7.3m) boom delivers an amazing 12.5 dB forward gain with 31 dB front-to-back ratio. For long distance, high powered action, this one has all other five-element yagis beat. This famous Hy-Gain Long John can handle 2000 watts of power with ease. Top quality materials and exclusive Beta Match feedpoint system with direct dc ground guarantees efficient power transfer and increases your talk power 18.4 times the normal output of your radio.

Model 410 The Original Long John

Model 542 SDB 6

Two 12' (3.7m) beams on a 14' (4.3m) cross boom for 12.7 dB forward gain.

First, bring the two halves of the dipole to the center insulator and wind them securely, but leave a little extra (you'll see why in a while). Strip your coaxial cable carefully, exposing the center braid of copper and center conductor.

Then to one side of the dipole center insulator, firmly attach and solder the center conductor of the coax, while twisting the braid into a strand and firmly attaching and soldering it to the other. They should meet the two incoming ends of the dipole wire and be well soldered.

Once you've done this, cover the center connector with tape and a good non-conductive coating. This should work quite satisfactorily.

It's a good idea to make sure that all the connectors, insulators and hardware are covered with a good non-conductive material. This minimizes the chances of corrosion. (Don't worry if the copper oxidizes and darkens. It won't interfere with your signal one bit.)

How does a dipole antenna perform? It should perform quite well on both transmit and receive. Since it puts a good portion of your wave into the horizontal wave, it should help you get out a good, clear signal with a minimum of loss.

The horizontal orientation of the antenna should help quiet unwanted noise. And, since the antenna can easily be moved around, you can change the orientation easily should you want to minimize interference from another station.

However, since it is also horizontal, remember that if you want to communicate with mobiles with the vertically polarized whip antennas you're going to have to switch to a vertical antenna.

As mentioned earlier, you can also get full 360 degree coverage with just two dipole antennas strung at right angles (north-south and east-west). To connect both of these to your rig I'd suggest using a multi-switch antenna coupler. This way you can switch from one antenna to another, at the flick of a button, should you want to communicate with someone in a different direction.

The keys to building your dipole should be time and patience. Take the time to do it right and be patient if it doesn't go together right the first time.

A dipole is a good, experimental antenna which should give you some first-hand experience of how the pioneers of radio felt. It also works well. Remember to keep it as high as possible for the best signal!

LET'S SCAN THE AIR!

YES--YOU CAN TUNE IN
ON PRIVATE, MILITARY AND
COMMERCIAL AIRCRAFT COMMUNICATIONS!



THERE is a growing legion of communications enthusiasts who have happily discovered the VHF Aero Band (108 to 136 Mhz); and to meet the needs of these listeners there are now several brands of top-notch scanners available, as well as a large number of tunable portables. Yes, it's true; folks have started discovering that there's much to hear on this fascinating band, including law enforcement, search and rescue operations, firefighting, military aircraft, airliners, even test pilots communicating with ground stations operated by aircraft manufacturers! There's actually an unlimited amount of totally dazzling things to hear on the band—if only you know where to listen!

When Tom Kneitel authored the original edition of his book AIR-SCAN it immediately became the “bible” for those of us who have become “addicted” to the VHF Aero Band; in one easy-to-use volume were more than 12,700 listings of airports and frequencies—control towers, ground control,

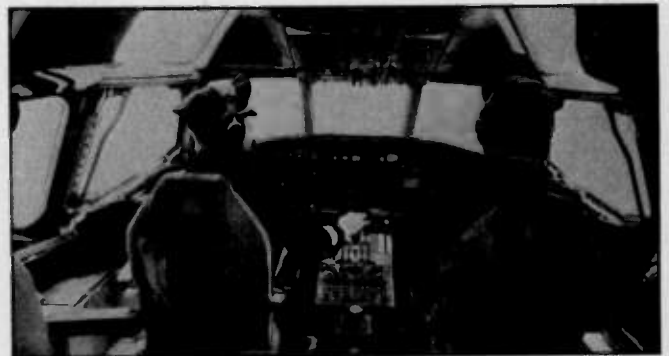
approach and departure frequencies, even some 2,000 frequency listings used for airline operations. It enabled a person to tune to private, commercial, and military operations in the band; my copy became well-worn from use.

Tom has now put together a new 2nd Edition of AIR-SCAN, containing all of the many changes and additions relating to frequency assignments, plus an enormous amount of all-new data which not only opened my eyes, but (more importantly) has opened my ears!

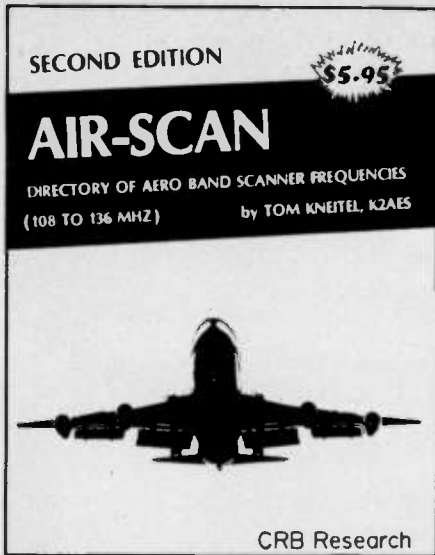
After the book's introductory chapter, which discusses equipment and gives information on the things which you'll hear on the band, it forges head-on into the listings. The first section of the book covers about 6,200 landing areas, and that includes those large and small—private, commercial, and military; even “unlisted” private landing areas closed to the public; plus seaplane bases and heliports! This time 'round, Tom has supplied



Search/rescue/emergency operations? The VHF aero band is the place to hear them! They're even on special frequencies!



The airlines have their own private communications operations going. Main topics of conversation include feisty passengers and pilot reports of mechanical problems with the aircraft. If the passengers only knew.



The all-new 1981 edition of this popular guide to all VHF aero band operations has been greatly expanded.

information on Mexican and Canadian airports which are close enough to the U.S. borders to be heard by listeners in the U.S.A.

This section of the book lists all operations frequencies at these 6,200 ground facilities, including control towers, ground control, approach/departure, Unicom, FAA Flight Service, clearance delivery, A.T.I.S., and other miscellaneous ones used by manufacturers, schools, agricultural, and other interests. In this edition Tom has also supplied frequencies used for radar controlled approaches. There are well over 18,500 listings in this section, more than contained in the entire earlier edition! But the 2nd Edition of AIR-SCAN doesn't stop there!

The new edition contains a convenient "log" listing of 76 interesting and/or popular frequencies in this band, with information on their use.

Next comes an all-new section. In the previous edition Tom gave only passing mention of the



The ol' "eye in the sky" police trick of watching traffic from upon high usually requires the use of the VHF aero band, which can also be used for aerial surveillance work.



These days you can get the VHF aero band on a number of different scanners, such as this super Bearcat 300 unit which also scans regular public safety bands.



An inexpensive way to approach VHF band joys is by means of a number of small "transistor portables" which tune 108 to 136 MHz.



The flight control board is the nerve center of many military aeronautical operations, as the pilots radio in their positions.

FAA's Air Route Traffic Control "Centers." Now he offers monitors a complete roster of all "Centers," together with the remote transmitter sites and more than 1,000 frequency listings at those sites.

This is followed by a greatly expanded section on Aeronautical Enroute airline operation communications. In the earlier edition Tom had listed about 2,000 of these frequencies—he said the "most active." Apparently his readers found these frequencies to be especially interesting and prevailed upon him to devote more space to these stations in forthcoming editions. Tom did just that, and there is now a complete listing of all of these frequencies now in use, together with the transmitter locations; there are some 5,600 listings in all, I would guess.

I must admit that these airline frequencies have always been my own personal favorites, possibly because the communications there seem to be high on the list of things which they *don't* want the



Communications between gliders and soaring craft and their tow-craft and ground units are to be found on the VHF aero band.



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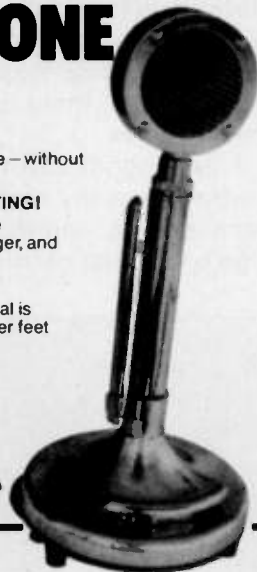
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CIRCLE 11 ON READER SERVICE CARD



The VHF aero band also buzzes away with communications from airport vehicles as well as ground-mobile rescue units.

public to hear, including "problems" with feisty passengers and more serious problems with malfunctioning aircraft components. These (until now) elusive frequencies provide a startling look at what's really going on "behind-the-scenes" at all major airlines; a weird combination of things both hair-raising and hysterically funny! One of the puzzling things you sometimes hear on these "enroute" airline frequencies is the crew radioing ahead for their tuna salad sandwiches; sort of makes you wonder why they aren't about to eat the same food the passengers are being served!

On the other hand, yesterday I heard a pilot trying to get instructions from the ground operations personnel on how to get his stuck landing gear down so he could land safely with his 85 passengers! As I said, it's a mixed bag, but never (even for a minute) dull!

I can't imagine that there is any type of 2-way communications operation taking place between 108 and 136 MHz which is not covered—and in suitable depth—in this fascinating and useful volume; I mean when a book starts listing the "un-listed" then you really have to figure that you're in on the ground-floor of the topic! No other publication (even AIR-SCAN's own previous edition) has ever been brought out which contains even a fraction of the amount of data on communications within the VHF Aero Band as is available in this book. Any person having an interest in hearing what's taking place over these exciting frequencies should have a copy of the 2nd Edition of AIR-SCAN readily at hand.

AIR-SCAN, 2nd Edition, is available at \$5.95 per copy, postpaid, from CRB Research, P.O. Box 56, Commack, N.Y. 11725.

Reviewed by Dr. Carleton L. Phillips, Sr.,
KCA6AJ.



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THE MONITOR POST

RICK MASLAU/KNY2GL SCANS THE CHANNELS

FIRST 800 MHz PORTABLE

Motorola Inc. introduced the 800 MHz MX 300 Series Handie-Talkie radio which offers users the ability to communicate with handheld portable units at 800 MHz.

Designed around the MX300 series of portables radios, the new 800 MHz MX300 incorporates technologies which result in a portable radio that meets any 800 MHz conventional system communication need.

The new radio has 1.5 watts of R.F. output and five-channel capability. Wide space transmitter frequency separations across the entire band provide a wide selection of channel configurations to accommodate numerous frequency requirements, resulting in greater system flexibility. The antenna is of advanced design providing greater coverage than conventional antennas.

To minimize service time, the radio is built with plug-in modules, which contain 90% of the electronics. Only one adjustment aligns the receiver and three align the transmitter. The transmit/receive switching of power and frequency is done by solid state electronic modules. This feature avoids the possibility of mechanical switching failure and improves reliability.

A quick battery release makes the battery easy to replace. Single-unit and six-unit chargers with one-hour and 14-hour charge rates will charge either the complete radio or the battery alone.

As standard equipment, users have the choice of either Private-Line or Digital Private-Line tone-coded squelch systems, which reduce interference from a channel's other users.



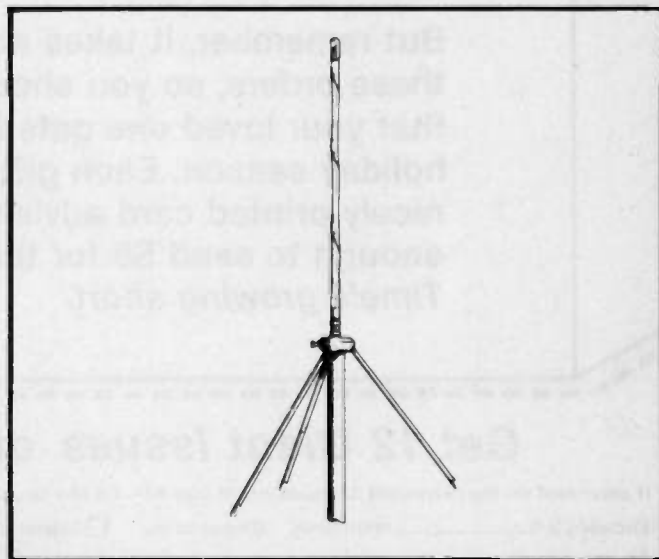
Among the many options available are repeater talkaround (available only to users who have exclusive use of channel and are licensed for talkaround), which allows the user to communicate, portable-to-portable, without tying up the repeater station; a Converta-Com mobile radio console, which enables the portable radio to work as a mobile radio; and a variety of leather carrying cases. Other accessories include a remote speaker/microphone and a safety helmet headset.

For further information about Motorola's 800 MHz Handie-Talkie two-way radio, contact John Apgar, Motorola Inc., Communications Group Public Relations Department, 1301 E. Algonquin Road, Schaumburg, IL 60196.

NEW VHF ANTENNAS

Firestik® Antenna Company has moved into the VHF frequencies with three new helically wire-wound fiberglass antennas. The new additions are: a 144-148 MHz 2 Meter whip (Model 2MP-4); a 156.250-157.035 MHz Marine Tele Band whip (Model MTB-4); a 157.755-158.715 MHz Land Mobile Tele whip (Model LMT-4).

All of the new VHF antennas are available in 48"



mobile models in white and with a white tip. The 2 Meter and Marine Tele styles will also be available in base station models.

The new antennas are $\frac{5}{8}$ wave both electrically and physically, and are capable of handling power up to 400 A.M. watts. The antennas, due to their

"Take it from a fellow who travels a lot..."

"... Realistic CB at 36% off is some bargain!" says Mr. Claus. Unlike Santa, you'll take more than one trip a year, and that's all the more reason to own Realistic CB. You'll never be alone on the road again when you have the TRC-427. Its "priority" switch puts you on Emergency Channel-9 instantly to report an accident or call for help. And Highway Channel-19 is a big timesaver in getting local directions and road conditions, or finding gas stations with the best prices. What's more, CB is great for conversation to pass the time on long trips. A tone control lets you adjust for best audio quality. An RF gain control prevents signal overload. And a PA/Monitor switch helps you get extra use out of your CB. Hurry — on January 1, the price goes back to \$139.95.

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design features indicate a typical 3 dB gain over ¼ wave or dipole antenna and promise a low angle of radiation, an exceptionally wide bandwidth and a low standing wave ratio.

Firestik® has the capacity to build antennas from 27 to 1000 MHz. Anyone that desires an antenna built to a special frequency should write for a free manufacturing quote to: Firestik® Antenna Company, 2614 East Adams, Phoenix, AR 85034.

ELEVEN MOBILE ANTENNA MODELS NOW AVAILABLE WITHOUT SPRINGS

The Antenna Specialists Co. announced that it will offer eleven of its most popular mobile scanner antennas either with or without shock spring. Identified by an "LS" suffix after the model number, the new "less spring" mobiles are available in four frequency ranges: 25-50 MHz (ASP-268 Series), 130-174 MHz (ASPS177 Series), 138-174 MHz (ASP-670 Series) and 406-512 MHz (ASP-660 Series).

Electrical specifications are identical to those of the corresponding shock spring-equipped models. For complete details write to: Professional Products Division, The Antenna Specialists Co., 12435 Euclid Avenue, Cleveland, Ohio 44106.



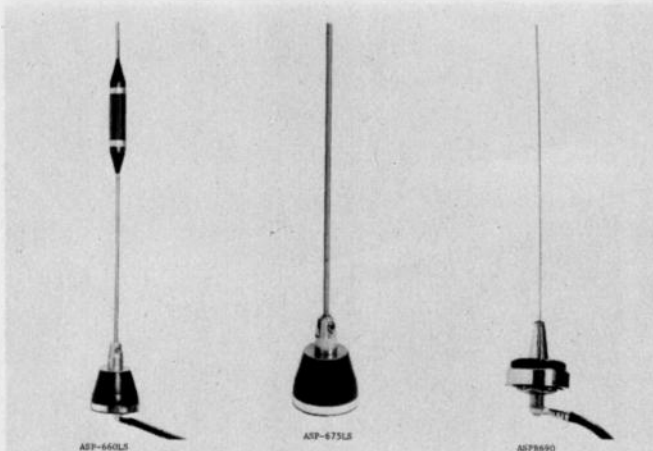
capability is also changeable in relation to modified frequency allocations. The XL-2000 may be set for simplex or one-half duplex operation.

Regency Communications, Inc., the two-way radio manufacturing division of Regency Electronics, will make the XL-2000 at the division's Satellite Beach, Fla. facility. The XL-2000 comes in either base station or mobile configurations.

More information is available from Regency Communications, Inc., 1227 S. Patrick Ave., Satellite Beach, FL 32937.

SHORTER FLEXIBLE ANTENNAS

Centurion has introduced a new line of flexible replacement antennas for VHF hand-held radios. The primary feature of the new antennas, available

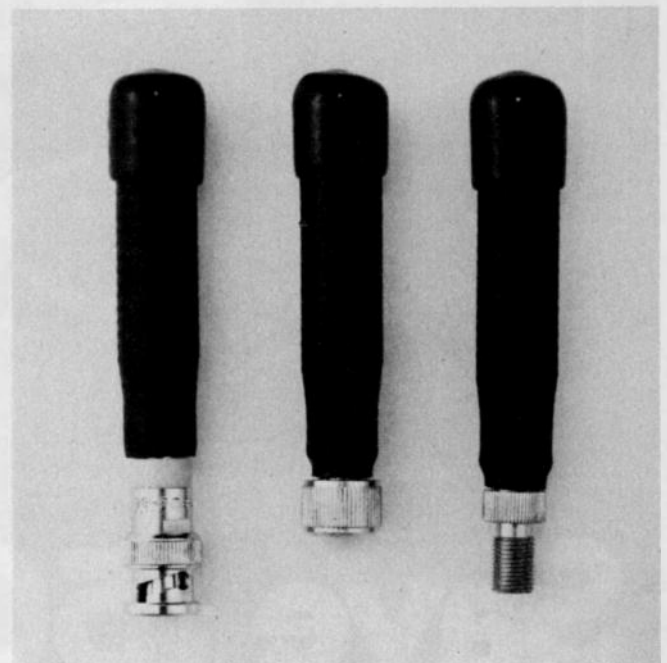


NEW DIGITAL TWO WAY RADIO

Regency Electronics has announced the introduction of the XL-2000, the only microprocessor controlled, frequency synthesis VHF mobile radio. Programmable to any assigned frequency in the 148-164 bands, the XL-2000 can be incorporated into virtually all existing VHF systems in minutes.

Regency's new frequency synthesis technology eliminates the normal waiting period for proper crystals to be delivered for add-on-units. Microprocessor control permits any technician to alter the XL-2000's frequency in accordance with changing customer frequency allocations, making the XL-2000 virtually obsolescence-proof.

Subaudible tone (CTCSS) has been built into the XL-2000 and is tunable in seconds via a CTCSS jumper selection group. This tone selection



in bands from 118 MHz to 225 MHz, is the reduced physical length. They are about one-half the length of the popular models they replace; while electrically, they are full ¼ wave, continuously loaded radiators.

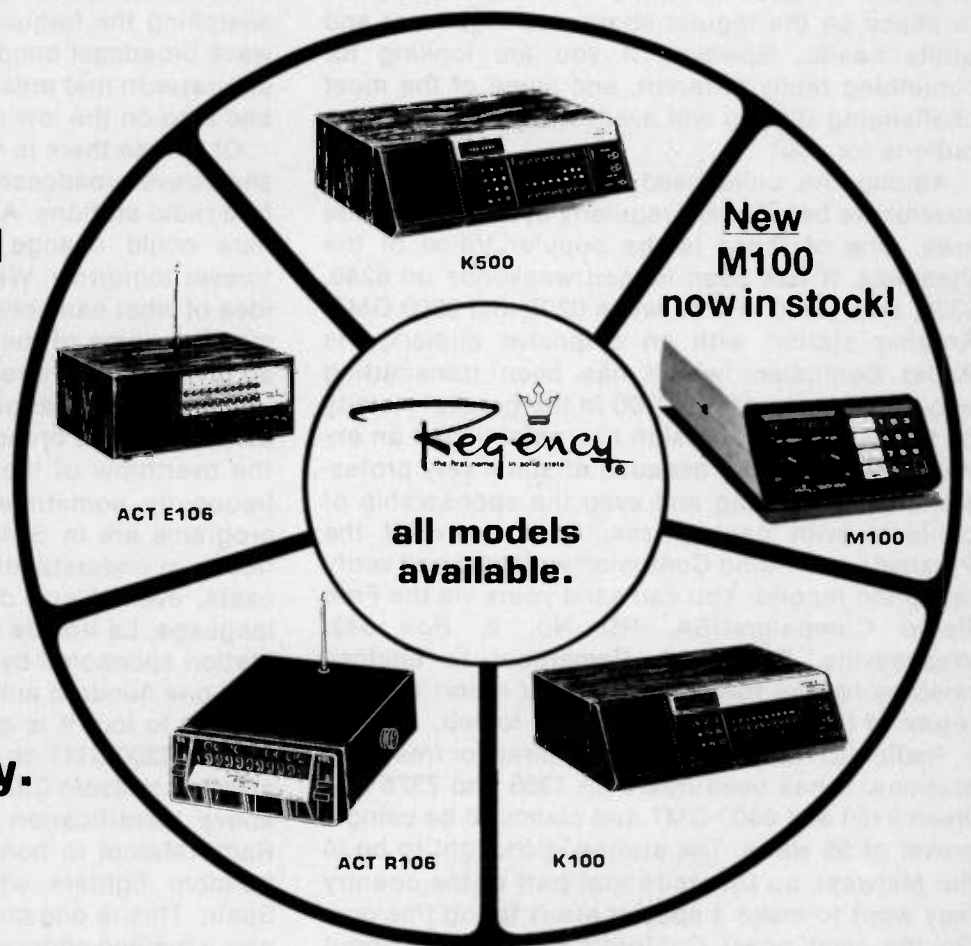
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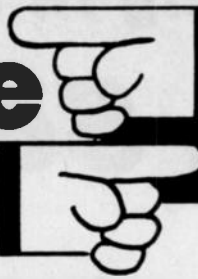
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CIRCLE 117 ON READER SERVICE CARD

Alternative Radio



Pirates-Spies-Clandestines

by John Santosuosso

CLASSIC rock coming from a hidden attic transmitter, calls to join the revolution, and mysterious messages entirely in numbers are some of the sounds of alternative radio. Sure, there is plenty of good listening and outstanding DX to chase on the regular shortwave broadcast and utility bands. However, if you are looking for something really different, and some of the most challenging DX you will ever find, then alternative radio is for you!

Among the unlicensed or pirate broadcasters several are being heard regularly over a rather wide area. One of these is the popular Voice of the Pyramids. It has been logged weekends on 6240, 9330, and 11650 kHz between 0200 and 0600 GMT. Another station with an extensive audience is Radio Confusion, which has been transmitting about once a month at 0100 in the general vicinity of 14550. Radio Confusion has established an enthusiastic following because of some very professional programming and even the sponsorship of contests with cash prizes. Both Voice of the Pyramids and Radio Confusion welcome and verify reception reports. You can send yours via the Free Radio Campaign-USA, RD No. 2, Box 542, Wescosville, PA 18106. Remember to enclose postage for the forwarding of your report and the return of the QSL from the station to you.

Radio VCR is one of the newer pirate or free radio stations. It has been heard on 7355 and 7375 between 0130 and 0400 GMT and claims to be using a power of 55 watts. The station is thought to be in the Midwest, so DX'ers in that part of the country may want to make a special effort to log this one. On the west coast California's KVHF, on about 6420 kiloHertz, continues to be one of the most widely heard free radio stations. It has also been monitored in other parts of the country. KVHF is not known to verify reception reports.

A most unusual logging of a pirate broadcast took place several months ago on Long Island, New York. A station broadcasting in Greek was heard on 1635 kHz at 2200. Although pirates in Greece are known to operate around that frequency, it seems more likely that this was an ethnic

pirate broadcasting in some city with a large Greek-speaking community. In any case it shows that alternative radio never fails to provide the different and unexpected. Even if Long Island DX'ers do not hear Greek speaking pirates they may find that searching the frequencies just above the medium wave broadcast band can be rewarding. A number of pirates in that area are said to be operating there and also on the low end of the FM band.

Of course there is nothing so quick to change as shortwave broadcasting. This is especially true of free radio stations. Any or all of those mentioned here could change frequency or leave the air forever tomorrow. We have tried to give you some idea of what has been heard in recent months. You may log some of these or others while searching, so give alternative radio a try.

Clandestine stations are pirates with a political purpose. Those broadcasting to Cuba and seeking the overthrow of the Castro government transmit frequently, sometimes almost nightly. While their programs are in Spanish, you will have little difficulty in understanding the purpose of the broadcasts, even if you do not speak a word of that language. La Voz de la Junta Patriotica Cubana, a station sponsored by an umbrella organization for over one hundred anti-Castro groups, is one of the easiest to log. It is on the air most nights around 0200 or 0300 GMT on 7400 kHz, or slightly higher in an effort to avoid Cuban jammers. In addition to the above identification the station also calls itself Radio Mambi in honor of the Mambi, the Cuban freedom fighters who won independence from Spain. This is one clandestine station which does give a mailing address. It has been tentatively identified as Apartado 2508, Caracas, Venezuela. If you do not hear Radio Mambi at the times above try at other hours of the evening. Most shortwave stations alter their broadcast schedule from time to time, and pirates and clandestines are certainly no exception to this practice.

Other regularly heard anti-Castro stations include La Voz de Alpha 66, the station of the Cuban exile group by that name. Look for it on 7053 kHz most likely between 0000 and 0200 GMT. Despite

several claims that it has been shut down, Radio Libertad Cubana with Comandante David continues to be heard quite frequently on Monday, Wednesday, and Friday evenings on 7080 or 7090 kHz. The amazing Comandante is said to be Cuba's most popular radio personality and partly responsible for the unrest that led to the mass exodus from that island.

If you want to hear what some unhappy Iranians think of Khomeini tune in the clandestine that attacks his regime. Radio Vatan (Homeland) has been reported on 15555 at 1705 GMT. It has also used a variety of other frequencies and times. So far there are no broadcasts in English, but you can enjoy that distinctive Persian music which was so popular in Iran before the revolution. It makes an interesting contrast to the lengthy exhortations and martial music on the official Iranian government station, easily heard daily on 15084 kHz.

The most unusual numbers station around these days is one transmitting on 7387 and 13360 kHz. Try for this one Sunday evenings at 0200 or 0300 GMT. It broadcasts what has been described as gypsy music and transmits coded messages in numbers in an unknown language.

That's it for this month. I've described what some people have been enjoying on the "alternative radio network." Remember that time and fre-


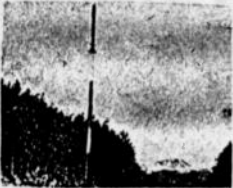
RADIO EUZKADI — EUZKADI IRRATIA

Date: 13-1-75 196

<input type="checkbox"/> 20.30 GMT	80 KW	<input type="checkbox"/> 23 m. 13.250 KHz.
<input checked="" type="checkbox"/> 21.30 GMT		<input type="checkbox"/> 19 m. 15.080 KHz.
<input type="checkbox"/> 22.30 GMT		<input type="checkbox"/> . m. _____ KHz.

"La Voix de la Résistance Basque"

"The Voice of the Basque Underground"





Basques were a free nation throughout history. France's uprising in 1904, assisted by Hitler and Mussolini, crushed the Basques depriving them of the remnants of their ancient freedom. Now under Spanish rule, without elementary human rights, Basques fight under cover to restore democracy in their land.

Les Basques: un peuple uni par l'histoire, par sa langue et par sa volonté de vivre en liberté. Le but de notre lutte est une Euzkadi libre dans une Europe unie en détruisant le peuple basque de la tyrannie.

Now defunct Radio Euzkadi was once the clandestine station of Basque separatists. Despite extensive jamming by the Spanish government, the station was widely heard in Europe and North America.

quency changes and even the disappearance of stations are to be expected—but if you are determined you should hear at least some of these stations and maybe discover a new one no listener has ever heard before. Alternative radio news is welcomed as is material suitable for illustrations. Send your contributions to me in care of S9/Hobby Radio, 14 Vanderverter Avenue, Port Washington, NY 11050.



Radio Liberation
Plaquemines Parish
Arid Marshlands of
Putrid Louisiana

QSL

To: John Sanja...
4927 Bobbie Ave.
Lakeland, FL 33503

Dear Listener,

RADIO LIBERATION

This letter is to confirm your report of our Radio Liberation program of 1975 at 0200-0300 hours GMT on a frequency of 7387 kilohertz, 40.45 meters.

Thank you very much for your interest in our programming. The staff of Radio Liberation wishes you further good listening.


Comments (if any): The reason our signal was weaker 0253 was due to the fact that we were being relayed via phone patch from the trunk of a moving Austin Mini car. Payments may be available soon for a fee. Keep tuned @ 741.5. AT RADIO LIBERATION, WE STEP ON THE FACTS; OUR REPUTATION DEPENDS ON IT.

73,

Guy Wire
Guy Wire (station manager)

Justin Case
Justin Case (director)

Pat
Pat (Par East monitor)



Pirate Radio Liberation broadcast for several months from Florida's East Coast before being shut down by the FCC in 1979.

Turn on to
MAXIMUM POWER
output and input
with *heliwhip*TM
Broad Stick^{T.M.}



It's Rugged!
Tested up to 700 watts.

It's Broad! Constant VSWR across 40 channels.

It's Tough! Made of shatterproof fiberglass.

It's Efficient! Wound with 32' (7/8 wave-length) heavy gauge wire.

It's Available! In 3', 4', 5' and 6'—red, white, black.

It's the top-of-the-line top loading CB antenna for autos, trucks, vans, RV's and marine use... and it's a beaut!

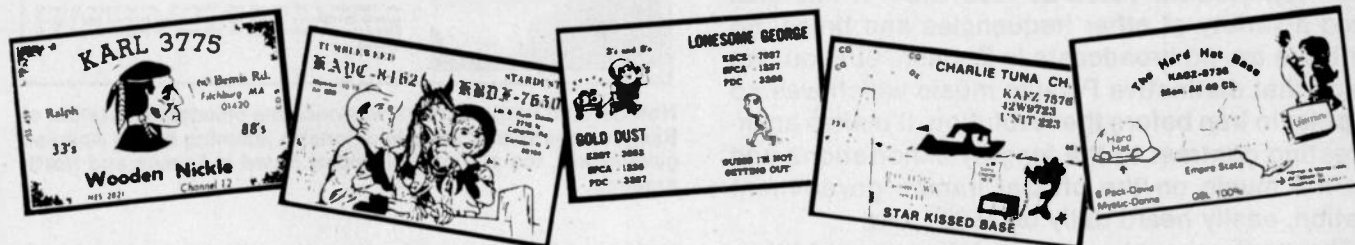
ANIXER-MARK

2180 S. Wolf Rd., Des Plaines, Illinois 60018
312/298-9420
©1980 Anixter Mark
CIRCLE 24 ON READER SERVICE CARD

Cardswappers Unlimited

S9's Column for QSL Cardswappers

Conducted By: Dottie Iacone



The Cardswappers Unlimited Column is dedicated to the hobby of swapping or exchanging CB QSL cards (wallpaper). The below listed CB's have submitted their names to this column to indicate that they invite other CB's to send them QSL cards for swapping purposes, and will respond to all who do so with a QSL of their own. Those readers wishing to swap cards with these people, should mail QSL cards directly to the addresses indicated, and NOT to the offices of CB RADIO/S9.

Readers wishing to be listed as Cardswappers are requested to obtain a copy of our rules and standards for becoming a part of this column. These rules were outlined in the December (1979) issue of CB RADIO/S9; a reprint is available for 25 cents and a self-addressed stamped envelope. Address all requests to: Dorothy Iacone, Cardswappers Unlimited, CB RADIO/S9 Magazine, 14 Vanderventer Ave., Port Washington, NY 11050.

- | | | |
|--------------------------------|--|--|
| | KASZ-2323 Faye Unit 720, PO Box 5983 August GA 30906 | SSB-1406-A Chip Lucas, P.O.B 265, Verona, PA 15147 |
| Big Dollar/
Unit 183 | Pres. U.S. of Texas QSL Swap Club, P.O. Box 183 Henderson, TX 75652 | America Ave., Tifton, GA 31794
Ana, CA 92705 |
| Mr. Magic/
Rag-Muffin | The Martin's, 101 Diplomat Plaza, Morton, IL 61550 | R-Cat-6 Al Eisne
Eagle CO 80931 |
| | | K Rd, Rockport MA 01966
P.O. Box 5115 Security |
| KQL 5845 | John J. Vinsko, 34 Weston Place, Shenandoah, PA 17976 | Screaming Eagle P.O. Box 9266, Phoenix, AZ 85068; |
| KHN-4892 | Mike Zimer, 2917 Coventry Blvd., N.E., Canton, OH 44705 | 6W132 H.M. Koski, 19 Squam Rd, Rockport MA 01966 |
| Unit 76 | P.O. Box 14786, Philadelphia, PA 19134 | Screaming Eagle P.O. Box 5115 Security CO 80931; |
| Wizard/
Travler | Box 16164, Ft. Harrison IN 46216 | KND-6021 Al Eisner (50) Siyanco (Saudi Arabia) APO New York 08017; |
| Purple
Viking | Jon Klotz 6501 Old Boonville Hwy., Evansville, IN 47715 | Unit-451 11632 Las Luces, Santa Ana, CA 92705; |
| Cleopatra/
Warlock | The Diefenbach's, 1501 Nathaniel Mitchell Rd., Dover, DE 19901 | R-Cat-6 Al Eisner (50) Siyanco (Saudi Arabia) APO New York 08017; |
| KMV 2120 | Jim Thompson, Rt. 6, Box 90A, Ida OK 74820 | SSB2087B 212 Bonnie Lane, Willits CA 95490; |
| KAXO-9558 | Paul H Miller 361 Tracy Lane, Grand Island, NY 14072 | Captain David Haire, 2406 Prince Ave., Tifton, GA 31794 |
| Hard Hat/
Gemini | The Daley's 22 Teetsel St., Saugerties, NY 12477 | KHN-4892 M.Zimer, 2917 Coventry Blvd. NE, Canton, OH 44705; |
| SSB-1186-B | LP Sell, Sr. 9423 Waverly Dr., El Paso TX 79924 | Yellow Feather Jack B. Richter, 23 E. George St., Yoe, PA 17313; |
| KAST-6919 | Mildred S. Bugbee Rt 1, Box 39 Pennville IN 47369 | Bar-B-Q/
Seal The Roberson's, Box 11014 Parkwater Station, Spokane, WN 99211; |
| Cutty Sark | J. Renshaw, 8361 Woody Dr., Norfolk VA 23518 | Buffalo Skinner P.O. Box 7515, Lexington KY 40555; |
| Lucky-Lady | Hazel Gettingter, 78 Hudsonale St., Weatherly, PA 18255 | Double A/
SSB-296A The Parm's, P.O. Box 126, Nashville, MI 49073 |
| KPM 0221 | 78 Hudsonale St., Weatherly, PA 18255 | Turtle/
The Marsh's, 4971 Hwy H. Kewaskum, WI 53040 |
| KEY 2443 | M Spranger Jr., Rt 1 Perry Lake, Fairview, MI 48621 | |
| Big John/
Snuggles
6W132 | P.O. Box 9266, Phoenix, AZ 85068
H.M. Koski, 19 Squam Rd, Rockport MA 01966 | |
| KGC-1045 | The Blanchettes, 1 South St., Danielson CT 06239 | |
| Hill Top
Lady | Ethel Gomez, 24 Woodland Dr., Wappingers Falls, NY 12590 | |
| Mr. Coffee | Michael Ray, 200 West Carney Ave., E. Herkimer NY 13350 | |
| Big Dollar/
Unit 183 | Pres. U.S. of Texas QSL Swap Club, P.O. Box 183 Henderson, TX 75652 | |

New, K40 Magnamount: Grips like a grapple, actually improves transmission.



We double guarantee it.*

Exclusive Octopole Construction.



That's eight magnets set in eight different directions to give you a magnetic seal so complete and powerful, your antenna would stay up there if you could squeeze

between two semis passing each other at 180 miles an hour. That's magnetic octopower.

* GUARANTEE I

Placed on the roof of a vehicle; properly tuned, the K40 Magnamount is guaranteed to transmit a further distance than a standard K40 without the Magnamount or you will receive a prompt and full refund from your K40 dealer who installed and tuned the Magnamount K40 for you.

* GUARANTEE II

Materials and workmanship are guaranteed for a full 12 months. Any part that fails to perform satisfactorily will be replaced absolutely free.

Exclusive K40 Flux Harmonics for Greater Transmission.

The magnetic radiation pattern was designed to match the K40 antenna radiation for greater distance than the standard K40. See our guarantee.

The facts: Physics and Physical.

1. Magnamount is a bigger, stronger magnet—in fact it's 8 bigger, stronger, magnets.
2. It doesn't just hold the K40 antenna, it helps it transmit further.
3. Remember the law of reciprocity. The antenna that transmits better, receives better.
4. It provides a flatter, lower SWR because the Magnamount is capacitance grounded.
5. It puts your $\frac{5}{8}$ wave K40 antenna securely in place in the most advantageous place to work against a ground plane—high and free from obstruction. That's square in the middle, right up on top.

\$16.95*

**BUYS THE MAGNAMOUNT
\$42.50* BUYS THE K40
(SUGGESTED RETAIL)**

K40 Magnamount.

American Antenna 1945 South Street Elgin, Illinois 60120

This professional CB equipment available only through Registered K40 Dealers!

CIRCLE 2 ON READER SERVICE CARD

IN ONE YEAR OUR **K40**™ AN LARGEST SELLING CB AN

1. It's more expensive ...

\$42.50*

CHECK OUT THESE EXCLUSIVE FEATURES!

And when you pay more, you expect more!

MORE PERFORMANCE:

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

MORE FLEXIBILITY:

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

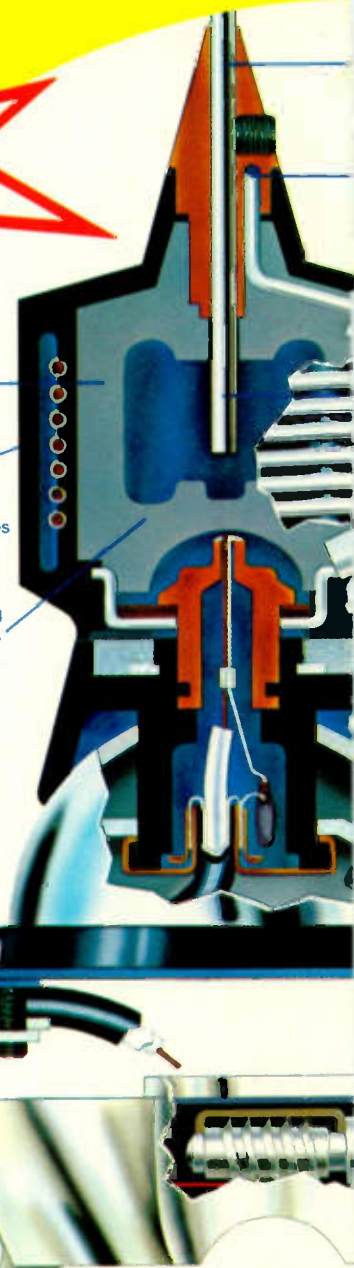
MORE QUALITY:

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

*Suggested Retail

2. It's made

- 4** WHIP ADJUSTABLE OVER 2" for fine-tuning SWR—NO cutting!
- 5** METL-PLAS[®] construction combines metal and plastic into one heterogeneous coil for highest permanent tolerances—less than 2% variance from antenna to antenna!
- 6** COMPUTER DESIGNED ISOLATION CHAMBER dampens static, provides clearer reception than ordinary solid inductance cores.
- 9** FULLY ASSEMBLED with 18' of co-ax with in-line connectors for trouble-free mounting!
- 10** Optional UNIVERSAL MOUNT adapts for mounting anywhere you want it; mirror, luggage rack, gutter, etc.



RUST PREVENTION—all metal components plated to MIL-SPEC QQ-C-320B MIL-STD868 and 870.

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

DOUBLE GUARANTEE

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

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

... Sold exclusively by 3500 Am

TENNA HAS BECOME THE ANTENNA IN THE WORLD

...better...

3. It's proven best!

...Here's what the leading CB publications said.



1 RADIUSED 180° TIP provides static dissipation without requiring ball. No ball loss—ever!

2 CRITICAL ASSEMBLY, material and specifications adhere to U.S. Government Spec's for mobile antennas (MIL-A-55288B-EL). So unique—77 new patent claims pending or issued including U.S. Patent 3,826,051. Canadian Industrial Design Patent 45,497.

3 FULL LENGTH 56" WHIP ground from 17-7PH Stainless Steel for 300% increase in signal-transmitting surface over 36" and 42" whips.

7 QUARTER-TURN QUICK RELEASE removes antenna from mount.

8 30° ROTATING BASE permits vertical adjustment on any angled surface.

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

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

PERSONAL COMMUNICATIONS:

"... an impressive 95% of the trials, the K40 out-performed the existing mobile antennas. We had to try one for ourselves. ... in every case, the K40 either equaled or out-performed its competitor.

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

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

...Here's what CB'ers all across the country said.

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

—J.H. Collett, 207 McFee, Bastrop, LA

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

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

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

—John A. Blum, Box 446, Zellenople, PA

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

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

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

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

IF YOU'RE A BEGINNER:

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

GOOD STUFF FOR PROS ONLY!

K40 POWER
AMERICAN ANTENNA
ELGIN, IL 60120



American **K40** Dealers throughout the U.S. & Canada.

CIRCLE 1 ON READER SERVICE CARD

COPYRIGHT AMERICAN ANTENNA 1979

IF YOU OWN A RADIO, THIS MICROPHONE WILL LET YOU TRANSMIT FURTHER AND CLEARER OR WE'LL GIVE YOU YOUR MONEY BACK!



Guaranteed to out perform any mic on any radio!

A speech processor microcircuit, designed by us, that eliminates splatter, boosts power and recharges its own battery. A patented American invention made in an American town.



CHECK OUT THE EXCLUSIVE FEATURES!



- CLIPS ANYWHERE
- PROCESSES SPEECH WITH COMPUTER CIRCUIT
- SOUND SENSITIVE 2 INCHES OR 2 FEET
- NOISE CANCELLING
- TWO MICS WITH ONE SWITCH
- FRESH CHARGE WITH NO BATTERIES

YOUR DOUBLE GUARANTEE

GUARANTEE I:

The K40 Speech Processor is guaranteed to outperform any microphone it replaces or return it for a complete and full refund within 7 days from the K40 Dealer that installed and tuned it.

GUARANTEE II:

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

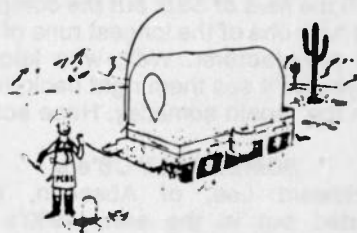
\$44.50 Suggested Retail

AMERICAN ANTENNA
ELGIN, ILLINOIS 60120
© COPYRIGHT AMERICAN ANTENNA

...Sold exclusively by **3500** American **K40** Dealers throughout the U.S. & Canada.

CIRCLE 4 ON READER SERVICE CARD

THE CB PIONEERS' CORNER



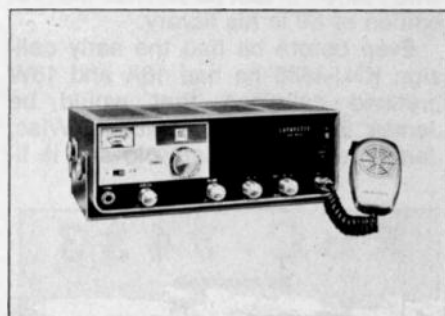
By Judy, SSB-99/PCBS-99

I received a letter the other day from a rather upset reader who asked why I've made several apparently rude references to the old Lafayette rigs as being from "Laughing-yet." He said that he owned several of them "way back when" and he thought that they deserved a better place in CB's memory book than the way I was approaching them.

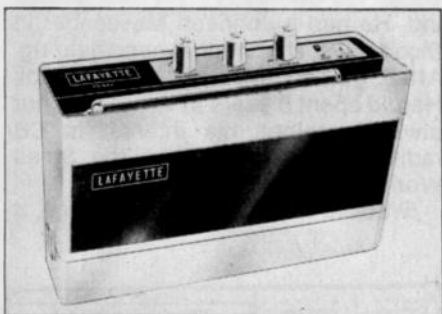
Actually, I meant no disrespect; "Laughing-yet" was the name we used to call these sets in my neck of the woods. It didn't in any way denote



Lafayette's top of the line rig for a while was the deluxe HB-444, 23-channel transceiver, an especially attractive and well-made rig with all of the extras Lafayette could think of.



The Lafayette HB-600 was a 23-channel rig featuring a selectable choice of standard noise limiting or a TNS type. It also had a built-in mike preamp which could be switched in and out of the circuit as needed.



In the realm of portable rigs, Lafayette had an HE-450 which did a pretty respectable job of offering full-powered operation on a limited number of channels.

there was anything wrong with them, and in fact for many years Lafayette appeared to have a pretty good foot in CB's door. It's your guess against mine as to what exact series of events eventually transpired between the early 1960's and the present time—a time which has seen many of Lafayette's local stores closing their doors. Even into the mid-1970's Lafayette appeared to be a factor in CB circles, but, alas, those days are probably gone forever.

Fact is that Lafayette had plenty of innovative and interesting rigs, such as a CB rig with a built-in tunable VHF

public safety band receiver! Not only that, but their HE-15 single conversion rig was one of the earliest CB rigs ever to achieve any national fame, and they had that rig on the market practically as soon as the band commenced operation in the late 1950's! It was replaced with an HE-15a version, then later with the famous HE-20. After that came a lengthy string of CB units, almost all rigs offering some clever or "different" approach to operation on 11 meters! I'll admit that some of their later rigs didn't really seem to stack up



The Comsat 9 was a low cost rig which offered front panel crystal sockets which could be used for instant supplementation of the rig's internally installed crystals. Most folks used the external sockets for out-of-band operations, I'm afraid.



The Comsat 23 was from Lafayette's golden years when they were at their peak. This was a deluxe 23-channel rig which could hold its own against any rig on the market. It featured switchable mike preamplification.



The HB-555 was Lafayette's approach to a miniaturized rig (mid-1960's) when most sets were big and bulky. It wasn't much of a performer but it was one of the first really compact rigs ever mass marketed.

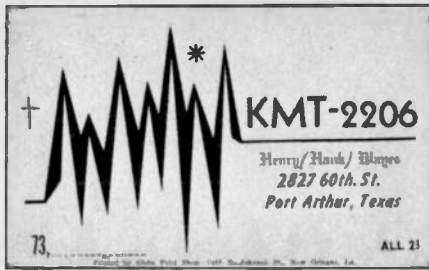
very well against some of the more sophisticated on the market, especially in the field of SSB; but the company did have one of the longest runs of any CB manufacturer. Well, who knows; maybe we'll see them right back there "on top" again someday. Hope so!

SOME EARLY CB'ers

Howard Lee, of Absecon, N.J. started out in the early 1960's as KCL-0995 and somehow managed to hang on to his original callsign.

One of the early supporters of *S9 Magazine* was J. R. Williams of Las Vegas, Nevada. Back when he was 14Q-0628 he subscribed to *S9* when it first came out in 1962—he's still an avid reader! In fact he still has the first edition of *S9* in his library.

Even before he had the early callsign KNJ-4658 he had 18A and 18W prefixed callsigns—that would be James Bowater of Pewaukee, Wisc. James is now 68 years old and is li-



1960's he was licensed as KBG-8079 and KBG-8179. Alvin's now retired and spending more time on CB than ever before.

Howard V. Riske, Jr., of Norwich, Conn., started out using his father-in-law's callsign, then eventually took out his own license of KBC-3433. His first CB rig was a Sonar Model E which was in service for many years (still has it, too). Howard's present CB callsign is KMJ-1666 and he's sometimes known as *Roadrunner*. His 1963 QSL card is one of the few early cards to display a CB handle as handles didn't come into their full glory until a bit later in CB's history.

Starting out with a converted military walkie-talkie, James Griswold (of N. Wilkesboro, N.C.) took out one of the very first 27 MHz CB licenses, 6W-0407. The W-T was at first fed into a 10 meter ham band whip but Jim says that he had better results with a long wire on the flat side. However there were only 3 other local operators on air back then so you might say that Jim knew every CB'er in town personally!

In the early 1960's as KKT-1956 (and later as KKT-3925—the FCC changed your callsign if you changed your mailing address in those times), Hank

Mayes (now of Rogers, Texas) began his CB career. He had a *Laughing-yet* HB-222 and also a Pearce Simpson Escort. The base station antenna was a 5-element 24-foot Long John and you can believe that it was the first time any of the local residents ever gawked at anything of those formidable dimensions. Hank says that he used to have a rig in his truck (he was a long-distance driver for Ryder Truck Line in Houston), but since he never heard any other truckers on the air he figures that he was probably one of the first long haul truckers to use CB radio! Now retired due to a job-related disability, Hank runs a Browning Mark 4A base into a 4-element Avanti Moon-



raker. On AM he is the Poor Boy, while on Sideband he is Alpha Daipha 5222.

Starting out using his brother's KHC-7089 callsign (he was too young to get his own in 1964), Harold Draves began his CB hobby from Mishawaka, Ind. He had a Johnson Messenger in those days, a 5-channel hand-held rig. After getting out of high school, Harold spent 5 years in the USMC, but always retained his interest in CB radio. He's a member of the Small World Society as SWS-481.

5W-0846 was a very early callsign, it



censed as KMC-0159. He spends quite a bit of time monitoring Channel 9.

In 1963 the FCC issued callsign KFD-2824 to W. C. Van Bebber. He picked up 2 Knight Model 2500 rigs (still in working condition) and began his CB career. Since those days he has also used Cobras and Midlands. W. C. got started in radio about 60 years ago and held early ham callsigns 6AVM and 6CJH. He's been a subscriber to *S9* since 1963 and has kept all of the copies intact—a trick that *S9* itself hasn't accomplished!

Before moving to the Bikini State, Alvin Allen lived in Spring Lake Heights, N.J., and way back in the



W. C. Van Bebber's base station.

FCC Form 302 October 1962		Form Approved Budget Bureau No. 34-4123 9		AUTHORIZATION FOR COMMISSION USE ONLY	
UNITED STATES OF AMERICA FEDERAL COMMUNICATIONS COMMISSION CITIZENS RADIO LICENSE				KFD 2824	
This authorization permits the use only of transmitters which: (1) Are listed under Special Conditions below, (2) appear in the Commission's "Radio Equipment List, Part C," or (3) in the case of Class G or Class D stations, are crystal controlled.				CLASS OF STATION (Check one) A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input checked="" type="checkbox"/>	
3 (a) Name (see instructions) W. C. Van Bebber				7. Number of transmitters 3	
3 (b) Permanent mailing address (number, street, city, state, zip) 22454 Creston Dr. Los Altos, California				CALL SIGN	
4. State whether applicant is (Check one) INDIVIDUAL <input checked="" type="checkbox"/> PARTNERSHIP <input type="checkbox"/> ASSOCIATION <input type="checkbox"/> CORPORATION <input type="checkbox"/> GOVERNMENT SERVICE <input type="checkbox"/>				CONDITIONS OF GRANT	
(If applicant is a corporation or an unincorporated association, item 11 or item 12 whichever is applicable, on the reverse side of this form, must be completed)				A. Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts, treaties, and all regulations hereafter or hereinto made by this Commission, and further subject to the conditions and requirements set forth in this authorization the licensee or licensee herein is authorized to use and operate the radio transmitting facilities herein described. This authorization shall not vest in the licensee or licensee any right to operate the station nor any right in the use of the available frequencies specified in the Commission's rules beyond the time hereof, nor in any other manner than authorized herein.	
5. (a) Will applicant own the radio equipment? If answer is "No", give name of owner and answer (b) below				B. Whether this authorization was the right granted herein shall be assigned or otherwise transferred to any person, firm, company, or corporation.	
5. (b) If not the owner of the radio equipment, is the applicant a party to a written lease or other agreement under which control will be exercised in the main manner as if the equipment were owned by the applicant?				C. This authorization is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained, so far as they are conditional hereunder, will be carried out in good faith. The licensee shall, during the term of this license, render such services as will serve public interest, convenience, or necessity in the full nature of the privileges herein conferred.	
6. Location of permanent mailing address indicated in item 3(b) above County (for appropriate subdivision) Santa Clara Co. State California				D. This authorization is subject to the rights of use or control by the Government of the United States as authorized by Section 904 of the Communications Act of 1934, as amended.	
Special Conditions:				E. This authorization replaces and supercedes any previous authorization of this class for the radio system or systems of transmitters.	
Date of application and date authorization is effective JULY 23 1963				Date will expire 3:00 A. M. EST JULY 23 1968 and is subject to further conditions as set forth on reverse to this form.	
By direction of the FEDERAL COMMUNICATIONS COMMISSION				SECRETARY	

LICENSE NOT TRANSFERABLE

was issued to Marvin M. Moser of Chilhowie, Va. and Marvin is still a CB aficionado.

Speaking of those really early licenses, we also know about Simon Starobin (ex-1W4692 from 1960) of Worcester, Mass. Sometimes known as Silver Fox, Sidebanders hear him as SSB-1583-B. His FCC call signs are KAIU-0856 and KOA-6261.

Anybody recall the Hallicrafters HT-7 rig? Richard Cunningham, KKV-8521, then of Dallas, Texas, had one! These days, from Kansas City, he collects vintage E. F. Johnson CB gear



Herb Poor keeps tuned to the world with this snazzy setup.

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20555

CITIZENS RADIO STATION LICENSE

CLASS OF STATION D	NO. TRANSMITTERS 3	CALL SIGN KMB 0510
LOCATION (COUNTY) NORFOLK MASS		
EFFECTIVE DATE 12-20-65	EXPIRATION DATE 12-20-70	

NOT TRANSFERABLE

Ben F. Waff
SECRETARY

CONDITIONS OF GRANT:

A. Subject to the provisions of the Communications Act of 1934 as amended subsequent acts, treaties, and all regulations hereunder or hereafter made by the Commission and further subject to the conditions and requirements set forth in this authorization the license or permits herein is authorized to use and operate the radio transmitting facilities herein described. The authorization shall not give the licensee or permittee any right to operate the station nor any right in the use of the available frequencies specified in the Commission's rules beyond the terms herein set in any other manner than authorized herein.

B. Neither the authorization nor the right granted herein shall be assigned or otherwise transferred directly or indirectly to any person, firm, company, or corporation.

C. This authorization is issued on the licensee's representation that the conditions contained in licensee's application are true and that the undertakings herein contained, so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such service as will serve public interest, convenience or necessity to the full extent of the privileges herein conferred.

D. This authorization is subject to the right of use or control by the Government of the United States as provided by Section 606 of the Communications Act of 1934, as amended.

E. This authorization expires and terminates by previous authorization of the class for the same radio system or group of transmitters.

SEE THE REGULATIONS ON THE REVERSE AS TO THE USE AND OPERATION OF THE STATION LICENSE HEREIN.

and has some of the more desirable units (including both the whiteface and blackface Messengers, Models 123 and 323!). At the present time he is running a Cobra 148-GTL into a Wilson Shooting Star. He is known on the air as Metro North 533, and his CB call is still KKV-8521. Anybody who has vintage Johnson gear that might fit into Richard's collection should contact

him at P.O. Box 15031, Kansas City MO 64106.

A true CB pioneer is Herbert Poor, Holbrook, Mass., better known as SSB-1932 and registered monitor KMA1CE. Back in the 1960's Herb (the Ace Mechanic) was Issued the call-sign KMB-0510 and had a Heathkit *Lunchbox*. Herb is tuned in on all bands from SW to VHF!

CB Usage Tips From S9

(CUT OUT & PLACE AT OPERATING POSITION)

Preferred & Designated Channels

- Channel 8 Agricultural operations
- Channel 9 Emergencies and travel info.
- Channel 13 Maritime and RV's
- Channels 16 to 18 Single Sideband only
- Channel 19 Trucks/Vehicles in transit*
- Channels 31 thru 40 Single Sideband Only

*Note that in many areas there are also 1 or more additional channels designated and/or normally used for in-transit vehicles, often Channels 10 and/or 12. This is especially true in metro areas and their suburbs where Interstate Highways are on I9 and secondary roads such as parkways are on alternate channels. Base stations are requested to avoid using all area in-transit vehicle channels in order to permit their full, free, unobstructed and exclusive use by in-transit vehicles.

Stations using power mikes should be cautious that their audio levels are set to a level which will not cause voice distortion, over modulation, or splashover on adjacent channels.

Single sideband stations now generally operate on Channels 16, 17, 18, and 31 through 40, although this may vary in specific areas. Stations using standard AM transmission are requested to avoid use of local Sideband channels, likewise Sidebanders are requested to confine their transmissions to those channels established locally for their use.

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CIRCLE 22 ON READER SERVICE CARD

S9 • December 1980 • 35



ON THE SIDE

S9'S MONTHLY COLUMN FOR SIDEBANDERS
BY BILL SANDERS/SSB-295, KW-5304, KBAH6794

FIXEM-UP: GETTING NATIONAL NUMBERS

Single Sideband operators don't use "handles." Instead we identify by special sideband numbers. Those many readers who write to us asking how they may obtain a set of these numbers are advised that we recommend obtaining a set of permanent national numbers from the SSB Network, which is the largest, most prominent, and oldest Sidebanding organization in the world. There are no dues! We suggest that ALL Sidebanders now avail themselves of the opportunity to become part of the vast network—future sidebanders, new sidebanders, and even experienced old-timers with "this many" local and regional numbers. A self-addressed stamped envelope sent to The SSB Network, P.O. Box 908, Smithtown, N.Y. 11787, will bring you information on how you can become a vital and important part of the national Sidebanding movement, and at last obtain a number which is part of the uniform International Sideband Identification system, recognized throughout the world.

OVER the months the mail has brought in its steady flow of questions and comments. While some are highly specific and relate to rather unique situations, many others fit into categories which are of general interest. In fact, you'd be surprised at the number of questions and comments which come in which are almost "standard." I thought I'd spend some time tossing these around this month.

For instance, for some unknown reason there seems to be an "oid wives' tale" about SSB communications being unsuited to transmission via fiberglass whips, as opposed to steel whips. I don't know where or how this crazy notion started, but I do know that it's been circulating for many years now. There's nothing to it; if an antenna is properly tuned and installed it will offer no difference if the radiating element is steel or if it is of the fiberglass type.

And speaking of fiberglass antennas, the foregoing question is especially unusual since one of the most popular omnidirectional base station antennas with Sidebanders

has long been the *Shakespeare* Big Stick, which is—you guessed it, fiberglass! And while I'm on the topic of the Big Stick, several issues back I asked if anybody could offer proof that there was any real signal gain to be realized by changing the upper element of the Big Stick to a whip of a different length. Here's another one of those strange "instant soup-up" gimmicky ideas which always circulate. Although I've had a stack of letters asking me to reveal further details of this sure-fire signal boost idea, not one single reader has been able to offer the adequate proof that there is any noticeable difference with a replaced upper element—although dozens of readers wrote in to offer their own suggestions for what to replace it with. My own observation was (and still is) that the Big Stick is a darn good antenna "as is," and that it would take a lot of doing to second guess the Shakespeare design engineers and vastly enhance it with such a simple change. But I'm still open for proof on this idea, and if it works I'll be the first to pass it along!

The clarifier control brings in its share of mail, not the least of which are letters squawking about the fact that "no matter how well I clarify in other stations, they always lack a natural sounding voice quality." I think that it's important here to realize that no 2-way communications system is designed with the idea of competing with a hi-fidelity broadcast station. Certainly, while hi-fi contains a wide ranging dynamic sound spectrum which is intended to offer the most natural sounding voice (and music) quality possible, it is definitely unsuited to 2-way communications use. In 2-way communications we are looking for the ability for the message to punch through noise and interference and to be copied over as great a distance as possible; maybe you call it "talk power."

Maximum "talk power" is the antithesis of hi-fi, and not too good a friend of natural sounding voices either. To get that extra punch, equipment designers have found ways to shape, clip, condense, and elec-

tronically reshape the sound components of a voice in order to toss it as far as possible through "the air" via radio. While this is, to some extent, noticeable in AM communications, it is especially noticeable in much of the SB communications one encounters. I hasten to add that some Sideband rigs seem to do a better job of reproducing the incoming signals than do other equipments, and also there are times when there is actually something wrong with the clarification process. My experience has been; however, that new Sidebanders often expect maybe a little too much in the way of voice fidelity than they have a right to expect. If you want to hear a natural sounding voice, then converse with someone standing near to you; secondarily you can turn on an FM broadcast station. But quality 2-way SSB gear is designed to transmit and receive voice communications over the maximum distance possible; the rich tones and shadings of the human voice are hardly the prime consideration in this process.

Insofar as real problems in the clarification process, stations which are difficult to clarify can be the result of many things, including high SWR at your station or the other guy's, your receiver or his transmitter malfunctioning, weak signals, interference, or the other station being too far from *center slot* for your clarifier to tune. If you do not suspect an actual "problem," but still would like to get a bit more naturalness from the sound coming from your receiver, try running it through a larger speaker. Sometimes the loudspeakers built into rigs are selected for their compact size; a factor which can often be compensated for by using a larger one designed for communications (not a hi-fi speaker, please!).

I'd also like to remind readers that currently produced Sideband "stock" rigs do not change transmitting frequency when the clarifier is rotated in order to change the receiving frequency. This was a feature of most older gear, but the FCC yanked this good idea from its design specs for our units a couple of years back and things haven't been the same since; except for those operators who have

COMMUNICATIONS
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UNITED STATES

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 MONITOR
 16 USB-LSB
 4-9-19 AM
 BREAKER
 NY ASS

SSB 1A68R
 UNIT 187-E
 KADX-2887

73's 88's

SSB NETWORK MEMBER

AMERICA 131
 SSB 8455 A
 RB TANGO 1145

KKA-1352
 MONITOR 18

UNIT 71

BASE MOBILE MARINE

Ann & Paul Broncau
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 Wrentham, Massachusetts 02091

been able to figure out how to "unlock the clarifier," or have gotten someone to do it for them. While the "unlocking" procedure is strictly "against" the FCC rules, it is nonetheless a popular modification which many operators have put to use. It's unfortunate that this idea, usually called a *slider*, or more formally a VXO, isn't allowed for Sideband CB communications. It could get a lot more mileage out of any given frequency. It is one of the features which has been under consideration for the proposed exclusive SSB frequencies above .405 (if they pick up the ball and run with it again).

Another popular item in the mail questions whether I think that the FCC fairly enforces its rules and regulations between AM and Sidebanders on 11 Meters, and how CB enforcement stacks up against enforcement in other services. Well, considering our flea-powered role in the scheme of things, I would say that CB receives far more than its equitable share of attention from the FCC. And, within the confines of 11 Meter operation, Sidebanders are probably given somewhat more harassment than AM operators for the same or equal violations. While having a high degree of operator violations, some services receive almost no enforcement at all; especially the

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aeronautical and maritime services, the industrial services, and calls put in through mobile telephone (and ship-to-shore) operators. The broadcast industry also receives only token enforcement, unless the operations violation is rather flagrant or many complaints are received. There's no doubt that the FCC enforcement gang finds CB'ers to be easier targets than many other services, and the crowd in the field enforcement program apparently takes the easiest route in order to meet their harassment quotas; they have never been noted for any great affection or regard for CB operations, and the pinhead who presently heads up this FCC operation appears to be a rotten apple they picked right from the very bottom of their barrel. One of the things which has always had them riled up the most about Sidebanders has been the "outbender" groups which spent several years loudly imploring their members to operate above or below the authorized frequencies. Even though these groups

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have mostly fallen by the wayside at this point, the dust which they managed to kick up is still settling on all Sidebanders. They manage to make all Sidebanders look like people more interested in rule violations than anything else, an erroneous image which has stereotyped Sidebanders in some of the little minds one encounters at the FCC all too often. Sidebanders have a bit of a way to go in changing this image; it was one of the factors in stalling RM-3317. Knowing the FCC, we could be repenting for years, and for a couple of defunct or dying groups to which most of us didn't even belong! Figure that out!

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TOTAL CAR STEREO PACKAGE FOR IMPORT, SUB-COMPACT, GM-X AND CITATION CARS

Audiovox Corporation introduced the Dyna-Mini package of three popular Audiovox car stereo components to fit all import, sub-compact, GM-X and Chevy Citation cars.

The Dyna-Mini, which retails for about \$200 and is sold through mass merchandise stores, consists of an AM/FM stereo cassette player with



adaptors for installing horizontally or vertically; a pair of super slim coaxial speakers; and a graphic equalizer with five slides and 50 watts of amplification power. The luxury sound and economy components are all wrapped up in a package small enough to sit on a countertop.

"The trend is to smaller cars," said Jack Olney, vice president of Marketing and Advertising for Audiovox Corporation. "It just made good sense for us to respond to our customers needs and develop a uniquely packaged system that brings big sound to small cars at an affordable budget price."

The Dyna-Mini system includes the ID-605A stereo cassette player, Audiovox COSC-5A speakers, and the AMP 550 graphic equalizer.

CONSUMERS CONCERNED ABOUT WARRANTIES

Warranties are becoming more important to buyers of car stereo equipment, according to retailers polled by a leading manufacturer.

Retailers questioned in a nationwide poll by Clarion Corporation of America said that consumers were becoming more value conscious with demand for strong warranties playing

a major role in their purchasing decisions.

"There has been a strong trend toward buying value, not just price," reported Clarion Senior Vice President/Marketing Don H. Coleman. "Consumers are asking about warranties and are willing to pay a bit more to get significantly increased warranty coverage. Retailers across the country are telling us essentially the same thing. The economic slowdown and continually rising car prices are encouraging people to hold on to their cars for longer periods of time. So they're willing to invest more in better car stereo equipment, but they want to make sure it lasts for a longer period of time."

According to Coleman, Clarion's extended warranties are selling briskly. "Our standard product line comes with a one year parts and labor limited warranty. A two year extender is available at extra cost, giving a total of three years of protection. Our Hi-Way Fidelity Series products have a standard two year limited parts and labor warranty with a third year available at extra cost. We've seen an increase in the past 90 days in the number of consumers opting for extended warranties."

"In reviewing sales with retailers, we believe that the Clarion warranty is one very important reason why Clarion products are selling stronger now than last year at this time despite the economic slowdown," stated Coleman. "We're increasing our share of a down market because of our reputation for quality and value despite the fact that our products are not the lowest priced."

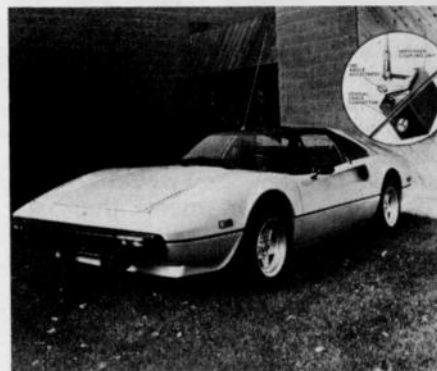
A GLASS MOUNTED AM/FM ANTENNA GIVES GREATER RANGE AND CRYSTAL CLEAR SOUND

Called the AFM-1, this antenna has three unique features. First, it's a 3 db gain type antenna which greatly exceeds the performance of window wire or fender mounted and retractable antennas. This helps the AFM-1 to eliminate poor reception caused by

signal blocking which occurs in mountainous or rolling terrain, as well as in urban areas where large buildings interfere with FM radio signals. The antenna design also acts to reduce signal fading and multi-plex distortion while improving the range of mobile audio systems. In tests conducted at Avanti's Chicago laboratory, the AFM-1 showed up to a 30 dB increase over the performance of an imbedded window type antenna.

The second main feature of the AFM-1 is the Ritter noise control circuitry contained in the black pick-up box. This advance feature enables the AFM-1 to reduce noise and static before it ever gets to your mobile radio.

Last, but not least, the AFM-1 can be mounted quickly and easily on a glass windshield or window without drilling holes in the vehicle. This antenna mount type epoxies directly to the glass with the new space-age



adhesive which has the strength of a 3/8" bolt, yet it can be easily removed when desired with the use of a soldering iron or heavy-duty hair dryer.

The sleek silhouette of the AFM-1 blends in perfectly with today's automotive styling and with the on-glass design there are no external electrical connections to detune or corrode.

For more information on the AFM-1 contact: Avanti Research & Development, Inc., Audio Division, 340 Stewart Avenue, Addison, Illinois 60101.

TOMCATTIN' WITH TOMCAT!

ACROSS THE CHANNELS WITH S9'S EDITOR
TOM KNEITEL, TOMCAT/SSB-13



READERS may recall my recent reporting of the sad tale of the fate of CB'er Albert F. Merrill.

You know, he was the San Jose operator who was accused by the FCC of, at one time in the past, attempting to fool the FCC into sending him a copy of someone else's Ham ticket. The FCC also claimed that he was bootlegging on the Ham bands and using the callsign of the chap whose Ham ticket he had attempted to obtain a copy of. When "caught" by the FCC at these antics he had confessed the error of his ways.

Later, he applied for and received a CB license. Then, after that, he applied for a Novice Class ham ticket. At that point Merrill was dragged before one of those hokey FCC kangaroo courts where the so-called "Judge" decided that because of the earlier affront to the FCC's "Integrity" (asking for a copy of someone else's ham ticket, bootlegging with the guy's callsign) he not only was going to have his Novice Class ham application "denied," but also the CB license he'd been issued was to be revoked. All this was brought about because he'd applied for the Novice Class ticket; there were no charges that his CB license had been obtained with any irregularity or used in violation of Part 95, or that there was anything wrong with the way he had applied for his Novice Class ham ticket. The FCC was basically just angry at him for having the unmitigated gall to even apply for a Novice Class ticket—and this type of harassment was their own unique brand of retribution.

The editorial brought in a howl from readers, many of whom had their own nightmare tales of terror to relate, all concerning their fate as they were run roughshod through the FCC's 2-bit "justice" system. Apparently my pointing out Merrill's difficulties touched quite a sensitive point, as it seems that there are a lot of people out there who either suffered similarly, or who know someone who did. Most people who wrote asked that I tell *their* story, or the story of their friend, since they have felt so much outrage and frustration at the idiotic way in which they were dealt with at the

hands of the bizarre FCC "court system." While most of the stories appeared to me, at least from reading *their* versions of them, genuinely grotesque and true to form, if I were to attempt to start relating all of them in print it would fill a book.

There was an interesting bottom line to Merrill's story, however, and it did seem that my own outrage at the FCC's revocation of his CB license was right on the mark. Merrill had accepted his fate and obviously saw little sense in trying to appeal the decision of the FCC "judge." I suppose, like many others who had been given the "business," he saw no point in doing anything other than joining the other "justice" recipients.

However, in a rather interesting and not-often-noted move, the FCC Review board somehow decided—after our editorial was written—to review the decision of FCC Administrative Law Judge Joseph Chachkin and the way he dealt out justice to Merrill. They did this on their own initiative—and wasn't it a happy coincidence that it came immediately on the heels of our revelation of Merrill's CB license revocation farce?

After looking over Judge Chachkin's monumental decision they decided that it "appeared to conflict with a previous . . . ruling." In an earlier case the FCC court system had decided that it wasn't authorized to revoke a radio station license solely on the basis of a licensee's "misconduct" occurring entirely within a previous license term where the misconduct was known to the FCC prior to a grant of the license renewal (or, in this case, the original license grant).

Since the FCC had a signed written statement from Merrill relating to his earlier "misconduct" at the time they had issued his CB license, they had no reason whatsoever to come around two years later and try yanking the license from him because of the previous matter.

The bottom line was that the revocation of Merrill's CB license was—you guessed it—reversed; Judge Chachkin's revocation decision was tossed into the dumper where it belonged.

In the matter of Merrill's application for a Novice Class ham ticket, Merrill did not fare quite so well. The Novice Class license had never been issued to Merrill, so the hook upon which Judge Chachkin's CB decision was hung didn't apply; there had been nothing to revoke since Merrill had never been able to make it past the application stage before the alarms went off on the FCC's vigilant computer. As a result, the denial of Merrill's ham ticket stood—another monument to FCC jurisprudence, and possibly a matter which one of the ham radio organizations or publications should examine and/or pursue in the interest of the public.

Several nagging questions remain. Merrill had not appealed nor offered any additional information in order to reverse the revocation. It was reversed on the existing evidence and testimony. The decision was quickly reversed by simply taking the time and trouble to pull out of the FCC's magic hat a very clear cut course of action which said, in no uncertain terms, that Merrill had no reason to lose his CB license.

My question is that if ignorance of the law is no excuse for a defendant, then how is it an excuse for a judge? In this case, the information relating to how Merrill's fate was to have been handled was right there in the FCC records and files; why didn't the judge have knowledge of this or at least take the trouble to find out if there were applicable statutes or decisions before he ruled in Merrill's case? Was it a question of just dropping the brickload onto Merrill and hoping nobody would notice and/or that Merrill wouldn't appeal? Was it simply a slipshod decision by a poorly informed jurist? Did Merrill receive the fair and adequate consideration due him as a citizen, or was he just railroaded through to be disposed of as expeditiously as possible? If Merrill was to lose his license because he was ignorant of the law, then does the same thing now happen to Judge Chachkin—or are so-called FCC Administrative Law Judges a special category of citizen to whom laws don't apply?

And what about the countless others who have been dragged before the FCC's bar of justice to receive equally illogical and unjust treatment—accepting their fate because it seemed so hopeless and futile to try to do battle with the likes of the FCC's "court" system? How many of these people received the same razzle-dazzle and fast-shuffle which befell Merrill, and found "guilty as charged" (with loss of license, fines, or other penalties) without any legitimate or justifiable reason? Do these people have any chance to get their decisions reviewed by the mysterious "Review

Board"—a way of removing the embarrassment, recovering the "monetary forfeitures," or regaining the ability to be licensed by the FCC? Do they, in fact, have the ability to collect for damages caused them by being given inept treatment at the hands of some of these half-baked quacks and their cracker-barrel knowledge of the laws which they pretend to administer?

By backing down on the Merrill CB revocation matter after it became a public "cause," the FCC certainly did Merrill no big favor—justice is no "favor" under the Constitution, it is a right to which we are all entitled. Furthermore the agency did not do itself any favors either. If it felt that having second thoughts on the Merrill decision was going to make any of us go away quietly, it will be surprised to learn that all it accomplished was to open up an even larger space in the FCC's credibility gap.

What about present or former FCC licensees who feel that they were given a raw deal by the FCC? I would suggest getting an attorney and making as big a stink as possible! Our dear old Uncle Charlie may just have clay feet 'neath those pointy boots which he uses so quickly and freely to boot his licensees in the butt.

Maybe we have to become more indignant, be less the guy who says "thank you for the eyewash" when someone spits in his face. I'm not suggesting marches on Washington carrying signs, but I am suggesting reorienting our view of the FCC as the legendary "immovable post"—unyielding and unbending under any amount of pressure. I think it's more bluff than brawn, and it could well be the Merrill incident has offered us all a rare chance to peek under Uncle Charlie's skirts and see those ugly clay feet. I say that if the agency spews out an illogical regulation, or hearing decision, or turns down a legitimate and valid proposal for improving our lots as licensees, then it behooves us to make one helluva squawk—get petitions, get attorneys, give the matter a good public airing, and anything else to get them to back away from whatever it is they are trying to get away with.

And if you're one of those people who *didn't* bother to write to the FCC to support exclusive Sideband hobby frequencies, then maybe you can think of how you might wish to approach the situation if and when it ever comes around again on the FCC's merry-go-round.

Tomcat!

Tomcat's Mailbag

By S9 Editor
Tom Kneitel



Tomcat answers some of his more interesting mail in this column from time to time. Address your letters to Tomcat's Mailbag, S9 Magazine, 14 Vanderventer Ave., Port Washington, N.Y. 11050.

UNSCRAMBLED EGGS, PLEASE!

The whole matter of building and/or selling "little boxes" which can unscramble over-the-air pay-TV signals seems to have been a victory for the public. A federal court recently ruled that, despite the loud protests of the pay-TV industry, it was fully legal to sell components and kits for these devices. It occurs to me that such a ruling may have far-reaching implications in other fields. What say?

Harry Moskowitz
N. Miami Beach, Fla.

The pay-TV people dragged up the tired old "Section 605" thing about prohibitions against interfering with the privacy of their transmissions. Unfortunately for the pay-TV industry, the Judge said that the pay-TV folks did not have a monopoly on decoding their signals at the receiving point simply on the basis that they had FCC licenses to transmit the signals. He said "the granting of such monopolies is the province of Congress, which is charged with regulation of the airwaves in the public interest." This, straight away, raises many questions concerning the sale of SCA adapters. These can be attached to most FM receivers for the purposes of extracting "background music" signals which piggyback silently on regular FM broadcast programs, but which cannot be heard without a special gizmo. For years the background music industry has waged a ferocious battle against the sale of these units to the general public; in several court con-



frontations they seem to have gotten their way, too. More than one manufacturer has been forced to back away from selling FM receivers with built-in SCA reception features. This decision could well affect this long-standing "situation." Furthermore, it could possibly bear upon any future problems which might arise relating to the use of de-scrambling devices with scanners.

HOPE THEIR EQUIPMENT RESPONDS BETTER THAN THEY DO!

In the October issue of S9 the "Monitor Post" column had an excellent story about Motorola's ad campaign for voice scramblers; that would be the ad campaign which depicted scanner owners as low-life types whose apparent prime motivation is to overhear public safety agency transmissions for some unsavory reason or other. As "Monitor Post" suggested, I

immediately wrote to Motorola to register a complaint regarding the tone of these ads. Unfortunately they did not see fit to even bother sending me a reply to this complaint; a fact which I will have no choice but to keep in mind in the future when evaluating Motorola products versus others.

However, I sincerely appreciate S9's taking a stand on this matter and bringing it to my attention. I wonder how many others who wrote complaint letters fared in their efforts.

Jim, KTX5HG,
Arlington, Texas

If it will make you feel any better Jim, they ignored my letter too!

COMBAT TAPE REPLAY

Several months back you ran some information on where to get a 90 minute tape recording of actual 2-way radio communications made during

combat in Vietnam. I followed up on it and can gladly report that not only have I obtained a copy of the tape (it's as much or maybe even more exciting than you said) and some additional information on its source and availability. The tape comes with a written analysis of the battle, a battle map, and other materials so the listener can follow along and know exactly what's taking place. The cassette is \$7.95 and it's also available on 8-track for \$8.95. The correct address for obtaining the tape is: Combat Tape, 7245 E. Garfield (B), Scottsdale, AZ 85257. The tape lets you hear the radio traffic as a U.S. Battalion Commander directs artillery, gunships, dustoffs, flame-baths, TAC air, helicopters and ground forces. The tape was brought back from Vietnam by Lt. Col. John Welker, who is now retired from active duty and has made the recording available for those who have the stamina to hear it. Believe me, this tape makes *Apocalypse Now* and *The Deer Hunter* look like something for kids by comparison. I spent a couple of years in Vietnam myself, and Welker's tape is really the way it was. Anybody into scanners and interested in knowing what combat communications are like will find this tape awesome.

Mike R. Sullivan, ex-USMC
Arlington, Texas

My mention of Welker's tape brought lots of interesting mail all asking for more information. Most interesting letter of all came in from John Welker himself—seems he had never heard of S9 Magazine until the

July issue appeared and he became deluged with requests for information on obtaining his tape! Apparently there's lots of interest in hearing the sounds of this brutal war from a vantage point of 12 years later.

ARE U FRIEND OR ARE U FOE?

About 2 years ago you ran a story on UFO's and how CB has played its part in establishing communications between persons who report sightings. What still bothers me is that there is still no genuine interest in UFO's by our government; after Project Bluebook was closed it's almost like they have told us to go away and play like nice little children. Yes, they accept reports, check out some of them, but the impression one gets is that most of the time we are being humored or patronized. Do you think the government will ever view this seriously?

Craig. P. Manoolian,
CB-UFO Investigation Team,
Crook County, Wyoming

My feeling is that they aren't quite as indifferent as most folks think. For example, U.S. and Canadian armed forces pilots are instructed to participate in sending so-called "CIRVIS" (pronounced (SUR-VEES) reports. These are described as "reports of information of vital importance to the security of the United States and Canada and their forces, which in the opinion of the observer, require very urgent defensive and/or investigative action by the U.S. and/or Canadian Armed Forces." Reports with the code word CIRVIS are supposed to be

transmitted "as soon as possible, to any available . . . military or civilian air/ground communications facility." By saying the code word CIRVIS 3 times the frequency must immediately be cleared, and if that doesn't work the pilot is instructed to send the International Urgency Signal ("PAN"). What info is supposed to be sent under these circumstances? Well, actually 7 different categories of things the pilot might see, starting off with hostile aircraft which appear to be directed against the U.S. or Canada. This is followed by sightings of missiles. Guess what's next? Right, Bunky, in the government's own words "Unidentified Flying Objects!" In fact they're 3rd on the list ahead of hostile trinkets, the likes of surface vessels, submarines and other things. Photos are supposed to be taken, if possible. I would say that this denotes more than a casual or passing interest by the government in UFO's. Moreover, the government officially regards information about them as being of "vital importance" to the nation's security, and requiring "very urgent defensive/investigative action." How much more "seriously" than that can ya' handle? Listen for CIRVIS on your VHF aeroband scanner! Believe me, they're deadly serious!

WRONG WAY OF LOOKING AT THINGS

Just recently I was given a CB rig as a gift, and I would very much like to use it in my new Cadillac. The thing that I'm concerned about is the use of the CB with my new car. Certainly I don't want to cut or drill into the vehicle, and I was wondering if a magnetic mount mobile whip can be used without causing any damage to the vehicle's paint.

Arch T. Uhlman,
Dallas, Texas

A mag mount, if used properly, should cause no grief to your Caddy and should give you good results; but you're missing the point. Here's the idea, Arch, if you want to be one of the 11 Meter crowd you've got to reorient your thinking completely. In the 11 Meter game we cut and drill without considering such insignificant details as the vehicle; sure, maybe 15 years later when the car is going to be sold or traded it may require a few patches or dabs of paint here and there to cover over antenna installation jobs; but why worry about that now? Anyway, in 15 years a small antenna mount hole should be the worst of the car's cosmetic problems. That's the way to see the situation, Arch.



ON THE COUNTERS

S9'S MONTHLY PRODUCT REVIEW

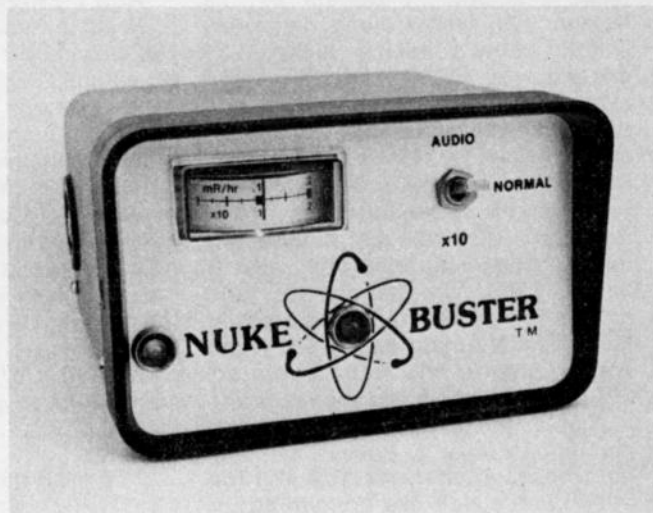
NUKEBUSTER

Nukebuster from Solar Electronics is a radiation detector that combines the features of a geiger counter and a radiation alarm. It detects alpha, beta, gamma, and x-rays at a price well below any alpha-sensitive geiger counter on the market.

Calibrated to a National Bureau of Standards Cesium source, Nukebuster is accurate and easy to use. It is superior to film badges, geiger counters, and dosimeters for on-the-spot warning and detection of radiation sources, such as plant venting, nuclear fallout, meltdowns, spills, dumps, waste, leaks, tallings, and x-rays from color TVs.

Flashing lights and audible tones warn the user of any rise in the radiation level. The alarm goes off at 10 and 100 times normal background and a warning light glows at 5 and 50 times normal. Like a standard geiger counter, the meter reads directly in milliRoentgens per hour.

Accuracy and reliability have been verified by independent laboratories and extensive field testing at nuclear dump sites, test zones, and power plants around the world.



Nukebuster plugs into any 12-volt cigarette lighter socket, and is for car, home, or field use. Options: Portable Battery Pack and AC Power Supply.

For more info: Solar Electronics—156 Drakes Lane—Summertown, TN 38483.

Mark number 69 on Reader Service Card.

CORDLESS TELEPHONE SYSTEMS

Two new cordless phone systems, each with full duplex FM voice transmission, are the new additions to Fanon/Courier's Personal Communications Products group.

Model FCT-200 has 700 ft. range and offers touch pad dial-out capability compatible with rotary dial and touch tone systems, and has built-in intercom capability between handset and base.



Model FCT-100 has 600 ft. range and call-in capability.

Both systems are equipped with nickel-cadmium battery and recharger.

Further information may be obtained by contacting Ray Dashner, Fanon/Courier Corporation, 990 S. Fair Oaks Avenue, Pasadena, CA 91105.

Mark number 66 on Reader Service Card.



TRANSCEIVER/RECEIVER PRESELECTOR

The MFJ-1040 transceiver/receiver preselector covers 1.8 to 54 MHz in 4 bands. It improves weak signal reception, and helps reject out of band signals, while reducing image response. A push button switch gives you 20 dB attenuation to cut down those strong signals that might otherwise overload your receiver. Two more pushbutton switches let you switch between 2 antennas and 2 receivers. Other controls include: gain, relay delay, band selector, and on-off/bypass. An LED indicates when the unit is on.

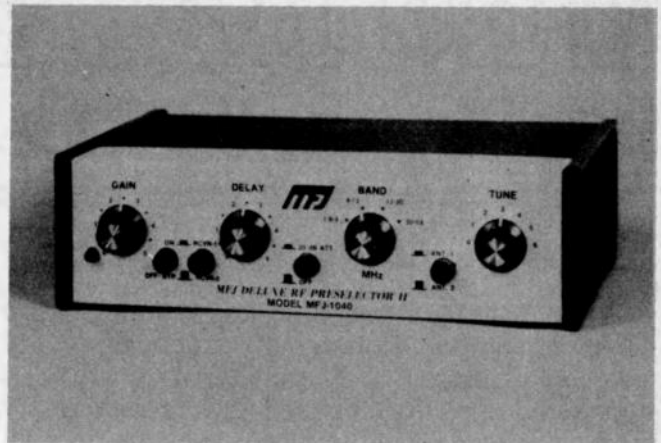
Phono jacks are paralleled with coax connectors on the back panel to let you use the connector type you prefer.

The MFJ-1040 has an RF sensing relay which handles up to 350 watts. This relay automatically bypasses the preselector when transmitting. It also has a push-to-talk connection on the back, if this is preferred.

The 1040 operates on 9-18 VDC or on 110 VAC with optional AC adapter.

The cabinet is eggshell white with walnut sides and top, and the size is 8 x 2 x 6 inches.

If bought from MFJ there is a 30-day money back trial period. If you are not satisfied, you may return



the unit within 30 days for a full refund (less shipping). MFJ also provides a one-year unconditional warranty.

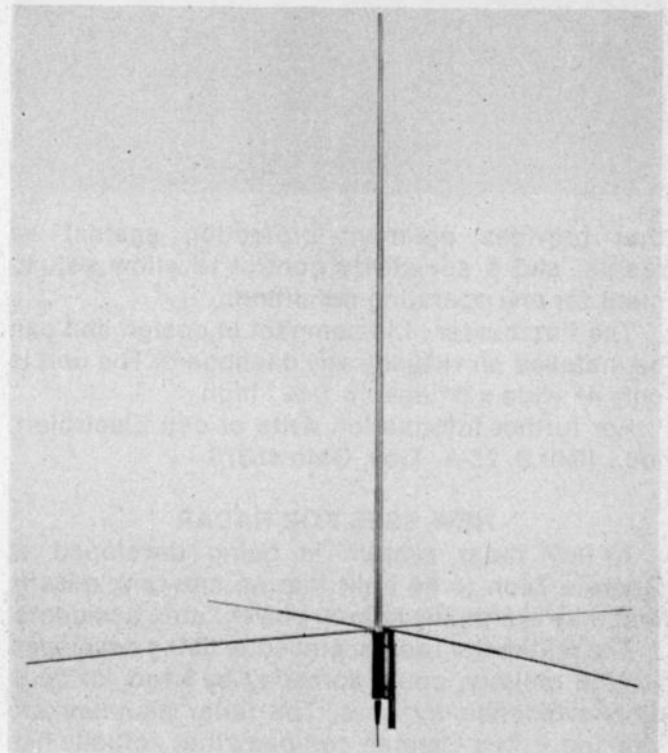
The MFJ-1045 is a less expensive version of the MFJ-1040, except it doesn't have the 20 dB attenuator, relay for transceiver bypass, delay control, and push-to-talk connections, and only has connections for 1 antenna and 1 receiver. The size of the MFJ-1045 is 5 x 2 x 6 inches.

For more info contact: MFJ Enterprises, Inc., P.O. Box 494, Mississippi State, MS 39762.

Mark number 65 on Reader Service Card.

1/8 WAVE BASE ANTENNA—5.3 dB GAIN

A new 1/8 wave omni-directional CB antenna that combines the best electrical and mechanical characteristics of the firm's 1/2 wave M-117 antenna and the 1/8 wave concept has been announced by The Antenna Specialists Co., Cleveland, Ohio. According to A/S, "This antenna captures all the design skill, performance and reliability built into our basic omni base station line over a quarter century, while simultaneously providing the desirable characteristics of 1/8 wave concepts—at a suggested list price well below our competition." The new antenna, model M-2117, incorporates Antenna Specialists' basic quadruple radial design; four nine foot, 1/4 wave solid aluminum radials provide optimum ground plane for radiating efficiency and increased range. The vertical radiator, 22 feet high, is constructed of aircraft grade aluminum tubing with swaged joints for optimum electrical continuity. The antenna exhibits 5.3 dB gain over a conventional ground plane. The high impact plastic transformer jacket is completely waterproof and DC grounded for both lightning protection and minimum electrical noise in the system. Model M-2117 is furnished with complete mounting hardware, less cable. For further information contact: The Antenna Specialists Co., 12435 Euclid Ave.,



Cleveland, OH 44106.

Mark number 62 on Reader Service Card.

The Radar Column

by "Jammer"

ELECTROLERT, Troy, Ohio has introduced the latest addition to its rapidly expanding line of radar detectors. The Fuzzbuster III has been engineered to be the most sensitive radar detector in its price range, able to pick up signals from all types of radar, yet it automatically rejects signals from non-radar sources.

The new unit will retail for approximately \$140.00. Some of the features of the Fuzzbuster III are: dielectrically coupled wave guide technology



that provides optimum protection against all radars; and a sensitivity control to allow adjustment for any operating condition.

The Fuzzbuster III is compact in design and can be installed on virtually any dashboard. The unit is only 4" wide x 5" deep x 1-3/4" high.

For further information write or call Electrolert, Inc., 4949 S. 25-A, Troy, Ohio 45373.

NEW USES FOR RADAR

A tiny radar system is being developed at Georgia Tech to be built into an anti-tank missile that may eventually help to prevent auto accidents.

The millimeter radars, presently being developed for the military, could someday be used for collision avoidance for cars. The radar planners are working with a German company that actually has implemented radar in the grille work of a Mercedes and is using it as a collision avoidance system.

The radar would warn a driver that he is approaching another car, or a stationary object too fast. It would give the driver an amber light, then a

red light, or beep a horn, to say, "You're driving past the point of no return." To this point, those radars have not been used to apply brakes or any similar function.

STATE COPS HEAR IT ALL

Some Pennsylvania police officers recently recounted some of the more humorous speeding arrest excuses they heard, which included:

Faulty speedometer.

"I'm trying to get to a restroom—I have chronic diarrhea."

"I thought I was going to run out of gas so I'm rushing to a gas station."

The woman wearing high heels who said her heel got lodged underneath the gas pedal.

The woman who said a package slipped off the front seat; while trying to retrieve it, her hand accidentally hit the gas pedal.

A woman was stopped for doing 75 mph heading for the airport (she told the officer she was trying to make a flight). An hour later, he stopped her doing 75 mph heading the other way (she then told him she missed her flight).

The man who said he was driving his wife to a hospital. After pointing out that he had passed by several exits to hospitals, the officer escorted him to a nearby hospital, where the guy ended up with a hospital bill (when nothing was wrong with his wife), plus a ticket.

And then there's the one about the man who *wanted* a ticket (to save his job and his marriage).



He had told his boss he was late for work because he was stopped for speeding on the way in. The boss said he was fired—unless he could show him the ticket. The man also needed the ticket to show his wife; the real reason he was late for work was because he had stopped off to see his girlfriend.

STRICT ENFORCEMENT AREAS REVEALED

Hank Downey of the American Automobile Association has released information about what the AAA considers areas of strict enforcement. The AAA designates "Strict Enforcement" areas to tell its members to watch their P's and Q's because the police will be tough on them if they're caught speeding.

The states so designated are Virginia, Massachusetts, Connecticut, New Hampshire, New Mexico and Maryland.

Other areas include:

- Kentucky: Mountain Parkway between I-64 and Salyersville.
- Louisiana: Parishes of St. Helena, Tangipahoa, Washington and St. Tamman.
- New York: Interstate 290 (Youngman Expressway) from I-190 to I-90; Onandaga County, especially I-81 and State Route 417 from 10 miles east of Wellsville to 10 miles west of Olean; I-90 and I-787 through Albany, Columbia County, and I-814 through Putnam County.
- Ohio: Tuscarawas County I-70 through Licking County I-70 Springfield bypass; town of Urbana; I-71 between U.S. 36 and U.S. 30.
- Oregon: Town of Jordan Valley.
- Tennessee: Town of Cookeville and I-40 from 15 miles east and west of Cookeville.
- Texas: Town of Kendleton.
- W. Virginia: Town of Cedar Grove.

If you know of other "Strict Enforcement" areas, drop us a note and we will publish them.

ISRAELI POLICE TAMING TRAFFIC

Israel, a country that has long been known for having the deadliest traffic situation in the world, has managed in the past five months to cut traffic deaths almost in half.

Visitors who remember how traffic used to be now stare amazed at Israeli motorists driving with what seems to be prudence and caution down the slow lane of the Jerusalem-Tel Aviv Expressway at 55 miles per hour.

Israeli drivers were famous for an aggressive driving style that many considered bordered on homicidal. There was a time when anyone who stopped for a pedestrian at a crosswalk would cause a block-long pileup behind him.

What then has happened? The Israeli police, that's what. Because of a police crackdown, Israeli drivers admit that it is the fear of a traffic ticket, some brought about by use of police radar, that has turned them from apparent maniacs into careful drivers.

Driving licenses are being suspended for two minor infractions a year. And fines, once small, are now sky high—up to \$2,000.

The results so far—for the first five months of 1980 there was a 16% drop in all accidents, a 41% drop in serious accidents, and a 48% decrease in the number of people killed.

POLICE CHIEF'S SECRETARY "ARMED"

Where would you look for a radar detector? In West Bend, Wisconsin you wouldn't have to look further than the police department's parking lot, next to a squad car.

Now, whose car would be parked in the police department's lot with a radar detector on the dash? The police chief's secretary, that's who.

Asked by the West Bend News what she used the radar detector for, Mrs. Crivello paused for about five seconds and said into the telephone, "Just a minute. Will you hold please?"

A half minute later, Crivello returned to the phone and said, "I'm sorry, I don't have any comments on that."

She hung up before anything else could be said.

The police chief also was reported to have "no comment" on the subject.

SPEED TRAP FLASHER LAW OVERTURNED

A trial judge in Windsor, Connecticut says it's a constitutional right of free speech to flash your car's headlights to warn other drivers of upcoming police radar speed traps.

Superior Court Judge John Mulcahy ruled against a state law prohibiting "improper flashing of lights" when a Hartford lawyer (Thomas J. Barberie) and his attorney, Joseph F. Keefe decided to fight the statute instead of paying the \$25 fine.

In the brief written by Barberie and Keefe, both the Paul Revere ride and a ride by Jack Jouett warning the Virginians of the presence of British dragoons were cited. It was stated that Barberie's act "was merely carrying on one of this country's traditions, and exercising his right to freedom of speech chronicling the presence of armed authority."

The case was dismissed and Hartford County State's Attorney John Bailey wrote to Chief State's Attorney Austin McGuigan recommending that flashing light cases no longer be prosecuted.

There was no immediate word if the state would appeal the ruling.

DX KORNER

C.M. STANBURY II REPORTS

ON THE INTERNATIONAL SHORT WAVE SCENE

Send SWL reports to:
C.M. Stanbury II
c/o S9 Magazine
14 Vanderventer Avenue
Port Washington, N.Y. 11050

AIRBORNE DX

Aircraft, space vehicles and mountaintops all represent unique monitoring opportunities. Earth-bound stations cannot radiate skywave signals (i.e. transmissions which reach the ionosphere) much below 5 degrees. Signals between 0° and 5 degrees above the horizontal are absorbed in the form of groundwave and never reach the ionosphere. Airborne antennas can, in theory at least, radiate in any direction. Unusually low radiation angles increase maximum hop length—the longest possible distance between the transmitter and the next point of contact with the Earth—usually limited to about 2000 miles when propagation is by the highest (F2) layer of the ionosphere. Abnormal

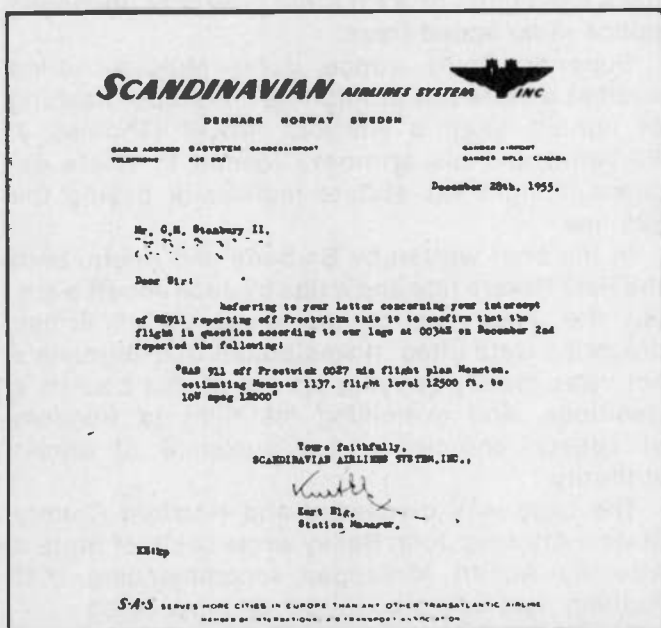
radiation angles also can increase the range of frequencies at which a signal will be propagated.

Unfortunately, we don't know of any mountaintop shortwave transmitters, and most space vehicles, other than those carrying ionosondes, disappeared from the 3 to 30 MHz range some years ago. But aircraft, some flying near the bottom of the ionosphere, can still be logged from all parts of the world below 30 MHz! High flying trans-polar airliners are often heard by North American DX'ers on 8910 kHz while Canadian forces jets have been heard on approximately 11234 kHz—the same channel apparently used by U.S. and British military aircraft over and around the Indian Ocean (see last month's column).

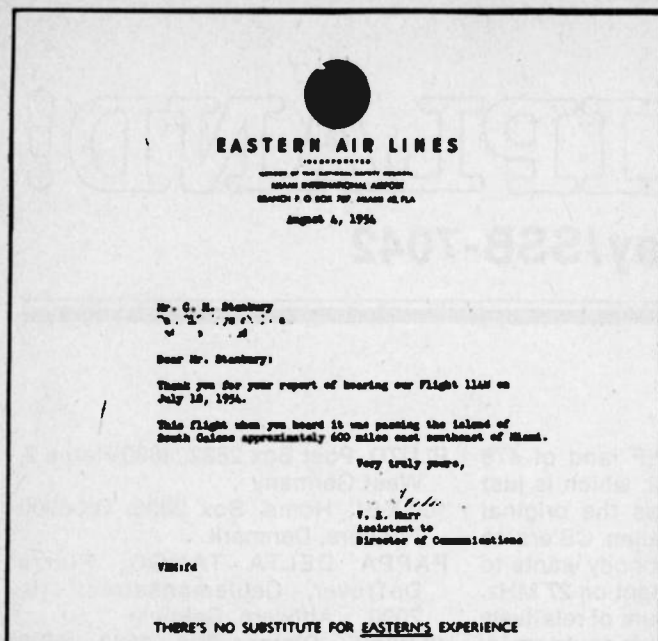
Between those two geographic extremes represented by the Arctic and Indian Ocean, are airborne transmitters to be found on many other shortwave frequencies. 6610 and 8882 kHz are the places to look for African flights; the latter channel will also produce South Asian loggings. For the Pacific try 8854 and 8831 kHz. 6543 is used in the western Atlantic and eastern Caribbean while many European USAF flights are on 6750 kHz. It's back to 8831 for the Near East, while nearby 8824 is a Mediterranean channel, and 13201 is a good spot for USAF jets over Japan and the North Pacific.

Given the current high sunspot count, 6 and 8 MHz will be best at night with daytime AERO DX pretty well restricted to 10 MHz and up. Most of the transmissions on these frequencies will be single sideband, but a few third world airlines still use standard AM. Depending upon the quality and design of your receiver, you may have to contend with interference from strong 31 Meter SWBC images on 8 MHz.

Now we come to a debatable point—what about aircraft passing over rare DX countries? Do they count as those countries? Most DX organizations say no but we have always counted them as such. For example, there are no BBC SWBC transmitters in Scotland and Scottish ground based utility stations are also scarce on shortwave frequencies. With patience, however, an AERO DX'er can log transpolar flights passing over Scotland, as well as



QSL letter for Scandinavian Airlines flight 911 over Scotland.



QSL letter for Eastern Airlines flight 114W over South Calico Island.

Iceland, which is only a slightly less difficult catch. In fact on the 2 MHz band I've been able to log aircraft over Iceland (2945 kHz) but never Keflevik Aeradio itself.

Another normally rare country, Turks and Caicos Islands, is a routine logging via aeronautical DX, because South Calicos Island is a reporting point on the busy Miami to San Juan route. As we see it, that's just too good a DX opportunity to pass up—at night on 2966 kHz. Meanwhile a Caribbean reporting point of considerable historic interest is Swan Island: try 10021 during daylight hours, 5619 and 2952 kHz after dark.

Once you determine that a given AERO frequency is "open," try to monitor that channel as long as possible. That way you will not only log a flight over several different locations, but also be able to determine from which airport the flight originated and/or where it is bound. Reception reports should then be addressed to the Communications Supervisor of the appropriate airline at either location.

Ground stations use the same frequencies and some of these "Aeradios" are also very interesting DX. During the day you might listen for San Andres Aeradio (sometimes referred to as "St. Andrews")—a Colombian island in the western Caribbean—on 10021 kHz. Cocos Island has been reported on 11234: that's the Australian possession in the Indian Ocean, not the Costa Rican Cocos Island south of the Central American coast. On 8824 there is Malta Aeradio, and Tripoli Aeradio in Libya. Reception reports should be addressed to the Technician in Charge.

Monitoring above 30 MHz on the VHF Aero Band is equally challenging and exciting and has been rapidly growing in popularity with communications

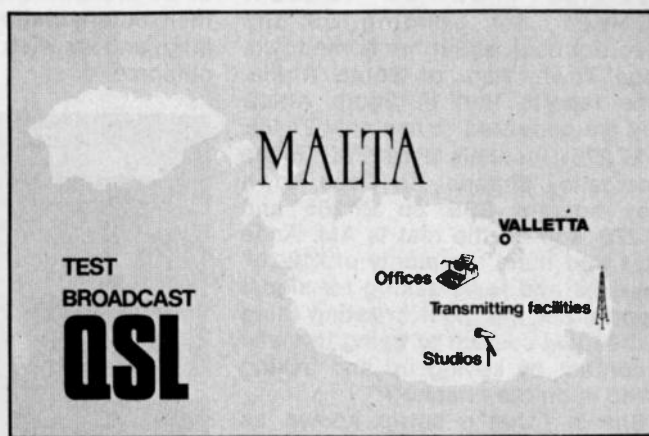
enthusiasts. Be sure to find out about monitoring the VHF Aero Band (108 to 136 MHz) elsewhere in this month's issue!

MALTA UPDATE

Most international religious broadcasters try to avoid political involvement, especially those which don't transmit from U.S. sites—but two which have not avoided such entanglements are the American-based Adventist World Radio and the Swedish IBRA Radio. Both purchase time on various government-owned shortwave transmitters.

The most troublesome of these arrangements occurred on the island of Malta where, as explained in our very first DXK (Aug. 1979), the Voice of Germany operates through a corporation called Radio Mediterranean. The Maltese government has consistently forced Radio Mediterranean to air Libyan propaganda, which means that the same transmitters carrying AWR and IBRA's rather moderate religious programming have also aired Colonel Qhadafy's radical views.

Now, however, the Maltese government has reportedly become disenchanted with Qhadafy and, supposedly, Radio Mediterranean will no longer be forced to broadcast Libyan programs. Who knows? Under these circumstances Radio



Special QSL card for test broadcasts from IBRA Malta.

Mediterranean may even begin relaying Radio Canada International again! Incidentally, transmissions from Radio Mediterranean are primarily intended for Europe, but North American DX'ers should watch for IBRA Malta afternoons on 9510 kHz and AWR Malta on 9670 kHz at 0200 EST S/On.

While we're on the subject of interesting SWBC frequencies, Libyan broadcasts can still easily be heard on 17930 kHz (technically speaking in a utility band) until 1300 EST. Programs are in Arabic. Also AWR now has its own station in Guatemala ("Union Radio") which has been heard with some difficulty evenings on approximately 5980 kHz in English and Spanish, with an alternate frequency of 6090 kHz.

HELLO SKIPLAND!

By Craig, VX-42/Unit 342-X-ray/SSB-7042

Readers of this column are requested to let us know any overseas addresses they come across or hear on the air. We would also like to receive copies of any DX cards received by our readers so we can run them in the Hello Skipland Column. Since we don't wish to be responsible for the "safety" of any rare DX QSL's we request that readers send in copies (Xeroxes or other office type copying machine prints are fine) and not the original cards.

MANY thanks to Anne (SSB-0027), also known as **YELLOW MONKEY**, for sending us the beautiful book about her home town, Cape Town, Rep. of South Africa. Anne reports that in South Africa they are permitted to use only 27.185 to 27.275 (Channels 19 to 27); 21 is the emergency channel. In Cape Town they operate SSB on 27.265 and 27.275, and all the rest is AM. Anne says that there are plenty of "10-36" requests and folks asking for signal reports, but the most irritating thing is the local custom of trying to make a contact by keying up and asking "Who is on the channel?"

Shawn ("Jim"), better known as *Sandcastle 3* in Australia, says that S9 is "a wonderful magazine," and for that we say a 100% wall-to-wall "thanks!" Jim sent along some information on the rather massive protest

to the never-never UHF land of 476 MHz along about 1982, which is just as poor a situation as the original plans to move Australian CB'ers to 930 MHz. Of course, nobody wants to do anything but stay right on 27 MHz. Besides the large amount of relatively new CB equipment which could rapidly become outdated, 27 MHz is "where it's happening" on CB around the world, and Australians are a particularly avid breed of hobbyists! On the other hand, from what we know about the Australian spirit, it's going to be no easy task to move these people off the 27 MHz band. All of us here at S9 are with these good people in their determination to remain on 27 MHz, and we wish you the best in the outcome.

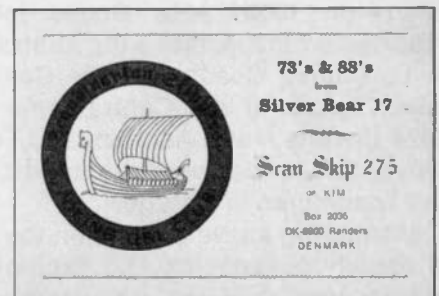


Herb Poor, SSB-1932, of Holbrook, Mass., has everything from CB to scanners, and communications receivers to tape decks all close at hand. What a station!

PLUTO, Post Box 2882, 4690 Herne 2, West Germany
102-X-01, Homs, Box 2035, DK-8900 Randers, Denmark
PAPPA DELTA TANGO, Pierre DeTroyer, Ceulemansstraat 19, 2000 Antwerp, Belgium
13-WW-5, Dieter, Box 2882, 4690 Herne 2, West Germany
Gunter, P.O. Box 1133, 6909 Mulhausen, West Germany
ROTKAPPE Mobil, Hortst Fischer, Margeritenweg 45, 33 Braunschweig, West Germany



HYDRA 1, Georg Huttinger, Post Pleinting, D-8351 Stinglloh 4, West Germany
SCAN SKIP 275, Klm, Box 2035, DK-8900 Randers, Denmark
SIERRA 1, Patrick, P.O. Box 23, 9700 Oudenaarde, Belgium
BRAVO BRAVO, Mick, 497 Commonsides East, Mitcham, Surrey CR4-IHH, England (Would like to receive maps of the various states in the U.S from stateside operators.)
SANDCASTLE 3, Jim, Box 574,



OVERSEAS ADDRESSES

JULIETT TANGO, Juan, P.O. Box 426, Igualda, Barcelona, Spain
ALPHA 35, Adrian, P.O. Box 791, 1400 Germiston, TVL, South Africa
SSB-0027, Yellow Monkey, P.O. Box 1966, Cape Town, Rep. South Africa
REPELSTEELTJE, P.O. Box 10328, 3004 EA Rotterdam, Netherlands
ALTONA, P.O. Box 345, Port Elizabeth 6000, Rep. South Africa
SSB-084, Ray Irrthum, 43 rue des Carrefours, Strassen, Luxembourg



which "down under" CB'ers are starting. The problem is that the government has been making noises along the lines of shifting CB from 27 MHz

Salisbury, S. Aust., Australia 5108
(100% QSL! /1-4-1)
Willy Hyllested, Kaerlundsvej 12, 900
Aalbor, Denmark
CH-3598, Lance, 30 Corthampton St.,
Aranul, Chrlistchurch, S. Island,
New Zealand
Vance Nooltrust, Agamemnonstraat
21-hs, 1076 LP Amsterdam,
Netherlands
Terry Baron, P.O. Box 87313, Johan-
nesburg, Rep. South Afrlca
LOK-1, Michael Forduhn,
Namesdorfstr. 16, 300 Hannover 72,
West Germany
SSB-075, Willy, Post Box 16, 8380
Zeebrugge, Belgium
LIMA-ZOELOE, Willem, P.O. Box 179,
3430 AD Nieuwegeln, Netherlands



Terry Carter (UNIT 328) of Baltimore, Md., runs this Cobra 1000-GTL and D-104 into a Wilson V-Quad. A really nice looking station, wouldn't you agree?

MS-647, John M. Guy, 12 Runciman
Place, Dannevirke, New Zealand
NU-639, Raewyn, 74 Kelly Street, In-
glewood, Taakak, New Zealand
EL-509, Paolo, P.O. Box 97, Vercelli
1300, Italy
Uwe Both, P.O. Box 1212, D-5810
Wlitten, West Germany
Sten & Inge, P.O. Box 3021, 42403
Angered 3, Sweden
Bruno Dreier, Westkilverstrasse 38,
4986 Rodinghausen 2, West Ger-
many
Bert Turner, P.O. Box 41128, St.

CB STATION
Spain
Juliett Tango 
op. Juan
P. O. BOX 426 - IGUALADA
Barcelona - España

Lukes, Aukland, New Zealand
Hermann and Josef End, Ludwig
Umland-Str. 22, 5012 Bedburg, West
Germany
Yulchi Kato, 221 You Kamachi,
Kesennyma City, Mlyagi 988, Japan
ONZ-7054, Kurt, P.O. Box 21, 9740
Gavere, Belgium
Rainer Roth, P.O. Box 64, 6682 Ott-
weller 1, Saarland, West Germany
NAS-1220, Robert and Joan, P.O.Box




79, Heidelberg, Vlct. 3084, Australia
Kelth, P.O. Box 628, Orange NSW
2800, Australia
Dick & Meg, P.O. Box 816, Rosberg,
Tasmania 7470, Australia
Wolfgang Grabasch, Nordstrasse 16,
4410 Warendorf 1, West Germany
Klaus J. Pirch, P.O. Box 1166, 5466
Neustadt/Weld, West Germany
Rolf Heinzl, P.O. Box 61, D-2813
Eystrup/Weser, West Germany
BELLA 1, P.O. Box 1150, D-7014
Korwestheim, West Germany
Christa Muller, Kalmuntener Strasse
15, 5060 Bergisch, Gladbach 2,
West Germany



Petra Czernetzki, Bruderstrasse 27,
5980 Werdohl, West Germany
W. Hermans, Nelkenweg 1, 4180 Goch
2, West Germany
Thomas Orling, Meyherstrasse 33a,
2100 Hamburg 90, West Germany
CO-103, Box 27, Aalst, Belgium 9300
STE-526, Piero, P.O. Box 10, Vidulfo,
Italy 27018
EB-47, Alex, P.O. Box 18507, Sao
Paulo, Brazil

Q S L from
SIERRA 1
STARSKY (LOCAL)
OPERATOR PATRICK
P O Box 23
9700 OUDENAARDE
BELGIUM



UNIT 707, Tony, P.O. Box 782,
Curacao Island, Netherlands Ant-
illes
Martin Kerr, Aunmoe Navan, Co.
Neath, Ireland
Federico Garza, Aptdo. Postal A-112,
Monterey, N.L., Mexlco
Jean Jacques Deknuyt, Ave. des
Nervlens 11, 1810 Wommel,
Belgium



If you've heard Scott, USA-561, here's his radio room. Scott is a regular address contributor to this column. All readers are invited to send along names and addresses of overseas operators.



This neat 'nifty radio shack belongs to Bruce Hoover, Valler, Pa., who enjoys S9 so much that he says he will still be reading S9 when we bring out our 40th Anniversary issue. That would be along about July of 2002!

CB SHOP



TWO WAYS TO ADVERTISE YOUR PRODUCTS & SERVICES IN THIS SECTION

1. **By-The-Word Ads**
Commercial, Clubs, Organizations, \$1.00 per word (\$40 minimum per issue).
2. **Display Ads**
\$120 per inch minimum per insertion plus \$60 per 1/2-inch additional to maximum of 4-inches deep.

Closing Date—All advertising in this section will now close the 10th of the third preceding month; i.e., January 10th for the April issue.

PAYMENT — All ads must be pre-paid by check or money order (payable to Cowan Publishing Corp.), or through Bank Americard (Visa) or MasterCard. On charge orders, include card number, expiration date and inter-bank number.

Permanent address and phone number must be supplied if not identified in actual ad copy. Publisher reserves the right to refuse any advertising deemed unsuitable or inappropriate. Because advertisers, services, and equipment contained in CB Shop have not been investigated, the publisher cannot vouch for the merchandise or services listed therein. Direct all orders and correspondence to: Eileen Lucey, S9/Hobby Radio, 14 Vander-venter Avenue, Port Washington, N.Y. 11050. Phone: (516) 883-6200.

Bargain Hunting?
Send 50 c
FOR BARGAIN CB CATALOG!
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Kansas City, Mo. 64114

PALOMAR/PRIDE—Exclusive Repair Facility. We also repair most other brands of Ham and special CB equipment. Dealers & Repair Shops — send for catalog special parts, RF power transistors and tubes. **PALOMAR ELECTRONIC REPAIR SERVICE**, 1320 Grand, San Marcos, CA 92069. 714/744-0720.

SECRET CB VOLUMES 1 through 10; \$12.95 ea. **TECHNICAL CB APPLICATION 2nd and 3rd Edition;** \$14.95 ea. **SSB ENGINEERING PRACTICE VOLUMES I and II;** \$14.95 ea. Cobra's Two Way Discount Supply, Dept. CB Radio, Route 5, Box 123, Hope, Arkansas 71801. 501/777-3220.

MORE CHANNELS AND RANGE! We specialize in Frequency Expanders, speech processors, VOX, bleedover filters, do-it-yourself repairs, modifications plans, antennas. Catalog \$1. CB City, Box 31500-S, Phoenix, AZ 85046.

NEW YORK CITY METRO FREQUENCY PROFILE includes listings for NYC UHF/VHF POLICE FREQUENCIES, FIRE, EMS and much more! City, State and Federal agencies are covered. Includes special "SERVICE SEARCH" section detailing high activity frequency groupings. Eight Dollars. Certified check or M.O. will speed First Class Delivery. DIGICOM, Dept. S-12, Box 1175, New York, NY 10009.

SCANNER OPERATORS! Are you registered? Be assigned your own personal monitoring ID letters inscribed on beautiful 2-color bordered certificate, plus discounts and goodies! Thousands already registered! Only \$5, ppd. from CRB Research, Box 56-T, Commack, NY 11725.

LOOKING FOR old Lionel trains. Interested only in "O" gauge, excellent to like-new condition. Primary interest is locomotives prior to 1952, but will consider complete sets, or more recent models. Am willing to buy outright for cash, or swap radio gear to meet your needs. Write: Dick Cowan, WA2LRO, c/o CB Radio/S9 Magazine, or call 516/883-6200.

ASSOCIATE MEMBERS WANTED to join American CB Radio Club. Receive membership card, permanent club ID number, QSL card, 10-code, CB language, bumper sticker, etc. Associate membership—only \$10.00 a year—mail check to: American CB Radio Club Inc., PO Box 321, Bronx, NY 10469.

THE BOOTLEGGERS BIBLE, proven by your letters to be the finest publication available for *Modifying the CB Radio*, above Ch. 40 Or below Ch. 1, 77 PLL Chips listed, for Crystal, AM & SSB, 23 & 40 Ch. sets. **\$12.95**

THE LINEAR AMPLIFIER PLANBOOK II Containing plan for linears from 2 to 400 MHZ, from 15 to 1000 watts, all transistor designs, 11 Meter Models? Yes **\$11.95**

CB RADIO REPAIR Circuit descriptions, trouble shooting chart, component testing, the latest techniques used by the Pros: **\$8.95**

Bootlegger kits, special XSTLS, scanner XSTLS available full line catalog \$1.00 refundable.

AP SYSTEMS
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QSL CARDS by a Reliable Company with 14 Years' Experience in Satisfying Customers. Top quality, reasonable prices. 12 colors, gloss-coated, designed for you. **FREE CATALOG** and **SAMPLES**. Write: CBC Club, Dept. SS9, Box 703, Lexington, NC 27272.

FREE! OVER 150 INFORMATIVE PAGES of more than 50 famous brands in Graham Radio's latest catalog. We sell to dealers only and ship anywhere! Send letterhead and state tax number for free catalog and price list. **GRAHAM RADIO, INC.**, Dept. S, 505 Main St., Reading, MA 01867.

VHF AERO BAND FANS! All new for 1981! The spectacular 2nd Edition of Tom Kneitel's book **AIR-SCAN** is here! More than 18,000 listings of frequencies/locations of VHF Aero Band (108 to 136 MHz) communications operations. Includes "unlisted" frequencies and many private "unlisted" airports closed to public; plus test pilots; aircraft manufacturers; airline operations; all U.S. (commercial/private/military) airports, and Canadian/Mexican airports close to U.S. borders. Only \$5.95, ppd. from CRB Research, P.O. Box 56-TT, Commack, N.Y. 117215. (Dealers wanted!)

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11746
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Your one source for Ham Radio & Business Band Equipment. Also, Ham Radio classes given. Call 212-925-7000 or write us at: 512 Broadway, New York, NY 10012

SCAN THE "NUKES!" "ENERGY-SCAN" by Tom Kneitel. A major new scanner data book reveals 20,000 vital communications frequency listings used behind-the-scenes in the major energy industries: Petroleum, Nuclear, Electric Power Utilities, and Natural Gas. Hear their general operations, security patrols, emergency repair service crews on the job! Also lists environmental agencies & companies which keep tabs on and clean up after the energy industries. Listings state-by-state with company/agency names and their frequencies. Be on the inside of tomorrow's headlines! "ENERGY-SCAN" is only \$5.95 per copy, ppd., from CRB Research, P.O. Box 56, Commack, NY 11725. (Dealers wanted.)

BUY THE RIGHT SCANNER: Our special guide, **SCANNER PROFILE**, highlights the advantages and disadvantages of various programmable units. Report also recommends models for specific types of application. Eight Dollars. And, before you buy any programmable scanner, at any price, read our **CONSUMER BULLETIN**... Sent with each order or free upon request. **FIRECOM**, Box 61, New York, NY 10011. 212/989-5773.

INNER EAR HIDDEN CAR ANTENNA—Built-in Tuning Light. High performance. Easily installed /tuned. Protects against thieves, vandals. Thousands of satisfied customers. Great Xmas gift. \$24.95 postpaid. Visa, Mastercard, Check. Money back guarantee. Wavefront Products, Wheatland Street, Phoenixville, PA 19460.

CABLE TV DESCRAMBLERS AND CONVERTERS. Buy our completely assembled premium channel descrambler or build our kit and save. We also sell Cable converters. To determine your descrambler and converter needs send \$2.00 for information. C&D Company, P.O. Box 26, Hudsonville, MI 49426.

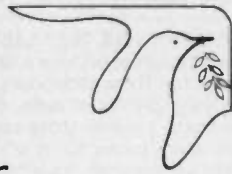
FREQUENCY EXPANSION TECHNIQUES REPORT—Program "out of band" frequencies including 406-420 MHz **GOVERNMENT BAND** and more into your Regency M-100/M-400/K-500 and Bearcat 250, plus special "split" frequencies like 431.237 and 450.087 into your BC 250 and 250A. This report a must! Now only Eight Dollars. Certified check or Money Order will speed delivery. DIGICOM, Dept. S-12, Box 1175, New York, NY 10009.

BUILD YOUR OWN "PYRAMID POWER" Indoor CB antenna for \$5.00 or less. Complete plans. Send \$2.00 to LJB, 116 Ridge Rd., Marion, NC 28752.

SUPER BARGAINS! SCANNERS, CB's, Stereos (Home & Auto), Video, Ham, Telephone Accessories, etc. Send SASE for FREE list to: LJB, 116 Ridge Rd., Marion NC 27652.

MONITOR FOR EMERGENCIES ON CHANNEL 9 or your local truckers' channel. We invite you to join our nationwide, non-profit organization. Members receive all the information they need to be an effective monitor. NO meetings and NO required monitoring. Members identify with their state name (such as "Florida State Emergency Radio") using the team call letters. INDIVIDUAL and TEAM membership. For more information and a membership application, send a self-addressed, STAMPED envelope (stamp REQUIRED for a reply) to: U.S. EARS, Headquarters, P.O. Box 1956-A, San Jose, CA 95109.

Happy
New
Year



DANGER!!



FERROEQUINOLOGIST AT LARGE

Hi, I'm Dick Cowan. I'm the publisher of S9. I'm also one of the country's most ferocious ferroequinologists. You don't recognize the word? It translates out to "collector of old toy trains."

Anyway, I have bought hundreds of old trains from S9 readers in the past six years, but my hunger for a bigger collection keeps growing. That's why I want you readers to know that I'll pay enormous prices to add good trains to my collection.

What am I looking for? Primarily Lionel, and that includes O gauge or standard gauge. But I'll also consider old Marklin, Ives, pre-war American Flier, and several others. No HO or N gauge, please. I wouldn't know what to do with them.

How much will I pay. Perhaps a few hundred dollars, perhaps a few thousand. It depends on what you've got and what condition it's in. Just as an example, a Lionel 5344 engine can bring a thousand dollars or more, and lots extra for the freight or passenger cars. A 400E will bring at least as much. Complete sets, especially in the original boxes and set cartons can be worth as much as \$5,000. In other words, I'm very serious about this whole train collecting thing.

If you've got old trains stored away in the basement or attic, just jot down the numbers on the engines and cars. A polaroid picture will help, but it isn't all that necessary. I want those trains and I'll go to any lengths to get 'em. Why not drop me a line, or better still, give me a call.

Richard Cowan, Publisher
S9 Magazine
14 Vanderverter Ave.
Port Washington, N.Y. 11050

Tel. (516) 883-6200

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S9/HOBBY RADIO Magazine
14 Vanderverter Ave., Pt. Washington, NY 11050

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6. "Take it with you" theft protection is also built into the mount with quick release retainers that make it easy to dismount and remove your CB.

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12. Urban engineered RF amp and mixer stages protect against signal overload, blocking and cross modulation in heavy city traffic.

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