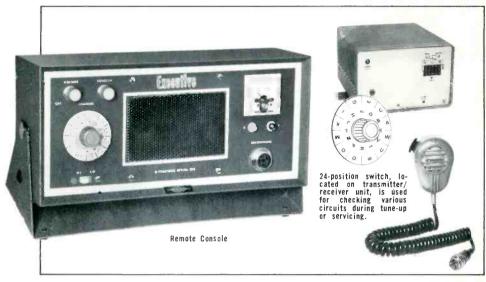


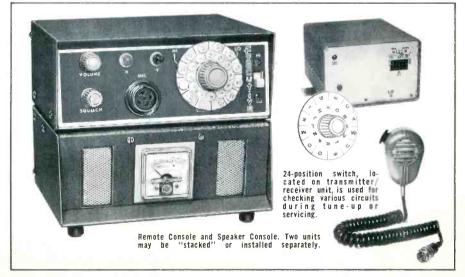
The OFFICIAL CB RADIO MAGAZINE



International Executive 750-HB2



International Executive 750-HM2



It's totally new . . . a Citizens Band transceiver with built-in test circuits. Now at the "turn" of a switch, located on the transmitter/ receiver unit, you can instantly check the operating performance of various circuits within the set. Makes tune-up and servicing easy. Checks filament, plate and input voltages, transmitter forward and reflected power, modulation, etc.

This "years ahead" built-in test feature has been incorporated into International's two new transceivers. The 750-HB2 with its functionally designed remote console* for desk-top installation, and the 750-HM2 for mobile communication. Both transceivers have 23 crystal controlled channels, and operate on 115 vac, 12 vdc, and 6 vdc.

Write for the name of your nearest International dealer. See the 750-HB2 and 750-HM2. Ask him about his trade-in / trade-up plan.

*Base station remote console available separately. Ask for RMO-24 HB2

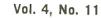
NEW Built-in test circuits. **NEW** Delayed/Expanded AVC. **NEW** Simplified cabling. **NEW** Built-in S/Meter and Transmit/Meter as standard equipment. **NEW** Microphone with improved characteristics for better "close talk" quality. **NEW** Speech Clipper/Filter Amplifier.

TEST CIRCUITS WILL CHECK . . .

- Receiver Signal Strength And
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 - Receiver RF Amplifier
 - Receiver 1st Mixer ●
 - Receiver 2nd Mixer ●
 - Receiver 1st Oscillator
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 - Power Audio
 - Transmitter Buffer ●
 - Transmitter Power Amplifier
 - Tränsmitter Oscillator ●

- WILL CHECK
- Transmitter Frequency Adder
- Plate Voltage
- AC Filament
- DC Hot +
- DC Hot =
- Transmitter Forward Power
- Transmitter Reflected Power
- Transmitter Modulation







November, 1964

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

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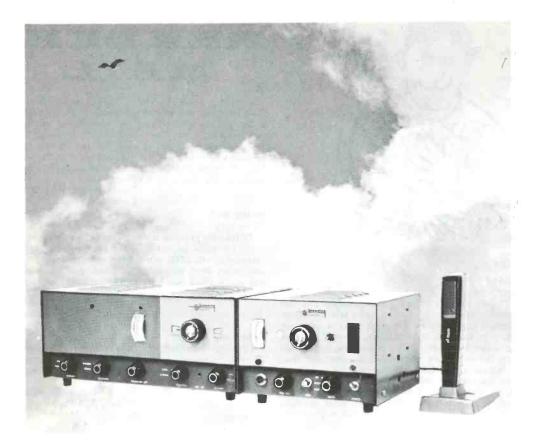
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S9-GUARANTEED Largest CB Circulation!



Browning Eagle sales are soaring high.

No wonder. The Browning Eagle CB base station has so many new features, every CB'er wants one. For example, the Eagle R-27 receiver has an RF gain control, AVC defeat switch, a switch for broad or narrow selectivity, a cascode nuvistor front end, and twelve tuned I.F. coils. The Eagle S-23 transmitter has a compression amplifier and a clipper filter stage for highest percent of modulation, a built-in SWR meter and naturally, all 23 channels. That's only the beginning. There are many other reasons why you'll want to own the new Browning Eagle base. Want more facts? Send for free copy of Browning's CB catalog and the location of our franchised service center nearest you.

Write on company letterhead for information on a few franchise territories still available.



100 UNION AVENUE, LACONIA, NEW HAMPSHIRE 03246



"FLASH"

Dear Tom,

Thanks for S9's "Flash" service, where you furnished subscribers (who had self-addressed, stamped envelopes on file with you) a same-say notice on the FCC rule changes. When I received the notice from you I called a few people and told them the news, they wanted to come over and read it. Within a half hour the parking lot and street were overflowing with a traffic jam. Dozens of CB'ers wanted copies of the advance S9 press release. Finally a friend with a photostat machine came to the rescue with almost 100 copies. The CB'ers of America are grateful to S9 for your help in bringing us the news, first, best, and in your (often imitated) special style.

George Kunzman, KIC1000 Modern Service Company Johnson City, N. Y.

George, we mailed out 9,800 copies of our "Flash" bulletin to subscribers who requested this service when we offered it last year. Happily (for us) many of those CB'ers who heard about the new rules first from their subscribing friends, decided that now was the time for them to get in on the subscribing bit. Since the "Flash" notices were mailed out our subscriptions increased substantially—and many of the new subscribers said that it was the "Flash" that did it.

SCARCE AS HENS' TEETH

Tom:

I had just picked up my new copy of S9 and then had to stop at the drug store for a pack of cigarettes. I had the windows down and my S9 on the front seat. While I was inside someone "borrowed" my copy. Thanks for turning out the number one choice of CB theives, S9!

Don Huntley, KDD1522 Asheville 10, N. C.

Editor;

Please do a reprint of your "Emergency Police Sticker." Some CB'ers will swipe everything good they can get their hands on. They went and stole my copy of S9 which had the sticker in it.

Lowell Ellis, KEH4052, Vice, Pres. Concho CB Assn. San Angelo, Texas

4 • November 1964



Tom:

Darn ... Darn ... Darn ... You were right! Now I've gone and missed a copy of S9 all because I thought my good friend the newsdealer would put aside my copy. Now I find that he has sold it just because I was out of town the day they went on sale and didn't come by the stand. A curse on him. To prevent this from happening again I'm enclosing my check for a subscription.

Don Albright, KGI1268 Parsons, Kansas

WHAT HOI

Hi S9 Staff:

Thanks for printing my name in S9 as a Swapper. Since my name appeared in the June issue I have received about 1,000 cards from your readers. I'm answering them all as fast as I can, and I'm still only up to about 500. Everyone be patient, I haven't forgotten you!

Rex S. Dean, BRS25120 Berkhamsted, Hertfordshire England

Dear Tom.

l received hundreds of QSL's since my name was in your Swapper's column. Tell all the U.S. and Canadian swappers that I'm working on catching up on the backlog.

David Waugh, GI-9831 Belfast, N. Ireland

10-CODE

Sirs: We would like 50 copies of the S9 Official National CB 10 Code for our Tri County React Team. George Dearth, Chairman Waynesburg, Ohio

Éditor.

We have made reprints of your 10 code and are distributing them to many of the operators hereabouts. We are doing our share in standardizing your version of the 10 code.

Jim Berlier, KDC1853 QSL Printing Co. 3616 Riehle Rd. Cincinnati, Ohio

As mentioned previously, copies of the S9 Official National CB 10 Code are available free upon receipt of a self-addressed, stamped envelope. Bulk copies of 20 or more are available to clubs upon receipt of the stamped envelope and a request on a club letterhead, signed by an officer. The new FCC rules stipulate that if you use any of the 10 code signals you must have a copy of the complete code (such as S9's) at your station. This is one more service to the CB'ers of the U.S. and Canada by S9.

RE: 59's IMITATORS

Dear Tom.

Add my name to the list of dissatisfied subscribers to the latest addition to CB publications. Trash!

Melba M. Lee, Sec'y Leav. 11 Meter CB Radio Club Leavenworth, Kans,

Continued on page 72

Is it time to renew your S9 subscription?

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and now 1964... **THE NEW RCA MARK NINE** the latest and greatest RCA CB radio of them all

Look at some of the new features...

NEW! Combination "S" Meter and Relative RF Output Meter

"S" Meter indicates the relative strength of incoming signal in "S" units. RF Output Meter (EO) indicates relative strength of the signal being transmitted.

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Lets you connect an external speaker to the set, so incoming calls can be heard in remote locations.

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ACTUAL SIZE:

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ACTUAL PRICE:

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KBG4303 rides again!

by TOM KNEITEL EDITOR, S9

For about a year now I've been receiving a rather constant (and growing) number of letters each week from readers who seek information on shortwave listening (known as "SWL'ing" and "DX'ing"). This is the hobby of using a receiver for the purposes of hearing distant or foreign broadcasts and point-to-point transmissions—and collecting QSL cards from the stations heard. It's really more than a hobby, it's an art; a fascinating one which has held my own interest for more years than I care to recall.

Your letters indicate that some of you have picked up communications receivers to be used in conjunction with your CB operations, others among you have found CB'ing so interesting that you've decided to see what's doing on the many other radio bands. Receivers (good ones, too) can be had these days for less than \$100, with second hand gear readily available for as low as \$20!

What all this is leading up to is the fact that I'm going to try an experiment. It's a "trial" SWL section in S9, presented with the hope that it will be of genuine aid to those of you who are snooping on the megacycles. I hope that it may also bring some new SWL enthusiasts into being. We are able to devote space for this "trial" section without cutting into any regular S9 CB coverage because of the additional pages we now have each month (the rest of the added pages are given over to CB), this is what you might call a "bonus" feature.

We're interested in your comments and opinions on the column, even if you *don't* like it. Since the feature is being presented as a trial balloon, nobody's feelings will be hurt if a sufficient amount of reader mail is adverse and I have to squash it.

If you do want it, send us data on distant stations you have recently monitored, be they standard broadcasting stations, shortwave broadcasting stations, hams, ships, aircraft, police stations—anything (except a distant CB station as the column won't cover CB DX). We don't care if you hear these stations on a super deluxe \$500 communications receiver, the kitchen radio or a 1 transistor "Mickey Mouse" set.

We are also interested in seeing a photo of your SWL shack (good ones will be run in S9) and knowing how many countries and stations you have QSL'd—also the callsign of your best QSL.

The SWL shack at the S9 offices presently consists of Hallicrafters SX-117 and Lafayette HE-80 receivers. At the home 10-20 it's a Collins R-390A digital readout receiver with mechanical fiters, an Ameco preselector, a panoramic adaptor, an "LM" frequency meter, and a navy surplus DZ-2 "VLF" receiver (14 through 1700 kc/s).

I hope that you like "The SWL Shack" and that you will let us hear from you about it.

HAVE IT YOUR WAY!

A few months ago we ran a subscription gimmik, we called it our "Birthday Special." It was that if any of our readers sold four subscriptions to their friends at the reduced rate of \$4 each (\$1 off the regular price), we would toss in a free one year subscription to the reader who sold the subscriptions. The offer was in effect for 30 days, and was for new subscriptions only (no renewals at the special rate).

To say that the idea was a success would be the understatement of the decade. We are still receiving these at a clip of several a day, and here it is *months* after the offer expired. The stodgy old Circulation Department has been sending them all back marked "Offer Expired" and when I heard about this I had a slight case of apoplexy. In addition, I am now receiving all sorts of mail from irate readers who took the time and trouble to sell S9 subscriptions only to get rapped in the head by the Circulation Department here because they didn't do it before a deadline.

Continued on page 73

When experience counts, it's S9 every time!

November 1964 • 7

<u>any</u>*

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Is it time to renew your S9 subscription?

BEWARE THE CB BANDITS

KEEP YOUR GEAR by ELWOOD C. THOMPSON, 19W5462

Since the close of World War II, more than 5000 electronic equipment thefts have been reported to law-enforcement agencies throughout the United States. The prey of amateur and professional criminals alike, theft of electronic equipment is among one of the major items on the nation's ledger of annual losses.

Each year it has become increasingly more important that the challenge presented by these "CB Bandits" can be adequately met only through united action. If you are a member of a CB or Radio club, it would be worthwhile to have a police officer or other selected speaker give a talk/demonstration outlining precautions to take. Devoted entirely to an open forum discussion of this particular type of theft, these meetings will meet with enthusiasm and interest. Here in Ohio, an encouraging number of solutions to this problem have been presented and there has been unanimous agreement that an alert, educated public is the greatest asset in coping with this type of crime.

At the professional level, equipment theft is highly organized, encompassing the nation and even extending beyond national boundaries. On the amateur level it presents a critical problem to the citizen and to police, all too often serving as a springboard from which the criminal tyro is launched into a life of underword activity,



... "Right down to your call letters", ...



... "Larcenous attention"...

Each year many pieces of stolen electronic equipment are bought and sold by innocent citizens throughout the United States. Before buying *any* used equipment, it is the prospective owner's responsibility to carefully inspect the serial numbers and bill of sale (or receipt). If it appears that efforts have been made to alter the serial numbers, or if a doubt arises concerning the authenticity of the bill of sale, the police should be notified immediately,

Professionalism in the theft of equipment reaches its ultimate peak in the operation of gangs which are organized in a business-like manner to steal gear for resale or use in a major crime. These gangs are so highly organized that the function of each member is narrowly defined. These gangs recognize no state boundaries in carrying out their criminal intent.

A typical theft ring employs a "spotter" who locates the equipment to be stolen, often having instructions to find items of a particular manufacturer. Remember, a giant CB antenna on your roof invites larcenous attention. Another member or members steal the equipment and delivers it to a "central" point where the identification and serial numbers are altered or removed. In addition, these gangs have employed persons who specialize in obtaining false bills of sale, using still others to transport the equipment to various points throughout the nation to be sold. In other words, they can strip you right down to your call letters.

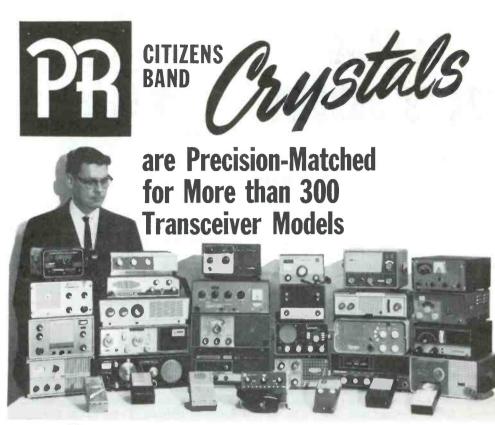
The electronic equipment theft problem can be met adequately only through the full cooperation of all law-abiding citizens (banders). The rules are simple and sensible to follow: Protect your own car and home with adequate alarm devices; report suspicious activities; be certain you are not duped into buying stolen equipment; record serial numbers and keep bill of sale or receipt locked in a safe place,

Don't be a victim of the "CB Bandits"!



More people read more things in S9!

November 1964 • 9





Selecting channels is only part of getting crystals for your transceiver. Crystals must be *matched* to your circuit, or you're very likely in for trouble.



Z-13P

That's why PR Crystals are supplied *precision-matched* for today's CB equipment. It takes at least 28 different transmitter crystals and 44 receiver crystals to meet requirements of more than 325 makes and models of transceivers. And each crystal is supplied in 23 channels!

PR Crystals not only match the circuits, but they have been tested in actual operation in the individual equipment for which they are coded.

Photograph above shows Bill Petersen, Jr., president of PR, with a display of 32 recent models . . . a small part of the hundreds used for precision matching.

Get PRs from your CB Dealer. They'll not only *match* your equipment, but give you the finest frequency control that money can buy . . . and EVERY PR CRYSTAL IS UNCONDITIONALLY GUARANTEED.

PETERSEN RADIO CO., INC. 2800 WEST BROADWAY COUNCIL BLUFFS, IOWA

10 • November 1964

When experience counts, it's S9 every time!

QUICATENNA

A FREE BASE STATION ANTENNA FOR ONE AND ALL

by MARTIN CUNNINGHAM, 13Q0947

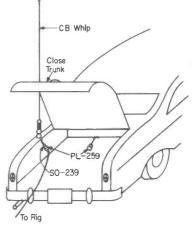
Setting up a temporary base station always creates a problem which is solved by several alternatives: 1) a base loaded "shortie" antenna which attaches directly to the back of the rig (this "indoor antenna" puts a nice crimp into your range), 2) a full fledged roof installation (a shame to spend all that time on a temporary station), 3) build a homebrew "temporary" type antenna (as they say in the coffee ads, "good" but not great). S9 now is going to tell you how to get a quickie station on the air with a minimum of time and trouble and just about zero outlay of cash!

This QUICATENNA is just the thing for campers, hunters, vacationers, construction companies and other "commercials" with temporary locations, and it's even passable for regular CB'ers who have lost the use of their regular base station antenna due to storm—or can't put one up in the first place due to neighbors or XYL. In other words, it's a real cure-all for any and all base station antenna problems; and it's so simple, so obvious, that in reams and reams of CB articles I have plowed through, I've never before seen anything like it written up!

So what is the QUICATENNA? It consists of using the regular mobile antenna installation on your car as your base station radiator! Why not? You spent a respectable sum on the installation (figuring the price of the antenna and the cost of your time or the time of a technician). Your mobile antenna is a professionally designed CB sky-hook—it even has a built-in ground plane (the car itself)! It's a *potential* base station antenna, and you take it with you when you travel—mostly it just sits there while you make do with short range jobs, or sweat out the job of putting up a "temporary" contraption.

CONSTRUCTION

To build the QUICATENNA you must first open the trunk of your car (if your antenna



Rear Mount Quicatenna

is a rear mount job). You then take a pair of wire cutters and snip the coaxial cable about 6 inches from the connection to the antenna. On the piece of cable which goes to the antenna, solder an SO-239 coaxial receptacle. On the remaining piece of cable, the one which runs to the rig under the dash, connect a PL-259 coax plug. All that is left to do is to secure a length of coaxial cable of sufficient length to reach the vehicle from wherever the base station rig will be located and attach a PL-259 plug to each end of that length of cable.

When you are using the mobile antenna, the cable from the mobile rig is connected to the antenna. When you want to operate as a base station, disconnect the mobile rig by means of the new connectors in the trunk. Attach the cable you will use as the base station lead-in, and that's all there is to the QUICATENNA!

HINTS

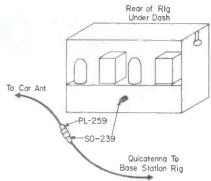
It is going to be difficult, if not altogether impossible, to close the vehicle's trunk with the QUICATENNA cable running to the

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88 CLINTON ROAD, WEST CALDWELL, NEW JERSEY 07007 TEL: (AREA 201) 228-2400

LABORATORIES, INC.



base station rig. An open trunk lid might change the impedance of the antenna and/or the directional characteristics. I suggest that you either place some sort of weight on the lid to keep it down, or find another cable exit point so that the lid may be closed completely.

If you use a roof top antenna, your OUIC-ATENNA installation will be different. On the lead-in cable to the base station rig, connect a PL-259 plug at one end and an SO-239 receptacle to the other. When operating as a base station, the rig in the car is disconnected from the mobile antenna right at the back of the rig (there is no need to cut the lead-in in the trunk for this installation). The mobile antenna lead is then connected (right under the dash) to the SO-239 going to the base station rig. You can run the lead through the car's window opening. Actually, this type of installation might even be used with a rear mount antenna instead of the previously described method-the only thing is that it is less of a bother to change connections in the trunk than in back of the dashboard.

One further thought. Don't forget to disconnect the QUICATENNA when you are about to use the car. A CB rig makes a rather large hole in a window when yanked hard by a moving car!

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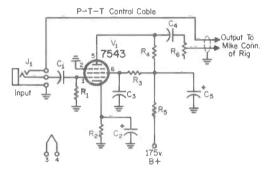
by JOHN G. BORKMAN, 12W1919

I live in a CB'ers dream world because I work in a computer lab—I don't need a "junk box," our lab throws out as "N.G." more good components in one week than 50 CB'ers could buy in a year. As you probably know, many critical components in a computer (and the test equipment associated with a computer) are periodically replaced after a certain number of operational hours, even though the supposedly "worn out" components may still be in excellent condition, offering many hundreds of hours of non-computer or other non-critical use.

Anyway, I was preparing to make my weekly contribution to the electronics rubbish heap when the realization of what I was doing hit me square between the eyes. Gads! I should be drummed out of the ranks of CB'ers—here I was with a need for more talk power for my CB rig, and I was (ugh!) throwing away dozens of amplifier tubes, all perfectly good! Forsooth!

Right on top of the pile was a gleaming type 7543 pentode amplifier—a super-dooper version of the 6AU6. The 7543 is a "special" exotic tube with fantastic gain, especially designed to provide extremely low hum and non-microphonic operation. It is obviously the product of much research in an elite RCA developmental laboratory. I decided, right then and there, that some unsung RCA tube designer would be immortalized by being honored with *his* tube as the central component of a CB mike preamp.

A mere 5 capacitors and 6 resistors later (plus a few pieces of construction hardware) I had not only *a* mike preamp, I had *the* mike preamp—more talk power than I had even hoped for and with audio quality up to challenging *any* station on the band—the little devil *really* has Moxie!



PARTS LIST

- C1 .01 capacitor
- C2 25 ufd electrolytic, 25 vi
- C_{3, 4} .05 capacitor
- C₅ 20 ufd electrolytic, 450 v.
- R₁ 2.2 Meg., ½-watt resistor
- R₂ 1K resistor
- R₃ 200K resistor R₄ 100K resistor
- R₄ 100K resistor R₅ 22K resistor
- R5 22R resistor
- R₆ 500K potentiometer J₁ 3 conductor OC iack
 - (Switchcraft 12B or equiv.)
- V1 7543 tube
- Misc.: 7 pin tube socket, chassis, mike cable, hookup wire, mike connector.

Want to "cômputorize" your audio? Here are some hints on putting this simple preamp together, and it is simple; nothing complicated about it. First of all, don't ask me to send you our "worn out" tubes, I can't do it. You can buy a brand new 7543 tube for about \$1.55 from most tube distributors.

The circuit was built in a Bud CU-3001-A small *Minibox*, although any metal chassis will do. The preamp requires 6 volts for the

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Silicon Rectifiers & Capacitors 1N3212-400 piv.-15 amp \$1.00 ea. 1N342-400 piv.-500 ma 4 for \$1.00 5000 mfd-35 VDC \$1.00 ea. WANTED NEW & USED TUBES, PARTS, COMPONENTS & TEST EQUIPMENT MID-WEST ELECTRONIC SUPPLY 54 Mia Ave., Dayton 27, Ohio

CB CRYSTALS! HAM CRYSTALS! New CB regs. effective Nov. 1, 1964. Send us make, model & channel desired. We ship crystals postpaid \$2.49 ec. Enclose check or M.O. No COD's. All crystals guaranteed. Amateurs, send for price list. A&F Xtal Distributors 581 Maple Ave., Sunnyvale, Calif. U.S.A only Calif. add 4% tax

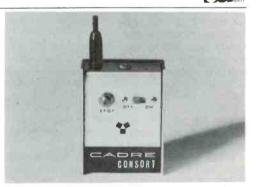


filaments and about 150 to 175 volts for the B+. I suggest that you take the B+ at the output of the filter capacitor (the second one after the rectifier(s)) of your CB rig. Observe proper polarity for the two electrolytic capacitors in the preamp circuit.

Resistor R_{0} is a pot which establishes the output volume of the preamp, and this *must* be initially adjusted and set only by a qualified and licensed technician (so that you won't overmodulate and run afoul of the FCC). The output of the preamp was piped into some mike cable (directly from R_{0}) and thence to the input jack on the CB rig.

At the input of the preamp, I used a Switchcraft type 12B jack (J_1) , a 3 connection "open circuit" jack which would permit me to retain the push-to-talk operation of my mike. The connector on the mike was then changed to a Switchcraft type 60 plug to mate with the 12B jack. The mike used, of course, was a high impedance type—and the preamp may be used with any crystal or ceramic mike.

There you have it, the secret of my success. One highly specialized electronic tube used in a circuit which takes every advantage of the latest tube engineering techniques. It's inexpensive, simple, and should satisfy even the most critical CB'er.



Pocketful of power...

New FM Wireless Microphone

Put the new Cadre Consort in your pocket, or stand it on a table. Set up an FM radio. Zero in the Consort on any open channel in the 88 to 108 mc band with a special pushbutton tone signal — and talk. You've got the finest, most portable PA system available — a wireless short range FM transmitter effective up to 200 feet from the FM radio. Walk free from wires and cables. Stand and speak comfortably with your hands free. The Cadre Consort has many features—built-in dynamic microphone; built-in antenna; 4 silicon transistors for excellent stability; a jack for external microphone. FCC type approval No.WM-104.Operates up to 300 hours on a mercury battery. Less battery only \$44.95. See the Consort at dealers. For free brochure, write:

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When experience counts, it's \$9 every time!

THE UNDERCOVER SPECIAL

A PRETTY MUCH INVISIBLE CB ANTENNA

by PAUL MEYERHOFER, KHH4055

I have always been intrigued with the possibilities of operating on CB with weirdo antennas—however it took a recent change of station location to bring the situation to reality. The new landlord made it plain and emphatic, "There'll be no antennas of any kind on my roof or hanging from my windows." He made it *most* definite by adding a few choice words to this effect in my lease words which threaten much wrath to be brought upon me should so much as one millimeter of hard, soft, or flexible antenna material be detected protruding from the confines of my domicile.

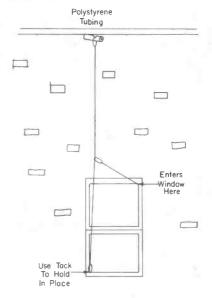
It was then that I brought from reserve my interest in unusual antennas. The result? An "undercover" dipole which does a passable job on CB and a super-fantastic fake-out job on friend landlord. Anyway, it's been in use for three months now and there have been no complaints. It simply cannot be seen from the street, and I live on the top floor of a six story building.

MATERIALS

The obvious solution to constructing a hidden antenna is to use *super*-fine wire, however many radio textbooks and "experts" were quick to point out that I had several forms of granite located between my ears for taking this notion unto myself. I was told that the current will cause the wire to go up in a puff of smoke; that the resistance in super-fine wire will eat up all of the power; that RF energy travels along the "skin" of a wire and that a thin wire will cause the RF to make itself scarce because it has no place to travel; that the antenna will probably not be able to support its own weight; that any breeze or rain will be the end of it; and so on.

Well I mulled over all of these points and then proceeded to build my *idiot's delight CB antenna*. They said that Robert Fulton was crazy, they said that Isaac Newton was crazy, they said that Irving Schmaltz was crazy (my uncle, he *was* crazy).

Obtaining the wire for my antenna was a cinch-it was unwound from the innards of



an old audio transformer. I guess that, lacking an audio transformer to cannibalize, I could have gone out and purchased some thin enamelled wire (you can get 500 feet of #22gauge magnet wire for \$1.25; more than 6 *miles* of #40 gauge wire for \$5.50, or a *new* audio transformer for \$1).

The "insulators" for the antenna were then selected, these were small rubber bands three of them, one for each end of the antenna and one at the center.

The feedline was a problem, and it was decided that a cash outlay would be necessary. The outlay amounted to 78ϕ for 15 feet of RG-174/U skinny little 50 ohm coaxial cable. RG-174/U cable is one-tenth of an inch in diameter.

Constructing the antenna, I measured out 8-feet 8-inches for each leg of the dipole, put a rubber band in the center, one at each end; then connected one end of the coax to the dipole (after scraping off the enamel from the ends of each element), and the other to a PL-259 coax connector. Guess what? It didn't work. Well, that's not exactly right, it

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November 1964 • 15



TRANSISTORIZED VIBRATOR ELIMINATOR VI-TRAN ELIMINATES VIBRATOR HASH INCREASES EFFICIENCY

The new Vi-Tran is a solid state vibrator eliminator for mobile units using mechanical vibrators. It has a high efficiency rating, conserves power, boosts output, eliminates noise, and costs only \$5.95. No tools required to install it; the Vi-Tran just plugs in.

The Vi-Tran is superbly engineered and thoroughly field tested. Oscillates as low as 5 volts; environmental test: -50°F. to +180°F. Power is maximum as authorized by FCC.

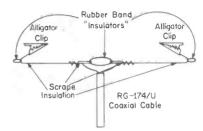
Two models are available:

VE-194 P (vibrator pin #1 pos.) VE-195 N (vibrator pin #1 neg.)

In a düstfree aluminum case. Blister packed with complete installation instructions on card. Now at your local parts jobber or dealer. Or write:



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did radiate a little, but it didn't load up properly.

It then seemed reasonable to assume that the fine wire had different electrical characteristics than regular #12 gauge antenna wire (I had measured off my 8-feet 8-inches based upon #12 wire's characteristics). I decided to experiment with different lengths for the dipole (gads, after all, I must have about 3000 feet of the wire). Rather than going through the involved job of constructing 826 different length dipoles, I measured off two 9-feet 6-inch dipole elements, attaching an alligator clip to each of the two outside ends. Scraping off insulation about a foot in from each end, I was then able to try different element lengths for best loading (by checking my SWR meter for lowest reflected power). When attempting this trick, both alligator clips must be moved the same distance so as to keep both elements exactly the same length. When I had located the proper antenna length I carefully soldered the ends of the dipole and removed the alligator clips. The actual length will vary with different gauges of wire. By the way, soldering on this peach fuzz is a somewhat hairy task and it might be wise to practice up a bit on some scrap before attempting it on the carefully measured-out dipole. It doesn't take too well to intense heat, such as dispensed by a "big" soldering iron or gun. I used transistor solder which has a low melting point, combined with a wood burning tool.

MOUNTING

The ahtenna was finally finished and ready for mounting. The bottom "insulator" was held in place with a glass headed "push pin" jabbed into the window sill. The top "insulator" was attached to a notch filed into the end of a short length of polystyrene tubing. The tubing was attached under a rim around the roof; it was used to hold the antenna away from the building wall ever so slightly. It cannot be stretched very tight or it will snap.

The coaxial feedline should run away from the antenna at right angles for as far as possible, and this created a problem because I

Continued on page 73

Is it time to renew your S9 subscription?

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USL T 1050 A \$119.95 23-Ch. tunable receiver illuminated dial. 6-Ch. crystal-controlled transmit & receive. Illuminated S & RF meter. Crystal spotting. Earphone jack. Nuvistor low noise RF front end. 6 V or 12 V power supply available (optional extra). Unit comes complete with: microphone, AC and DC cords. 1 pair of crystals and mobile mounting brackets. Squelch & full series noise limiter. TVI trap. Signal-to-noise ratio: better than 10 db at 1 microvolt. Full plate modulation.

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November 1964 • 17

1965 CB TUBE SUBSTITUTION DIRECTORY HUNDREDS OF REPLACEMENTS FOR POPULAR CB TUBES by STEPHEN DEDALUS, 12W5415

Last year the editors of S9 asked me to compile a listing of substitutes for tubes commonly found in CB rigs. The listing ran in the August 1963 issue.

The status today is somewhat different, new tubes have gone incorporated into transceiver design, other tubes have gone out of vogue. The list we present for 1965 reflects the current trends in transceiver design and replacement art. The substitutions shown here for 1965 are suggested *only* for the receiver and audio portions of the transceiver, we have not included substitutes or replacements for tubes in the transmitter or oscillator portions of CB rigs, as the substitute of these components can cause off frequency operation.

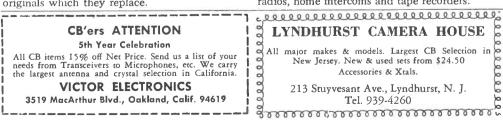
Reader mail forwarded to me by S9 indicates that our last listing was put to good use by many of you. As we anticipated last August, many CB'ers found that a tube "went west" while they were at home, or away on business or vacation. In any event, the exact type tube from their rig could not be secured on such short notice and the S9 Tube Substitution Directory saved the day.

The tubes shown in the right hand column as substitutes for those in the left hand column should give results which approximate the original tubes, with the following exceptions: tube types shown in parentheses are "emergency" substitutions which will get your rig back in action but without its original zip—in some circuits they might not function at all. The tubes which are shown in bold face are better tubes than the originals which they replace. These bold face replacements, in many cases, are so-called "premium tubes," that is, they cost a bit more for the additional performance. The plusses of these tubes vary individually, but some examples are: 5654 is a 6AK5 with reduced microphonics and vibrational output, longer life, ruggedized construction, extra reliability—the tube is about 25ϕ more than the 6AK5; the 7320 is a version of the 6BQ5 designed especially for mobile use, it's about 75ϕ more expensive than the "original." If you are interested in making certain that you are getting one of these ruggedized tube types, look for them under their special trade names; RCA Special Red and RCA Command, GE 5 Star are notable.

Sometimes the "better" tube can be too much of a good thing. Some of the replacements have considerably more gain than the originals—in an RF stage this might possibly cause receiver overload, in an IF stage possibly "motorboating," in a modulator it might cause overmodulation. Then again, they might not have any effect but to make the rig work better!

Some tubes in CB rigs cannot be replaced with substitutes, so if your rig contains any of the following popular CB tubes we suggest that you keep a spare on hand: 6AN8, 6BZ7, 6FM8, 6CM6, 12AB5, 6EM5, 12X4, 6AZ8, 6BJ7, 6EQ7, 6BH7, 12AL5, 6AZ6, 12BR7 and 12BW4.

Keep the S9 Tube Substitute Directory inside the service manual of your transceiver, or in the glove compartment of your mobile unit. Here's a hint: in a pinch you can try to *bulb snatch* replacement tubes from TV sets, hi-fi units, radios, home intercoms and tape recorders.



When experience counts, it's S9 every time!

S9 CB TUBE SUBSTITUTION CHART

ORIG.	REPLACE WITH
6AK5	(EF95) 6AG5 6AH6 (6AJ5) 6BA6 6BC5 6BH6 6BJ6 6CB6 6CE5 6CF6 (6CY5) (6EA5) (6EV5) 403A 403B 731A 1220 1381HQ 5590 5591 5595 5654 6096 6968 (9001) 9003
6AL5	D717 EAA91 EB91 5726 6097 6663 7631
6AQ5	EL90 (6BF5) 6BM5 6005 6095 6669
6AU6	EF94 (6AG5) (6AL5) (6AK5) (6AK6) (6AW6) 6BA6 (6BC5) 6BD6 (6CB6) (6CE5) (6CF6) (6DE6) (6DK6) (5590) (5591) 5749 6136 7543 (9001) (9003)
6AV6	EBC91 6AQ6 6AT6 6BK6 6BT6 6066
6BA6	EF93 6AL5 6AU6 6BC5 6BD6 (6BZ6) 6CB6 6CG6 5749 6136 6660 6661 7496 7543 9003
6BC8	EF93 X155 6BK7 6BS8 6BQ7 6BX8 6BZ7 6BZ8 6HK8
6BE6	EK90 6BY6 6CS6 1217 5750 5915 6660 7036 7502
6BH6	E90F 6AW6 (6BC5) 6CB6 6CF6 6DC6 6265 6661
6BJ6	E99F 6AS6 6BA6 (6BC5) 6BH6 6662 7694
6BJ8	(6BN8)
6BN8	(6BJ8)
6BQ5	EL84 N709 7189 7320
6BS8	X155 6BC8 6BQ7 6BX8 6BZ7 6BZ8 6HK8 6RHH2
6BZ6	(6BA6) 6CB6 6DC6 6DE6 6DK6 6HQ6 6JH6
6BZ8	X155 6BC8 6BK7 6BQ7 6BS8 6BZ7 6HK8
6CB6	EF190 6AG5 (6AJ5) 6AK5 (6AN5) (6AS6) (6AU6) 6AW6 (6BC5) (6BH6) 6BZ6 (6CE5) 6CF6 6DC6 6DE6 6DK6 6HQ6 (6HS6) 5590 5591 5654 6676 7732 (9001) (9003)
6CM8	(6CR8) (6CS8)
6CW4	6DS4 7895
6DC6	(6AG5) (6AU6) 6AW6 (6BC5) 6BH6 6BZ6 6CB6 (6CE5) 6CF6 6DE6
	6DK6
6DS4	6CW4 7895
6EA8	(6CQ8) 6GH6 6GJ8 6U8A
6ES8	(6CQ8) 6GH6 6GJ8 6U8A ECC189 6DJ8 6FW8 6KN8 6AX8 (6CQ8) 6EA8 6GJ8 6U8A
6GH8	6AX8 (6CQ8) 6EA8 6GJ8 6U8A
6T8	6AK8 6R8
6U8A	ECF82 6AX8 6BL8 (6CQ8) 6EA8 6GH8 6GJ8 1252 6678 7731
6X4	EZ90 U707 WTT-100 6AV4 6BX4 6063 6202
12AL5	HAA91
12AQ5	12BM5
12AT7	A2900 B739 ECC81 12AU7 12AV7 12AX7 12AY7 12AZ7 12BH7 12DF7 6060 6201 6671 6679 7492 7728
12AU7	B749 ECC82 ECC186 ECC802 12AT7 12AV7 (12AX7) 12AY7 12DF7 5814 5963 6067 6189 6680 7318 7489 7730
12AX7	B339 B759 ECC83 ECC803 12AD7 12AT7 (12AU7) 12AV7 12AY7 (12AZ7) 12BH7 12BZ7 12DF7 12DM7 12DT7 5721 6057 6681 7025 7494 7729
12AZ7	12AT7 (12AU7) 12AV7 (12AX7) (12AY7) 12BH7 12DT8
	HF93 12AU6 12BD6 (12BZ6)
12BE6	HK90 12CS6

Editor's note. The information contained in this article was compiled from material supplied by tube manufacturers. S9 Maga-zine presumes that this information is correct, but does not guarantee the degree of results which will be obtained by the application of

the information. It must be remembered that slight electrical and mechanical differences may exist between the "original" tubes and the suggested substitutions.

S9

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M-103 Combination CB-AM antenna

Beautiful, clean lines and heavily chromed, the M-103 is inconspicuous yet has that professional air about it.

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No buttons or switches. It's all done with Antenna Specialists' new automatic dividing harness. Operates by merely turning on the CB rig, the car radio, or both at the same time.

The center-loaded, cowl mount M-103 fits in the γ_8'' to $13/_{16}''$ hole of the car radio antenna. Operating position 46"—telescopes to 31".



Available separately as the M-104. Couples with our M-49, MR-49, or any ungrounded CB antenna requiring no more than 5' of cable.

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Automatic Dividing Harness Fits under dashboard out of sight . . . three simple connections to make. 1' low loss cable to the AM set; a 2' cable to the CB rig; a 5' cable to the antenna.

10% more gain at your base!

MODEL M-117 SUPER MAGNUM CB base station antenna

3.75 db. true omni-directional gain—more than any omni base antenna made "Stati-Lite" Noise Reducer continuously dissipates static discharge full half-wave radials for maximum RF decoupling Super Power Play Transformer— Direct ground for reduction of noise, effective lightning protection. (JSWR a fabulous 1.17 ... built to withstand 100 MPH winds.

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THE OL' TIMER HAS SWAPPING PROBLEMS

Brothers and sisters, have you ever been afraid to look in the mailbox, for fear there were QSL's in it? Not very likely, unless like me you are caught up in the entrails of your own sins! (As our guest sermonist speaks, we shall begin passing the basket, and all contributions will be gratefully accepted.)

My tale of woe began one April day. Suspecting nothing, I turned on my CB rig for a call to my mobile unit—when I heard *it*.

Yes, the skip was in, in full battledress. I could hear Doctor Gab, Hardluck Charlie, The Ol' Pillpusher, The Silver Voice of Dixie, Big John, Smoky the Bear, and 20 people called The Rebel coming in. The powers tempted me to work some of that skip, I don't deny that. But I resisted, and did no more than read the mail (a minor sin, child, for-givable under the circumstances.)

I copied down some 10-20's, and shipped out some QSL's. I know now that I shouldn't have sent a card with my CB calls on it, because if they hadn't learned that I was a CB'er ... well, it's too late to go back now. (Yes, we will accept trading stamps.)

Send a card ta the first name an this list and a copy af the letter, with your name added, ta seven of your friends. In 20 days you will be surprised, when about 250 QSL cards turn up in your mail. This chain has been going since 1962 and is approved by the U.S.P.O. Please do not break this chain. A CB'er in Ohio broke the chain and the next day his linear exploded.

Well, I hide my face in shame, because I gave in! (The choir will now add appropriate background music to this testimony.)

Who could explain what made me go ahead with it? The letter said that the more copies I sent out, the more cards I'd get back. So, I ran off 10 copies on the office mimeo.



After all, what harm could *ten* letters do, with so many CB'ers around?

Well, sure enough, in 20 days I had over 200 cards. I was satisfied. But the cards kept coming!

I sat down to figure it out, Originally, there must have been four names on the list, with instructions to send out four copies. That's 4x4x4x4, which comes out to 256.

But my letter had asked for seven copies; that would produce 823,543 cards, which is unbelievable even to Dan Guthrie! But evil was piled upon evil, because I sent 10 copies --and if there were enough CB'ers in the world, I would receive something like 8,235,430 cards!

To top it off, most of the people getting that letter wanted to get as many cards as they could, and made up multiple copies as I did, and added more names to the list, and so on. I figure on applying for SSC-100,000 by the end of the year!

Yes, hell is paved with good intentions, but only *I* know what its walls are papered with!

(Amen, Brother.)



More people read more things in S9!

November 1964 • 21

AN EXCEPTIONAL, "ALL LIGHTS GREEN" VALUE TO INTRODUCE THE BRILLIANT NEW RAYTEL TWR-5 ALL-TRANSISTOR C-B RADIO

THE 10-54 IBO

10-54, SIMPLE AS A, B, C . . .

- A)- Buy the power-packed performer, TWR-5 at only 179.50.....
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- C)- Take along Bonus merchandise worth 54.00 !!!

THE 10-54 BONUS PACKAGE ...

TWR-5 Transistorized C-B Radio with crystals for Channel 11 179.50 Gimbal-type Mounting Bracket N/C CR6MA Base-loaded Antenna with stain-
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DP-200 Noise Suppression Kit
Litter Bag, durable plastic with 10-code imprinted on one side
Total value 243.85 Your cost . 189.50

*ALTERNATIVE BONUS DEAL, the 5-34. Pay only 5.00 more than the 179.50 price of the TWR-5 and receive the above merchandise (less the DP-200 Noise Suppression Kit) worth 34.00.



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Small, half size of tube sets \bullet Fully transistorized \bullet No tubes, very low current drain \bullet 11 Channels \bullet Full 5 watts power input \bullet Exclusive "Booster" gives 100% modulation, big talk power \bullet Exceptional, single- conversion superhet receiver with 10 db S+N/N ratio at $1/_2$ microvolt \bullet Adjacent channel rejection 1000:1! \bullet 21/2 watts Class A audio \bullet Front panel mounted speaker \bullet Adjustable "squelch" \bullet Noise limiter that really works \bullet 12V DC operation with Zener diode regulation \bullet Supply for 117V optionally available \bullet Set pre-wired for Tone Signaling Unit \bullet Gimbaltype mounting bracket.



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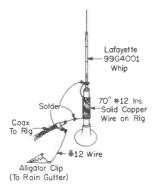
A JIFFY ANTENNA LOW COST, EASILY STORED

by ROBERT McAIRE, KIC7608

Here's an antenna for those times when you've decided that you want to use a mobile rig without making a complete installation. The antenna can be crunched down to about 15 inches when not in use, thrown into the trunk and forgotten. When you need it, it's ready to go in a few second's time.

CONSTRUCTION

Our antenna consists of a telescoping 38inch whip (Lafayette 99G4001, 59ϕ) mounted on a wooden dowel (about 3 inches of broom handle should do well), which in turn is mounted on a rubber suction cup (the kind which can be swiped from a car-top carrier or child's hi-chair toy). A loading coil is wrapped around the wooden dowel.



The loading coil consists of 70 inches of No. 12 insulated antenna wire, wrapped tightly around the dowel, with about 2 inches left at each end.

The dowel is mounted on the rubber suction cup by means of a flathead screw with it's head recessed into the bottom of the dowel. The recessing hole should be the same size a sthe head and then filled with epoxy cement before the screw is inserted. Once the screw head is set into the dowel, a washer is slipped over the protruding portion of the screw, and glued in place with some more epoxy. Next, when the epoxy has hardened, fill both the hole in the top of the suction cup (and the rim around the top) with more epoxy-inserting the point of the screw in the suction cup opening, wiping off excess epoxy which may have squished out of the edges. Wait for this to harden before going further.

Next, drill a hole in the other end of the dowel to accomodate the antenna, make it about $\frac{1}{2}$ -inch deep. Give it the epoxy treatment and jam in the antenna. After it dries you can solder the wire from the top of the loading coil to the bottom of the whip (you may have to scrape off the chrome to get the solder to "take" properly). The bottom end of the loading coil is

The bottom end of the loading coil is soldered to a length of RG-58/U coaxial cable which is used as the lead-in to the rig.

The shield of the coaxial cable is attached to a length of No. 12 antenna wire which has a Mueller 27C mesh teeth clip (Lafayette $32G3512, 23\phi$). The wire between the clip and the coax shield should be long enough to reach from the center of the vehicle roof to the edge of the roof, at the side of the car.

IN OPERATION

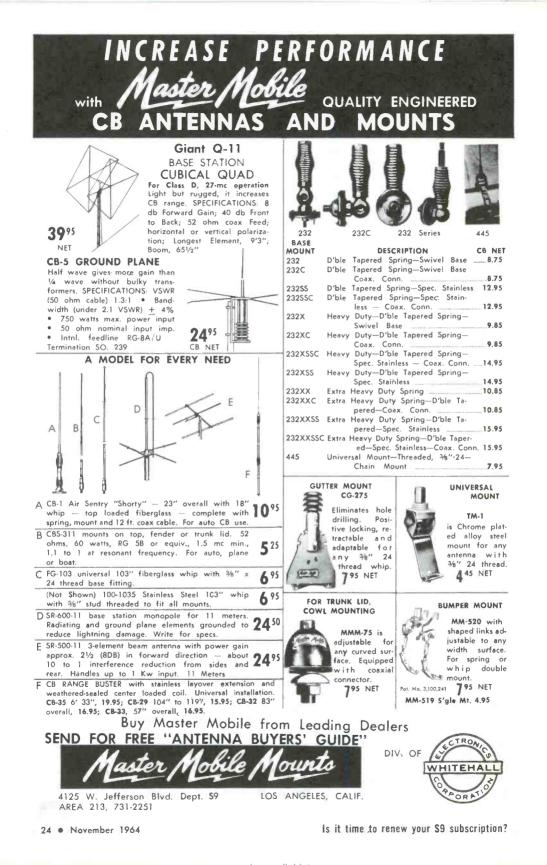
In operation, the suction part of the suction cup is moistened with a thin film of glycerine (any drug store carries it, cheap too) to help it stick. The antenna is then positioned in the center of the roof, the whip extended, and the clip from the coax shield is clipped to the vehicle's rain gutter.

Keep this in mind: the car door will not be able to shut on the lead-in coming from the roof, so provide sufficient coaxial cable to pass through one of the rear windows (front windows are bad because you might open the car door and pull off the antenna). The suction cup should hold the antenna in place at *reasonable* speeds, but if you are a Barney Oldfield racing-type, better get the speed up slowly to see just how much wind the antenna can take. If it pops off it can be quite a dangerous weapon as you zip down the street pulling along a steel "kite" at eye level. If you decide that you want to make this thing a permanent fixture on your car, use epoxy instead of glycerine-but don't expect to get it off again without taking some paint with it. The glycerine will allow removal of the antenna without grief.

When you are through with the antenna, the whip collapses to only 9 inches, the suction cup un-suctions from the roof, the rain gutter clip un-clips, and the coaxial lead-in can be conveniently coiled up around the whole business. Just right for storing until the next time it is needed!



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www.americanradiohistory.com



HAVE YOU CONSIDERED THE POSSIBILITIES OF LEGAL HOBBY CB ON THE "LOW BAND"?

by ROGER ZARUBA, NORTHERN 2503, KAI1467

For some time now we "micro-hams" (that's the "in" name for Part 15 hobbyists) have been relying on the 27 mc/s Citizens Band for all of our communications. Yet one morning recently I was loafing through my copy of the FCC's Part 15 and came upon a most interesting thing.

Hidden away in the rules is "Rule 15.203," which has probably gone unnoticed by many micro-hams. The rule states that Part 15 stations may operate with voice or CW in the entire 160 through 190 kc/s frequency band. This is a "low frequency" band, below the standard broadcasting band, and even below the frequencies used by aeronatical and marine radio beacon stations. Actually, the frequencies here are almost barren-there isn't anybody there to cause interference to Part 15 micro-ham operations, and we, in turn, can't be accused of jamming anyone else's communications (as we have heard on the 27 mc/s band).

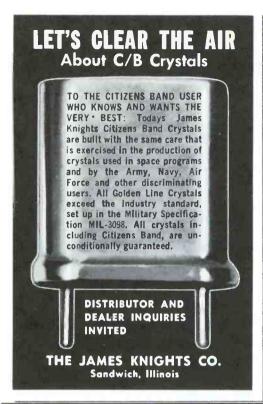
The rules stipulate the following limitations on P-15 stations operating "low band:" RF input power can be 1 watt (that's 10 times the power permitted P-15 stations on 27 mc/s) and the antenna (including transmission line) may be as long as 50 feet! And you are permitted to use a loading coil which can make the effective and *electrical* length of the antenna far longer than 50 feet! Another portion of the rule states that any modulation products of "low band" stations which might stray from the band edges shall be suppressed 20 DB below the unmodulated carrier. about the 1-watt/50-foot antenna maximum so long as the radiation does not exceed a limit which computes to 14 microvolts-per-meter at 1000 feet (this is for a 170 kc/s transmitter). Of course, you would have to have a lot of complicated laboratory test gear to keep tabs on the transmitter to see that it did not exceed this level. In all probability, the level is the same as that of the 1-watt station with a 50 foot antenna.

Now, while 10 times the power and antenna length of a 27 mc/s P-15 station may sound, at first, like the answer to a maiden's prayer, there are things to consider which do not come to bear on 27 mc/s. For instance, a 5 foot P-15 antenna (with a loading coil) can become the 9 feet necessary for a quarter wavelength antenna on 27 mc/s (the wavelength at 11 meters is 36 feet) without much grief. For 170 kc/s operation, a 50 foot antenna (even with a BIG loading coil) will be a far cry from efficient because a full wavelength at 170 kc/s (1740 meters) is 5.700 feet. A quarter wavelength antenna would have to be about 1400 feet long. Another thing to consider is that you generally have to run more power to "get out" on the lower frequencies, as compared to 27 mc/s. A 250 watt broadcasting station on 1600 kc/s doesn't have very much more of a coverage radius than many 5 w. CB stations-and 170 kc/s makes the job even harder. The combination of the low power and short, inefficient antenna spells out the fact that coverage won't be equal to a P-15 station on 27 mc/s.

The FCC even gives you the option to forget But a

But coverage and great DX isn't the only thing

More people read more things in S9!



for a mocro-ham to consider. After all, a local neighborhood net can be a lot of fun and afford you a lot of chance to experiment with building simple equipment to operate on "low band." A CW station on "low band" can give you a *lot* of coverage.

Speaking of equipment, you could modify a regular broadcast receiver and have good results. A transmitter can be constructed from scrap broadcast set parts in a few hours. Many military surplus receivers cover this band, too.

Another possibility for operation on "low band" would be to modify one of the many low cost "wireless intercoms" which are sold at every electronics emporium. These wireless intercoms are nothing more than 185 kc/s radio transceivers operating under Part 15. Instead of an antenna, the RF power is inductively coupled back into the intercom's power cable and from there into the power lines. To change one of these units to a set with an antenna and kill the power line feature all you would have to do would be to string up an antenna and take the inductive coupling off the power cable, changing it to the antenna. With a loading coil wrapped around an oatmeal container you could get some nice coverage.

There are definitely many possibilities for "low band" P-15'ing. If you're interested, contact me at 448 Union Avenue, Rutherford, N. J. See you on "low band!"

CITIZEN BAND STANDARDS BY SONAR

When performance is critical and reliability a necessity SONAR CAN BE DEPENDED UPON. CB standards of Sonar must and will always be above and beyond what is expected. Write for full particulars.



26 • November 1964

When experience counts, it's S9 every time!



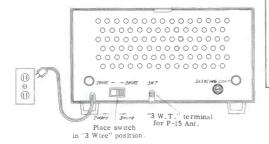
by ROBERT McAIRE, KIC7608

The Lafayette PA-405 (Catalogue No. 99-G-4544) is a "Deluxe Wireless Intercom," but in the eyes of any good dyed in the wool P-15'er it is a P-15 "low band" (185 kc/s) transceiver which can be had for \$16.75, or two for \$32.50.

Conversion of the unit from wireless intercom to transceiver isn't really a conversion at all, it still gives you the use of the unit for it's original purpose and you don't have to do any digging, chopping, or otherwise mutilating of the unit.

First let us see how the intercom is able to perform through the powerlines in your home. The RF is taken from the set's 50C5 tube, run through a transformer and then to a .05 capacitor which couples the RF into the PA-405's power cable. The manufacturer realized that "wireless" transmission through the electrical systems of two different buildings is sometimes not possible (the sets won't work between houses which take their power via different power company transformers) and has provided you with the alternative of being able to switch the RF from the power cable and run it via a wire to the metal screw which holds the face plate onto your 115 volt AC wall receptacle. This then permits you to feed the RF into the grounded electrical framework of your house with the hope that the other unit in your system will be close enough to receive the signal or will possibly have a common ground connection (via water pipe, etc.)





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somewhere along the line. The wire to the wall receptacle screw from the PA-405 is taken from a screw terminal on the rear of the unit. The screw terminal is marked "3 W.T." All that is necessary to get the PA-405 operating as a 185 kc/s radio transceiver for P-15 is to connect a suitable *legal* antenna. By *legal* antenna, we mean one that is not longer than 50 feet, because this is the maximum limit permitted by the FCC. A method had to be devised to get the best performance from this rather stiff regulation. The slide switch on the rear deck of the PA-405 should be in the "3 wire" position.

It was decided to use a loading coil in parallel with a capacitor to get the antenna to resonate on 185 kc/s, since trying to feed a 185 kc/s signal directly into a 50 foot hunk of wire would be a rather miserable effort.

We decided that the best bet for a loading coil would be a commercially made unit (although one could be easily "scramble wound" on a cardboard oatmeal container with several hundred feet of wire). The unit selected was the Miller type X-5495A long wave antenna coil, a "hi-Q" unshielded permeability tuned job with an adjustable core. The coil is Lafayette stock number 34-G-8706 and sells for \$1.62. Across this

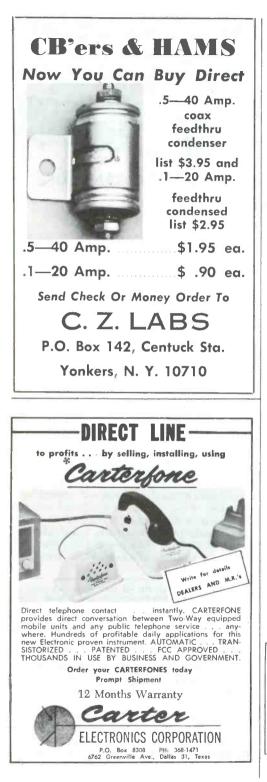
S9 Magazine certifies that this low power transmitting device can be expected to comply with the requirements of Paragraph 15.205 of the FCC regulations under the following conditions: (A) When this device is assembled and/or adjusted in accordance with the diagrams and instructions published by this magazine, using components of the exact specifications described. (B) When ln use for the purpose and in the manner indicated in the instructions, (C) When operated on a frequency between 160 kc/s and 190 kc/s and using an antenna limited to a length of not more than 50 feet. (D) When using not more than 1 watt input to the final radio stage. S9 Magazine, Port Washington, N. Y. Dated October 15, 1964 I hereby certify that I have assembled and adjusted this device

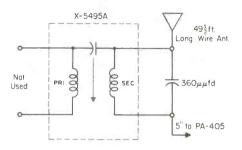
I hereby certify that I have assembled and adjusted this device in strict accordance with the above.

Date:

In order to operate legally on low band P-15 with the Lafayette PA-405 wireless intercom, it will be necessary for you to sign this certification and affix it to the set.

Owner's signature.





coil in parallel hookup we used a 360 uufd mica capacitor (Lafayette 30-G-3541, 53¢). The wire for the rest of the antenna: anything you have kicking around the shack which is of sufficient length.

The antenna tuning device was connected about 5 inches from the back of the PA-405, and added about an inch to the overall antenna length --this leaves 49 feet 6 inches left for you to string out of the window, 50 feet physically but considerably longer (and in resonance) *electrically!* The antenna may be peaked up by means of the tuning slug in the coil, which can be adjusted with a screwdriver. Any receiver which covers 185 kc/s (such as another PA-405) may be used to determine when you have the slug tuned for maximum signal output).

Speaking of the coil, you are interested only in the secondary windings of the coil, the primary windings are not used. A substitute coil for the Miller X-5495A is the Meissner 14-1407. Any 360 (or 390) uufd mica capacitor may be substituted for the one we used at our installation.

Don't expect to work stations in Timbuktoo with this rig, it will give you some interesting local contacts however (if you get together with other local P-15'ers and establish a net, that is). If there are persons in your area who are using the PA-405's as wireless intercoms and complain that you P-15 operations are causing interference, you can move off frequency (but still stay within the band) by slightly adjusting the oscillator coil at the bottom of the unit. Naturally, since all PA-405's are factory set at the same frequency, all of the stations in your net will have to similarly change their frequencies.

Editor's note: Check the frequency of your wireless intercom, some units operate as high as 200 kc/s, which is out of the P-15 band. In such instances, the oscillator coil will have to be adjusted to bring the unit to below 190 kc/s-we would suggest to at least 185 kc/s to keep modulation sidebands within the band edge. This 15 kc/s (or less) shift in operating frequency should be easily accomplished. In addition, some wireless intercoms may run more than the legal 1 watt input. Check this as it may be necessary to put a resistor in the B+ supply to bring the power within the proper limit.



NATIONAL CALLING CHANNEL

A "LOST IN THE SHUFFLE" PROPOSAL

by DICK TURPIN, KCF2700

For several years now we have all been saying how great it would be to have a socalled "National Calling Channel," one specified certain channel which would be monitored by *all* base and *all* mobile stations not actively in contact on any other channel.

This type of channel is currently in use in the Marine Radio Service—it's on 2182 kc/s. FCC regulations forbid conversations on 2182, and they require that all marine stations monitor this channel when not otherwise engaged. The only permissible contacts on 2182 are distress signals, or calls from one station to another for the sole purpose of establishing the contact prior to switching to one of the other "conversation" channels. This way, 2182 is always relatively clear and when one ship captain wants to contact another he doesn't have to look for him on numerous channels—the desired station is always looking for calls on 2182.

If you have done any amount of CB'ing you can see the immediate advantages of our own "2182" type of frequency. True, some local clubs have set up their own monitoring channels, but these vary from town to town. If a motorist needs help he must have both a 23 channel rig and the information on which local monitoring channels are in use.

So, as we said, for several years now all of us have been giving lip service to the fact that Channel 9 was the *National CB Calling Channel*. Nobody paid very much attention to the idea and you never could depend on Channel 9 because of the yakking.

When the FCC came out with their original rule change proposals 2 years ago they were going to allow five channels for crossstation communications (12 through 15, and 23). At that time S9 Magazine, in comments before the Commission, stated that this would kill any chances for the Channel 9 plan to ever get going. When the new rules were announced in July we were all surprised to see that the five cross-talk channels had grown to seven, beginning with Channel 9 and going to 14 (plus 23). When we asked the FCC about the reason for the change we were told, "You fellows want to set up Channel 9 as your National Calling Frequency? Fine! Go ahead!'

The FCC will not make any official recognition of Channel 9, presumably because they realize that it would be an almost impossible task to even attempt to police it for proper use. They have given us their un-official approval for the idea and told S9 that, "It's a good idea, but you fellows are going to have to get it off the ground."

THE GROUND FLOOR

So, as of this minute, we are still pretty much on the ground floor, trying to finally get our plan into operation.

What can you do? If you belong to a club you can bring this idea up at your next club meeting, suggesting that your club endorse and adopt it. If you are an individual who feels the desire to be of service to the CB world by aiding lost or troubled motorists, you can keep the rig tuned to 9 when you are not actually using it on another channel.

Most important, everyone is going to have to try to keep Channel 9 clear of their own conversations so that it will be useful for its intended purpose. Will power and a desire to cooperate are the only things which can accomplish this. Clubs might wish to stress this point to their members. Manufacturers can help by including with their transceivers an instruction sheet on the proper use of our voluntary National CB Calling Channel. By instructing new CB'ers in the proper use of the channel, less confusion and more communications will prevail-and this will help the market to grow. We hope that the manufacturers will do their share in helping us to achieve maximum use of the band and of our transceivers. S9 will gladly cooperate with any manufacturer who requests our aid in preparing instructional material regarding the National CB Calling Channel.

Here at S9 we have made up a large three color decal which is suitable for sticking on your mobile unit to help spread the word. We are offering these decals *free* (while they last) with each subscription to S9 received after October 18th (be sure to mark your subscription order "Decal" to receive the decal). They are also being sold at 50ϕ each, or in bulk at \$3 for 10 decals, postpaid. We are *considering* furnishing these decals through dealers if there is sufficient interest. If you are a dealer, write to us on your letterhead for the status of this plan, and details.

How To Get 4 New CB Features At The Same Low Price...



Buy The New Heathkit® MW-34... Only \$89.95!

4 New Advanced Features For Greater Operating Convenience! That's the new Heathkit MW-34 Citizen's Band Transceiver. Boasts 5 crystal-controlled transmit & receive channels with a new front-panel crystal socket to allow quick, easy changing of one transmit crystal without the fuss of removing the cabinet! Utilizes variable receiver tuning with another new feature — a spotting switch — for receive function. The spotting switch turns on the transmitter oscillator without going on the air, thus generating a signal for tuning the receiver to exactly the same transmit frequency.

In addition, a TVI filter is incorporated to minimize interference with TV sets. And a new calibrated "S" meter automatically shifts from transmitter to receiver to indicate strength of received signals or relative power output during transmit.

Ideal For Boat, Home & Car! The MW-34's compact size, 3-way power supply (6 & 12 v. DC, 117 v. AC) and gimbal mounting bracket allow installation just about anywhere ... under your car's dash, on top of your boat's instrument panel, or anywhere in your home. And you enjoy the convenience of variable receiver tuning with vernier action and lighted dial to receive all 23 channels ... superhet receiver with RF stage for sensitive, long-distance reception ... adjustable squelch to silence receiver during standby ... automatic noise limiter to reduce electrical ignition interference ... efficient transmitter circuit for extrarange transmissions. Attractively styled in rust-resistant black & white metal cabinet ... matches Heathkit marine gear. Quick & Easy To Assemble! With new Heathkit 2color step-by-step instructions. Requires no special talents, background or tools. Kit includes push-to-talk microphone for ease of operation, AC & DC power cord, and crystals for one channel (specify frequency). Get the most for your money . . . more performance, more savings . . . get the new Heathkit MW-34. Tear out the coupon & order yours now!

Kit MW-34, 16 lbs. \$89.95



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BEST BETS FOR LISTENERS ON THE DX BANDS by RICK SLATTERY

We are seeking DX reception reports and photos of SWL stations for this column. Reports of reception can cover standard and shortwave broadcasting stations, ships hams, aircraft and ground stations, point-to-point telephone stations-just about anything you've heard in the way of DX. Do not include reports on reception of CB stations, except stations heard which are not in North America, Hawaii, Virgin Islands, or Puerto Rico. Please include frequency, time (in EST), callsign and/or station name, location and any other pertinent data on the stations you report. Address reports to: "The SWL Shack," S9 Magazine, 14 Vanderventer Avenue, Port Washington, N. Y. 11050. All times indicated are in 24-hour Eastern Standard Time.

BAND HOPPING

Radio Belgium runs news in French and Flemish to N.A. 1900-2000 on 7205 and 9745 kc/s. Radio Prague, in Czechoslovakia, beams English to N.A. 2000-2055 and 2230-2345 on 5930, 7120, 7345, 9795, and 11990 kc/s. Radio Berlin International, East Germany, has English to N.A. at 1230, 1515, 1700 on 6080, and 7300 kc/s. The Voice of Nigeria reported in English with good signal strength 1200-1400 on 15295 kc/s. In Peru, OAX4W, Radio America, heard on new frequency of 9470 kc/s at 0015. Look for an English broadcast from Costa Rica's Radio Casino in Puerto Limon at 1910 on 5950 kc/s. A sure bet for a good signal should be HCIB, The Voice of The Andes, Quito, Ecuador, in English at 0130-0500 (Sunday to 0430) on 6050, 9745, 11915, and 15115 kc/s. A rare one to try for is ZK6 in the Cook Islands heard in English and Maori at 0145 on 3265 kc/s. Another Pacific station to seek out is Radio Fiji in English at 1300-1630 and 2300-0530 on 3230 ke/s and



Here's a photo of the DX shack used by S9 editor Tom Kneitel. How about sending in a snap of your receiving station.

1630-2300 on 4756 kc/s. There have been reports that the *British Broadcasting Corp.* is testing with experimental SSB broadcasts with the following schedule: 2200-0000 on 9317 kc/s, 0100-0300 and 0415-0445 on 15913 kc/s, 0830-1245 and 1300-1715 on 12182 kc/s.

Nobody knows for certain where it is, but *Radio Liberdad* gives out with mucho anti-Fidel propaganda (in Spanish) on 1400, 5700, 6240, 7380, 9325, 15050 kc/s (frequencies are approximate and fluctuate daily). Signs on at 1757 with the Cuban national anthem and has been heard until 0100. Station is probably in Venezuela, judging from direction finding tests and propagation characteristics.

The new Voice of America relay transmitter in Monrovia, Liberia, is heard at 1500 on 15315

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CLOSEOUT SALE

We have only a few of our "Fabulous Modulation" famous C-II audio compression amplifiers left and we want to clear out our stock. Thousands were sold at \$29.95; while they last, they're only \$25. Hooks to any CB rig in minutes, really BLASTS you through the most hairy QRM, challenges any signal on the band for King of the Channel! Self contained battery operated. Full compliance with new FCC regs.

> COMTRAN ASSOCIATES, INC. 2847 Cropsey Avenue Brooklyn, N. Y.



kc/s. Also will good signals at 0300 on 7185 kc/s. Radio Australia operates with an extensive shortwave schedule and if you should hear them between now and December 31, 1964, you can receive a special "25th Anniversary" QSL card. Reports should go to: Shortwave Service, Radio Australia, Melbourne, Australia. Be sure to include date, time, frequency, signal strength, and program details of the material to be QSL'd. A big signal from Europe is *Deutsche Welle*, in English from Cologne, West Germany at 1000-1050 on 9735, 11795, and 11925 kc/s; 2035-2115 on 6075, and 9640 kc/s, 2355-0035 on 6154, 9545, 9735, and 11795 kc/s. They send a nice OSL card.

NON-BROADCAST STATIONS

Interesting Royal Canadian Mounted Police net heard about 4798 kc/s most evenings. Look for stations XJA31/Port Alice, B. C.; XJA37/ Powell River, B. C.; XJA42/Victoria, B. C.; XJA43/Vancouver, B.C.; and XJA55/Kamloops, B. C. With the Great Lakes iced up during the winter (and the Great Lakes ships in dry dock) you have a pretty good chance to cash in on distant ship and Coast Guard station on 2182 kc/s every evening. Another good bet for ship stations is 2830 kc/s, which buzzes with the salty language of Gulf of Mexico shrimp boat captains at night. They are easily heard throughout N.A. For those ex-U.S. Navy listeners, you can recall your days with Uncle Sam by listening to the Navy's 2716 kc/s which turns up all sorts of military vessels. Air Force veterans can fly along on 6730 kc/s where ground stations and aircraft chatter back and forth. You "dogfaces" can relive your past by checking on station AAE60, located at Sandia Base, Albuquerque, N. M. They are heard frequently testing in SSB on about 4830 and 12173 kc/s.

If you can tune SSB (can't everyone?) take a look for the following "rare" countries via their SSB radiotelephone transmitters: ZNX90, Bridgetown, Barbados, at 1055 on 19055 kc/s; FZF64, Fort de France, Martinique, at 1320 on 16440 kc/s; 6YR72, Kingston, Jamaica, at 0700 on 15620 kc/s; and KUJ39, RCA in Agana, Guam, at 0955 on 9490 kc/s.

Now it's your turn to tell us what you've heard!





VIVA CB EN PERU

HAVE YOU HEARD THIS ONE YET?

by PHILIP NOLAN, KEA2905

E S	ISCOZAZIN (VIA SAN RAMON) PERU
Iscozazia	AAT - 3 CB Radio
	Monitored Your Sig. Here Channel Signal
	19atEST Pearce Simpson Companion Antenna Hy-Gain TH-3

CB'ers throughout North America have told us about hearing a mystery station announcing "This is station OAAT-3 in the jungles of Peru. Most of those who contacted us seem to think that this is a product of the fanciful imagination of some U.S. based prankster-but nothing could be further from the truth. There IS a station OAAT-3, and the fellow IS in the jungles of Peru.

The station is operated by an American petroleum geologist named C. K. "Kim" Ham. Kim supervises a petroleum exploration program for the Ceno de Pasco Corporacion on a 2 million acre tract of land just east of the Andes Mountains

When not in the jungles, Kim lives in Lima with his XYL, Ruth, and their three harmonics. The rigs at OAAT-3 are three Pearce-Simpson Companions located at the base camps and drilling rigs in Iscozazin, Peru. Channels in use are 1, 3, and 4-and Kim seems to be heard in North America pinning everyone's S-meter. The antennas are Hy-Gain TH-3's. Our map shows about 150 miles northeast of Lima-right smack on the eastern edge of the Andes, and the Andes rise up to about 20,000 feet above sea level. Sounds like a pretty nice 10-20 and it's no wonder we all hear OAAT-3 with such a fantastic signal.

We are indebted to Russ McKeown, KHC5918, of Decatur, Ill. for giving us a look at the card he received when his signals were monitored in Peru. Apparently Kim does a lot of reading the mail when the band opens up to the States and Canada.



More people read more things in \$9!

November 1964 • 33

ELENCO MODEL LR-I LONG RANGER BI-LATERAL LINEAR RF POWER AMPLIFIER

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\$129.95

*Connects in coax line between transceiver and antenna

*Automatic electronic switching

*10 times (10 db) power gain on transmit signal; up to 60 watts carrier output, depending on RF drive power and mode.

*Three S units gain on received signal.

*Factory tuned, ready to go into 50 ohm coax.

*Can be operated remote control.

*Will operate mobile with inexpensive 12V DC to 115V AC inverter.

ELENCO L200 SERIES LINEAR RF POWER AMPLIFIER



*Up to 135 watts carrier output, depending on available RF drive power and mode. *Connects in coax line between transceiver and antenna.

*Automatic electronic switching, transmit to receive.

*Set-and-forget tuning.

*Can be operated up to 100' away from transceiver.

*Remote control in-out circuitory built-in.

COMPESSION AMPLIFIER



\$45.00

*Provides a very high level of talk power; makes 5 watts as effective as 20 watts (without compression).

*Has control to avoid overmodulation of signal to prevent spreading.

*Has front panel switch for local-distance operation.

*Four variable controls permit precise adjustment for top performance on all sets.

*Three wires to connect to set, complete instructions furnished for connecting to any set. Wired quick disconnect plug furnished.

ELENCO MODEL SW-I SIDEWINDER



\$29.50

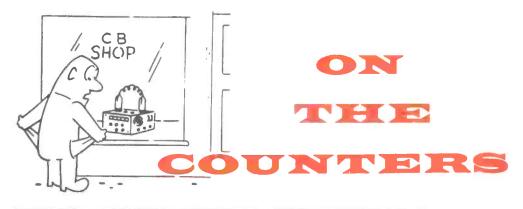
*Converts sets putting out standard AM signal to a double sideband modulation controlled carrier signal (DSMCC) *Function switch provides a low power position for local contacts; helps reduce interference. *DSMCC signal provides a more efficient

duty cycle signal for driving linear RF power amplifiers. Permits operation of a linear at two times power rating of straight AM operation.

*Goes with the set on any voltage.

Fingertip control of power and range! Be first in your area with the newest equipment. See your local CB dealer for a demonstration. If no local dealer, order direct from factory.

ELECTRONIC ENGINEERING COMPANY PHONE 563-2294, AREA CODE 219 WABASH, INDIANA



Manufacturers of CB gear and accessories are welcome to submit photos and releases of items for possible inclusion in "On The Counters." There is no charge or obligation.



Sonar Radio Corporation, 73 Wortman Ave., Brooklyn, N. Y. gave S9 a scoop on announcing their new Model H which is to sell for \$159.95 (list). The Model H features a transistoried power supply, 7 transmit/receive channels with external sockets for transmit/receive crystal, it has an adjustable squelch and a fine tuning control for the receiver.

And we understand that e.c.i. electronics communications, inc., 56 Hamilton Ave., White Plains, N. Y. has what can truly be called a "remarkable" unit in their new Courier 12. The Courier 12 is a combination 5-watt Class D CB rig and 100 milliwatt Part 15 legal hobby CB rig. A flick of the switch on the Courier 12 and you go to a Part 15 setup which allows you to legally work skip, call CQ, send unsubstantive messages, etc.-all the things you can't do on regular CB-and it's legal; repeat it's legal! The Courier 12 is supplied with two transmit crystals, one for the National CB Calling Channel (9) and the other for the most popular Part-15 hobby channel, Channel A (26.995 mc/s). Look for this base station and mobile unit to really take the CB world by storm. Further details are available from Mr. Pete Robins, head man at e.c.i. Tell him S9 sent you!



The folks at Control Labs, 123 Avenue U, Brooklyn 23, N. Y., sent along some interesting data on their "Hi-Gainer" audio compressorclipper-amplifier. This unit utilizes three high gain transistors and requires no internal connections to your CB rig. The manufacturer says that you can use the variable gain control to bring you up to "high quality, penetrating, big sound audio without violating FCC regulations." Suitable for both base station or mobile use, the Hi-Gainer operates from its own self contained 9 volt battery, and with any crystal, dynamic, or ceramic mike. Case is chrome plated steel. The unit sells for \$22.95 and is available from dealers or right from the manufacturer. By the way, Control Labs is looking for new dealers on this item.

Heathkit's new 1965 catalogue is a wonderland of all kinds of electronic goodies which offers well designed kits for both beginners and old timers. It's free from: The Heath Company, Benton Harbor, Mich.

A number of useful books on various aspects of electronics is available from World Publications of Denmark, via their national distributor, Reed Advertising, 546 Pond Run Road, Raceland, Ky. 41169. The books include some good volumes on various aspects of shortwave listening (including the famous World Radio Handbook, which lists and discusses just about every standard and shortwave broadcasting station in the world: callsigns, frequencies, addresses, powers, schedules, etc.). Get details of the exciting new

S9 = more news, more authors, more value!

November 1964 • 35



Yes, you can boost Channel 9 as the National CB Calling & Monitoring Channel with a large red, white, and black decal on your windshield! Can be seen by all mobile units to let them know where you are listening. These large decals sell for 50ϕ each but are FREE with all new S9 subscriptions and renewals received here after October 18th—all you have to do is mark your subscription order "Decal" to get these while they last!

Besides the decal, you will be signing up for 12 months of the "Official Publication" of all CB'ers throughout the U.S. and Canada, the largest circulating CB magazine—the one with twice as many pages for the same price! So double your pleasure, double your fun, get twice as much magazine, for the price of just one! And don't forget to take advantage of the Channel 9 Monitoring Decal—tell the gang where you got it too!

A postpaid subscription form is located in the rear of this issue. By the way, an S9 subscription makes a swell holiday gift for someone (XYL's please note!). S9 gift subscriptions are furnished with a distinctive gift card to tell the CB'er who has been kind enough to send him the best in CB reading. 1965 edition direct from Reed Advertising. Dealers' inquiries invited.

A new base station antenna is with us, the SB-100 Super Star Burst, which is said to give your rig 9 watts of effective radiated power, a 1:1 SWR across the entire band, containing a matching transformer designed to minimize and discriminate against TVI. On the mechanical side, the Super Star Burst is 100% rust proof, it is 20 feet tall, and it weighs 9 lbs. In development for several years by CB'ing engineers who custom designed this for their own use, then were beseiged by other operators for duplicates, the Super Star Burst is now available from Astro Antenna Corporation of America, 2 Rock Spring Road, West Orange, N. J. They are looking for new dealers too. We understand that this antenna really creates quite a bit of favorable comment when it is demonstrated so you might look into it. The Astro people will send you some descriptive literature on the unit.

S9 Lab Reports

THE BROWNING DRAKE



We recently had the opportunity to take a close look at a much talked about unit, the so-phisticated Browning M-523 "Drake."

Basically the M-523 Drake is a 23 channel rig (the model M-506 has 6 channels) which was designed for mobile use (although a 115 volt power supply is available too). The unit consists of an exceptionally small transceiver (about half the size of this page, holding the book edgewise), a separate loudspeaker, and a separate transistorized power supply which can be tossed in the engine well to conserve space within the car itself.

The transceiver-proper mounts beneath the dash and takes up very little leg-room. The unit with the loudspeaker, in our particular installation, was hidden away under the dash, behind the steering column. Since only the small transceiver shows in the space normally occupied by a large CB rig, it's quite a shock to see something so relatively tiny doing the chores normally

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tackled by something two, three, or *four* times the size. It does not look dissimilar in size or general appearance to the control head for a commercial two-way radio installation in a police vehicle or taxi. We installed the Drake in a semi-compact car (Chevy II) to see exactly what kind of benefits might be obtained by placing a semi-compact rig in same. It proved its point —it's really quite unobnoxious and does not constitute a nylon snag problem nor forbid the seating of three adults in the front seat.

On the electronics side, the Drake has a pretty hot dual conversion receiver which can fight off just about all kinds of adjacent channel interference except that caused by overmodulating locals (and this is the fault of the station being received and any deficiency in the Drake). The front panel contains a "fine tuning" control which varies the tuning up or down 2½ kc/s, although this doesn't seem to have very much effect one way or another. The rear deck contains terminals for connecting an external tone calling device.

The transmitter, fortified with a healthy 5763 tube (capable of 10.3 watts output when juiced up with 300 volts on the plate, but held down to 5 watts input with the power supply in the Drake), delivers a cool, unstrained 3.4 watts to the antenna. This, coupled with healthy 100% modulation (via 6BQ5/12AX7 combo), presents quite an imposing signal on the band. Pi-net tuning permits loading into any antenna used for CB.

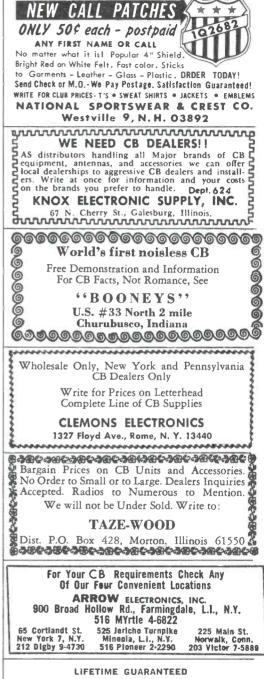
The transmitter section of the Drake runs 4 tubes, the receiver has 5-some tubes are double function and operate in both receiver and transmitter sections. Two crystal diodes are also employed.

A provision for PA operation consists of a slide switch on the rear deck to cut out the transmitter and run the audio through the loudspeaker when the mike button is pushed. This switch would have been considerably more convenient to use if it were placed on the front panel (the folks at Browning are considering such a change, we understand). We would like to see the switch permit using a second speaker, such as enginewell mounted, for exclusive PA operation.

The noise limiter cleverly operates on the same tuning shaft as the squelch. When you pull the shaft towards you the NL is cut out of the circuit -push it in and the NL is in operation. The squelch does a nice job and isn't prone to opening up with the noise from passing cars. Provision for an S-meter is made by a socket on the rear deck.

Browning has condensed an exceptionally large number of goodies in this small packagea look inside the cabinet shows a neatly wired and well engineered professional piece of gear (this has become a hallmark of Browning by

Continued on page 42



CB CRYSTALS

for HE 20 — All Series Johnson Messenger 1 & 2, Lafayette HB111, HB200. All Walkie Talkies, 1.69 ea. / 3.30 Per Set. Include .05 per xtal mailing. Dealer Inquiries invited.

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NEW! LAFAYETTE DUAL-CONVERSION DELUXE 9-TUBE C. B. TRANSCEIVER Model HB-200 Successor to the Famous Lafayette HE-20C





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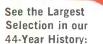
9 Tubes plus 3 Silicon Diodes plus 2 Crystal Diodes for 17-Tube Performance
 Super Sensitivity—1 Microvolt or Less
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 Crystal Transmit Positions plus 23-Channel Tunable Receive Push-to-Talk
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 Switch
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 Built-in 117 Volt AC Power
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 With Bracket
 Handle, Push-to-Talk Ceramic Mike, Pair of Transmit and Receive Crystals for
 Channel 15 plus Crystal for Dual Conversion

NEW! LAFAYETTE MODEL HA-115 AUDIO COMPRESSOR AMPLIFIER FOR CITIZENS BAND-TRANSCEIVERS

3 ACCESSORIES IN ONE COMPACT UNIT

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 Completely Pre-Set and Pre-Tested
 Printed Circuitry — Advanced Design
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 Better Modulation for Older Units
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- Continuous One-Control Channel Tuning
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- Dual Conversion Receiver With $3/10 \ \mu v$ Sensitivity Delta Tuning Offers "Fine Tuning" of $\pm 2.5Kc$ on Receive Illuminated "S" and RF Output Meter
- Variable Squelch, Variable Noise Limiter, AGC
- Built-in 117V AC & 12V DC Power Supply
- "Vari-Tilt" Mounting Bracket for Easy Mobile Installation
- Plug-in Facilities For Lafayette Selective Call Unit



Double Side Band Full Carrier

CITIZENS BAND TRANSCEIVER

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Efficient, dependable 2-way communications in any fixed or mobile application is assured with this rugged, new 5-watt CB transceiver. A military-type frequency synthesizing circuit makes it possible to transmit and receive over the full range of 23 channels with crystal-controlled accuracy-no extra crystals to buy and install!

Efficient circuit with 13 tubes and 8 diodes offers maximum transmitter power output . . . high receiver sensitivity-plus every feature CB users want!

overy feature CB users want: Operates in a fixed or mobile location with equal ease ... has built-in power supply for either 117V AC or 12V DC. Specially designed "Vari-Tilt" mounting bracket simplifies mobile installation—permits fast removal of the transceiver too! And, there's nothing else to buy—you get all crystals, push-to-talk ceramic mike, and a built-in vibrator for 12V DC, plus 2 power cables. Measures a compact 12Wx5Hx10"D.

ADVANCED "RANGE-BOOST" CIRCUIT

Increases Your Effective Range-Lets You Get Through When Others Fail!

Want to effectively increase your range? You can-with Range-Boost! A simple turn of a switch on the HB-400 increases the average percentage of mod-ulation and lets your voice cut through QRM and noise to reach further . . . gives you more "talk-power" when you need it—without overmodulating!

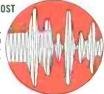


Average Percentage of Modulation is Lower



WITH RANGE-BOOST

Average Percent-age of Modulation is Higher—Side band Power is Increased



Headquarters For Citizens Band Equipment NEW! LAFAYETTE ALL-TRANSISTOR DUAL CONVERSION 5 WATT CB TRANSCEIVER



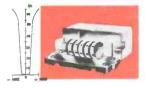
Small, Compact—Only 11-7/16Wx6-11/16Dx3"H

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Low Battery Drain—Less Than 350 ma on Receive, 850 ma on Transmit!

- 12 Crystal Transmit plus 12 Crystal Receive Positions
- 23 Channel Tunable Receiver with Vernier Tuning
- Dual Conversion Receiver with 5/10 μV Sensitivity
- 15 Transistors, 3 Diodes, 2 Zener Diode plus 1 Thermistor
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- For 12 Volt DC Mobile Operation (Negative or Positive Ground) or for 117V AC Operation when used with Matching Solid State AC Power Supply (Optional) Meets All FCC Regulations

HIGHLY SELECTIVE MECHANICAL FILTER



With C2 channels only 10 Kc apart, selectivity is important! In the HB-500, ultra-sharp selectivity is achieved by means of a true mechanical bandpass filter in the 455 Kc if section. At 10 Kc on either side of the center frequency, the filter provides 60 db of attenuation—an extremely high rejection ratio that assures complete adjacent channel rejection!

Model HB-501 Solid State AC Power Supply

SILICON MESA TRANSISTORS used in Re-

ceiver Oscillator, RF and IF Stages.

If you're looking for a high-performance CB transceiver in a

small, compact size, you'll want the HB-500! Using advanced solid-state circuitry, this transceiver is small enough to fit

conveniently into the most compact car. And, battery drain

is really low! The transceiver draws no more than .35 amps on receive, .85 amps on transmit—an important advantage

in mobile applications! This rugged transceiver offers in-

stantaneous, cool-running operation and features printed

circuit, all-transistor design. Equipped with mobile mounting

bracket, push-to-talk dynamic microphone, crystals for opera-

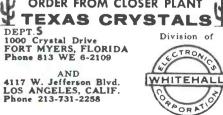
Matching solid state AC power supply for HB-500 for fixed station operation (at home, business, office). Transceiver rests on power supply to form attractive integrated unit. Size 11%x6¹/₄x3¹/₅".

tion on channel 12.

Final Stages.







LAB REPORTS

Continued from page 37

now). While not exactly in the budget category, the Browning Drake (which comes complete with all 46 crystals) is easily in the exclusive Rolls Royce class of slick, high quality CB communications equipment. All in all, it packs quite a wallop for its size, and is a tribute to advanced communications enginering and to Browning's designers.

Further information on the Drake is available from Browning Laboratories, Dept. S, 100 Union Ave., Laconia, N. H.

THE J-A ELECTRONICS'

SPEECH CLIPPER

Even if you shy away from transceiver modifications, you too can add some real "sock" to your rig's modulation. With the J-A Speech Clipper-a device specifically designed for the "I won't do it myself" CB'er -you can add adjustable speech clipping, and frequency correction to your transceiver and never cut into the transceiver's "guts."

The J-A Speech clipper is a completely self contained preamp, speech shaper, and speech clipper housed in a cabinet small enough to be tucked away under the dashboard. Or, if you like your equipment all built-in, a small printed circuit board with all components is available; this PC board is small enough to be tucked away inside most transceiver cabinets.

The speech clipper uses four transistors to provide all the features necessary for maximum "talk power." First, the unit clips the peaks off the speech waveform so the average modulation can be boosted to nearly 100% modulation. Then, a low pass filter removes the distortion components generated by the clipping. In the process of filtering the clipper's frequency response is altered so maximum voice power is transmitted in the 500 to 2000 cps range-those frequencies that carry maximum intelligence. Plenty of reserve mike gain is provided, so even those transceivers normally short on modulation can be brought to the 100% level.

Both a clipping and output level controls are provided. The clipping control lets you establish the optimum clipping level for your voice. The output control sets the correct level for 100% modulation. Naturally, since there is more than enough gain to cause overmodulation the clipper must be adjusted with some sort of modulation meter, you can't do it by "ear."

The self contained 9 volt transistor radio

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0

battery will give approximately 6 months of service if the clipper is used an average of 2 hours per day.

The only work needed to get this unit "on-the-air" is the addition of the correct mike connectors. You just add an input and output connector and the clipper is readyto-go. For the technically competent CB'er built-in installation is no problem. Just find a convenient location on the transceiver chassis and mount the PC board. Open the mike input lead, connect the clipper in series and you're back on-the-air.

The J-A clipper's price depends on how much of the work you want to do. The basic PC board costs \$9.95 while completed units run to \$19.50. We suggest you write to J-A Electronics, P.O. Box 645, Teaneck, N. J. 07666, for a full price list. It's the only way you'll get what you want (and need).

LAFAYETTE RADIO'S HB-400 TRANSCEIVER



If you've been around since the beginning of CB you know that Lafayette Radio's reputation is based on good performance at rockbottom prices. So, when Lafayette breaks the \$150 price ceiling you've really got a right to expect something *extra* in performance; and in their HB-400 (\$169.50) you not only get *extra* performance, you get *extra reliability* and *extra field service conveniences*.

The HB-400 is a frequency synthesized rig; that is, a minimum number of crystals are needed for full twenty-three channel coverage—this is a major contribution to reduced cost—and the transceiver is factory equipped for all 23 channels.

The big selling feature of this unit is the so-called "Range Boost" so we'll cover this feature first. Range Boost is not simply a speech clipper. Instead of just clipping negative peaks, the HB-400 clips both the positive and negative peaks; within the capabilities of a CB transceiver the HB-400 packs about as much audio into the carrier as is possible. On field tests, where a mobile was located so the standard signal was completely buried in the noise level, switching in the Range Boost resulted in almost 100% copy—it was



The satisfaction you get from CB--ing with the new Cobra CAM-88 is a richly rewarding everyday experience. It's rugged, handsome to have in your car or home base—and it operates like you want it to—for personal, professional or business 2-way communications in the 27 mc Citizens Band.

Outstanding Features

- Fully-Equipped for Immediate 23-channel Transmit and Receive
- Double Conversion Superheterodyne Receiver
- Transistorized 117V AC/12V DC Power Supply
- Maximum Talk Power
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Carefully engineered design makes the Cobra completely reliable and easy to operate. Completely selfcontained. No additional crystals needed. \$21495

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Ordnance Development Awards for fiberglass research now offer these new and novel fiberglass CB antennas CB 50 AMAZER, a halfwave folded centerfed 8' fiberglass whip \$10.95 CB 14 MONOWHIP, a halfwave folded endfed "monopole" 8' whip \$12.95 CB 88 OCTOPUS, a double half wave fiberglass base antenna \$32.50 Business band antennas also available FRANCIS INDUSTRIES

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CB NORTH AMERICA an unusual 6 color map showing CB in a new perspective, like no other CB map, it shows American and Canadian call areas in one glance. ΉR The radio districts are indicated Calls with call prefixes (incl. 1965), S9 "10-code", new FCC rules resume, time zones, space for MAP call sign are some of many features. Map is on heavy paper 22" w. x 28" h. rolled, \$1.00 ppd. Send your order to: CB CALLS MAP, RUTLAND, VERMONT 05702 KKD 4039 💽 KKD 4039 The hit of the band! Two fantastic CB tie clip designs engraved with your personal callsign-the "Eyeball QSO" and the "Golden Mike." Only \$1.50 each. Prompt delivery from: Apollo Co., 10 Ave. "O", Brooklyn, N. Y. Electra Transistorized Vibrator for CB Specify Neg. or Pos. **5**5⁹⁵ Send Check or Money Order Electra. Inc. BOX 464, SOMERVILLE, N. J.

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just as if the carrier power had been increased many times. Another outstanding feature was the "cleanliness" of the modulation. Even when shouting, which produced over 10db of clipping, the modulation was outstandingly clean and sharp, so much so, that several stations broke-in to inquire as to what rig we were using.

The receiver section employs Nuvistors for both the RF amplifier and first convertor. As would be expected the noise level is very low; so low, that without an antenna connected it appears the receiver is defectiveit's really quiet. Double conversion is used with three stages of 455kc. IF amplification in the second conversion. Needless to say selectivity is phenominal-adjacent channel interference just doesn't exist. Selectivity is so sharp that a station off-frequency just wouldn't be received. To compensate for the other station being off-frequency delta tuning is provided. The delta tuning shifts the receiver tuning 3 kc. above or below center channel; if you still can't receive the other station he's so far off-frequency he is due for an FCC citation.

An average quality squelch is provided and a superior adjustable noise limiter. Even under the worst ignition noise conditions the limiter almost eliminates all snap-popsand crackles-you get just a smooth "rush" which doesn't interfere with intelligence. The receive audio quality is similar to the transmit quality-"clean" and crisp.

The transmitter delivered 3.2 watts to an antenna. The output circuit is designed for an antenna close to 50 ohms (100 ohms the upper limit); it will not compensate for a bad antenna installation. A pi-section harmonic filter practically eliminates harmonic TVI. The receiver S-meter doubles as a relative RF output meter-when the meter peaks the transmitter is peak-tuned.

One feature we questioned was the use of a vibrator when everyone seems to be going transistor, and Lafayette came up with a valid point. "If a transistor blows in the field where are you going to get a replacement? And where are you going to get a soldering iron? If the vibrator goes the local radio shop will probably have a replacement which only has to be plugged-in." And just in case you're worried about that bugaboo vibrator-hash, forget it; the HB-400 is well filtered and there is no vibrator hash.

Also in the service end of things: All components are in the clear; the main filter capacitor is clamp mounted rather than chassis mounted and can be easily changed in an emergency. Tuning adjustments are made through the cabinet, you don't have to re-

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move the cabinet to tune-up, or when you trim the tuning to compensate for an antenna change.

The power supply handles 12 VDC or 115 VAC and both cables are provided. A prewired socket on the rear apron permits instantaneous connection (or disconnect) of a selective calling adapter. A front panel jack allows easy connection of a remote speaker, headset or handset. Construction is just about "commercial quality."

Another big "plus" is the HB-400's instructional manual. Not only is it a service manual with a "simple troubleshooting" and alignment section, it is also virtually a CB Handbook. There are sections on mobile and base station antennas explaining the radiation patterns and when to use them, and a TVI, auto and marnie noise eliminating section. Also a section on the S-meter's calibration in microvolts and a section on operation including using the "ten code." Finally, the handbook explains when and how the power output meter can be used as a direct reading RF power output meter.

Truly, at *any* price the performance and construction of the HB-400 is outstanding. At \$169.50 it's an excellent buy.

TOROID-TENNA

For mobile CB work it often becomes necessary to use a shortened antenna in place of a full-length whip to provide ample clearance for overhead obstacles, to facilitate garaging of the vehicle or to furnish an unobtrusive installation which is not unsightly nor which mars the appearance of an automobile. Although some compromise in efficiency may be expected, a well designed loaded short whip will provide favorable performance, especially since it can be mounted up on the car body or roof where more uniform omni-directional coverage can be obtained and where less noise pickup may be





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With the Miniverter, you can listen in your home or auto to conversations on any of the shortwave frequencies: Fire, Police, International, Amateur, Citizens Band, Civil Air Patrol, Coastguard. It's fun and also a valuable tool for Volunteer Firemen, Auxiliary Policemen, boatowners, and many other listeners. Crystal-controlled and transis-



torized, these easily installed powerful units are available in a range trom 2 to 60 megacycles. All have a tuned RF stage and are shipped postpaid ready for installation.

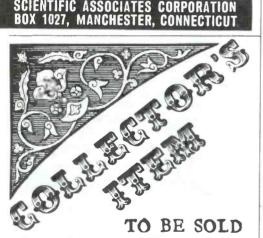
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BAND*

International, CHU, WWV	\$18.95
Fire, Police	\$27.95
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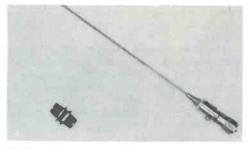
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Write Dept. S11 to place your order or for a descriptive brochure.



A complete set of S9 Magazines, 18 issues from July, 1962, through December, 1963, book bound in a hard cloth cover. Distinguished in maroon with 24 karat gold lettering. Will last for years. Limited supply, first come first served. 1136 pages of pure CB for only \$20, postpaid.

> Cowan Publishing Corp. 14 Vanderventer Avenue Port Washington, N. Y. 11050



The Toroid-Tenna. It is trimly styled with the toroid transformer enclosed in the base with a tuning adjustment accessible through a small aperture at the projection on the side. The base is fitted with a PL-259 coax connector. A suggested mounting accessory, an 83-IF coax adapter, is shown at the left (not supplied with the antenna).

experienced than otherwise found with the customary bumper-mounted full-size whip. Also, in the case of a commercial vehicle, bumper mounting usually is not feasible, so the antenna must be mounted at some high point on the truck body, thus dictating the need for a shortened arrangement.

The Toroid-Tenna, produced by Electro-Winders Co., Inc., consists of a shortened whip, 42" in length (compared to a length of approximately 108" for a full-size whip), using an efficient base-loading coil and matching transformer. A departure from many similar arrangements is that the loading coil is a toroid-wound transformer having high Q, lower losses and better efficiency than obtained with some of the conventionally used loading devices. In addition, it includes a screw-driver adjustment which permits precise tuning to frequency and the attainment of a near 1:1 standing-wave-ratio. Trimming of the whip itself is not required, so there is no danger of cutting off too much.

Circuitwise, the bottom end of the toroid base-loading coil is grounded and a tap at the 50-ohm impedance point on the toroid is brought out through the base connector for the transmission line. The tuning adjustment is a very small value variable capacitor shunted across the coil.

The toroid is enclosed in a metal shield intended to make it less susceptible to noise pickup. Teflon wire is used for the toroidtransformer windings along with Mylar insulation, making the arrangement unaffected by varying weather conditions. The whip is taper-ground flexible stainless steel and bends to a small radius, so that it need not be tied down for garaging. Other parts are brass and chrome-plated to MIL. Specs.

The base of the antenna is equipped with a PL-259 coax connector for the transmission

Continued on page 74

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When experience counts, it's S9 every time!

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- Tunable Receive 23 Channels
- Transistorized Power Supply
- P. A. Facility
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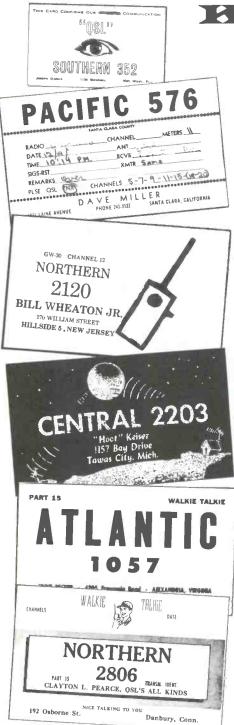
World famous manufacturers of quality CB & BB equipment including Courier 23, Courier 1M, Courier 30B, Fleet Courier, Port-A-Lab, Transistorized Power Supply, Linear Amplifier.

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KORNER

by DEAN DETTON, NORTHERN 17

Despite the several times it has been explained here, we still receive considerable mail concerning Part 15 legal hobby CB. Apparently it sounds too good to be true to be accepted by many of you, but it is true! Operation under Part 15 of the FCC rules permits low powered stations on CB (and certain other) frequencies to: work skip, talk about any subject, talk for an unlimited length of time, call CQ, use code (CW), use a VFO to vary transmitting frequency, and numerous other things not available to regular 5-watt Part 95 Class D CB stations. The FCC does not even charge you for a license to operate in the Part 15 band-it's free. Since the FCC doesn't assign callsigns to P-15 stations, S9 Magazine gives them out free, as a service to the hobby.

P-15 equipment includes any number of different brands of walkie talkies, and also several full fledged base stations made by both *e.c.i. electronics communications inc.* and *International Crystal Mfg. Co.* and details about their Part 15 equipment may be obtained directly from these manufacturers; see their ads in this issue for addresses. They operate on the so-called P-15 channels, which are given alphabetical letters, rather than numbers, to differentiate them from Class D CB channels. Channel A is the most popular P-15 hobby channel, it's frequency is 26.995 mc/s; this is between CB channels 3 and 4.

What kind of range and operation can you expect on P-15? Skip can be worked on both phone and CW, and many P-15 clubs have sprung up to pursue skip working on the band. The stations have their own distinctive QSL cards and swap them in exchange for a contact. As we said, all of this is *legal* and *fully* within FCC regulations.

A letter from the Nashville 100 Milliwatters Club, P.O. Box 3301, Nashville, Tenn., tells us that recently they had 5 members take part in a marathon QSO on Channel A. It lasted for 15 hours and 31 minutes. In another P-15 exploit, stations ATLANTIC 410 and 678 were working each other on Channel 7. A plane flew over and 410's signal jumped from an S-3 signal to S-9! They're looking for new members.

Thomas Ardinger, 348 Franklin St., Quakertown, Pa., can attest to P-15 DX possibilities. Members of their local P-15 club have worked skip into Georgia! They keep busy on Channel 10.



More people read more things in S9!

Don't bother to read this ad. Just subscribe to S9.

Since you're paying no attention to our first suggestion, maybe we can get you to act on the second.

Why should you subscribe to S9?

After all, the place is loaded with all manner of CB newsletters, pamphlets, bulletins, brochures, flyers, circulars, reports and periodicals. Many excellent. Some great.

We'd like you to judge for yourself the remarkable difference of S9. Many people consider it to be significantly superior to all others. (Or, as

bluntly put by 2A4671, "The best damned magazine in the world.")

Leaf through a few pages, neat.

This is the sure test of the quality of any publication.

You won't find a trace of mediocrity. You'll have no tendency to gasp or shudder.

S9 reads smoothly.

What's the secret?

It's not that we won't tell you.

We can't. We don't know.

Experience has a lot to do with it though.

Each word placed in S9 is processed through a barrage of experienced and qualified CB'ers, technicians, creative genuses and assorted authorities—each of whom add their own touch of distinction to the end product.

When an article or story begins its journey through this lineup, we don't even know what the final result will be until it actually appears in print.

But we do know that our staff produces a publication which has taken the CB world by storm.

There are many thin,'s which make it so.

Such as the light touch and easy readability of the articles.

And the fact that our staff maintains many exclusive personal contacts within the CB industry and with other "insiders."

Then (hushed voices, please!) there's the skill of our editors.

By experience alone, they judge if editorial material is fit to be called "\$9."

If there is the slightest doubt, the material does not appear in print. This policy is infallible in our striving to give you only the best.

Now, many people ask us, Is S9 understandable if you have no in-depth knowledge of electronics.

Yes, it is.

But don't imagine that this "readability" has anything to do with the fact that the articles might not cover a subject adequately.

A readable magazine is a worthwhile magazine.

And "worthwhile" S9 most certainly is.

As we started to tell you, don't bother to read this advertisement. . . Oh, well. Too late.

When experience counts, it's S9 every time!

CARD

SWAPPERS UNLIMITED

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

- SACA 178 Bud Fowkes, KLP5005, Duncansville, Pa.
 179 G.D. Massam, XM411700, Toronto, Ont.
 180 Matila Leonhardt, KLM6123, Cincinnati, Ohio
 181 Edward Gray, KAG3428, Eugene, Oreg.
 182 A.D. Williams, KDE2173, Spartanburg, S.C.
 183 Herb Girard, KBD0747, Woonsocket, R.I.
 184 Nick Miller, KDJ0332, St. Petersburg, Fla.
 185 Bill McShea, KCG300, Arlington, Va.
 186 Lee Willick, KCJ3880, Raleigh, N.C.
 187 Bill Orton, 6W7263, Chattanooga, Tenn.
- PX -25 324 Lee Willick, KCJ3880, Raleigh, N.C.
 325 G.D. Massam, XM411700, Toronto, Ont.
 326 Dale Fletcher, KKX5201, Yucca Valley, Calif.
 327 A.D. Williams, KDE2173, Spartanburg, S.C.
 328 Ray Randall, KLP2986, Hudson Falls, N. Y.
 329 Norman Williams, KKM9544, Jackson, Tenn.
 330 Dale Reinhard, WPE4HSE, Florence, S.C.
 331 John Hall, Northern 2595, Hornell, N. Y.
 332 Ronald Walters, KLK6913, Freeport, Ill.
 333 Clayton Warner, Binghamton, N. Y.
- PX-50 279 Lee Willick, KCJ3880, Raleigh, N.C.
 280 G.D. Massam, XM411700, Toronto, Ont.
 281 A.D. Williams, KDE2173, Spartanburg, S.C.
 282 Ray Randall, KLP2986, Hudson Falls, N.Y.
 283 Ronnie Martin, KRG6227, Plainfield, N.J.
 284 Clayton Warner, Binghamton, N.Y.
 285 Jim Boweutt, KFA6460, Hacienda Heights, Calif.
 286 Dale Fletcher, KKX5201, Yucca Valley, Calif.
- PX-75 215 Lee Willick, KCJ3880, Raleigh, N.C.
 216 G.D. Massam, XM411700, Toronto, Ont.
 217 Art Machado, KLA0346, Sonoma, Calif.
 218 A.D. Williams, KDE2173, Spartanburg, S.C.
 219 Richard Sprinkle, KCJ4859, Winston-Salem, N.C.
 220 Don Brandt, KKD1311, Short Hills, N.J.
 221 Ed Myers, KHB2216, South Bend, Ind.
- PX-100 200 Lee Willick, KCJ3880, Raleigh, N. C.
 201 G. D. Massam, XM411700, Toronto, Ont.
 202 Art Machado, KLA0346, Sonoma, Calif.
 203 Edward Gray, KAG3428, Eugene, Oreg.
 204 A. D. Williams, KDE2173, Spartanburg, S. C.
 205 Tom Norman, KAP0812, Florence, S. C.
 206 Richard Sprinkle, KCJ4859, Winston-Salem, N. C.
- PX-125 143 Bruce Holt, KGC1311, Colorado Springs, Colo. 144 William Larsen, KEH0651, Midwest City, Okla.
- PX-150 122 Ed Ross, KCG3689, Eastville, Va. 123 Bud Fowkes, KLP5005, Duncansville, Pa. 124 Bill McShea, KCG0200, Arlington, Va.
- PX-175 113 Robert Thatcher, KBG7687, Hudson, N. Y.

114 Bill Orton, 6W7263, Chattanooga, Tenn.

MSA	 137 Rick Stephens, KFD5533, Palo Alto, Calif. 138 A.D. Williams, KDE2173, Spartanburg, S.C. 139 Nick Miller, KDJ0332, St. Petersburg, Fla. 140 Bill Orton, 6W7263, Chattanooga, Tenn.
SSC-1	148 Lee Willick, KCJ3880, Raleigh, N.C. 149 Matilda Leonhardt, KLM6123, Cincinnati, Ohio
SSC-2	124 Harold Channell, KCF1224, Alexandria, Va.
SSC -3	110 Bud Fowkes, KLP5005, Duncansville, Pa.
SSC-8	105 Bill Orton, 6W7263, Chattanooga, Tenn.

If you would like to be listed as a QSL 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 10ϕ 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 January issue is November 12th.

Our Swappers' listing is a bit shorter this month than usual. Our 10ϕ charge seemed to have the desired effect of weeding out many of the deadbeats who send in huge batches of cards without any intention whatsoever of actually swapping.

Here are this month's swappers:

1W6216 Errol Engraving, 36 Hampden St., Westfield, Mass. George Delaney, 308-47th St., Union City, N.J. 201147 2W7638 Bill Holt, 314 Mountainview Terr., Dunellen, N.J. 301618 Everett Lindsey, R.D.1, Mount Holly, N.J. Paul Skidmore, Box 243, Rockwood Rt.1, Tenn. 600914 Bobby Morehead, Rt. 2-Box 412, Shelby, N.C. 6W2675 801009 Sid Corvell, 4502 W. 29th St., Little Rock, Ark. Gordon Fleming, 10999 Standard Ave., Lynwood, Calif. 11Q0822 1102714 Eileen Inns, 530 Catalina Dr., Newport Beach, Calif. 16W1603 George Eaton, Box 251, Bayfield, Wis. 17W3325 Pete Nosler, 1144 Pineridge, Wichita, Kans. 17W5449 H.Hawkins, R.R.1-Box 86, Fair Grove, Mo. 18B2648 Glenn Davis, 6143 N. Rockwell St., Chicago, III. Richard Cary, Rt. 4-Box 176, Russell Springs, Ky. 1808866 Fred Schuemelfeder, 316 West Park Rd., Round Lake, Ill. 18QA1528 Harold Meador, R.R. 8-Box 111, Decatur, Ill. 18QA1612 19A5551 Steve Yankee, 357 First St., Manistee, Mich. Stan Sickler, 2310 Commor, Hamtramck, Mich. 19A 5964 Jim White, Box 108, Syracuse, Ohio 19Q0707 1904842 James Humburg, 460 Pipestone St., Benton Harbor, Mich. John Kasten, 5916 Westbrook Dr., Brookpark, Ohio 1908152 Martin Ripper, 7617 Cavel, Garden City, Mich. 19Q9941 19W8131 Robert Tatum, 23748 Haig Rd., Taylor, Mich. 20Q0255 Philip Lundy, 48 Sodus St., Clyde, N.Y. 20Q1360 Ivan Smith, 419 Water St., Danville, Pa 24Q0244 Dewey Watkins, 1811 Irving St.N.W., Washington, D.C. KAG2486 Dave Buda, 717 Centre St., Nutley, N.J.

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, you must notify (in writing) both the FCC in Washington and your local FCC office. You must do this for each time you perform emergency services. These FCC Notification cards were designed to cut to a minimum the paperwork necessary for well meaning clubs and individuals—they contain all the necessary wording—all you do is fill in a few blanks, drop them in the mail. They come with a list of the addresses of local FCC offices. Available postpaid in packages of 50 for only \$1. Order now from:

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

HALT! CB'ers & CLUBS! CH. 9 DECAL

ONLY 50¢ ppd.

Get this big, easy-to-see, 3 color Channel 9 Monitoring decal for your car windowl Boost better communications on CB by pushing and using Ch. 9 as the National CB Calling and Monitoring Channel. Immediate delivery. Only 50¢ each, bulk orders of 10 or more, 30¢ each. Dealer inquiries invited. Order NOW from:

> Channel 9 59 Magazine 14 Vanderventer Avenue Port Washington, N. Y. 11050

KAG3667 Jerry Hagler, 2240 McHenry St., Baltimore, Md. KBA 5534 Henry Fahs, Beacon Hill, Easton, Conn. Ted Cummings, Bellflower Rd., Billerica, Mass. KBA 5557 KBC0209 Vince Melendy, Spring St., Bedford, Mass. KBC0533 Ruth Charon, 109 Bowers St., Holyoke, Mass. Larry Brokalis, 185 Woodbury Rd., Burlington, Vt. KBC3057 KBC3375 Linwood Lord, 26 Chestnut St., Richmond, Maine KBC3663 Anna Fahs, Beacon Hill, Easton, Conn. KBC 6606 Ted Johns, Carmel, Maine KBC8093 Dennis Cidale, 17 Water St., Stonington, Conn. Jim Dooley, 115 Bartlett St., Charlestown, Mass. KBC9307 Ed Harhausen, 20 School St., No. Woburn, Mass. KBD0454 Herb Girard, 348 Carrington Ave., Woonsocket, R.I. KBD0747 KRD1474 Dorothy Sullivan, Port Clyde, Maine KBD2689 L. Dawson, R.F.D. 3, Houlton, Maine KBG4667 John Krueger, 23 Standpipe Rd., Freehold, N.J. George Miller, 32 Manning Ave., N. Plainfield, N.J. KBG6190 KBG7387 Gerry Schechter, 3535 Kings College Pl., New York, N.Y. Robert Thatcher, R.R. 1-Box 59-B2, Hudson, N.Y. KBC 7687 KBG8079 Alvin Allen, 610 Prospect Ave., Spring Lake, N.J. KBG8153 Betty Krueger, 23 Standpipe Rd., Freehold, N.J. KBG8159 Hazel Drewes, Lighthouse Dr., Saugerties, N.Y Dick Fuhrman, 1631 Alta Pl., Dubuque, Iowa KBH1789 Hank Mancura, 64 Meadow Lane, Levittown, N.Y. KB10275 KB12123 Richard Rios, 2897 Ardsley Rd., Wantagh, N.Y. KB13455 John James, 299 1/2 Lark St., Albany, N.Y. KB13957 Mitch Berson, 67-45 Kissena Blvd., Flushing, N.Y. KB16480 Art Scheid, 2 Essex Place, Hartsdale, N.Y KB16983 George Brandt, 1297 Myrtle St., Hillside, N.J. KB17038 Joe DiGiaimo, 287 E. 29 St., Paterson, N.J. KB18077 John Krejc, 60 Division Ave., Garfield, N.J. KB11722 George Hunt, 353 Highland Ave., Middletown, N.Y. Paul Price, 117 No. Montgomery St., Valley Stream, N.Y. KB11921 KB12055 Harmon Heller, 610 East 20th St., New York, N.Y. KCC0676 Frank Castaldi, 5317 Gravs Ave., Phila., Pa. KCC1860 Hank Thompson, 915 High St., Bethlehem, Pa. KCC2443 Bill Keefer, 31 N. Queen St., Littlestown, Pa. Charles Moyer, 1234 E. Phila. Ave., Gilbertsville, Pa. KCD2212 KCD4607 Joseph Wunder, 107 West Meyran Ave., Somers Point, N.J. KCD5154 Earl Rogers, 224 Tuscany Rd, Maple Gardens, Chester, Pa. KCD5222 William Wright, R. D. I, Green Lane, Pa. Aral Moser, R. D. I -Box 307AA, Coplay, Pa, KCD5294 KCD5295 Arlan Moser, Rt. 1, Box 306, Coplay, Pa. KCD5385 William Wright, R.D. I, Green Lane, Pa. KCD5410 Bill Rogers, 224 Tuscany Rd., Maple Gardens, Chester, Pa. KCD6109 Lois Lowell, R.D.2, Sellersville, Pa. Oliver Mayberry, 135 Chestnut St., Pottstown, Pa. KCE0146 Willie Lindsey, 10 E. 21st St., Baltimore, Md. KCE0329 KCE1224 Harold Channell, Box 126, Alexandria, Va. KCG0706 Eddie Becker, 4305 Franconia Rd., Alexandria, Va. KCG1087 Barney Ross, 425 Garden St., Washington, D.C. KCG3068 Ricky Lowman, 1001 W. Addition St., Martinsburg, W.Va. Clifton Carey, 911 South Division St., Salisbury, Md. KCG3371 KCG3689 Jane Ross, Box 188, Eastville, Va. KC11656 Allen Clair, 2847 Cannady Rd., Roanoke, Va. KC12842 Clarence Moore, Rt. 4, Box 34, Thomasville, N.C. KC12904 Jim Rawles, 7008 Belvedere Dr., Newport News, Va. KC14756 James Rice, P.O., Box 34, Hanover Court House, Va. KC12780 R.K. Harris, 513 McDonald Ave., Charlotte, N.C. Joel Smyre, 747 S. Brady Ave., Newton, N.C KC14187 Denis Jackson, 1316 Grove St., Greensboro, N.C. KCI4314 KC15002 J.Kirkland, Rt.5, Raleigh, N.C. KC]6180 Buddy Williamson, 604 Gillespie St., Greensboro, N.C. KCj7698 Joel Dawson, 1125 Tabor St., High Point, N.C. A. Clarke, 1009 Hamilton Ave., Clifton Forge, Va. KCJ7737 KC18028 Buck Buchanan, 2923 West Marshall St., Richmond, Va. Bruce Kanoy, P.O.Box 2306, Sunset Beach, N.C. KC18282 T. Matlock, RFD 5, Box 558, Greensboro, N.C. KC18765 KCJ9742 J. Gupton, 3242 Selwyn Ave., Charlotte, N.C. KDC0215 Dan Gooding, 1230 Westmoorland, Ypsilanti, Mich. Jerry Pater, 1195 Dale Rd., Hamilton, Ohio KDC0390 Garland Elmore, P.O.Box 327, Athens, W. Va. KDC0533 KDC1358 W.McKeever, Box 573, Lakeside, Ohlo Larry Rochelle, 3281 Warringham, Drayton Plains, Mich. KDC2257 KDC2313 Chuck Spain, 3113 Bessie St., Auburn Heights, Mich. KDD1522 Don Huntley, P.O. Box 2642, Asheville, N.C. KDD1522 Darlene Hill, Rt. 5, Rutherford, N.C. KDD6368 Dennis Laxton, Rt.3, Box 387, Lenoir, N.C. KDD8403 Lloyd Coop, 506 E. General St., Tullahoma, Temn. KDD9162 Irene Beem, P.O.Box 52, Russellville, Ala. Rodney Wise, P.O. Box 2953, Asheville, N.C. KDE0565 KDH1318 Robert Dwyer, 105 McKinley Ave., Cocoa Beach, Fla. KD11754 Steve Yacynych, 1205 Dove Dr., Orlando, Fla.

Is it time to renew your \$9 subscription?

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FLASH! NEW CB RULES NOTICE

PRESS TIME FLASH!

As we go to press we learn that the FCC's November 1, 1964, CB rule change will not go into effect on November 1. It has been postponed "indefinitely" (we think that this means at least 30 to 90 days) pending the Commission's consideration of the Lafayette/Polytronics petitions. This is an S9 scoop, and we are keeping our ears to the ground for further developments. S9 subscribers are welcome to send us a self-addressed and stamped envelope for keeping in our "FLASH" file. As soon as new information is received we will notify those subscribers who have these envelopes on file with us. Please send in the address strip with your name on it from a recent issue of S9 to indicate that you are a subscriber. New subscribers may obtain this service by enclosing the self addressed envelope with their subscription order. The information will also appear in S9 in the next available issue.

Address your Flash requests to: FLASH, S9 Magazine, 14 Vanderventer Avenue, Port Washington, N. Y. 11050.

We understand that the new issue (November) of Popular Electronics Magazine contains their own proposal for hobby CB'ing which offers a new slant to the situation. We suggest that you pick up a copy to keep abreast of this additional proposal, which will, no doubt, receive FCC consideration along with the Lafay-ette/Polytronics petition and 5 others before the FCC.



More people read more things in S9!

HE'S A	QUIET MAN
	His hair 'isn't slicked down with chicken fat.
	He doesn't wear raunchy suits with chrome lapels.
	. He does not wear a rhine- stone stickpin in his tie.
	He doesn't work illegal skip. His antenna is 20 feet above the rooftop.
	2
	His magazine does not reek of sensationalism, it does not incite him to do things which may cost him his CB license.
	Naturally, he subscribes to S9 Magazine. If you, like the great majority of CB'ers, are a "quiet man" we cordially invite you to subscribe to the nation's largest circulat- ing monthly publication for users of the Citizens Radio Service, S9. There's a post- age-free subscription enve- lope in the back of this issue. Quiet men, unite! Rowdies need not apply.
	9

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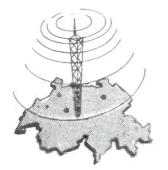
NEW!...AND READY FOR ACTION! By PEARCE-SIMPSON-THE LEADER!



When experience counts, it's S9 every time!



the mighty midget



by HANK MILTENBERG, KDH2299

Florida readers will recognize the author as being the owner/operator of the three Parts Unlimited electronics stores in Jacksonville, CB headquarters for northern Florida. Hank just opened up a new CB emporium at 1237 East Colonial Drive, Orlando.

A 1 TRANSISTOR SHORTWAVE RECEIVER

This little receiver won't break any worldwide DX records, but it will permit you to get a look as what's going on around the megacycles for about a \$3 or \$4 investment (or less if you have a well stocked junk box). It should drag in shortwave station within a radius of several hundred miles, and do it surprisingly well. I was able to obtain coverage from 2.5 through 8 megacycles on it, and that includes several ham and international broadcast bands, plus marine and aviation bands. I constructed the receiver using a small metal box as the chassis.

COILS

Different coils provided full frequency coverage, these were wound on 11/4" diameter coil forms. I used number 28 enamelled wire with the following number of turns for the different bands covered:

28	turns		3	to	4	mc/s
14	turns	\square	4	to	8	mc/s

OPERATION

Capacitor C_1 allows you to peak the antenna, while C_2 changes the stations. The antenna should be an outside long wire, and make it as long as possible. The circuit should be grounded, as indicated on the schematic, to something like a cold water pipe. I suggest that you experiment with different values of R_2 to obtain best operation of the circuit, try

- C1 150 uuf variable
- C₂ 100 uuf variable
- C₃ 10 uf, 12 v. electrolytic
- R₁ 220 K resistor
- R₂ 220 K resistor (see text)
- L see text
- B 9 volts
- Q1 2N374 transistor
- D₁ 1N38B diode
- S1 SPST toggle
- Pair of 1K ohm magnetic earphones, chassis box, coil forms, knobs for C_{1, 2}

values from 100K to 1 Meg-or install a 1 Meg. pot in the circuit here.

Be certain that you carefully observe proper battery polarity.

You can experiment with different coils for additional frequency coverage, more turns give lower frequency coverage, less turns give high frequency coverage.



When experience counts, it's S9 every time!

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CB

CASEBOOK

by LEE AURICK, 2W2870 MT. PLEASANT RD. RFD 1 COLUMBIA, PA.

WOULD YOU LIKE TO READ ABOUT YOUR COM-MERCIAL USE OF CB IN 59? IF SO, WRITE TO US.



Today's Casebook is going to visit a company that uses CB radio in the classic tradition. Relying on eight mobiles and a well equipped base station, Schwanger Bros. and Co., Inc., fuel oil dealers, Lancaster, Penna. make CB radio work for them.

Your reporter enjoyed talking with Dave Schwanger, a young man with a mature business sense who, along with his father and uncle, are responsible for the efficient organization that bears their name.

"We've been using CB radio now for about three years," Dave told us. "We started with just two units, as a trial, because this type of thing was new to us. These first units were, frankly, an experiment, and I recall that my Dad and Uncle weren't particularly enthused, or convinced that CB radio was for us. Those first few months were a revelation, and even though the equipment wasn't of the caliber of today's sets' we proved to ourselves that radio was the one missing ingredient in our service to our customers.

"We now have CB rigs in our three oil trucks, four service vehicles, and—you guessed it—Dad's car. When he saw the added convenience to us, and resultant service to our customers, it didn't take long to win him over.

"We had considered using the Business Radio Service, but found the investment was too great for our little experiment. Had we ultimately decided that the radios could not help us in our business, we would have had the neat problem of trying to dispose of them to another Business Radio user. We would have had to find him ourselves, and then take an awful licking in reselling the units. We reasoned it would be a great deal easier to dispose of them if the, as yet unknown benefits didn't materialize.

"An oil truck is a mighty expensive piece of equipment to operate; something like thirty cents a minute. If the truck comes back to the depot with oil on board—it has cost us money. CB radio has enabled us to get the maximum use and benefit from our small fleet of trucks by keeping them moving until all the oil has been delivered.

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"While this use has saved us money, and we like it, perhaps the greatest reward CB has brought us is in the form of improved service to our customers. While winter, from November to March, is our severest test, many homes and industries use oil the year around for heating water and a variety of other uses. All year long our service trucks are on the road, and while our summer 'emergencies' aren't as numerous, as hazardous, or as demanding as those of winter, customers still want service as quickly as possible. Well I'd say that CB radio lets us give service quicker than possible-quicker that is than by any other means I know of.

"We sell oil throughout Lancaster County, and our radios give us excellent coverage just about everywhere. Oh sure, we have an occasional 'deadspot,' but our drivers now know how to avoid these, and they give us no problems. The local Sheriff's Office also uses Channel 6, and sometimes we're able to help them with the relay of a message.

"Some of the early sets we had three years ago were not too good as far as selectivity was concerned, and we had trouble for a while with other stations on adjacent channels. The latest model sets which we are using now have eliminated this problem.

"I believe that CB is the answer for the small businessman with an operation such as ours, where he has vehicles on the road that must be directed and dispatched. Previously, our drivers had to get to a 'phone every few hours and call in. This was frequently a problem, as many of our customers live in the country, and public 'phone booths are almost non-existent.

"On at least one occasion, because of our radios, we were able to dispatch an oil truck to a home just before snow drifts closed the road. There is no need to tell you that this customer was grateful for the service we were able to give that night. And we were grateful to CB.



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by JOHN BURNUP, XM49-405

Well here I am back after a lapse of one month. I am so swamped with mail that I am not sure that I should not open my own Post Office. Many thanks to all my American friends for their cards and letters and please have patience I will get an answer to you all as soon as possible.

I received a very nice story from XM41-2882 (S9 reporter) who has been traveling the Western Provinces of Canada. We present his story complete this month.

From, Edmonton, Alberta XM22-444 Paul Cross, 9758–145 St. writes that they have a very nice club operating. Paul will be our S9 reporter in that area so look for news from the home of the Eskimos.

Frank Dayton always keeps me informed of the latest developments in the GRS and I think the most important one is the fact that Americans

Across XM-land by V. Auteri XM-41-2882/3/4

Finally left Toronto for the great Western Part of Canada and traveling in convoy of 7 mobiles, one trailer and two walkie talkies which made the trip very interesting. All we could think about was the new CB friends that we would contact and all those wonderful pieces of "Wall Paper" that we were going to exchange. We planned our trip so that we would be able to visit with our friends in the U. S. of A. up the Michigan peninsular up thru Wisconsin, Minnesota than back into Manitoba and the Prairie Provinces.

Our trip through Ontario was very "Talkative" via our Lindsay's and the contacts were great, we were not able to stop and meet our CB friends in Ontario, but a lot of wall paper was exchanged by mail. Entered Michigan in the evening and we kept ourselves amused by talking to each other mobile in our convoy on Channel 9. Channel 11 was very quiet so we thought that by using ch. 9 we might be overheard. No such luck 'til we were a few miles from Midland, Michigan, at about 10-11 P.M. When trying to find a place for a cup of coffee, KH12486, Mrs. Ethel Thompson, was very nice in coming in and telling us where we could find a coffee shop. She also used the land line to inform Betty Scheaffer that we were in the area and they in turn directed us to their restaurant. Bill and Betty Scheaffer, KHH0017 and KHJ0634, brewed some coffee for the whole bunch which just hit the spot. From Clare, Michigan, up to Minnesota we met many CB'ers, swapped wall paper and much to my surprise, in all cases CB'ers were on hand to say hello. Many waited for us to come through their towns

can now operate their units legally while in Canada provided they make application to the Regional Office of the Department of Transport in the area that they will be in. This must be done thirty days prior to entry into Canada.

Frank also stated that the Jamboree in Staffodville suffered from very unfavorable weather. The club has gained a lot of experience so we can expect better things next time.

I wish to thank, KGI6100, Bob Schmink of the Wichita-Sedgwick County Civil Defense Heavy Rescue Unit for his very nice letter.

XM33-690 Russ Renwick, 1455 Bond St., Regina, Saskatchewan, writes that at present there is no club in his area as the air is used only for business. He would like to see one started so if any one in that area is interested I am sure Russ would like to hear from you.

and this is what made our trip a big success. From Crookston to the Canadian Border again radio silence. It seems that no one was on Channel 11 or Ch. 9. Entered Winnipeg, Manitoba and for one week I thought that the transmitters in all our units were not working. Heard much transmission, but no one would confirm our calls. Our last day in Winnipeg we made contact with George McCormich, XM31145 and Tony Biegum XM31033. Both George and Tony were very kind in coming to our base trailer. Spent a few hours talking and they informed me that all they monitor there is Channel 12 and 5. I also understand that Ch. 5 is a boat club and that they will all be on ch. 13 in a month or so. If anyone planning to visit Manitoba, equip your rigs with ch. 12. Both George and Tony will answer.

From Winnipeg into Regina, Sask., again radio silence. Seems that CB here is strictly for business. No Clubs. No contacts. All channels seem to be used, but for business purposes only. Nothing to add. No contacts made. Seems that every one just cuts into transmissions whenever they have a call to make. No courtesy on air time. Will be in the Regina area for a while and I wish to thank all the fine people or I should say fellow and gal CB'ers that we made contact with. Also our trip out west was a very successful one and we, Rick and Audry Finley, Lawerence and Anita Pendergast, Cam Leslie my XYL Tina and myself again wish to thank all for their wonderful reception.

Also wish to thank all from S9 that have sent their wall paper. Will QSL 100%.

Hoping to meet more CB'ers in the western part of Canada and maybe will be able to visit with you. (Advertisement)

CB IN ACTION By Len Haas, Sales Manager, Pearce-Simpson, KBG7527



In our last column, we gave a "Salute To The Pioneers Of The Air." In this article we called for letters from clubs and individual CB'ers to help get the ball rolling on an idea -a national "CB In Action Week" that would point up the great value of CB to the community, and a great once a year celebration throughout the United States at the same time. The response to this idea, so far, has been tremendous. If you really want this plan and want the week to be organized, get all your friends and clubs to get behind it write and let us know that you support the program.

We are all part of this same rapidly growing industry-CB-a great force for community good, as well as a most effective means of business and industrial communications.

I would not want this idea to be misinterpreted. Nor do I feel that I would want anyone to believe that it would be for my benefit personally. If the letters that are now coming in on this subject steadily increase to a greater proportion, I would like to turn these letters over to "59" Magazine so that with their communications with manufacturers, clubs and individuals, a week may be established and a committee chosen on a national basis.

As far as I am concerned, personally, I just want to be another CB'er and help celebrate a "CB In Action Week." If through the power of the press and my column we can be an aid in establishing a "CB In Action Week," I will feel I have contributed to the CB'ers and the citizens band industry, of which I am a part.

With Part 95 playing such a vital role in our future, there is now a stronger need than ever for "CB In Action Week." "S9" has a large readership—add to this your friends and clubs and we will have enough participants to make a great impact. So, please send your letters don't wait, do it today—a postcard, a letter, anything indicating that you would like to have a "CB In Action Week." Only you and your letters can make it possible.

WIN A "COMPANION II" CB

Do not forget to write to us about any "CB In Action" experience in which you or your club has helped your community. If your letter is run in this column you will win a brand new "Companion II" CB. A new winner every four months. Write Len Haas, National Sales Manager, Pearce-Simpson, Inc., N. W. 14th Street, Mianii, Fla. 33125. ANTENNAS

by LEN BUCKWALTER, KBA4480

ABOVE THE 49th PARALLEL

Last month we reported that the FCC was toying with the idea of loosening antenna-height restrictions. The Commission said it was aware that some CB'ers were at a disadvantage. The 20-foot limit would not enable an antenna to clear a nearby obstacle that blocked the signal. The Commission, nevertheless, points to the FAA-recommended 20-foot figure as universally safe for aircraft. (Perhaps the rule is a good one -Orville Wright reported that his machine rose only about 10 feet off the ground during its first flight.) But what about the big oak tree just across the way, thrusting up 40 feet or more. maybe towering over the CB antenna? You're under no obligation to crown it with a winking red light, even though it might prick a passing, petered-out Piper Pacer. And the tree, of course, is a hazard to CB communications.

For a realistic solution to the problem, we need only shift our attention up north, beyond the 49th parallel, to Canada. They've solved the antenna-obstacle dilemma with a plausible regulation. If an obstacle lies within a radius of 1,000 feet of the antenna, it is permissible to raise the antenna up to 30 feet above it. Thus, if a nearby oak loomed large, it can be legally topped, tower included.

I discussed this with John Burnup, who capers elsewhere on these pages at S9's Canadian Editor. Typical range of the Canadian operator, he reports, is about 20-25 miles. And John explains there is no hazard to aircraft; the rule permits heights up to 75 feet if the location is more than six miles from an airport.

Hopefully, this could set a precedent for U.S. lawmakers. An interesting sidelight is that other Canadian rules are generally much tougher than those of the FCC. For example, a transmitter must remain stable in frequency through a 5-hour period at 0° C, then 5 hours at 40° C—roughly equivalent to sitting on a block of ice, then running into the Russian Room at the local Turkish Bath.

A fresh FCC approach on antenna heights would certainly be welcomed by the CB'er whose present antenna radiation pattern resembles the opening billboard on "Breaking Point," an irregular ink splotch.



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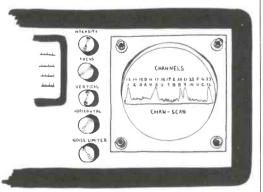
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254 Series

"THERE WAS A CB'ER"

by WILLIAM HAYMON, KBG5891

There was a CB'er from Tulsa Whose rig gave him more than one ulcer, He got S9, now he's fine, And he says, "It's not dull, sir!"

There was a CB'er from Rockaway Whose station couldn't reach a block away, Now it's 50-over-9 'cause he subscribed to S9, And for 50 miles he can yak-yak away.

There was a young man named Chaim Whose antenna was bent all the time, He subscribed to \$9, now it's straight as a line, And he's getting out better than I'm.

There was a CB'er named McGorce Whose wife had a face like a horse, Now he always reads S9; he even drinks wine, But she's still just as ugly, of course!

There was a CB'er, St. Nicholas Whose signal was pretty redic-ilus, With S9 in the sled, he now knocks 'em dead, And his "Ho-ho's" on the air do tickle us!

If you think that these limericks are crazy We hope that you won't be lazy, Five dollars in time will get you S9, For 12 issues fresh as a daisy!

happy holidays

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.

ATTENTION CB'ERS AND CB CLUBS.

Do to the ever increasing demand of news media, next month we will list all \$9 A.P.R.E.^Ps (Area Public Relations Editors) for your convenience. News of your club or CB news should be sent to these capable persons for publication in the largest CB publication, S9. The A.P.R.E.'s are a select group of CB'ers appointed by \$9, Club Editor, John F. Kreic, to secure news from their areas for publication. Most clubs and such do not know why they are nor where they live. So here's your chance to labor 59's editors with your literary efforts. Let's have an open season by taking pen in hand, and leave the rest to my mail-man. If you so desire, you can still mail reports of your club to S9, Club Editor, John F. Krejc, 60 Division Ave., Garfield, New Jersey.

New appointment this month to the A.P.R.E. program are: Thomas E. Peterson, 55 South Street, Claremont, New Hampshire; Julius F. Heinke, Jr., 866 Church Street, Bohemia, Long Island, New Yörk; Charles E. Eichorn, 843 Hinton Street, Petersburg, Virginia; John Fraier, KEH5875, 329 South Fleishel, Tyler, Texas; John Pearson, KDE0146, 1204 Ashwood Ave., Nashville, Tenn.

COMING EVENTS

The Windy City CB Club of Tullahoma, Tenn., will hold a CB Jamboree, October 24th and 25th at the big Springs Park in Tullahoma. Plenty of camping space, hotels, motels and eating establishments. Monitor chagnel 11.

Lincoln Trail CB'ers Inc., Paris, Illinois, is having their second annual HOOTENANNY November 5th, Sunday and will be an all indoor affair held at the Moose Hall in Paris, Illinois. Time 8:00 a.m. till ??? p.m. There will be numerous prizes and exhibits staged throughout the hall and continuous entertainment. Contact: Charles Yates, KHA4230, Chrisman, Ill. or Duke Johes, KHD5029, 121 Austin, Paris, Ill.

CB Jämboree, sponsored by the Norwalk Nor-Watters of Norwalk, California. The event will be in conjunction with the Annual Norwalk Fair, October 24th and 25th at the Fairgrounds proper. Monitor channel 9 and 15.

With the Fairgrounds proper. Monitor channel 9 and 15. The Lake City CB Club and the McDowell County Rescue Squad, both of Marion, North Carolina will jointly sponsor the 2nd Annual National Grandfather Mountain CB Jamboreë, next June 11th, 12th and 13th, 1965, at MacRae Meadows on the slopes of Grandfather Mountain. For more information on this rather noticable Jamboree, contact-Secretary, Blanche Wilkerson, 308 Vale Street, Macion, North Carolina.

The Lancaster County CB Club will hold their Annual Jamboree, July 5th, 1965. More info will be forthcoming, but as of now, the place remains the same. Remember the gala event of this year. Who can forget???

EXTERIOR

A great step forward in Red Cross disaster preparedness was taken recently with the help of The Guam Five-Watters CB Communication Club. The Five Watt-



ers, organized last December, have offered the Red Cross the use of all members radio facilities in time of disaster. Daniel J. Pereira, Five-Watters President, and Father Mel McCormack, Red Cross disaster chairman, concluded arrangements for the cooperative agreement recently at a meeting of the communications club. At that time, members demonstrated the effectiveness of their radios, mobile units, for Father Mel and Red Cross Executive Sceretary Al Nobriga.

NORTHERN

The Middlesex CB Radio Club was organized in September 1963. President, John Landry, KBC7400; Vice President, Walley Brewer, KBC3266; Secretary, Dick Hammersley, KBC6273; Treasurer, Larry Briggs, KBC-1891. The club's purpose is to serve the community and to promote better CB. To date the members have participated in numerous searches and more than one half have completed the basic and advanced Red Cross first aid courses. It is affiliated with Civil Air Patrol. The Club monitor channel is 9. Business meetings are held on the first Thursday of each month and social meetings with prospective members invited the third Thursday. Both meetings are held at Landry's Cycle Supply in Framingham at 7:30 p.m. Club mailing address is 80 Hollis St., Framingham, Mass. Recently organized is the Grape Belt CB club with a membership of 56, and hoping to hit 100 by the end of the year. President, Harold Brown, KLP8133; Vice President Rover Stever 2002652 Secretary John

Recently organized is the Grape Belt CB club with a membership of 56, and hoping to hit 100 by the end of the year. President, Harold Brown, KLP8133; Vice President, Roger Steger, 20Q2652; Secretary, John Hall,, KID7345; Treasurer, Walter Schulze, 20W3947, which have been elected for 2 year term. The membership felt that it takes a new group of officers a certain period of time to get themselves organized and by having them serve a two year term of office, it would benefit the club more. The unit is registered with the local police, Sheriff, State Police and Fire Dept. to assist them in the event of emergencies.

Recently organized is the Bay State 5 Watters, which started with membership of 11 and has grown to 43. The club has set-up a very effective emergency communications net for the area, and also have affiliated themselves with the Arlington CD. Although they are a new club, and no doubt they have a lot to learn, they feel that they have one of the finest group of CB'ers in the entire country, and have many plans to utillze group communications for the general benefit of the public.

More people read more things in S9!

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The Hudson-Essex Chapter of the C.B.R.R.L. will be meeting at the Italian-American War Veterans Post on Acme St., Belleville, New Jersey in the future. Monitor channels 11 and 15. President, John Hopton, KBG3370; First Vice President, Bill Apperice, 2Q6923; Second Vice President, Jules Pawlowski, 2W6854; Third Vice President, Carmine Berardinelli, KB13354; Treasurer, Joseph Valeo, 2Q3644; Recording Secretary, Marge Resciniti, KB16727; Corresponding Secretary, Holly Hopton.

The Pine Tree Five Watters CB Radio Club of Bangor, Maine received a citation from J. L. Flannagan, Col., USAF Commander, 397th Bomb Wing, Dow Air Force Base, Bangor, Maine. A certificate of merit was presented to 12 members of this radio club for their outstanding work. The following members received the following personal letter from the Wing:

Donald McCann, KBC0810, Bangor; Raymond Dutch, 1Q3011, Brewer; Harold DeGrasse, KBA3761, Brewer; Donald Goss, KBD3456, Dedham; Henry Stillings, KBD-0354, Veazie; Carroll Debeck, KBD3999, Orrington; Edward Millett, Jr., KBC0238, Bangor; Timothy Millett, KBD1795, Bangor; Philip Chapman, KBC5291, Bangor; Richard Gaudet, KBB0313, Old Town; Robert Lowell, KKA1188, Bucksport; Lloyd Mann, KKA1222, Brewer.

New officers of the Chili-Ogden-Riga-Klub CB are: President, Ken Robinson; Vice President, Harold Potter; Secretary-Treasurer, Jerry Oakley; Directors, Leslie Pimm and Harold Beatson.

Members of the South Shore Rescue Rangers are also members of the Brockton CD Communications, monitoring channel 4 approx. ten hours per day. Having given a successful display of the many CB units that they have plus their vehicles at the famous "Brockton Fair." The display was held under the direction of Mr. Tom Berry, KBC7334, who is Deputy CD Director for the City of Brockton. This group of CB'ers are very active helping and assisting in any emergency that arises. Over the Labor Day week-end you will see this group of hard workers covering every road in and out of the city of Brockton. Which I might add is one big job to be taken on by any group.

Those weird calls you her are not skip but the Eastern States Beach Patrol assisting at emergencies, where the State Police are being called upon or a doctor being needed at a scene. There call letters are a Special Authorization by the FCC which are KUA0003. When you hear these call letters being used on channel 8 or 7 please stand by or break for these men and women as it might be the life or death of someone else, or there traffic is of some great importance more than ours. Typical scene as your reporter was there. The date July 21, 1964, time-9:46 p.m. Scene: Men looting abandoned car on Route 128, Milton, Massachusetts. A member of the Eastern States Beach Patrol, better known to those who use and listen to channel 8 as "Maple," calls the base control station and gives him a land-line number he can call. The call was received by the control and within seconds a landline is madeThe member tells the officer-in-charge what he observed and that he wished the State Police to be notified. With an approx. ten minutes the State Police were on the scene and had the men in custody under arrest for larcency from an automobile not his property. This I might add is just one of the type of Patrols that this group do. Just the other night, a women had been badly cut at an accident and a doctor was needed. This was taken care of, thanks to a member of the Patrol.

Monthly meetings of the North Country CBees are held the 3rd Tuesday of each month at 7:30 p.m., 40 Main Street, Berlin, New Hampshire. The meetings are open to visitors. At all meetings entertainment is provided. gab session with plenty of refreshments.

CENTRAL

The Barry County CB Radio Club and the Hastings CB Club has recently, in cooperation with the Counties Civil Defense, turned over to the Sheriff's Department a Rescue Truck, which will be fully equipped and maintained to assist at any given emergency throughout the County, or else where needed. The trucks first tryout was a recent fatal accident on Gunn Lake, Yankee Springs Recreation Area, of Barry County, Michigan. The Wapello County Citizens Band Association held

The Wapello County Citizens Band Association held its organizational meeting August 4, 1964 in Ottumwa, Iowa.

The purpose of the club is to aid in the advancement of CB radio in this area; to aid local Civil Defense officials (it has been designated the official Civil Defense radio group for Wapello County); and to help regulate citizens band radio in the area. Local business men are cooperating 100% with the club. Many offer discounts to members presenting their CD identification card.

Temporary officers are: W. G. Fleming, Chairman and CD Co-ordinator, KGH1530; Curtiss Riedel, Sceretary, KGK1530, Unit #3; Gene Jackson, Treasurer, KGI9184; Bob Allender, Public Relations, KLH157; Harry Carpenter, Public Relations, KLH3572.

The club meets every second Wednesday night and can be contacted on Channel 6. It is in the process of planning to take part in several local celebrations, the first of which will be PIONEER DAYS, September 19-20, 1964. Ten units will take part in the parade also acting as security guard and traffic control officers. A CB Jamboree is planned for next spring.

Illinois Governor Otto Kerner will head the guest list of almost 30 dignitaries that will attend the various events connected with the Illinois Junior Sports Jamboree.

One of the most noticable groups involved in the operation of the Jamboree can be easily identified by the tall antennas on their cars and the walkie-talkies they will carry with them. This group is the Tri-County Citizens Band Radio Club of Sterling, Illinois. Radio Club members will intercept the buses as they

Radio Club members will intercept the buses as they enter Sterling-Rock Falls, spacing their arrival at the Registration Center. Club members will remain with the buses whenever they are moved during the entire Jamboree.

At the Junior High School two base units will be in operation at all times, each operating on different frequency. The hospitality car for dignitaries will be dispatched through this station.



Pictured from left to right are: Roger DeLanghe, Curt Lewis, Jay Fransen, Bob Maxwell, Larry Meyers, and Victor R. White, II.

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When experience counts, it's S9 every time!

A Radio Club member will be near the State Chairman at all times with a walkie-talkie, letting him know of any problem. In addition Club personnel will make up a large part of the chaperon force, providing policing units at the dormitories on an around the clock basis.

During the parade, formation and the parade itself, Club personnel will see that it is organized and runs smoothly. They will also assist in the running of the torch relay from the Grandon Civic Center to the high school stadium.

As the meets are run, walkie-talkie men will keep the announcer informed about the heights and distances, as well as the times in the running of the field and track events, giving the spectators a better picture of the state of the meet and creating greater interest.

The parking of cars and carrying of dignitaries to the Awards Banquet is the last official task of the Tri-County Radio Club. By this time the club will have worked in excess of 620 man-hours. A total of 33 walkie-talkies, 5 base units, 42 mobile units, 48 men and 10 women will have worked on the Jamboree which was held August 27th, 28th, 29th, 1964.

On June 26, 1964 (BFers from the cities of Duluth, Minnesota and Superior, Wisconsin, joined together to form the Twin Ports Citizens Radic Club. The purposes of the Club are to (1) Form a closer relationship between the owners of Citizen Band Radio Equipment as an organized group and not as two cities of individuals with no aim or goal in mind, (2) Also, to be able to assist our law enforcement agencies if they should ask for our help in any way, and (3) to work out some definite plans so they will be able to meet just about any situation that may arise.

At this meeting, the following officers were elected: Al Flatten, KGF3263, President; Bucky Delapast, KLF-1454, Secretary; Bob Dieryck, 16Q2005, Treas.; and Sid Howard, KLF0052, Vice President. The Twin-Ports Citizens Radio Club held a meeting

The Twin-Ports Citizens Radio Club held a meeting of July 30, 1964 with the forming of a 25 car convoy in Duluth, Minn. The convoy proceeded over the new Duluth-Superior High Bridge through the city of Superior, with Police escort, to the new Superior Town Hall where the meeting was held. The attendance for this meeting was 35 members and their wives. Their meetings are held on the 2nd and 4th Thursdays of every month, with a Radio roll call on the 1st and 3rd Thursdays of each month.

Thursdays of each month. Shirley Schraft, S9, A.P.R.E. just returned from a trip from Minn. and Iowa and stated that the CB'ers are great about aiding those who need road info. Special mention goes to the Webster County Rescue Unit and the West Central CB Club.

The Five Watt Wizards of North Central, Mo., held their annual picnic recently with an attendance of over 300. Prizes were awarded every 20 and a western band played music throughout the day.

St. Joseph CB Club of Mo. held a watermelon feed recently for CB'ers from the Mo. and Kansas area. Lots of watermelon and CB'ers made for a great time.

A pancake breakfast was sponsored by Leavenworth, Kansas CB'ers recently with many clubs and CB'ers from the area attending. The event accomplished much --to unite the many clubs represented for better cooperation in their community work. Thanks for the above, Shirl.

The Circus City CB Club recently held their First Annual Jamboree and Club President, John Shank was pleased and overwhelmed at the large turn-out of CB ers attending. (2500-3000) He expressed thanks to S9, his committees and all the wonderful people who helped to make it such a huge success. Ralph Harter, S9, APRE stated: I give the club lots of credit, for much hard work and planning went into this event to come off so orderly. There was never a dull moment in the whole days program, and it is one of the very few he has seen with so much success.

The Allen County CB Club of Lima, Ohio recently held their Second Annual Jamboree. Club President, Tom Barttell, KHH2845 was pleased to announce that it was a huge success and wished to thank S9 for their part with listing under CB Calendar. A conservative estimate of 3500 CB'ers and friends turned up at the Jamboree for a real day of fun and card swapping. No less than 20 displayers were on hand and they covered everything from soup to nuts.

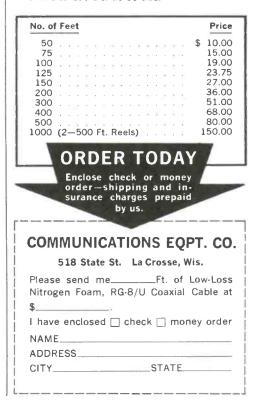
A clown was on hand to entertain the small fry. Ralph states: He doesn't know how he kept going, but

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he sure done a wonderful job of furnishing games, prizes and keeping all the kids interested and busy all day. Ralph wishes to thank all the wonderful CB'ers the world's greatest bowler.

On March 10, 1964, the St. Croix Valley CB Club of Hudson, Wis. participated in assisting the Hudson Police Dept. during the Annual Basketball Tournament. They assisted the police in preventing traffic jams and any other way they could. There was also a CB rig in a police car for direct communications with police officials. Those members participating in this event were: Ted Gillen, Carl Westerdahl, Don Danielson, William Schultz, Mr. and Mrs. Carl Krampert, Mr. and Mrs. Mike Reber, Dick Krampert, Lolly Cassiday

and Oscar Cederbloom. On August 2, 1964, the Club also took part in the Stillwater, Minn. Play Days. Units were set up along the parade route, 3 to 4 blocks apart to assist Auxiliary Police and anyone else néeding assistance. CB Headquarters was set up along side of the Stillwater Police Department so that Police could be dispatched if needed. Thère were two persons on the radio at the Civil De-fense Truck and ten other mobile units participated.

ATLANTIC

A note of thanks from the members of the Chesa-peake CB Radio Club of Hartford and Cecil Counties of Maryland for making their CB Jamboree a great success. The club hopes to present a bigger and better event next year.

The Metropolitan CB Radio Club of Nashville, Tennis meets the last Monday of each month at the Melrose Branch of the 1st American National Bank. Time: 7:00 p.m.

On August 20, 1964 the Queen City 5 Watters CB Radio Club held their first in a series of monthly "CB Workshops." Guest speakers were Jim Cross, KCF0823, and Mrs. Fay Benedict, KCF2574, the REACT co-ordinator in the Hagerstown area. Jim spoke on the use of CB in connection with law enforcement agencies and also talked on the new rules and regulations to bécome effective November 1, 1964. A question and answer session followed. Mrs. Fay Benedict spoke on the operations of **REACT**. Approximately 60 licensed CB'ers attended and expressed desire for future "work-shops." Dick Long is the director of the club and chairman for these workshops. He is assisted by Jim Fol-som, KKI1550, assistant director and Bill Kight, KCG-1496, secretary-treasurer. Any club wishing to corre-spond with the Queen City 5 Watters may do so by writing to the club at 711 N. Mechanic Street, Cumberland, Maryland. They monitor channel 9 in this area. Citien Band, Civil Air Patrol, Civil Defense and Ham

Radio (RACES) came together to make one of the largest get-togethers ever programmed in the South Western Virginia. They came by car, wagon and plane, from the hills of eight states.

Wagon Train Granny, (Margaret Benton, KKM9581)

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Old Country Boy, (Robert Sensabaugh, KKD6450) and the Old Mountain Man (Kylê Flanary, 6W6859) were the main attraction of the two day jamboree. There were no ticket or gate fees, the program was open and everyone welcome, several groups of musicians staged a "Hootenanny" Saturday night, Sunday's program bean at sunrise with religious service and gospel sing-ing, after lunch, Civil Air Patrol put on an aerial demonstration, control on ground directed their plane as air arm for rescue for Civil Defense.

A truck load of prizes and card swapping ended the program. The two that came by plane arrived early, grashing in the mountain near the jamboree, rescue, fire and police with communication were in operation, the two walked away with only scratches.

This proving that communication is a vital part of our lives and we too can live to-gether.

Richard Long, KCF0986, the Director of the Queen City 5 Watters CB Radio Club of Cumberland, Maryand, traveled to the area of Tapawingo near Conflu-ence, Pa. to present William A. Evans, better known to many area CB'ers as THE OLD MAN O' THE MOUNTAIN, 2021088, with a lifetime membership card in the Queen City 5 Watters CB Radio Club. Bill is 81 years young and just recently purchased a Lafay ette HB-333 which he likes very much. He has 3 different antennae on the top of his home. He can cover a wide area of Pennsylvania, Maryland, W. Va. and a wide area of Felingivania, maryina, in the source of the mountain above Cranberry Lake of which he is care taker. Thise CB'ers interested in exchanging QSL's with Bill Evans write him at RD #1, Tapawingo, Con-fluence, Pa. He monitors channel 11. The Madison County Rescue Squad of Huntsville,

Alabama recently elected officers for the coming year:

President, Edward Sims; Vice President, Paul Baker; Treasurer, William Stone; Secretary, C. B. Womac. The Squad, which was formed in August, 1963, is strictly a rescue organization and is not affiliated with any club or social group. Equipment includes a boat, motor and trailer purchased by the members and four which and traiter by local merchants. The Squad will move into it's new Headquatters building, financed by public donations and valued at \$19,000, in mid-Sep-tember. Rescue efforts involve lost children, drownings, rabid animals and recently a large-scale manhunt for an escaped convict who kidnapped and murdered a young wôman during his escape. The Squad monitors channel 6 on a 24 hour basis and a 10-33 to, KDB7910; of a call on the Squad phone will result in quick assistance.

The Nashville CB Club meets the last Thursday of every month at the Nashville Electric Building. Time 7:00 p.m. The club is forming a rescue squad, and members will be trained in emergency rescue work, which includes first aid.

The Donelson CB Club meets on the first Sunday of each month at the Home Federal Bank in Lebanon Road. Time 2:30 p.m.

Virginia State Citizens Band Radio Ass'n re-The Virginia State Citizens Band Radio Ass'n re-cently held their annual elections at their 5th Annual Convention in Norfolk, Va. Officers will serve until August 31, 1965. President, Jake Schmuck, KC13257; Vice President, Northern area, Grace Langlotz, KCI-2290; Vice President, Eastern area, Jim Boyette, KCI-2239; Vice President, Central area, Charles E. Eichorfi, 2233; Vice President, Central area, Charles E. Elchord, KCJ3882: Vice President, Western area, William Inge, 5Q1617; Secretary, Dick Arnold, KCI0051; Treasurer, Roman Harris, 5W1494. Recently the Wonder City CB Radio Club, Inc., of Hopewell, Virginia furflished radio communication for the Waverly JC Horse Show which was held at the Pichon Stolkes in Worealy Ve

Bishop Stables in Waverly, Va.

WESTERN

The Prescott CB Club is known as Arizona Local Emergency Radio Team (ALERT) and presently moni-

Is it time to renew your S9 subscription?

tor channel 2. (Subject to change). Meetings are held the last Wednesday of the month at 8:00 p.m. in the Blue Flame Room in the rear of the Southern Union Gas Co, in Prescott, President of the newly reporting group for the next 6 months is Victor Hone, KE12973. The club has helped the Yavapai County Sheriff's Dept. on 2 searches by request, as some of the members have portable 5 watt units, Contact: Zene M. Kempf, KFA-9774, 206 Frontier Drive, Prescott, Arizona 86301. Fourteen year old Mark Sturdevant who won southern

Fourteen year old Mark Sturdevant who won southern California recognition in a City of Commerce Science Fair for his model of a vehicle for moon exploration powered by solar rays has been praised by Coast Guard officials for leading the rescue of four persons adrift in a 21 foot boat off Pt. Loma near San Diego.

Mark, who is vacationing with his parents in San Clemente, effected the rescue via CB radio. His radio, with extra-sensitive antennae which he developed, is installed in the family trailer.home which Mr. and Mrs. Rex Sturdevant of Pico Rivera maintain year around at Capistrano Shores in San Clemente.

Mark was tuning his radio when he picked up a call for help from a Whittier man, Richard Lake. Lake, and three others, on board a small inboard-outboard craft, radioed that the engine had failed and the boat was drifting out to sea.

Quick-thinking Mark knew the rescue might be a lengthy process and advised Lake to conserve power on his battery-operated radio by sending a three-minute signal every 15 minutes.

After alerting his friend Tim Valentine, also of Pico Rivera and summer resident in the trailer park, to maintain contact with the drifting craft, Mark called the Coast Guard in Newport Beach and was advised to notify the Coast Guard in San Diego.

Mark, who was alone at the time because his parents had returned to Pico Rlyera to attend a silver-wedding anniversary celebration, stuck with his radio for six hours until the Coast Guard was able to achieve the rescue. He alerted other CB'ers to assure reception of the boat and its weak signal.

Mrs. Sturdevant said that one amazing factor of the dred miles out over the ocean. She said that usually radios such as Mike's had a range of only 30 miles, and she attributed the distance of his set to the antennae system he designed. Mike, who began ninth grade in September, has been interviewed on KTTV, and presented an explanation of his moon vehicle in a television broadcast,

PACIFIC

Family Communications Club of Fremont, Calif. meets on the 3rd Sunday of each month at 2:00 p.m. at the Niles Sportemans Club located on Castro Lane in Fremont. It is the practice of most members to bring a picnic lunch. There was a costoume dance on Oct, 18th, to celebrate the first anniversary of the club. There were drawings for prizes, admission was free and all CB'ers were welcome.

Miss Jean Simmons, KFA0832, who won the Jamboree Queen contest at the West Coast CB Jamboree, is a member of the Family Communications Club.

Club officers are, President, Earl Mayo, KCF3421; Vice President, Dwight Sanders, KFD1295; Treasurer, Wayne Olson, KFD0793; Secretary, Carole Newman, KFD2900; Sgt. At Arms, Ray Diehl, KFC2830.

Members of the Yankee Citizen's Radio Club are now forming the Yankee Emergency Team (Y.E.T.). Yankee meetings are held on the second Wednesday of each month at 8:00 p.m. on the Santa Clara County Fairgrounds in San Jose, Calif. All CB'ers are welcome to attend. Most club members monitor channel 11.

Yankee officers are: President Gene Wulff, KFD1943; Vice President, Jim Tincher, KFD5576; Secretary, Ruth Helton, KFE0464; Treasurer, Don Mack, KLA-1383; Sergeant-at-Arms, Frank Manazanedg, 12Q0546; Y.E.T. Chairman Fran Hopper, KKX1036; Members of the Board of Directors are: Dave Barmore, KFD4845; Jim Helton, KFD3446; Dorothy Tincher, KLA0453,

Club membership at the time of this report stands at thirty-one. The Yankees were formed in March of this year.

The McKenzie Citizens Band Ass'n holds their meetings the first Sunday of the month in or near Eugene, Oregon. Presently meetings are held at the Equitable Savings and Loan Building, Time 1:30 p.m.



APPLICATION FOR FREE PART 15 STATION IDENTIFIER CERTIFICATE

To register your Part 15 "unlicensed" CB station with 59 and receive your special station identifier certificate, do the following:

A. Fill in the application below, or facsimile if you don't want to cut your copy of S9.

B. Enclose your completed application form together with a self-addressed stamped (5¢) envelope, in another envelope addressed as follows:

Part 15 Department S9 Magazine 14 VANDERVENTER AVENUE PORT WASHINGTON, L. I., N. Y. 11050

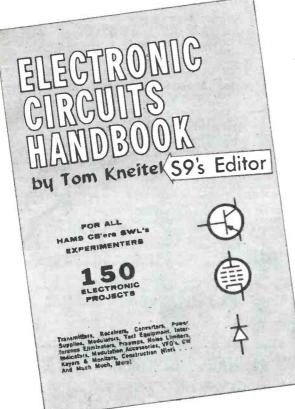
C. Please do not request special identifying words for your station as all identifiers are issued in alphabetical rotation for ease of recording on our records.

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Name:	CB Call:
Address:	
City:	Zone:State:
Part 15 Channel:	Type of unit:
No. of units:D	ate:
□ I enclose 50¢ for the 1964 Part 15 Callbook/Handbook.	Signature:

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- Heterodyne Eliminator
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- S-Meters
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- TVI Filters
- Mobile Unit Burglar Alarm
- Schematic Symbols Chart

Here is the book we've all been waiting for! By "Mr. CB" himself, S9's Editor, Tom Kneitel, KBG4303. Tom has compiled a book which presents and discusses in detail 150 of the most often needed circuits around the shack. Beginners, old timers, Hams, and experimenters will find many valuable circuits for construction projects. There's even a chapter which tells how to make all construction projects "a snap." Here's a book which is a MUST for each and every CB'er, written by the leading authority on the subject! Get yours NOW!

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WASHINGTON

OUTLOOK

Here are the FCC actions this month:

2W4888, Eugene R. Plummer, Neptune, N. J., proceedings were dismissed on his show cause notice.

C DE

8Q0774, Charles Chrestensen, d/b as Two-Way Sales, Belzoni, Miss., license revoked for repeated failure to respond to official notices concerning alledged violation of the rules.

11Q1038, Clarence O. Zickefoose, Escondido, Calif., license revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

11W9404, J. W. Sprong, Los Angeles, Calif., license revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KBC1096. Laurence Robert Snyderman, Randolph, Mass., directed to show cause why his license should not be revoked for repeated violations of Section 308(b) of the Communications Act and Section 1.89 of the rules.

KBC1555, Diann N. Roosa, Somerville, Mass., license revoked for repeated violations of the CB rules and willful violation of Title 18, United States Code, Section 1464.

KDB2107, Manning G. Ryals, Columbus, Ga., license revoked for repeated failure to respond to official notices concerning alleged violation of the CB rules.

KDB5274, Wyman E. Shipes, Appling, Ga., hearings terminated on his show cause notice and certified to the Commission.

KDC0285, John A. Clufetos, Mt. Clemens, Mich., license revoked for repeated violations of Section 308(b) of the Communications Act and Section 1.89 of the rules.

KDD8793, Joseph Clanton Merritt, East Point, Ga., his monetary forfeiture was reduced from \$100 to \$25. He had requested that the forfeiture be cancelled.

KDE3799, Bud Moates, Aragon, Ga., imposed with a monetary forfeiture of \$300 for repeated violations of the rules.

KDH1235, Carl J. Hall, West Palm Beach, Fla., license revoked for repeated failure to respond to official notices concerning alleged violations of the rules.

KDI5273, Earl Sutor, Miami, Fla., hearings terminated on his show cause notice and certified to the Commission.

KEB1318, Charles E. Porter, Jackson, Miss., hearings on his show cause notice terminated and certified to the Commission.

KEE0585, Clarence E. Oliver, Jr., Pearland, Tex., his \$300 monetary forfeiture was reduced from \$300 to \$50. He has requested complete cancellation.

KEJ7522, R. N. Blaize, III, Palos Verdes Estates, Calif., imposed with a forfeiture of \$100 for repeated violations of the rules.

KFA2600, Marion J. Dillard, Crestline, Calif., imposed with a monetary of \$100 for repeated violations of the CB rules.

KFA3105, Marie E. Hogan, Buena Park, Calif., license revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KFA3127, Alpha Baker, Jr., South Gate, Calif., imposed with a monetary forfeiture of \$100 for repeated violations of the CB rules.

KFA5830, Robert V. Gendle, Sr., Bellflower, Calif., imposed with a monetary forfeiture in the amount of \$100 for repeated violations of the rules.

KFA9245, Robert H. Noyes, Ontario, Calif., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KFC0646, Florence H. Nichols, Redwood City, Calif., directed to show cause why her license should not be revoked for failure to respond to official notices concerning alleged violations of the CB rules.

KFD0134, Clyde C. Van Dyne, Fresno, Calif., proceeding to revoke his license was dismissed because the license requested cancellation.

KHH1848, James H. Hicks, Jr., Troy, Mich., license revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KHJ3570, Arthur D. Pipes, Circleville, Ohio, his \$100 monetary forfeiture was reduced to \$25. He had requested complete cancellation.

KIC1650, James L. Manusco, Rochester, N. Y., hearings on his show cause notice terminated and certified to the Commission.

KKM0913, Thomas N. Thompson, Austell, Ga., hearings on his show cause notice terminated and certified to the Commission.

KKM6336, Brooks Automotive Shop, Atlanta, Ga., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violation of the CB rules.

KKM7285, Joe H. Wilson, Atlanta, Ga., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violation of the CB rules.

KKP1379, Elizabeth T. Scholander, Boynton Beach, Fla., directed to show cause why her license should not be revoked for repeated failure to respond to official notices concerning alleged violations of the rules.

KKP1664, William T. Pitts, West Palm Beach, Fla., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KKX3795, Hubert J. Palmer, d/b as Eagle. Eye Armed Guard Service, Anaheim, Calif., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

KLP1052, Emmett M. Chapman, Rochester, N. Y., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violation of the CB rules.

KLS0073, Harold P. Luke, Waimanalo, Hawaii, directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violations of the CB rules.

Representative Ken Hechler (D., W. Va.) introduced a bill into Congress which would force the FCC to undertake a review of its CB rules and "make whatever changes which may be necessary in such rules in order to assure that operators in the Citizens Radio Service will have the maximum use of the frequencies in the radio spectrum compatible with the public safety and the utilization of the radio spectrum in the public interest." The bill called for the results of the review to be available on, or before, February 1, 1965. The bill was promptly buried in the House Interstate & Foreign Commerce Committee, Our opinion here at S9 is that this bill will never again see the light of day now that it has been railroaded "into committee." See if we're not right!

The FCC files record that Senator Goldwater has equipped his two campaign aircraft with three CB rigs which will communicate with two CB base stations. These are special 90 day authorizations. In addition to the CB units, the campaign aircraft (aircraft numbers N-1982 and N-5512) are licensed in other radio services and will operate with various forms of emission (mostly FM and radioteletype) on the following frequencies: 146.94 mc/s (Ham rig with FM and SSB), 151,625 mc/s, 157.4 mc/s, 158.49 mc/s, 158.52 mc/s, 158.55 mc/s, 158.58 mc/s, 158.61 mc/s, 158.61 mc/s, 158.64 mc/s, 158.65 mc/s, 158.67 mc/s, 459.95 mc/s, 459.90 mc/s, 459.85 mc/s, 459.80 mc/s, 459.75 mc/s, and 459.70 mc/s. There is also a "private" channel to permit direct calls from the campaign aircraft to the Washington HQ. Most of the gear is GE made, it is installed aboard the Boeing 727 and Lockheed Electra 188-A craft which will be using the callsign KH4514 when communicating with ground stations. On the ham bands the calls will be K7UGA and K3UIG "Aeronautical Mobile."

READER MAIL

S9 :

Thanks, S9! Most of the others are a waste of both time and money.

Continued from page 4

Frank Cheney, KGC0434 Denver, Colo.

We have found from long, hard, experience that imitators of S9 are a dime a dozen. They seem to start from nowhere, collect enough subscription money from CB'ers to make the initial investment "interesting" to the backers, Suddenly, they're gone-vanished into the night from whence they came. It's happened before, and if it wasn't for the fact that a certain number of naive CB'ers get "taken" in the process, it would almost be laughable. There's a very strong possibility that another one of the fly-by-nighters might soon be taking to the air. Remember you heard it here first!

ACDA

I'm sorry, like many others, I didn't find out sooner about the so-called ACBA. I had that idiotic ACBA emblem printed on my QSL's and I'm trying to find a way to change the "B" to a "D" for the ACDA! I'm for the ACDA 100%. Keep up the good work.

Dave Buda, Nutley, N. J.

Membership in the ACDA (Association to Condemn Detrimental Associations) is available free to all S9 subscribers. See details in this issue.



KBG4303 RIDES AGAIN

Continued from page 7

Sooooo-if you didn't make it under the wire, I apologize. As of this writing, the circulation people have been told to accept "Birthday Special" subscriptions. They will continue to accept these subscriptions until the end of 1964 (December 31) but that's the cutoff date. If you sent in before, send it back to us. If you didn't know about this deal before, or knew about and didn't do anything about it, now is the time for you to take advantage of it. You might want to give the four special rate subscriptions out as Christmas presents, and reward yourself with the free one. If you are already an S9 subscriber, we'll add the extra year on to your present subscription. When you submit these subscriptions to us, don't forget to mark them "Birthday Special" so the Circulation Department knows what you are talking about. 10-4.

By the way, it seems that in CB publishing the best way to know if an idea is a good one is to see if anyone steals it from you. Well the "Birthday Special" was apparently good because it was promptly swiped by a "Johnny-come-lately" publication in the field-a publication which has previously freely helped itself to the talents of S9 staff members without authorization. If many industry rumors are correct, this new publication may not be with us for very much longer anyway, so I guess it's a matter of grabbing at straws. It seems to be a case of lack of both reader and advertiser interest-pretty much of a repeat of what happened to their 'predecessors," who also had a CB publication which is now somewhere over the horizon. Pity, so many people got stuck the last time these same people conveniently "went out of business" when things got "hot."

SPECIAL GUEST EDITORIAL

by Jack Gould, Radio TV Editor The New York Times By permission of The New York Times.

If a husband uses a radio transmitter to say an affectionate hello to his wife, is it aimless small talk or a personal communication or intelligence?

A court test of what makes a chat meaningful or superfluous was promised recently by the Lafayette Radio Electronics Corporation of Syosset, L. I.

The company announced a legal challenge to the Federal Government's new rules designed to curb abuses of the citizens-band radio service.

In a petition filed with the Federal Communications Commission, Lafayette (in conjunction with Polytronics Labs) contended that the agency was assuming the right to decide whether the content of a conversation between two per-

More people read more things in \$9!

sons was in the public interest.

In the Lafayette petition, it was disclosed that the Federal Trade Commission had moved to support the new rules of the Federal Communications Commission.

The Trade Commission in a letter to manufacturers, asked that all advertisements of eitizens-band transmitters carry a warning that "the operation of such equipment as a hobby, in and of itself, or for the exchange of aimless small talk is not permitted."

The Lafayette petition, filed by Marcus Cohn and Leonard H. Marks, Washington lawyers, argues that the rules are unlawfully vague in defining authorized personal communication, and that the ambiguity is reflected in the Federal Trade Commission's mention of aimless small talk.

If the hobby of radio cannot be discussed on citizens-band channels, Lafayette asked, can a person discuss golf or bridge? Behind a husband's call to his wife, the company says, may lie the conveyance of bona fide information that could be appreciated only by the parties concerned.

Once the Federal Government sets aside channels for personal communication, the petition goes on, it is beyond the power of the Commission to control the content of the message or to judge the motive that stimulates the individual to transmit the communication. A contrary course, the petition notes, would force the commission to embark upon a regulatory determination of the usefulness of individual messages,

If the FCC confirms its earlier opinion that further proceedings will not serve a useful purpose, Lafayette officials said they planned to appeal to the courts.



UNDERCOVER SPECIAL

Continued from page 16

had hoped to be able to run it to the house via the top of the window. I had not taken into account that the window was about $5\frac{1}{2}$ feet high, which would place the top of the frame about 3 feet below the feedline. This was solved by placing the antenna at the side of the window and running the coax diagonally away from it to the far side of the window at the top. Painted a dingy red, the coax blended right into the bricks of the wall.

ON THE AIR

It worked! The thing really gets out-and it has a low SWR! It hasn't blown down, exploded, collapsed under its own weight, or anything else. If it did, I still have enough of this "yak hair" left to build 155 more "Undercover Special Antennas."

November 1964 • 73

Continued from page 46

line and with which it can be mounted at the same time, but unless one employs a mobile mount which accepts this type connector (we have not seen any in the catalogues), some difficulty may be experienced in installing the Toroid-Tenna. Nevertheless, an inexpensive mount can be had simply by installing an Amphenol 83-IF coax adapter bulkhead (coax feedthru adapter with takeup nuts as shown in the photograph) which requires only one $\frac{5}{2}$ " diameter hole. It may thus be conveniently installed on a guttermount bracket or on the cowl, fender, trunk or roof of the vehicle.

Adjustment simply involves applying power and turning the trimmer with a small screw driver while using a field-strength meter or a receiver with an S-meter for maximum output indication or employing a standing-wave-ratio meter for minimum SWR reading.

Field tests using the Toroid-Tenna indicated excellent performance, with the advantage that it could readily be precisely tuned for peak performance and with a minimum SWR which in our case amounted to 1.05:1, close enough to 1:1 for all practical purposes. Another dividend is that the antenna is nicely styled with a trim and very neat appearance, while its flexibility eliminates garaging problems and does away with the need for expensive and bulky spring-type mounts. It thereby ensures peak performance at all times and enhances the looks of a mobile installation.

The Toroid-Tenna is priced at \$21.95. It is manufactured by Electro-Winders Company, Inc., 854 West Front Street, Covina, California.

TESTING THE CARTER PHONE PATCH

Do you get the most value out of CB? No, we don't mean to question working range or interference free QSOs. Rather, we ask whether you utilize the full capabilities of CB in terms of convenience. Take something like a phone call from the boss who needs information only the guy in the truck can give. Well, you know how muddled anything becomes when a third party—the dispatcher—relays questions and answers. Think how easy it would be if the boss were connected to the truck via CB; yes, the telephone line becomes an extension to the transceiver. What's that, you don't know how to connect a CB rig to the phone lines? Well, the Carter Electronics Corporation has introduced a gadget which allows *any* CB'er to "phone patch" his transceiver. That's right, *any* CB'er. Even if you know from nothing about phone circuits, with Carter's "Carterfone" *you* can run a patch like an expert.

The Carterfone is a "no connection" phone patch; that is, there is no direct connection between the patch and the phone line. The main part of the patch is a plastic frame actually a cradle—which holds the telephone handset. Under the telephone receiver is a telephone pickup coil which "detects" the incoming phone signal, amplifies it, and feeds it into the transceiver's input. Under the phone transmitter is a speaker which feeds the received signal from the transceiver to the phone. A separate speaker is provided which permits the operator to monitor the incoming phone signal.

Two "patch methods" are provided-automatic and manual.

When set to automatic, an incoming phone signal automatically switches the transceiver to *transmit* and the phone message is broadcast. When the party on the phone stops talking the transceiver is automatically switched to receive, and the received signal is fed into the phone line. Since automatic patches are not allowed under the new FCC rules us CB'ers will have to use "manual operation."

In manual, the patch is used the same way except the operator controls the T-R switching. When the operator—who listens on the separate monitor speaker—hears the party on the phone stop talking he releases the mike's PTT switch, the transceiver switches to *receive*, and the incoming signal is fed into the phone line.

The only difference between automatic and manual operation is the operator actuating the T-R rather than the telephone voice.

While you might think that connecting such a complex unit (four transistors, two diodes) to a transceiver would be a formidable chore, such is not the case. Only six connections are made to the existing transceiver wiring, and these are made through a single octal plug. Adjustment is also a relatively simple matter; turn a few controls to set the incoming and outgoing levels and the Carterfone is ready for use. However, and this is most important, the level from the Carterfone to the transceiver should be adjusted using a modulation meter. The Carterfone has plently of reserve gain and the transceiver input can be easily overloaded (or the modulation can be driven well past 100%.



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When experience counts, it's \$9 every time!



Rates for CB SHOP are 10¢ per word for advertising which, in our opinion, is obviously of a non-commercial nature. A charge of 25¢ per word is made to all commercial advertisers or business organizations. A 5% discount is in effect for an advance insertion order for six consecutive months.

We do not bill for advertising in CB SHOP Full remittance must accompany all orders and orders sent in otherwise will not be run or acknowledged.

Closing date is the 15th of the 2nd month preceding date of publication. We reserve the right to reject advertising which we feel is not suitable. Because the advertises and equipment con-

tained in the CB SHOP have not been investigated, the publishers of S9 cannot vouch for the merchandise or services listed therein.

QSL CARDS, EYEBALL CARDS. The largest designs, colors, cardstock. Samples-10¢. APRIL SIGN, 56290 Van Dyke, Washington, Mich.

CB transmitters \$6.00. Other bargains, catalog 10¢. Vanguard, 190-48-99th Ave., Hollis, N. Y. 11423.

A few choice territories are still open for Browning franchised sales & service centers. Contact E. A. Coons, Browning Laboratories, Inc., 100 Union Ave., Laconia, N. H.

QSL's, CB, WPE, Samples 10¢. Nicholas & Son Printery, P.O. Box 11184, Phoenix, Arizona 85017.

Heathkit owners, double reception! SK-3 Preselector fits GW-10, GW-11; SK-4 fits GW-12. \$8.00 kit, \$11.99 wired. Postpaid. Holstrom. Box 8640-S. Sacramento, California 95822.

"Don't be misled by pseudo confusing claims alleged by advertiser's of some new so-called dual transceivers and attachments. Add our original truly "tight" easy-do Dual Conversion adapter-kit; it also increases sensitivity. HE-15, A; 15B; 115B; 20, A, B, C; 90; 800; 910, B; Mark VII; 770, 1, 2; Messenger; GW-10, etc. \$15.50, with tubes \$17.50. Unique Speech Clipper-kit complete \$19.85, or \$5.00 Deposit plus C.O.D. Results! Not promises. Free literature Dept. #11S, Bainbridge Radio, 214 East 180th St., New York, N. Y. 10457.

Most efficient CB/BC mobile antenna coupler, DP-2 Kit, \$5.49. Free kit, antenna list. Holstrom Associates, Box 8640-S, Sacramento, California 95822.

CONVERT the inexpensive Surplus BC-659 to CB with crystal filter, AVC, squelch bias, Pi coupling, electronic push to talk, xtal controlled receiver, 2 RFs, 14 tube operation. Conversion parts kit and plans \$20.60. Plans only, \$2.00. Jay's CB Service, P.O. Box 173, Citrus Heights, Cal.

CB OSL Cards. New Kute, Klever, Komical designs. Reasonable prices. Brilliant colors, including beautiful silver and gold. Samples Free. M. Hellwig, Box 425, Lake Wales, Fla. 33583.

S9 - more news, more authors, more value!

HAMBONE?

Even if you're a tried and true CB'er, clear to the bone, perhaps you are considering the possibilities of Ham radio. Or maybe, like many S9'ers, you already hold a Ham ticket. In any event you will enjoy reading "CQ Magazine, The Radio Amateur's Journal," which is published each month by the same company which brings you 59. CQ's pages are chock full of construction projects,

humor and fiction, Ham station activities, VHF news, DX propagation predictions, etc. Curious? A sample copy of CQ will be sent for only 50¢-a 1 year subscription is \$5. Special trial introductory (new CQ subscribers only) offer for 59 readers: 6 months of CQ for only \$2. Subscribe now and receive the giant \$1 November issue in your subscription at no additional cost!

> CQ Magazine, Dept. CB 14 Vanderventer Avenue Port Washington, N. Y. 11050





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Buy!

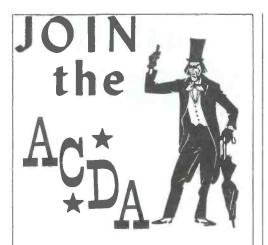


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(The ASSOCIATION TO CONDEMN DETRIMENTAL ASSOCIATIONS)

Be a free, independent, thinker! Join CB's second largest do-nothing organization!

When you join the ACDA you will have **nobody** telling off the FCC in your name; the ACDA will not try to sell you beanie hats and red shirts; we will not assess you with a tax; we will not announce officers before the election (because we don't have officers); and we will not do anything else that you would rather we did not do! Anyone can join!

A membership in the ACDA brings you an outrageous, zany and chintzy membership certificate suitable for wall mounting (mount it only if you really are a true independent and don't give a hoot what your friends think of you) or for blotting up ginger-ale puddles; you also receive the next 12 issues of CB's most infuriating, free-thinking, and helpful monthly publication, S9. Belonging to ACDA gives you full rights to condemn any Association which is detrimental to CB. Membership for 1 year is only \$5 (including the S9 subscription), 2 years \$9, 3 years \$13. Use the form inserted between pages 64 and 65 of this issue, be sure to mark it "ACDA" on the front, If you already subscribe you can still obtain a certificate by sending a self-addressed and stamped envelope to "ACDA" in care of S9, enclosing the address strip with your name from the back cover of a recent issue.

OFFER LIMITED, SO HURRY!

CB QSL Cards. New Kute, Klever, Komical designs. Reasonable prices. Brilliant colors, including beautiful silver and gold. Samples Free. M. Hellwig, Box 425, Lake Wales, Fla. 33583.

DANDY HAM STATION! Thinking about going Ham? Buy my transceiver—cheap! Am selling my beloved Clegg 99'er 50 mc (six meter) transceiver after two years of faithful service. Runs 8 watts input on phone; double-conversion superheterodyne receiver. Everything in one unit: all you need is a mike and antenna. Worked (and QSL'ed) 31 states with this unit from the mobile! Price: \$97.00 postpaid. Make it \$110.00 and we'll throw in a completely transistorized speech clipper-compressor device, used successfully in conjunction with the 99'er (designed by Don Stoner). Will ship immediately on a first-come basis: Bob Brown, KBG-8417/K2ZSQ, % S9, 14 Vanderventer Avenue, Port Washington, L. I., New York 11050.

CB QSL's—BROWNIE W3CJI/3W1974. 3111D Lehigh, Allentown, Pa. 18103. Catalogue with samples 25¢.

CB QSL SWL Cards that are different. Quality Card Stock, Samples 10¢. Home Print, 2416 Elmo, Hamilton, Ohio.

FOR SALE! One General MC-5 CB Unit—22 Channel Transmit (all Crystal-Transmit) 3 receive —2 Power Cords, 12 Volts. DC & one 117 Volt. AC—Mounting Rail Bracket. Will ship Paid-Posrage anywhere in U.S.A. . . Price asked \$200 Cash. No Time payments or Trades wanted . . Illness in Family—must sell—need Money Badly. Please do not Telephone me—Write only. All replies will be answered promptly. Stanley Schneider, KB19512, 1224 Walton Ave., Bronx, N.Y.C.

3-D QSL cards have that glittering Space-Age look with 3rd dimension standout, like putting your name in lights! Samples 25ϕ (refundable) including CB and Ham personalized Christmas greetings. 3-D QSL Co., Monson 3, Mass.

Free SW Receiver—Have no room for big & bulky USN type RCH communications receiver. Covers standard BC and all international SW bands, in good working condition. In steel cabinet on shock mounts, weighs about 80 lbs. Willing to give it away free to anyone who can pick it up in Jamaica, Queens, N. Y, No catch, am really giving the thing away free. Write: Box B, S9 Magazine, 14 Vanderventer Avenue, Port Washington, N. Y. 11050.

QSL Cards—\$2.95 per 100, samples—10¢. Bill Orton, 905 Altamaha St., Chattanooga 12, Tenn.

CB QSL cards, personalized art work—minimum charge \$1,50 extra on your first order. Catalog and samples 10 cents. Sacandaga Press, Broadalbin, New York 12025.

CB QSL's 3 & 4 colors 100 \$2.00 samples dime. Bob Garra, Lehighton, Penna.

"Audio-Aid-All" Clipper kit, \$10.99; \$14.99 wired. Boosts modulation, aids reception. Postpaid. Holstrom, Box 8640-S, Sacramento, California 95822,

Hundred QSL's: \$1.00. Samples, dime. Meininger, Jesup, Iowa.

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Is it time to renew your \$9 subscription?

SWAPPERS. ACHTUNG! Assortments of actual cards from most call areas. All either unmarked or signed by the operators. These are all "real cards" and not printers samples. 50 assorted, no duplicates, for \$1.25, postpaid. Limited supply, so hurry. Nussbaum s, 1440 54th Street, Brooklyn, N. Y. 11219.

CRYSTALS, mailed anywhere. Any channel, any set, all \$2.25 each. Thousands in stock. Shipped same day. Cash orders shipped postpaid. Worcester County CB Sales, 110 Worcester Street, North Grafton, Mass.

STOP RECEIVING DRIFT AND STATION HUNTING—Transistorized module converts tunable receivers to crystal receive. Two crystal positions and manual tuning. Fits all superhet transceivers (Lafayette, U.S. Lab, Dewald, Elco, etc.) Two simple receive connections, complete with crystal \$12.95. Extra crystals \$2.95 each. Specify transeiver model and channel desired. Money back guarantee: CI-BAN ELECTRONICS, P.O. Box 401, Fort Lee, New Jersey.

QSL's. Christmas designs and regulars. Cataloguesamples 10¢. Longbrook, Box 393-X. Quakertown, N. J.

QSL CARDS-\$2.95 per 100, samples-10¢. Bill Orton, 914 Altamaha, Chatfanooga, Tenn.

ASSURE LOCAL LAW AUTHORITIES and FCC your equipment is Legal—helps prevent tampering—FCC Warning and FCC form 452-C Transmitter identification metal plates set. Self-adhesive backing—(see March '64 S9, page 30). Use one set to each transceiver—\$1.00 money order per set postpaid—3 sets for \$2.75—"CITIZENS-PHONE", P.O. Box 1063, Lampoc, Calif. 93438.

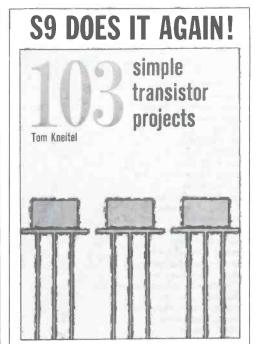
Customized QSL's with your autographed photo. Dime brings sample. Pic-Ur-QSL. Rice Lane, Baltimore, Maryland 21207.

WANTED: ASSOCIATED DEALERS IN CB AND AMATEUR RADIO EQUIPMENT TO SELL ALL POPULAR CB AND HAM UNITS FROM OUR HUGE INVENTORY AT SPECIAL DEALER DISCOUNTS. WRITE DEPARTMENT E FOR FULL PARTICULARS. GRAHAM PA-DIO, INC., DEPT. E, 505 MAIN ST., READING, MASS. 01867.

CHEAP! CHINTZY! RUN OF THE MILL QSL's, but what do you want at 1¢ each? Send 10¢ for wild samples. Save your money for a Rainy day! Nussbaum, 1440 54th St., Brooklyn, N. Y., 11219.

¹'Audio-Aid-All'' Clipper-Filter kit, \$12.49; \$15.99 wired. Boosts modulation, aids reception, Postpaid. Holstrom, Box 8640-S₁ Sacramento, California 95822.

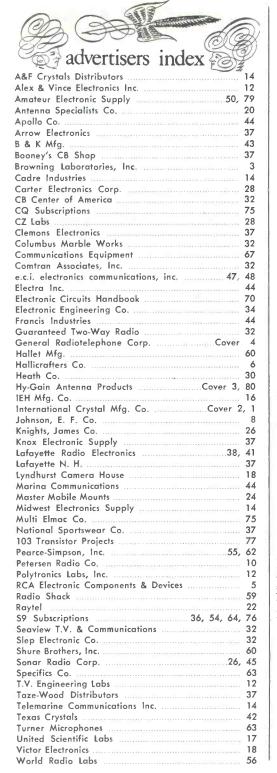
Identify your Mobile Rig with call letters $1\frac{1}{2}$ " bold, styrene plastic. They're pressure sensitive. Apply to rear window, trunk, ör bumper. To apply merely peel off back. They really stick! In red, blue, green, yellow, white, black, gold, silver. Only 25¢ per letter, postage paid. Other sizes also available. Fairlawr Sales Co., Box 5160, Akron 13, Ohio.



Yes, "Mr. S9," Tom Kneitel, has created an exciting adventure through 103 Simple Transistor Projects. His new book gives you circuits which are not only simple (2, 3, and 4 transistors) but fill every CBshack need. Beginner and expert alike will actually enjoy building such things as: CB mike boosters, transmitters, transceivers, receivers, noise killers, channel locators, frequency standard, battery chargers/eliminators, modulation monitor, power inverter, amplifiers, and more ... More ... MORE !!! All necessary instructions (in Tom's easy-to-understand style) and hints accompany each project, and Tom has put together an entire chapter on how to construct transistor projects to get the best results.

Order yours n	ow!	
Only \$2	2.75 postpaid	
Book Division, Cowan Publishing Cor 14 Vanderventer Ave Port Washington, N.	nue	
Gentlemen:		
Enclosed is \$ Tom Kneitel's newest Projects. Please fush	forcopies t book, 103 Simple Transis !	0 to
Name:	, Call:	
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More people read more things in S9!



23 channel transmit dial and crystal holder for any international executive. \$14.95 prepaid—cash or money order. Write for other CB specials. Frank Zugner, P.O. Box 422, Rome, N. Y.

"Alternator Filters" The original designers and manufacturers. Non-Tunable type \$2.50. Tunable type \$3.95. Highest quality. Engineered Products Company, Springboro, Ohio.

CB'ers, alert your base or mobile with "Redilert." Completely wired, easily installed. Send \$2.98, transceiver model. Ram Research Associates, Box 322, Hartford, Conn.

"Generator Filters" Low-Loss 3-30 mcs. CB type \$2.50. 30-60 mcs. 6 meter type \$2.50. Voltage Regulator Filter \$2.50. Highest quality. Engineered Products Company, Springboro, Ohio.

CB Calls Northeast publishes District 1, 2 and 20 call signs free of charge in quartely publication. Send your call along with your CB club roster: "CB Calls Northeast," 46 Washington, Rutland, Vermont 05702.

QSL's. Gorgeous rainbows! Top quality! Fast service! Low prices! Samples 10¢. Refundable. Harms, KDI1143, 905 Ferneld, Edgewater, Florida.

CB Clubs, emergency squads, CD nets, coffee breaks, any CB organization, annual Jamborees, list your group free in the "CB Calls-Club Directory." Send officials' names and other pertinent information to: "CB Clubs," 46 Washington, Rutland, Vermont 05702.

Quality QSL's—Custom and Stock. Samples 10¢, 25¢, 50¢. Savory, 172 Roosevelt, Weymouth, Mass.

FOR SALE—New and Used CB equipment, antennas & crystals. Dealer inquiries invited. Jim's Auto & Electronics, Box 87, Jansen, Nebraska.

MOST EFFICIENT CB/BC mobile antenna coupler, DP-2 kit, \$5.49. Free kit, antenna list. HOL-STROM ASSOCIATES, Box 8640-S, Sacramento, California 95822.

Tighten that Eico 760, 761, 762, 771, 772, 770 complete kit with detailed instructions \$8.95 ppd. Milton Electronics, Box 101, New Haven, Ind.

HIGHEST QUALITY QSL'S—Best paper and inks. See our new "EYEBLINDER" CARDS. Artwork available on any subject. Fat bunch of samples 10¢. Dick, 19QA0625, 1996-S9 N. M-18, Gladwin, Michigan.

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QSL's 100 only \$3.00, samples 25¢ refundable. Redbird Hill, Freedom, Indiana 47431.

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