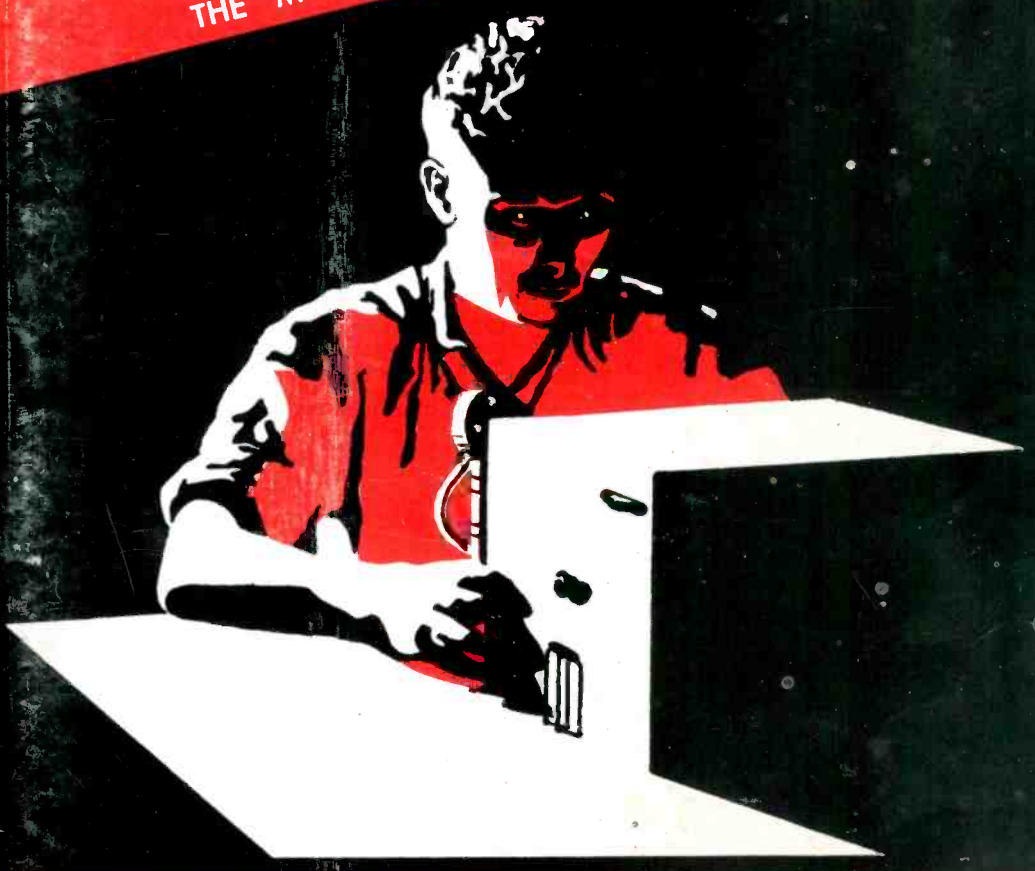
8 PAGE CB OPERATOR'S GUIDE — PAGE 35

S9

APRIL 1966
50c

the citizens band journal

WILD HISTORY OF 11 METERS • VAMPIRE BAT ANTENNA
CB IN THE KKK • FCC FUNNIES • THE BALUNTENNA
THE "MOUNTIES" NETWORK • AND MORE!



The OFFICIAL CB RADIO MAGAZINE

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Lately we've had a flock of inquiries from CBers asking whether our new ASP-503 Lo-Band Professional Scanner will work on CB.

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S9
the citizens band journal

Vol. 6, No. 4

April, 1966

S. R. COWAN, KBI7182, PUBLISHER

14 Vanderventer Ave., Port Washington, N. Y.

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Is it time to renew your S9 subscription?

READER MAIL

KIND OFFER

Dear Tom,

My son, Juan Antonio Sanchez, who was licensed as KGC0634 and died in a recent ranching accident, had a collection of nearly 400 QSL cards. There are few duplications and the collection represents just about all states (except Hawaii) and Canada.

We would like to see this collection placed where it would be appreciated the most. Antonio was a person with an immense love for his out-of-doors life and was profoundly concerned for those who could not share it. We would like to see his collection placed with someone whom illness or accident has confined.

Juan Vicente Sanchez
Route 1, Box 113-D
Durango, Colorado 81303

Thank you, Mr. Sanchez, for your very kind and generous offer. CB'ers who are confined and who would be interested in having these cards should contact Mr. Sanchez directly.

FROM OVERSEAS

Hi—

I recently won a subscription to S9 in a WRUL shortwave contest. In the December '65 issue of S9 you ran a "Festival of Foreign Card Swappers." Guess I missed the boat, but you might wish to pass along the word that I'd very much like to swap cards with CB operators. It would help if those wishing to swap could enclose three International Postal Reply Coupons (available at any post office) for return air mail.

Martin A. Hall, TN/DX-068/G
30 Montagu Crescent
Oakwood
Leeds 8
Yorkshire, England

ANOTHER VOTE AGAINST CB

Dear Editor,

I doubt if you will print this letter but I am writing it any way. I think the Citizens Band should be taken away or the laws followed. Talk about hobby big Jamborees Qsl card sure this is not a hobby. Most of the CBers use it just to talk to there friendsfor 5 or 10 minutes no other reason. But some use it rite not many I'm not against it if its used correctly. What good is it the way it is now give a listen on 11 and you will see what I mean.

Ray McCarty, WN2TUN
6 Circle
Hornell, N. Y.

We didn't have the heart to correct the spelling or grammar in this quaint letter. Well, guess we can't have everybody in favor of CB.

WHAT WE STAND FOR

Dear Sir:

What does "S9" stand for?

Mrs. Neil Osborne
North Bend, Oregon

We always stand for the Star Spangled Banner; sometimes for ladies on the bus.

CIRCUS CB

Dear Tom,

A new CB club here in Florida has been formed for carnival and circus performers and personnel. We're called the "Rovin' CB Club" and have about two dozen members now, all readers of S9. We invite others employed in our business to contact us concerning membership.

Charles McNab, KMP3553
Royal American Shows
Box 512
Tampa, Fla.

FROM VIETNAM

Hello S9,

Here's the scoop on one of our fellows in Vietnam who swaps QSL cards, but please enclose an IRC. He is: Bill Bukovac, 237 Dai Lo Chi Lang Gia Dinh, Saigon, Vietnam.

Art Scheid, KBI6480
Hartsdale, N. Y.

RE KKK

Dear Tom,

I've seen a number of comments in newspapers and S9 regarding the use of CB in the KKK. I agree 100% with the statements made, but nothing yet has been said about the use of CB by Civil Rights workers.

During the summer of 1965 I was up late and listened to my CB rig a good deal. These listening periods turned up a number of transmissions from base stations operated by local Civil Rights people.

I was absolutely shocked at some of the unrepeatable language which I heard, in fact, I suspended all of my CB operation while these stations were on the air.

I think that if all of these groups (including the KKK) are allowed to have licenses to operate on CB, the very least they could do is to obey the FCC's rules. If the rules are ignored, the FCC should revoke their licenses; although it's hard to see how licenses are given out to these groups in the first place.

Al Christopher, KMR4321
Starkville, Miss.

Hallicrafters' new CB-19 transceiver
is about as sleek and trim and compact
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That's why there's room for the "S" meter,
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speaker and unsurpassed basic performance
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You'll get a boot out of these features!

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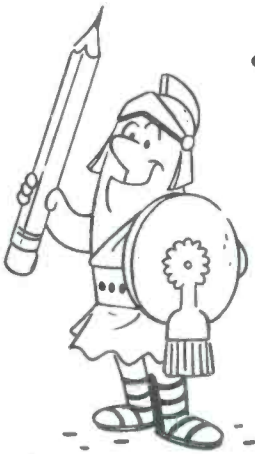

editorial

KBG4303 rides again!

by TOM KNEITEL
EDITOR, S9

PUBLIC SERVICE ANYONE?

If you are a CB'er who is interested in helping out your neighbors, you'll be keen on something we are going to kick-off in the next issue of S9.

Anybody out there who believes that recognizing a good deed brings about additional ones will want to be with us in the May S9.

OPERATING GUIDE

With CB rapidly becoming a way of life and new stations popping onto the scene, we began to see an increasing number of requests for bits and pieces of CB operating information, callsign data, definitions of words encountered on 11 meters, advice on how to call stations, the proper use of Channel 9, etc. These requests, interestingly enough, weren't from newcomers only, the long-time operators had their own questions.

We kept a big check-list of each of these requests for information, and when there seemed to be enough of a pattern as to the information which was most often requested, we planned our "CB Operator's Manual."

The "Operator's Manual" contains just about all of the data you need to know to properly obtain a license, stick by the rules, and get the message through. The "Operator's Manual" is, in actuality, a complete booklet and is being added to the "S9 CB Library" of budget publications. It is being sold for 25¢ per copy, however a pre-publication copy is included within this issue of S9 at no additional charge. The copy is easily removed from S9 by prying open the two staples which hold the issue together, taking out the issue, and re-closing the staples to keep the remaining pages together. The "Operator's Manual" may then be stapled together, placed in a 3-ring binder, or pinned to the wall of your shack.

Clubs or CB shops wishing to purchase bulk copies of the "CB Operator's Manual" can obtain details from writing to "CB Manual," % S9 Magazine, 14 Vanderventer Avenue, Port Washington, N. Y. 11050. If you want to keep a copy of this booklet around your shack without tearing apart your issue of S9, or if you have a friend to whom you would like to give the booklet, you can order additional single copies at 25¢ each, plus a stamped, self-addressed, envelope.

10 CODE CONFUSION

In our February issue we ran a letter from a reader in Johnson City, N. Y. who complained that local CB'ers were getting FCC citations because they used the "10 Code" on the air.

This letter brought forth upon us a rather large pack of mail from readers throughout the country, each expressing a wide range of opinions of the legality of 10 Code in the CB service.

One reader, M/Sgt. John L. Brackett, KBC-8296, who is one of the fingers on the missile button at Ft. George Meade, in Maryland, wrote to say that he checked the situation with an FCC monitoring station. They told him that they were aware of the "Official National CB 10 Code" and that, in itself, the code was *not* objectionable. They suggested that the 10 Code may have only been the instrument of an actual rule violation by the station(s) receiving the citation(s).

The Sarge hit the nail on the head, because we checked with the FCC office in Washington and they verified the information from their monitoring station. The FCC says that it's OK to use the code (if you have a copy of it on hand at your station), providing that you don't use it to violate other sections of the CB rules. For instance, (and this was their example) if you suddenly come on the air and say "KXX9999 10-8," and then sign off.

The FCC feels that such a transmission isn't addressed to a specific station, and, in addition, is little more than a very thinly disguised invitation to make contact with an unknown station. Both rule violations, and both reasons for getting a citation. There are times when the use of 10-8 is perfectly legit, and a citation will not be given.

So there's your answer, the 10 Code, per se, is not going to hang you; it's what you do with it. The FCC permits the use of this code on CB,

Continued on page 70

The ideal base/mobile combination for CB radio

FOR BASE STATIONS where 117 V 60 cycle AC current is available...

The Low-Cost RCA Mark VIII and Mark NINE

- 9 crystal-controlled transmit and receive channels.
- Tunable receiver for reception of 23 C-B channels; dial marked in both channel numbers and frequency.
- Exceptionally good voice reproduction.
- Highly selective superheterodyne receiver with one RF and two IF amplifier stages.
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- Illuminated "working channel" feature.
- Light and compact—only 3¾ inches high, weighs only 9 pounds with mike.
- Improved Automatic Noise Limiter.

Plus these EXTRA features in the Mark NINE

- Combination "S" Meter and relative RF Output Meter (indicates the relative strength of incoming signal) and Relative RF Output Meter (indicates relative strength of signal being transmitted).
- Spotting Switch. Permits precise manual tuning of receiver without use of receiver crystals.
- External Speaker Jack. Lets you connect an external speaker to set, so that incoming calls can be heard in remote locations.

Mark VIII: $99.95* **Mark NINE: $114.50***

FOR MOBILE UNITS where low power consumption is important...

The all-solid-state MARK 10

- All silicon transistors assure low power consumption, dependable communications at temperatures from —23° to +130° F.
- Compact, lightweight. Fits easily under dash of any car or truck. Only 3⅜" high, 5¾" deep, 8½" wide. Weighs less than 4½ pounds.
- 12 crystal-controlled transmit and receive channels with illuminated channel selector.
- Combination "S" Meter and relative RF Output Meter.
- Operates from 12-volts DC power source (positive or negative ground).
- Crystal-controlled double conversion, superheterodyne receiver provides frequency accuracies greater than 0.004%.
- Separate AGC amplifier eliminates blasting and overloading, minimizes fading.
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- Low-distortion, series-type noise limiter with automatic threshold adjustment.
- Receiver power regulated for maximum stability.
- Acoustically designed cabinet with audio characteristics shaped for maximum intelligibility.
- External speaker jack (de-activates internal speaker).

Mark 10: $189.95*

*Optional distributor resale price.

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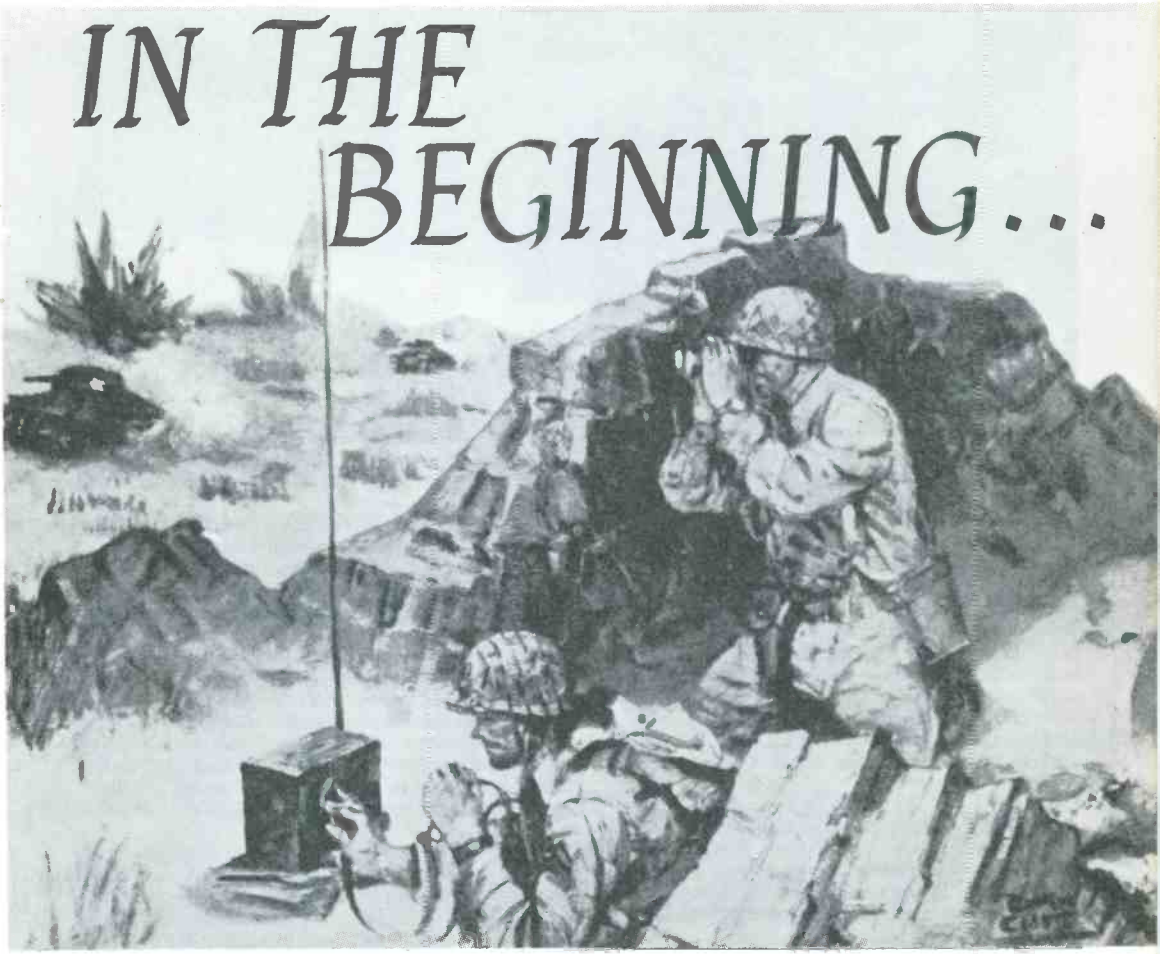
The Most Trusted Name in Electronics

IN THE BEGINNING...



EXPERIMENTERS, EXPLORERS, NAZI PANZER DIVISIONS, G.I.'S, HAMS, AND MANY OTHERS WERE THE ORIGINAL 11 METER PIONEERS. HERE'S THEIR OFF-BEAT STORY.

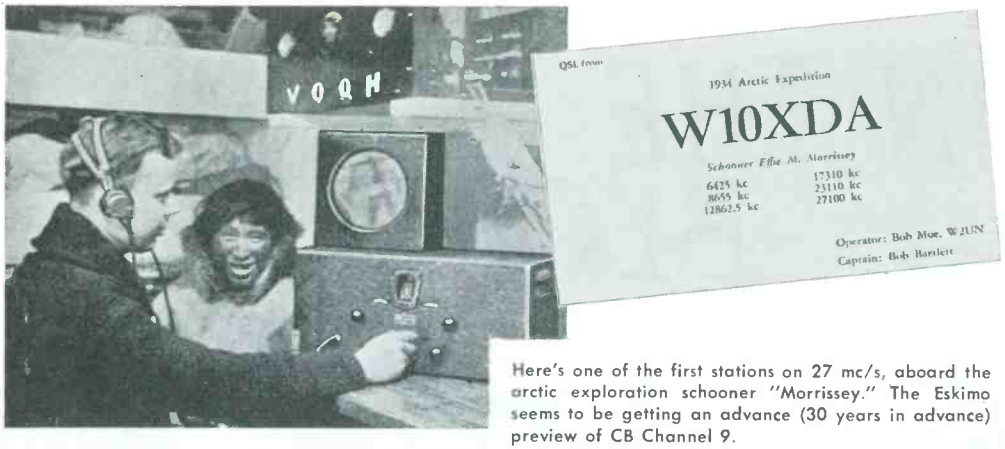
by THE OL' TIMER

In the beginning there was darkness—in fact, there was static, which is even worse than darkness. Yes, that's what was to be heard by anyone who even bothered to listen on 27 mc/s only 40 short years ago. As a matter of fact, not too many years ago, only the most advanced engineer in a lab would probably have even had the equipment to listen there.

Little did our intrepid listener know what was to blossom out on 27 mc/s. Chances are, 99% of the CB'ers who use 27 mc/s today don't have much of an idea of the wild history of this little slice of radio spectrum which was to play a part in arctic exploration, in the lives and careers of General Erwin Rommell (Hitler's "Desert Fox") and countless Yank G.I.'s, and was to go on to become a hot potato, and, finally, the stomping grounds for hundreds of thousands of CB operators.

But let's not get ahead of our story.

Back, when 27 mc/s was known as "VHF" and still a pioneer scientific frontier, we find records to indicate that there were only one or two stations in the entire country on this band. This was as late as 1933. One station, W6XBC, in Yuma, Arizona, was operated by a long-forgotten broadcasting station with the callsign KUMA (no relation to today's KUMA in Pendleton, Ore.). W6XBC was strictly an experiment to see the possibilities of using VHF for remote broadcast



Here's one of the first stations on 27 mc/s, aboard the arctic exploration schooner "Morrissey." The Eskimo seems to be getting an advance (30 years in advance) preview of CB Channel 9.

pickups. They operated on 27.100 mc/s, but even tried frequencies as high as 100 mc/s (darn near microwave in those days). They were on for 1 hour per week and eagerly sought reception reports.

About the same time, and right up to World War II, another frequenter of 27 mc/s was a schooner known as the *Morrissey* which went on annual arctic explorations. Known under various callsigns, including VOQH, WHFZ, and W10XDA, the old wood-hulled sailing ship was on 27.100 mc/s (same as W6XBC, but just as a coincidence). Using an ancient looking homebrew transmitter with a type 203-A tube in the final and a 6 tube modulator, the *Morrissey* worked many 10 meter band Ham operators throughout the world.

By the time World War II came along, 27 mc/s started to show signs of really coming alive because it was discovered that electronic medical apparatus would function very well on this band. The 10 meter Ham band was in full swing by this time, but 11 meters was still relatively quiet.

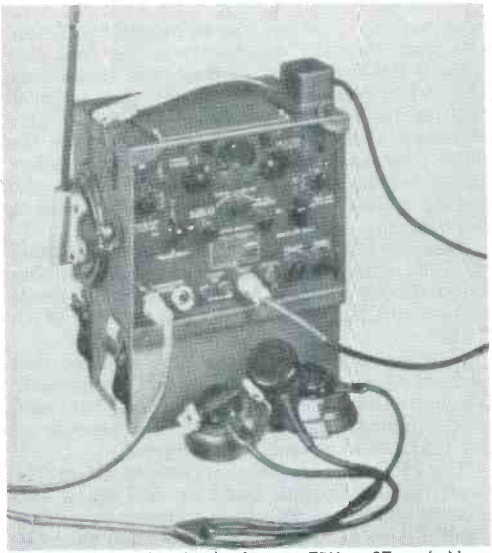
THE BIG BOOM

World War II was to show the true potential for 27 mc/s as a valued slice of spectrum. Uncle Sammy produced a number of pieces of fine communications gear for this band, and so did the Germans. Much of the tank and vehicular communications of the war was to take place on 27 mc/s.

An interesting sidelight, a story made the rounds in radio circles which concerns the use of 27 mc/s by the Germans in their North African campaign. Seems that a Ham operator in Rhode Island heard mysterious foreign language transmissions here one day in 1942. Just for kicks he recorded what he heard and then played the record for a German speaking friend. Zounds, it was discovered that it was none less than a series of military communications! Taking the record to the U.S. Navy, the experts decided that these transmissions were from Rommel's tanks in North Africa, received in the States by "skip," but impossible to hear by our North African monitoring stations.

Funny thing was that these same transmissions were to be heard on a rather regular basis, and only within a one or two square mile area in Rhode Island! The War Department immediately established a gigantic secret monitoring station in an old farmhouse at the Rhode Island site, and erected antennas aimed at North Africa. Almost every important message from Rommel to his units was monitored in Rhode Island and

A compact, rugged, 11 meter unit used in many of the German Panzer Division tanks. Rommel's 27 mc/s communications "skipped" around the world to U.S. military monitoring stations (see text).

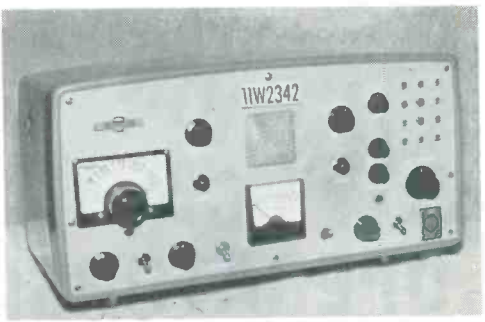


Beautiful but a bamb, the famous TBY, a 27 mc/s Navy transceiver. With its super-regen receiver and drifting transmitter, it was the disaster of the age.

then sent back overseas to Field Marshal Montgomery, who was fighting Rommel. Perhaps these feeble 27 mc/s signals played an integral part in Rommel's ultimate downfall at El Alamein. (The full story of this radio espionage appeared in the *CB Spotlight*, the publication of the *CB Radio Patrol*, Burlington, Vt.)

For our part, our boys were set up on 3 channels which lie within the present limits of the Citizens Band. These channels were known as Channel 70 (also 270) on 27.00 mc/s, Channel 71 (also 271) on 27.100 mc/s, and Channel 72 (also 272) on 27.200 mc/s. Operating on these channels throughout the world were a myriad of units which have now gone down in the pages of history with their famous "names," BC-604, BC-924, BC-620, BC-659, BC-1335, BC-608A, SCR-609, SCR-610, SCR-509, SCR-510, SCR-508, SCR-528, TBY, and many others. Surely the little TBY transceiver hit the beachhead at Okinawa, Tarawa, and Iwo Jima. Other units were in the tanks at the Battle of the Bulge, still more units filled the air with 27 mc/s signals from mountain-top lookout positions or command posts.

Little did anybody realize that some of the designs used in these sets would inspire the CB rigs of 20 years later. For instance, the BC-1335 transceiver was a little FM unit which ran about 4 watts, using 18 tubes in its circuit. It operated on either of 2 channels and could be run from 6 or 12 volts. Just as in some contemporary CB circuits, 1 crystal was used for both transmitting and receiving (superhet receiver with 4.3 kc/s IF). Another feature was push-to-talk, with a carbon microphone. You could hear the transmitter coming through the receiver when you were sending to see if it was functioning properly. The BC-1355 weighed in at 24 lbs. You can still buy these sets on the surplus market for less than $30, brand new.



Just to show what can be done with military surplus, here's the result of converting a Navy MBF rig (made by Collins) to CB use. The rig is owned by Frank Webster, KKX4717 (ex-11W2342), of Hollywood, Calif. Original frequency range was 60 to 80 mc/s, and this was the major task, the cabinet was also custom made by Frank. The rig is as slick as a greased ground plane and the envy of all who see it (and what a fantastic signal too).

Another CB-like unit was the Navy's TBY, this was a real disaster which was murder to repair if it ever went out of whack. Operating from batteries, it featured a superregen receiver and the whole thing was tunable over the frequency range of 27 to 40 mc/s, fone or CW. It was very unstable and drifted all over the place. They can still be purchased for a few dollars, make nice door stops or small boat anchors.

When the war ended, back came the scientific and medical apparatus, but the art of communications on this band, and the ease with which commercial gear could be produced at relatively low cost cried out for a better fate. By the way, it's interesting to note that the U.S. Navy's headquarters station in Washington, D.C., still is set up to operate on 27.150 mc/s with 15,000 watts. Callsign is NSS.

In 1947, the nations of the world got together in Atlantic City, N. J., and tried to untangle some of the confusion created on the radio bands during the war. During that conference, it was decided to leave 27 mc/s to the doctors and scientists with their diathermy and heat treatment machines. Since the band was so cluttered with this noisy apparatus, it was considered useless for any type of commercial communications, so, as a late thought, the Ham operators were given the use of this band. In the treaty, a footnote was added to the "ISM" (Industrial, Scientific and Medical) band allocation to indicate that Ham radio operation would be permitted here in the Americas, Australia, New Zealand, South Africa, and Southwest Africa. This was known as the "11 meter" Ham band.

Some Hams made good use of the tons of war surplus gear which could easily operate on this band with very little conversion work. By and large, however, the 11 meter band was a dud for Ham operation. There were several reasons for this; for one thing it bore no direct harmonic relation to any other Ham band (note that Ham bands are all multiples of each other, such as 3.5, 7, 14, 21, 28, 56 mc/s), and since much Ham gear is constructed to take advantage of this

relationship, 11 meters was an outcast right from the start. Another problem was the fact that none of the highly desired European Hams were allowed to operate on 11 meters, they were all on 10 meters—just one megacycle removed. There just wasn't much point in trying to buck the noise from ISM, high SWR encountered when trying to load up a 10 meter antenna on 11, and having a limited number of stations to work to the bargain.

An early CB-type experiment was in operation by 1948 when the Firestone Tire and Rubber Co., took out a license for two 3 watt FM transmitters on Channel 23. Their callsign was W10-XXD.

Exactly 10 years later, the FCC decided that perhaps there might be some more applicable communications use of this "junk band" (as many FCC engineers had come to call it because of the ISM noises emanating therefrom).

The FCC had, several years before, attempted to set up the Citizens Band on 460 mc/s, and this was perhaps as smashing a success as putting the Hams on 11. You could yell further than the 460 mc/s CB gear would work, and there were only two companies making equipment for the band. Someone in Washington then got the idea to take a whack at putting the Citizens Radio Service on 11 meters and seeing if that would make any difference to the growth of the CB service.

Then they lowered the boom with their now famous CB proposal docket, #11994, brought out in the Spring of 1957. Feeling that something was being taken away from them without just cause, the Ham operators were openly irritated at the FCC, and even (for some strange reason) at the CB'ers, who certainly didn't ask the FCC to evict the Hams (or anyone else) from their band.

"Save 11 meter" contests were hurriedly organized among the Hams to show the FCC that there really was life in the old 11 meter band yet. About 400 stations rose to the occasion, and many exotic calls were to be heard, such as CX2AY, CN8JW, XE1A, ZP5IB, VK2QL, and KG4AI.

The *American Radio Relay League*, the national Ham organization, brought up the point that the 1947 Atlantic City Treaty specified the band "for Amateur use." Noting that while the FCC might not be *required* to let Hams operate on 11 meters, solely on the basis of the fact that the treaty authorized (but didn't require) such operation, it still might not have the authority to arbitrarily stick someone else there who wasn't specified in the treaty. It seemed like a valid point, and still does, frankly.

Moving in its own strange ways, the FCC decided that it *did* have the authority to remove the Hams, it *did* have the authority to move in the CB'ers, and it did exactly that in September of 1958.

Early CB'ers, a cautious lot, weren't chomping at the bit to take advantage of their new found band. During October and November of 1959 only a few hearty souls requested CB licenses,

Continued on page 56

$169. Ready to go on all 23 channels.

Courier's TR-23S solid-state CB rig. So reliable, it's guaranteed for 10 years!

It's everything you'd expect in a CB rig with such an unprecedented guarantee. Silicon-transistors throughout bring the size down to 5¾" W x 6¼" D x 1⅞" H. **Crystals supplied for all 23 channels.** Complete with microphone. Illuminated S meter. Illuminated channel selector. PA system. Auxiliary speaker jack. Single-knob tuning. Modulation indicator. DC cord. Exclusive Courier "Safety-Circuit" to protect against mismatched antenna, incorrect polarity, and overload.

Plus the biggest guarantee in the business—10 full years. See it at your Courier dealer. Or mail the coupon for full data.

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eci. **electronics communications inc.**
56 Hamilton Avenue, White Plains, N.Y.

Yes! I'd like to know all about the $169 Courier TR-23S with the 10-year guarantee.

Name _____

Address _____

City _____ **County** _____ **State** _____

Use it... mobile... base... or portable!

Cape Horn to Fairbanks, Alaska

"Messenger III" goes all the way on Mercury Comet 16,200 mile durability run! Comet drivers report: Over 40 continuous days and nights, through rain, fog, sleet and snow . . . on washboard roads, some scarcely more than a trail . . . in tropic heat and frigid Arctic weather—the "Messenger III" never let them down!

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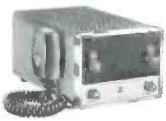

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100 Milliwatt and 1½ Watt hand-held units: Twice the sensitivity and 40% more range than similar units with conventional circuitry!

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To date—one of the biggest sellers in the Citizens Band field! 5 channels—long on performance, short on cost.

BUILD THE VAMPIRE BAT

A TRULY FABULOUS ANTENNA

by HOWARD ITTWEURK, KKE9849

Editor's note: We built and tested the VAMPIRE BAT in the S9 laboratory and can report that, despite its seeming simplicity and unorthodox design, the author/designer has, nevertheless, come up with what might well be the most sophistical design ever to be presented to CB'ers. One thing's for certain, the VAMPIRE BAT will do everything claimed for it, and more. Commercial manufacture arrangements haven't yet been made, but the designer will shortly embark on a campaign to offer the design to some of CB's larger companies. One executive, who happened to drop into our lab while the VAMPIRE BAT was being tested called the device "the *ultimate* addition to a CB station."

While it may look like some gadget from the *Batman* TV program, "fabulous" is probably the best way to adequately describe the VAMPIRE BAT, the *hottest* thing you'll ever attach to the antenna connector of your CB rig—and the smallest too!

Go ahead, be a skeptic; *I don't blame you!* When a transistor the size of a cigarette filter-tip was claimed to do the work of a tube the size of a Coke bottle, *I scoffed myself!* Eventually, doubt gives way to reason when you recall that we now live in the 20th century, a time when beams of laser light melt steel, and bread molds are turned into life saving drugs. Which brings us to a somewhat lesser development in terms of scientific accomplishment, but just as unusual, the VAMPIRE BAT.

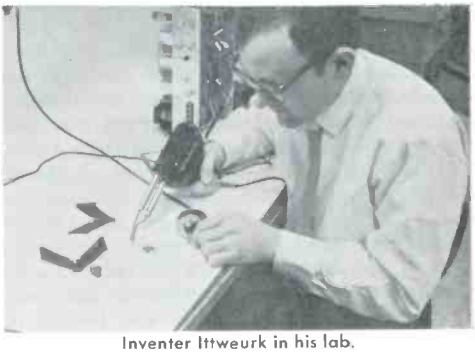
Connected to a CB rig, here's what the VAMPIRE BAT will offer: lowest possible SWR across the entire band with a *perfect match* to every rig, omni-directional null radiation pattern, it eliminates adjacent channel overloading from strong locals, it may be used either horizontally or vertically, it will *completely* end *all* CB TVI problems, it is impervious to auto ignition noise (it is filtered out before it gets into your rig), portable (can be used either base or mobile), *maximum* efficiency at *any* height (no need to mount it on your roof), and, as a bonus, it is 99% rust/corrosion/lightning proof. Best of all, the VAMPIRE BAT can be built in less than a half-hour with a few cents worth of parts, and carried around in your pocket for walkie-talkie use, or when transporting your base station.

INGREDIENTS

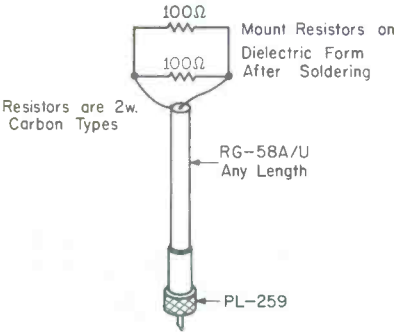
Basic ingredients are a handful of components which most CB'ers wouldn't consider as the makings of, of all things, a CB antenna. You'll need a hunk of RG-58A/U coaxial cable (length isn't critical, just measure the distance from the mounting spot to the rig and cut), a PL-259 coaxial connector with reducing sleeve, two 2-watt 100-ohm carbon resistors (do not substitute here, as these are critical components), and a VAMPIRE BAT dielectric form.

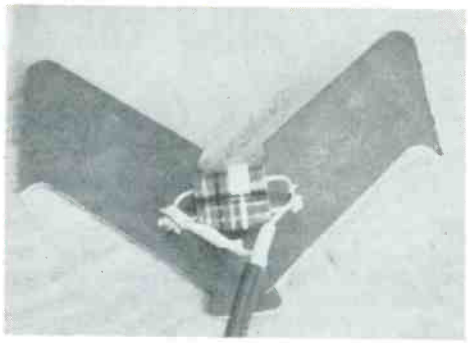
The two resistors are connected in parallel, as shown in the schematic, keeping the leads as short as possible. The coaxial cable is then connected, center conductor to one side of the resistors, shield to the other. When these connections are completed, the PL-259 connector is attached to the other end of the coaxial cable.

You are now ready to place the resistors onto the VAMPIRE BAT dielectric form. The dielectric is used to minimize any possible losses in

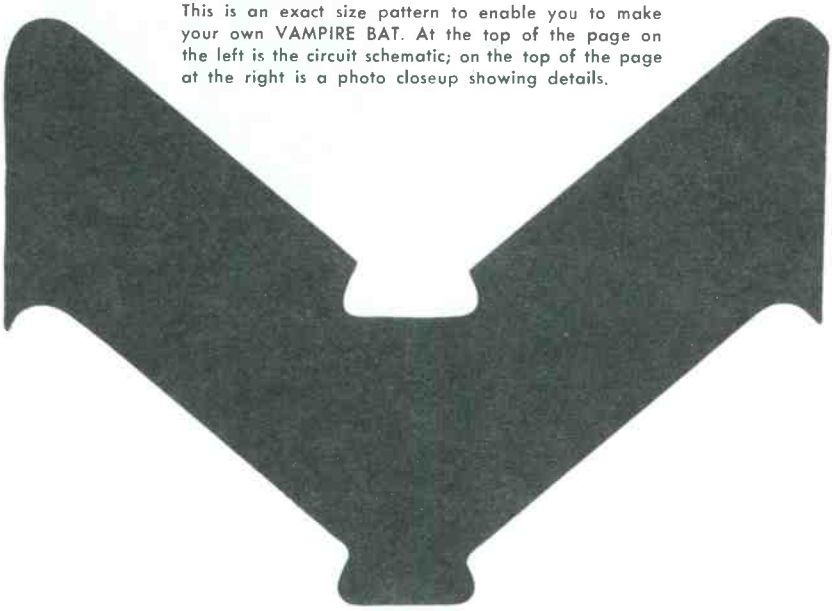


Inventer Ittweurk in his lab.





This is an exact size pattern to enable you to make your own VAMPIRE BAT. At the top of the page on the left is the circuit schematic; on the top of the page at the right is a photo closeup showing details.



the VAMPIRE BAT, a most apocryphal little antenna, for transmitting.

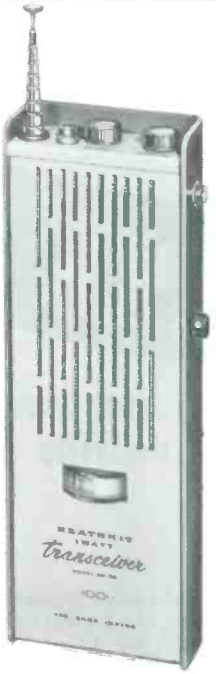
The dielectric form which I used when designing the VAMPIRE BAT was obtained through a local oriental supplier, but I would imagine that suitable similar substitute forms are available in many areas of the U.S. and Canada. Included here is an exact size template (pattern) which you can use to cut your own copy of my VAMPIRE BAT form from a piece of plastic, plexiglass, or even stiff cardboard. The form which I used was ready-made and had a small piece of thin, flexible metal on one side which I used to bend over the top resistor to hold the wiring in place on the form. Instead, you may glue the resistors in place with *Duco Cement* or *Elmer's Glue-All*, but let the cement *fully* harden before you transmit.

Your VAMPIRE BAT is now complete, hook one end to the antenna connector and hang the dielectric form on your wall or dashboard. Watch it live up to the specifications claimed for it. I think that you'll find the VAMPIRE BAT to be the most *terrific* accessory you have ever used with your CB station. The folks at the FCC, ever interested in improving communications, would be *more* than happy with a VAMPIRE BAT in use at most CB stations.

The VAMPIRE BAT is shown on the foregoing page in actual use. This was before I discovered that it eliminated TVI and was still using it with a low pass TVI filter (note at rear of rig). It was struck to the wall by a dab of glue. By the way, the VAMPIRE BAT worked so well that stacking them or using two in phase offered no improvement over one single unit.

SOLID TEAM!

5-watt



1-watt

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KKK KONFIDENTIAL

THE KKK'S SECRET CB NETWORK EXPOSED IN THIS SPECIAL BEHIND-THE-SCENES REPORT

by RICHARD CORRIGAN

WASHINGTON POST STAFF WRITER

It could have happened this way:

Sitting in a pickup truck on a lonely stretch of dirt road, the Klansman cocked his ear at the static coming over the radio receiver.

Then came the voice he was waiting for—the deputy sheriff telling the night dispatcher he was stopping at the cafe for a cup of coffee.

The Klansman fired up his engine and picked up a microphone from the dashboard. "Twenty-four calling Whitey," he said. "It's all clear. Meet you there in five minutes."

GETAWAY

Five minutes later, a stick of dynamite was thrown at the shack of an old Negro farmer who had gone down to the courthouse that afternoon to register to vote. Ten minutes after that, a cross was lit on the lawn of the moderate-minded county attorney.

The Negro farmer never reported the incident. And by the time the county attorney called the sheriff's office, and the office got hold of the deputy, and the deputy arrived at the scene, the Klansmen were safely home.

This particular incident is imaginary, but the pattern is not. For during its investigation of the Ku Klux Klan, the House Un-American Activities Committee has found that besides using the traditional weapons of terror, Klansmen employ a system of communications that would do credit to a guerrilla army.

"Klansmen make use of Citizen Band radios for communication among themselves," chief investigator Donald T. Appell has said. "In addition, they have equipment which enables them to intercept police radio calls. With quick means of communication, and being in a position to know where police patrol cars are at a given time, they can judge pretty well when and where they can commit an act of violence and have time to make a getaway."

And even if they heard someone on the air "ordering five cans of oil," the engineer said, there would be no way of knowing whether it was a Klansman planning a cross-burning.

Among the CB licensees, for example, is Imperial Wizard Robert M. Shelton of the United Klans of America. But FCC officials say no evidence has been found that Shelton or any other Klansman has violated the Federal Communications Act. And the licenses were applied for by individuals, not by the Klan units per se.

Besides using radio receivers to listen in on lawmen, and Citizens Band radios to keep contact among themselves, Klansmen also carry walkie-talkies for such missions as staking out civil rights headquarters or keeping security at rallies and meetings.

CITIZENS BAND NETWORKS

According to the Committees information, almost every Klan Klavern has Citizen Band equipment and many members have installed CB receivers and microphones in their cars. Several witnesses have been asked about their 5, 10 and even 18-unit CB networks.

Committee Chairman Edwin E. Willis (D-La.) said on Nov. 9 that one of the first results was the Federal Communications Commission, "has undertaken a study of the misuse of Citizen Band radio."

But FCC officials concede that it is almost impossible to keep track of the ever-growing number of CB licenses, who now number about 800,000 and increase at the rate of thousands a month.

HARD TO POLICE

CB proved immensely popular, an FCC spokesman said—"maybe too popular to handle."

In the South, for example, the FCC has district offices at Norfolk, Miami, Atlanta, New Orleans and Houston and monitoring stations near Atlanta and in Kingsville, Tex. All these offices are charged with listening in on CB talk and have now been told to watch for Klan-style conversations.

Tram takes the wraps off new TITAN base station next month

And we'll do it right here on page 21 of S9's May issue. Be patient . . . for it's going to be a sensational announcement. Technically, Tram's Titan is the most advanced base station yet devised. Engineered to meet the most exacting requirements of the most demanding CBer.

Next month you'll see Titan in all her glory (and she's a thing of sleek beauty). You'll learn all the facts, all the features. And the price (better than $400). Somewhat more than what other base stations will run you. But why pay less (unless you want to get less)? Tram's Titan is the only base station offering as standard equipment every advance perfected for the CBer (some sets have some, but none have all of Titan's features). With Titan, you see, there are no optionals. No extras. Everything is built in. Titan is the complete base station.

Wait for it. If you can't wait send right now for details and the name of your nearest dealer. Serious CBer's have a right to an advance peek!

Tram Electronics, Inc.

Dept. A-4, P.O. Box 187, Lower Bay Road, Winnisquam, N.H. 03289.
Phone 603-524-0622.

BALUNTENNA

USE YOUR TV ANTENNA FOR EMERGENCY MONITORING

by ROBERT McAIRE, KIC7608

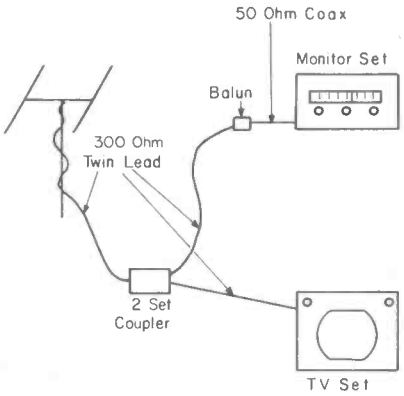
Here's a novel way to set up a quick-and-easy emergency service monitoring station without having to go through the formality of running up an antenna. It's a cinch, as a matter of fact (unless you don't have a TV set). It's the TV antenna on your roof which you will press into service, while not impairing the TV reception. You can even leave your monitoring receiver running with the TV set going at the same time!

You're probably saying to yourself, "So hook the monitor receiver to the TV set's antenna terminals, big deal." It's not quite as easy as that—two basic problems arise. For one thing, the emergency monitor receivers are intended for use with a 50 ohm antenna input, while TV sets operate with 300 ohm inputs, 300 ohm twin-lead antenna cable, and 300 ohm antennas. Trying to hook a 50 ohm set to this lash-up will create an impedance mis-match so great that you'd do better using a piece of damp string as an antenna. The other problem is that with the FM monitor receiver hooked directly to the TV set's antenna terminals, both sets will interfere with each other when they are both being used at the same time. While you probably won't object to the *Late Late Show* coming through on your local police station, the little woman probably won't feature the local fuzz botching up *Peyton Place* (the folks in *Peyton Place* seem to have enough problems of their own). So a method must be obtained to separate the oscillator circuits in both receivers.

THE METHOD

Two gadgets are employed to lick the problems. First, at the rear of the FM monitor receiver we hooked a little balun coupling transformer which transfers the antenna's 300 ohm impedance over to 50 ohms. These transformers look like IF cans and do a nice job. The one we tried was a J. W. Miller type 6161, which should be readily available from most radio supply houses for about $3.25. Other suitable balun transformers would be Meissner 15-1073, Merit TV-170, or Stancor RTC-9223. The transformer is connected to the FM receiver by means of a short length of RG-58A/U cable. The 50 ohm transformer terminals are clearly indicated.

To the other (300 ohm) terminals of the transformer, connect a piece of 300 ohm TV twin lead. Now we still have the problem of how to get both of these sets running on the same antenna. This is accomplished with a two-set coupler, such as those made by Jerrold, Finco, JFD, Blonder-Tongue, Lafayette, Taco, and probably 100 others. They sell for 50¢ to about $3. The coupling device is then inserted in the TV set's antenna lead, with one output going to the TV set and the other going to the monitor receiver.



That's all there is to it. I found that the TV antenna offers decent reception on both high (150 mc/s) and low (30 mc/s) bands, and the fact that the antenna is horizontally polarized (while the police, etc., stations are vertical) doesn't seem to cut too deeply into the reception. Another thing, the TV antenna is directional towards the center of town where all the TV stations are—and that's the direction of all of the best emergency communications stations. In some areas, all of the TV stations are on a nearby mountain, but that's usually the location of most of the local communications antennas too.

I even tried hooking a spare CB rig to this gizmo so that I could monitor 9 while occupied on other channels. It worked out fine, but it can be used for listening only, *do not try to transmit into this thing!*

If you put alligator clips on the TV set side of the two-set coupling unit, you can keep the BALUNTENNA coiled up ready for travel. Just clip it to the antenna terminals of any TV set and you're in business.

ON THE COUNTERS

Manufacturers are invited to send in press releases and photographs for listing here, for which there is no charge or obligation to advertise. Readers should take note that we have not investigated the products, claims, or services listed in On The Counters, and cannot be held responsible for any erroneous information contained here.

A jazzy line of walnut communications consoles to house Ham and CB gear was recently announced by Design Industry, Inc., P.O. Box 6825, Medical Center Station, Dallas, Texas 75219. Equipment is flush-mounted in a durable white formica panel for easy operation, with precision cut-outs for most gear and may be easily changed if you install a different rig. In addition to the console, Design Industries, Inc., also makes a budget-priced desk. Write to them for details.

Lafayette Radio, Dept. S9-D6, P.O. Box 10, Syosset, N. Y. 11791, has brought out a new CB rig called the HB-444/25 25 Channel Transceiver. The 25 channels include all CB frequencies plus provision for the two H.E.L.P. frequencies currently being pondered by the FCC. It incorporates a full-wave range-boost circuit, 13 tubes, 2 transistors, 8 diodes, Nuvistor front end, 100 mw and 5 watt power switch, PA switch, transistorized PS for 117 VAC and 12 VDC. Price is $179.95.

Another Lafayette unit is their HA-99 walkie-talkie, the one with built-in range-boost. The HA-99 is a two channel job using 9 transistors, 3 diodes, 2 thermistors. Complete with Channel 10 crystals, batteries, leather carrying case, etc. for $28.95 each (two or more are $27.95 each).

The Robyn Company, 4303 Kroes Road, Rockford, Ill., has three new sets. One is the Ranger 1000 base station unit featuring two IF amplifiers, dual conversion, and an RF stage in the receiver. Set runs a full, healthy, 5 watts on 8 push-button selected channels with crystal controlled and tunable receiver. Power supply accepts 110 VAS/12 VDC. Price is $94.50.

Robyn's other sets are of the hand held variety, the R/T-400 being a 100 mw unit with 9 transistors priced at $49.95 per pair; and the Robyn Walkie-Talkie, a 1 watt 2 channel unit equipped to operate on Channels 4 and 9. The set has an external antenna jack, external battery or AC adapter jack, squelch control, and combination battery and modulation meter. Nicad batteries and charger are optional. Price is $69.95 each or $129.95 per pair.

Regency Electronics sends word that they will market Shepherd CB crystals through electronic distributors. This is a complete line of crystals, each individually packaged and identified by channel number. Dealers wishing more data should contact Mr. Ambler Harling, Distributor Sales Manager, Regency Electronics, 7900 Pendleton Pike, Indianapolis, Ind. 46226.

Haral Associates, 1133 Broadway, (Dept. CB), New York, N. Y. 10010, offers a new tie pin with your club emblem reproduced in bright metal, approximately 1 inch in diameter. Send them a black and white reproduction of your club emblem (or any other emblem you want) and $3 for the pin.

HOORAY! Add another transistorized rig which will work on both negative *and positive* electrical systems, the Hallicrafters CB-12. This news came by way of a flash from Harry Charvat, KHB1361, of the Hallicrafters sales department. In case you aren't familiar with the CB-12's features, some of them are 12 channel operation, PA system, optional AC power pack, illuminated channel selector, compact size, squelch, real sharp and sensitive receiver. More details can be obtained by contacting Hallicrafters, Chicago, Ill. 60624.

The people at Ottawa Sales Company, Box 627, Holland, Mich., has a little VHF receiver kit which can just about fit into your pocket or can be carried around in your glove compartment. Picks up police calls. Instruction booklet looks very complete and is filled with construction hints and kinks. Write them for more info.

Just announced by EICO Electronic Instrument Co., 131-01 39th Ave., Flushing, N. Y. 11352, is their Model 715 Transmatch. This is a compact, portable, easy to use, complete CB laboratory which quickly measures the status of

all vital CB rig characteristics. Flipping a switch permits fast and accurate readings of SWR, true RF output power, modulation percentage, modulation distortion, and relative field strength. Kit is $34.95, but also available wired for $44.95.

Hallicrafters brought out a new receiver called the SX-130 for foreign broadcast, aircraft, marine, standard AM broadcast, Ham and CB listening on either AM, SSB, or CW. It features both crystal filtration and crystal controlled selectivity in three bandwidths, 1650 kc/s IF. A built-in S-meter is included as well as a provision for coaxial cable or single wire antenna leads. Net price is $169.95. A more basic version of the set (without some of the more sophisticated "extras" is available at $154.95 and is called the S-129. An external speaker is required and Hallicrafters has several models which are matching and suitable.

Uncle George Beyers, that old rebel rascal, reports wide acceptance by CB'ers of his converters and now announces a teenie-weenie microphone amplifier and speech clipper which will do everything but make you melt down receivers across town. Unit is called the Sentry PAC-1 and it hooks to any dynamic, ceramic, crystal, or variable reluctance mike in seconds, it can be placed right inside most CB rigs. Heart of the unit is a 6DS4 Nuvistor. Price is $12.95. George will send you additional data if you want, plus info on his many other CB products. Contact him at Sentry Manufacturing Co., Box 12322, Oklahoma City, Okla. 73112. Telephone 405-942-5686. Here's a word to wise CB dealers, Uncle George's products will fill your place with clamoring CB'ers as soon as word gets around about your carrying the stuff. Ask him for a full list of his CB products, say S9 sent you.

The CB-15 hand held transceiver from Hallicrafters is a novel approach to the situation. First of all it's a mw CB rig which lays a big loud signal onto the band, but it's also a 9 transistor standard AM broadcast receiver with excellent sound reproduction. Price is $59.95. The CB-15 is part of Hallicrafters new SPECTRUM line of consumer products which feature shortwave and CB.

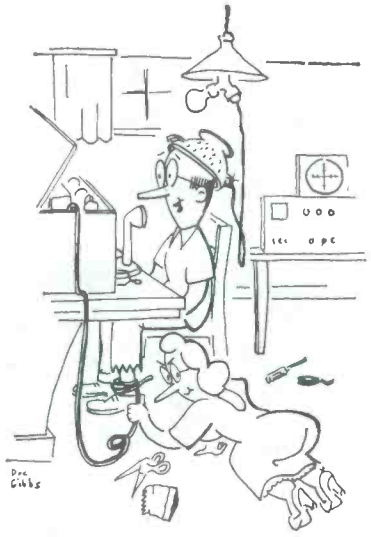
We were most pleasantly surprised when we received a *beautiful* metallic QSL card plaque in the mail. Seems that these plaques are being made by Perma-Pic Corporation of America, Box 67, New Hope, Pa. One of the fellows at Perma-Pic is CB pioneer Karl Weber, who was licensed as 2W3503 back in 1959 (he's now on 6 meters as WA3CAL, and was WA2UTO); Karl says

that these plaques incorporate a new process wherein your QSL card is reproduced in metal. The design cannot be erased, chipped, peeled, wear off, or affected by salt-spray—a process originally designed for emergency instruction plates affixed to the outside of Mercury Space Capsules. You send in your QSL card (or any clear photo either color or black and white) and you'll get back the metallic reproduction mounted on an attractive wood-grain background, rimmed in metal, plus a mounting loop. Two sizes are available, 3" by 3½" for $3.50 ppd., and 5½" by 6½" for $4.95 ppd. Pennsylvania residents should add 5% sales tax. They can also similarly reproduce and mount club emblems or anything else which can be photographed.

Amphenol Distributor Division, 2875 South 25th Avenue, Broadview, Ill. has a new CB rig called the Model 650, which is an 18 transistor unit with a crystal correlated tunable receiver, seven panel controls, output/S-meter, PA switch, and built in a steel case to withstand severe environmental extremes. Transmitter puts out at least 3.5 watts on 10 channels, with both tunable and crystal controlled receiver. The retail price is $209.95.

No CB or SWL shack should be without the new issue of THE WORLD RADIO-TV HANDBOOK, now in its 20th edition. A real fat 304 pager, the book lists virtually every radio broadcasting station in the world, whether it be standard AM, shortwave, FM, TV, or whatever. The following data is shown for these stations: frequency or frequencies, hours of operation, identifying announcements, address, transmitter power, names of key station personnel, and whether or not they send QSL's. Listings are shown two ways, by country and by frequency. In addition, frequencies of satellites are given, plus a number of feature articles on various aspects of DX listening. It's really quite an unusual volume, we've never seen anything else which quite compares to it. Price is $4.95, postpaid, from Gilfer Associates, Box 239-S, Park Ridge, N. J. 07656. Please say you saw it mentioned in S9!

Shure Brothers, Inc., has a new "ball" type microphone which is ideal for CB work. It's called the Spher-O-Dyne and is an omni-directional dynamic job with a uniform frequency response from 40 to 11,000 cps, on/off switch, and high output. Impedances are 150 to 250 ohms (Model 533SB) or high impedance (Model 533SA). Address of the manufacturer is 222 Hartrey Ave., Evanston, Ill.

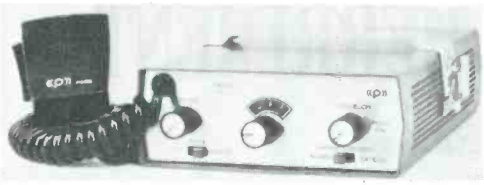


"And, Fred, you'll never guess who's finally got the bug and is working on some big secret project."

S9 Lab Reports

PACE II TRANSISTORIZED CB TRANSCEIVER

One of the early transistorized CB transceivers to appear on the market was a six-channel job produced by Pace Communications Corporation. Their newest model, which employs silicon transistors throughout, provides up to 13 crystal-



controlled transmit and receive channels chosen by a selector dial with easily read illuminated letters from A to M to identify each channel.

Other new and updated features include a flexible squelch arrangement that may be adjusted not only to operate at various input-signal levels, but which also can be set for optimum squelch action at the threshold point.

A switch on the noise limiter provides a choice of two different degrees of noise-limiting action. An inherent characteristic of most noise limiters is that undesired audio distortion can be introduced when a high degree of clipping is used as may be needed under adverse conditions. When the noise-limiter switch on the Pace II is set at "normal," the operating level is adjusted so that clipping does not take place until almost 100 per cent modulation of the received signal takes place. The clipping action therefore does not adversely affect the audio quality, yet it is sufficiently high enough to provide an adequate amount of noise reduction with average signals under normal noise conditions. When conditions are severe or the signal level is weak, the switch may be set to the "extended" position where clipping takes place at about 35% modulation levels. Noticeable distortion may be introduced thereby, but you'll have better noise suppression that at least makes the signal readable.

In line with the current trend, the Pace II provides for public-address or hailing operation using an external loudspeaker or bull horn, but a new feature here and one which we've been advocating is the inclusion of a microphone gain control that may be utilized to set optimum operating levels and minimize feedback under certain conditions during PA use. PA operation is selected with a separate "Mode" switch on the panel and the a.f. volume control then serves as the mic gain control. The PA speaker plugs into the external-speaker jack on the rear panel and when the Mode switch is set back to normal operation, the receiver feeds the PA speaker. This requires that the PA speaker plug be pulled out if normal CB reception is desired with the internal speaker of the set.

SPECIFICATIONS AND PERFORMANCE

The Pace II carries the following specifications: Receiver sensitivity: .35 microvolts for 10 DB signal-to-noise ratio (400 cps modulation at 40%); selectivity: 6 DB bandwidth, 5.5 kc/s min., adjacent-channel rejection 50 DB min.; spurious and primary image rejection: 55 DB min., other 40 DB min.; AGC characteristics: AF output variation of 6 DB with signal inputs of .5 uv to 100,000 uv; squelch sensitivity: .35 uv; AF output: 2 watts at minimum sensitivity; PA output: 3.5 watts.

Transmitter carrier output is rated at 2.9 and 3.3 watts minimum at 12.5 and 13.6 VDC input respectively; modulation at least 85%; harmonic suppression 65 DB.

These ratings were confirmed by measurement in the S-9 Lab, except as follows: Adjacent-channel selectivity on a carrier-to-carrier basis was slightly better than rating, 50 DB with 400 cps modulation; AGC was 13 DB AF output change for .5 to 100,000 uv signal-input variation, 9.5 DB for 1 to 100,000 uv; primary-image rejection (13 mc/s): 56 DB, secondary image (26 mc/s) was 26 DB. Transmitter output at 12.6 VDC input was 3.5 watts with good modulation to between 90 and 95% on the positive peaks; however, with high-level voices the negative peaks went beyond 100% and tended to break up the carrier, but no adverse splatter was detected therefrom.

Operational tests in a car exhibited nice overall performance with convenient handling capabilities. The high sensitivity of the Pace II enables weak signals to be copied without adverse impulse noise, even when the noise-limiter switch is set at "normal"; in fact, we did not run across any occasions where it was necessary to use the "extended" noise-limiter position. This is quite significant, considering that our car generates excessive ignition, generator and regulator noises (noise suppression steps intentionally have not been taken in this particular vehicle, in order that we can give the CB sets under test a good workout for evaluating the effectiveness of their noise eliminators during actual operation on the road).

The AF quality was clean, while good selectivity was realized without sacrificing AF quality and if you have to locate the set where the effective intelligability from the side-mounted loudspeaker is reduced, you can use an external speaker plugged into the rear jack.

Squelch operation was generally satisfactory; however, adjustment of the rear-panel squelch sensitivity control appeared to make little difference from a practical operating standpoint. It also was found that raising the volume-control setting quite high tended to alter the squelch threshold, but with the volume control operated near moderate AF levels, the squelch threshold, asset by the front panel control, was unaffected. AGC action was good and on several occasions nearby stations opened up on us without causing deteriorating receiver overload.

Good quality signals and modulation were obtained from the transmitter. During PA use, the mic level control made it easy to obtain satisfactory operation without audio feedback when the PA speaker had to be located on the car.

Some interesting "technical facts" are written up in the operating manual which give sound reasons why you should not fiddle around with internal tuning adjustments of the set. They are worthwhile reading and heeding.

You can "Keep pace with Pace" by purchasing the Pace II CB Transceiver which is priced at $169.00, complete with p.t.t. microphone, one set of crystals for Channel 11, latch-rak mount and all necessary hardware. It is a product of Pace Communications Corp., P.O. Box 2317, Gardena, California.

MONITORING MERRIMENT

by HANK MILTENBERG

MORE NOTES FROM FCC FIELD ENGINEERING REPORTS

Some Citizens Radio Service licensees become quite annoyed when interference from other stations prevents a satisfactory exchange of communications. A few go to extremes in venting their displeasure. The FCC Kansas City office received complaint of continuous interference from 4:30 p.m. to 7 a.m. daily on a certain CB frequency. Direction finding bearings indicated it came from a cemetery about two blocks from the complainant's home. Signal strength observations narrowed the search to a clump of evergreen trees in the center of the graveyard. A transmitter in a plastic box was found suspended from a tree branch by a 30-inch antenna. A miniature photo cell incorporated in the circuit turned the transmitter on at dusk and off at daybreak. Ownership remains unknown. The complainant suspects a group of unfriendly CB operators because two days after the interference started he found in his front yard a cardboard cylinder with a similated antenna affixed and a note printed "THIS IS NOT IT, STUPID."

Improper operation of electric fences often causes interference to radio communication in various services. A recent investigation of such interference to broadcast reception exposed an engineer from the FCC Kansas City field office to double jeopardy. His search revealed the cause to be an electric fence on property adjoining that of the complainant. The owner was not convinced but consented to remove the fence from service since the hogs, which it had enclosed, had been sold. But there was an unfenced dog, and he was uncooperative to the extent of biting the investigative engineer. But the owner listened to warnings and both fence and dog interference stopped.

Complaint of interference to space communication was made to the FCC's monitoring station at Powder Springs, Ga., by the NASA test facility at Bay St. Louis, Miss. FCC observers identified the interfering signal as unstable radiation from an industrial electronic heater. Their long range direction finding bearings indicated a source north of Memphis, Tenn., and the case was referred to the FCC's Atlanta district office for further investigation. The cause was found in a factory at Ripley, Tenn., where excessive radiation was eliminated when a loose ground strap on one of the four heaters was replaced.

The Coast Guard station at Pt. Vincente, Calif., received interference to a frequency reserved for ground-to-helicopter rescue operations. An engineer from the FCC's Los Angeles office drove to the station but the signal was too weak to be heard in the investigative car. FCC monitoring stations at Livermore and Douglas, however, were able to get long range bearings which placed the source 50 or 60 miles away, near Santa Cruz Island. Direction finder bearings brought the engineer to a truck camper body, supported on a wooden platform, on a hill some 50 feet from the highway. A 35-foot antenna and buried ground radials and power cable indicated a permanent installation. A name and telephone number posted on the premises provided contact. The station was found to be one of several licensed to a petroleum company searching for oil deposits. Violation notices were served and the licensee was instructed to take remedial measures before resuming radio prospecting.

An unexpected turn of events sometimes adds spice to what initially appears to be a routine interference investigation. Such was the case when engineers from the FCC San Francisco office and its western TV-FM enforcement unit collaborated in tracking down the source of interference on TV Channel 5. Approaching the suspected area, a steady carrier was heard between the sound and video signals. It was punctuated with background noises—the ticking of a clock, loud crashes, male voices discussing the use of drugs and other chatter. The search led to a vacant dwelling. No antenna was visible, but entry was made. Two youths were found inside, one of which made a speedy exit. An adult male observed loitering outside of the building also vanished. The remaining youth told the engineers that he was cooperating with the local police in an effort to obtain information on the supply and use of drugs by students in the area. Authorities confirmed that the house was a decoy for persons engaged in illegal drug traffic. A microphone hidden in a downstairs lamp relayed conversation to a transmitter (licensed to the police) in the attic which was received by a recording point about half a mile away. The operator was directed to remedy the situation as far as TV service was concerned.

In response to four identical complaints about interference to Channel 7 in Los Angeles, the local FCC office investigated. Direction finding equipment set up in front of one complainant's home registered the interfering signal, but the area had to be cruised to define the extent of radiation. A building housing a large supermarket proved to be the place of strongest emission. When an FM musicast system serving the shoppers was discontinued the interference did likewise. The store was warned to take remedial measures before resuming its background music operations.

Engineers of the FCC's Seattle district office

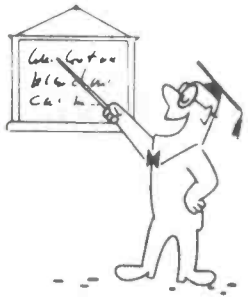
responded to a call to locate and eliminate an unidentified signal which was hampering the search for a hunter who had disappeared in the rugged terrain of the elk county. Army and Civil Defense units joined with 60 to 70 individual volunteers in an intensive search of the area. Civil Defense personnel were communicating on a Radio Amateur Civil Emergency Service (RACES) net when a steady carrier appeared on the frequency and blocked traffic. Monitoring station direction finding indicated the signal went there in an investigative car. He traced the signal to a county courthouse where the local Civil Defense unit operates radio equipment. The transmitter was found to have been inadvertently left on when the operator checked out of the emergency net. A violation notice was issued.

The Federal Aviation Agency in Pittsburgh reported interference to an airport approach frequency, the solution of which taxed the ingenuity of an engineer from the FCC's Baltimore office. The situation was unique in that the signal was heard by the airport's receiving facilities only when the incoming plane transmitted from a point at least six miles away. Supposition that a local broadcast station was responsible was abandoned when the sound remained active after all local broadcast has ceased for the day. Cruising in a car was fruitless. The signal could be heard only at the airport tower. Listening-in at the top of the antenna did not help. Tests of all FAA transmitters and receivers in the building were negative. On-off tests of the main power lines were the next step. One of these paid off by showing that the power was feeding the offending equipment. Next, a mobile unit pinned the guilt on a transceiver on the main floor of the building. After 26 hours of continuous search, the FCC engineer departed for his home office with the thanks of FAA officials.

The garage-door interference epidemic, which is a hazard to aviation communication, broke out in San Diego, Calif. An engineer from the local FCC office, assisted by one from the Los Angeles office, systematically detected and removed from the air 130 excessively radiating electronic garage-door opening devices. Enforcement continues to deal with this particular problem.

FCC Buffalo district office engineers, responding to an interference complaint from the local Coast Guard, encountered a real puzzler. Signals from a local broadcast station were encroaching on the ship-to-shore and marine distress frequency. Preliminary investigation quickly determined that non-linear rectification of the broadcast signal was occurring in the vicinity of the Coast Guard's own antenna array. Observations indicated a particular steel tower, and a crew of men set to work cleaning connections and hardware at the base of the structure. By a coincidence, the trouble disappeared, but the following day it came back stronger than ever. Further inspection found a halyard supporting a horizontal antenna about 40 feet up the tower had rusted throughout its length. When the antenna and halyard were lowered, the interference ceased entirely. The Coast Guard expressed its

Continued on page 56



KYLE'S KORNER

WRITE TO:
JIM KYLE, KEG3382
% S9 MAGAZINE
14 VANDERVENTER AVE.
PT. WASHINGTON, N. Y. 11050

Yep, I'm back—with a bulging mailbag. No chatter this month; too many questions to tackle.

BEAM-ANTENNA CONNECTIONS

Your dope on building a beam was fine except for one thing. Can you tell me where to connect the coax to the radiator and what to do with the shielding? Also, what material should I use for the crossbar? Thanks.

—P.N., Eagle Lake, Fla.

You can use any of several techniques for connecting the coax. Personally I've always favored the "gamma match" technique myself, and somewhere around here there's a sketch of the hookup. To adjust it, you connect an SWR meter into the line as close as possible to the antenna end of the line. Next, adjust the variable capacitor for the smallest possible SWR. Be sure to recheck from time to time to make sure that the antenna is taking power, though, because you can easily stop all power transfer and the SWR will appear to be mighty good (until, that is, you find out no power is going up the line either!). Now move the clamp connecting the short bar to the radiator (either direction first time) about a half inch and adjust the capacitor again. If the SWR is better this time repeat this adjustment, playing around the circle until you get down around 1.05 to 1 on the meter. If the best you can do this time isn't as good as before, you went the wrong way; reverse the movement of the clamp. This particular feed-line connection technique has a number of things going for it. One of the biggest is that it adds additional harmonic rejection to the system. Now about that crossbar. You can use just about anything. Aluminum tubing is fine if it's strong enough; so is galvanized steel if you take care to avoid electrolysis at the joints. The center of each element is at RF ground so insulation is not needed.

POWER BOOSTING?

How can I bring the power of a 100-mw hand-held transceiver up to one watt or more? And how much will it cost me?

—B.I., Gasport, N. Y.

The only way to do this would be to build a 1-watt linear to hang onto the unit. Unless the composite affair were then licensed under Part 95, it wouldn't be legal—and the cost would be at least as much (probably more) than the cost of brand new 1-watt hand-helds. Sorry; I can't recommend this attempt at all.

LOW OUTPUT POWER

My output power is down to less than 2 watts. Have tried new tubes; the trouble seems to be in the resistors of the final stage but the problem is which ones? Can you assist?

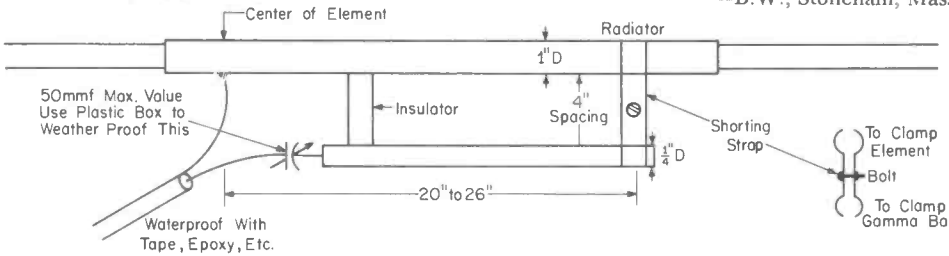
—L.B., Aurora, Mo.

The only resistor in the final which could affect your output power to any great extent would be the screen-voltage dropping resistor. If this one changes it will have a large effect on the output, and unfortunately most resistors tend to increase their values with age. Check against the schematic for your rig and make sure the screen resistor value is correct. There's also a plate-voltage decoupling resistor (usually 470 or 1000 ohms) that could cause trouble if it changed to a much higher value. Best bet is to check them all against the schematic and replace any weak ones. The regs require that this type of servicing be done by the holder of a Radiotelephone Second license.

AUDIO PROBLEM

I have a problem. I have a -------- and my problem is low modulation. Is there any way of raising it without going into a preamp?

—B.W., Stoneham, Mass.



This problem isn't uncommon. Quite a few rigs out have been designed around rather low-quality modulation transformers. Replacing the mod transformer with a better unit is one answer, but this gets to be a sticky legal problem because overmodulation can easily result. All in all I suspicion that a preamp would probably be your best bet. Either that or get another rig!

SOMEBODY KNEW AFTER ALL!

Attached is a letter sent to Laytonville School with the address they wanted. You sure were wrong this time, since F.M.E. is almost a neighbor of yours, and not in Fort Wayne, Indiana.

—C.E.P., Havre de Grace, Md.

I wasn't very certain I was anywhere near right, you know. That Indiana guess was based on similarity of names. Thanks very much for helping out; I was pretty sure somebody would.

SELECTIVE CALLING

I have a Lafayette HB-400 and a Johnson Messenger III and would like to use selective calling. Are Johnson's Tone Alert and Lafayette's Priva-Com compatible? If not, can it be made compatible?

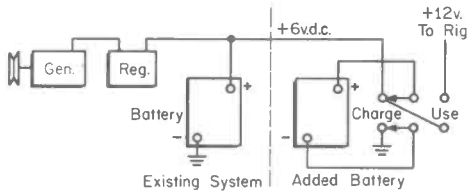
—R.H., Bloivar, Missouri

I'll probably get bombed on this one but so far as I can determine the two systems are not *compatible. I have worked with the Tone Alerts quite a bit, and also with the first model of Priva-Com (but I am not certain that the present models are identical to the Priva-Coms I worked with since the firm which originally built them underwent extensive reorganization); the ones I examined couldn't work together. However this is not the problem it might appear to be, since either the Tone Alert or the Priva-Com can be installed on both rigs (that is, if the transistor Priva-Com is locatable). With identical calling gear on each rig there's no question of compatibility. Both rigs are already wired for selective calling, so the problem reduces merely to figuring out how to put a Priva-Com plug on a Tone Alert cable or vice versa. The instruction books are pretty good on points like this. I even got one of these units to work on a General MC-5, which required some drastic circuit changes inside to let the calling circuits work properly.*

ANYBODY SEE 6 EXTRA VOLTS?

My 1955 Ford electrical system is 6 volts. How can I use a 12-volt CB rig in it?

—L.L., New York City



Simplest way is to add an additional battery to the car with a DPDT switch wired as in the sketch around here someplace. When you're not using the rig put the switch in "CHARGE" position; to use the radio, switch to "USE." The extra battery might come in handy during cold weather, too. Next simplest way is to buy a later model car with a 12-volt system!

MISCELLANY

I have followed your column since its inception, and finally have sat myself down to dash off a few questions myself. First I am using the old stand-by "Super Magnum" for my base operations. It's great until it rains. Then SWR jumps to 1:4 and sometimes worse. Any suggestions on waterproofing or the like? Number two problem. My base unit raises the devil with my stereo record player, and also the TV to a limited extent. How about that? Finally, I have an audio compressor and modulator made by Communications, Inc., formerly of Wilton, Conn. Would you know where they are located now? I need a schematic and installation instructions for this unit. Well, that's enough of my problems. Thanks very much in advance for your help.

—W.T.C., Mansfield Center, Conn.

Good work there. Only stumped me on one out of three! I haven't heard anything out of Communications, Inc. for more than a year now so I assume that they have gone the way of so many small firms with a good product but insufficent capital. Maybe somebody else can give us a hand on this. The SWR problem when it rains can be alleviated by getting some silicone grease and smearing a thin coat over all the exposed connections to the antenna. This stuff is sold as "transistor heat-sink grease" by several different concerns so you shouldn't have too much trouble locating it. It's not cheap but you can do up almost any antenna installation with less than $2 worth of the stuff. Now your audio interference. I have this too—can't listen to FM when I have the rig on. The trouble is in the audio amplifiers themselves wherever they may be, not in the rig. The signal gets picked up by some wiring and reaches the grid of the first audio stage in the amplifier. This grid acts like diode detector and detects the signal. From there it gets amplified, and we've had it! The absolute tip-off on every case of this I've ever seen is that the interference gets worse, not better, when the gain control of the offending amplifier is turned all the way down. The only way to cure it involves surgery on the audio amplifier. First you locate the offending grid. Then you remove all wires from that pin of the tube socket and connect a 50-pf to 82-pf (no bigger) capacitor from this pin to the cathode pin on the same socket. Next, add a 10K ohm ½ watt resistor to the grid pin, and put all the wires you took off on the other lead of this resistor. The result is that you have added a single-stage RF filter to the amplifier, and the interference is gone. It works nicely—the only problem left is getting permis-

sion from the better half to perform the surgery on the stereo, and that's a non-technical question that I'm afraid I haven't an answer for. As I said, I still suffer along with the interference here. . . .

ADDITIONAL INTERFERENCE

I work on an ore boat and have a CB set on board. I have put TVI filters on the TV's but I am getting complaints that I am interfering with their radios. They say I interfere on the broadcast band. Is there a filter I can build that I can put between my transmitter and my antenna?

—J.E.P., Duluth, Minn.

I fear this is another case of audio interference; it's typical when you get complaints of BC interference. The cure is to put the filters inside each radio, rather than in your rig (see the preceding answer for the details). This kind of problem gave hams a hard time for years and years; the only thing that stopped it was when people virtually quit listening to BC radio except in their cars! If the BC listeners don't want anybody messing around inside their sets, there's not much that can be done. One way to help convince them would be to get a set similar to theirs, install the filter on your own, and demonstrate the difference to them. This sometimes works, but not always.

MORE AUDIO QUESTION

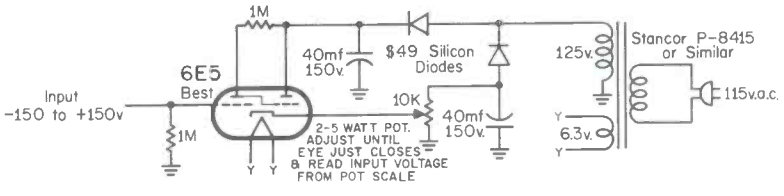
Recently S9 ran a review of an audio compressor amplifier. I would like to purchase one of the models reviewed but I discover that it is not suitable for a transistor transceiver and I have an HB-500. I would appreciate your comments. If the unit reviewed cannot be used on my HB-500 is the same true for the Knight-kit Model C577? Keep up the good work.

—R.M., Decatur, Illinois

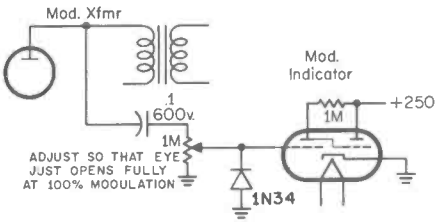
When an audio compressor-clipper-preamp or other accessory is listed as "not suitable for transistor rigs" this usually means that the accessory uses vacuum tubes and has to steal its B+ voltage someplace; transistor rigs have no B+ to steal. It's just that simple. Many audio accessories now available are fully transistorized. I know of at least two made by smaller firms, either of which would work with your HB-500. The C-577 will probably do nicely for you too (although I don't have a complete set of specs on it yet).

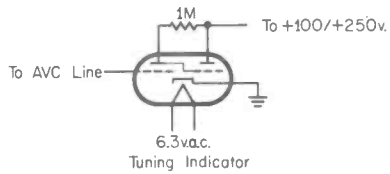
TUBE BASE DIAGRAMS

How about some diagrams for 6E5's and 6U5's. I have a few lying around the shack but no diagrams for their use. Would particularly like to adapt one to use as a tune-up indicator (a la 1629's in last September's issue). The 1629's



Damage Proof & Cheap VTVM





work swell, but I'm getting tired of looking at a bunch of 6E5's for which I've seen no practical CB uses.

—N.H.A., Scottsboro, Ala.

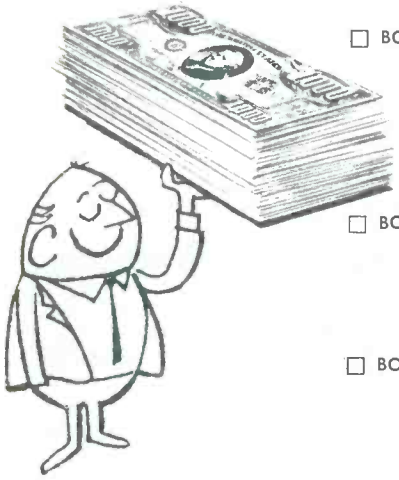
Just like you asked, here are some diagrams of several of the "magic eye" indicator tubes. And for good measure, I'm tossing in a few other practical uses. The VTVM is particularly handy for troubleshooting since you can't possibly bend the pointer on this meter—there isn't any! While there are minor differences between most of the different types, all those shown here are interchangeable. The only real difference is that the 6E5 opens its eye with around –7 volts applied to the grid, and the rest don't open until around –22 volts. Thus the 6E5 is most sensitive but the others will cover a wider range. You take your choice.

And again we're at the end of the line with a goodly stack left over for next time. Don't let this keep you from sending your own questions in, though. They'll all find answers sooner or later. Remember the address is Kyle's Korner, S9 Magazine, 14 Vanderventer Avenue, Port Washington, L. I., N. Y. 11050. See you next month!

READERS' BONANZA!

TAKE YOUR PICK OF THESE GIFTS!

For some time now we have been offering all kinds of free goodies with new subscriptions and renewals, we vary them each month. But we always seem to get requests for bonus items which haven't been offered for several months and that sends the Circulation Department into a tailspin. So here it is, a grand round-up of all the various offers, tied in with an exciting offer for you to get several of these things FREE with your subscription or renewal.



☐ BONUS ITEM #1 — Large 3 inch, 3 color, "Monitor Channel 9" decal. Regularly sells for 50¢.

☐ BONUS ITEM #2 — 50 **Project Aid** cards which you are required to use to notify the FCC whenever you use your CB rig to help a stranded motorist or for any emergency use. These sell for $1.00.

☐ BONUS ITEM #3 — S9's CB Interference Manual, a complete handbook covering the elimination of TVI, detection and elimination of power line interference and noise, and CB mobile ignition noise. Everything you need to know, including details of obtaining free TVI high-pass filters. The books sells to non-subscribers for $1, you can get it FREE.

☐ BONUS ITEM #4 — **Do-It-Yourself-S9-Editor-Kit** — Yes, an official multicolored S9 Press Card which will get you on buses (show it when you pay your fare), also a 10-code card, plus one of our now famous green and white "Wall Certificates."

☐ BONUS ITEM #5 — Jazzy blue-with-white, red-with-white or black-with-white plastic badge engraved with your callsign. Big 1" high by 3" long. Just the thing for a jamboree or use the pin to stab artichoke hearts or your aunt Maud in the clyde. $1.50 value. Specify color combination.

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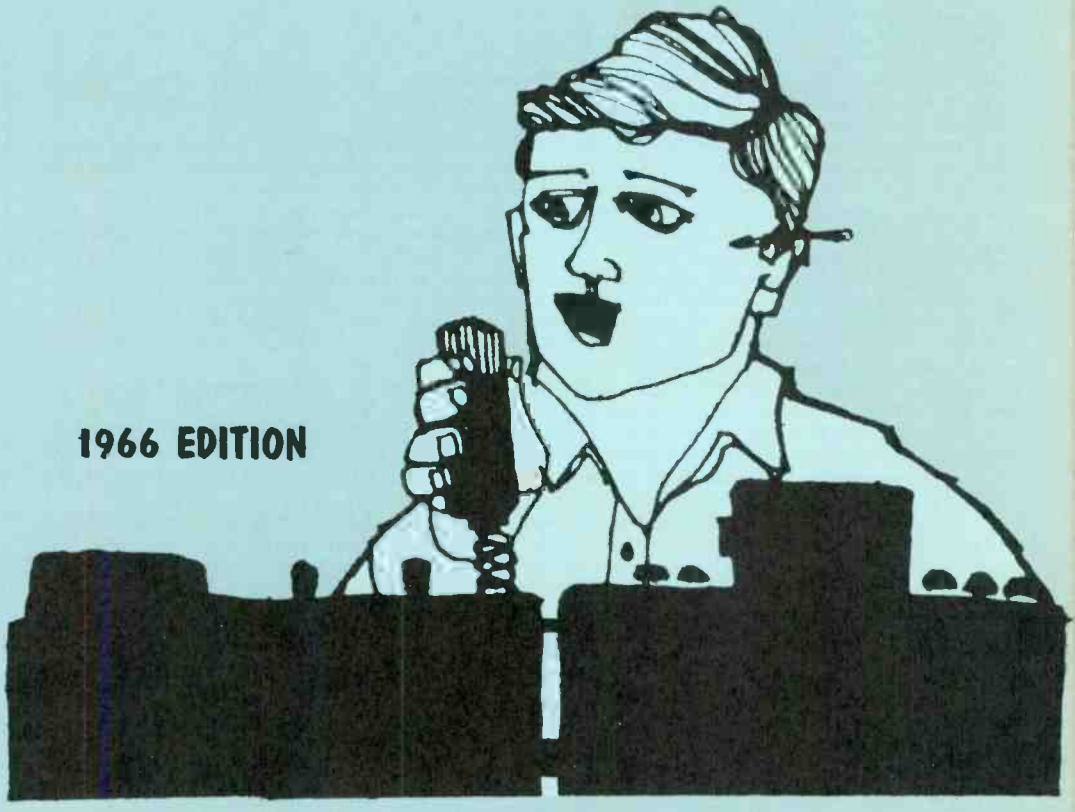
CB OPERATORS MANUAL

Edited by Tom Kneitel, KBG4303



1966 EDITION

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SYNOPSIS OF MAJOR CB OPERATING RULES

All CB stations are *required* to have on hand a *current* copy of Part 95 of the FCC rules and regulations. The following synopsis is *not* a replacement of Part 95, it is a partial and brief resume of *some* of the *major* points covered in only one section of Part 95. For complete information on any of the specific rules discussed below, you are referred to the section in Part 95 (indicated in parenthesis) covering the rule.

CHANNELS TO USE (95.41d). When communicating with other units operating under your own license, any channel may be used. When communicating with stations operated by another licensee, the following channels (only) may be utilized: 9, 10, 11, 12, 13, 14, 23.

PROHIBITED USES OF CB (95.83): as a hobby; for transmission of obscene, indecent, or profane words, language or meaning; for communicating with unlicensed stations (including walkie-talkies), for communications not addressed to specific stations (with some exceptions); to cause malicious interference to the communications of another station; transmission of unnecessary messages; transmission of music, whistling, sound effects, or any material for amusement or entertainment purposes, or solely to attract attention; for communications relating to the technical performance or signal strength of CB equipment; for communications covering a distance of more than 150 miles.

USE OF CODES (95.83(16)). Plain language must be used. The 10 Code may be used if a copy of the 10 Code is kept at the station.

EMERGENCIES (95.85): You must clear the channel when another station wishes to transmit an emergency message. There are no limitations as to duration, channel, or other restrictions on transmissions which involve the immediate safety of life or the immediate protection of property. In the event you participate in such emergency communications *and must ignore normal CB use restrictions, you must* send written notice to both the FCC in Washington, D.C. and your local FCC district office, stating the nature of the emergency and the role you played in the emergency.

DURATION OF TRANSMISSIONS (95.91): Transmissions should always be as short as possible. Communications between stations of different licenses are limited to a maximum duration of 5 minutes for the entire exchange of messages, at which time both stations may not again transmit *on any CB channel* for another 5 minutes. In the event an exchange of communications are completed in less than 5 minutes, the 5 minute stand-by period still must be observed.

STATION IDENTIFICATION (95.95): Callsigns must be given in English, and shall consist of each letter and number separately and distinctly transmitted. The entire callsign must be transmitted at the beginning and end of each transmission or series of transmissions between units of your own station, or those of another licensee. You must also transmit the complete callsigns of any and all other stations involved in the communication. Where the callsign of another station is not immediately known, you may temporarily use a name or other distinctive word to establish communications, then switching over to the station's FCC assigned call sign when it is made known to you. When it is necessary for a transmission to extend over a lengthy period of time, the identification will be transmitted at least once every 15 minutes.

TRANSMISSIONS NOT ADDRESSED TO SPECIFIC STATIONS (95.83(6)): Such transmission for emergency and *authorized* Civil Defense use are permitted. Also permitted are communications from mobile units for the sole purpose of requesting routing directions, assistance to disabled vehicles or vessels, information concerning the availability of food or lodgings, or any other assistance necessary to a CB'er in transit.

CIVIL DEFENSE (95.121): All Civil Defense operations must be conducted under the direction of authorized Civil Defense authorities.

POSTING OF LICENSES, ETC. (95.101): License must be posted in a conspicuous place at the "base" or principal fixed station of a licensee. If the base station transmitter is not in plain view of, or readily accessible to, the operator, a transmitter ID card (FCC Form 452-C) must be completed and attached to the transmitter. An FCC Form 452-C card must be completed and attached to each mobile unit's transmitter. Secondary base stations must have a photocopy of the FCC license posted.

OPERATION OF STATION (95.11 and 95.27): You may not loan your callsign to another operator, nor sell or give it to someone who purchases your equipment.

CHANGES IN STATION (95.35): If you change your mailing address or increase the number of units in your station you must reapply for a new CB license, returning the old license for cancellation. When you move, you may continue operation under your old license if you notify the Engineer in Charge of your Radio District and also apply for a new license within 30 days.

FALSE SIGNALS (95.115): It is against regulations to transmit a false or deceptive communication, or to identify your station by means of a callsign which has not been assigned to you.

IN GENERAL; Stations are reminded that CB frequencies are used on an equally shared basis and no one station may have one for his exclusive use. "CB" also stands for *courtesy* and *brevity*, without which communications are impossible. Transmit only when you have a necessary message. CB is not a substitute for a telephone, when you can use a telephone to send your message, your fellow operators will greatly appreciate your doing just that.

Neither is CB a game, nor its equipment toys. CB is a means of communications which has been used in the past, and will undoubtedly be used in the future, to save lives, aid travelers, cut business costs. It is therefore not a forum for children or immature adults to add to the already existing confusion created by too many stations on too few channels. If a "skip" station calls you, ignore him. If an unlicensed walkie-talkie calls you, ignore him. THE FCC CAN BRING ACTION AGAINST YOU WHICH COULD COST YOU SEVERAL HUNDRED DOLLARS AND YOUR CB LICENSE IF YOU BECOME AN ON-THE-AIR NUISANCE!

GLOSSARY OF CB TERMS

Breaker. A CB operator who requests the use of a channel while it is in use.

Calling Channel. Channel 9 has been unofficially designated and adopted as the National CB Calling and Emergency Channel.

CB. The Citizens Radio Service, especially Class D which permits low-power radiotelephone communications on certain frequencies on 27 megacycles (wavelength of 11 meters). Stations must obtain a license from the Federal Communications Commission office in Gettysburg, Pa. Cost of a license is $8 and any U.S. citizen over the age of 18 may apply for the license (although those under 18 may operate a licensed station). The license is obtained by filing an FCC Form 505, which can be obtained from any FCC office, or from some radio shops which sell CB equipment. License term is 5 years. Local communication only is permitted and under certain restrictions and regulations outlined by the FCC.

CB'er. A CB operator.

Citation. An official FCC notice sent to a CB operator warning him of operations not consistent with regulations.

Coffee Break. A CB get-together for social purposes, usually held at a diner, often on Sunday mornings.

Crystal. The frequency (channel) determining component of a CB transceiver. It is a small piece of quartz, encased in a metal container.

Diathermy. A type of interference to CB communications caused by medical apparatus which is permitted to operate within the limits of the Citizens Band. It has a buzz-saw sound and frequently occupies a number of adjacent channels.

Eyeball (QSO). An in-person meeting between CB operators.

FCC. The Federal Communications Commission, an agency of the United States Government which regulates and licenses all radio transmitters, in addition to a number of interstate wire communications facilities. The FCC is also entrusted with the enforcement of its own regulations, for which it has established a network of monitoring stations spread across the country.

Fox Charlie Charlie. As some CB'ers frequently refer to the FCC.

Ground Wave. The signal from a CB station which is received by other stations within the immediate local area (as opposed to "skip" reception).

H.E.L.P. Highway Emergency Locating Plan.

Harmonic. Besides meaning a spurious signal, it frequently means CB transmissions.

Indians. Television viewers who are bothered by interference from CB transmissions.

Jamboree. A social gathering of CB'ers, usually outdoors, sponsored by a CB club, and having equipment displays from dealers and manufacturers. Just about all CB jamborees are listed in advance in the pages of *S9 Magazine* each month.

Junior Op. The teen-age offspring of a CB'er.

Heterodyne. A squeel or tone produced when more than one station attempts to transmit on the same channel at the same time.

Part 95. That section of the FCC's rules and regulations which pertains to the Citizens Radio Service. Every CB station is required to have a current copy of Part 95 on hand. These may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. Price is $1.25.

Pink Ticket. An FCC citation.

QSL. A post card bearing the callsign of a CB station. These cards are swapped by CB'ers by mail and in person (at jamborees) as a hobby. Printers of QSL cards advertise each month in *S9 Magazine*, and a lengthy list of CB'ers who seek such swaps is also given each month.

Rig. A CB transceiver.

Rock. A crystal.

S9 Magazine. The national monthly publication catering to CB operators, covering all aspects of the CB service. *S9 Magazine* is available at many radio shops, newsstands, or by direct subscription from the publisher, Cowan Publishing Corp., 14 Vanderventer Avenue, Port Washington, N. Y. 11050. Price is $5 per year.

Skip. Signals from a CB station heard over distances of hundreds or thousands of miles due to their reflection by ionospheric layers above the earth. It is against FCC regulations to communicate with stations heard via "skip."

Swapper. One who exchanges QSL cards as a hobby.

Splatter. A station is said to be "splattering" when, because of illegally high modulation, its signal covers more than one CB channel. A receiver having poor selectivity, and therefore unable to adequately reject adjacent channel signals, may falsely create the impression that another station is "splattering."

Take Five. Staying off the air for 5 minutes, as required under certain circumstances by FCC rules.

Ten Code. A system of on-the-air abbreviations, wherein a lengthy message, expressing a complete thought, is shortened to a group of numbers.

Tennessee Valley Indians. Television interference from CB transmissions, as it is known by some CB'ers.

Transceiver. A combination transmitter/receiver.

TVI. Television interference from a CB transmission.

Uncle Charlie. As some CB'ers refer to the FCC.

W.T. A walkie-talkie, or unlicensed 100 milliwatt hand-held transceiver.

XYL. A wife.

YL. An unmarried female.

73. An expression meaning "best wishes."

88. An expression meaning "love and kisses."

SAMPLE MESSAGES

ON THE AIR PROCEDURE — *Between base and mobile units of the same license:*

1. Calling: "KZZ0001 Base, calling unit 2."
2. Response: "KZZ0001 unit 2, to base, over."
3. Clearing: "KZZ0001 base, clear with unit 2" and "KZZ0001 unit 2, clear with base."

Between mobile units of the same license:

1. Calling: "KZZ0001 unit 1, calling unit 3."
2. Response: "KZZ0001 unit 3, to unit 1, over."
3. Clearing: "KZZ0001 unit 1, clear with unit 3," and "KZZ0001 unit 3, clear with unit 1."

Between units of different licenses:

1. Calling: "KZZ0001 calling KZZ0002," or "KZZ0001 calling KZZ0002 unit 3."
2. Response: "KZZ0002 to KZZ0001, over."
3. Clearing: "KZZ0001 clear with KZZ0002," and KZZ0002 clear with KZZ0001."

Breaking the channel: If you find that there is sufficient reason for you to "break" into someone else's communication, wait for the second of silence when one of the stations turns it over to the other. Then, quickly, come on the air and say "Break." It may be necessary for you to do this a few times until they hear you. Upon hearing you, one of the stations will say "Go ahead, Breaker." You then say, "Breaker is KXX9999 Unit 3 trying to contact police with an accident report." The other stations will then either permit you to contact your own base station or will assist you themselves. If, after repeated failures to have your "break" heard because the stations do not have sufficient time lag between transmissions, try giving three rapid signals with your microphone button during one of the station's transmissions. The receiving station should hear this as 3 short tones and will then let you break. The tones should be only a fraction of a second in duration (like a Morse code "dot").

REACT — H.E.L.P. — NATIONAL CALLING CHANNEL

Channel 9 has been adopted by CB'ers, and unofficially endorsed by the FCC, as the National CB Calling and Emergency Channel. This channel is supposed to be used only when making an emergency call, when asking for road directions, assistance, or information, and when trying to establish communications with stations licensed to others. Upon making the initial communication on Channel 9, it should then be cleared, the stations switching to an alternate channel, leaving Channel 9 free for use by others.

Channel 9 is being monitored by hundreds of stations operated by "REACT," an organization of volunteer CB operators located throughout the United States. If you are mobile and in trouble, or are assisting another mobile in trouble, or need any information, you can switch to Channel 9 and say, "KXX9999 Unit 3 calling the REACT monitor station." The station, if you are within their receiving range, will come back to you with their callsign, which should then be used in all transmissions.

H.E.L.P., is a nation-wide emergency monitoring system being planned by the Automobile Manufacturers Association. Its purpose is to aid stranded motorists. Plans are for the program to use Channel 9 for all communications until FCC approval can be obtained for duplex operation on 27.235/27.245 mc/s.

CB operators are requested to have the courtesy to refrain from using Channel 9 for the exchange of messages, utilizing it solely for a calling channel. Stations presently equipped to operate only on Channel 9 are urged to obtain proper crystals for a second channel from their local CB sales shop, from the manufacturer of their equipment, or from one of the mail order electronic supply houses. Crystals may be placed in your equipment only by the holder of a First or Second Class FCC Radiotelephone or Radiotelegraph Operator's License. While awaiting the installation of your crystals, please keep Channel 9 transmissions as brief as possible.

Cooperation between CB operators is the only way Channel 9 may be used to its full potential. Anyone who has ever found it necessary to get an emergency message through on Channel 9 can attest to its need.

INTERNATIONAL PHONETIC ALPHABET			NUMBERS
A — ALPHA	J — JULIET	S — SIERRA	1 — WUN
B — BRAVO	K — KILO	T — TANGO	2 — TOO
C — CHARLIE	L — LIMA	U — UNIFORM	3 — THUH-REE
D — DELTA	M — MIKE	V — VICTOR	4 — FO-WER
E — ECHO	N — NOVEMBER	W — WHISKEY	5 — FI-YIV
F — FOXTROT	O — OSCAR	X — XRAY	6 — SIKS
G — GOLF	P — PAPA	Y — YANKEE	7 — SEH-VUN
H — HOTEL	Q — QUEBEC	Z — ZULU	8 — AIT
I — INDIA	R — ROMEO		9 — NINE-R
			0 — ZEE-ROW

OFFICIAL NATIONAL CB 10-CODE

10-1	Receiving Poorly
10-2	Receiving Well
10-3	Stop Transmitting
10-4	OK, Message Received
10-5	Relay Message
10-6	Busy, Stand By
10-7	Out Of Service, Leaving Air
10-8	In Service, Subject To Call
10-9	Repeat Message
10-10	Transmission Completed, Standing By
10-11	Talking Too Rapidly
10-12	Visitors Present
10-13	Advise Weather/Road Conditions
10-16	Make Pickup At_____
10-17	Urgent Business
10-18	Anything For Us?
10-19	Nothing For You, Return To Base
10-20	My Location Is_____
10-21	Call By Telephone
10-22	Report In Person To_____
10-23	Stand By
10-24	Completed Last Assignment
10-25	Can You Contact_____?
10-26	Disregard Last Information
10-27	I Am Moving To Channel_____
10-28	Identify Your Station
10-29	Time Is Up For Contact
10-30	Does Not Conform To FCC Rules
10-32	I Will Give You A Radio Check
10-33	EMERGENCY TRAFFIC AT THIS STATION
10-34	Trouble At This Station, Help Needed
10-35	Confidential Information
10-36	Correct Time Is_____
10-37	Wrecker Needed At_____
10-38	Ambulance Needed At_____
10-39	Your Message Delivered
10-41	Please Tune To Channel_____
10-42	Traffic Accident At_____
10-43	Traffic Tieup At_____
10-44	I Have A Message For You (Or_____
10-45	All Units Within Range Please Report
10-50	Break Channel_____
10-60	What Is Next Message Number?
10-62	Unable To Copy, Use Phone
10-63	Net Directed To_____
10-64	Net Clear
10-65	Awaiting Your Next Message/Assignment
10-67	All Units Comply
10-70	Fire At_____
10-71	Proceed With Transmission In Sequence
10-73	Speed Trap At_____
10-75	You Are Causing Interference
10-77	Negative Contact
10-81	Reserve Hotel Room For_____
10-82	Reserve Room For_____
10-84	My Telephone Number Is_____
10-85	My Address Is_____
10-89	Radio Repairman Needed At_____
10-90	I Have TVI
10-91	Talk Closer To Mike
10-92	Your Transmitter Is Out Of Adjustment
10-93	Check My Frequency On This Channel
10-94	Please Give Me A Long Count
10-95	Transmit Dead Carrier For 5 Seconds
10-99	Mission Completed, All Units Secure
10-200	Police Needed At_____

Note: Any 10-code signal may be reversed by stating it as a question. For example, 10-20? would mean "What Is Your Location?" or 10-36? "What Is The Correct Time?"

EMERGENCY TELEPHONE DIRECTORY

Fill in the blanks below with telephone numbers and CB callsigns which you may require as a result of your CB operation.

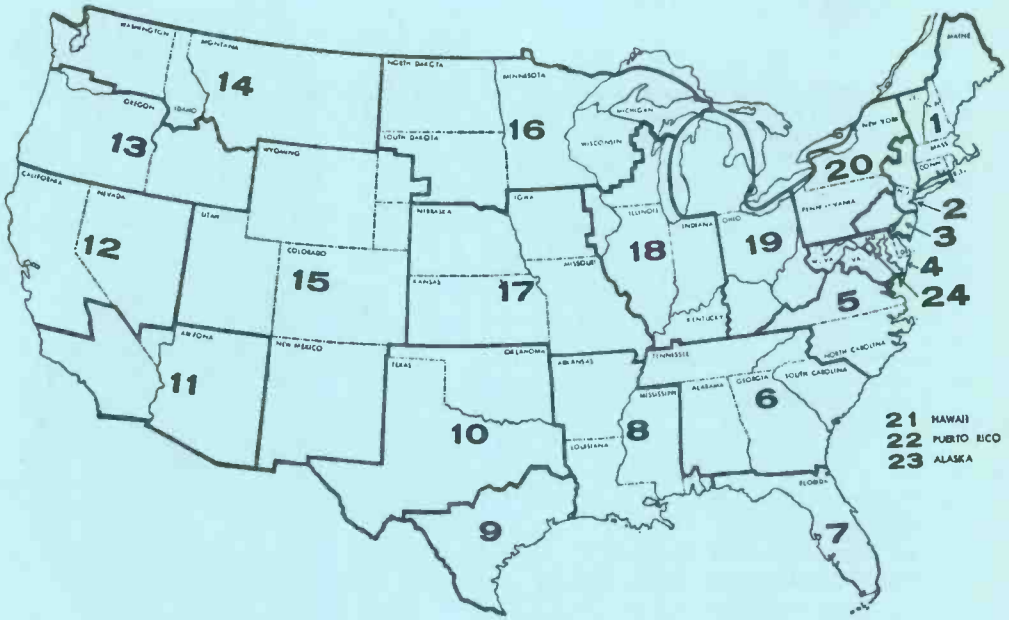
	Telephone	CB Call & Channel
Local Police		
Sheriff Dept.		
State Police		
Fire Dept.		
FBI		
Auto Wrecker		
Ambulance		
Doctor		
Druggist		
Hospital		
Airport Tower		
Coast Guard		
Newspaper		
Radio Station		
Radio Repair		
Weather Bureau		
CB Club Officer		
Civil Air Patrol		
Civil Defense		

1966 CLASS D PREFIX CHART

Below are listed all of the FCC prefixes currently being used by Class D CB stations in each of the 24 radio districts. The first column indicates the prefix, the second indicates the radio district number (see map for locations of these districts), the third column shows the year in which the prefix was issued by the FCC. Since the CB license terms are 5 year periods, the 1962 prefixes will all be expiring in 1967. Prefixes shown with an asterisk are "spares" which the FCC might use in 1966 should any radio district run out of assignable calls. Those shown with two asterisks are special authorization prefixes which may be issued in the respective districts during any year.

PREFIX	DIST.	ISSUED
KBA	1	1962
KBB	1	1962
KBC	1	1963
KBD	1	1963
KBE	1	1964
KBG	2	1962
KBH	18	1963
KBI	2	1963
KBJ	2	1963
KCA	2	1964
KCC	3	1962
KCD	3	1963
KCE	3	1964
KCF	4	1962
KCG	4	1963
KCH	4	1964
KCI	5	1962
KCJ	5	1963
KDA	5	1964
KDB	6	1962
KDC	19	1963
KDD	6	1963
KDE	6	1963
KDF	6	1964
KDH	7	1962
KDI	7	1963
KDJ	7	1964
KEA	8	1962
KEB	8	1963
KEC	8	1964
KED	9	1962
KEE	9	1963
KEF	9	1964
KEG	10	1962
KEH	10	1963
KEI	10	1964
KEJ	11	1962
KFA	11	1963
KFB	11	1964
KFC	12	1962
KFD	12	1963
KFE	12	1964
KFF	13	1962
KFG	13	1963
KFH	13	1964
KFI	14	1962
KFJ	14	1963
KGA	14	1964
KGB	15	1962
KGC	15	1963
KGD	15	1964
KGE	16	1962
KGF	16	1963
KGG	16	1964
KGH	17	1962
KGI	17	1963
KGJ	17	1964
KHA	18	1962
KHB	18	1962
KHC	18	1963
KHD	18	1963
KHE	18	1964
KHG	19	1962
KHH	19	1962
KHI	19	1963
KHJ	19	1963
KIA	19	1964
KIC	20	1962
KID	20	1963
KIE	20	1964
KIF	21	1962
KIG	21	1963
KIH	21	1964
KII	22	1962
KIJ	22	1963
KJA	22	1964
KJB	23	1962
KJC	23	1963
KJD	23	1964
KJE	24	1962
KJF	24	1963
KJG	24	1964
KJH	5	1963
KJI	20	1963
KKA	1	1964
KKB	1	1964
KKD	2	1964
KKE	2	1964
KKG	3	1964
KKI	4	1964
KKK	5	1964
KKM	6	1964
KKN	6	1964
KKP	7	1964
KKR	8	1964
KKT	9	1964
KKV	9	1964
KKX	11	1964
KKY	11	1964
KLA	12	1964
KLC	13	1964
KLD	14	1964
KLE	15	1964
KLF	16	1964
KLH	17	1964
KLI	17	1964
KLJ	18	1964
KLK	18	1964
KLL	18	1964
KLM	19	1964
KLN	19	1964
KLO	19	1964
KLP	20	1964
KLQ	20	1964
KLS	21	1964
KLT	22	1964
KLU	23	1964
KLV	24	1964
KMA	1	1965
KMB	1	1965
KMD	2	1965
KMG	3	1965
KMI	3	1965
KMK	5	1965
KMM	6	1965
KMN	6	1965
KMP	7	1965
KMR	8	1965
KMT	9	1965
KMV	10	1965
KMX	11	1965
KNA	12	1965
KNC	13	1965
KND	14	1965
KNE	15	1965
KNF	16	1965
KNH	17	1965
KNI	17	1965
KNJ	18	1965
KNK	18	1965
KNM	19	1965
KNN	19	1965
KNP	20	1965
KNS	20	1965
KNT	22	1965
KNU	23	1965
KNV	24	1965
KNY*	ANY	ANY
KNZ*	ANY	ANY
KOA	1	1966
KOB	1	1966
KOC	1	1966
KOD	2	1966
KOE	2	1966
KOF	2	1966
KOG	3	1966
KOH	3	1966
KOI	4	1966
KOJ	4	1966
KOK	5	1966
KOL	5	1966
KOM	6	1966
KON	6	1966
KOO	6	1966
KOP	7	1966
KOQ	7	1966
KOR	8	1966
KOS	8	1966
KOT	9	1966
KOU	9	1966
KOV	10	1966
KOW	10	1966
KOX	11	1966
KOY	11	1966
KOZ	11	1966
KPA	12	1966
KPB	12	1966
KPC	13	1966
KPD	14	1966
KPE	15	1966
KPF	16	1966
KPG	16	1966
KPH	17	1966
KPI	17	1966
KPJ	18	1966
KPK	18	1966
KPL	18	1966
KPM	19	1966
KPN	19	1966
KPO	19	1966
KPQ	20	1966
KPR	20	1966
KPS	21	1966
KPT	22	1966
KPU	23	1966
KPV	24	1966
KPW**	-	1966
KPX**	-	1966
KPY**	-	1966
KUA*	1	ANY
KUB*	2	ANY
KUC*	3	ANY
KUD*	4	ANY
KUE*	5	ANY
KUF*	6	ANY
KUG*	7	ANY
KUH*	8	ANY
KUI*	9	ANY
KUJ*	10	ANY
KUK*	11	ANY
KUL*	12	ANY
KUM*	13	ANY
KUN*	14	ANY
KUO*	15	ANY
KUP*	16	ANY
KUQ*	17	ANY
KUR*	18	ANY
KUS*	19	ANY
KUT*	20	ANY
KUU*	21	ANY
KUV*	22	ANY
KUW*	23	ANY
KUX*	24	ANY
KUY*	ANY	ANY
KUZ*	ANY	ANY

C B RADIO DISTRICT MAP



CB CHANNEL CHART

1	26.965 mc/s	UNITS OF SAME STATION ONLY
2	26.975 mc/s	UNITS OF SAME STATION ONLY
3	26.985 mc/s	UNITS OF SAME STATION ONLY
A	26.995 mc/s	CLASS C RADIO CONTROL & 100 MW UNITS
4	27.005 mc/s	UNITS OF SAME STATION ONLY
5	27.015 mc/s	UNITS OF SAME STATION ONLY
6	27.025 mc/s	UNITS OF SAME STATION ONLY
7	27.035 mc/s	UNITS OF SAME STATION ONLY
B	27.045 mc/s	CLASS C RADIO CONTROL & 100 MW UNITS
8	27.055 mc/s	UNITS OF SAME STATION ONLY
9	27.065 mc/s	ALL STATIONS/NATIONAL CB CALLING CHANNEL/REACT
10	27.075 mc/s	ALL STATIONS
11	27.085 mc/s	ALL STATIONS
C	27.095 mc/s	CLASS C RADIO CONTROL & 100 MW UNITS
12	27.105 mc/s	ALL STATIONS
13	27.115 mc/s	ALL STATIONS/PLEASURE BOATS
14	27.125 mc/s	ALL STATIONS
15	27.135 mc/s	UNITS OF SAME STATION ONLY
D	27.145 mc/s	CLASS C RADIO CONTROL & 100 MW UNITS
16	27.155 mc/s	UNITS OF SAME STATION ONLY
17	27.165 mc/s	UNITS OF SAME STATION ONLY
18	27.175 mc/s	UNITS OF SAME STATION ONLY
19	27.185 mc/s	UNITS OF SAME STATION ONLY
E	27.195 mc/s	CLASS C RADIO CONTROL & 100 MW UNITS
20	27.205 mc/s	UNITS OF SAME STATION ONLY
21	27.215 mc/s	UNITS OF SAME STATION ONLY
22	27.225 mc/s	UNITS OF SAME STATION ONLY
F	27.235 mc/s	100 MW UNITS (PROPOSED H.E.L.P. CHANNEL)
G	27.245 mc/s	100 MW UNITS (PROPOSED H.E.L.P. CHANNEL)
23	27.255 mc/s	ALL STATIONS/CLASS C RADIO CONTROL

Note: 100 MW stations are unlicensed walkie-talkies, which are permitted operation on any frequency within the edges of the band, including frequencies lying between CB channels. Licensed Class D stations are not permitted to communicate with unlicensed walkie-talkies. Walkie-talkies may be licensed only if they meet the technical standards established by the FCC for Class D. Many walkie-talkies cannot meet these standards.

FCC EMERGENCY NOTIFICATION CARDS

ONLY 2¢ EACH!

Section 95.85(1) of the CB rules states that if you use your CB gear for any emergency, even for calling for help for a stranded motorist, you *must* notify (in writing) both the FCC in Washington and your local FCC office. You *must* do this for each time you use your CB rig for emergencies. These FCC Notification cards were specifically designed to cut to a minimum the paperwork necessary for well meaning clubs and individuals —they contain all of the necessary wording (and are even addressed)—all you do is fill in a few blanks, stamp, and drop into the nearest mailbox. They come with a list of addresses of local FCC offices. Available *postpaid* in packages of 50 for only $1. Thousands of these cards are already in circulation. Order now from:

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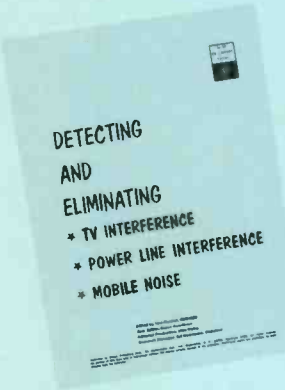
S9 Magazine
14 Vanderventer Avenue
Port Washington, N. Y. 11050



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$1

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ODDS 'N ENDS

by HERB FRIEDMAN, KBI9457/W2ZLF

Consumers of the world unite! ! ! ! Fall in step and let us march shoulder to shoulder proudly holding our banner high, proclaiming the motto: FOLD–SPINDLE–MUTILATE. From this day forth let all manufacturers, bankers, stores and utilities be put on notice that *we will not do their work for nothing*–free of charge.

It has been slow and insidious, but month after month nearly *everyone* has foisted off *their work* on us consumers, so that the other morning I awoke to find that I spend one half of my free time doing other people's work for *nothing*–for not one single cent of compensation.

The telephone company requires that we put our phone number on the outside envelope so they can sort the payments with a minimum of help. Well tough on them! Leave all information off the envelope–let them boost the economy by hiring clerks to sort their fortunes.

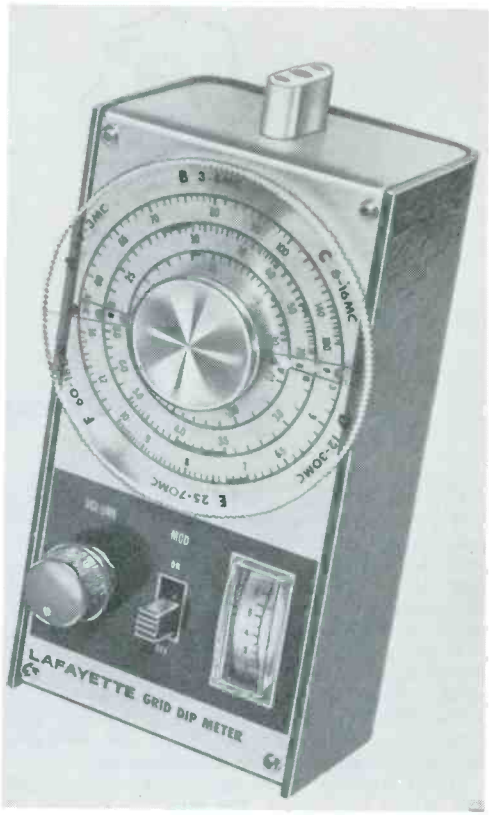
And department stores, they have the greatest racket of all. Time was they sent you a monthly statement with copies of all your purchases. Now you get a piece of paper with meaningless computer symbols known only to God, and the consumer must save 30 days worth of receipts to know what the bill is *supposed* to represent. So now the consumer has become an *unpaid accountant* for the department stores.

But the most insidious plot of all is *free consumer research*. Let me explain. Accompanying my new washer was an official looking IBM card that *appeared* to be the warranty registration. I was to fill out a lot of personal information and then return the card, *with my postage stamp*. Close inspection revealed that this gift from the IBM ogre was not in fact the warranty registration at all but information for their research grist mill that decides what and how appliances shall be sold. In short, I was expected to be an *unpaid consultant* for this multi-million dollar corporation and I was expected to pay for the postage to get their free information into the computer. You can just guess the type of information I passed along. (Of course I didn't put a stamp on it, the post office has an extra charge for postage due.)

Well, if you're tired of working for nothing you can help fight back by joining *Key-Punch Anonymous*–an organization of dedicated individuals with no dues or contributions. All that's required for membership is that you purchase a hand key-punch, a little gadget that punches those small rectangles found on computer cards. And next time you are expected to provide free work or information just turn over the card to your children with full instructions how to operate the punch, fold paper into fourths, and how to spindle and mutilate. You have no idea the pleasure you can get from periodically reading several hundred letters pleading that you treat the computer cards with care. It will almost bring tears to your eyes.

The first returns are in, and we are rather surprised. For years we've been getting letters to recommend all sorts of electronic equipment, but when the chips are down, and *we invite* you to ask about equipment what happened? The overwhelming request this month was for something in the general electronic *experimenter* line–something real cheap that can be used to check out receivers, transmitters, converters, etc.

Okay, you want something cheap and universal?–try Lafayette Radio's Nuvistor Grid Dip Meter at $22.95 (no Tommy, it's not a kit, that's the wired price). Complete with 6 coils the GDO covers the 1.7 to 180 mc. range. What's it used for? Nearly everything. Need a signal source to check out a CB receiver, an SWL receiver, or to track down TVI? Right, the GDO is a signal generator. Need a relative field strength meter to check out an oscillator or transmitter? Right again, the GDO is an FSM. Want to check the modulation of your transmitter, or track down hum, squeals or clicks getting into the modulation–plug in a pair of phones and get to work. Or suppose you're just a general experimenter and occasionally you need to wind coils for such things as antenna tuning networks or TVI filters; or perhaps you just want to tune your antenna(s) as fine as a fleas eyelash. Simple, don't bog down in complex mathematical equations; just place the GDO near whatever it is,

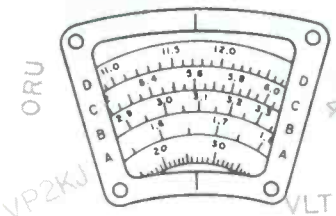


tune the dial, and when the meter reading suddenly *dips* read the resonant frequency right off the dial. See, we said it was a universal tool.

At any price we found the Lafayette Nuvistor GDO the best unit we have ever used. One of the problems that plague GDOs is *false dips*—you sweep the dial, the meter dips, and lo-and-behold the dip has no relationship to anything. But the Nuvistor GDO is different. We checked, checked and rechecked (cause we didn't believe it) but Lafayette's GDO had not one single false dip. And at no frequency was the meter driven off-scale—at no time was it necessary to stop and recalibrate the meter.

An interesting feature not found—to our knowledge—on any other GDO is built-in modulation. With other GDOs you get just a "carrier" when using it as a signal generator. But on the Lafayette you throw a switch and the signal is modulated—just as if it was a standard signal generator. For those of you who asked—the Lafayette Radio 99 R 3503 is the best buy (and the best) in grid dip oscillators.

That's it for this month. As of now it looks like next month we'll be covering what you call the "Best but least expensive Hi-Fi receiver." Anybody want something else? Why not drop us a note at Odds and Ends—we can't know what you want if you won't tell us.



THE SWL SHACK

BEST BETS FOR LISTENERS ON THE DX BANDS

by RICK SLATTERY

From Vancouver, B.C., comes word of remarkable reception with a little SONY 6-transistor receiver, souped up only by means of a 70 foot longwire antenna. The dial twirling credits go to Mike Thompson who pulled in stations like: "R. Francaise" on the Caribbean island of Guadeloupe (650 kc/s at 1000 EST); TJG in Guatemala City (880 kc/s at 0015 EST), and XAEI in Coahuilla, Mexico (1600 kc/s at 1930 EST). On the frequency of 1630 kc/s, Mike reports hearing a number of Canadian maritime land stations (mostly west coast) giving weather reports and shipping notices. If all this can be heard on a relatively basic receiver and simple antenna, just think what could be heard with an elaborate station at Mike's wild location.

Harry McDonald, Findlay, Ohio, seems to have stumbled upon one of those beacon stations at the low end of the standard broadcast band. His was using the ID of "NB," and our records show this to be operated by the Royal Canadian Air Force at North Bay, Ontario. They QSL! Harry also reports hearing Radio Australia, signing off at 0815 kc/s on 9915 kc/s; and Switzerland Calling on 6080 kc/s at 2024 EST.

This is a photo of Tony Russomanno's DX shack in Whippany, N. J. Tony uses a National NC-300, Lafayette HB-266 (as KKE0173), and an ancient 1928 RCA console. Tony works at 10 watt FM station WHPH on 90.3 mc/s, located at his high school. If anybody hears WHPH, send Tony the report for a QSL.

Seated at his Hallicrafters SX-110 receiver is reader John Kuc, Indian Orchard, Mass. He's got 35 countries and 33 states verified.

From El Cerrito, Calif., we received a "super hot reception report" (that's the description used by our reporter) from Mike Forsyth, KNA1504/WB6PGT. For those of you who dig propaganda yak-yak, Radio Cambodia towing the red line on 9695 kc/s at 0815 EST.

Mike Kumjian, Orient Point, N. Y. (out on the end of Long Island) really digs utility stations. Among his loggings are: Cable & Wireless at Ascension Island (south Atlantic) on 20100 kc/s; International Radio Telephone Terminal, Zambia, most nights on 10075 kc/s; and a bunch of Tropical Radio Telegraph Co. stations in Central America, such as Panama on 15450 kc/s and 9150 kc/s, Honduras on 9950 kc/s, and Nicaragua on 15550 kc/s. On the SWBC bands, we have reports of Radio Tirana, Albania, 7265 kc/s at 1915 EST; Radio Berlin International (North American transmission) at 2000 EST on 5960 kc/s; Radio Peking, China, on 11945 kc/s at 2130 EST. Mike says he knows that S9's Editor, Tom, lives somewhere in the wilds of Long Island, but asks if it's near Orient Point. Sorry, Mike, but Tom says that Orient Point is the next before Barcelona on the Long Island Expressway. Tom hangs his antenna somewhat closer to the

Listening post of Harry "Max" McDonald of Findlay, Ohio.

New York Metropolitan area—near Huntington.

Still on the move is our USAF reporter, Robert L. Baltimore, who popped up at Eglin AFB, Fla. His regular receiver got too banged up in shipment from Alaska and Bob is now using a Westinghouse Helmsman 8-transistor model. He's setting up a whole new shack featuring a Heath GR-54. Latest stations heard are "Alfa Alfa India" located at Ft. Bragg, N. C., at 2345 EST on about 6500 kc/s; and Radio Habana with the same old ranting on about 7 mc/s.

It was a Merry Christmas in Lawrenceberg, Ky., when reporter Steve Jones, KLO0519, received a new HA-230 receiver as a gift. Some examples of Steve's DXploits are: Vatican Radio heard until sign-off at 2005 EST on 7250/9645/5985 kc/s; Radio Japan on 11815 kc/s at 1905 EST; ETLF, Radio Voice of The Gospel, Addis Ababa, Ethiopia, 11875 kc/s at 1427 EST; and Radio Belize, British Honduras, 3300 kc/s at 2005 EST. On the utility bands he heard KNFA, the Research Vessel John E. Pilsbury, on 2182 kc/s; and the following CW beacon stations (frequencies approx.) in the evenings: EPO/1608 kc/s, RAB/1613 kc/s; PPN/1640 kc/s; TNT/1710 kc/s; UIB/1660 kc/s; PSO/1612 kc/s; TIPM/1675 kc/s.

Next month our regular station listings will include a run down on just about all stations in the large network operated by the U.S. Army Corps of Engineers. These stations dot the nation at dam locks and most harbors. They are very active, most will QSL, and the springtime flood season will probably make them even more active than usual.

There's a new edition of the World Radio TV Handbook out, and each and every DX enthusiast should have one. This is an absolute MUST for anyone trying his hand on the bands. Details of the contents of this 340 page book and how to order it are in this month's On The Counters column of S9.

Let's have some more of those reports and shack photos.

S9

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*Automobile Mfg. Association H.E.L.P. Application Pending Before Federal Communications Commission.

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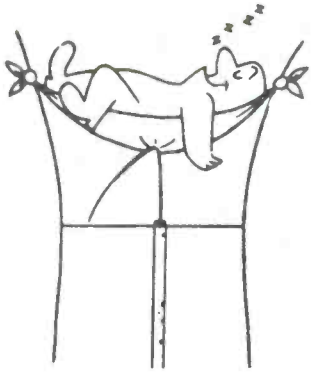

ANTENNAS

by LEN BUCKWALTER, KBA4480

HOW TO GET WALT DISNEY

Listening to a lecture about antenna theory is about as exciting as watching Bette Davis on a surfboard. Sure, antennas are thrilling, but theory is another matter. Even a famous book on antennas, written by Professor John D. Kraus, has a black and gold binding which somehow reminds one of mourning. Try to read it. You'll weep.

But learning about antennas *can* be as much fun as going to the movies. In fact you can do just that. There are several films—available to clubs—that'll breathe new life into antenna principles. Not only are they fun—these flicks are free!

For starters, there's a little opus produced by the U.S. Army Air Force back in 1942. Called "Radio Antennas: Creation and Behavior of Radio Waves," it explains all that happens from the tip of your whip, to the climax of your co-ax. Included are topics like how the radio field is created and generated, its behavior in space, information about ground waves, skip and fading. The film is in black-and-white, has sound, and is 16mm.

With that under your belt you might go on to SWR, a subject that can put an audience to sleep faster than laughing gas in the air-conditioner ducts. Not so in the cinematic tidbit produced by the U.S. Navy. It's called "Standing waves on transmission lines." You'll get 23 minutes of diagrams that dance, interesting lab demonstrations, and details on cause, result and prevention of standing waves.

The Navy also takes a bow for a movie called "Reduction of radio interference." In 20 minutes, this sound film runs through causes of interference in radio equipment, and demonstrates how to reduce it.

These freebies are not limited to antennas. Two films guaranteed to put zing into a club meeting are produced by Walt Disney. With animated cartoons—and living color—Disney's "Basic electricity" makes rollicking good sport of voltage current, coils and magnetic fields. Another cartoon feature by Disney is "Basic electronics." It runs 18 minutes, has sound and color, explains electrons, tubes and other technical topics.

How do you get these films? The best information source is a hefty directory put out by the U.S. Dept. of Health, Education, and Welfare. Some 500 pages long, it describes films mentioned above, plus some 5000 others (on topics that range from rat-catching to a 4-minute clip on Snuffy—a cocker spaniel billed as "Smokey Bear's pal"). The films are free, but the club must shell out $2.75 for the catalog. Request a copy of "U.S. Government Films for Public Educational Use, Number OE-34006." Send request and money to: Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. The catalog gives titles, running time, subject matter and details about ordering.

1 SHELL OIL COMPANY
430 Peninsular Avenue
San Mateo 8, California

2 SHELL OIL COMPANY
624 S. Michigan Avenue
Chicago 5, Illinois

3 SHELL OIL COMPANY
149-07 Northern Boulevard
Flushing 54, New York

4 SHELL OIL COMPANY
P. O. Box 2099
Houston 1, Texas

In most cases you'll find that films must be returned 48 hours after showing, and you pay return postage. (There's a special low rate for film mailing so check with the post office.) Also, you'll probably be asked to fill out a form which shows how many people viewed the film.

The only other obstacle is a projector and screen. Most common film type offered to groups is 16mm sound. If no-one in the club has one, check with a local photo dealer; he may offer projection equipment on a rental basis, and often under $10. You cannot, incidentally, charge admission when you exhibit government films. But it is permissible to pass around the hat to make

Continued on page 70

Faulty, fragile, filament failures.

Phooey.

Yes, phooey to filament failures and costly tube replacements. CB radios should be solid state to take the bumps and knocks of mobile use.

That's why *all* Amphenol Citizens Radios are solid state. We don't believe in thin filaments that heat up and short or snap. Or in fragile glass enclosures. Or in tubes at all, when transistors have more than ten times the life and warm up instantly. That's why Amphenol has the broadest line of solid state equipment available today.

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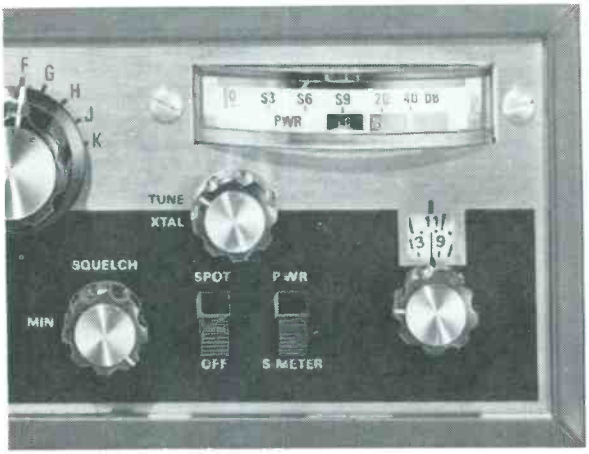

Remember, when you want the reliability of solid state circuitry, think of the industry's broadest line, Amphenol. See your local Amphenol distributor for more information on Amphenol solid state, and the Spokesman 650, or write us direct.

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CARD SWAPPERS UNLIMITED

Swappers Awards are given to those readers who have sufficiently proven that they have reached certain specified levels of achievement in QSL card swapping. There are 19 different and distinctive Swappers Awards, and if you would like a complete set of rules, address your request together with a stamped, self-addressed envelope, to: Swappers Awards, S9 Magazine, 14 Vanderventer Ave., Port Washington, N. Y. 11050. Here are the winners of the black, red and gold certificates for the past month.

SACA
286 Helen Maturen, KNM2171, Saginaw, Mich.
287 Irving Norman, KKA7064, Pawtucket, R. I.
288 Charles Eason, KKI0959, Bethesda, Md.
289 B. Little, KLN3571, Battle Creek, Mich.
290 F. Braun, KLK2431, Glenview, Ill.
291 Bill Howell, KDB0371, Airken, S. C.
292 Frank Groff, KBH1141, Chicago, Ill.
293 C. Tooke, Rayleigh, Essex.
294 C. Schneider, KNC1206, Kelso, Washington

PX-25
566 Irving Norman, KKA7064, Pawtucket, R.I.
567 Charles Eason, KKI0959, Bethesda, Md.
568 S. D. Begley, KLC1752, Brookings, Oregon
569 John Drew, KNK1867, Havana, Ill.
570 H. Clark, KLP9660, Ellicottville, N.Y.
571 N. Powell, KMD0346, E. Orange, N.J.
572 J. Geery, KIC3133, Irondequoit, N.Y.
573 John Brutlag, KNE1971, Sheridan, Wyo.
574 H. Boardman, KNP9119, Little Valley, N.Y.
575 R. Karriker, KCI2972, Goldsboro, N.C.
576 L. Jenkins, KMM6987, Charleston Hts., S.C.
577 J. Guyton, KNV0022, Washington, D.C.
578 W. Kakareka, KNP3602, Moscow, Pa.
579 G. Graham, KLH8576, N. London, Mo.
580 C. Schneider, KNC1206, Kelso, Wash.
581 E. Maples, KMT2683, Clute, Texas
582 R. DuBois, KBJ0753, Wallkill, N.Y.
583 R. Buell, KLN6051, Dayton, Ohio

PX-50
487 S.D. Begley, Brookings, Oregon
488 C. Eason, KK10959, Bethesda, Md.
489 Irving Norman, KKA7064, Pawtucket, R.I.
490 J. Drew, KNK1867, Havana, Ill.
491 H. Clark, KLP9660, Ellicottville, N.Y.
492 N. Powell, KMD0346, E. Orange, N.J.
493 B. Dean, KNC0998, Portland, Oregon
494 J. Brutlag, KNE1971, Sheridan, Wyo.
495 H. Boardman, KNP7119, Little Valley, N.Y.
496 R. Karriker, KCI2972, Goldsboro, N.C.
497 L. Jenkins, KMM6987, Charleston Hts., S.C.
498 J. Guyton, KNV0022, Washington, D.C.
499 W. Kakareka, KNP3602, Moscow, Pa.
500 G. Graham, KLH8576, N.London, Mo.
501 C. Schneider, KNC1206, Kelso, Wash.
502 R. DuBois, KBJ0753, Wallkill, N.Y.
503 R. Buell, KLN6051, Dayton, Ohio

PX-75
381 Irving Norman, KKA7064, Pawtucket, R.I.
382 Charles Eason, KKI0959, Bethesda, Md.
383 S. D. Begley, KLC1752, Brookings, Ore.
384 Nick Adams, KMP0494, Quincy, Fla.
385 H. Clark, KLP9660, Ellicottville, N.Y.
386 N. Powell, KMD0346, E. Orange, N.J.
387 R. Ackerman, Sawyer, Mich.
388 Bill Dean, KNC0998, Portland, Ore.
389 H. Boardman, KNP7119, Little Valley, N.Y.
390 J. Hnasko, KID8954, Hazleton, Pa.
391 J. Guyton, KNV0022, Washington, D.C.
392 G. Graham, KLH8576, N. London, Mo.
393 C. Schneider, KNC1206, Kelso, Wash.
394 R. DuBois, KBJ0753, Wallkill, N.Y.
395 R. Buell, KLN6051, Dayton, Ohio

PX-100
348 S. D. Begley, KLC1752, Brookings, Ore.
349 Irving Norman, KKA7064, Pawtucket, R.I.
350 C. Eason, KKI0959, Bethesda, Md.
351 H. Clark, KLP9660, Ellicottville, N.Y.
352 N. Powell, KMD0346, E. Orange, N.J.
353 L. Litchford, KMV4210, Okla.City, Okla.
354 J. Guyton, KNV0022, Wash., D.C.
355 H. Graham, KLH8576, N. London, Mo.
356 C. Schnieder, KNC1206, Kelso, Wash.
357 R. DuBois, KBJ0753, Wallkill, N.Y.
358 R. Buell, KLN6051, Dayton, Ohio

PX-125
255 Irving Norman, KKA7064, Pawtucket, R.I.
256 Charles Eason, KKI0959, Bethesda, Md.
257 E. Fell, KNA2893, FPO San Francisco
258 C. R. Pirtle, KMP2491, Ft. Myers, Fla.
259 N. Powell, KMD0346, E. Orange, N.J.
260 H. McLeod, KKP1645, Perry, Fla.
261 Dale Rook, KMA0295, Windsor, Vermont
262 E. Beam, 5Q2178, Vale, N.C.
263 C. Schneider, KNC1206, Kelso, Wash.
264 H. Maturen, KNM2171, Saginaw, Mich.
265 R. Buell, KLN6051

PX-150
210 E. Fell, KNA2893, FPO San Francisco
211 H. McLeod, KKP1645, Perry, Fla.
212 F. Graff, KBH1141, Chicago, Ill.
213 E. Beam, 5Q2178, Vale, N.C.
214 R. Buell, KLN6051, Dayton, Ohio

PX-175
180 B. Little, KLN3571, Battle Creek, Mich.
181 F. Braun, KLK2431, Glenview, Ill.
182 E. Fell, KNA2893, FPO San Francisco
183 H. McLeod, KKP1645, Perry, Fla.
184 E. Beam, 5Q2178, Vale, N.C.

PX-200
155 R. Stichter, KLL0681, Freeport, Ill.
156 D. Theisen, KNM0810, Freeport, Ill.
157 B. Howell, KDB0371, Aiken, S.C.
158 E. Fell, KNA2893, FPO San Francisco
159 E. Beam, 5Q2178, Vale, N.C.
160 G. Raybin, KB10854, N.Y., New York

PX-225 134 E. Beam, 5Q2178, Vale, N.C.

PX-250
187 D. Stoneburg, KGI7912, Omaha, Nebr.
188 E. Beam, 5Q2178, Vale, N.C.

PX-275 114 G. Wiles, KKB5015, Williamstown, Mass.

PX-350 106 V. Gould, KLP7641, Binghamton, N.Y.

PX-375 103 V. Gould, KLP7641, Binghamton, N.Y.

PX-400 105 V. Gould, KLP7641, Binghamton, N.Y.

PX-425 102 V. Gould, KLP7641, Binghamton, N.Y.

PX-500 124 Rev. G. Thayer, KAA4564, Salamanca, N.Y.

PX-600 105 Rev. G. Thayer, KAA4564, Salamanca, N.Y.

MSA 210 R. Haught, KKB2813, New Britain, Conn.

A few months back we ran the name and address of David Thompson, 1Q7422, in our swappers list. Dave is happy to report that he was deluged with CB cards from hither and yon, and they're still coming strong! Here's Dave, hard at work telling the world about Raytheon CB gear, with some of your wallpaper holding up the ceiling in his office. By the time you read this, Dave will probably have covered all four walls in his office and be halfway down the hallway. If you haven't sent yours yet, Dave's 10-20 is: Raytheon Company, 213 East Grand Avenue, South San Francisco, Calif. 94080. Ask Dave to send you data on a 5 watt CB rig as small as a few packs of smokes.

211 E. Ross, KCG3689, APO San Francisco
212 B. Little, KLN3571, Battle Creek, Mich.
213 Ruth Charon, KBC0533, Holyoke, Mass.
214 B. Kretzer, KKI4592, Hagerston, Md.
215 F. Graff, DBH1141, Chicago, Ill.
216 E. Beam, 5Q2178, Vale, N.C.

SSC-1
223 Helen Maturen, KNM2171, Baginaw, Mich.
224 N. Powell, KMD0346, East Orange, N.J.
225 L. McGann, So. Bridge, Mass.
226 B. Little, KLN3571, Battle Creek, Mich.
227 F. Braun, KLK2431, Glenview, Ill.
228 Ruth Charon, KBC0533, Holyoke, Mass.
229 Henry McLeod, KKP1645, Perry, Fla.
230 F. Graff, KBH1141, Chicago, Ill.
231 I. Norman, KKA7064, Pawtucket, R.I.

SSC-2
169 F. Braun, KLK2431, Glenview, Ill.
170 H. Fosse, 20Q2793, Bloomsburg, Pa.
171 L. Huggins, KNH0542, Paxton, Ill.

SSC-3
141 F. Braun, KLK2431, Glenview, Ill.

SSC-4
130 R. M. Clogston, KKA4210, Starks, Me.
131 F. Braun, KLK2431, Glenview, Ill.

SSC-5
121 E. Beam, 5Q2178, Vale, N.C.

SSC-6
111 G. Wiles, KKB5015, Williamstown, Mass.
112 E. Beam, 5Q2178, Vale, N.C.

SSC-7
112 E. Beam, 5Q2178, Vale, N.C.
113 E. Becker, KCG0706, Alexandria, Va.

SSC-8
112 E. Becker, KCG0706, Alexandria, Va.

VACATION TIME

Some people take their vacation early and we must frankly admit that our gigantic list of Card Swappers was forced to take a hasty and unexpected vacation. The reason for it being that because of our special 8 page Operating Guide in this issue we just couldn't squeeze everything into the alloted number of pages. Have no fear, next month we will pick up where we left off last month. All those swappers who have made arrangements to be listed for several months will have an extra month tacked on to their running time.

SUZIE SEZ . . .

SEND ALL ITEMS
AND PHOTOS TO:
Suzie Sez
℅ S9 Magazine
14 Vanderventer Ave.
Port Washington, N. Y.

by SUSAN HENRIKSEN
Assistant Editor

Hi girls! I'd like you all to know that it was very difficult for me to pick this month's YL QSL winner. I received so many nice cards, I wish I could run them all. But since I can't do that I'd like to announce the winner who is Audree Bonsack KFD5878, of Modesto, California. Congratulations!

I received a charming letter from Billy Paul Warner of Heavener, Oklahoma who asked me to print the following story about his mom, of whom he is very proud. I think you'll enjoy it:
Editor:

This is the only way I know to express my thanks and appreciation for the help that was extended to me and at the same time let Heavener know how fortunate they are to have people like the "CB'RS" (Citizen Band Radio Operators) operating and monitoring the channels like they do.

Last evening I had to make a flying trip up there and return soon after I got there. On this side of the mountain, I encountered automobile trouble. Being a CB'R myself, of course I got on my radio and summoned help. Mrs. Bill Warner was there to help out in a second. She called my Father and Mother who came to my aid. Of course everyone cannot know how many times during the day and night people are actually helping someone out. Not that they want a thank you everytime. But I think that they deserve a great deal of credit.

Keep up the good work CB'RS. I am behind you all the way, along with thousands of others.

My thanks again to Mrs. Bill Warner.

Sincerely,
W. B. "Bill" Babcock
Wills Point, Texas.

I'd like to wish Mildred K. Knapp, KMA7975, of Wallingford, Conn. a Happy Birthday. She celebrated it on March 18. We have two Wedding Anniversaries this month. Don and Betty Pugh, KLP8114, of Churchville, New York, who celebrated their 9th Anniversary on February 9th. Mr. and Mrs. Pugh are the Vice-President and Secretary of the Chili-Ogden-Riga Klub. Also, Mr. and Mrs. Harold Byer, KNP4227, of McKeesport, Pa. celebrated their 16th wedding anniversary on January 18th. Congratulations all.

Edward and Jane Schmidt, KKG3369, of New Providence, Pa., asked me to announce the birth of Erik, 5 lbs. 14 ozs. born in December. This makes 4 boys now! Good luck Jane and Edward. I received a letter from Mr. Charles W. DeLong, KPM1793, of Cleveland, Ohio in regard to an article I had written in the January Issue of S9. I thought you might get a kick out of reading it, it's very interesting:

". . . An item of special interest to me was written by Fay Thomas of West Virginia expressing her thanks to CB'ers along the East Coast in locating her when her father was near death. I haven't seen Fay for 30 years and her parents and mine were good friends for many, many years. It was a real surprise to hear of a childhood friend through a National Publication. I am in West Virginia 3 or 4 times a year, and thanks to your magazine, I will have the opportunity to renew an old acquaintance."

Remember girls, if there is anything you would like to pass along to other CB'ers, just write to me and I will try to get it in the earliest possible issue. Till next month . . . Suzie.

MONITORING GUIDE TO THE

ROYAL CANADIAN MOUNTED POLICE

RADIO NETWORK

The "Mounties" conduct a considerable amount of interesting emergency business over the below listed radio stations. Our list was compiled from a number of sources, and there is a possibility that a few non-RCMP stations may have crept in because of the fact they operate on "Mountie" channels. Not all of these stations operate on each and every RCMP channel, most operate on several however. Listeners report that most of the RCMP activity seems to be in the 4 mc/s band.

This page may be removed from S9 and inserted in a 3-holed notebook for future reference.

Frequencies: 1650, 1708, 2326, 2788, 3325, 3455, 4475. 4775, 4785, 4805, 4895, 5445, 9130, 49120 kc/s.

LAND STATIONS

CFZ67	St. Johns, Nfld.
CJM92	Annabelle, B.C.
CJT20	Sturgeon Bay, Man.
CKC40	Bonavista, Nfld.
XJA26	Nanaimo, B.C.
XJA28	Campbell River, B.C.
XJA29	Ocean Falls, B.C.
XJA31	Port Alice, B.C.
XJA32	Queen Charlotte, B.C.
XJA34	Port Alberni, B.C.
XJA36	Alert Bay, B.C.
XJA37	Powell River, B.C.
XJA38	Atlin, B.C.
XJA39	Chilliwack, B.C.
XJA40	Pouce Coupe, B.C.
XJA41	Williams Lake, B.C.
XJA42	Victoria, B.C.
XJA43	Vancouver, B.C.
XJA44	Prince Rupert, B.C.
XJA45	Prince George, B.C.
XJA53	Penticton, B.C.
XJA54	Nelson, B.C.
XJA55	Kamloops, B.C.
XJA56	Cranbrook, B.C.
XJA57	Zeballos, B.C.
XJA58	Barlorne, B.C.
XJA82	Truro, Ont.
XJA84	Ohio South, N.S.
XJA88	Hartlen Pt., N.S.
XJA92	Yorkton, Sask.
XJA99	Bella Coola, B.C.
XJD23	Red Deer, Alta.
XJD27	Brentwood, B.C.
XJD28	Rockcliffe, Ont.
XJD32	Toronto, Ont.
XJD33	Pond Inlet, N.W.T.
XJD34	Pangnirtun, N.W.T.
XJD48	Ottawa, Ont.
XJD50	Quesnel, B.C.
XJD51	Terrace, B.C.
XJD54	Revelstoke, B.C.
XJD58	Sacks Hr., N.W.T.
XJD80	Herschel I., Yukon
XJE22	Fredericton, N.B.
XJE30	Sydney, N.S.
XJE35	North Battleford, Sask.
XJE36	Westmount, Que.
XJE40	Calgary, Alta.
XJE42	Edmonton, Alta.
XJE43	Lethbridge, Alta.
XJE44	Ft. Walsh, Sask.
XJE45	Maple Creek, Sask.
XJE47	Regina, Sask.
XJE48	Regina, Sask.
XJE49	Saskatoon, Sask.
XJE50	Swift Current, Sask.
XJE52	Brandon, Man.
XJE53	Headingly, Man.
XJE57	Almonte, Ont.
XJE74	Spence Bay, N.W.T.
XJE75	Halifax, N.S.
XJE77	Old Crow, Yukon
XJE78	Grisefiord, N.W.T.
XJE80	McBride, B.C.
XJF73	S. Hyacinthe, Que.
XJH92	Pembroke, Ont.
XJK72	Peace River, Alta.
XJL20	Burgeo, Nfld.
XJO38	Golden, B.C.
XJO43	Eskimo Point, N.W.T.
XLK75	Winnipegos, Man.
XLK76	Dauphin, Man.
XLK77	Nelson House, Man.
XLK78	Cross Lake, Man.
XLK79	Gods Lake, Man.
XLK82	Island Lake, Man.
XLK83	Gr. Rapids, Man.
XLK84	Sasaginnig, Man.
XLK89	Norway House, Man.
XLK90	Berens River, Man.
XLK91	Little Gr. Rapids, Man.
XLK92	Hole River, Man.
XLK93	Bloodvein, Man.
XLK94	L. Dubonnet, Man.
XLK95	Dauphin River, Man.
XLK96	Grace Lake, Man.
XLK98	So. Indian, Man.
XLK99	Ilford, Man.
XLL20	Pukatawagan, Man.
XLL29	L.S. George, Man.
XLL32	Bird River, Man.
XLL33	Bissett, Man.
XLL35	Hodgson, Man.
XLL36	Kississing, Man.
XLL37	Oxford House, Man.
XLL38	Rennie, Man.
XLL40	Shoal River, Man.
XLL58	E. Braintree, Man.
XLL59	Marchand, Man.

Continued

XLL61 Piney, Man.
XLL62 Sprague, Man.
XLL63 Duck Bay, Man.
XLL64 Mafeking, Man.
XLL65 Swan River, Man.
XLL66 Herb Lake, Man.
XLL67 Wekusko, Man.
XLL68 Wabowden, Man.
XLL69 Thicket Portage, Man.
XLL70 Lynn Lake, Man.
XLL71 Snow Lake, Man.
XLL72 Riverton, Man.
XLL88 Maskwa Lake, Man.
XLL89 Poplar Lake, Man.
XLL92 Selkirk, Man.
XLL95 Whitemouth, Man.
XLL97 Baldy, Mtn., Man.
XLL98 Garland, Man.
XLL219 Eriksdale, Man.
XLL220 Gypsumvil, Man.
XLL223 Whitemouth, Man.
XLN34 Kenora, Man.
XLN35 Dryden, Ont.
XLN45 Pt. Arthur, Ont.
XLN49 McDiarmid, Ont.
XLN53 Plevna, Ont.
XLN56 Pay Plat, Ont.
XLN58 Sault Ste. Marie, Ont.
XLN82 Chaplean, Ont.
XLO53 Toronto I., Ont.
XLO96 Dyment, Ont.
XLP22 Maple, Ont.
XLP69 Ronda, Ont.
XLP78 Williamson, Ont.
XLQ35 Geraldton, Ont.
XLQ37 Cochrane, Ont.
XLQ50 Bancroft, Ont.
XLQ68 Sault. Ste. Marie, Ont.
XLQ69 Tweed, Ont.
XLR29 Massey, Ont.
XLR30 Jamot, Ont.
XLR57 Lindsay, Ont.
XLR60 Rondean Pr., Ont.
XLR61 Green Lake, Ont.
XLS23 Dacre, Ont.
XLT36 Courtenay, B.C.
XLT84 Nelson, B.C.
XLU42 Vancouver, B.C.
XLV63 Victoria, B.C.
XLY80 Port Hardy, B.C.
XMA20 Slave Lake, Alta.
XMA22 L. La Biche, Que.
XMA25 Saskatoon, Alta.
XMA40 Calgary, Alta.
XMA41 Rocky Mtn., Alta.
XMB84 Buck Mtn., Alta.
XMB88 Entwistle, Alta.
XMK20 Bakers Nrs., Man.
XMK22 Cranberry, Man.
XMK23 Channing, Man.
XMK24 Cormorant, Man.
XMK25 Dyce Tower, Man.
XMK27 Beaver Creek, Man.
XMK30 Manigotagan, Man.
XMK32 Round Lake Trap, Man.
XMK33 Crossing B., Man.
XMK74 Bodger, Man.
XMK75 Beaver Creek, Man.
XMK76 Bird Lake, Man.
XMK79 Halfway, Man.
XMK80 Marchand, Man.
XMK81 Nutimik, Man.
XMK83 Otter Falls, Man.
XMK84 Pine Falls, Man.
XMK85 Point Dubois, Man.
XMK86 Richter, Man.
XMK88 Woodridge, Man.
XMK89 West Hawk, Man.
XMN27 Gooderham, Ont.
XMN28 S. Williams, Ont.
XMN36 Coldwater, Ont.
XMN37 Severn, Ont.
XMN41 Kemptville, Ont.
XMN50 Ear Falls, Ont.

AIRCRAFT

CF-MPT

SHIPS

CGMF RCMP IRVINE
CGMG RCMP MacBRIEN
CGMM RCMP FORT PITT
CGMP (General Call - All Ships)
CHMR RCMP FORT WALSH
CGPC RCMP BRULE
CGPD RCMP CARNDUFF
CGPG RCMP CUTKNIFE
CGPK RCMP GRENFELL
CGPL RCMP LITTLE BOW
CGPM RCMP MOOSOMIN
CGPP RCMP SLIDEOUT
CGPQ RCMP TAGISH
CGPV INTERCEPTOR
CGPW RCMP WILLOW BUNCH
CGPZ DETECTOR
VC2906 RCMP ESKIMO POINT

IN THE BEGINNING . . .

Continued from page 12

but by January of 1959, some 600 per month had started to arrive at the FCC. By May the monthly rate was up to 5,500, and today some 17,000 citizens per month decide to use the services offered on 11 meters. As of the end of 1965, more than 790,000 CB stations were authorized (with at least two units operating at each authorized station).

There are about 150 commercial CW and 'phone stations in Europe and Asia there too, plus some Canadian and New Zealand Hams.

When you think about it, only 40 years ago 27 mc/s was considered to be the upper limits of the usable radio spectrum and static ruled our band. Today, on particularly dark and eerie nights, when the band is empty of most CB'ers, a strange static arises. Some old timers say that they hear faint and distant voices 'neath the static—"Land Ho—" "Achtung—" "Baker Niner Seven, this is Easy Fox Command, come in—" They soon fade back into the ether and are replaced by "Break Channel 9" which pins the needle.

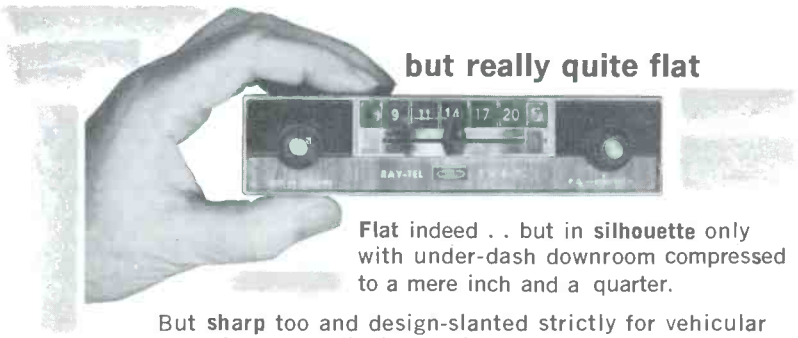
MONITORING MERRIMENT

Continued from page 29

appreciation for FCC's aid and presumably replaced the faulty halyard.

The FCC's Savannah, Ga., office resolved an interference problem that had closed down a local airport instrument landing system to prevent incoming planes from being diverted to a housing area. The first effort was a flight over the scene to determine where a ground search could begin. This was unsuccessful since the whole city appeared to be radiating. The signal could be heard in the air three miles from the landing strip. Signal intensity observations while ground cruising around the airfield finally centered on about three city blocks served by an electrical distribution system running parallel to the runway. The power company was advised and promptly sent a crew to locate and correct the cause. Seven men worked to disconnect arrestors, tighten circuit connections and remove tree limbs. Finally, wiggling a tie line on an insulator gave results, and repair of seven tie lines enabled the airport instrument landing system to be restored to service.

in perfect tune for every C-B application



but really quite flat

Flat indeed . . but in **silhouette** only with under-dash downroom compressed to a mere inch and a quarter.

But **sharp** too and design-slanted strictly for vehicular operation, with slimline styling and a bold new natural woodgrain trim, a fitting complement to any modern car. The **TWR-7** is also rugged and functional, equally at home on truck or motorcycle.

Today, any mobile unit must be solid-state–for exceptionally low battery drain—for a very real and important reduction in equipment size. The **TWR-7** goes far beyond mere transistorization—uses only silicon planar transistors—introduces a unique double-sided ground plane construction for lowest silhouette and highest circuit isolation. Ground plane boards are copper surfaced epoxy fiberglass, have plated through holes. Ruggedness and durability are dominant in **TWR-7**—quality is in evidence everywhere.

The price is music to the ears of the discerning buyer, 129.95

5 watts · 5 channels with tip-touch selector and direct channel readout.

Write for attractive full-color brochure detailing the big RAY-TEL C-B line.

RAYTHEON COMPANY

213 East Grand Avenue, South San Francisco, California 94080

CB CHIT-CHAT

INDIVIDUALS AND CLUB MEMBERS!!
SEND US ITEMS FOR THIS COLUMN!

Address correspondence to:

JOHN KREJC, KBI8077
60 DIVISION AVENUE
GARFIELD, N. J.

CANADA

Wednesday evening a call was given to the Local R.C.M. Police office, and reported that a young lad was lost in the woods. A quick call on the "CB" radio by XM631025, Lawrence Smith, alerted two mobiles, XM631108 and XM631120, Alva Garron, who picked up a few operators from the Woods Harbour area, XM631254, Leslie Goreham and XM631124, Louie Devine. They were at Smith's 10-20 within a few minutes. From there via "CB" radio, were in contact with the R.C.M. Police, XM631287, who was getting a few of his men together for the search.

At the same time, a few men from Cape Sable Island, XM631045, John Waybret and XM631168, Murray Quinlan were also mobile with some searchers. Ten minutes later with the help of XM631286, Vince Whelpley and XM631296, Eric Weeks who obtained the Barrington Fire Department's Walkie-Talkies, communications was established on Channel 9. The search party was divided into two units each with a Walkie-Talkie and the R.C.M. Police acting as Base. Within twenty minutes the search was cancelled when word was received from other members who were working on Channel 11 that the lad was safe in his home after walking in the woods for three miles. A hearty thanks from the lad's father and the R.C.M. Police Office to all those who took part in the search was given.

On Monday, a number from the Western Nova Scotia CB Club visited the "Kingfishers Halifax Club where the Officer from the Department of Transport gave a lecture and answered many questions regarding the "CB" radio's use and operation.

A good time was had by all, and a full hall indicated the interest in the new type of Radio Communications "CB" has brought. Many different parts of the Province was represented and good traveling weather got all home safe. A counter meeting is being planned in the near future by the Western Nova Scotia Club.

Newly received was a note from Barry Guilders, Secretary of the **Grand Valley CB Club** and **Grand Valley Search and Rescue Club** telling about the club has been in existence for about 2 years with a membership of 65. The club recently installed a base unit in the local police station and is monitored 24 hours daily.

ATLANTIC

TRUE CHRISTMAS SPIRIT? HERE'S REALLY WHAT IT IS

By MICHAEL-JOHN CLARK
Star Staff Writer

Children stepped on you and smiled, tossing their balloons, and shaking their smiling faces when you lifted them.

Presents were wrapped and baskets of food were decorated in the home of Mr. and Mrs. Herman Godlove at Siler Rt.

The Winchester-Frederick County Citizens Band Radio Club, Inc. then loaded their communications truck with the gifts.

THE TRUCK stopped beside a tarnished, red house in the county.

Children suddenly opened the door and stepped from the lighted kitchen on to the rickety porch.

"I knew you were coming. I was expecting you," the boy said.

His pajamas did not fit. He tried unsuccessfully to hike his pajamas above his feet. No matter how emphatic his effort, you still couldn't see his feet.

A younger sister was delighted. "I couldn't go to sleep until you came." The girl, all of eight-years-old, hopped up and down excitedly.

THE CITIZEN Band members carried the presents into the house.

Another little girl poked her head around the corner, peeking into the kitchen. Her face was puffed with surprise and joy. She kept looking around the corner, smiling each time.

The gifts donated by a local grocery store, shoe store, department store, and Club members were stored in the kitchen.

"MERRY CHRISTMAS and thank you," the mother, a short, pleasant woman, said.

A club member returned to the truck and said, "Now I can have a Merry Christmas."

"So can they," his friend said.

A little information about **The Heart of Dixie Cl Radio Club.** The club meets the 1st and 3rd Thursday night each month at the Pell City Recreation Center. The business meeting is followed by refreshments, coffee and cookies, and then bingo. Anyone passing through Pell City in invited to drop by for a visit. The Club monitors channels 11 and 9. Club Officers are: President, R. L. Vaughan, 6Q0865; Vice President, Jim Seales, KDF0388; Secretary-Treasurer, Juanita Thompson, KKM5881.

The Chesapeake CB Radio Club Inc., which meets the 2nd and 4th Monday of each month, at the Aberdeen Community Center in Aberdeen, Md. Recently elected officers for the year 1966: President, Cordelius Hathaway, 4Q0841; Vice President, Mildred Keen, KKI4652; Secretary, Joanne Vesely, KKI4669; Treasurer, John Laurie, 4Q0809; and Sergeant-at-Arms, John Simmonds, KKR2752. The club is very active in community affairs. Our motto being: Community Service. We are now in the process of completing our own club building. Anyone wishing any information about this club, address all correspondence to P.O. Box 64, Havre de Grace, Md.

From Atlanta, Georgia, **The Atlanta CONTAC Radio Ass'n,** reports on their CB activities. This group of CB Radio users have put together an organization second to none and are doing great things for their community. CB Chit Chat is proud to run their story as an example of what a group can do with proper and directed use of CB. In addition to numerous civic projects, **CONTAC** delivers constant services to highway motorists. Drivers in distress on Atlantas expressway need not hit the panic button. A new radio equipped expressway patrol is cruising the main traffic arteries into the city every night, to bring aid to stranded motorists. The expressway patrol is a public service of the Atlanta **CONTAC,** working under the auspices of the Atlanta Traffic and Safety Council. About 100 members volunteer their time to patrol in their radio-equipped cars. Anyone who has ever been stranded on a high-speed expressway in the middle of night, knows how welcome any kind of help. Our hats off to **CONTAC.** Interested parties should contact: Paul Posner, P.O. Box 8236, Station F, Atlanta, Georgia 30306.

SOUTHERN

SARASOTA, FLA.—Eleven members of Sarasota **REACT** "graduated" January 10 as radiological monitors, receiving special monitoring kits from the Sarasota County Civil Defense Coordinator.

The **REACT** members have completed a 40-hour course conducted by the local CD's radiological monitor instructor. The radiological monitoring will be primarily for the detection of fallout in Sarasota County in case of an atomic attack. However, the monitors will take monthly radioactivity readings and keep a continuous record of readings.

Equipment items that they have received from the CD include two radiological survey meters, a Geiger counter, two dosimeters and a dosimeter charger.

The **REACT** members will act as radiological moni-

tors at their homes, thereby adding 11 additional stations for such monitoring work to 20 existing stations in Sarasota County. The monitors are in constant touch with CD headquarters through a round-the-clock monitoring schedule. The radiological monitoring represents an expansion of **REACT** functions, according to Mark Stires, public relations director.

The monitors who received their kits include: Bernard Cowan, Jack Foreman, Michael Histed, Everett Lough, Frank Mesaros, Charles Payne, Paul Teeter, Donald Weeks, Kenneth Purdin, Walter McLannan and William L. McCracken.

Hurricane Betsy left Louisiana, but in its place, left a vast amount of property damage and human suffering, and still another danger faced the populace of the capital city of Baton Rouge. Citizens were yet to suffer many anxious moments, during the next few days after the hurricane.

The hurricane was over, but, during the storm, a barge loaded with deadly chlorine gas broke loose from its mooring and pounced dangerously down the Mississippi where it finally sunk. The river barge lay buried deep in the black river mud of the river several weeks while divers cautiously probed the depths of the muddy water for it. After many days of waiting and watching, the sunken chlorine barge was located, down the river, just South of the downtown area of the city of Baton Rouge.

Plans were made by the officials of the "Red Stick" City to lift the barge on a certain day, depending upon weather conditions. All citizens within a five mile radius of the barge were requested to leave on that day. The two hospitals within the five mile zone prepared to use emergency ventilating systems. Thousands of gas masks were shipped into the city and stored at the old Baton Rouge Junior High School building on Florida Street. All invalids and bed-ridden old folks were carefully placed on an Army Hospital Train and sent to Alexandria, La.

The Greater Baton Rouge Citizens Communications Associations, Inc. was called upon to establish an emergency radio net for communications. All radio and TV stations in Baton Rouge mounted CB antennas on their roofs, with **GBRCCA** members at the controls of the CB transceivers. **GBRCCA** mobile units were assigned to all areas of the City of Baton Rouge. Each **GBRCCA** mobile unit was equipped with a loudspeaker, a red flashing light, and a siren. These emergency warning devices were to be used to warn all citizens to evacuate, if the gas accidently was let loose. The mobiles were also loaded down with gas masks to hand out to the citizens.

Everyone gave a great big sigh of relief when the all clear was sounded. Mayor Woody Dumas of Baton Rouge and the Civil Defense office commended the **GBRCCA** for its fine spirit of participation with all concerned in the barge lift.

Officers elected for 1966 for **GBRCCA** were: President, Prentice Massey, KMR1703; Vice President, John Dobbs, KKR6383; Secretary, Bobby Flynt, KKR4528; and Treasurer, W. Don Curtis, KKR4805.

The Acadian CB Association, Inc., of Lafayette, Louisiana held its first meeting of the new year on Monday, January 3, 1966. The new slate of officials elected were Bill Vincent, KEA1448, President; Charles R. Henderson, KKR5251, Vice President; Herb Foote, KMR5040, Treasurer; and Mrs. Thomas Mohar, wife of KMR5655, was elected Secretary. The membership of this club covers the entire Parish of Lafayette, and there are approximately 20 members.

The club went on record as unanimously endorsing the HELP program as far as its original purpose was concerned, and they are vigorously pursuing a course that will qualify to affiliate with REACT. They have already set up facilities with the local Civil Defense organization and will in the near future have a monitoring station set up in the State Police Headquarters in Lafayette.

The Greater Baton Rouge Citizens Communications Association recently elected a new staff for the club paper: Editor, John Spain, KMR3126; Ass't Editor, Don Curtis, KKR4805; Reporters, John Buie, KEB5383; John Dobbs, KKR6383; Bill Johnson, KEB1338; Joe Aldridge, 1938; Bobby Flynt, KKR4528.

Dade County REACT has held elections for Officers and Board of Directors for 1966. Those elected are Fred George Muller, KDH1404; Director, John Hendry, KDI1946; Deputy Director, John Robert Ditmars, KMP-4911, Treasurer and Sara Jan Muller, KDH1404, Secretary.

(Advertisement)

CB IN ACTION

By Les Hench, KHA3272 Sales Manager Pearce-Simpson, Inc.

THE ANTENNA—FRIEND OR FOE?

Antenna design is based on its electrical length being some multiple of one-quarter wavelength at the frequency of operation. The multiple is determined by the load impedance to be presented to the transmitter. The one-quarter wavelength antenna is the most popular for CB use and has a load impedance of approximately 52 ohms, at its feed point. This makes possible the use of 52 ohm coaxial feed line such as RG-8U (for longer lines since losses are lower) or RG-58U for short leads where its flexibility and small diameter are important. The standard one-quarter wavelength mobile whip is an example of an antenna of this type. The antenna manufacturer takes into consideration several related factors including the mounting position and probable resulting capacity distribution to the automobile in determining what physical length will give it an electrical length equal to one-quarter wave. Sometimes this whip is shortened by inserting a loading coil to give it the correct electrical length with a much shorter physical length. This accomplishes the purpose of giving you an antenna which is of a more convenient length but which still appears to be the original length to the transmitter. This works well in practice with the only drawback being that the radiating area of the antenna has been reduced. This, of course, does reduce your range by a varying degree depending on how short the antenna was made. In some installations, it may be found that range is increased with one of these shortened antennas, however, this usually results from the more desirable (electrically) mounting location or the fact that the antenna was adjusted more nearly optimum.

An examination of different vehicles will show that mounting locations and the distribution of metal body masses in relation to the antenna will vary widely. This variation will cause differences in capacity to the antenna and its distribution along the length of the antenna. This means that the antenna manufacturers calculations cannot take into account all of these variables. As a result, the antenna will usually be improved if a final adjustment is made with the antenna in place on the vehicle and with as many conditions the same as they will be in use as is possible.

Continued next month.

WIN A COMPANION II CB

Your story of "CB in Action" can win a COMPANION II CB. Write and tell us how CB helped perform a service or helped you or your community in an emergency. Send your story to Les Hench, National Sales Manager, PEARCE-SIMPSON, INC., P.O. Box 800, Biscayne Annex, Miami, Florida 33152.

Elected to serve on the Board of Directors are Joseph Hamilton, KMP1946, Chairman of the Board; Kenneth Dunning, KMP3004; Albert Flaksa, KDI3393; Harold Kramer, KKP3373 and N. E. Riggs, KDI1621.

Since November of 1964, **Dade County REACT** has conducted a Motorist Aid Program every Friday, Saturday and Sunday on US 41 from the Palmetto ByPass (Fla. 826) to the Dade County line a distance of 38 miles one way. The Motorist Aid Program is run between the hours of 7:30 p.m. and midnight. Dade County's REACT's call letters are KMP2297 and we use channel four for the MAP.

Meetings are held on the second Tuesday and the fourth Monday of each month at the Eagles Lodge, located at 750 NW 72nd Avenue, Miami, Florida. Visitors are welcome to attend.

WESTERN

The **Ouchita CB Club**, and the Civil Defense did a fine job, during a train wreck a few weeks back, about 40 units were on the air and helping with all their might. The CB'ers were praised by the Sheriff and Mayor of Camden, Ark. for their untiring efforts to help. (Now we hope people will see that a CB or Citizen Band radio is as necessary as a telephone in your car, or home.)

The Miller County Civil Defense, held a meeting last evening and about 150 people turned out, including the ECO Club. Two hours was well spent on the program, ARE WE PREPARDED FOR A DISASTER. Pictures, slides, plus a well planned exhibition on Atomic Fallout. A live demonstration plus lecture was given, so it looks like Texarkana, Ark. will have a first class Civil Defense.

Most of the ECO members pledged their time and services.

The Emergency Communications Organization, has at this time been active in several emergencies; also they take time out for STEW suppers, and fellowship with other clubs. Springhill, La. and Waldo, Ark. were visited last two Sundays, and a club in the making at both cities. Radio Red Slim Bears, and other members take time out to Visit, Hope, Ark.; Camden, Ark. and various towns in the 4 state area. Organizing clubs and helping to start something. Hope Club had a nice turnout for their Ham Supper this week, about 70 were present. Some from Texarkana, Lewisville, Garland, Waldo, Magnolia, and a few towns that I can't remember all came out, and a good program was held, also prospect for new members.

At 10:10 p.m. an alert was flashed to the **Citizens Emergency Mobile Patrol (CEMP)** by John Bisceglia, KEJ5862 of radio station KIL, that the Los Angeles police were requesting assistance in search for a lost Sylmar boy.

Twenty-five (25) members of CEMP responded without hesitation (or thought of the uncomfortable weather), to aid in the search for 3½ year old David Bruce Dixon, who had apparently wandered away from his home earlier in the day. A frantic house-to-house search was organized throughout the Sylmar area.

CEMP units and scores of officers from the Los Angeles police department, the Los Angeles County Sheriff's Dept., members of the Montrose and Sierra Madre Search & Rescue Teams (with bloodhounds), began a systematic search house-to-house, rousing occupants from their sleep to allow searchers to enter their premises. Buildings of every description, citrus groves, culverts, drains, parked vehicles and every nook and cranny were searched throughout the entire Sylmar area and surrounding terrain. This intense search continued into the early hours of the cold and windy morning (Tuesday). At 3:00 a.m. CEMP units were relieved for much needed rest and hot coffee.

Many of the CEMP units (including this A.P.R.E.) returned at 6:00 a.m. to continue the search in daylight. Additional law enforcement personnel was brought in to assist in the search, this included 3 helicopters to search open areas, 3 mounted policemen for rough hillside terrain and 7 divers to search the waters of the Van Norman Lakes. Every possible effort was expended to locate the boy, still no tangible clues were found. Time went by, with still no clues and officials in charge harbored the theory that the boy may have been lured away and/or kidnapped.

The distraught parents appealed to the public via TV and radio to come forth with any bits of information they may possess, if anyone had seen the boy at any time since his disappearance, yet 24 hours later still no clues. By midafternoon and only after an all-out extensive second search of the immediate vicinity of

the boy's home, did the officials call off the massive search. However, the investigation is not closed and will continue until the boy is found.

During the past holiday season, this A.P.R.E. had the pleasure to the company of his friend and president of the Arizona **Emergency Local Radio Team (ALERT)**, Mr. Zene M. Kempf, KFA9774 and his son Terry of Prescott, Arizona.

Before returning to their home in Prescott, Mr. Kempf was gracious enough to assist many of the **Citizens Emergency Mobile Patrol** (of Reseda, Cal.) units in float escort and traffic control duties on January 1st during the 77th Annual Tournament of Roses Parade and the Rose Bowl Game.

We regretted to see him leave so soon, but only for a short time, as this A.P.R.E. will attend another meeting of **ALERT** in Prescott in the very near future. Hope Mr. Kempf enjoyed his visit with friends in Pasadena also.

News from Public Relations Chairman, Frank Farquharson, KMX1331, of **West Valley REACT**, comes the news that the club voted unanimously to financially adopt an orphan. The adoption is really a sponsorship designed to provide the child with medical care, education, nutrition and love that is so necessary for both physical and mental growth. **West Valley REACT** accepts this responsibility not because of an over-abundance of wealth, but because of an affection for the unwanted innocent children in this world that is so greatly needed. At present they are enjoying a very successful soap collection drive for the Armed Forces in Viet Nam. Credit must be given to the Valley AM and FM Radio Stations, KIL and KVFM along with the Valley newspapers for the fine coverage given this drive.

The Vandenberg Air Force Base REACT CB Club with 18 members is now one year old. Officers include: President, Earl Hintz, KE1613; Vice President, Ted Lott, KMX6881; Secretary-Treasurer, Ed Finucane, KID0685. Meetings are held every other Sunday night. Interested CB'ers should contact the many CB'ers on base.

Thirteen days after the disappearance of 3½ year old David Bruce Dixon, the law enforcement agencies still lack necessary clues which would indicate the fate of little David. The search has not been abandoned, it is continuing on a nationwide basis. The distraught parents still hope for his safe return. This A.P.R.E. who has participated in the initial local search, hopes that this can be accomplished (the safe return).

The Citizens Emergency Mobile Patrol (KEJ7036) welcomes back two members into its active status, made possible by membership boundary revision amendment to the By-Laws. We welcome Al Lewin, KOX0354, 863 Jenny Dr., Newbury Park and Ralph Gamble, KEJ0355, 1772 Montgomery Rd., Thousand Oaks, Cal. CEMP membership is open to all serious-minded CB'ers within a reasonable distance from San Fernando Valley.

On Saturday, Jan. 29th, 18 units of the **Citizens Emergency Mobile Patrol** traveled more than 50 miles to the Buena Park-Cypress area, to assist the Cypress-Buena Park P.A.L. League in presenting their parade. Units of **CEMP** took on duties in assisting to get all participants lined up prior to parade time, and to control traffic at given points along the parade route. This A.P.R.E. (**CEMP Unit 20**) was on hand also and met a very capable group of individuals whose general business is strictly Search and Rescue. None other but the Orange County Sheriff's Search and Rescue Unit, under the direction of Capt. W. J. Kretsinger. This S & R Unit is one of the best equipped units for this work, that this A.P.R.E. has ever witnessed. The group also has a diver, vehicles of varied description, including a portable canteen, and is self-sustaining for a long period of time. More on this group later with accompanying photos.

CB Operators Wanted—The C.A.P. is now open to all **CB operators** in this area, and is urged to become members of C.A.P. . . . Members may also use crystals (26.620 Mcs) for out of the CB band training use in their CB rigs, this includes Legal Skip, but not beyond the limits of the state line. According to C.A.P. Monitoring Officer, Harold Gates. Much of the C.A.P. miscellaneous business is now conducted on CB channels . . . this is a natural for all CB operators. Those individuals who are interested in this activity is invited to call Mr. Harold Sargent, KLE0972 on the air in the Utah County area or write to same at Commandant, C.A.P. Unit, 440 West Main St., Pleasant Grove, Utah for information, brochure and applications in the C.A.P.

Notice to CB clubs, individuals, CB operators—News of late has become very scarce in the Utah area, there-

fore all CB clubs, CB operators, etc. are solicited to forward any and all news to the following address: A.P.R.E. Junius H. Noyes, KLE0928, 52 South First West, American Fork, Utah 84003. . . . This also applies to club newspapers, etc. in the Utah area. No matter how large or small the item.

Excitement ran high the evening of January 11th, as **West Valley REACT Emergency Mobile Team** was called to alert. A simulated power failure had struck the Valley helpless. They were put through a test to see how well Emergency Communications could be handled. Mobile units were dispatched to Valley police station, fire stations, hospitals and key intersections. Because a base control could not be used, due to no power, command control was mobile and located on a hill so as to be able to transmit and receive all calls from the units. At the end of the exercise, approximately one hour, the units were told to reassemble at a location unknown to us. It turned out to be a **REACT** members home where a discussion on the exercise was made, along with coffee and donuts being served. A very interesting and educational evening for everyone.

January 18, 1966 was a sad day for citizens of the San Fernando Valley. At 7:30 p.m. **West Valley REACT** received mobilization notice to participate in a search and rescue. A little 3½ year old boy, Donald Dixon had been missing over 24 hours in the San Fernando-Sylmar area. The search was intensified by local law enforcement with the use of helicopters, mounted patrols, and skin divers, to search the very rugged terrain, reservoirs and rain drain off sumps which had been filled due to the recent rains. As of this writing, over 500 volunteers have joined the search, but unfortunately to no avail. **West Valley REACT**, furnishing 30 members, was supervised by Sheriff Don Snodgrass, who plotted and assigned the areas we were to search. By 1:00 a.m., tired but optimistic **REACT** members reported in to main control, who had been keeping informed as to latest details, and with great sorrow, returned to their homes. Hoping the new day would find the child safe and reunited with his family.

The Arizona Local Emergency Radio Team (ALERT) of Prescott, Arizona celebrated its second anniversary in January of this year. Congratulations to its membership with wishes for many more.

Shortly after **ALERT** was organized and its charter sanctioned, the officers of this group contacted the Sheriff of Yavapai County, of which Prescott is the county seat, and presented its offer of assistance on a voluntary 24 hour basis in any emergency and or search and rescue situation that may arise in the future.

After outlining its methods and support with 2-way radio communications system (which makes it mandatory that each member of **ALERT** has a base unit at home and a mobile unit in their vehicle, plus additional equipment, including walkie-talkies (1-watt) and necessary emergency equipment) **ALERT**'s offer was eagerly accepted, in view of the mountainous terrain in Yavapai County, the Sheriff's Dept. appreciates any assistance rendered. Since, **ALERT** has been officially called out six (6) times to assist in search and rescue operations.

Incoming calls are continuously monitored and upon receiving an alert from the Sheriff's office an **ALERT** member institutes a general callout for all available members to respond and proceed to designated area and establish contact with officers in charge of command post. A mobile unit acting as **ALERT** control is set up and other units dispersed with necessary equipment into search area.

A noble example of the fine work by this group is exemplified by a recent search for a seven (7) year old boy lost for 24 hours from his family's camp area and was found within the hour after **ALERT** units were sent into the field to assist. Each unit is systematically checked in before going into the search area, and continuous contact is maintained with all units, and again checked out upon leaving the area.

Also, being a civic minded organization, in November 1965, **ALERT** assisted the Prescott Kiwanis Club which held a telethon on a local radio station, an **ALERT** control was set up at a designated station and donors were asked to call in their pledges, money for candy, for servicemen in Viet Nam for Xmas. Units, each with a Kiwanis member, were dispersed to planned positions and upon receiving a pledge, the nearest unit was sent to pick up the donation.

Another civic function in which **ALERT** participated in, in December 1965 was the Kiwanis "Toys for Christmas" for needy children.

In spite of the remote region that Prescott is located in, **ALERT** boasts members living as far as 50 miles distant, and one in particular, lives more than 400

miles away and has attended 5 meetings in the past year and a half since he has become a member. (Note: Reference to this A.P.R.E., Mark J. Planovsky, KKY-0299) **ALERT** does not encourage membership over the 50 mile radius.

Sidewinder CB Radio Club, 10/20 Ridgecrest & China Lake, Calif. Dateline Feb. 1966. The last two meetings of the club showed a marked increase in both attendance and general interest. Two new members were signed, they being Mr. and Mrs. Mike Brady, KMX9261 and G. E. Whiteside, KEJ6964. Whiteside being A.P.R.E. for this area was appointed as publicity agent for the club. A discussion on FCC rules and regulations was held and plans were organized for special events to interest other CB'ers to join the ranks of **"The Sidewinders."**

Officers for 1966 of the **Midwest City Citizens Band Radio Club** are: President, M. C. Burkett, KEG1437; Vice President, Ken Davies, KEH4449; Secretary, Vera Herring, KKV2000; Treasurer, Dick Arthur, KEI0117; Publicity Chairman, Glenda Cox, KKV4812.

NORTHERN

The Wachusett CB Social Club was organized in April 1965 and hold their meetings the 1st Tuesday of each month at the American Legion Hall in Sterling, Mass. President is Les Watkins, KKB3131; Secretary, Evelyn Martineau; Activity Chairman is Ray Woods, KMA1302.

Officers of the **Circuit Breakers of Suffolk County**, N. Y. are: Chairman, Charles Reimann, KBG0711; President, Fred Kenneth, 2Q6944; Vice President. James Eckardt, KBI4001; Corr. Secretary, Richard Marcotte, KBI3195; Rec. Secretary, John Lee, KBI-5116; Treasurer, William Phifer, KKD8725. Nice to hear again from Brother Bill, KBG6627.

1966 officers of the **Metropolitan Radio Communication Club** are: President, Nat Brussel; Vice President, James Brumley, KBI1556; Secretary, Mike Borisuk, 2A5880; Treasurer, Elmer Molnar, 2W4250. Meetings of the organization are held the 2nd Tuesday of each month at Lincoln TV, Midland Ave., Garfield, New Jersey. Good luck to the group.

Newly elected officers of the **Lakeland Watters Radio Club** of Transfer, Pa. are: President, Lloyd Green;

Officers of the Mid-Hudson Radio Club pictured above are: Left to right—Installing Officer, Mr. Pells, Assemblyman, Victor C. Waryas; Vice President, Dave Mitchell; Secretary and Treasurer, Mary Brown; President, Walter R. Cole.

Vice President, Richard Chatfield; Secretary, Dan Foltz; Treasurer, Ron Clark. The club is planning a Country and Western Show in the near future. Also, they have donated a CB rig to a young fellow who probably would never walk again, to make his coming years a fulfillment of communications.

Officers of the **Germantown Emergency Mobile Squad** are: President, Robert Bleakly; Vice President, James Rice; Secretary, Betty Komar; Treasurer, John Pogzelski; Sgt.-at-Arms, Louis Weinberg. Present membership is 55.

The **North Country C-Bees** held its annual election meeting at Berlin, N. H. on January 2, 1966. The membership elected for its new President, Phil Lefevre, KBA6904; Vice President, Rick White, KBC2530; Secretary, Dorothy Meron, KKB4022; and Treasurer, Lawrence Lavoie, KMA0732.

The newly elected Board of Directors were: Skip White, KBD2108; Stewart White, KKA2946; Bob Gagne, KKB3866; Ernest Sanschagrin, KKA9509; Ken Gowdy, KBA6568; and Stan Mycko, KKA7270.

The North Country C-Bees meets every 3rd Tuesday of each month and all visitors are welcomed, so if any CB'ers traveling through Berlin, N. H. who would like to meet friendly people, just give a call on chan-

nel 11.

Officers of the **Machias Valley CB Radio Club of Eastern Maine** are: President, Agnes Johnson, KKA-7344; Vice President, Lee Clemmons, KMA2542; Treasurer, Esther Johnson, KMA4079; Secretary, Effie Drisko, KKB1534. How about that fellows the girls already have the majority.

Officers of the **Bradford CB Radio League** are: President, Dick Giddings: Vice President, Carl Knight: Corresponding Secretary, Esther Lance; Recording Secretary, Grace Baker; Treasurer, D. C. Sage.

From S9, A.P.R.E. William Davidson, KLP8083; Glens Falls, N. Y. A new club is being organized in Corinth, N. Y. The club is the **Corinth 10-10'ers.** At present they are holding their meetings in the Corinth Village Hall, the second Wednesday of each month.

The officers of the **Corinth 10-10 CB'ers** are: President, Thomas Collard, Sr.: Vice President, Ernest Webster; Treasurer, Loretta Collard: Secretary, Ruth Vincent. The Board of Directors are: S. Hyatt Brookins, Donald McCarthy, and Joseph Test.

The Corinth 10-10 CB Radio Club, is also starting a junior club for walkie-talkie owners. So many youngsters received talkies for Christmas and were using them only as toys. That the 10-10'ers will teach them how to use the talkies the right way, and still have a lot of fun.

Citizens Band Radio Operators March on Leukemia for the Danny Thomas St. Jude's Research Hospital—On October 17, 1965, The Rhode Island Citizens Band Radio Clubs and many independents banded together in a joint effort to provide transportation for teenagers collecting donations for Aiding Leukemia Stricken American Children; more commonly known as **ALSAC.**

ALSAC is a non-profit organization which supports St. Jude's Hospital of Memphis, Tennessee, sponsored by Danny Thomas. St. Jude's Hospital accepts any child free of charge, regardless of race, creed, or color, that has been stricken with leukemia or other catastrophic diseases.

Teenagers throughout the state were transported to their assigned area to march on leukemia by a Citizens Band Radio controlled mobile. CB's also worked and provided a radio control at headquarters, and mobile units supervised and coordinated the activities. **ALSAC** gives the clubs much credit for the success of the drive. Thanks to CB'ers, over $25,000 was collected.

A larger drive is anticipated next year with greater expectations, due to the increased activities of many of Rhode Island's clubs. Some club presidents and members are volunteering to coordinate the drive in individual communities and actively aid **ALSAC. ALSAC** feels that the CB's have made a major contribution to the success of this drive. Danny Thomas has cited all of these clubs with a personal letter of commendation.

The Pocono Area Radio Klub held its first meeting January 9, 1966. The club monitors channel 9 and each evening 6 to 9 and 9 to 12 two members of the club are on standby as the PARK Monitor. The club is fortunate to have Rev. Conboy, KNP6618, Hazleton as a member for he too takes his turn to monitor and he has been heard tell many a motorist words of wisdom.

The President of the club is Leroy Kemery, KLP-4597, Tamaqua; Vice President, Eugene E. Laigon, M.D., KMG3642, Coaldale; Treasurer, Al Bickowski, KMG2430, Delano; Secretary, Pete Albano, KMG4294, McAdoo. The other charter members are: Attorney P. J. DeSantis, KCD5874, Coaldale; Tom Braddock, KNP0036, Freeland; Dick Searle, KKG4776, Pottsville; David Richmond, KMG2187, Park Place; Joe Latanza, KMG2781, Brockton; Vic Caruso, KMG3240, Port Carbon.

At the first meeting 19 CB'ers applied for membership. The first Sunday of the month at 2:00 p.m. was chosen for the future meetings. The clubs mailing address is: 108 Orwigsburg St., Tamaqua, Pa.

CENTRAL

The Rib Mountain CB Club, Wausau, Wisconsin will be covering the big snowmobile race at Rhinelander, Wis., on Jan. 15th. There are 300 entries and the club will have 20 to 30 radio equipped cars stationed along the 40 mile course to handle any emergencies.

The Rock River Valley CB Club now has 210 members plus 7 honorary members. Elections of new officers will be coming up soon, a story will follow. The year was topped off with an interesting and unusual Christmas party.

Mr. Glenn A. Barth, KHI5814, (age 19) is another example of a fine CB radio operator. Your editor has known Glenn for a number of years through CB radio. Glenn sends this picture with his story. Glenn is an "old hand" at operating CB radios and related equipment. At his base station he employs a Regency Range Gain with a "golden" GCLR antenna. His mobile equipment consists of a General VS-2 with an 108" whip on the back end of his vehicle.

The Rock River Valley Citizens Band Emergency Squad has been formed. This is a branch organization of the **Rock River Valley CB Club**, and all members of the squad must become members of the club first. The emergency squad was formed to provide free assistance in any situation in which the local authorities might ask for the squad's help.

In the search for Susan Brady, the Winnebago County Sheriff's Dept. and the Rockford Police Dept. called for assistance from the emergency squad and were very impressed by the quick response and high degree of efficiency that the squad showed. They are now 100% behind the squad and are ready to utilize it in any situations that it might be of help.

NOTICE! The Rock River Valley Citizens Band Club holds its meeting on the second Saturday of each month at 7:30 p.m. in the Odd Fellows Hall, corner of Auburn St. and Bruner in Rockford, Illinois. Anyone interested in joining the club or the emergency squad should come to a meeting. Visitors are welcome.

PACIFIC

The CB 7-11 Radio Association Inc. of Spokane, Washington held their annual installation banquet on Jan. 8, 1966.

The new officers for the year are: President, Larry Proelss, KLD0752; Vice President, Jerry Woodland, KFJ2384; Secretary, Al Chafee, KLD1434; and Treasurer, Lee Stone, KLD2415. Trustees are: Chairman, Bill Eades, KFJ2228; Earl Strawn, KLD2275; Les Woodland, KND0514; Art Kringel, KND0157; and Don Young, KFJ1162.

A total of one hundred and eighty members and wives attended the banquet. Achievement awards were presented to four members for outstanding service to the association. Door prizes consisted of a new Scanner antenna and two mobile antennas, furnished by Antenna Specialists Co. Three microphones were also given to lucky winners and these were furnished by local electronics stores in Spokane.

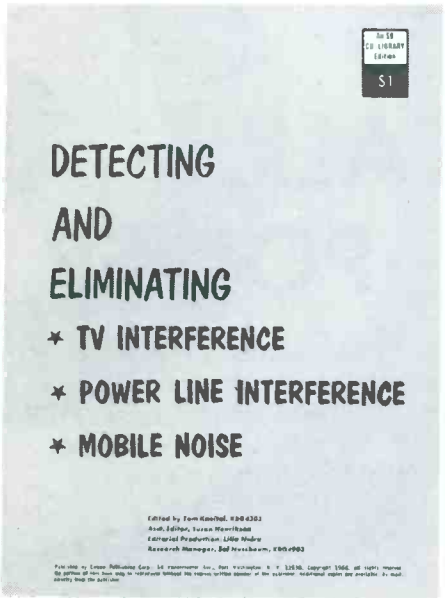
Dancing to live music rounded out a most enjoyable and entertaining evening.

On Jan. 22nd and 23rd the **CB 7-11 Radio Association Inc.** furnished radio communication for the March of Dimes Telethan held over one of the local television stations. We have helped with the pickup of money and pledges for the last four years. Over sixty mobile units were used to cover teh city and surrounding areas. The units were controlled by four base stations and these were controlled by a main base station situated at the Davenport Hotel where the telethon was conducted.

The CB 7-11 Auxiliary provided food at the base stations, enabling the hungry members to remain at their work for the whole day.

All members of the **CB 7-11 Radio Association** monitor channel 11 and we are glad to help any motorist coming into town, providing the correct method of communication is used.

LOOKIE!



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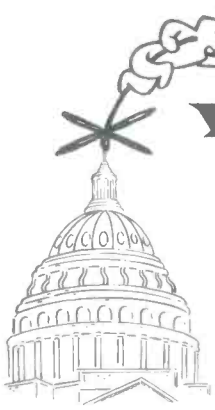

WASHINGTON OUTLOOK

The current FCC actions are:

• These CB'ers were asked to show cause why their licenses should not be revoked for failing to reply to official communications:

KG13090, William B. Hopkins, Ballwin, Mo.
KCG2401, John H. Tegler, Baltimore, Md.
KDC1728, Paul L. Dupree, Kalamazoo, Mich.
KLA6615, Angelo J. Usberti, Oakland, Calif.
KKI2057, Donald R. Davis, Arlington, Va.
KHG5570, Harold Pisarek, Detroit, Mich.
KIJ0417, Israel Garcia, Naguabo, P. R.
KNM5983, William J. Cargill, Milan, Mich.
KLA2126, Robert L. Valko, Oakland, Calif.
KLA6881, James T. Grealis, Hayward, Calif.
KDH1733, Harold G. Maxwell, Opa Locka, Fla.
KMI2204, Raymond W. Wheatley, Jr., Baltimore, Md.
KEH4790, Bruce R. Rowan, Dallas, Tex.
KMM3104, Larry G. Moody, Huntsville, Ala.
KMA3113, Gerald F. O'Neill, Providence, R. I.
KEH6827, Joe B. Fleming, Dallas, Tex.
KND0732, Clyde T. Tobiason, Spokane, Wash.
KDD7729, Randall R. Taylor, Atlanta, Ga.

• These operators had their CB licenses revoked:

KMM7489, Julian E. Howell, Atlanta, Ga. (operating station as a hobby or diversion and for failing to identify the station at the beginning and end of each transmission or series of transmissions, and without identifying station with which communicating).

KKM2152, Arthur Blake, Jr., Atlanta, Ga. (failing to reply to official communications).

KEI0385, E. P. Sweatman, Jr., Denton, Tex. (not replying to official communications).

KLT0131, Martin Cruz, Santurce, P. R. (not replying to official communications).

KNA1457, John J. Rodriguez, Felton, Calif. (not replying to official communications).

KFD4259, Robert Leiske, Alameda, Calif. (not replying to official communications).

KGB1063, Steve P. Wawok, Denver, Colo. (not replying to official communications).

KKX5010, Raymond R. Scholl, San Diego, Calif. (not replying to official communications).

KLN4732, Robert L. Kendrick, Detroit, Mich. (not replying to official communications).

KGC2144, James L. Crabb, Denver, Colo. (failing to respond to official communications).

• This CB'er received a notice that he had violated the rules to the tune of a $100 monetary forfeiture:

KMX7281, Ray E. Kirchoff, Glendale, Ariz. (communicating over a distance of more than 150 miles).

• Going one step better, the FCC sent the following CB'er a notice of $200 monetary forfeiture:

KMI2529, Roger T. McIntyre, Woodbine, Md. (for failing to identify station by assigned call-sign at beginning and conclusion of each series of transmissions and transmitting communications over a distance of 150 miles to unit of another CB station on a channel reserved for communications between units of the same station).

• FCC actions against the following CB'ers were dismissed or dropped:

KLN7451, Mrs. Mary G. Shearer, Detroit, Mich. (licensee cancelled her license and FCC will take no action to collect previously incurred monetary forfeiture).

KMX1006, Broadway Auto Parts, Santa Ana, Calif., (revocation action dropped because licensee settled with a monetary forfeiture and has taken corrective measures to preclude a recurrence of the violations which formed the basis for the proceeding).

KFA2323, Angie D. Mizer, Norwalk, Calif. (license was cancelled).

KLK7610, Floyd O. Whitcomb, Davenport, Iowa (licensee settled with monetary forfeiture and has taken corrective measures to preclude a recurrence of the violations which formed the basis for the proceeding).

KLP7387, R. B. Nelson Co., Rochester, N. Y. (same as above).

7Q2265, Motor Inn Service, Miami, Fla. (same

as above).

• In other FCC actions, the FCC lowered the monetary of one CB'er to $50:

6W7228, Don G. Cooley, Gainesville, Ga.

They also dismissed with prejudice the CB applications of former CB'er Ernie Walker of Espanola, N. M.

They changed Section 95.95(c) of the CB rules to clarify station identification requirements and to include examples of proper station identification. This was done because of widespread misunderstanding of ID requirements by CB'ers. The FCC's suggested examples of proper CB station identification are included in the "S9 CB Operators Manual" (included in this issue of S9).

They revised FCC Form 703, "Application for Consent to Transfer of Control of Corporation Holding Construction Permit or Station License" for use in the CB service. It simplifies and reduces the information required to be furnished by such applicants now using Form 400 or 505.

They publish a report on last November's northeast power failure and said that "some citizens radio licensees functioned as auxiliary units for police and fire departments, arranging for emergency transportation and assisting in traffic control." As for Ham stations, the FCC said that while stations were alerted and operational, little emergency traffic was handled.

The FBI made its first move against a CB'er in the New York City area in early February when a 54 year old TV repairman was accused of broadcasting obscene matter over the air. The CB'er, Matthew O'Hara, KKD1443, of Long Island City, N. Y., faces two years in prison and/or a $10,000 fine if convicted.

The U.S. Attorney's office stated that numerous complaints during the past few months had been received by both police and the FCC from local residents in O'Hara's area.

The FCC's new head of the Amateur and CB Division is Everett Henry, formerly with the Marine and Aviation Division.

ANTENNAS

Continued from page 50

up costs of mailing or renting a projector.

If you want a long-term program, you can also borrow a complete movie course in basic electronics. These are films used originally for training technicians in the services. The navy, for example, offers a series of 16 films that covers electronic fundamentals from the ground up. A similar course is available from the Army. With these and other films, you'll find that ordering must be done well in advance of showing.

Finally, don't overlook free ones offered by big corporations who want to shine up their public image. General Motors, for example, has a cartoon feature which is non-electronic, but mighty handy for the do-it-yourself CB'er. It shows in animated style the proper way to use a dozen different hand tools. Your local power and telephone company are also good bets for free films, as are major oil companies (see cut).

Although the catalog mentioned earlier is the best source, here's a list you can write to for additional film titles and sources:

Motion Pictures
E. I. DuPont de Nemours & Co.
Wilmington 98, Del.

GM Motion Pictures
General Motors Film Library
GM Building
Detroit 2, Mich.

Institute of Visual Communications
40 East 49th St.
New York, N. Y.

Encyclopedia Britannica Films
1150 Wilmette Ave.
Wilmette, Ill.

Scientific Apparatus Makers Assoc.
20 North Wacker Drive
Chicago 6, Ill.

KBG4303 RIDES AGAIN

Continued from page 7

but does not give it any official recognition status, by the way.

ANTENNA ANXIETIES

An anonymous reader sent along the following improbable story—quite unbelievable but easy reading nevertheless.

Seems that a CB'er wrote to the engineering people at the FCC to say that he had found hydrochloric acid good for cleaning soot and grime from his CB antenna. The FCC engineers wrote him: "The efficacy of hydrochloric acid is indisputable, but the corrosive residue is incompatible with metallic permanence."

The CB'er replied that he was glad the FCC agreed with him.

The FCC tried again, saying: "We cannot assume the responsibility for the production of toxic and noxious residue with hydrochloric acid and suggest that you use an alternative procedure."

The CB'er again wrote that he was pleased the FCC agreed with him.

Finally the FCC wrote to the CB'er: "Don't use hydrochloric acid on your antenna, it will eat the thing up."

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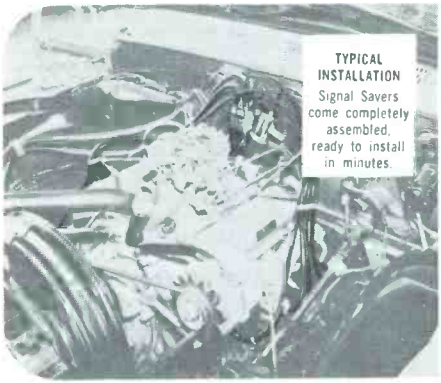

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FREE SAMPLES—CB QSL CARDS—$2.50 per 100 in 3 colors. Garth Printing Company, Box 51S, Jutland, New Jersey.

QSL's. Smart CB'ers buy their QSL cards from The CBC Wholesale Club. Box 631, Lexington, N. C. See half page Advertisement on Page 61.

New! Give CB'ers your own book matches—your name and call letters printed in red, blue, and black on gold or silver covers. 100—$3.25. Frank White, 111 Williams St., Greenville, S. C.

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