TWO FREE GIFTS — Pages 20 & 38 SEPTEMBER 1965 50c the citizens band journal A TEXAS TORNADO ANTENNA **CB SPUTNIK** HOW TO SOLDER BUILD A FSM SAVED AT SEA BY CB CB TUNE-UP GADGET RADIO MAGAZI



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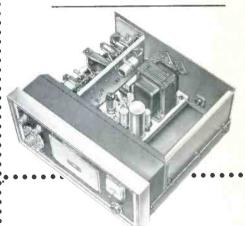
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September, 1965

the citizens band journal 14 Vanderventer Ave., Port Washington, N. Y.

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READER

ON THE MOVE

Dear Sir:

I enjoy your magazine very much. In fact we own a store that sells magazines. We sell the same amount of S9 as we do Playboy. So when you can top Playboy you know you got it made. Clinton has a population of over 30,000 people.

"73"
Phillip Ohsann, KNJ0105
Clinton, Iowa

Maybe we should run photos of CB rigs minus the cabinets?

ACHTUNG!

Dear "S9"

In reference to your March issue of S9. I fell in love with the "Achtung" certificate and wondered how you acquired the lingo, so just the other day we had a visitor who is a recent arrival from Germany and is not shy of the fact that her English is broken. So knowing that she does not get offended of making a joke of their nationality I asked if I could hear this "Achtung" in broken English. So she did—

"By Golly" it was a scream and she loved it

too so she read it aloud again.

I'm trying to find a way to get this on tape, and I will sure send it to you.

All the best from CB Club "15."

Ben Biro, XM15-065 Penticton, B. C.

Yeah Ben, we heard that scream all the way down in New York but I frankly didn't think it was from someone looking at an "Achtung" certificate. For the benefit of those readers who haven't yet received their free certificate, we still have several million of them left so get them before we are gone. All you have to do is write and ask. If you are a subscriber, send us a mailing strip from a recent issue of S9 and we will print your name on this certificate in fancy lettering.

WHO'S FISHING

Hi Tom,

Many remarks are made about our "fishing poles" on our cars. Well, to several people that is what it must have appeared last week. While driving across the Eau Gallie Causeway, I heard something hit my 102 inch whip. Looking in my rear view mirror, I noticed coming into view a live shrimp, hook, line, and sinker. As you can guess, a careless fisherman has cast his line from

one of the bridges without waiting for me to pass. Result—I had a true "fishing pole," bait and all on my car.

Just thought I'd pass it along, as it might bring a chuckle or two to our sometime blue CB world.

Kemper Mazzarelli, KKP5223
Eau Gallie, Florida

Now let us see how good you can pull in signals.

NEGATIVE GROUND PROBLEMS

Gentlemen:

Check the import figures on Volkswagens! All are 6v. Negative ground. Why aren't the transceiver manufacturers all after this 6v business with all-transistor compact sets? We need small sets and low battery drain. Some, are missing a good thing.

N. J. Schweitzer Defiance, Ohio

I have also maintained that Volkswagens are the next step up from windup roller skates, however, I can sympathize with you in your search for a rig to fit an imported car. My own car is 12 volts positive ground, and relatively few pieces of transistorized CB equipment will function in the car.

HELP NEEDED!

Dear Tom:

I would like to know if you could help me out, I am a old time CBer, and I have had cards from all over, but in the tornado we had here, I lost everything. I had my CB rig lost and smacked up and lost all of the QSL cards I ever had. I would be glad to send any out to anybody that would send me a card so I can start all over again. I really got hit hard here. I lost 2 homes, a car and my truck stop. I lost the whole works and got to start over. So if you could print a little note in S9, I would sure be glad.

Yours truly, Richard Gresso, 18W7230 % Burger Chef Systems, Inc. 1350 Stadium Dr. Indianapolis, Indiana

OK Dick, we are running your request, but the next time we go through Indiana you owe us a sack of Burger Chef Hamburgers (rare with everything but hold the onions).

19



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by TOM KNEITEL

GETTYSBURG ADDRESS

During a recent excursion to points south, I stopped by the FCC's Gettysburg, Pa., CB application processing office to see how it's all done.

We got a chance to speak to the folks from the Commission and get taken on a tour of their facilities there — and it's really quite an operation. Heading the office is Supervisor Richard C. Zeigler, and buried beneath several tons of CB applications was Chief of the Control Section, Miss Martha Sterner.



Dick Zeigler



Martha Sterner

How they can sift through about 2,500 CB applications a week and still smile is difficult to understand, but they do it. And you CB'ers who have been around for a few years can remember when it took about three months to get an application processed. Now it's less than three weeks!

CB UNITY?

A few issues back we asked readers to let us know if the wild-eyed radical bunch calling themselves the "American Citizens Band Association" (ACBA) was still on the CB scene. Only a few readers seemed to know, but one was kind enough to send along a copy of the February-March issue of the ACBA newsletter. This was an edition devoted to "CB unity" telling how great it would be if all CB'ers of good will would send the ACBA's membership committee \$3, apparently to finance more of their proposed good work on behalf of CB.

Well, after reading several paragraphs on togetherness and unity we finally arrive at the meat of the whole spiel. They have a hate on for Lafayette Radio. The ACBA accuses Lafayette of being in some sort of secret pact with "two CB magazines" in the creation of a new CB club, "a commercial venture," to be in competition with ACBA. Members are forewarned about being "taken in" by Lafayette and their club.

The editorial goes on to say that, "We have had several conversations with them (Lafayette) over a long period of time as well as the exchange of letters." However, in the very next paragraph they state, "We made several attempts to talk to the Lafayette people by telephone. They are never in and do not return our calls when requested to do so."

Lafayette Radio is definitely not in a secret plot in conjunction with any CB magazine. Furthermore, the Lafayette folks have always been easy to contact by phone, by mail, and in person, on any matter concerning the betterment of CB when the matter is presented in a logical and realistic manner by rational and responsible persons. There are many thousands of CB'ers and local CB clubs who know this from first hand experience. ACBA has yet to learn that manufacturers have, from time to time, been known to sponsor excellent non-commercial organizations. Hallicrafters sponsorship of REACT is one example.

Then, after all of this fancy linguistic dancing from ACBA, we hit the actual bone beneath the meat. To quote the ACBA, "We have attempted to sell them (Lafayette) advertising in the (ACBA) Journal and with the exception of the ad previously mentioned, they haven't supported ACBA. They place several ads in each issue of other magazines while we, without avail, tried to get them to support our national organization."

So the ACBA is still up to their old tricks of trying to blackjack their way into the hearts of CB'ers and CB manufacturers. If you don't advertise with us, we'll give you the full and

Continued on page 71

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- 9 crystal-controlled transmit and receive channels
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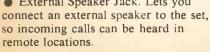
channels; dial marked in both channel numbers and frequency

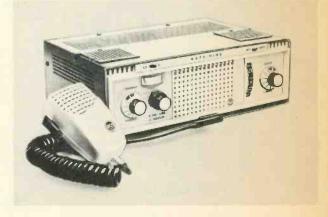
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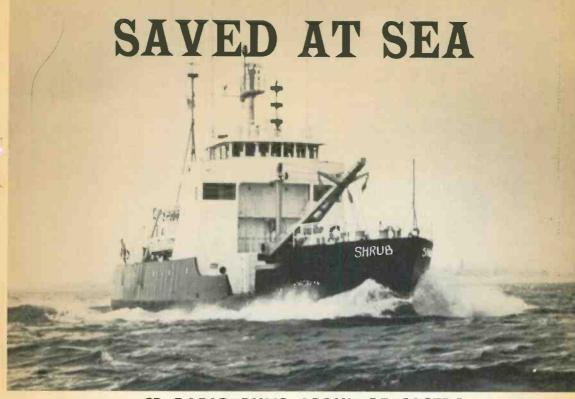
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8 • September 1965

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CB RADIO RUNS AFOUL OF CASTRO

by RICHARD APAKIAN

AS TOLD TO EDWARD MAUTNER
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The motor vessel "Shrub," a converted Coast Guard Buoy Tender, pitched violently, decks awash and super structure cracking in turbulent seas, seventy-five miles southeast of Camaguey Province off the hostile Cuban coast. The date—February 21, 1963. The ship was en route from Miami to Dominican Republic on a hunt for sharks, lobster and treasure with a nine man crew aboard when it ran into a fierce storm.

"Things really got bad," relates Dick Apakian, 30, the fishing boat's radio operator. "We were taking water fast when suddenly the ship was heaved thirty feet into the air on the crest of a monstrous wave. We pitched there for a few seconds and then slammed down into the sea's angry trough like a piece of balsa wood.

The anchor was torn from the housing—we tried to turn the ship into the storm but the electrical steering mechanism jammed and tore

the bottom of the boat out. I tried sending Mayday signals but the power failed. Minutes later the bow was under water and we were sinking. By some stroke of divine providence, power was momentarily restored and I sent frantic calls for help on both CB and marine channels. Minutes later we were forced to abandon ship and the nine of us, including the captain, took refuge in a twenty-six foot whaling boat. As the storm raged the boat's seams began to split apart and we bailed furiously to keep affoat. Exhausted and almost completely spent, we finally formed teams of three—six resting and three bailing, day and night—and that's the way it was for four days and five nights . . . drifting with no food or water except for three cans of peaches.

"White tip sharks followed the boat constantly. Every time one of us went over the side to try to repair the boat, one of the sharks would attack and force him back in the boat againmaking repairs to the outside hull impossible.

"On the fifth day a lighthouse was sighted. We painstakingly maneuvered a landing of the battered craft and immediately faced thirty or forty guns trained to our heads. We learned later that we had landed at a Russian Sub Base. Here we were imprisoned for a week and then taken to G-2 Security Headquarters in Havana where we were accused of being CIA agents.

"The next 67 days were spent in the Cuban Prisons, including 43 days in solitary confinement. Our cells were 9' x 12'. The food was bad—rice and beans, sometimes macaroni and beans for lunch and dinner. They gave us a rack for a bed, with mattress and pillow but no blanket. We felt lost and forgotten. During those lonely hours we could not have known that my Pearce-Simpson "Companion" CB signal was picked up in Miami, 400 miles away, and the message related to the proper authorities.

"Throughout my long period of confinement, I thought of many things. Most of them concerned my experiences aboard the "Shrub" and the events leading up to that terrible day in

February.

"As the ship's operator I was in contact with other fishing vessels in the Caribbean area trading weather and fishing information. During the day, I operated both marine and CB radios and found that I was using CB almost constantly.

Skip conditions at night allowed me to hear CB'ers in cities all over the United States. As we approached Cuban waters I didn't realize that I was operating on Russian monitored CB frequencies used by their shore stations along the Cuban coast. The Russians operate on 10 watt CB units compared to the 5 watt legal limit in the United States. CB proved a more valuable channel of communications than regular marine radio because of the crowding.

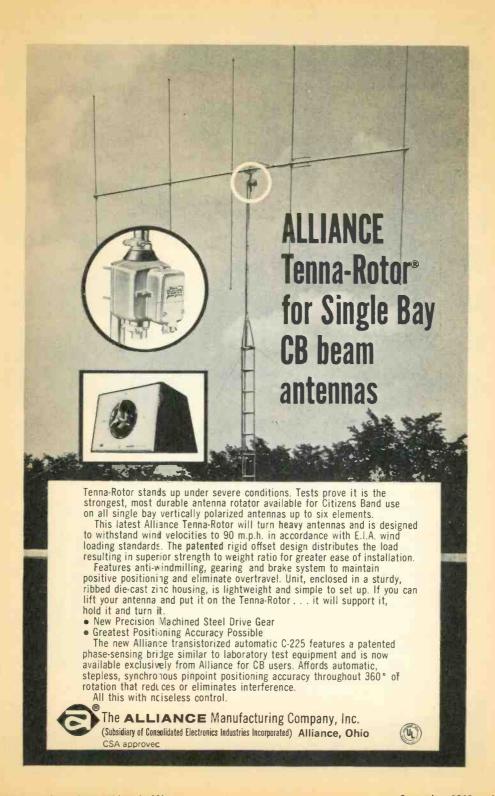
"The days dragged into months until we were finally herded together in a room one morning and told that the Cuban G-2 had declared us innocent. Some days later we found that Attorney James Donovan had interceded on our behalf. The nine of us were released and sent back to the United States along with the Bay of Pigs prisoners.

"Now that I am back in the United States, it seems as if the whole episode was a bad dream. But the constant stream of refugees is a grim reminder of my shipwreck and confinement . . . and how lucky I am to be home and free."

Dick Apakian today lives in Philadelphia—he is the sales manager of a company specializing in safety equipment and he is also an executive in a motion picture studio. Perhaps if it had not been for CB, he might still call a Cuban prison his 10-20!

199





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THE TEXAS TORNADO

GIVE YOURSELF A LEGAL 35 WATT CB SIGNAL!

by PETER PATTIESON, KBG8911

They do things in a big way in Texas-not necessarily because they want to, but mostly because Texans have to. One example is in CBsometimes the distances between CB stations is so great that it's a long haul for a puny 31/2 watts of CB signal. What to do to increase the signal without breaking the law is the problem -and here is one answer. I saw this thing tried during a recent trip through the Lone Star State and decided to see how it worked for normal. non-Texas style, CB'ing. Guess what, this antenna (which I have dubbed the "Texas Tornado") really lays out a whopping signal-gives you more than 10 DB of gain, turning a 31/2 watt signal into about 35 watts. It's legal, it's inexpensive, and 35 watts of CB signal does a bang-up job.

It does have a few differences from regular CB-type antennas. For one thing, it's horizontally polarized. This means that the base station(s) you will be working will have to use a similarly polarized antenna for maximum results. Mobile stations will have to be similarly polarized with one of the new horizontally polarized mobile antennas now being introduced to the CB market. Horizontal polarization, by the way, is an extra bonus because it reduces the signal strength of regular vertically polarized CB signals entering your receiver. There are a

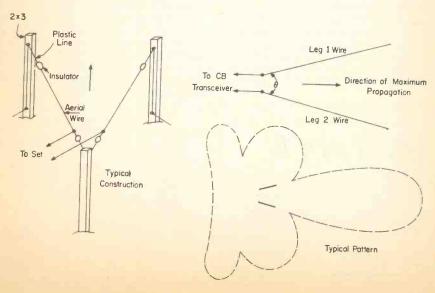
number of "horizontally polarized" local CB clubs springing up around the country.

Another difference from regular CB antennas is that it is not only directional, but the direction of the signal can not be rotated. Therefore, good uses for this antenna are from base-to-base, for when your base station is located a considerable distance away from a city or town and you want to speak to your mobile units (or other bases) in the town. In the event, when you hit the band with this one, everyone on the channel will know about it.

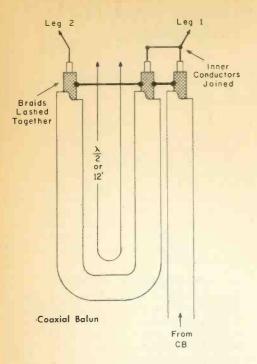
LOCATING THE ANTENNA

Since the antenna is basically a one-direction affair (it has several minor signal lobes in addition to the main one), it will be necessary for you to plan the proper direction for the construction for the antenna. You will need a map of your area, a compass, and (when you find the proper spot) at least 300 feet of space in which to string up the Texas Tornado.

First, locate your base station on the map and place an "X" on the map. Next, locate the general area with which you will communicate, place another "X" there. Now, draw a line between the two "X's" and compute the compass direction. Let's say it's north-north-east. Now, take your compass out in the yard and find this



The BIG Switch Is To S9



direction, placing a marking rod flat on the ground pointing towards the desired direction.

The Texas Tornado consists of two horizontal long wires which will straddle this marker, they are placed in a "V" shaped configuration, with a 35° angle at the point (the feed point)—this means about 17° on each side of the marker. The proper angle may be easily determined with a draftsman's compass (available at any school supply store for a few cents).

The apex of the "V" (the feed point, that is) may be on the side of the building in which the CB transceiver is located, or you can use a guyed or self-supported 2 x 2 plank as a mast. Whether you use the building or masts for the apex support at the transceiver end of the Texas Tornado,

7.11713E

NUSSBAUM'S FOLLY! The printer goofed on our last order and ran off 3 times the amount of our famous wild CB QSL cards than we wanted. We refused to pay for the extras and can now pass these savings on to you. You never saw cards of this quality at 175 for only \$1. All you do is add your name and callsigns and they look better than cards costing many times this price. Order; enjoy, enjoy. S. Nussbaum, 1440 50th St., Brooklyn, N. Y.

you will most likely require two additional masts, one for each end of the antenna's legs.

Measure off at least 291 feet for the "far" ends of the antennas two legs—these two ends will be about 175 feet distance from one another if you have measured correctly. Erect your masts here, unless you have conveniently landed within a few feet of another building which can be used as an antenna support.

CONSTRUCTION

Now that you have established the location of the antenna, the next step is to hang the sky hook. Place screw eye insulators at each of the three antenna termination points. At the feed point, hang two antenna strain insulators from the screw eye insulator, attaching to each exactly 290'9" of copper antenna wire. While the actual antenna length for each leg is 290'5", we have allowed a few inches extra for connections to the insulators at each end.

Run each of these antenna wires out to their respective "far" points and attach to their respective hitching points.

All that's left to do now is to connect the antenna to your rig. It will be necessary to use a matching Balun to get this antenna properly working with your CB rig, and we have therefore provided you with the details of just such a coaxial Balun. Note that the Balun has an input from the CB rig and output connections for each leg of the antenna. This Balun is made from RG-58/U coaxial cable, connected as shown, and with the braids lashed together as indicated. This Balun is located directly at the feed point, any length of RG-58/U may be used to run from the Balun to the rig.

All you have to do now is connect the antenna to the rig, peak up the tuning of the rig and you're on the air.

It occurs to me that all of you may not have all of the footage necessary to try out this antenna so I have computed measurements for smaller versions of the antenna, which, while providing less gain, can be erected in less space. Add a few inches to the lengths indicated to allow for wrapping around insulators.

	Apex Angle	
Leg length (ft.)	in degrees	Gain (DB)
254.1	37	9+
217.8	40	9
181.5	45	8
145.2	50	7
108.5	58	5+
71.8	70	4+
35.4	90	3+

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 Assembled GWW-14, 9 lbs.
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GX-142

THE LOW BANDER

BEST WAY TO MONITOR 30 TO 50 MC/S

by ROBERT McAIRE, KIC7608

Having tried all manner of homebrew antennas to monitor my state police department, which operates their radio communications network in the 30 to 50 mc/s "low band," I finally decided that perhaps the best approach (considering my limited finances and desire for optimum reception) was not via the homebrew route.

Yes, I had tried all manner of long wire lashups, short wire lashups, alligator clips on the window screen deals, TV antennas, CB antennas, and whatever looked like it might work. Nothing worked well, since my desired reception area ranged encompassed several hundred square miles. Then it struck me—a ground plane for "low band" is the same thing as a CB ground plane, only a CB GP is larger. If I could find a real inexpensive CB GP,

chop it up and throw away a good portion of it, using the remaining pieces for receiving only. I eventually found a GP which sold for \$6.50 and decided that, although it didn't seem as sturdy as the standard brands, it would probably suit my purposes fine (especially since I would be relieving it of a considerable amount of wind resistance when I trimmed it). Subsequently to my purchasing this antenna I noticed that Lafayette Radio sells a CB GP for \$7.90 (stock #42-G-7401WX), which looks pretty sturdy and is made from tubular aluminum.

Anyway, I figured as long as I had to trim it down in bits and pieces, inch by inch, that I would make up a little chart and pass it along to other CB'ers who might want to try this method of emergency service monitoring

LOW BAND ANTENNA LENGTH

Freq. (mc/s)	Whip	Radials
30 to 31.5	96"	96"
31.5 to 34	90"	96"
34 to 36.5	841/2"	841/2"
36.5 to 39	79"	841/2"
39 to 42	72"	841/2"
42 to 44	68"	841/2"
44 to 48	62"	841/2"
48 to 50	57"	841/2"

maybe I could trim it down to the higher frequencies used by the many "low band" stations—because I had later discovered that, in addition to my state police; my local police, fire department and sheriff were also in this band, as well as several other things like my local forestry station, ambulance service, etc.

So out I went to find the *most* inexpensive CB ground plane I could buy. Not having any local fellows who had a spare which they no longer used (never overlook that possibility, by the way), I shopped around and found that some of the local CB shops could let me have a CB GP for a lot less than I had imagined. I found that most GP's ranged from \$12 on up—this was a reasonable price to pay for a CB antenna, but, heck, I was going to

on this band. When you determine the frequency of the "low band" station or network you wish to monitor (see April S9, page 9), then check our chart and start trimming. If your antenna has hollow elements, use a pair of pliers to pinch the tubing at the cut ends of the elements. These antennas are pretty much broadbanded, especially inasmuch as they aren't going to be used for transmitting, so if you cut the thing for, say, 32 mc/s, and you want to hear a station on 45 mc/s, the loss of signal strength because of the antenna size will be relatively low.

Use RG-58/U coaxial cable to feed these antennas.

19

*se-lec-tive(sǐ lěk/tǐv) adj having the function or power of selecting; making selection characterized by selection Radio.having good selec

FACT! - 23

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FEAR INDUCER

by DICK TURPIN, KCF2700

SURE LOOKS IMPRESSIVE ANYWAY!

In the pursuit of saving your mobile CB rig from theft, the next best thing to actually having a burglar alarm in your car is to have something which lets prospective Citizens Bandits think that you have a burglar alarm.

Did you ever see those nifty burglar alarm warning signs posted in the windows of trucks? Well I did, and I set about designing one for myself just such a sign for my CB mobile. The results were nice looking, and (so far) nobody has clipped my rig yet (I lost one last year).

Other locals admired the sign, and at their suggestion I am giving you a chance to have one of these signs for your own mobile unit. Here it is. Just cut it from the page and Scotch tape it to your window.

WARNING!
THIS VEHICLE PROTECTED BY

Radarmatic
ELECTRONIC BURGLAR ALARM

IS THAT WHAT'S TROUBLING YOU?

With apologies to Eddie Lawrence, "The Old Philosopher."

Say Cousin!

You say you bet on the Mets,

And when you told your boss you'd like to go to the game he made you buy his old Edsel, And you left the top down and it rained . . .

All over your new Courier.

Is that what's troubling you?

Hey Bunky!

You say some local CB'ers as a joke stuck an ad in S9,

And said you were selling your new Browning base station for \$50,

And the phone didn't stop ringing for 5 weeks;

And you received your order of QSL cards, 3000 of them, 4 colors,

And your call is printed wrong on every one of them;

And the fellow you promised to swap cards with, but couldn't-

He just called to say he's coming over to punch you in the nose.

Is that what ails you?

Hard-Luck Buddy,

You say somebody just tossed a rock through your window ...

With a TVI complaint attached!

And you were joking with a guy about a 250 watt CB rig,

And he reported you to the FCC,

And an investigator just walked in to your shack,

And heard you signing off with a Venezuelan!

Is that why you're banging your head against the wall?

You again?

You say that the fellow you met at the Jamboree and invited to "drop in" just showed up, With his XYL and 9 kids,

And two mean chow dogs,

And they're staying for a week!

And you told him he could be your "unit 2,"

And he worked 18 stations in Red China,

And the FCC is calling you a threat to national security,

And the State Department wants to deport you—to Albania.

Is that why you're quivering?

Hey Miserable!

You say you sent money to CB Horizons,

And the next day they stopped publishing,

So last month you subscribed to a new CB magazine,

And now you hear they may call it quits too?

So, for a feeling of belonging, you joined the ACBA,*

And they said they were sending a representative to the FCC,

And someone told you it was to burn down the building,

And one of the FCC Commissioners is your uncle,

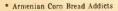
And he never liked you to begin with.

Is that why you're shaking friend?

Well, lift up your head, face the world, never give up the ship! No! Never! You can make it!
You'll show them all!

Yes, subscribe to S9! March down to the mailbox, the wind and rain in your face; proudly; defiantly; rising above past failures; secure that you've finally chosen a winner!

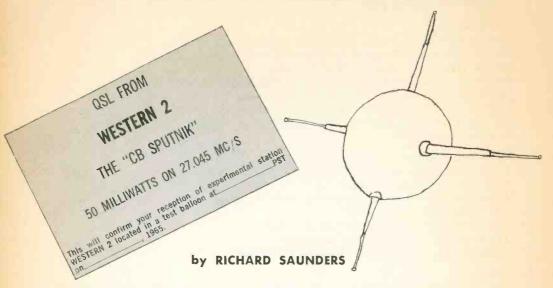
Then go home, tell your mother-in-law you'd rather do it yourself; buy a new rig and install it on your XYL's best table; call your boss and demand a raise . . . THIS is the start of a new life for you, at long last!





THE CB SPUTNIK

BUILD YOUR OWN CB SATELLITE—AND IT WORKS



I got to thinking one day how the Hams have their own "Oscar" satellite, the TV stations have "Early Bird," and Uncle Sam has scads of satellites. Why not CB'ers? We seem to have gotten the fuzzy end of the lollypop on just about everything else so why shouldn't we at least have a satellite of our own. So I built one.

Admittedly, it didn't get a very elegant launching because when I asked some of the fellows at the local airport if they would let me hang it from any of their private planes they giggled at me. Finally I was reduced to hanging the satellite from one of those big helium filled balloons they sell at kiddie parks. It slowly drifted skyward, sending out its raspy signal on Part 15 Channel B (27.045 mc/s). Without distance measuring equipment it was hard to tell exactly how high it reached before we lost its 50 milliwatt signal, but it was several thousand feet!

A few days later the unit was picked up halfway across the state and returned to me

-still in working order!

I'm passing along the design of my unit, you may wish to build one yourself. Even if you never launch it, it makes an interesting desk ornament which can be turned on and off and monitored on your own CB rig. It requires no license inasmuch as it operates under Part 15 low power rules.

CONSTRUCTION

I built it on a small piece of corrugated cardboard (to keep it as light as possible, but mainly because I don't have any chassis punching tools) which worked out fine and dandy. The layout of the parts isn't critical, but I kept all leads as short as possible.

The circuit was placed inside the "Sputnik," which was a hollowed out clear plastic toy ball (it originally came with a plastic duck floating in some water inside the ball). The ball was pried apart at the seam and the transmitter placed inside. The antenna, a short telescoping whip, was attached to the ball. I used only one whip for my rig, but the use of three additional unconnected whips would have made it look somewhat nicer.

After the transmitter was located inside the ball, I packed the ball with foam rubber to keep everything from jogging around, and also as protection during "landing."

TIPS

Use a miniature wire-lead crystal, soldering directly to the crystal wires. When soldering to the crystal and transistor leads, be sure to use a pair of tweezers or other heat sink a dissipate the heat so as not to damage the components. Be careful with battery polarity. Don't operate this on any of the regular

CERTIFICATE OF COMPLIANCE WITH FEDERAL COMMUNICATIONS COMMISSION REGULATIONS, PART 15, PAR. 205

S9 Magazine certifies that this low power transmitting device cam be expected to comply with the requirements of Paragraph 15.205 of the FCC regulations under the following conditions: (A) When this device is assembled according to the diagrams and instructions published by this magazine, using components of the exact specifications described. (B) When in use for the purpose and in the manner indicated in the instructions. (C) When operated on a frequency between 26.97 mc/s and 27.27 mc/s and using an antenna limited to a single element not more than 5 feet long.

S9 Magazine, Port Washington, N. Y. Dated: Sept. 1, 1965

I hereby certify that I have assembled and adjusted this device in strict accordance with the above.

Owner's signature.

Date:

The finishing touch! To comply with FCC regulations it will be necessary for you to sign this tag, cut it from the magazine, and paste it.

Class D CB channels. The variable capacitor at the antenna should be rotated for maximum reading on an S meter or field strength meter—this adjusts the loading into the antenna.

To comply with FCC regulations, a certification of compliance with Part 15 must be attached to the transmitter. Such a certificate is given here and may be cut out and pasted to the chassis. It's a good idea to also include your address and telephone number if you are really going to send this thing into the wild blue yonder, that is if you ever hope to have it returned to you.

If anyone out there builds one of these, please drop me a line in care of S9, letting me know your experiences with it. How about a picture? I don't have a picture of mine because the last time I sent it aloft it headed toward parts unknown. It was the fifth flight

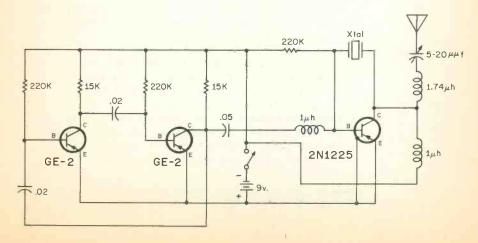
so I didn't feel too bad.

By the way, so many of the locals heard the Sputnik that I decided to issue a special commemorative QSL card. The callsign was a special Part 15 identifier issued to me by the S9 Part 15 registration people. Guess these cards are pretty unusual—the worlds only CB Sputnik!

PARTS LIST

- 3 220K resistors
- 2 15K resistors
- 1 .05 ufd capacitor
- 2 .02 ufd capacitors
- 1 5-20 uufd trimmer capacitor
- I crystal for 27.045 mc/s
- 1 1.74 uh choke (Miller RFC 144)
 - 2 Tuh chokes
- 2 GE-2 transistors
- 1 2N1225 transistor
- 9 volt battery
- 1 SPST switch
- 1 38" whip antenna (Lafayette 99-G4001 or equiv.)

Misc.: chassis, plastic ball, foam rubber, battery clips, hookup wire, launching balloon.



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All crystals provided for 23 crystal-controlled transmit & receive channels!

WIRED ONLY \$169.95

Rugged 5-watt CB transceiver with "space-age" 23 channel frequency synthesizer. Gives you bullseye two-way communication in both fixed and mobile locations with equal ease. At your dealer now, the EICO Sentinel 23 (Model 779) is the new CB rig with every wanted and useful feature!

- Super-selective dual conversion superhet requires only ¼uV for 10db S/N.
- · Crystal-controlled 6mc IF and three 455kc IF's.
- Effective automatic impulse noise limiter, wide-range AGC.
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- Adjustable squelch and standby switch.
- . Illuminated "S" meter/RF output meter.
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- · Headphones/external speaker jack.
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TUNE-UP Á LA 1629



TUNE IN YOUR RECEIVER VIA THE MAGIC EYE METHOD

by PAUL MEYERHOFER, KHH4055

If you didn't like the idea I presented for you last month (The Mod-U-Mon, S9, August, p. 20), here's yet another use for the type 1629 "magic eye" electron tube—this time we use it as sort of an S-meter, or tuning meter. As you tune in a station with your receiver, the eye of the tube begins to close. Maximum closing of the tube indicates that the station is properly tuned in. Often you will find that by properly tuning in a station you'll be able to cut interference and also hear stations further away. At any rate, the pretty green light sure looks nice, even if you don't care much how you tune in a station.

Another use we have found for this gadget is to use it for quiet monitoring of Channel 9, the National CB Calling & Monitoring Channel. Luckily, Channel 9 isn't cluttered up with a lot of jibberish and nonsense-when the channel is used, 9 times out of 10 it is a lost or stranded motorist, or else it's someone trying to contact a local who cannot be found on his usual channel. Anyway, I like to monitor 9, but my communications receiver doesn't have a squelch and the background noise is just out of this world and makes it impossible to monitor a dead channel for more than ten minutes at a time without my going batty. Now, since I've installed this 1629 tube, I can flip the set onto 9 and turn down the volume. I just glance over at it from time to time-if the eve is closed that means that someone is on the channel. If I'm not busy, I turn up the volume. Even if I had a squelch I would prefer this system because there is nothing as annoying to me as trying to get a message through on one channel while the standby set is blasting my ear off with one of the other locals calling someone or giving road aid.

Anyway, I'm sure that you will be able to use the 1629 for these and any number of other uses.

250 v. To A.V.C. 1M 5 3 4 4 4 1629 55K

PARTS LIST

- 5 K pot (optional)
- 2 1 Meg. 1/2 watt resistors
- 1 .1 mfd capacitor
 - type 1629 tube
- 1 Amphenol 58-MEA-8 assembly

CONSTRUCTION

The tube is mounted in an Amphenol type 58-MEA-8 assembly, and the few components in the circuit may be easily attached to (or near) the socket of the assembly. The assembly may be housed in a small *Mini Box* or mounted on the front panel of the receiver with which it is being used.

A pot is included in the circuit as an optional feature, you can use it to vary the amount of closing of the "eye." If you omit this from the circuit it won't diminish the

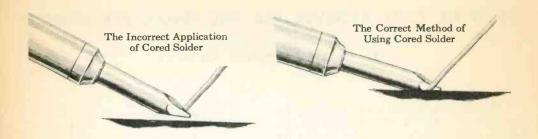
operation of the circuit.

Pin 5 of the 1629 tube, the grid, is connected to the AVC voltage of the receiver, which may be picked from the grid of the DC amplifier, indicated on equipment schematic diagrams, or it can be pointed out to you if you bring your schematic to any CB service shop. The B+ voltage is 250 volts, the filaments receive 12 volts.

S9

SOLDERING-DO IT RIGHT

by LYNDON DONNELL, KED0422



Have you ever constructed a piece of electrical equipment only to find that it didn't work? After much work of checking to make sure each component in the circuit is workable, you finally decide that the reason it does not work is because of a "cold" solder joint. These "cold" solder joints, joints which fail to conduct electricity, are difficult to find and this problem could have been avoided by knowing how to correctly use a soldering iron and by using correct soldering techniques.

Before doing any soldering, the tip of the soldering iron or gun should be clean and properly tinned. If on inspection, the tip is discolored or scaley appearing, it is in need of cleaning and re-tinning. Cleaning should be done before the tip is heated. The tip can be cleaned with sand paper, a wire brush, or steel wool. After cleaning, the tip can be tinned by heating the tip and applying solder to the tip as soon as it is hot enough to melt the solder. Care should be taken not to allow the tip to discolor because of over-heating before the solder is applied. After preparing the soldering iron as described, it is ready for soldering.

A good solder joint is one that is bright after cooling as contrasted to a bad joint that is dull gray or frosty in appearance. A bad joint such as this can be caused by not applying enough heat or by moving the joint during cooling. To correct this, should it occur, the joint must be reheated. Reheating of a joint is also necessary when rosin appears to coat one part of the joint. This is an indication that both parts have not been evenly heated.

To be assured of getting a good joint, here are a few "do's" and "don'ts" to follow when soldering.

- 1. Clean all metals to be soldered so that they are free from dirt, oxides, and grease. This can be done with sandpaper or by scraping the surfaces with a knife blade. Cleaning such as this insures a strong joint.
- Support the joint mechanically where possible.
- Large surfaces should be pre-tined before they are soldered together.
- 4. Solder should be applied to the joint and not to the tip. The joint should be heated sufficiently enough to cause the solder to flow evenly and freely. Both parts of the joint should be heated evenly.
- Do not use too much solder. Too much solder not only shows a sign of poor workmanship, but it also can offer too much resistance to current flow and can cause the electrical apparatus to operate poorly or incorrectly.
- Joints should be soldered as rapidly as possible so as not to overheat the components or burn the insulation.
- In soldering electrical connections, only rosin-core solder or rosin flux should be used. Acid core solder or acid flux should never be used on copper or brass connections.

By keeping in mind these simple rules and tips, much better joints can be easily obtained. They will not only give a better looking and neater joint but will also help to achieve the best performance from the device.



KYLE'S KORNER

WRITE TO:

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

NEEDS ADDRESS, DATA

Can you help us find the correct address of the Federal Manufacturing and Engineering Corporation? We have what appears to be a very fine RF signal generator made by this firm. It bears the label: "Model LP-5, Serial 598, Type CFD-60006-A, RF Standard Signal Oscillator, Federal Manufacturing and Engineering Corporation." If you can not help us locate the manufacturer, can you offer any assistance in locating a power cord, schematic, or operator's manual for it? Any help you can give us will be greatly appreciated.

—D.E.D., Laytonville Schools,

It's only a guess—and not a very educated one at that—but this firm may be a division of IT&T. If the guess is right, then the present name is ITT Federal Labs, 3301 Wayne Trace, Fort Wayne, Indiana, and the man to contact there is Mr. W. Hughes. Even if my guess is wrong, Mr. Hughes might know something about the firm. Can any of the rest of the gang help the school out with the data they need?

Laytonville, Calif.

OPERATING IN CANADA

What do I have to do to get a permit to operate in Canada, for how long and what is the charge? I hope to attend some Canadian jamborees this summer and I would like to be able to operate up there.

-L.F.V., Johnstown, N. Y.

I don't have all the details, but I can at least refer you to the authoritative source. Write to "Department of Transport, 25 St. Clair Ave. East, Toronto 7, Ontario, Canada" and they'll give you the official word. Ask them what the requirements are for the "Tourist Radio Service," which is the name of the special deal letting U.S. CB'ers operate north of the border. I understand that you have to make written application 30 days in advance, to the office of DOT which has jurisdiction over the area where you plan to enter. So far as I know there is no fee nor time limit on operation; you use your U.S. call with the suffix "/XM." But the DOT will give you the official word; what I have is "left over" from last year and may have been changed since then.

SOLUTION TO TV NOISE

I would like to know why television manufacturers do not put a squelch (if possible) on TV sets to filter or eliminate unwanted noise?

—R.B., New York City

The reasons are numerous. If you're referring to the ordinary squelch, to stop the "hiss" that roars out when you tune to a vacant channel, the main reason is cost. To add this to a TV receiver would cost the manufacturer about a dollar per set. By the time the set gets to you, that would be about a \$50 increase in the price (it just works out this way!). And most people aren't that interested. If you're referring to a noise-limiter to hold down pops and crackles, the circuits for TV would be extra complicated. In the golden days of broadcast radio, some of the bigger sets did have squelch. They called it "QAVC" (quiet AVC) or "interstation muting"; it's from these circuits that many of our CB squelches are adapted. But it died out; nobody felt it was worth what it cost. And it did add another control that could be set wrong, and cause "trouble" in reception.

LOOKING FOR CAPACITOR

In the March 1965 issue of S9 you mentioned a 1000-mfd capacitor for noise suppression. I suppose this is the same one that was referred to in the December 1964 issue. It was made by Motorola, Serial No. AK300. What I want to know is how do you get one of these goodies? I have tried for a month and haven't had any luck thru the dealers locally. Would appreciate any help; it is about to bug me. Thanks in advance.

-G.X.B., Richland, Wash.

Actually, I didn't say how big a capacitor to use, but 1000 mfd sounds fine if you can get one! The Motorola item is news to me; when I need this much capacitance I usually use industrial type electrolytics. For bypassing the coil, electrolytics aren't so good—they puncture too easily with the voltage spikes from the coil. Much better would be non-inductive oil-filled "bathtub" capacitors, such as Sprague's type CPD53. You can get a duel .25-mfd 1000-volt unit for \$2.83 plus postage by ordering catalog no. 15 L 746 from



COMPLETE INFORMATION
- V -
MULTI-ELMAC COMPANY
21470 COOLIDGE HIGHWAY OAK PARK 37, MICH.
Citi-Fone SS Citi-Fone 99 C
Name
Address
City Zone State

Allied Radio, 1000 N. Western, Chicago, Ill. The full description is "Sprague type CPD53 capacitor, part no. B4EC254V, .25-.25 mfd, 1000 volts." Make the leads from terminals to coil and to ground as short as possible, and he prepared to re-time the engine as mentioned before.

PART 15 TRANSMITTER-ONLY

I already have a good CB set. So do you know of any company that makes a Part 15 radio without a CB set in with it? The reason for my asking is that I am very interested in Part 15. Thanks a lot.

-W.C., Jamestown, Tenn.

So far as I know, nobody makes a transmitter alone for Part 15 use. International Crystal, at 18 N. Lee, Oklahoma City, Okla., has some transistorized transmitter and modulator boards available which could be hooked together to make a P-15 rig, but the cost might be a bit steep since the boards cost around \$5 to \$10 each (depending on model). In the October 1964 issue of \$9, on page 19, Hartland Smith described a P-15 transmitter you can build for yourself. It's billed as "Part 15 DeLuxe" and really is just that; you would have a hard time getting more performance than this rig will give. This issue is available from the circulation department, if you don't have it on hand.

NEEDS MARINE ANTENNA

I have a Heath GW-11A CB transceiver aboard my Chris-Craft cruiser. I have gotten fair results with it using a 180-inch whip antenna. However I believe I can greatly improve both transmission and reception with the use of some of the improved antennas particularly designed for marine use. Would you suggest, or put me in touch with, manufacturers of good marine CB antennas? I would be most interested in any comparison of such antennas, or further information that will be helpful in selecting the best antenna for marine installations.

-R.N.B., Eatontown, N. J.

Quite a number of the better-known antenna manufacturers include special marine models in their lines. Among them are Hy-Gain Electronics Corporation, The Antenna Specialists Co., B&K/MARK division of Dynascan Corporation, Mosley Electronics, and Francis Industries. All have catalogs of specifications on these, which you can compare. You might also inquire from other CB'ers in your area as to how the various ones stack up against each other. Not having either a cruiser or much water to cruise it on, I'm not in much position to offer practical help here.

ADDING EXTRA CHANNELS

Do you know of any way to adapt Generals, Johnsons, and other 5-channel CB transmitters to hold more crystals besides the old separate socket on the outside of the set? I've been trying and asking to devise a way to do this in the last few months since the channels are so busy in this

area and since the new rules came out. Thank you.

R.C., Louisiana

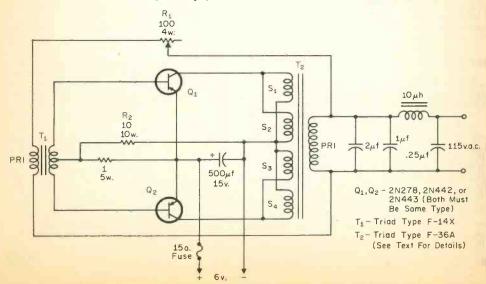
Unfortunately, no. The only safe way to do it is to use the crystal sockets the manufacturer put in! The fine print in Part 95 says, among other things, that the only way it's legal for you to even change a crystal in a rig is for the circuit to be so designed that the change cannot possibly put you out of tolerance, and all adjust-ments must be sealed. When you add an external socket, even, you've in effect "broken the seal" and are thus outside the law! Even such a simple modification can easily put you outside tolerance -and the most common violation the FCC monitors discover is just that, off-frequency operation.
The time is very, very ripe for some enterprising manufacturer to come up with a transistorized outboard "frequency box" which could contain either 23 rocks, or a synthesis circuit, and which could just plug into the existing crystal socket. Such a gadget, properly sealed, could be put into any set for all-channel operation—and it wouldn't be too difficult to build, in production quantity, to sell for around \$50 a copy. Any eager manufacturers out there?

MORE ON THE 6-VOLT INVERTER

In the April issue on page 41 you had a diagram for a 6VDC to 115VAC inverter. I have a Volkswagon in which I would like to put a 12-volt Courier 1M. I would like to know if this inverter would be powerful enough to power a Courier 30B or a rig of about 20 watts output. If your answer to this is "no," I would greatly appreciate details on how I could go about making an inverter which would work with it. Incidentally, I could not locate a 12-volt 10-amp CT filament transformer, a 10-microhenry choke, or a 3-mf 400WVDC capacitor for this circuit. Can you tell me where to purchase them? Thank you very much.

-G. DeM., Brooklyn, N. Y.

Let's take care of parts supply first. For the transformer, try a Stancor No. P-4097, which is Lafayette catalog no. 33 G 8118 at \$7.52. It's not the exact unit specified, but ought to work. The chock can be made from a length of Airdux or B&W Miniductor coil stock, such as Airdux 432 (1/2-inch dia, 32 TPI) with eight turns removed to leave a coil of 56 turns. I can't find a 3-mf capacitor in my catalogs so you'll have to build it up from a 1-mf and a 2-mf in parallel; Lafayette has these, catalog no. 34 G 7752 for the 1-mf and 34 G 7753 for the 2-mf. However, this inverter isn't recommended for an AC load over about 50 to 60 watts, and since publishing the circuit I have been informed by Motorola that they no longer recommend it for construction! You would probably be better off with the two-transformer circuit shown here. It's somewhat experimental, since I haven't had a chance to build it and check it out; try it at your own risk, but if you're careful you shouldn't burn anything up-and it ought to give you at least 100 watts of AC out before the transformers get too warm. All the parts are standard stock items which you should be able to find at industrial supply houses; Lafayette may have them even though they're not all listed in the catalog. To get T2 hooked up correctly, use a 6-volt pilot lamp such as No. 47. Temporarily connect 115 VAC to the primary, and (with power off) connect one lead of secondary winding 1 (S1) to one lead of S2. Connect the other lead of \$1 to the pilot lamp and touch the other lead of S2 to the other side of the bulb. If the bulb lights (it'll be bright if it does), reverse the connections to S2. When you find the hookup which doesn't light the hulb, leave the two leads which are connected together, and also connect together the two leads which went through the bulb. Check by seeing if the bulb lights when connected to the two junctions. This time it should have normal brilliance. Connect S3 to S4 by the same procedure. Then connect one lead from a S1-S2 junction to one of the S3-S4 junctions, and test the other pair of junc-



tions with the bulb. This time, you want the connection which lights the bulb instead of the one which doesn't. When all connections are correct, you'll find 6.3 volts AC across S1-S2, the same voltage across S3-S4, and 12.6 volts from the outside of S1-S2 to the outside of S3-S4. Potentiometer R1 controls the frequency of the AC generated; start with it set at maximum resistance and plug in an electric clock with a sweep-second hand to the output. Adjust R1 until the clock is keeping approximately correct time (one revolution of the second hand every minute) and lock the adjustment with a drop of glue. If RI is set to less than half its total resistance, cut power and measure the value of R1, then substitute a control with just a little more (next higher standard value) resistance than you're using. The reason for this is that power ratings on potentiometers are based on the maximum resistance; a 100-ohm 4-watt pot that's using only 10 ohms can no longer dissipate 4 watts, but instead will handle only 4/10 of a watt! Don't omit the fuse; if it's not there, not only the transistors but both transformers can be cooked by an overload. The fuse may not protect the transistors, but their cost is less than \$7 compared to more than \$10 for T2. A good heat sink for the transistors will be required-at least 100 square inches. If you're going to build one of these, I would recommend getting a copy of either Motorola's "Power Transistor Handbook" or G-E's "Transistor Manual, 7th Edition" for the details on proper heat-sinking and general care and feeding of power transistors. Either will cost you \$2; the G-E manual can be obtained from any G-E supplier, and the Motorola book from Motorola Semiconductor Products Division Inc., 5005 E. McDowell, Phoenix 8, Arizona. Incidentally, to make this work with 12-volt input, reverse the S1-S2 and S3-S4 connections to those which make the bulb light, and double the value of R2; no other changes are necessary.

BEAM FOR RECEIVER ONLY?

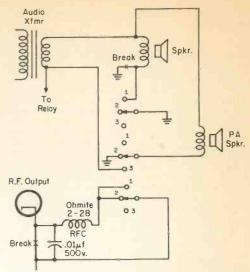
As transmitter antenna size is limited in Part 15 rigs, would a beam or long-wire such as the Signal Squirter cause a noticeable gain as a receiver antenna? Also, would it be directional?

—T.H.T., Reno, Nevada

Yes, on both counts. This is one of the best ways to boost Part-15 range, since there's no limitation at all on receiving antennas. If you can afford it, you can put a 6-element beam 100 feet up in the air so long as it's used only for reception (and while you're at it, of course, you can locate the entire transmitter-and-short-antenna assembly right up there with it). Any beam is every bit as directional on receiving as it is on transmitting; in fact, most manufacturers hook the antennas up as receiving ones rather than as transmitting ones, for tests. It's easier to provide a standard signal that way.

P. A. TROUBLES

I wonder if you might be able to give me some information concerning a project in the article



"CB Mobile from A to Z" in the May, 1964, issue of S9. The project I am working on is the P.A. system shown on page 54. It doesn't work. I have a Lafayette HE-90. Everything was built as shown but it doesn't work. There were no specifications for the RF choke. The capacitor shown is a .01 mf disc but is the voltage critical?

—L.P., Belleville, Illinois

Ouch. Looking at the schematic closely, I can see one good reason why it doesn't work on "P.A. only" (switch position No. 3) but if that's what's giving you trouble, it ought to work nicely on position 2. Does it? If it does, the trouble is that the lead from the audio transformer marked "to relay" gets lifted from ground when you push to talk, and naturally nothing can get through. To cure this, rewire the speaker and switch circuit according to the accompanying schematic. This one will work, at least with most rigs. I don't have a diagram for the HE-90, so I can't tell if the PTT switching built into the rig is killing the audio chain somewhere else or not. Chances are, however, that my error is what's wrong. Hope so, anyhow.

Which brings us smack up against the end of the allotted space, even though the basket does still have a lot of unanswered questions in it. We'll get them next month—at least, most of them. Every now and then, you know, one of you stumps me. And when that happens, I'll he the first to admit it.

How about you? Have a question, preferably technical but if not technical, ask it anyway? Then drop me a card, % S9, 14 Vanderventer Avenue, Port Washington, Long Island, New York 11050. By the time you get all that address on the card there won't be much room left for the question, but that will help you keep it fairly short.

Then all you have to do is sit back to enjoy the wait until I'm back again here at the old stand. 10-10 until next time . . .

ST

CB FLICKERS



"You and your lousy 'extra modulation' godgets!"



"The micritoring truck is coming down the street, you've just got time for one more skip contact!"



"Interesting device you've €ot here, Er. Ranjii. What does 'BFEAK-EREAE' mean in your native tongue?"



"Go back and tell THIS to your friends at the FCCI"



"QSL card? You dict, this is the FCCI"



"That dumkopf keeps telling me to sear the REACT channel."

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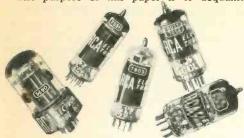
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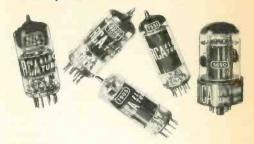
From time to time, stories are heard of unfamiliar new tube types reputed to possess magical properties. It is rumored that the mere "plugging in" of one of these new tubes will automatically increase the power output of CB equipment, bring in stronger signals, improve reliability and life, and solve all kinds of difficult electronic problems. Usually, of course, such claims stem from "word-of-mouth" recommendations rather than from published data of qualified sources.

The purpose of this paper is to acquaint

teria, including initial tube cost, circuit complexity, and circuit reliability.

The initial cost of a tube is always a consideration in the choice the designer must make. Because cost is usually directly related to reliability, however, it cannot be considered separately, but must be included as an integral part of component reliability. Certainly, the intended use of a piece of electronic gear will, in large measure, dictate the reliability required from both the component and the over-all system.





Those "Special" Tube Types

SHOULD YOU SPEND THE EXTRA MONEY FOR THEM?

By L. W. AURICK, KCD5514

RADIO CORPORATION OF AMERICA ELECTRONIC COMPONENTS AND DEVICES LANCASTER, PA.

the non-technical reader with some of the relevant facts concerning "special" tube types so that he may reach a more intelligent judgment of extravagant claims and recommendations. Generally, the choice of a tube type for a particular application requires a very carefully considered and reasoned judgment which only an engineer is trained to make. The following discussion will not necessarily enable a non-technical reader to make such a judgment, but it will at least expose some of the problems involved. It may also help to explain why a local radio-parts dealer may not stock, and perhaps may not even have heard of, some of these "special" types of tubes.

APPLICATION

In his initial selection of a tube type for a particular application, an equipment designer first considers where and how the tube is to be employed. Because there are usually several tube types which may be expected to perform the required function in a specific application, the selection is based on several cri-

WHAT IS RELIABILITY?

In addition to the purely technical aspects of tube selection, the equipment designer must consider the required reliability level. In simple terms, reliability is a measure of the capability of a given component to perform a certain function in a particular application for a specified time. Thus, reliability depends on the requirements of the application.

For example, a tube designed for use in a missile might be required to have a functional life of only one minute, but would require an extremely high probability of satisfactory operation because replacement would be impossible and tube failure could destroy the entire mission. In this case, reliability would be the prime consideration, whatever the cost.

On the other hand, tubes of the types used in home-entertainment instruments such as TV, hi-fi, and tape recorders can have a somewhat higher probability of failure because the results are not so serious. These tubes are required to perform their function for a reasonable length of time, but it is equally important

that their initial cost, as well as their replacement cost, also be reasonable. The life of entertainment-type tubes may often be extremely long (there are many instances of tube radios performing for years with the original tubes), but the degree of probability of satisfactory operation need not be as high as that required for many industrial and military

applications.

Receiving-type tubes designed primarily for home-entertainment applications are called "commercial" receiving tubes, and those intended for use in communications or other industrial equipment are called "industrial" receiving tubes. The tubes discussed in this paper represent three of the many classifications of industrial receiving tubes: premium tubes, mobile communications tubes, and "special red" tubes.

"PREMIUM" TUBES

RCA "premium" tubes are designed especially to meet the requirements of a particular military specification or of a critical industrial application. As a result, they are required to pass many special tests, which may include shock, fatigue, vibration, glass strain, microphonics, stability, or high altitude. In applications other than the specific one for which the premium tube is designed, however, there is no guarantee that this "industrial" type will provide better performance than its "commercial" prototype.

For example, many CB rigs utilize one or more of the popular commercial receiving type 12AT7 in mixer, oscillator, or audio stages. Often, it may be tempting to replace these tubes with some of the various industrial types for which the 12AT7 was the prototype, or "take-off point," in the hope of improving CB performance. Unfortunately, there is every probability that such substitutions would re-

sult only in disappointment.

Among the "premium" tubes that can replace the 12AT7 are the military types 12AT7WA and 12AT7WB.¹ Each of these types was designed to meet an individual military specification, the details of which are not readily available to non-military customers. Even if the tubes themselves were available, therefore, there is no assurance that they would perform better or last longer, than the prototype 12AT7. In addition, of course, they would cost considerably more than the commercial type.

Another premium type which evolved from the 12AT7 is the 6201. This type is physically and electrically similar to the 12AT7, but is subjected to special tests to assure dependable performance under shock and vibration and in "on-off" control applications involving long periods of operation under cutoff conditions. Although the 6201 could undoubtedly be used as a replacement for the 12AT7 in most applications, therefore, the substantial increase in cost would buy very little, if anything, in normal CB operation.

MOBILE-COMMUNICATIONS TYPES

Two of the types in the RCA line of mobile-communications tubes are similar to the 12AT7. The 7898, which has slightly higher maximum-plate-voltage and plate-dissipation ratings, is recommended for use with 6-cell (12-volt) storage-battery systems. The 6679/12AT7 double-branded type2 is recommended for 3-cell (6-volt) systems. Again, these types are designed specifically for use in the particular application for which they are intended, and their advantages for that type of usage are not necessarily advantages in other types of equipment. For example, the wider heater-voltage range of mobile types (10 to 15 volts for the 12-volt tubes) provides no added capability in CB rigs which operate from a well-regulated line-operated ac power supply.

"SPECIAL-RED" TUBES

Although the four tube types included in the RCA "special-red" family are not used in CB equipment, some mention of them is worth-while because of the special philosophy they represent. The 5690 is a full-wave rectifier in which each section contains its own heater and cathode; this type is rated for service at altitudes to 60,000 feet. The 5691, 5692, and 5693 are similar to the 6SL7-GT, the 6SN7-GT, and the 6SJ7, respectively. All four are octal-based tubes designed for extreme dependability and exceptional stability. These tubes are subjected to the most stringent tests, and carry a warranty for 10,000-hour life (approximately 2 years). They are also priced accordingly. "Special-red" tubes represent the ultimate in tube design for circuits that require the highest degree of confidence.

COST DIFFERENTIAL

Although many of the differences between industrial receiving tubes and their commercial prototypes may appear to be minor, the

Continued on page 71

^{1.} The letter designation W following a type number indicates that the type is tested to a particular military specification (however, not all military types carry this letter designation). A letter designation A, B, or C indicates an improved version of a type that is unilaferally interchangeable with all previous versions (e.g., type 61.6GB could replace type 61.6G, but type 61.6G could not necessarily be used in place of type 61.6GB; similarly, type 61.6GC could replace both type 61.6G and type 61.6GB, but neither of these types would necessarily work in a 61.6GC socket).

Double branding indicates that a tube can be used to replace, unilaterally, tubes bearing the individual type numbers; again, the individual types can not necessarily replace the double-branded type.

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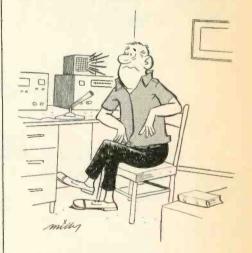
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THE HI-LIFE

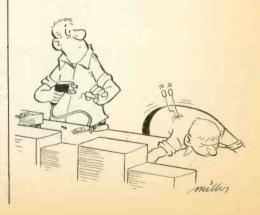
by WALT MILLER



"I pulled that tube, Harry. Now, what? . . . Harry?"



"... and now for her second selection, my wife, Ethel, will sing ..."



59-GUARANTEED Largest CB Circulation!

A NICE \$5 FSM

HAVEN'T YOU ALWAYS WANTED

A FIELD STRENGTH METER?

by PETER DENDIN, 17W6366

Really, haven't you ever wondered if your rig was getting out—don't you sometimes think that you're calling into a dead microphone? A field strength meter will cure this—plus several other ailments to boot!

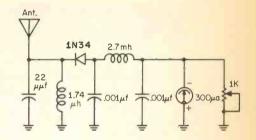
A field strength meter is simply a sort of S-meter which gives a relative reading of your own transmitter's signal strength. It consists of a crystal diode to detect your signal, a tuned circuit to weed out undesired strong signals which could give the meter problems, and (natch) a meter. It is rather insensitive a gadget and will not detect a CB signal from much further than you can throw a monkey wrench. When you press your PTT button the needle on the meter promptly pops up. Since you are able to vary the sensitivity of the meter, the writing on the meter scale is of no particular significance other than as a source of relative signal strength.

CONSTRUCTION

The FSM isn't too big a project to construct, we built ours in a small plastic box, but just about any handy container will suffice, even a tin can!

The relatively few components can be mounted on a three or four point terminal strip inside the container. The meter movement is a microammeter, I used a 300 ua movement in mine, but I would imagine that you could use just about any size down to 0 ua—the lower rating should be used if you intend utilizing this FSM with a 100 mw rig. You'll find that meters tend to be somewhat on the expensive side but ours, at \$2.45 (Lafayette 99-G-5028), is about as inexpensive a meter as can be obtained (unless you can scrounge one from a junk box or military surplus shop. The meter is less than an inch square and will allow you to construct your FSM in something like a frozen juice can.

The antenna I used was a short length of bell wire, insulated. The exact length isn't very critical and will depend upon the placement of the FSM in relation to your rig. If



PARTS LIST

- 1 1N34 diode (Lafayette 19-G-4901)
- 2 .001 ufd capacitors (Lafayette 32-G-0943C)
- 1 22 uufd capacitor (Lafayette 32-G-0943C)
- 1000 ohm potentiometer (Lafayette 19-G-6142)
- 1 1.72 uh choke (Miller RFC-144)
 - 2.7 mh choke (Miller 975)
- 1 Microammeter (any from 50 to 300 ua)
- Case, terminal strip, wire

you use the FSM in your mobile unit, place the meter on top of the dashboard and drop the wire antenna out of the way into one of the defroster vents.

IN OPERATION

With your mike button pressed, and the antenna of the FSM placed so that you get a ¾ meter reading with the sensitivity potentiometer opened about ¼ to ½, you have a fine reference spot. Take a crayon and mark the meter cover to indicate this reading, also the position of the sensitivity control. Unless you move your FSM antenna, the meter reading should remain the same each time you go on the air. If it shows any more than a drop of a few degrees, then you may have something out of tune or out of whack in your rig, or possibly in your antenna or transmission line. At least you know that something requires your attention!

TO ALL VISITORS:

TAKE

This is a Citizens Band, or "CB," radio station.

It is licensed by the Federal Communications Commission.

Citizens Band Radio is a method of short distance radio communication used by men and women from all walks of life throughout the United States and Canada.

CB'ers require no government exam or test in order to be able to operate. We do not need to understand morse code or to know radio theory. Many CB'ers are licensed "Ham" operators, which is a completely dis-similar radio service.

This equipment does not interfere with TV, providing the TV is of good design, filtered, aligned, and operated properly in conjunction with a good antenna.

The basic piece of equipment used here is called a "transceiver," it being a combination transmitter and receiver. These sets cost roughly from \$60 to \$300.

We are permitted in our operation to use more than 20 specific channels located on a wavelength of 11 meters, a frequency of 27 megacycles. This is not anywhere near the standard radio broadcasting band or TV channels. The power of this station is 5 watts, which is the maximum permitted for CB stations.

We cannot communicate with "Ham" radio stations, nor can we hope to establish communications with other CB operators whom you may know, even if they are a few miles from here. For one thing, they may not be listening; for another, government regulations prohibit idle chitchat between CB stations.

Police stations cannot be monitored on CB equipment.

Repair of Hi-Fi, TV and table radios should be done only by a repair shop because it requires special skills. It also requires a considerable amount of testing equipment plus a large supply of spare parts. This also holds true for tape recorders.

The cards which CB'ers hang on their walls are called "QSL's," and exchanging them with other CB'ers is a pleasant custom.

A monthly magazine for CB operators is available for your further information on the subject. A copy of this magazine, called S9/the citizens band journal, is available for your inspection from the operator of this station. License information on CB radio may be obtained from your nearest FCC office or from most stores selling CB equipment.



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	BONUS		Membership in the Detrimental Associ world's largest do-no program, it was so-called "national" red and gold cert this one.	ations (ACDA othing CB club patterned afte 'CB clubs. Yo), now the . No officers er one of the ou get a big
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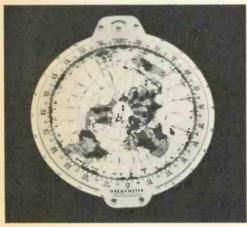
59-GUARANTEED Largest CB Circulation!



Harry Zipkin, formerly of CB Electronics, Hoboken, N. J., has joined CZ Labs, Co. which has been in business for over a year and a half. CZ specializes in compact parts for CB operators. Write to Harry for free details. The new address is CZ Labs, 82 Lake Ave., Tuckahoe, N. Y.

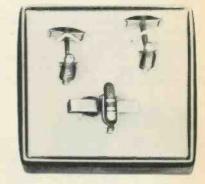
G & S Sales and Engineering, with offices in Yorktown Heights, N. Y. (a division of CZ Labs) specializes in receiving tubes and special purpose tubes. For more information on their products, contact Nick DeSalvo at CZ Labs.

New-Tronics Corp., 3455 Vega Ave., Cleveland, Ohio 44113, has announced a new line of CB antennas. All of the models feature resonators which may be tuned by means of a stainless steel tip rod. Masts are of chrome plated brass, either one piece or telescoping, or fiberglass. The various models are designated for cowl, fender, or roof-top mounting.



We received information on an interesting new product from Mike Grega of the Gregameter Company, P.O. Box 1014, Alameda, Calif. The Gregameter is a patented celestial-terrestial slide rule for computing problems relating to time of day at any given hour for all points on earth (Local, GMT), distance and direction of jet flights and missile shots, numerous astronomy uses, celestial navigation and space shots. It's \$12.50.

One good way to protect your mobile unit and its contents from theft is by means of the Wiggins Vehicle Theft Alarm, produced by W. S. Wiggins, P.O. Box 448, Whittier, Calif. 90608. You build the alarm yourself with easily obtainable, standard, parts (assembled units aren't yet available). Highly sensitive, it actuates a signal rhythmically. Stops and re-arms itself when not disturbed. Send \$2 for a nine page brochure of copyrighted circuits and complete instructions.



Miniature replica of a CB microphone on a tie bar and cuff links are available in either gold or rhodium finish, gift boxed, at \$4.50, postpaid, from Nordlund Radio Products, 7635 West Irving Park Rd., Chicago, Ill. 06034. The Tie-clasp only is \$2.

J-A Electronics Co., P.O. Box 645, Teaneck, N. J. 07666, has brought out a miniature microphone preamp "for the extra bit of audio." This is a self-contained, battery operated, transistor unit designed to provide up to a gain of 6 (16 DB). Price for the wired and tested is \$10.95.

Lafayette Radio, Dept. S9H5, P.O. Box 50, Syosset, N. Y. has brought forth a whole slew of new CB rigs which we will briefly outline here:

The HB-600 Deluxe 23 Channel Crystal Controlled CB Transceiver. 100% solid state, supplied with all crystals; crystal positions left open for HELP and other services which are, or will soon be, operating near CB; range boost in modulator, dual conversion receiver, ½ uv sen-



sitivity, effective noise silencer, mechanical filter, delta tuning, socket for selective call unit, PA system self contained when used with external speaker, built in AC/DC (neg. or pos. gnd.) transistorized power supply. Price \$219.95.



The HB-444 23 Channel Crystal Controlled CB Transceiver. All crystals supplied, range boost in modulator, Nuvistor front end, 3 uv sensitivity, variable ANL and squelch, delta tuning, PA switch on front panel, built-in AC/DC PS, socket for selective call unit. Price is \$179.95.



The COMSAT 9, 9 Channel CB Transceiver Kit. This kit has 9 transmit and 9 receive channel capabilities, plus a tunable receiver. Operates from 117 VAC or with optional PS on 12 VDC. Price: \$59.95 in kit form only.

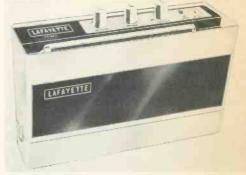


The COMSAT 23, 23 Channel CB Trans-

ceiver. Equipped for functioning on all 23 channels—no crystals to buy. Dual conversion receiver with .8 uv sensitivity, variable squelch and fine tuning control, selective call switch, TVI trap built-in, AC/DC transistorized PS. Price: \$139.95.



The HE-20D Transistorized Transceiver. The famous HE-20 has been introduced for 1966 with transistor circuitry and featuring a mechanical filter. All channel tunable receiver with 12 position transmitter, PA switch, spotting switch, variable squelch and antenna peaking, selective call input socket, built-in AC/DC transistorized PS. Price: \$89.95.



The HB-555 Solid State Transceiver. A compact new unit with 12 transmit/receive positions, dual conversion receiver, mechanical filter, automatic noise limiter, PA speaker jack, selective call socket, 6 uv sensitivity, operates from 10-16 VDC, or from 117 VAC when used with optional PS. Channel 9 crystals included. Price \$99.95.



The HA-450 2½ Watt Transceiver. This is a super walkie-talkie portable for hand or mobile operation. Fully transistorized and featuring 6 transmit and receive channels, the ANL and squelch are adjustable. A whip antenna is included, as is a jack for an external antenna. Operates from standard "D" size rechargeable nickel cadmium cells. Operates from 10-16 VDC, pos. or neg. ground. Price: \$119.95.



The HE-29D Walkie Talkie. Latest version of the Lafayette workhorse, the HE-29D still needs no license for operation on Channel 10. New improved circuit employs 9 transistors and a diode with a superhet receiver. Price: \$25.95 each or two for \$49.95.

Drop a card to Lafayette for further details on all of these new sets plus some exciting addi-

tional CB gear.

Master Mobile Mounts, 4125 West Jefferson Blvd., Los Angeles 16, Calif., has a good idea to keep you from ever having to face the prospect of a dead car battery. This is a 2 battery system which may be controlled from the drivers seat, has a charge rate motor for the second battery, can operate either alternators or generators. There are dozens of advantages to a system of this kind in a CB mobile. Get further details from Master Mobile.



A new all transistor 12 channel rig has been announced by Pace Communications Corp., 520 W. 182nd St., Gardena, Calif. The new unit, the PACE II, features a dual conversion receiver, noise limiter (adjustable), a variable squelch, operates from 12 VDC (pos. or neg. ground). One set of crystals are supplied. Price is \$169.00. Pace says they'll be happy to send you some additional info on the rig if you saw it in S9!

15¢ INTRODUCTION

We will send you, prepaid, 1 plastic CB card holder for 20 cards upon your request accompanied by your CB card and 15¢ for postage and packing. One per family only—offer expires Sept. 30. Regularly 3 for \$1, 10 for \$3 at your dealers or prepaid from factory.

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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:

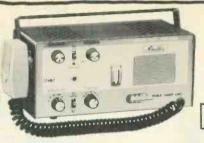
> **Project Aid 59 Magazine** 14 Vanderventer Avenue Port Washington, N. Y. 11050



THIS NEW DELUXE B TRANSCEIVER YOU ON THE AIR IN SECONDS

Leo I. Meyerson KLH 7297

> COMPLETE NO EXTRAS TO BUY!



PRICE INCLUDES: Both AC/DC Supply & Mounting Bracket.

Made in U.S.A.

\$5.00 Monthly

NEW! WRL'S "RUSTLER" CB TRANSCEIVER

Here's a New Deluxe American Made CB Transceiver with features you would expect to find only in CB units costing much more. WRL's Rustler CB Transceiver is a complete package with 115 VAC and 12 volt DC power supply, cords, mtg. bracket and PTT mike. It also includes eight crystal-controlled channels and a 23 channel, tunable, superhet receiver, (CRYSTALS FOR CH. 9 SUPPLIED)

Other important features include a positive squelch control, illuminated "S" meter, spotting switch, ANL, 3.4 watts, and a quick-change crystal socket. Beautifully designed for home or guto use! Only WRL offers you the finest for less.

CB WALKIE-TALKIE Exclusives from WRL

TRANSISTOR

WIRED ea. in pairs

- · Ready to operate.
- No license needed - No age limit.
- Operates on single battery.
- Handsome Compact Weighs 10 oz.

On the move communications. Range 1/4 mile and more - ideal conditions.

TRANSISTOR



WIRED ea. in pairs

- Range 1-3 miles.
- · Crystal controlled.
- Noise limiter switch. Push-to-talk switch.
- · Leather case. earphone.

Ideal For Business, Pleasure & Home Use.

ONE



WIRED ea, in pairs

- Professional Model.
- · Range 1-5 miles.
- FCC License required.
- 13 Transistors.

WRL'S CB PRE-AMPLIFIER



\$1195 each Improves any CB

receiver . . .

Guaranteed to improve CB reception. Uses two 6CW4 nuvistors providing up to 20DB gain on receiver signals.
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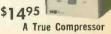
WRL's Rustler CB Transceiver. 3 Transistor Walkie-Talkie, \$9.95 ea. in pairs. 9 Transistor Walkie-Talkie, \$24.95 ea. in pairs. 1 Watt Walkie-Talkie, \$59.95 ea. in pairs. WRL's CB Pre-amplifier, \$11.95. Compression Amplifier, \$14.95.

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Made in U.S.A.



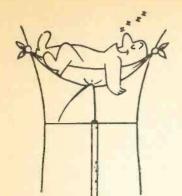
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Not a Clipper CB/HAM/COMMERCIAL USE

COMPRESSION

- Provides up to 15DB
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59-GUARANTEED Largest CB Circulation!



ANTENNAS

by LEN BUCKWALTER, KBA4480

LET'S SPEAK JAPANESE

After months, maybe years, of operating on 27 MC, a number of CB'ers get SWL fever. It can bite hard. For short-wave listening can bring in, for example, Dr. Toru Mastumoto and his twice-weekly show from Tokyo, "Let's Speak Japanese." You might learn that honzai doesn't really mean Charge!—like in the old movies—but translates as "10 thousand years." Or if you get lucky on the bands you might hear an aircraft in distress with a stuck-up landing gear or something sensational like the sinking of the Andrea Doria. And if education is your dish, the BBC fills the air with about 500 hours a week with such gems as a West Indian wrestling match.

International shortwave stations (there are now about 3000 on the air) run much power. One big installation at Allouis, France, pours some half-million watts into the shortwave bands. And probably half the lights in the Soviet Union go dim when Radio Moscow fires up its rig and beams signals to North America. But to enjoy shortwave you need a reasonably good antenna. It can make stations around the world sound like locals. Let's take a look at some practical SW antennas.

Support Support

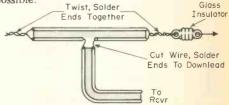
One of the simplest and effective antennas is the inverted-L, shown in Fig. 1. If you've got the room, run it out the full 100 feet. You'll note that there is no transmission line, as in CB antennas—just a long wire. It should run as straight and high as possible. If you want to capture low-angled signals skipping in from overseas with good strength, try to keep the long part of the wire about 30 or more feet above ground. Out at the far end use a pole, garage roof or even a tree for support. If it's a tree, select one with a stout trunk and fasten the wire at that point. Otherwise sway is apt to snap the antenna when the wind kicks up.

The antenna wire itself isn't critical. But over a long run, the heat of summer can cause the

wire to sag due to expansion. Ice loading in winter can also cause sag. A good choice is No. 12 or 14 hard-drawn copper wire, or copper-clad steel. It doesn't matter if the wire has cotton, plastic or enamel insulation; the signal passes through unobstructed. Just be sure to strip it clean where it attaches to the SW receiver. Bring the wire down and into the house with TV-type standoffs to prevent it from touching anything.

Since an antenna of this type does not offer the same degree of lightning protection as one with a coaxial cable, an arrestor of some type is advisable. (A direct hit by lightning is not the only kind that causes damage. It's possible for sparking to occur in the receiver during a severe thunderstorm.)

How directional is the inverted-L? This depends on the particular frequency of reception. Since SW stations are strewn out over various bands, the antenna responds differently on different frequencies. If you're having trouble picking up a particular region of the world, try changing the direction of the antenna run, if possible.



Although the inverted-L has certain advantages, mainly that it is all-band and needs no further tuning, it's not the most efficient type for a particular band. If you're after some choice DX and want to peak up the signal, you might consider a separate antenna system for the desired frequency. A popular arrangement is the folded dipole, shown in Fig. 2. It's quite inexpensive since common 300-ohm TV twinlead is used for construction. The top part of the folded dipole is cut according to the formula: Length in feet = 468 divided by the frequency in megacycles. For example: if you want especially good reception on the 31-meter SW band, which is 9.45 MC, antenna length is 468 divided by 9.45. The answer is approximately 49 feet. The 468 figure, incidentally, remains the same regardless of frequency. It's a constant which permits easy

What is Master Mobile So Excited About! ... **NEW REVOLUTIONARY** ANTENNAS NFW! DDRR'

VERTICALLY POLARIZED LOW PROFILE MOBILE ANTENNA MODEL CB-42 CB 11 Meter 27MC The DDRR Antenna

> has been designed to incorporate the electromagnetic efficiency of naturally resonant quarter-wave whip antennas with a low profile which can be easily installed on vehicle roof tops and precisely tuned over a wide range of frequencies.

> Because of its unique design features, the DDRR Antenna will normally outperform quarter-wave mobile installations, both in transmit and receive modes. CB NET \$29.95.

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Other frequencies available from 27 to 180 mc *Mfg. by Omni-Line Co., Div. of Rad Science, Licensee of Northrop Corp.

NEW TOROID TENNA

is a super-efficient, compact mobile whip that measures just 42" in length. Toroid-Tenna's quality construction incorporates toroid transformer in base to boost transmit range; all brass and stainless steel; screwdriver adjustment for perfect VSWR (no cutting or trimming needed); weather/ waterproof, chrome-plated base. Transformer and capacitor are completely shielded for noise-free operation. 27 Megacycle TOROID-TENNA: \$21.95 NET.

Dept. S9 Dealers Send for Complete Information and "ANTENNA BUYER'S GUIDE"

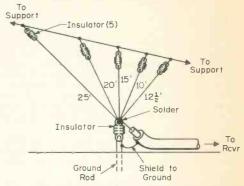


AREA 213, 731-2251

DIVISION OF

calculation of a half-wave antenna on any frequency. The folded dipole is definitely direc-tional. It responds best when placed broadside to the signal. Thus if you want signals arriving from east or west, run the antenna north and south, etc.

If your SW receiver is typical, there are two ways to attach the antenna lead-in to the terminals. There are three terminals, marked A, A and G. When the antenna is an unbalanced type, such as the inverted-L, link up the A and G terminal with the small metal strap provided. The A-G combination goes to ground; the antenna wire connects to the free A terminal. For a balanced antenna, such as the folded dipole, connect the two twinlead wires to the two A terminals. The G terminal goes to ground and the metal link not used.



Finally there's the deluxe SW antenna known as the fan dipole. Its claim to fame is that it can tune several bands simultaneously. It's more efficient than the inverted L and covers more frequencies (about 3 to 30 MC) than the folded dipole. But you'll need plenty of room in the yard for installation. The antenna picks up equally well in all directions. As shown in Fig. 3. several wires angle out from an insulated point on the ground. A convenient method is to drive a copper rod (sold for electrical grounding) into the earth and fasten a glass insulator at the top. The various wires are anchored and soldered at this point, as is the coax cable.

DON'T LOSE YOUR C.B. LICENSE!

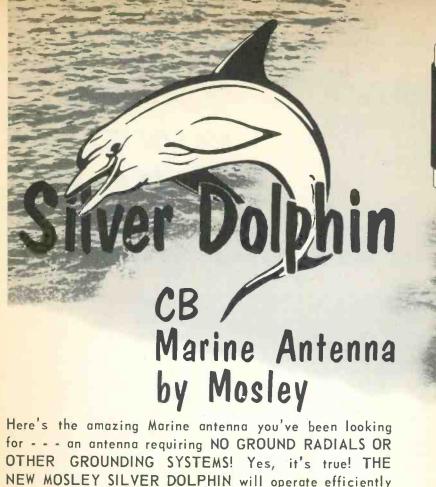
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NEW MOSLEY SILVER DOLPHIN will operate efficiently even on wood and fiberglass boats.

Outstanding Features

Overall height 8 ft. 5 inches.

CB NET

Salt-resistant, Weather-proof, Transformer.

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Hinge in Base For Folding Antenna Over. Amazing Ship-to-Shore Performance.

Consider this unique Marine antenna guaranteed to perform according to Mosley specifications or your money back.

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Name



FOR LISTENERS ON THE DX BANDS by RICK SLATTERY

This month we have some listings from a new reporter to the SWL SHACK. It's Steve Jones, KLO0519, of Lawrenceburg, Ky. Steve does amazingly well with no more than a modified Hallicrafters "Ecophone" (used to know a fellow named Hogarth who swore the Ecophone was the best set ever to come out of the second world war). Anyway, Steve has already received QSL's from Radio Sofia, BBC, HCJB, CBC, Switzerland Calling, Trans World Radio, and Deutsche Welle.

Steve passes along these loggings for your use: Radio Sofia, Bulgaria, 6070 and 9700 kc/s at 1900 EST; Deutsche Welle, Cologne, W. Germany, 9605 kc/s at 1620 EST; Trans World Radio, Bonaire, Neth. West Indies, 5955 kc/s at 2100 EST; Switzerland Calling on 9535 kc/s at 2035 EST; HCJB, The Voice of The Andes, Quito, Ecuador, 9745, 11915, 15115 kc/s at 2130 EST; Portuguese National Radio, Lisbon, on 6185 kc/s at 2330 EST: Vatican Radio, Vatican City, 9645, 11740, 15150 kc/s at 2000 EST; Radio Nederland, Hilversum, Holland, on 9570 kc/s at 2055 EST; Radio Australia, Melbourne, on 9570 kc/s at 0715 EST; Radio Finland, Helsinki, 9555 kc/s at 2000 EST; and Radio Havana, Cuba, on 15135 kc/s at 0715 EST

James H. Burton, III, Staunton, Va., passes along the news that Radio Kiev, in the USSR, has English beamed to North America from 1930 to 2000 EST on 9810 kc/s. They QSL promptly from: Radio Kiev, Radio Center, Kiev, USSR. Jim also reports two utility stations, one of the Bahama Government Telecommunication Department, Nassau, Bahamas, testing on approximately 3400 kc/s at 2245 EST. The other was station AEA, apparently a U.S. Army station, in Thenisens, West Germany. They were heard testing on about 10800 kc/s.

By the way, now is the time to start looking for those weak stations on the standard broadcasting band around sunset. Some real fine DX to be heard in this manner in the

coming months!

For the record, so many of you have written to ask about joining a top notch DX club, we will repeat the information on the Newark News Radio Club which we had presented a number of issues back. The NNRC is probably the oldest and largest DX club in the world. Began in 1928, it now numbers members from most of the nations of the world. Each month they send out a super-fantastic BIG DX bulletin covering all aspects of monitoring, including broadcast band, FM-TV, Ham, shortwave broadcast, utility, and even cardswapping! Dues are \$5 per pear and they will send you a sample of their bulletin for 25¢. Don't forget to mention S9 when writing to them. Address is: Newark News Radio Club, 215 Market Street, Newark 1, N. J.

Rambling on the bands: Radio Norway, Oslo, 6130, 11850, 15175, 17825 kc/s at 1600 EST; V. of Free China, Taipei, Formosa, on 7130, 11825, 11860, 15345 kc/s at 2217 EST; RAI, Rome, Italy, on 9630 and 11905 kc/s at 2005 EST; Radio Bucharest, Rumania, on 6150, 6190, 9510, 9590, 11810, 11940 kc/s at 2200 EST (very strong signal in English beamed to North America, usual propaganda rantings however); Far East Broadcasting Corp., Manila, Philippines, 6030, 7230, 9715, 11855, 11920, 11920 kc/s

at 1205 EST.

Let us know what you're hearing out there and why not send us a snapshot of your shack?



Shape up with the sharp one!



XL-100 C.B. Mobile Brand-new from TRAM

So sharp, adjacent channel rejection is 95 db or better! TRAM achieves this SUPER-SELECTIVITY with a built-in crystal filter. This, Better-Than-The-Competition excellence, separates TRAM's XL-100 from all others in the field.

Take a fast look at just some of the quality features that make TRAM Number One with pros who know!

23 channel operation via synthesis. • Compact (main unit 4" x 8" x 8"). • Sensitivity second to none. • Selectivity that can't be matched in any standard unit. • Built-in low-pass filter, minimizes "T.V.I.". • Hand wiring. • Teflon covered wire. • Locking switch makes rig tamper-proof. • Set padlocks to dash bracket. • Heavy duty, commercial microphone. • High efficiency transmitter. TRAM delivers 3.5 watts minimum output to the antenna. That's really getting your 5 watts worth of power.

At \$318 TRAM's XL-100 is your best C. B. value . . . your best TRANSCEIVER buy!

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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.

New appointments this month to the A.P.R.E. program include: Michael A. Zussman, 8078 No. 15th Ave., Phoenix, Arizona; Robert Langermann, KLF0755, Route 2, St. Croix Falls, Wisconsin; Donald R. Shue, KKG-4329, 355 S. George Street, York, Penna.; Fred Lepine, 13 Glen Street, Concord, New Hampshire.

ATLANTIC

June 20th the Tidewater Citizens Band Clubs were Host to Robert Rhule, Hy-Gain Antenna representing at the Oceanview Recreation Center. This was most interesting and informative lecture on antenna's and

was really enjoyed by everyone that attended.
On Friday, June 25th Terrac held an election of officers. Re-elected President was Fred Bryant, KKK7179. Other officers elected are: Vice-President, Ed Mittlesdorf, KMK0488; Secretary, Joe Mosebaugh, KKK5164; Treasurer, Dick Stilwell, KKK7675 and Communications Officer Dave Meadows, KK3210.

The club welcomes new members Leon Mueller, KMK-2724 and Larry O'Grady, KMK2704

Please pass your club news to A.P.R.E. Bob Smith.

WESTERN

In Redding, Calif. the newly organized North Valley CB Club holds its regular meetings on the first Tuesday of each month in the Shasta Savings and Loan Building. We are just getting started and welcome all CB'ers in the area to join us. We have some fine social events planned for the future, and you will be hearing more from this club.

Officers for the first year are President, Ray Maye, KLA4996; Vice-President, Ron Smith, KLA7040; Secretary, Tony DeCoito, KLA6363; and Treasurer, Larry Friar, KNA1909.

New officers of Maricopa County Emergency Com-munications are: KEJ0269, Barry Lee Pres.: KFA-2889, Mike Zussman Veep; and KKX1900, Mike Camp-bell, Secretary-Treasurer. Recently M.C.E.C. handled all communications and money pickups for the Annual Arizona Cerebral Palsy Telethon originating in Phoenix. This is the boys fourth year for the Telethon. Assisting them were Superstion REACT of Mesa, Arizona headed by KFA0102 Jim Shaw, and Coconino County Emergency Communications in Flagstaff headed by KFA1473, Bob Lockett.

On the morning of May 29th, 1965, starting at 6:10

On the morning of May 29th, 1965, starting at 6:10 A.M., (C.E.M.P.) Citizens Emergency Mobile Patrol KEJ7036, was alerted to participate in an Emergency-Disaster preparedness drill, MERCY V, involving some 17 hospitals in the San Fernando Valley Area of Los

Angeles, Cal.

This exercise was coordinated by County and Cities Disaster and Civil Defense Commission. Also the California Disaster Office and U.S. Public Health Service.

C.E.M.P. provided direct communications in and around West Hills Doctors Hospitals in Canoga Park, and to units positioned at other hospitals, the Police Dept., Fire Station, Radio Station KGIL and other strategic points, where an overflow of "casualties" strategic points, where an overflow of could be accommodated.

Some 13 Scout Troops, 4 Girl Scout Troops, and 1 Explorer Troop, volunteered to provide the

It is to be noted that less than 30 minutes expired from the first alert to the report of all stations manned.

This month members of San Gabriel REACT voted to supply Paul Seaburn, KFB0278, with several pieces of playground equipment for boys from Pacific State Hospital in Pomona, California.

Presently, Paul and his wife care for six boys from the hospital which is for youngsters with mental and

physical handicaps

Bob Bertiaux, KFA7864, Board Chairman along with Vern Broadwell, KKX0419, Lucy Ballew, KFA7864, and Edythe Armstrong, KKX5948, presented Paul with a check to purchase the equipment and have it installed.

At the monthly C.E.M.P. Board of Directors meeting, Tuesday, June 8th, action was taken by the board to appoint two members as Public Relations Officers for C.E.M.P. Mark J. Planovsky (KKY0299) and Phil Seberger (KKX8110), Unit 20 and 9 respectively.

Here's wishing them both much success in their en-

deavor. CB organizations and clubs are invited to contact either or both at Citizens Emergency Mobile Patrol,

Inc. P.O. Box 924, Reseda, Cal. 91336.
On June 17th, 1965... Three CB Units participated in the Local Big day at Pleasant Grove, Utah known as "STRAWBERRY DAY," the participation was over a four day period, being in parades both morning and evening . The participants with their mobiles as follows: Mr. Glen Larson, KGC2553, Orem; Mr. Mike Searle, KNE0521, American Fork; Mr. Bill Bird, KLE-2295, Orem and Mr. Harold Sargent, KLE0972, Pleasant Grove, Utah, this was a composite group representing the following organizations: "REACT," Squaw Peak CB Chapter, Civil Air Patrol, Individual Group and the Friendly Five CB Radio Club . . . this representation was full county wise in its participation throughout the whole four days, this is the type of cooperation and participation we like to see on all occasions, also last but not least was the Utah County Sheriff's Posse and their CB units.

The friendly five "REACT" Team for Utah County, Utah has now been sub-divided into six separate units known as groups, Namley, Lehi, Sherman Carlson, KLE1189; American Fork, Lorraine Hayes, KLE0928 Unit 2: Pleasant Grove, Harold Sargent, KLE0972; Orem, Bill Joe Bird, KLE2295; Provo, Clifford Stone, KLE1706; Springville, Irwin (Butch) Curtis, KLE-1656... In addition Mr. David Brown, KLE2804 trying to organize the county of Salt Lake and Mr. Dale John-KLE1442, Heber City, Utah is organizing WA-SATCH, County at the present time . . . Mr. Junius H. Noyes, KLE0928 was the spark in organizing Utah County, Utah and various other parts of the state, plus recruiting many members at large to do the same type of work in their city, county or state. He has since resigned his position as County Head to become a member of the Local City group of American Fork and return to writing for S9 Magazine.

The Emergency Communications Organization, have eceived their shirts with plaques, yes they are RED SHIRTS. The Club has offered their services to the RED CROSS, in case of an emergency, and when needed, also the Club is planning on going to the Marshall, Texas Jamboree, July 22 to 25th, approximately 40 units from Texarkana will be there, for the Coffee Break, and the Parade Saturday morning, also the Drawing Sunday after a big Bar-B-Que Dinner, Old Radio Red will furnish the sound system, as he did in

Dallas for their CB Fair.

Below is a report of recent activities of the Missile Valley CB Club, Inc. of Alamagordo, New Mexico:

On May 1st, 5 members of the club acted as traffic coordinators and assisted the village of Tularosa in making their Annual Rose Festival Parade a success. Members were stationed at strategic points along the parade route with one unit following the parade relaying directives from the Chief of Police to those routing

the traffic along busy U.S. Highways 70 and 54. On the following Saturday, May 8, the Immaculate Conception Catholic Church of Tularosa had their Centennial and a part of the festivities was a street parade along the same route. Club members assisted as in the Rose Parade. Saturday, May 15, an 8 year old child was lost in the mountains near Three Rivers. 8 units of the club responded to the call for help but, fortunately, they were not needed as the boy was found by a member Otero County Sheriff's Department approximately 10 minutes prior to the arrival of the first units. On Sunday, May 23, an ice cream social was held in the city park in Alamagordo; this was a family affair and all enjoyed a pleasant afternoon despite a 40 mile

an hour wind.

The first annual Citizens band JAMBOREE is scheduled for a one day stand during the month of August,
the exact date will be announced as soon as plans are

made permanent.

Lorrin Mabus, KGC1915 of Salt Lake City and Bill Holt, KGC0797 of Ogden are among those on the committee in charge. This venture is to be a combined effort of CB'ers from Provo, Ogden, Logan and Salt Lake City.

Plans call for demonstrations and displays of various transceivers, antennas and other types of CB equip-ment from the following manufacturers: Hallicrafters, Mosley, General, Webster, Place Tron Corp., etc. and

There will be a charge of \$2.00 per person with children being admitted free, there will be drawings for

various prizes.

Officers for the current year for the Albuquerque Citizens Radio Association, Albuquerque, New Mexico, are: President, J. R. Jolley, KLE2142; Vice-President, Willard W. Larson, KGC2430; Treasurer, Norman Mathis, KLE2420; and Secretary, Mrs. Sue Kelly, KBG-0800. Members of the Board of Directors include: R. W. Russell, KGC0102, John Goff, KGB1029, and Lloyd

Starr, KGB1371.

The A.C.R.A. Emergency Net is a separate unit of the club formed to work on a voluntary basis in assisting in search and rescue operations and to give whatever assistance may be needed in the community or
surrounding territory. The Net also takes part in the
March of Dimes, any and all telethons in the area, and any other fund drives where it may be needed. In addition the Net assists city, county and state law enforcement agencies whenever the need for additional com-munications arises. The Net Control Officer is Clark Speakman, 15W1793. Assistant Net Control Officers are: Lloyd Starr, KGB1371, John Goff, KGB1029, and Dave Ray, KGB1069.

The Net currently includes 59 mobile units and one permanent base station. The base station is operated by Clarence Juul, KLE0704, who is confined to a wheel chair and is almost totally disabled. Clarence is a real "work-horse" who really enjoys helping others when-"work-horse" who really enjoys helping others when-ever he can, and does a tremendous job in manning the

base station during Net operations.

The first A.C.R.A. Net operation in May consisted in the search for a 14 year old girl who was reported missing. She was located with a friend not far from her home. On May 9th, the Net was asked to assist in the search for a seven year old boy who fell into the Rio Grande at Albuquerque and was swept away by the swift current. During the course of the search a C.A.P. major flying an aerial search mission hit a power line and was killed. While the mission to find the boy was unsuccessful, Net members spent an entire weekend at various shopping centers and street intersections soliciting funds for the family of the C.A.P. major. This weekend campaign realized \$2,400 which was turned over to the major's widow.

On May 22nd the Net was again called to assist in the search for the still missing boy. Net members worked side by side with the State Police, City Police, Sheriff's Department and the Civil Air Patrol. The search was continued for 24 hours and again proved unsuccessful. (The body was finally recovered about

25 miles downstream three weeks later.)
This is a story of CB in Action and not as an individual, but as a group of the finest people in the world the CB'ers of the Denver area.

On Wednesday afternoon, June 16, 1965, a tornado hit the Castle Rock and Palmer Lake districts just Denver with a deluge of cloudbursts which in turn filled the South Platte River which runs through the City of Denver causing one of the worst disasters ever to hit this city. With about two hours warning CB'ers went to work. Along with the Police and Fire Dept., Civil Defense, the CB'ers went mobile in patroling the river and bridges, setting up road blocks, warning people in the area to evacuate the region. When the twenty foot wall of water hit the Denver district, luckily there was only a couple of lives lost. Here the CB'ers did a big job in taking people to other places in their cars and trucks. Several shelter homes and buildings were set up to house these people and feed them. Due to the loss of electrical power and landline communications the CB'ers handled messages to relatives and friends about their loved ones.

For two days these tasks were performed by a possible hundred CB units many without a break all this time and no thought given to their own safety, or costs,

or inconveniences at any time.

We had five different base units working with the mobile units which these people stayed on right around the clock. Many of these fine CB'ers missed going to work at their jobs to stay on another job that had to be done.

On June 17th, 1965, portions of Southeastern Colorado, was alerted to expect high winds with flooding. Due to the tornado and heavy rain with hail in the mountains. The Arkansas river was up and still rising, there was dam breakage along the Arkansas river. Also there was flooding from the Fountian river from Colorado Springs, which had a tornado hit with heavy rains with hail. The two rivers come together in the

Talins with hall. The two rivers come operations and City of Pueblo, Colorado.

The CB'ers of Pueblo, called in all mobile units and set in action REACT, at 3:30 P.M. The creet of the flood reached Pueblo, around 11:00 P.M. on the 17th destroying several homes and making hundreds home-

The REACT team quickly went into action warning families of Pueblo, to evacuate and go to the shelters

set up for them.

The REACT team quickly set up a chain of comnunications relaying warnings to the families of Junta, Colorado, and Lamar, Colorado, which is 100 miles from Pueblo, they also set in a link of communications to Fountain, Colorado, where the flood waters were racing from Pueblo, this proved very helpful as we had early warning of the crest to come. The CB'ers also set up a communications station at the Red Cross headquarters giving aid to the needy.

There was CB units stationed at all the bridges in the City as the flooding had caused cracking of the bridges and water was coming up over the bridges, this proved helpful giving instructions to the motorists as

to the routes to travel.

There was a call for a boat around 12:00 P.M. to get some children which were cut off by the flood and in seconds the good CB'ers had a boat to the rescue. The City got through this flood without any casualties, thanks to our CB'ers being ready and willing to risk their own safety. The CB'ers worked all through the night of the 17th without fail or tiring, and providing an excellent backup system to the Amateur operators

communications already set up.
On the morning of the 18th the Civil Defense Director of Pueblo County called the CB control asking that the CB'ers join them as communications were out and they needed the assistance of the CB'ers. This was done quickly and a communication link was set up with



President, Hank Rail, congratulating the Vice. Pres., Al Phelps, on a job will done.

Colorado Springs, 40 miles north of Pueblo, passing on information and inquiries of missing persons

The emergency lasted until late P.M. of the 18th. The

good CB'ers worked a full 25 hours without any sleep and without let up.

On the 19th came the clean up, the CB'ers were right there with their never failing assistance, relocating families and helping with the cleaning of homes, also reporting on the damage of the flood.

The never failing CB'ers of Pueblo, Colorado, deserve a big hand on the good work done. Thank God for the CB'ers who risk their own safety to save others in a emergency like the Pueblo, Colorado CB'ers did.

NORTHERN

The second formal meeting of the proposed North East Council was held in Hillsboro, N. H., June 6, 1965, at 3:00 P.M., in the courthouse building. Rep-

resentatives of twelve clubs were present, along with interested members that came to hear and be heard.

Don Spear of Newport, N. H., was asked by acting chairman, Ted Millis, to start the meeting and call it to order. He welcomed the people and then said that the nomination of the officers should be held as soon as possible, so that the council could have the necessary as possible, so that the council could have the necessary officers to start to do council business. The nomination came from the floor, but only the delegates were to vote for the nominees. The council officers are: Don Spear, President, KBD1095, Newport, N. H.; Blanche Vien, Vice President, KMA0504, Pittsfield, N. H.; Tom Gullage, Secretary, KKB1214, Concord, N. H.; Virginia Lyman, Treasurer, KMA0299, Laconia, N. H. After the slate was voted in and a committee was appointed to draft a constitution, that would be sent to the clerks to have them approve or change, and then return to Council so that the changes could be rewritten

return to Council so that the changes could be rewritten into the constitution and then at the next meeting of

the council the delegates may then ratify it.

Discussion then turned to dues—and it voted that the dues be \$2.00 per month per club payable quarterly, so the council could have the necessary funds to operate

The next regular council meeting will be in Concord,

N. H., September 12, at 3:00 P.M. Exact location will be sent to you later.

Special Jamboree Report from Roy Shetler, 20W7473, S9, APRE.

I have attended quite a number of CB Jamborees this year. On April 25th I attended a Trumbull County CB picnic near Champion, Ohio. Crowd was normal and everyone had a good

time. Lots of nice prizes.
On May 16th there was a special meeting for all CB'ers at Bradys Run Park, shelter #2. It was to discuss the rules and regulations in Part 95. Many interesting items were discussed. Free coffee and doughnuts were served. I helped

to promote this for all interested CB'ers.
On May 29th and 30th I attended the Wayne County REACT Jamboree. Many displays were on hand and many nice prizes were given by the organization. Lots of entertainment on Saturday night including round and square dancing. This was their first annual event, and was well planned and organized. This was held in Wooster, Ohio at the fairgrounds.

I will be taking pictures of all future events, and enclosed

is a picture of one of their square dances

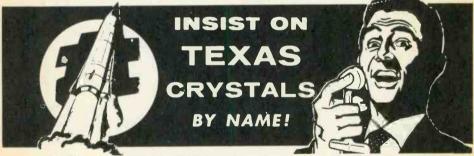
On June 6th I attended the Tri-County CB Radio League of Akron, Ohio Jamboree. This was held at Chippewa Lake Park. The crowd was normal, many nice displays were on hand, and believe it or not, this editor took home their grand prize, a 19-inch portable TV with all the goodies.

Newly installed officers of the Rapid Fire Emergency Net of Nassau County, L. I., include: President, Jerry Gieir, KBG1385; Vice President, KKD0701; 2nd Vice President, Terry Goldstein, KBI2124; Secretary, Ronnie Kalikou, KMD0724; Treasurer, Mike Mais, KMD1341. Interested parties should contact: P.O. Box 372, Levittown, L. I., New York.

With the acquisition of the emergency trailer the Finger Lakes CB Club has now become one of the most versatile disaster and emergency units in the area.

The trailer provides an emergency control center that is mobile and efficient. It can operate from either 110 volts power lines or from its own 12 volts power supply. It carries two transceivers and a control desk for the co-ordinator, and is equipped with two bunk beds and

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all necessary equipment for continuous 24-hour service. Twin coordinated antennas permit simultaneous reception and transmission, or transmission on two channels at the same time without interference. In an emergency the club could put 50 mobile units and 12 portables in the field, to work in conjunction with the mobile

base in the trailer.

The club is closely affiliated with the Glen Regional
CB Club at Watkins Glen and the Phelps Communica-CB Club at warkins gien and the Phelys Commindations Club, William Snyder, past president of the Finger Lakes Club, is in charge of the Emergency Trailer and can be contacted by radio on 20Q3190 on Channel 11 or on land phone—789-2668. A CB antenna was purchased and installed on the roof of the City Hall in

Geneva for use in emergencies.

On Thursday afternoon, June 10, about 5:15 P.M. a violent storm thought by some to contain Tornadic Activity hit the twin cities of Bangor and Brewer, Maine. The duration of which was no more than one half hour, during this time extensive damage was done. Major items were fallen trees, broken power lines and crushed automobiles. Fortunately no serious injuries were counted.

When the sun finally came out again after the storm, REACT came out with it. Searching the city of Bangor for damaged areas with their mobile units locating and sealing off danger areas and reporting these to Police and power company officials, units remained in these areas until the danger was elevated. Re-routing traffic and warning pedestrians away from these places. Power outages were extensive and lasted well into the following day.

KMA1814, Melvin Blackwell operated net control for the REACT Team directed by S/Sgt. Frank Jones, USAF. The Pine Tree Five Watters REACT Team also

participated.

The timely action of all individuals involved probably prevented untold injuries which could have resulted from live wires strewn in the street.



Newly elected officers of the South County Rebels CB Radio Club took their oaths of office, at a Dinner Dance held at the Kiote Hills Country Club. Members of the new Executive Board are: President, Ken Spann, KFC1360; Vice Pres., Bob Taylor, KLA5259; Treasurer, Rodger Flick, KLA0699; Sect., Jim Slack, KLA4770; Membership Chairman, Ken Miller, KFC3889; Publicity Chairman, C. R. Comfort, KFD2121; Activities Chairman, John Hansen, KLA0963.

Club meetings are held on the second Sat. of each month at 8:00 P.M., visitors are always welcome to

FITHER YOU'VE GOT IT OR YOU DON'T!

I guess I can safely say that I have the smallest mobile in the world.

But let's start at the beginning; I am 20 years old, and I have Muscular Dystrophy. Last year, my father bought me an electric wheel chair from the Everest & Jennings Co. of Los Angeles. Now I could move around without any outside help. It was great, but if anything happened, i.e. a part of one of the two motors broke, I was left helpless and I couldn't do anything. First, I thought of having a walkietalkie so I could contact my base. But my father had a better idea; he told a friend of ours, Yvon Dumont, an electronics

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This is me, XM53463, in my "mobile." This photograph was taken by XM53307, Pierre Dozois. The CB is a Messenger III, and the antenna is an M-130 "Mighty Mite." Best of 73's to all S9 readers.

technician, to get the smallest transistor unit he could find: he got us a Johnson Messenger III, the same unit we have in our car, a '64 T-Bird. He also got me an M-130 "Mighty Mite" antenna, by antenna specialists. That also is very small.

For power, I take 12 volts from my two 6 volt batteries connected in series. In my chair, I can get up to as much as 7 to 8 miles distance. The only thing missing is a good ground plane for better performance, but I never go farther than 3 to 4 miles from home. On base, I use a Courier IM by e.c.i., and an M-119 "Scanner" by antenna specialists. So now I think I can safely say that I have the smallest

CB mobile in the world! Either you've got the CB bug or not. Do you think I've got it?

CANADA

The appointment of the Cape Breton Citizens Band Club as headquarters for a newly formed radio emergency citizens team, serving the Cape Breton area on a 24-hour basis, was announced Tuesday by the organization's head office in Chicago.

The Cape Breton club is part of a nation-wide movement called Radio Emergency Associated Citizens Team which is sponsored nationally by the Hallicrafters Radio Company

Objectives of the movement are to provide a supplementary system of radio communication for local emergency situations and to promote correct and efficient use of radio service.

Co-ordinating the Cape Breton effort will be L. J. MacKeagan of Sydney, president of the Cape Breton Citizens Band Club. He said that a monitor station will be in operation soon at Sydney and Port Hawkesbury for the purpose of proper authorities.

"In many communities, General Radio Service has proved the difference between life and death," Mr. MacKeagan said. "From an accident scene on a remote country road a citizen who is equipped can instantly alert an ambulance, a doctor and hospital staff.

"He could also save previous moments in disaster situations where emergency oxygen or a resuscitator is needed."

Mr. MacKeagan said the recent situation on remote Flint Island where a child, bitten by a dog, had to be removed to hospital is a good example of the effectiveness of General Radio Service and "REACT."

General Radio Service was formed in Canada by the department of transport to satisfy a need for low-cost, two way radio for businessmen. Today, any citizen over 18 years can operate a private general radio service communications system after he receives his radio license.

MacKeagan said that 132 licenses have been issued in Cape Breton.

PACIFIC

The Oregon Trail CB Road Patrol over the Memorial Day weekend, was deemed a success after making some

All assists to motorists in distress.

The Patrols operating out of The Dalles, Wasco and Maupin areas, travelled the highways Friday evening

and Monday afternoon and evening, logging over 2000 miles in these three areas.

The Club would like to express their appreciation for the cooperation and assistance received from The Daily Chronicle, KACI radio, KODL radio and the local and State law enforcement agencies.

Also, a note of thanks to the following members for their extraordinary contributions of vehicles and time

to make this Patrol a success

The Dalles: Mr. and Mrs. James Lee, LeRoy Anderson, Mrs. Arthur Anderson, Mr. and Mrs. Eugene Christenson, Deryl King, Leon Smith, Dale Shuey, Jr., Randy Wink, Jack Dillard, Mr. and Mrs. Charles Hurd and Mr. and Mrs. Paul Dowling.

Wasco area: Mr. and Mrs. Martin Pshigoda, Mr. and

Mrs. Jerry Barnett, Mr. and Mrs. Richard Rust and Mr. and Mrs. John Alley, Jr.
Maupin area: Mr. and Mrs. Dolph Baker, Fred Gear-

hart and Hugh Adams.

To the above named and all other members and nonmembers alike who participated, we would like to say 'Well Done" and give our thanks.

The Oregon Trail CB Club met at the Wasco County Courthouse Annex Building, The Dalles, Oregon, June

8, 1965.

Highlight of the evening was the drawing of the winning numbers of the raffle the club has been conducting. First prize of a Mustang CB radio was won by Mr. Art Means, Sr., The Dalles. Second prize of a M-67 CB antenna was won by Mr. G. A. Nowling, The Dalles.

The members of the club would like to thank all who participated in this raffle, both those who worked so hard to sell the tickets and those who purchased the

tickets.

On June 12th the McKenzie C.B.R.A. sponsored a Bowl-a-break at the Firs Bowl in Eugene, Oregon. It was our first "go" at a coffee break and it turned out very well. A delicious buffet dinner was served, after which the pins started to fly. Prizes for high game for men and women were presented to Roger Bishop, KLC-1464 of Albany, Oregon and to Stella Stull (XYL of KLC0835) of Cottage Grove, Oregon. Numerous other prizes were donated by local CB dealers and presented



throughout the evening. There were door prizes galore. The Westerners Lodge #18 took home a nice folding table for having the most members present. "Bud" Stump, KFG1297, the president "gathered it in" for the organization. The E.M.C.O.S. from Klamath Falls collected a thirty cup coffee maker for having traveled the greatest distance. Jessie Barker, KNC0087, its News Editor, took the pot home to roost. We hope the gifts serve everyone well. We wish to thank all the 150 fine people who came to make the evening a terrific success. Our thanks go to Jerry Tynsdale, KFG0730, Don Scott, KLC1171 and all their helpers for the fine job in handling and planning this affair.

Many of our members traveled to Stayton, Oregon over the Memorial Day week-end to camp over-nite and over the Memorial Day week-end to camp over-nite and to take in the Santiam River White Water Challenge. Those attending were: the Ora Velkinburgs, KLC1733, the Art Moodies, KFG0582 and KFG0124, the Bill Winns, KLC0691, the Chet Keiths, KFG0784, the Chuck Maesners, KFG1693, and yours truly, Hank Velkinburg, KLC1776. KLC1733 and KLC1776 assisted the Trickness of the County Transcations of the Coun County Transceivers on their emergency communica-

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tions network. The camp grounds were wonderful and many new friends were made eye-balling around the camp fires

Our REACT team has affiliated itself with the American Red Cross local chapter. A drill is scheduled for June 2, 1965. Progress is being made with a program

for cooperating with the Lane County Sheriff's office. Our next BIG event will be the all-day JAMBOREE, Sunday, September 12th, at the Dan Tracer Farm, KFG-0595, located just outside Lancaster, Oregon. We will have door prizes, games, refreshment stand, pot luck, card exchanges, dealer display booths, kids corner, guide cars, and FUN, FUN, FUN! Plan to visit us if you are in our area that day.

SPECIAL GUEST STORY BY 59, A.P.R.E. MICHAEL J. LA VERSA, SR.

"MAN-TRAPPED! !"

"Any base station copy me?"

"Any base station copy me?"
"Any base station copy me?"
Must be some kid with a walkie-talkie, I thought.
This was the chatter at the moment on my Pierce-Simp-

son Companion I-channel 11

Being on vacation from my job as an Electrical Tester for G.E. in Pittsfield, Mass., and because we couldn't go away this year, I had been trying to amuse and en-tertain my family in one way or another. This beautiful Saturday evening in July seemed just perfect for an outdoor movie. A Walt Disney feature; an adventurous trio—two dogs and a Siamese cat, looked very attractive in the ads, so-o-o, three of my boys were all for it. At about 7:45 p.m. we were on our way to a soda and

At about 7:45 p.m. we were on our way to a sound and pop-corn evening.

Suddenly, the voice on 11 grew more urgent and insistent—"Does any base station copy me? This is an emergency call!!!" I hesitated only a moment to see if a base station would respond. There was nothing but total silence. Quickly picking up the mike, "This is KKA4462, the handle is Mike La Versa, please give your call letters and tell me about your Emergency!!" This was the ensuing conversations.

"This is Norm, Norm Lissee, KBC4991, you know me, I drive a taxi and I came to 11 to get some help. My base can't copy me from here. I just came up to a wreck with a man trapped inside. Are you base or mobile?"

"Mobile near the Artery Arcade," I answered, "Standby a second, Norm, my base should be on." "Break, here's base," said my wife.

"Listen to the conversation, Honey, and you will know

"Usen to the conversation, instancy, and the story."

"Go ahead, Norm," I continued, "Tell my wife the situation and what she can do to help. I'll standby."

"I'm on State Road," said Norm, "near the old mill and the Community Club—there's a Volkswagon bus with its frond end smashed against a tree. The driver is pinned behind the wheel and we can't get him out. We need a Doctor and an ambulance. The guy is bleeding restly had! You better call the Police Department, too!" pretty bad! You better call the Police Department, too!

"Go ahead, Honey, make those calls—Police, ambulance, and Doctor. I'll standby and will be headed out State Road to see if I can help Norm."—"KKA4462 will be 10-23," I closed.
"10-4, this unit 10-6"—she promptly responded. Then—Silence settled in like cold death.

The entire conversation had taken place on channel 11. This was the call channel. Not an alien word had been spoken nor had a single call interrputed us during our entire exchange. Everyone had done a 10-23 to give precedence to the emergency. It made me proud of every local CB'er!

"Mike, are you still in there?" came Norm's voice.
"Yes, Norm, I'm less than a mile from you. What can

I do for you?"
"Stop somewhere and see if you can get a crow-bar.
We need it very much! The guy is still stuck in there.
Your wife make those calls?"

"I'm near Ken Rice, He should have a bar of some kind at his gas station!" As I spoke the last few words, the fast approaching scream of a siren was deafeningand a Police car went speeding by.
"The Cruiser just went by me, Norm—there's your answer!"

'Yeah, O.K., Mike, I see him coming like h--- now! w!!—is he traveling!!"

"O.K., Norm, this unit 10-23-" and I turned into

Ken's Gas Station. While my boys kept an ear to the unit for any further calls, I dashed into the station; made my request for a crow-bar, got it, and ran back to the car. Norm called and I reported my success and was on the way to the scene.

In less than a minute, the entire picture came into view. Several men were crowded near the door of the smashed vehicle whose front end was mashed against a large tree. People from the neighborhood started to arrive—the natural curiosity of the masses—lured by the

wailing Police siren.

I parked on the right shoulder of the road and ran across the street toward Norm. We took the crow-bar over to the wreck and some of the men started to probe

and pry.

A wounded man about 25 years of age was laying across the seat, conscious and in great pain. His shirt front was soggy with blood from a lower chest wound. He was being held in such a position as to relieve the strain on his trapped foot. One man was in the rear reaching over and supporting the injured man in a partially sitting position. Another man was near the front door on the passenger side supporting the right shoulder and head of the injured man, and bathing his face with a cold towel. They could not remove the man from the car because his left foot was caught between the base of the seat and part of the car body which had been pushed in from the front.

been pushed in from the front.

A quick-thinking motorist asked that we hold traffic.

He made a quick U-turn and sped back to Ken's Gas
Station. In no time at all, he was back—with an acetylene torch and Ken. Now, things really started to look
promising. One of the willing helpers, in his efforts to
shield the injured man's leg, was severely burned on
one hand from the intense heat of the torch.

"Hey, Dad," called one of my sons, "Mom says the
doctor can't come unless the Police call him!"

doctor can't come unless the Police call him!

"O.K., Chuck, got the message—Clear the channel"
-The message was relayed to Police Headquarters via their own radio.

Again, the loud and eerie sound of a siren engulfed the atmosphere, the ambulance had arrived and a stretcher was being readied for the injured man. An Emergency Fire truck had arrived just moments before—

was also standing by There were about two hundred people milling around.
The accident had happened near an outlying residential district of our city. Despite this, the traffic was kept moving rather briskly by one Policeman and a couple of helpers. Yes, Norm was still there, too, assisting with the traffic problem. The other Police Officers on the scene was instrumental in directing the rescue

operation, having assumed responsibility upon his ar-

When the man was finally freed from his predicament, the ambulance attendants carefully but quickly loaded him on the stretcher and into the ambulance. The man with the burned hand was also seated and the vehicle sped away to the hospital.

Slowly, the crowds of people dispersed, drifting back to their homes—TV's, etc.—to whatever they had been doing. In a matter of minutes, it seemed, the traffic assumed its normal, hetic Saturday evening pace.

Norm had asked repeatedly about the Doctor and it was at this time that I explained why the Doctor had not arrived on the scene. A Doctor had been standing by awaiting verification from the Police Department. The physician did go to the Hospital and handle the case upon its arrival there.

upon its arrival there.

The injured man in this case has never known and still is not aware of the amount of cooperation, endeavor and thoughtfulness it took, and the part so many people played in his unfortunate episode. He doesn't know what CB is and that it had assisted him!!

The next edition of the local paper (on Monday afternoon) carried a three line article about an accident, where it happened, and that a man was hospitalized.

That is why, John -----, YOU never knew this part of your accident and about CB'ers and some others that had helped.

of your accident and about the had helped.

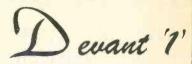
In CIVIL DEFENSE and in any Emergency—you can be sure—CB'ers and REACT here in the northwest corner of Massachusetts have been and will continue to be on the ALERT, READY and WILLING to Serve!!!

That's AII—FINI'!!

EXTERIOR

S9, A.P.R.E., Hawaii, KIG0307 reporting. On June 12, 1965, members of the District 1, Civil

The No. 1 CB Antenna on The Market Today



CB'ing was never like this! When the DEVANT "1" Came in the picture, countless CB'ers throughout the nation became aware of a real "Power House" of an antenna.

This remarkable base station antenna features 3.4 DB gain; VSWR of 1.5/1 or better, Feed Point Impedance of 52 Ohms, Assembled Weight, 7.5 lbs. Has extremely low angle radiation. Directs the signal equally well in all directions.

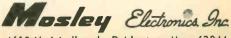
This weather resistant antenna is constructed to last, through high winds (wind load EIA Std. of 41 lbs. at 80 MPH), through extremes in weather! Antenna mounting is simplified, just mount the lightweight antenna on the mast, tighten two screws and lock nuts.

Consider buying the best . . . Net Price \$22.76

CR Mohile Antenna Devant 2"

For mobile to base operation the ultimate in a communication antenna is the Devant 2. This slim lined Devant 1 companion is designed for rooftop or trunk installation, has an SWR less than 1.5/1 on all 23 channels, requires no tuning. Net Price \$14.50

(For further information write)



4610 N. Lindbergh, Bridgeton, Mo., 63044.

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Defense, Honolulu Area Command got together and formed the "ALIMANU RADIO CLUB."

Nomination and election of officers were held and the following members will serve as: President, David Kauhi, KLS0123: Vice-President, Bill Kelikolio, KIG-0170: Operation Officer, Frank Machado, KLS0013: Radio Officer, Walter Kaleikini, KNS0037: Recording Secretary, Al Duhaylonsod, KNS0008: Corresponding Secretary, Jerry Alidon, KNS0031: and Treasurer, Jimmy Pagan, KLS0049.

Other members attending were: Tommy Bautista: John Manloloyo, KNS0020: John Costales, KNS0074: Henry Costales; Henry Rabago, KNS0066: Merl Martin, KLS0141: Bert Kalaikai, KNS0047: and Raymond

tin, KLS0141; Bert Kalaikai, KNS0047; and Raymond Romo, KNS0062.

Meeting will be held every second Saturday of the month. The above CB Club "ALIMANU RADIO CLUB" monitor Channel 11 (27.085 mc.).

monitor Channel 11 (27,085 mc.).
Plans are considered to open for membership to all CB'ers and "Ham" Radio Amateur operators residing within the areas boundary from Tripler General Hospital to Ewa Beach. Also considered were plans to start an activity similar to REACT to primarily serve in general communities boundary within the areas.
Do contact Jerry Alidon, KNS0031, 4153 Keake Drive, Honolulu, Hawaii 96818 for further information.

REACT AND MISSISSIPPI RIVER FLOOD

Things are just beginning to quiet down out this way. I wanted you to come out to Fulton during the height of the flood and tried to get word to you so you could come in and see CB being used.

We were an island city (pop. 4,000) for 3 weeks. I spent 4 weeks inside myself. When the water closed in around the town our Conservation men were inside and carried the bulk of the load.

I never imagined so many problems could arise and that CB could be so useful. All supplies had to be hauled across 5 miles of water, over fields and highways. There were 5 "Ducks" being used, all CB equipped. We had mobile units at all points of takeoff which

We had mobile units at all points of takeoff which changed with water levels, all points being numbered and mobiles working shifts. There was a base station in Flood Headquarters, and I operated from my car using a CB 3A on channel 9, and a Police 39.5. I was operating mikes with both hands for 1 to 14 hours a day. A check had to be made on people coming and going. No one came in unless cleared through mobile units and my car. Many occasions arose which I don't know how we would have handled without CB.

The Meredosia levee, protecting thousands of acres of farm land and homes, was a critical spot. If it failed

of farm land and homes, was a critical spot. If it failed of farm land and homes, was a critical spot. If it failed there would have been 10 feet of water over Hillsdale (pop. 600). It is Rt. 84 below Albany. It was sandbagged 4 feet high and a mile long. My daughter, Karen Bitler, was Post 3 using a CB 3A. Volunteers were called for sandbagging 24 hours a day. One night during the cresting period of the flood she called and said the engineers needed plastic film to protect the sandbag levee. It could be brought across the Gateway Bridge from Clinton, Iowa, if we could bring it down river the rest of the way by boat. While I was asking for information as to the weight and bulk of it, Nitrin Company broke in on channel 9 and said their heli-Company broke in on channel 9 and said their heli-copter would handle it. They came in with several loads the next day, landing in Karen's back-yard.



On another occasion a woman came around to Post 9 wanting sandbags for Johnson Creek levee. Our REACT mobile unit called me. I knew the city of Fulton had extra bags on hand. The mayor was standing by my car and had a city truck load the bags, take them to the army helicopter on the hill, and pefore the woman got back around to the levee the sandbags were dropped.

CENTRAL

At a special meeting held recently, the EMERGENCY COMMUNICATIONS TEAM (Cincinnati area), elected Carl Wright, 19Q6324, as Coordinator to assist Lew Prine, KLN1975, who was elected earlier at the regular annual meeting. Craig Ellison, KLC2216, was elected secretary-treasurer to succeed Tim P-ice, KHH-0415, who was elevated to the post of Assistant Co-ordinator. Besides the monthly meetings held by the Team, special social events are scheduled quarterly. The latest venture of the ECT was a stake-out of a school building which had been vandalized. Most of the community activities of the group are in cooperation with the local area police departments or civic groups.

Traffic direction for the annual Forest Park Baseball parade was accomplished at the opening of baseball season. Team members monitor 3, 9, and 14, and the club call (used for club business and emergencies only) is KLM9272.

The Northern Hills CB Club patroled Interstate 75 leading into Cincinnati during the busy Memorial Day weekend. They were kept busy by moto-ists stalled along the highway and others stopped for various reasons. The Northern Hills Club has over 200 members and several pieces of motorized equipment. Members are from southwestern Ohio and Northern Kentucky and some come quite long distances to attend the meetings. Northern Hills is a REACT team and monitors channel 9, as "Cincinnati REACT."

The CRYSTAL WIZARDS of Muskegon, Michigan,

began their meeting this month with a pot luck supper. On display was a Pearce Simpson 23-Channel owned by Rod Pesch, KDC2221. Mr. VanDyke, KH12531, from Fruitport (Mich.), was

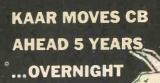
accepted as a member. July 25 saw a CRYSTAL WIZARDS caravan gather

ing at the Belt-Line Shopping Plaza. They then traveled south to John Ball Park in Grand Rapils where the meeting took place.

On the 11th and 12th of September, 1965, the Co-shocton County REACT Team, Inc., will hold a Re-gional meeting of REACT teams in Ohio and surrounding states. This meeting will be held for the discussion of various topics such as: Financing, codes, drills, 24-hour monitoring, law enforcement, local team problems, and etc. National REACT headquarters in Chicago will be sending representatives and a speaker. The FCC will be sending representatives and a speaker. The FCC will be sending representatives and a speaker. be contacted in an effort to supply a speaker. Registration will begin at 10:00 A.M., E.S.T., cn the 11th of September with discussions beginning at 1:00 P.M., E.S.T. On Sunday the meeting will begin at 2:00 P.M. with the various speakers addressing the entire body of REACT teams. There will be a registration fee of One Dollar (\$1.00) per person and adm ttance only to those persons with official REACT ID cards. Now, here's what you have to do: (1) Determine the number of members that will be atending. At least five (5) members will be needed to attend all seminars. (2) Motel and hotel reservations are limited; state price Motel and hotel reservations are limited; state price willing to pay and number in party in your letter. (3) Displays—If your REACT team has any type of emergency equipment for display, state in your reply. The meeting will be held at LAKE PARK One (1) mile NORTH of Cochocton, Ohio, on State Route Number 76. Here is a great opportunity for your REACT team 76. Here is a great opportunity for your REACT team to gain valuable information and know-now. This meeting is for your benefit, so let's support it 100%. For further information and reservations, contact: Coshocton County REACT Team, Inc., P.G. Box No. 22, Cosnocton, Ohio-% Steve Dawson, President.

The Missouri Valley Breakers, one of the newer Radio

Clubs in K. C. is fast becoming one of the important CB groups in North Central Missouri. Although membership is small they are dedicated to making CB more than just a party line for the latest gossip. Their meetings are held on the second and fourth Thursday of each month in the Raytown Savings and Loan Auditorium. Each member is responsible for a meeting to provide useful and interesting information of vital interest to the other members. On June 27th, the Club sponsored





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 - 2 YEAR GUARANTEE

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- Paging
- External speaker jack
- Illuminated signal level meter with dynamic modulation Indication
- · Glass epoxy circuit board
- · Provision for plug-in selective call
- · Amplified Zener diode voltage regulator
- · Fine tuning (Varactortechnique) on channel selector
- · External metering sacket

- Inter-station and system channels identified
- · Smart chrome and charcoal gray epoxy finish

complete with power cable, mounting bracket, crystal for channel 9 'Help' Channel

*OPTIONAL

6 pack crystals (for Chan-nels 10-11-12-13-14-23) 19.95

22 pack crystals — all 23 channel operation

69.95

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Member: CANADIAN MARCONI COMPANY Group

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The BIG Switch Is To S9



a swimming and potluck picule. Another picule will be held Aug. I. Anyone interested in joining a family type CB Club should contact KGI7201, Jack Phipps,

type CB Club should contact KGI7201, Jack Phipps, Treasurer, or 17Q3837, Bob Ahlstrom, Sec.

The Sedalia Citizens Band Radio Club held their annual CB Jamboree, June 20th, at the Mo. State Fair Ground. The outstanding event of the Jamboree this year was the formation of a State CB Group (note Newspaper Clipping) The statewide CB group will be known as the Mo. State Citizens Radio Service. Paul Stewart, St. Joseph, Mo. was elected president, and Hurless King, Chillicother, Harold Hawkings, Jefferson City, and Norman Burns, Carrollton, as Board Members. The state group already claims 335 members and hopes to provide a statewide emergency and service

group for local communities as well as for visitors to our state.

The Jamboree had an attendance of over 1,000 visitors this year and many manufacturers displayed new CB equipment. Music for the day was provided by the Coments and Templeton bands and several entertaining events were emceed by Nelson Stonner. Walter Boone, 108 S. Prospect, won the five watt CB radio that was given as grand prize. The Sedalia club monitors Ch. 11, so give them a call when in the Sedalia, Mo. area.

The Richards Gabor Air Force Base CB Club has held a coffee break the first Sat. night of each month for a coffee break the first Sat. night of each month for the past year. All Area CBers are invited as well as the many CB Clubs in the area. The event is held in the Air Bases Delta Wing Club, and great quantities of coffee and goodies are furnished by the Airmen CB'ers. The coffee breaks are a great success and attendance usually runs into the hundreds. This monthly event has done much to bring harmony to the K. C., CB area. The Nineteeners Citizens' Radio Service is a non-profit, public service organization of northeastern Ohio. While its members are mainly from the Akron area.

While its members are mainly from the Akron area, some do come from neighboring towns and cities as far away as Cleveland.

The primary purpose of the 19'ers is to provide needed communications for civic events. With the exception of one event, a listing of the club's activities may be found on the back of the enclosed card. The exception is the Fairlawn Fourth-of-July Parade, which is being

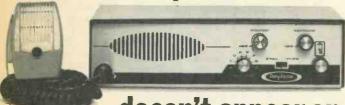
Tun for the first lime this year.

The club holds meetings on the first Saturday of every month at 8:00 P.M. The meeting place is the Number 1 Fire Station at 1864 W. Market St., Akron. All interested CB'ers, wives, and friends are invited to attend

to attend.

The Twin Cities CB Radio Club, The Tri-County CB Club and the Communications CB Club had their Get-Together, Get-Acquainted party recently at the Rendezvous Sisters Lake, Michigan. Highlights for the evening were entertainment, games and prizes, refreshments were served by the host and hostesses. News from Stella Hardin, KHG4644.

The most important feature of the new Amphenol 510-B



doesn't appear on its spec sheet.

Many things will impress you about Amphenol's first entry into CB—the Model 510-B. Our literature tells you all about the single-ended transmitter which exceeds 31/2 watts. Our spec sheet will describe the latest planar epitaxial silicon transistors used for the first time in a CB unit. Sensitivity of the receiver 0.5 microvolts; 40 db selectivity at 10 kc and dual conversion IF will be also covered.

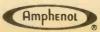
The literature goes on to tell about a speech clipper which permits full voice power short of overmodulation; and the full range squelch control. Also covered are 8 crystal-controlled channels and a crystal-correlated 23-channel tuner.

You'll soon realize the fully transistorized 510-B is a dependable, no-nonsense transceiver. In a compact housing it can be mounted anywhere for AC or DC operation. Sensibly priced at \$199.95.

So what important feature isn't covered in the spec sheet? It's the Amphenol name-your assurance of equipment you can lean on in emergencies, a guarantee of honest specifications, of full compliance with FCC requirements in an American-made device. It's the mark of engineering leadership that combines top performance with reasonable price.

Rounding out the line are two solid-state, 2channel hand-held transceivers: C-75 1.5 watt model at \$114.50; C-60 100 mw, \$89.50. Selective Call. portable pack and other accessories are available.

See the most advanced CB line at your Amphenol communications distributor.



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62 • September 1965

COMING BVENT CALENDAR

Second annual High Knob CB Jamboree at Norton, Virginia Elevation is 4,265 ft. September 3-4-5. Johnson CB grand prize, many other prizes. Ole time fiddlers contest, Ole

Mountain Man who is now famous over the U.S., Wagon Train Granny. S9 Reporter at large. Registration fee 50 cents. PICNIC-COFFEE BREAK-JAMBOREE, September 12th at Dan Tracers, KFG0595 place, located at Lancaster—5 miles north of Junction City, Oregon. The event is sponsored by the

McKenzie, CBRA.

Second Annual GRS Convention, September 10th, 11th and 12th at the Canadiana Hotel Highway 401 and interchange 59 (Kennedy Road) in Toronto, Ontario, Canada. Contact: Second Annual GRS Convention, Att. Larry Higgins, Box 73, Whitby, Ontario, Canada.

Whitby, Ontario, Canada.
September 4th, 5th and 6th, The 4th Annual Hillbilly CB Jamboree will be held at Maryville, Tenn., Fairgrounds.
Grand prize is a CB rig. Contact: G. H. Tarpley, KKM5987, Route 4, Maryville, Tenn.
The Cowan CB'ers Jamboree, September 26th at Smith Auditorium, Memorial Park, New Castle, Indiana. Event from 9 A.M. to 5 P.M. Contact: O. W. Clawson, Box 38, Cowan, Indiana.

The Naugatuck Valley CB Radio Club is holding a state wide Jamboree, October 3rd, Lake Quassapaug Pavilion, Route 6A, Middlebury, Conn. Contact: Ed Duvel, 57 Louns-

bury Street, Waterbury, Conn.
October 10th, the Bell City CB Radio Club Jamboree, Lake
Compounce, just off Route 72, Bristol, Conn. Contact: Ted
Singleton, P.O. Box 753, Bristol, Conn.

September 4th and 5th, the Citizens Radio Ass'n of Crawford County is holding its 2nd Annual Jamboree at Crawford
County Fairgrounds, located on Route 77, just outside Meadville, Penna. Contact: C.R.A.C.C., Box 456, Meadville, Penna.
Three Washington State CB Radio Clubs will host the

International Camp-Out, September 4th, 5th and 6th, Labor Day week-end. Site: Snoqualmie River Park, Fall City, Washington, Clubs participating are: CB Minutemen of Washington, Inc., The Tacoma CB Radio Club, and the North End CB

Inc., The Tacoma CB Radio Club, and the North End CB Radio Club of Washington, Inc. Contact: Jim Bossart, 2411 South 260th, Kent, Washington.
3rd Annual Jamboree, September 4th and 5th the Cape Fear Valley will hold its Jamboree, at White Lake Cosira, White Lake, North Carolina. Contact: James L. Deaver, Box 214, Bladenboro, N. C.

Bergen County Citizens Banders, Inc, will hold their 4th Annual Jamboree, September 12th at Sundance Lodge, Route 46, west of Mountain View Circle, Fairfield, New Jersey. The Lodge is located just off the corners of Route 46 and 23. Jamboree Chairman is Lee Janow. BCCB, P.O. Box 83, Fair Lawn, New Jersey. Lawn, New Jersey.

September 19th, the Quad County CB Radio Club of Walker-on, Indiana Jamboree at La Porte Fairgrounds, State Road West, La Porte, Indiana. Contact: Kathy Perkins, Box 27,

Mill Creek, Ind.

Cross County CB League, Inc. will hold its 3rd Annual Jamboree at Salisbury Park, Sunday, September 5th. 1st prize—Cadrea 510A Radio. Contact: Earl B. Broglin, Jr., Prudential Insurance, Roosevelt Field, Garden City, New

Maumee Valley 1965 Round-Up, Sunday, September 19th, Allen County War Memorial Coliseum, Fort Wayne, Indiana. Contact: Mort Knott, KHA4735, 2505 East State Street, Fort

Wayne, Indiana.

CB IN ACTION

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

"NOISE SUPPRESSION" PART II by Guest Author HAROLD PETERSON Research Engineer, Pearce-Simpson, Inc.

Last month we discussed how to locate the source of noise problems in CB transceivers. Now that we have traced down the problem-let's discuss how eliminate it.

Most noise suppression methods follow standard procedures-although some are more difficult

to locate and correct.

Ignition may be suppressed by one or more of the following: Resistor spark plugs or spark plug suppressors, resistor ignition wires, distributor suppressor, and condenser (preferably coaxial type) at connection of switch lead to the ignition

Filtering noise from voltage regulators can usually be accomplished with capacitors attached to the battery and generator armature terminals at the regulator. Sometimes it will help to connect a small (.002 MFD) capacitor and 3.9 ohm resistor in series from the field terminal to ground.

Generator noise can usually be treated by attaching a capacitor to the armature terminal and grounding the mounting strap directly to the case of the generator. Some stubborn cases can be helped by installing a small tuned trap (commercially available) in series with the generator output. With the engine running, the tuning capacitor in this trap is adjusted so that minimum generator noise is heard in the receiver.

The above measures apply to marine installations as well as to automotive installation.

On an automotive installation, noise is often carried to a point where it can be picked up by the antenna, by way of some metal portion of the auto. Bonding this object or objects to the auto frame will prevent passage. This may require bonding tailpipes, steering shafts, hoods or almost any part of the automobile. Experience is very valuable in tracing down this type of noise transmission.

Wheel static is treated by small springs (available at most supply houses), which are installed inside the hub caps. Tire static can be cured by a powder which is available to put inside the

tires.

For very severe noise elimination problems, elaborate systems which not only by-pass but shield the entire ignition system are available. Installation of these kits will be covered by the instructions accompanying the kit. A noise-free rig will improve both the operation of your set and your disposition.

WIN A COMPANION II

You can win a COMPANION II with your CB in ACTION story. Simply tell us how you helped an individual or your community with CB. Write to Les Hench, National Sales Manager, Pearce-Simpson, Inc., P.O. Box 308, Miami, Florida 33135.

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.

- 252 J. Mory, KKI2063, Baltimore, Md. SACA 253 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 254 Pop Utah, KKA8441, Poquonnock Bridge, Conn. 255 M. Forsyth, KNA1504, El Cerrito, Calif.
- 493 Pop Utah, KKA8441, Poquonnock Bridge, Conn. 494 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 495 Ed Stefanik, KKD8614, Garfield, N.J. 496 T. Twine, KCI5991, Suffolk, Va. 497 Sgt. R. Patton, KNM7922, Quantico, Va. 498 J. Moriarty, KKA8101, Florence, Mass. 499 H. Kuhn, KNJ6045, Alton, Ill. 500 P. Barbera, KHD8077, Chicago, Ill. 501 W. Hubbs, KEB3600, Little Rock, Ark. 502 G. Raybin, KB10854, Bronx, New York

503 J. & C. Markley, KNM9571, Cleveland, Ohio

- PX-50 422 T. Twine, KCI5991, Suffolk, Va. 423 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 424 D. Bellask, KMD0428, Brooklyn, N.Y. 425 Pop Utah, KKA8441, Poquonnock Bridge, Conn. 426 P. Barbera, KHD8077, Chicago, Ill. 427 W. Hubbs, KEB3600, Little Rock, Ark. 428 G. Raybin, KB10854, Bronx, N.Y. 429 J. & C. Markley, KNM9571, Cleveland, Ohio
- PX -75 321 Pop Utah, KKA8441, Poquonnock Bridge, Conn. 322 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 323 H. Huneke, KMD0992, Springfield, N.J.
 - 324 B. Cassell, KHI6760, Clendenin, W. Va. 325 P. Barbera, KHD8077, Chicago, Il. 326 J. & C. Markley, KNM9571, Cleveland, Ohio 327 P. Conant, KBC6229, Florence, Mass. 328 R. Frost, KHA4980, Orange, Utah
- PX -100 297 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 298 M. Forsyth, KNA1504, El Cerrito, Calif. 299 Pop Utah, KKA8441, Poquonnock Bridge, Conn. 300 P. Barbera, KHD8077, Chicago, Ill. 301 A. French, KKA8764, Lynn, Mass.
- 229 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. PX-125 230 Pop Utah, KKA8441, Poquonnock Bridge, Conn.
- PX-150 187 V. Cavicchi, KKD7623, Morristown, N.I. 188 Hootin' Annie, KKA3340, Poquonnock Bridge, Conn. 189 J. Mory, KKI2063, Baltimore, Md. 190 B. Giles, KK10688, College Park, Md. 191 D. Theisen, KNM0810, Norwalk, Ohio
- 157 D. Banks, KKA4451, Westfield, Mass. PX-175 158 D. Stoneburg, KGI7912, Omaha, Nebr. 159 R. Randall, KLP2986, Hudson Falls, N.Y.
- 134 C. Sylvester, KLK5617, Chicago, Ill.

- 135 V. Goodnuff, KLM7764, Belleville, Mich. 136 H. & B. Handley, KHA0733, Lockport, Ill. 137 H. Girard, KBD0747, Woonsocket, R. I.
- PX -250 172 E. Inns, 11Q2714, Newport Beach, Calif.
- PX -300 106 J. Cross, KCF0823, Hagerstown, Md.
- PX -400 102 B. Ross, KCG1087, Washington, D.C.
- 182 H. & B. Handley, KHA0733, Lockport, Ill. 183 H. Girard, KBD0747, Woonsocket, R. I. 184 E. Inns, 11Q2714, Newport Beach, Calif. 185 B. Ross, KCG1087, Washington, D. C.
- SSC-1 197 J. Mory, KKI2063, Baltimore, Md. 198 D. Stoneburg, KGI7912, Omaha, Nebr. 199 V. & A. Gould, KLP7641, Binghamton, N.Y.
- 154 V. & A. Gould, KLP7641, Binghamton, N.Y. SSC-2 155 D. Theisen, KNM0810, Norwalk, Ohio
- SSC-3 129 B. Giles, KKI0688, College Pk. Md.
- SSC-4 122 G. Solomon, KKG3692, Hellertown, Pa. 123 E. Inns, 11Q2714, Newport Beach, Calif.
- SSC -5 113 H. & B. Handley, KHA0733, Lockport, Ill.
- SSC-11 106 B. Ross, KCG1087, Washington, D. C.

If you would like to be listed as a OSL card swapper in our monthly listing, you must do the following: send us a separate card for each month you would like to be listed (you may send several month's worth of cards at the same time), and enclose 10¢ in cash (no stamps, checks, or money orders) for each month you are to be listed. Try not to write on your cards and don't Scotch Tape your dime to the card. Address the material to: Card Swappers Unlimited, 14 Vanderventer Avenue, Port Washington, N. Y. 11050. Deadline for listing in the November issue is September 12th. Any cards received after this date will be listed in the following issue.

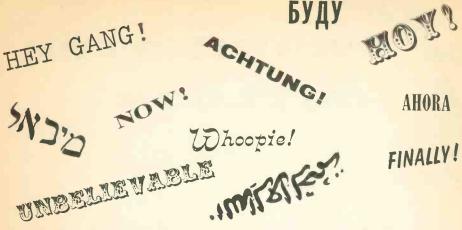
He	re are this months swappers:
1Q4271	Henry Sowa, P.O. Box 571, Holyoke, Mass.
1W6216	Errol Engraving, 36 Hampden St., Westfield, Mass.
2Q0152	Karl Weiss Jr., 245 Ashmore Ave., Trenton, N.I.
3Q1618	Everett Lindsey Jr., R.D. #1 Mount Holly, N.I.
5Q0577	Fred Harris, Route 3, Gate City, Va.
5Q2178	Elwyn Beam, Route 2, Vale, N.C.
6Q0054	Glenn Poore, 1316 Hixson Pike, Chattanooga, Tenn.
6W7263	Bill Orton, 905 Altamaha St., Chattanooga, Tenn.
6W7515	Terrell Craven, Route 1 - Box 32, Royston, Ga.
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KKN2631		KLK3438	Matt Loeffler, 2169 South 64th St., West Allis, Wis.
KKN2632	L.C. Crawford, 407 Chestnut St., Lake City, Tenn.	KLK3619 KLK3653	A Prior Poute 1 Box 2. Trevor, Wisc.
KKN2690	Carroll Rogers III, Box 178, Middletown, Conn.	KLK3655 KLK4588	Charles Copples, 1749 W. Ravina Park Rd., Decatur, Br
KKN2985		KLK4830	Francis Wagner, Elizabethtown, Indiana
KKN3229	The Table	KLK 4886	Charlotte Stearman, P.O. Box 326, Albany, III.
KKP0163	The contract of the contract o	KLK4958	Jasse Wade, 224 W. Elm St., Chillicothe, III.
K KP1645 K KP2232		KLK5005	Dave Karr. 320 Maplewood Dr., Antioch, III.
KKP2242	Towns Ele	KLK5502	Dick Crider 3033 Ute Ln., Lafayette, Ind.
KKP4124		KLK5617	Chuck Sulvester 1629 East 86th Pl., Chicago, III.
KKP4175		KLK5810	Irving Felzer, 2131 So. 15th Place, Milwaukee, Wis.
KKP4260	Clark Dickinson, Rt. 2 - Box 50, Perry, Fla.	KLK6181	Jim Lostlen, c/o Artist Corp. Wis. Hotel, Milwaukee, Wis
KKR5223	Charles Keathley, 3005 Loma Dr., Little Rock, Ark.	KLK8300	Marlyn Kempf, Rt. #1 - Box 298, Cambridge, Wis.
KKR 6231	Mike Anderson, P.O. Box 2626, Laurel, Miss.	KLK8405	Bob Dungan, 208 N. Main St., Dunkirk, Ind. Dick Hadley, 607 Wesley St., Huntington, Ind.
KKT3680		KLK8815	Mike Geiger, Box 83, Culver, Ind.
KKT3774		KLK9539 KLK9761	Todd Schumann, 8025 S. Euclid Ave., Chicago, III.
KKT4113		KLL0146	David Greer, 708 Peveler Dr., Russellville, Ny.
KKV3836		KLL0681	Dick Stichter, 851 E. Pleasant St., Freeport, Il.
KKV4589 KKV6543		KLL0809	Eritz Stearman, Albany, Ill.
KKX2898	The state of the Complete Colif	KLL0995	Lim Mazurek, 1444 S. Clinton Ave., Berwyn, III.
KKX5201			Reld Kenley, P.O. Box 427, Maywood, III.
KKX664	Harvey Ingersoll, 531 Edith St., Walla Walla, Wash.	KLL1281	Tom Wilson, 1603 Ruth Ann Dr., Centralia, Ill.
KKX7083	James Fuller, 405 Fillmore St., Taft, Calif.	KLL1451	Richard Lee, 823 Elmwood Ave., Kewanee, III. Lee Collins, 4814 Sundale, Drayton Plains, Mich.
KKX764	Walter Koziel, P.O. Box 2212, Bell Gardens, Calif.	KLM1447	
KKX823		KLM3971	
KKY019			N I Schweitzer P O Box 232, Defiance, Unio
KLA101		KLM4519 KLM4842	Ressie Hazen, 231 North Mead St., Zanesville, Unio
KLA252		KLM5051	lim Swartz, 62 Stadium Drive, Tallmadge, Onto
KLA329		KLM5256	Jess Coneland, R.R. 1, Sawyer, Mich.
KLA357 KLA364		KLM626	Torry Wright 525 South Downing St., Piqua, Unio
KLA517	3 Chuck Hopper, 480 Sonoma Blvd., Vallejo, Calif.	KLM7450	Bill Piper, R.F.D. #5 - Box 414, Swanton, Unio
KLA533	9 Larry Horton, 2369 Mammoth Dr., San Jose, Calif.	KLM7763	tim Warner 836 Pensacola, Pontiac, Mich.
KLA551	9 Cliff Anfinson, 1830 - 32nd Ave., San Francisco, Cali.		
KLA562	Q Carroll Hatchell, 2222 Sacramento St., Vallejo, Calif.	KLM831	Bob Sizemore, 7807 Hope Ave., Cleveland, Ohio
KLA578	Tom Saunders, 782 Hutchings Drive, San Leandro, Calif	KLN0934	
KLA584	Ray Broten, 40 Buena Vista, Vallejo, Calif.	KLN1209	and the state of t
KLA640	Con Your Colif	KLN1732	
KLA656	Bob Wright, 1243 Sierra Mar Dr., San Jose, Calif.	KLN2082 KLN3497	D. D. St. Harbart Make
KLA736		KLN3731	
KLA742		KLN4091	Clare Wilson, 94 E. Colgate, Pontiac, Mich.
KLA744		KLN5598	Rawlings Funeral Home, London, Kentucky
KLC107		KLN5649	Roy Wallington, Route 1 - Box 19, Augres, Mich.
KLD05		KLN623	Fritz Caccia, 3749 Longfield, Ravenna, Ohio
KLD09		KLN734	John Arnold, 8 E. Main St., Trenton, Ohio
KLD18	17 Don Fletcher, 3432 So. 180 Pl., Seattle, Wash.	KLN801	
KLD23	62 Richard Spengler, Rt. 1 - Box 48, Grangeville, Idaho	KLN810	Gabby Blackie, 10078 E. Coldwater Rd., Davison, Mich.
KLE22	19 Art Paulk, 3262 W. 3800 So., Salt Lake City, Utah	KLN934	
KLF16	53 John McGuire, Box 12, Camp Douglas, Wis.	KLN996	
KLF28		KL0017	10 - 10 - 10 - 1 - 1 - 1 - 1 - 1 1 1 1 1
KLF29	80 Steve Butler, 822 North Glendale Ave., Tomah, Wis.	KLO036	
KLH35	J.B. Walker, 2803 Lewls St., Biloxl. Miss.	KEOOJI	, , , , , , , , , , , , , , , , , , , ,

KL00598 William Lechner, 4441 Parnell, Pontiac, Mich. KMK0568 Jack Pridgen, 408 W. 19th St., Lumberton, N.C. KL-00638 Dick Seperic, 3324 Karen St., Lansing, Mich. KMK0600 R.C. Shanks, P.O. Box 252, Montross, Va. KL01270 Bob McClellan, Box 51,203 Furnace Ave., Elberta, Mich. KMK0678 Edith Grantham, P.O. Box 364, Raeford, N.C. KLO1862 Chuck Cerny Jr., 2522 Belvoir Blvd., Cleveland, Ohio KMM0562 Charles Quinley Jr., 507 West 3rd St., S. Pittsburg, Tenn. Barbara Race, R.R. 3 - Box 135, Vicksburg, Mich. KLO2476 Ted Booth, 231 Minois St., Travis A.F.B., Calif. KMM1177 KLP0319 Pete Hons, 614 Main St., Portage, Pa. KMM1595 B.C. Murray, Maysville Rd., Commerce, Ga. K1.P2846 Harold Greba, 610 Henry Lane, Irwin, Pa. KMP0707 Jimmy Roberts, 2304 Palmdale St., Jacksonville, Fla. KLP5005 Bud Fowkes, 1031 5th Ave., Duncansville, Pa. KMR0014 Mark Stevens, Route 6, Box 321, El Dorado, Ark. KLP5033 Tom Zawrotny, Rathbone, N.Y. KMR0848 Scott Allen, 1090 Meadow Heights, Jackson, Miss. The Bailey's, 1110 Ford St., Ogdensburg, N.Y. KLP5280 Linda Loftins, Rt. 1 - Box 429, Deridder, La. KMR1149 KLP5686 Charles Johnson, 332 Huron Ave., Renovo, Pa. KMR1383 John Funk, Route 4, Pagagoud, Ark. KLP5750 Harlen Wood Sr., Box 526, Star Lake, N.Y. KMR1510 James Scroggins, Scroggins Hardware, Belzoni, Miss. KLP6039 William McKenna, 1354 Davis St., Elmira, N.Y. Arthur Cates, 1310 North Dakota, Baytown, Texas KMT1506 KLP6639 Don Berman, 121 W. Ross St., Wilkes Barre, Pa. KMV0649 Harold Maynard, Box 361, Vinita, Okla. John Fox, P.O. Box 92, New York Mills, N.Y. KLP6705 Frank White, Rt. #3 - Box 109, Bartlesville, Okla. KMV3634 KLP7094 Del Arthur, R.#3, Lowville, N.Y. Jim Stewart, 9335 Carmel Rd., Atascadero, Calif. KMX0073 K1.P7250 Chuck Miller, 75 Hamilton Homes, Oswego, N.Y. KMX0440 Warner Mayden, 385 Venus Ct. Rt. 1, Nipomo, Calif. KLP7516 Guy Widmeyer Jr., Box 99-A, Hopwood, Penna. KMX0684 Lois Fletcher, P.O. Box 924, Yucca Valley, Calif. KLP7578 David Moss, P.O. Box 61, Endicott, N.Y. KMX2394 Ed Hoover, 144 Corregidor, Fort Ord, Calif. KLP7749 Ray Bronder, 416 9th St., Monessen, Pa. Chuck Emerson, 7448 E. Holly, Scottsdale, Ariz. KMX2815 KLP7848 Bryan May, 147 Old River Rd., Wilkes-Barre, Pa. Jim Hughes, P.O. Box 1253, Atascadero, Calif. KMX3215 KLP7879 Clarence Peet, Box 73, Port Crane, N.Y. KMX3234 Ron Murphy, 12993 Herrick St., Sylmar, Calif K1.P8083 Howard Davidson, 26 Knight St., Glens Falls, N.Y. KMX3515 Red Osgood, 3805 Winona Ave., San Diego, Calif. K1.P8282 Delevan Arthur Jr., R.#3, Lowville, N.Y. KMX4118 Pat Sullivan, 726 Oneonta St., Imperial Beach, Calif. KLP8509 Leonard Dotys. Monessen, Pa. KNA 1504 Mike Forsyth, 789 Colusa Ave., El Cerrito, Calif. KLP8791 Jim Smith, R.D. 3, Fort Plain, N.Y. KND0168 Barry Simpson, 4819 So Fife, Tacoma, Wash. KLP8809 Don Shumaker, 147 Greenbrier Dr., Carnegie, Pa. KNF0678 Rick Miller, 1608 Huron St., St. Paul, Minn. Fred Sherman, Beech Creek, Pa. K1.P9464 Don Ebbeson, 509 West Mission Rd., Minneapolis, Minn. KNF0919 KLP9534 Steve Delorm, 258 Spencer Rd., Rochester, N.Y. KNH0542 Larry Huggins, 614 N. Chestnut St., Olathe, Kans. KI P9557 George Booth, 971 Sweeney St., North Tonawanda, N.Y. KNH0786 Bill Howard, 2700 Grandview Ave., Des Moines, Iowa KLP9618 Bill Lohnes, Box 176, Round Lake, N.Y. KNH2587 Frank Mauler, R.F.D. 1. Olmitz, Kansas KLP9656 Irvin Kimmel, P.O. Box 14, Tire Hill, Pa. KNH3016 Lee Glore, 101 Fannie, Lemay, Mo. KLP9789 Ed Kindervater, Box 404, Hopwood, Pa. KNH3738 Red Shaw, 9010 Sycamore, Kansas City, Mo. KLO0114 R. Hamm, 1447 Union Center-Maine Hwy., Endicott, N.Y. James Stell, 5734 Chestnut St., Kansas City, Mo. KNH3742 KLQ0123 Paul Blewett, 615 Valley St., Lewistown, Pa. Bill Busse, 100 So. Louis St., Mt. Prospect, 11. KN10550 K1.00423 Roy Clinch, 3558 Gifford Rd., Vernon Center, N.Y. KN10959 Bill Berendts, 818 Third St., Kalona, Iowa KLQ0457 Charles Goughnour, 207 Coldren St., Johnstown, Pa. 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KNM1533 KMA2393 Paul Bond, W. Lebanon, New Hampshire Bob Factor, 18 Hickory St., So. Zanesville, Ohio KNM1603 KMA2418 Irving McKlrryher, 421/2 Freeman Ave., Rutland, Vt. KNM2078 Bob Deaton, 2814 Evergreen Dr., Springfield, Ohio KMA2531 Mike Palmieri, 1 Brigham St., Waterville, Maine KNM2171 Gary Maturen, 1003 Court, Saginaw, Mich. KMA2585 Walter Palacz, 56 Ames Ave., Chicopee, Mass. Chuck Sisler, 140 Montgomery Lane, Mingo Junction, Ohio KNM2322 KMA2625 Leo Paradis, 540 Mt. Pleasant St., New Bedford, Mass. KNM2398 Cy Swegert, 2162 Pleasant Ave., Hamilton, Ohio KMA3939 Johnny McGann, 50 Coombs St., Southbridge, Mass. Richard Kingery, Route 2 - Box 374, Gallipolis, Ohio KNM2551 KMA4164 John McDonalds, Warren, New Hampshire KNM2986 Jeff Chern, 7404 Devon Lane, Chesterland, Ohio KMA5273 James Stuart, 45 South Main St., Baldwinville, Mass. KNM3839 Skye Wittig, 603 Spruce St., Manistee, Mich. KMD0023 Gregg Manish, 435 North Second St., E. Newark, N.J. KNM4813 Jim Waters, 28 S. Pembroke Ave., So. Zanesville, Ohio KMD0428 David Bellask, 1159 E. 42 St., Brooklyn, N.Y. Bill Brooks, 117 W. Stewart Ave., Flint, Mich. KNM5016 KMD0490 Fred Decter, 339 Leslie St., Newark, N.J. Larry Reed, Box 2075, Williamson, W. Va. KNM6195 KMD0992 Howard Huneke, 518 Mountain Ave., Springfleld, N.J. Raymond Patton, 222 Kontner St., Nelsonville, Ohio KNM7922 KMD1113 Richard Harvey, 133 Morris Ave., Summit, N.J. KNP0126 Earl Sprague, Port Henry, N.Y. KMD1314 John Humphries, 102 Lincoln Ave., East Paterson, N.J. KNP0224 Dave Latina, 458 Harvest Dr., Rochester, N.Y. KMD2436 John Erwin, 38 Gouverneur St., New York, N.Y. KNP0344 Elmer Hoose, 3053 Butler Ave., Horseheads, N.Y. KMD2632 Donald Heide, 2732 Batchelder St., Brooklyn, N.Y. KNP0457 Jeff Ohlsson, 86 Bowen St., Jamestown, N.Y. KMD3059 Bruce McPherson, 231 Wales Ave., River Edge, N.J. KNP0567 Bob Ivanoff, 726 Ellsworth Ave., Jeannette, Pa. KMD3327 W. Mitchell, 31 Fowler Ave., Newburgh, N.Y. KNP1042 Don Lewis, 33 South Morningside Dr., Binghamton, N.Y. KMD3684 Dom & May, 450 Rhodes Lane, West Hempstead, N.Y. KNP1200 Chuck Kratochvils, 111 Cort St., Jeannette, Pa. KMD3719 Dale Schmailings, 239 Seymour Rd., Port Chester, N.Y. KNP1444 Paul Clark, 863 Monaca Rd., Monaca, Pa. KMG0201 Gerry Hunsicker, 311 9th Ave., Collegeville, Pa. KNP1445 Earl Roehl, 861 Monaca Rd., Monaca, Pa. Charles Bell, 407 Pomeroy St., Ridley Park, Pa. John Rose, 431 Jackson St., Summerhill, Pa. KNP1806 KMG0471 Charlie Stauffer, R.D. #1, Holtwood, Pa. KNP2225 Robert Madison, 1515 Edgar Ave., Chambersburg, Pa. KMG0524 Gary Nicholson, 801 North Pitt St., Carlisle, Pa. KNP2429 Bob Bialecki, 17 Roser St., Rochester, N.Y. KMG0791 Gregory Pace, 910 Redwood Dr., Carlisle, Pa. KNP2730 Dick Newell, 395 Fairmount, Jamestown, N.Y. Jim Worrell, R.D. 1, Box 188, Linwood, N.J. KMG1618 KNP2915 John Bryant, Route #4, Brookville, Pa. KMI0759 Whit Strunk, 52 Broadway, Hagerstown, Md. Ron Taylor, Chapel Hill Rd., East Randolph, N.Y. KNP4176 KM 10928 Jim Shaffer, 109 South Front St., Georgetown, Del. Bob Isele, P.O. Box 214, Gasport, N.Y. KNP5138 KMI0962 Wm. McDowell, 8 Jones St., Piedmont, W. Va. Continued on page 71



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WASHINGTON OUTLOOK

The following CB'ers were asked by the FCC to show cause why they should not have their licenses revoked:

KLT0120, Marcelino Rivera Auto Sales,

Inc., Bayamon, P. R.

KLN5911, James Cheshire, Inkster, Mich. KNE0187, Clebe Doyle, Canon City, Colo. KLP5586, B&L Furniture, Rochester, N. Y. KKI2090, Roger E. Myers, Woodbine,

KDB6080, Ernest Copeland, Kite, Ga. 19QA0086, John C. Morrow, Kalamazoo, Mich.

KDD9787, Lawrence W. Frazier, Nashville, Tenn.

KLJ2298, William Stynen, Chicago, Ill. KKK5050, Billy L. McIntyre, Asheboro,

N. C.

KHJ6516, James E. Jollie, Dayton, Ohio.

KKK7791, John R. Derby, Hampton, Va.

These operators had their licenses revoked:

KEA2351, William B. Driver, N. Little Rock, Ark.

KDI2461, Paul K. Ballard, St. Petersburg,

KLK7610, Floyd O. Whitcomb, Davenport, Iowa.

KDH0200, Marguerite Anderson, Hollywood, Fla.

KLN3827, Paul D. Sullivan, Chillicothe,

KKM7406, Arthur Petty, College Park, Ga. KDI5007, John R. Sukowske, Ft. Lauderdale, Fla.

KFA9933, Lincoln B. Simmons, Los Angeles, Calif.

KGC2091, Edward Bruce McInturff, alias Edward B. Johnson, Casper, Wyo.

KEB3457, Sammy Church, Pascagoula, Miss.

KDE3799, Bud Moates, Aragon, Ga. KFA0783, Thomas L. Michaud, Compton, Calif. The following CB'er received a \$200 monetary forfeiture:

KKA8943, Grandville W. Davis, McKinley, Me.

• The following CB'er received a \$100 monetary forfeiture:

KBE0110, Elden Colbeth, Swans Island, Me.

 These operators had previously issued forfeitures reduced to \$50:

KEJ2646, Ralph E. Fullenwider, Riverside, Calif.

KAK1501, Paul's Fina Service Station, Dallas, Texas.

KKP2719, Thomas L. Odem, Sr., Hialeah, Fla.

• These operators had their forfeitures reduced to \$25: KLK9098, Albert M. Benson, Jr., Louis-

ville, Ky.

KLC1739, Daniel M. Danton, Portland,

Oreg. KGH1032, Joseph T. Elrod, d/b/a Elrod's

Radio & TV Service, Independence, Mo. KEJ1492, Lenora J. Kindell, Bell Gardens, Calif.

KFA3127, Alpha Baker, Jr., South Gate, Calif.

KKR4304, Robert E. Wickes, Mobile, Ala. KKP0737, Mitchell Middleton, Delray Beach, Fla.

In other actions, the FCC denied the request for monetary forfeiture of KFA0767, Alice E. Mitchett, Ontario, Calif., and ordered her to pay the full \$100.

They modified the order which revoked the CB license KEB0622, Vernon H. Huff, Jackson, Miss. The effective revocation date was changed from May 3 to August 3.

The show cause proceeding against KIC-0815, William J. Lewis, Rochester, N. Y., was dismissed because the licensee has settled his liability for monetary forfeiture and has taken corrective measures to preclude

a recurrence of the violations which formed

the basis for the proceeding.

The FCC designated for a hearing seven applications for a CB license in the CB service by five members of the Greenside family of Mattapan, Mass. (Richard, Michael and Stephen, brothers, and William and Bertha, their parents). Issues include determination of the need and purpose for the 70 Class D units and 1 Class C unit requested and, in view of past violations of the CB rules by family members, whether the applicants are qualified to be licensees in the CB service.

The FCC denied the petition to create a new class of Amateur Radio Service, called the "Hobby License." This petition was submitted by the International Crystal Manufacturing Corp., Oklahoma City, Okla. In denying the petition, the FCC pointed out that international radio regulations require examination and, further, that the Novice ham license, with minimum examination requirement, offers beginners an opportunity to acquire the experience necessary to obtain higher class licenses.

KBG4303 RIDES AGAIN

Continued from page 7

famous "ACBA treatment," is their apparent

policy.

It would certainly seem that they didn't make such a hot impression on the Lafayette people in whatever earlier contacts they might have had with them. Possibly Lafayette didn't support their hairbrained "CB'ers March on Washington," or maybe they got to speak to some of ACBA's "charter members" and former "officers" who fled the club in droves when its true commercial and devious nature was exposed.

It's most interesting to note, however, that even the mention of someone starting up a real national CB club sends the ACBA into such a frenzied panic that they have to twist and distort the truth for their membership (and they didn't even do a good job of that it turns out). Possibly this may finally panic them into really doing something for the poor innocent and trusting souls who sent in their \$3 and received very little in return (not counting hot air and promises galore). Maybe someday someone will start a real CB club in competition with ACBA.

Anyway, it's reassuring to know that the ACBA is still in there pitching; just in case you might have been wondering.

SPECIAL TUBES

Continued from page 34

changes made in tube manufacturing and/or testing usually require a higher selling price. In some instances, the structure of the tube is strengthened to assure reliable service in ruggedized military equipment or demanding industrial applications. In other cases, tubes must undergo an extensive series of tests to assure close control of certain characteristics. Such procedures inevitably contribute to higher manufacturing costs, and thus result in higher prices for all users, whether or not their equipment can take advantage of the particular improvements made in the tubes.

CONCLUSION

As stated previously, the original choice of a tube type is made by the equipment designer after consideration of many factors-cost, reliability, circuit complexity, availability, and the like. In the long run, it is wise for the amateur to follow the designer's professional judgment. Even though an individual may be willing to pay a higher price for a "better" tube, there is no justification for assuming that the substitution of such a tube will automatically improve the performance of a given circuit. The surest way to continued satisfaction with a piece of equipment is to replace worn-out tubes with new ones bearing the same number (including, of course, A and B versions or double-branded types carrying the same number. Substitution of these later versions may or may not help in your particular situation, but it will not hurt).

CARD SWAPPERS UNLIMITED

Continued from page 68

Dale Martin, 516 N. Pine St. Apt. 5, Anchorage, Alaska KNU0079 Lloyd Tait, 132 Riverside Dr., Penticton, B.C. XM112045 XM231020 Byron Orge, P.O. Box 1122, Medicine Hat, Alb., Canada Douglas King, Box 1289, Estevan, Sask., Canada XM33818 Skippy Massam, 66 Guthrle Ave., Toronto, Ont., Canada XM412800 Doug Ailles, 48-22nd St., Toronto, Ont., Canada XM414109 Jacob Fehrman, R.R., 1, Port Colborne, Ont., Canada Denis Dubois, Box 71, Welland, Ontarlo XM43614 XM431259 Bill Kerwins, 287 Nelson St., Sarnia, Ontario XM442411 Bernard Rachlin, 2615 Kent Ave. #204, Montreal, Quebec XM522895 Francois Goyer, 259 rue Moisan, Drummondville, P.Q. XM53534 XM551755 Leo Dupere, 92 Royal Roussillon, Quebec, Canada Gilles Petit, 409 St. Joseph, La Tuque, P.Q., Canada XM56066 Kerry Myers, 409 Brunswick St., Brunswick, Md. Atl. 1616 David Sigo, Rt. 1 - Box 153, Goodland, Ind. Cent.3250 Robert Ream, 608 High St., Lancaster, Pa. North3020 North3300 Tom Bolling Jr., 233 Temple St., Fredonia, N.Y. North8002 Terry Henry, 55 S. Lincoln St., Keene, N.H. Terry Henry, 55 S. Lincoln St., Keene, N.H. WPE1GCC Edward Madej, 193 Oak St., Indian Orchard, Mass WPEIGEM Gerry Schechter, 3535 Kings College Pl., Bronx, N.Y. WPE2NHW Sheldon Shuff, 105-57 Flatlands 8th St., Brooklyn, N.Y. WPE2NIO Tommy Berlinger, 105 Mount Hope Place, Bronx, N.Y. WPE 2NIR WPE3FQQ Donald Schmitt, Box #14, Gettysburg, Penna. WPE3FSC Robert Ream, 608 High St., Lancaster, Pa. Tom Spain, 1927 N. Junaluska Dr., Richmond, Va. WPE4IHA Jimmy Bullock, 1628 Long Ave., Nashville, Tenn. WPE4ENC Harry Okey Jr., P.O. Box 1526, La Jolla, Calif. WPE6ETT Henry Slade, 136 Tamarack St., Vandenberg AFB, Calif WPE6GBC Keith Ryan, 1641 Grasmere Cres., Ottawa, Ontario VE3PEILO David Bubeck, 109 E. Main St., Schuylkill Haven, Pa TRQ1000 Palle Nielsen, Humlebaekgade 13''', Copenhagen, N. Den. OZDR1261 Jacquet Camille, UBA P.O. Box 634, Brussels, Belgium ONL170 Ralph Bryant, 716 Riverside Dr., Fairfield, Conn. Ruth Charon, 109 Bowers St., Holyoke, Mass. Richie Krug, 11 Emmett St., New Hyde Park, N.Y. Central Printing, 920 vandeventer, Fayetteville, Ark. Jack Allen, 203 Ave. F, Brooklyn, N.Y.

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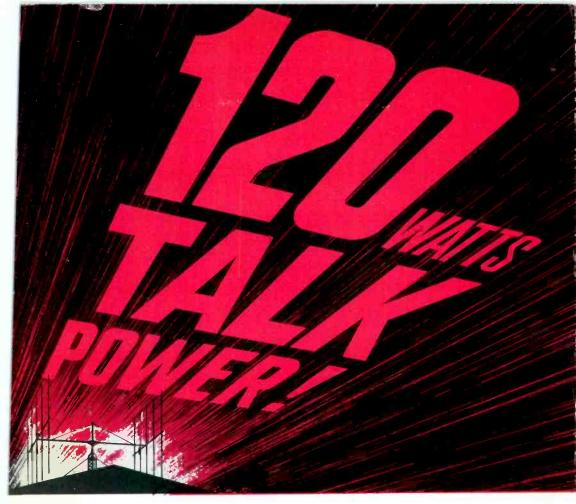
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