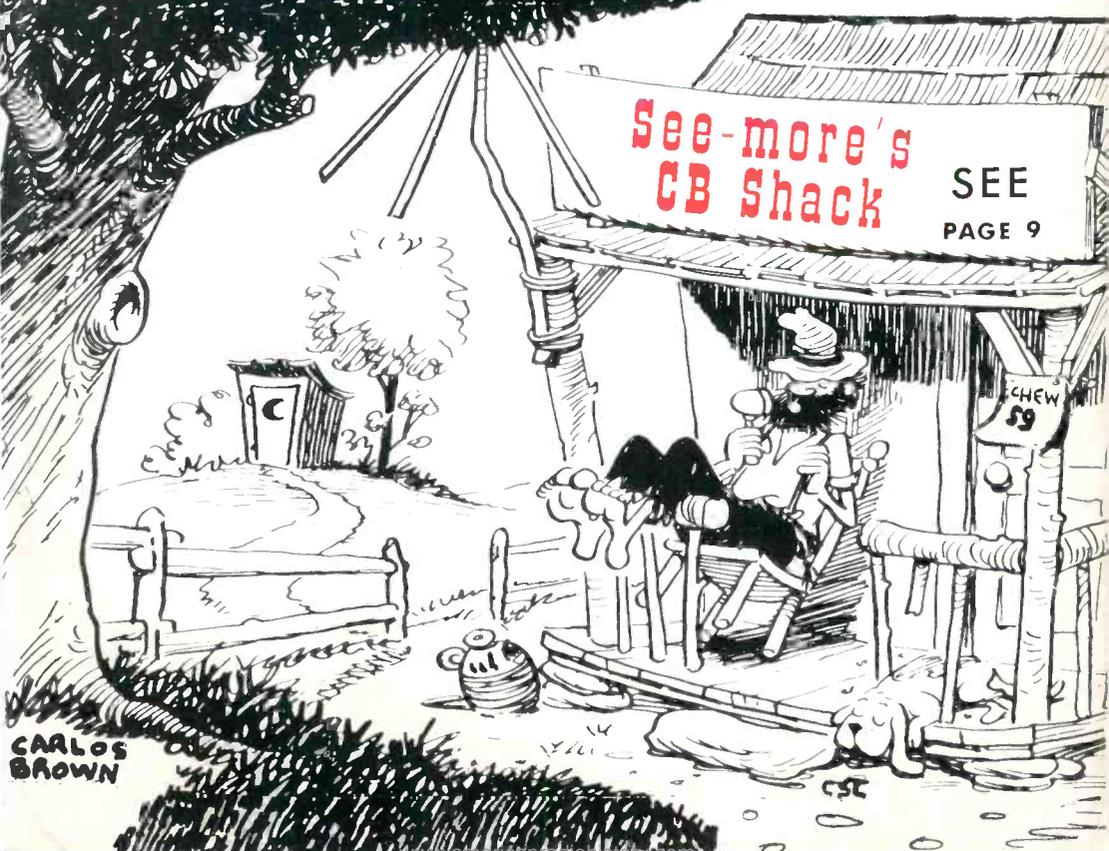


S9

the citizens band journal

**MORE THAN 500 CB QSL SWAPPERS LISTED
BUILD A SUPER-QUAD ANTENNA
THE SIGNAL SNATCHER, MARK II
ANTENNAS vs. MODULATION
A "DREAM" CB STATION
ALL ABOUT MODULATION**



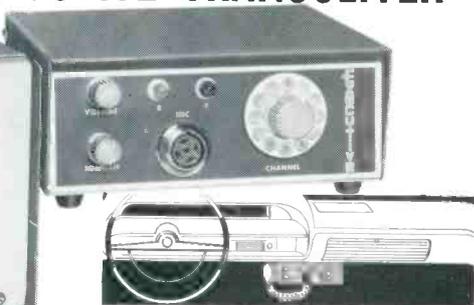
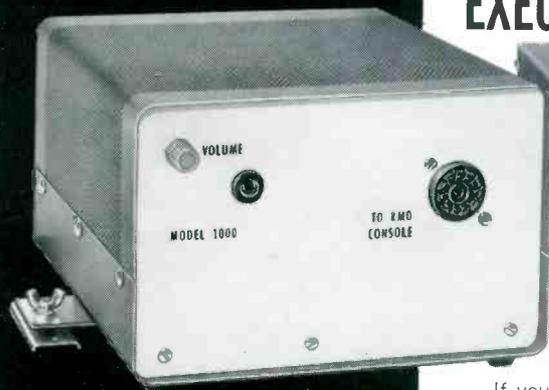
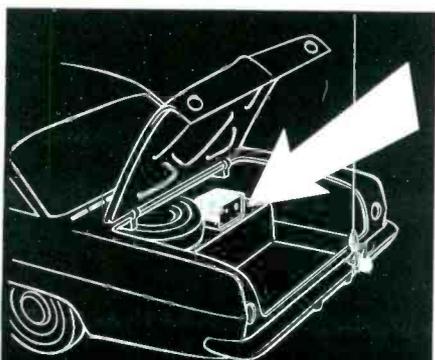
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you need the **NEW MODEL 1000**
EXECUTIVE TRANSCEIVER



If you are looking for a citizens band transceiver designed for limited space or remote operation, then you need International's Model 1000* transceiver . . . the very latest in the Executive series of fine two-way radios.

Engineered for flexible installation, the Model 1000* may be used in a car, boat or plane. Operates on 6 or 12 vdc and 115 vac. Features include: series gate noise limiter, high frequency crystal filter for reducing adjacent channel interference, delayed avc system, speech clipper amplifier and crystal filter. All frequency control circuits are housed in International's new (RMO) remote console.

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**combination CB-AM
antenna**

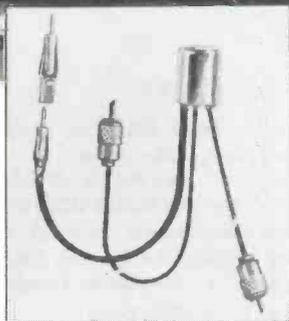
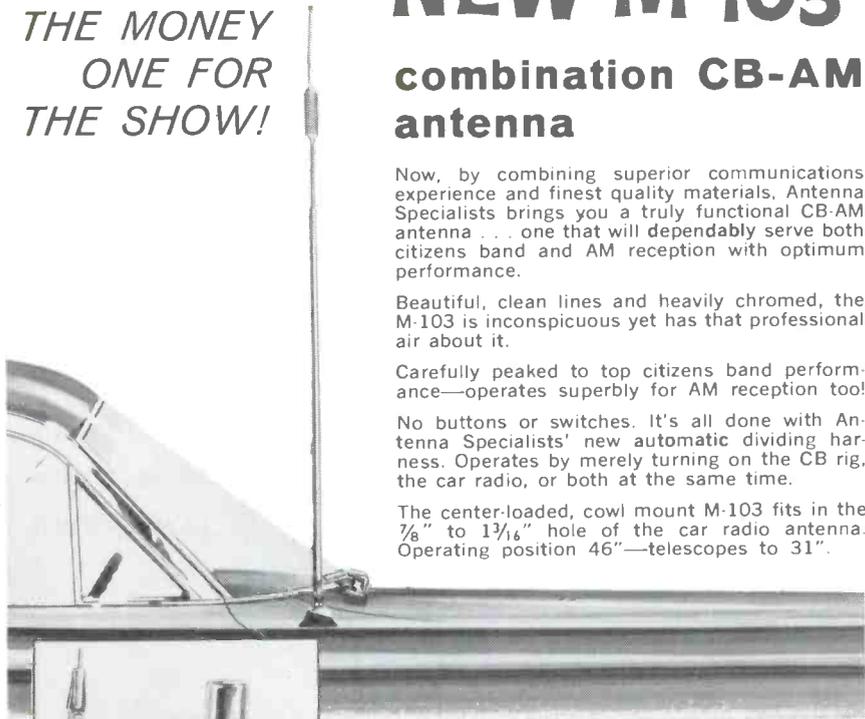
Now, by combining superior communications experience and finest quality materials, Antenna Specialists brings you a truly functional CB-AM antenna . . . one that will dependably serve both citizens band and AM reception with optimum performance.

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the citizens band journal

Vol. 4, No. 2

S. R. COWAN, PUBLISHER

February, 1964

300 West 43rd Street New York 36, N. Y.

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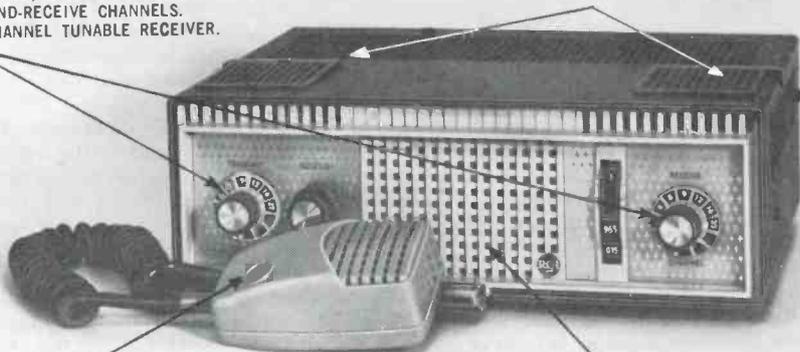
FEATURE FOR FEATURE — DOLLAR FOR DOLLAR YOUR BEST BUY IN CB RADIO

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CONVENIENT ACCESS TO CRYSTALS FOR QUICK CHANGING.



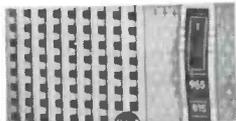
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George Stephens, KHA4610/W9SLM
RR 2
Sheldon, Ill.

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Dear Sirs:

In your September issue you ran an article entitled "S9 Strikes Back," wherein you reproduced two "EMERGENCY" warning signs for auto windshields. Well, I cut one out and taped it to the window of the car but the cold weather wet the window and the tag isn't readable anymore. Where can I get one of these tags in decal form?

You mentioned in your article that people in rural areas have a lot of trouble from police stopping their CB equipped mobile units to inspect the radio gear. You should be surprised to learn of the trouble which I, for one, have had from the police in a large city—Chicago to be specific. I have my antenna roof-mounted and I have been stopped 7 times in the past 6 months because of their questions. They want to know what it is, how it works, etc. It's a pain in the neck and I have been late for work because of it. I think that the "S9 EMERGENCY DECAL" has discouraged this somewhat.

Betsy Turner, KHA1272
Chicago, Ill.

NOTICE

TO POLICE & FIRE AUTHORITIES.
THIS VEHICLE IS EQUIPPED WITH
CITIZENS RADIO SERVICE

EMERGENCY

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LICENSED BY THE U.S. GOVERNMENT

We don't supply these stickers ourselves, however they may be obtained in decal form from Chuck Baer Enterprises, 6429-S2 North Glenwood, Chicago 26, Ill. Price is 2 decals for \$1, with bulk discounts to clubs and dealers

ACBA AGAIN

Editor:

I am behind you 100% in your views of the ACBA.

Larry Briggs, KBC1891
Framingham, Mass.

Tommy,

No comment on this so-called American Citizens Band Association, it will prove itself as others have.
Harold Stafford, Jr., KHG9108
Sec.-Treas., M.C.E.U., Inc. of
Kalamazoo County,
Kalamazoo, Mich.

Dear Tom,

Let me congratulate S9 on the editorial stands taken, especially in regard to the matter of the acba (I don't feel it deserves capital letters). On two recent trips to California and Tennessee I talked to many CB'ers and made it a point to see their opinions on the acba. From what I gathered, the ones which were *whole hearted* supporters of the rules and regulations *and seemed to be proud of it!* This was still a minority group though, most of the others belonged because they just didn't know (or care) what's really going on. Somebody said, "Gimme a buck and you'll be in a national CB club," no application blank, no promises or anything, just "sign here." Tom, I saw this with my eyes at a CB club meeting. Most that had been in a while just said, "Oh well, it's only a buck." It is a shame that some CB'ers are willing to pay a dollar into this organization which has done more damage to the CB service in a few months than all of the individual loud mouths on the band were able to accomplish in 5 years.

H. H. Stiers, Jr., KED1495
Kemah, Texas

The ACBA is still making all sorts of fantastic membership claims and officials of the ACBA can be expected to try to drag the FCC into court should the new CB rules not be to their liking. Of course, all this is going over like a lead balloon with the folks in Washington. It's really quite surprising because the ACBA sent out a recent mailing which solicited new members based on the fact that they (the ACBA) had "inside information" that the FCC was going to go along with the ACBA's wishes (which were not too much more than an "adaptation" of the original S9 Magazine proposal of a year ago). Here's something that will interest you; the ACBA now claims almost 10,000 members but a little birdie (who hasn't chirped wrong yet) told us that "booster" pins, other regalia, jewelry and sales gimmick trinkets were ordered to account for only about 1500 members.

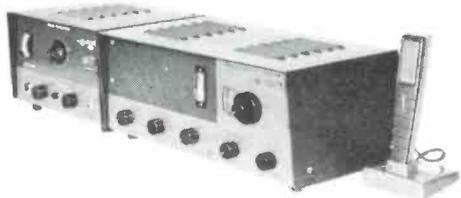


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February 1964 • S9 • 5



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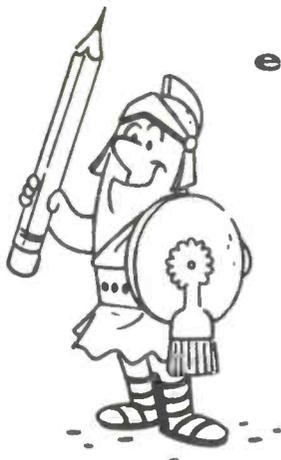
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e.c.i. electronics communications, inc. 325 no. macquesten pkwy. mt. vernon, n.y.

editorial



KBG4303 rides again!

by TOM KNEITEL
EDITOR, S9

THE RUMOR FACTORY STILL AT WORK

We recently received a letter from Ed Lander of the Metropolitan Dade CB Club (Miami, Fla.). Ed reported that the local CB gentry was in a state of semi-panic because there was a persistent story afloat that if Barry Goldwater was elected to the Presidency of the U.S. he was going to abolish the Citizens Radio Service. Shortly thereafter we began to receive letters at the rate of seven to ten a day which repeated this same story.

Trying to run down the source of one of these stories and determining whether it is true or false is usually an impossible task, however since it seems that a sufficient number of readers expressed concern over it we decided that it was worth the trouble. Taking the most obvious path, we promptly fired off a letter to Senator Goldwater and plain and simple asked him to confirm or deny the allegations.

While we were awaiting his reply, a reader in Virginia sent us a copy of a *CB Horizons* editorial from the December issue, upon which he had penciled. "What is S9 going to do about this?" Reading the editorial, which was entitled "Senator Goldwater on CB," we realized that the *CBH* staff was reading (in their own words) "apparent implications" into certain statements which the Senator made in conjunction with his support of a Ham radio licensing bill. The *CBH* editorialist (he doesn't sign his name to his efforts) said that these Goldwater statements have "caused concern on the part of Citizens Band opinion makers that other Congressmen will gain an improper vision of what CB is all about." The names of these "opinion makers" aren't pointed out, and the fact that *Senator Goldwater* isn't a *Congressman* doesn't seem to make much difference.

They conclude that there is a question as to whether or not Senator Goldwater knows

what he is talking about when he speaks of CB radio.

Bearing this in mind, we got quite a chuckle when we received a reply from Senator Goldwater which read:

"Dear Tom:

"When one is engaged in politics, one expects rumor to come from every angle, but sometimes they get downright amusing.

"At the present time, I am a licensed amateur radio operator, a licensed aircraft radio operator, and I operate Citizens Band. I don't think I have ever discussed Citizens Band with anyone, and certainly no one at the political level.

"Frankly, the most preposterous thing in the world would be for anyone to try to eliminate Citizens Band. In the first place, it couldn't be done, and in the second place, who wants it?"

"With best 73's,

"Barry Goldwater"

It would certainly seem that, in view of the Senator's statements, there is no foundation whatsoever to the fears of the CB'ers who contacted us. It also looks like *CB Horizons* could have saved a lot of people from sleepless nights had they had bothered to do some research before they printed their irresponsible comments and contributed to the "national rumor movement," which is already too big for comfort.

Please don't try to read any political inferences into this editorial—there aren't any. It makes no difference if you're a Republican, Democrat, or a supporter of the Temperance Party; I'm sure that whoever you support you will agree that these "apparent implication" statements which create panic, rumors, and agitation (for the sole purpose of sensationalism) have no place in the Citizens Radio Service. We deplore them, and we feel that most responsible CB'ers go along with us on this.

Continued on page 58

NEW
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INTERNATIONAL

AOC*

SINGLE SIDEBAND FILTERS

- 9 mc center frequency
- Bandpass 6 db 3 kc (approximate)

ACF-2 Two-crystal filter circuit using low impedance link input and 2K resistive output load. Unwanted sideband rejection greater than 30 db. Mounting space 1½". **\$9.95**

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SEE-MORE'S CB STATION

DOES THIS OPERATOR LIVE IN YOUR AREA?

by THE OL' TIMER

(Any similarity to persons livin' or dead that is mentioned in this here is purely on purpose, so I'm keepin' my name secret, so's nobody gits wise. Otherwise, I'm a dead pigeon.)

I bought some World War figger two (I always gotta say *figger* or *number* when speaking to rayo CB'ers because most is so dumb they can't tell when two is a figger) surplus rayo junk and built a powerful sendin' set which I expects not only to git on the air in a big way, but stay on there. I hadda little set which I bought from another CB'er without hardly no power a-tall, but now I has over 7 hunnert watts and a beam that I figgers could drown out all the CB'ers on my fregussy, just like a rich guy. Boy, what terrific power I'm gettin'! I'm lightin' up light bulbs all over the joint that is turned off. Not only was I causing interference to television and rayo programs, but I was bein' received in good condition on all telephone lines around the place. A neighbor said if I didn't quit burnin' her cellar lights, I'd have to pay her leckdrit bill.

Well, okay, things is workin' fine; so I starts in a-talkin' on my mike. I tests and calls unit 2 for half a hour and never got no answer. I gits hold of a tape recorder that tests and calls unit two automatic, and I left it run sometimes while I had tea and then would make a couple of call letters and switch to receive. Nobody ever called me, but I didn't give up. I trys to figger out what's wrong. Maybe I ain't callin' long enough or something ain't workin' just right.

Listenin' in to the rayo set at first I didn't hear nothin' but special calls. Some guys was testing, but mostly it was rich guys with strong signals already connected to other stations.

After many hours of cussin' and sweatatin', I contacted a guy that was callin' for REACT. He was mad, he called me a lid, whatever that means. I ast him, I says, "What's REACT?"

"See page 27, November, 1962, S9 Magazine," he says.

"Ain't got no asinine magazine," I said,

"only a American Citterzans Band A-sosia-shun bulletin."

"Okay," says the guy, "You are welcome to join us anyways."

"Where at?" I says. Just then a bunch of guys flocked all over the fregussy and I couldn't hear nothin'. Gee, I wonder what that REACT means. Could it mean some kind of secret club of CB'ers who react badly to new stations on the fregussy.

Boy, that CB stuff is terrific onced you git onto it, and I think I was gittin' onto it pretty good. I'm beginnin' to git guys up to three blocks away with no trouble; and don't think they didn't appreciate their weather reports. One guy was kind enough to tell me that our town is 8 miles from Springfield, which I had knowed all the time. I told him I lived in town for many years.

"Glad to hear it," he says, "Springfield is 8 miles from here." Next he says, "Best regards, see you later, gotta git off the air right away and take out the wife."

I was beginnin' to figger maybe them CB'ers didn't have time to say nothin'. I found out it made 'em happy if I wished 'em a 73. I didn't know what a 73 was, but they seemed tickled at what I said, so I latched onto that idea of bringin' 'em joy. The fregussys all over the dial cluttered up with thousands of guys all a-talkin' away, but soon as I'd get hold of a guy he didn't have time to say nothin'. They was all goin' out somewheres of their wives was callin' them to eat, to take garbage out, wash dishes, move the piano and so forth. There's an old sayin' "If at first you don't succeed, give up." Also, "Words is wiser than fiction," and similar, so I quits.

The next day I figgers I'll try it again since the mod'lotion was still workin'. I couldn't hear no further a few miles account of too many guys was all time callin' too many other guys. Most of the time everythink was all garbled up mumbo-jumbo that sounded like a lot of terbacco auctioneers.

Ever onced in a while I'd be tunin' the set and hears a CB'er say, "Standin' by for you."

That's a big break for me! I throws da mike a-phone on and hollers, "Oh-kay, a big ten four to da station standin' by for me. Who



is it, and how did youse know I was listenin' in to youse?" I called lotsa times but no matter how hard I tried I couldn't never find out who it was tryin' to git me.

After a while 15 guys that knowed each other's names was takin' turns yellin' on the fregussy, callin' mobile units. They was a mixture of jerks and wise guys all speakin' like they knowed somethin' terrible important. Most of 'em was tryin' to see how long they could talk without sayin' nothin' that made no sense except "uh" and "and uh." I was settin' waitin' for hours wid my rayo sendin' set turned on usin' hunnerts of dollars worth of leckdrit tryin' to git a chanced to break in an say what kinda rayo tubes I was usin'. Finally I did git a turn and give's my name. Fell' I know fixed me up with a relay that rung a bell and turned on the rayo transmitter after about 15 guys come on, so all I hadda do was lay in bed and sleep. When the bell rings, I jumps up and yells, with a voice put on to sound important, "Oh-kay gentlemen! We hear your voices clear. Stan' by for da next fell'. Over!" Sometimes I'd play smart and confuse 'em with a few numbers which didn't mean nothin'. I'd say I was runnin' a 567BW into a 8ZY42 which was being run into a gallopin' faze inversion coal-linear; and stuff like that.

Sometimes, late at night I could hear skip stations on the fregussy, and I was wonderin' if California could git my signals. 'Bout 3 am is a good time, because only drunks and looney-ticks is up then; so I gits up and listens. Two guys was on my fregussy, both of 'em in the same town down south. I feels awful tired and sleepy and wants to git back in bed, but I sits there waitin' figgerin' they'd soon go off and I'd git California. I waited half an hour an they didn't show no signs of quittin'. One dope was eatin' pancakes and the other was readin' a copy of some kind of *CB Horizontal magazine*, he said. While one eat, he was tellin' the other how to answer a citation. The other jerk was readin' about

what kind of rotten guys there is in Washington runnin' da CB stations. Each fell' would say he was "Callin' and returnin'." I could hear 'em callin' and I knowed they was returnin'; but if I knowed *why* they was returnin' I'll bet I could 'limate a lots of television interference. After a while I had enough, but instead of goin' to bed I gits real mad and bursts right in on the fregussy, callin' "test." The dopes hears me and gets mad.

"Is that yankee botherin' you?" says one dope to the other.

"No," said the other dope, "He hain't evin gittin' 'crossed the Susquehanna River."



Bein' a great grandson of dat great Southern General, and me bein' a rebel myself, I gets madden ever at bein' called a yankee, but I don't let on. I was mad enough to think ser'ous of goin' down South and straightenin' them rebs out, but a fell' in Ohio comes on and starts callin' me. With them dopes everythink we could think of from skinflint cotton pickers to hillbilly jaspers. "Holy smokes," I says, "Must be Don Ameche didn't install no telephone inventions in dat rebel town there yet." I ast 'em if they needed a dime or so to call up. I told 'em I'd lend 'em money to telephone so's I'd git rid of 'em and git California. Things got worst and worst. One dope wanted my license number, but I didn't had no number cause I didn't have no license.

What happened next was the most wonderful thing I ever seen! Up in the attic I have this big water cool tube a fell' stole from a broadcastin' station. I had hooked it but never used it, account of ever time I throwed it on the lights dimmed all around the place. I throwed on da big tube and yells, "Callin'

Continued on page 57

TRAM TR-27E TRAM



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TRAM Electronics will include in its ad each month a section on technical notes to provide interesting comments on specific TRAM circuitry. Offered particularly as a service to TRAM equipment owners, it will also point out to the general CB user the care with which quality equipment is designed.

Service techniques described in this section are for qualified service technicians. It may be desirable for owners of TRAM equipment to save these tips and attach them to their owners manuals.

TRAM SERVICE TIP No. 1

When tuning the 315 mc. 1st conversion receive oscillator coil (L2), tune for maximum D. C. voltage at pin #7 of the 6BK7 (V2). Then, looking at the coil from the bottom of the set, turn the slug counter-clockwise to drop the grid (pin #7) voltage two volts. This results in optimum oscillator stability.

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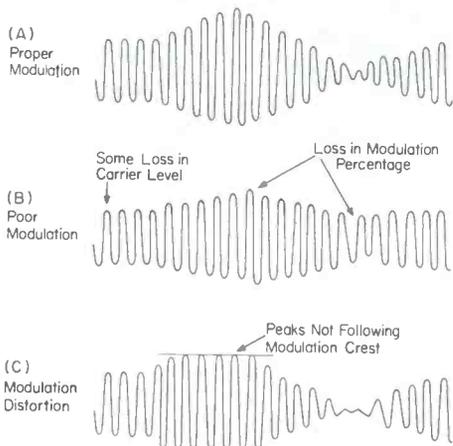
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ANTENNAS AND MODULATION

THERE'S A RELATIONSHIP

by ED NOLL, KCC2618

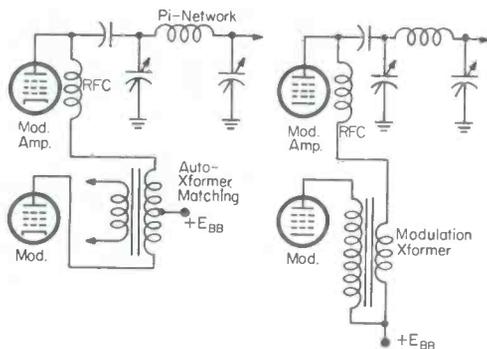
Can improper antenna matching have an influence on modulation? It can and often does affect the modulation. In some CB designs the influence of antenna matching on modulation quality is quite pronounced; other designs are affected to a lesser degree. On the air tests often shown that a mismatch in the antenna system can have a more apparent effect on the modulation than the actual carrier level.



In what manner can improper antenna matching affect the modulation? The modulation percentage (strength of modulation) can be reduced as shown in Fig. 1. In the example improper antenna matching has resulted in a limited reduction in carrier level. However, the improper loading has also cut back the modulation percentage. Note that the depth of the modulation has been reduced. Thus the signal has been affected adversely in two vulnerable spots, the carrier level has declined and there is a lack of modulation punch.

The quality of modulation can also be changed by mismatch. In this case distortion components are introduced in the modulation process as shown in example C.

Why does antenna matching influence the modulation? In an AM plate modulation system the load placed on the modulator is contributed by the modulated amplifier. The resistive load presented to the output of the modulator from the RF modulated amplifier is the quotient of its dc plate supply voltage and dc plate current (E_B/I_B). If the modulator is to operate at good efficiency and



deliver the necessary peak voltage for strong modulation, it must also work into a specific value of load resistance. These two resistance values are usually not of the same value. As a result some form of output modulation transformer or auto transformer must be used. The two basic circuits common to CB equipment are shown in Fig. 2. Proper operation of the modulation system thus depends on correct impedance matching and an adequate modulating signal level.

It is important to realize that the E_B/I_B quotient can be affected by the antenna loading. It is possible that the antenna loading can have a decided influence on the dc component of plate current. In turn this will change the loading presented to the modulator output by the modulated RF amplifier. If there is a substantial change in this loading the magnitude and/or the fidelity of the modulating wave can be altered.

Improper loading of the RF amplifier by the antenna system can make it difficult for the modulating system to follow the peaks of the modulating signal. This can result in a distorted modulation envelope.

What must be done to avoid modulation trouble? The CB transmitter is designed to reflect the proper load to the modulator when it is supplying signal to a 50-ohm load. Under this condition the RF amplifier draws the component of plate current that reflects a proper load to the modulator. Match your antenna system well and tune your transmitter correctly to avoid the above modulation difficulties.

S9

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6 crystal-controlled channels,
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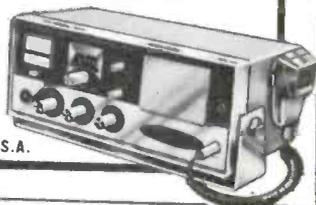
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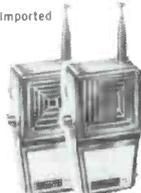
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WHAT IS MODULATION?

A BASIC EXPLANATION

by ED NOLL, KCC2618

One could amass a fortune if paid ten dollars for each time the word *modulation* is heard on the CB channels. "How is my modulation" and "Your modulation is so and so" take up a good segment of air time. Of course, modulation really is important in terms of receiver output and readability. Just what do we mean by modulation? More particularly, what do we mean by amplitude modulation (AM) which is the type used on the citizens band?

In an AM modulation system the speech changes vary the radio frequency power output of the CB transmitter. The speech variations or *audio* as such are not really

transmitted; these low frequency variations do not travel any substantial distance in space. A radio frequency wave does travel through space and the audio information to be transmitted can be sent out as a variation in the magnitude of the radio-frequency signal.

This can be better understood by considering the RF voltage variations as they leave the CB unit and are radiated from the antenna. When we are not speaking into the microphone the individual cycles of the RF voltage appear as shown in Fig. 1A. They are unchanging and of constant magnitude. When you speak into the microphone the individual cycles of the RF voltage begin to vary. For example if you whistle a pure tone into the microphone the output may appear as shown in Fig. 1B. Notice how the amplitude of the RF cycles are varying up and down; sometimes stronger, and sometimes weaker than the unmodulated radio frequency cycle. Notice in particular that, without transmitting any audio variations, the outline of the changing RF cycles occur at an audio rate. This pattern is referred to as a *modulation envelope*. The envelope is a very random pattern for speech modulation as shown in Fig. 1C.

For the best modulating efficiency the carrier should be modulated 100 per cent by the high amplitude speech components. For 100 per cent modulation, as shown in Fig. 2A, the radio frequency cycles reach

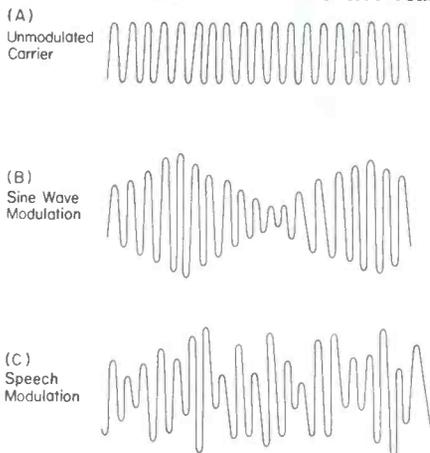


Fig. 1. Modulation of the cycles of an RF Carrier.

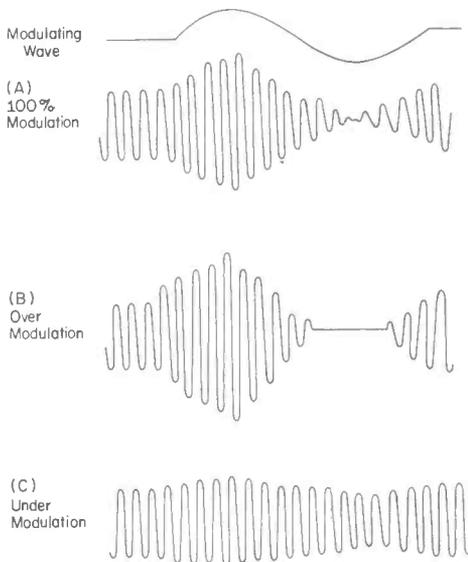


Fig. 2. Modulation Levels.

up to twice the unmodulated amplitude value and fall back down to zero. There is a maximum variation in the transmitted envelope. This degree of modulation sends out the greatest modulation power. In fact, for 100 per cent modulation, 50 per cent more RF power is intercepted by the receiver than for the unmodulated signal.

However, speech variations are not of a constant amplitude but vary in magnitude with relation to syllables and intonations. Thus 100 per cent modulation is not present continuously. It exists mainly on speech peaks. The use of modulation clippers and limiters in transmitting equipment help to maintain a high average modulation by preventing the modulation peaks from causing so-called overmodulation of the transmitter.

When there is overmodulation of the transmitter, as in Fig. 2B, the modulation envelope becomes distorted and speech quality is lost. Furthermore components are sent out that can cause interference on adjacent CB channels. Overmodulation is illegal and must be avoided in the design of the equipment and by keeping the gear in good operating condition.

The opposite extreme is inadequate modulation of the carrier. This can be the result of a circuit defect or occurs when you do not speak-up into the microphone. As shown in Fig. 2C, there is only a weak variation of the radio frequency cycles. Your transmitted signal, therefore, is all carrier and very little modulation.



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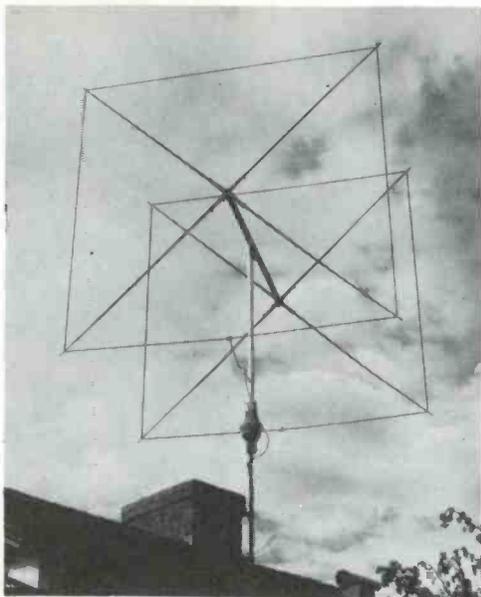
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BUILD A QUAD ANTENNA

**AT LONG LAST,
ONE THAT WORKS**

PART I

by CHARLES LEEDHAM, 2A3788

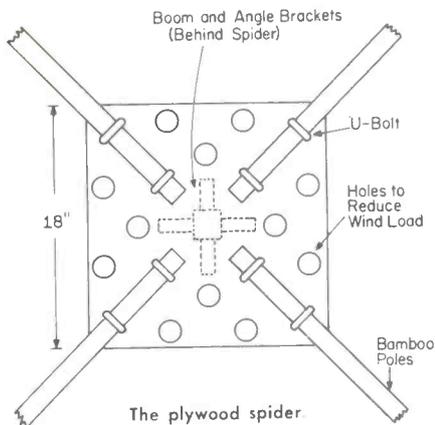
Directional antennas for Citizens Band use have always been a problem because of polarization. A standard 3-element beam, to be of much use on 11 Meters, must have its elements vertical, which brings up all sorts of troubles—a wooden mast, guying problems, insulating part of a metal mast as half of the driven element, and especially the fact that the reflector (half wavelength plus 5%) just about has to scrape the roof when the top is at the 20-foot maximum. But vertical it must be, or all the amplifying effect of the directional antenna is lost in cross-polarization.

An excellent answer so far is the curious antenna called the *Quad*, or *Cubical Quad* which can be polarized either way—horizontal or vertical—with little trouble.

Because almost all CB antennas are vertical, you need a directional beam which can be vertically polarized, without mast problems, and reasonably high above your mounting surface. In brief, a Quad consists of two squares of wire, each a quarter wavelength on a side, mounted vertically to form a sort of squashed cube—thus, Cubical Quad. One loop is fed directly by your coax and is the driven element, the other is tuned to a slightly lower frequency and acts as a reflector. Like the reflector of a flashlight, it forces the waves out in a narrow beam in a specific direction rather than letting the bulb shine weakly in all directions.

The fact that the Quad is only 9 feet long on each side lets you get the lowest part 11 feet above the roof and still stay legal, and it has a reasonably low angle of radiation so mounted. With proper construction and adjustment it will deliver 9 db of gain—when pointed at another station you will sound as if you were working 40 watts input (each 3 db gain effectively doubles power) and incoming signals will be proportionately increased. Even better—signals from the back of the Quad will be sharply down (the front-to-back ratio of the Quad runs between 20 and 25 db, meaning that signals from the back will be that much lower than those from the front).

Horizontally-polarized Quads have been moderately well tested, but vertical polarization changes things somewhat, and good figures on a vertical Quad are few and far between. Theoretically, a vertical Quad should have a much broader pattern, and my own tentative experimental data confirms this. Look at it this way and you will see why: a horizontal Quad (or a beam for that matter) has its radiating elements horizontal; therefore a station off to one side sees only the end of the element, and thus receives very little signal. But even when you rotate a vertical Quad (or beam) so that a station is off 90° to one side, that station still sees a quarter-wave element full-length, even though it is not directly in the higher-powered path of the beam forced out to



the front by the reflector. Thus you cannot expect as sharp a signal from the vertical Quad, nor anything like the rejection of signals from the side as you get from a horizontal. Still, of course, for CB work the Quad must be vertically polarized for the reasons discussed earlier.

CONSTRUCTION

The Quad is easy to build and should take about two evenings of work from start to operation. Materials required are: 80 feet of #18 enamelled wire, 4 feet of #14 bare wire, two insulators, two Fahnestock clips, 6 feet of shield braid, 8 seven-foot bamboo poles, two "spiders" to hold the poles in place (explained later), a 4½-foot boom, and of course rotator, mast, guy-wires, coax and other items which have no direct connection with the Quad, but would be required for any rotated beam.

Each of the two square elements of the Quad is made by stringing wire through holes near the ends of four poles, then arranging the poles in a giant "X" to hold the square in shape. The bases of the poles are in turn held by the spider, but as there are two possible spiders, first comes the preparation of the loops, the same no matter which spider you use. All the loop-stringing and connecting and soldering can be done inside where your iron is available, and the mechanical construction later on the roof.

First, cut two 37-foot pieces from the #18 wire and scrape five or six inches of each end clean of enamel. Drill a tiny hole in each bamboo pole 6 feet, 4½ inches from the base and wrap friction tape around the pole on each side of the hole, for strength. These poles, incidentally, can be found in almost any fishing supply store, and quite inexpensively. Get eight of the straightest and thickest you can find, and prepare each by giving it two coats of varnish as weatherproofing. Lay four of the poles together and string one piece of wire through the four holes, leaving the poles together until you get them on the roof. Now make sure you have a clear run of wire—without kinks, knots or tangles—and butt the ends of the wire to-

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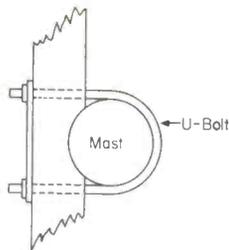
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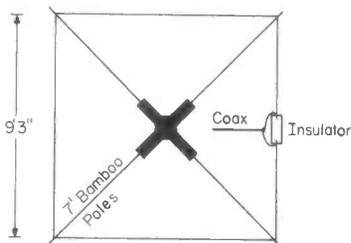
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Top view of 2 x 2 wooden boom grooved and bolted to mast.

gether. Place one insulator (for light weight and size Birnbach #464 is perfect) alongside the joint and now string one end of the wire through one insulator hole, and the other end through the other without disturbing the total dimensions. In other words, attach the wires to the insulator so that the total length of the loop-plus-insulator is still 37 feet, measured from the center of the insulator around and back to the center. Starting with the 37-foot wire, there will be just enough to put each end through the insulator holes and wrap back around itself for mechanical strength. Do the same with the other wire, four poles and insulator and you have the basic form of both driven element and reflector.



Front view of driven element.

To complete the reflector, make a square-bottomed "U" of the four feet of #14 wire, with the bottom of the "U" three inches long. Be sure the wire is bare, or if it is enamelled scrape the entire length clean and bright. Now slip a Fahnestock clip over each side of the "U" and sliding the clips down near the bottom of the U solder a short piece of bare wire between the clips. This makes a sliding short which should be able to ride up and down the U without disturbing the 3-inch separation of the sides. Finally, slip the ends of the U through the insulator holes of one of the prepared wire-loops, bend the ends back and around and solder one end to each of the wire ends at the insulator ends. The reflector is done.

Continued on page 22



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extra channels
\$5.90 ea

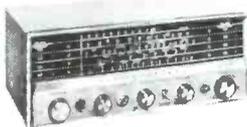
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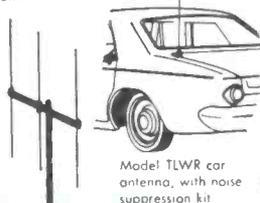
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after just **\$5.00 down!**

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S-118, 5 tubes	99.95	3.42
S-108, 7 tubes	139.95	4.87
*SX-110, 7 tubes	169.95	5.95
*SX-122, 11 tubes	295.00	10.47
*SX-62A, 14 tubes	430.00	15.34
FOR POLICE, FIRE, TAXI, COMMERCIAL		
CRX-1, 30-50 mc FM	\$ 99.95	\$ 3.42
CRX-2, 151-174 mc FM	109.95	3.78
FOR AIRCRAFT		
CRX-3, 108-113 mc	\$ 94.95	\$ 3.24

*These models do not have built-in speakers. Order R 48A speaker. \$19.95.

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MODEL 350C-Ceramic-
Equipped with hanger button, dash bracket, 5-foot (extended) rubber-jacketed coiled cord.
Response: 80-7000 cps.
Output Level: -54 db.

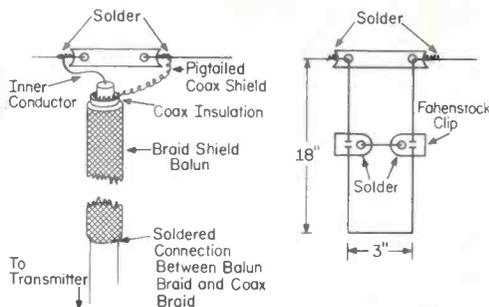
MODEL 254C-Ceramic-
Operates with on-off push-to-talk and lock switch. Cable is 7-foot, three conductor (one shielded) wired for relay operation.
Response: 80-7000 cps.
Output Level: -54 db.



Write today for complete specifications.

THE TURNER MICROPHONE COMPANY
945 17th Street N.E.
Cedar Rapids, Iowa

Before attaching your coax, you will need a balun (*BALANCED-UNbalanced*) to convert the unbalanced signal coming up the coax to a balanced form for the Quad, a balanced antenna. This is made from the six feet of shield braid. The braid you can get at most radio stores—ask for coax shield braid the right size to fit over 58/U or 59/U. Or if you have six feet of 8/U or 11/U lying around, you can get your own shield braid by slitting the big coax insulation lengthwise and stripping it off, then pulling the center conductor-plus-insulation out of the braid. Or see if you can get the store to sell you just 6 feet of the bigger coax, as the coax, for some reason, is cheaper by the foot than the braid alone.



Transmission line with balun (before weatherproof wrapping). On the right is the tuning stub with sliding short.

Slip the braid over your cable. Starting six inches from the coax end, snug the braid down the coax until you come to a point six feet from where you began—it won't be exactly at the end of the braid because it gets longer as you stretch it down on the smaller diameter of your coax, so measure. Cut off the braid at the six-foot point, and just under the end (six feet, six inches down the coax) strip away a narrow band of insulation from the cable. Solder the balun braid to the shield braid of the coax, but be careful not to get the inner braid so hot you melt the plastic insulation and short out the braid to the inner conductor. Now spirally wrap the whole balun with overlapping electrical tape for weatherproofing and insulation, with several extra turns at the point of connection to the coax braid.

With the balun completed, prepare the coax end by removing four inches of insulation, pig-tailing the coax braid and stripping an inch or so of insulation from the conductor. Solder the conductor to the wire at one side of the insulator of the second wire loop, and solder the pigtailed shield to the wire at the other end. Be careful when you prepare the coax end not to strip insulation far enough back to cause a

Continued on page 24

NEW WRL "DX'ER" 5-WATT CB TRANSCEIVER ENGINEERED FOR GREATER "TALK POWER" HOME • BUSINESS • MOBILE • INDUSTRY

I Full 5 Watts Power II 100% MODULATION III Built-in Three-way Power Supply IV Illuminated "S" and Modulation Meter V Double conversion superheterodyne receiver VI Push-to-talk ceramic mike VII Instant switching for 12 transmit channels VIII All channel tuning IX Unique "Spot Quick" control.

IT'S NEW!

WRL's New Powerful 5-watt "DX'er" CB Transceiver offers more performance extras than ever before at this low price — \$119.95. Completely hand wired and made in U.S.A. to WRL's specific high standards. Deluxe Extras include DOUBLE CONVERSION CIRCUIT. This feature with its tuned circuits and IF stages offers 5 kc receiving selectivity, freedom from unwanted spurious signals, .3UV @ 6 DB S/N sensitivity, crystal controlled conversion oscillator gives minimum drift. ALL CHANNEL TUNING as found in more expensive transceivers, makes drift-free tuning E-Z. Also allows the best reception tuning to each station without a channel selector. EXCLUSIVE "SPOT QUICK CONTROL" indicates instant "on channel" transmitting position as you tune the dial by the peak position on the "S" meter. This feature eliminates any need for separate receiver crystals. COMPACT, RUGGED steel cabinet attractively finished in dark grey and white. Size: 12-1/2 x 7-1/4 x 4-1/4. Wt. 17 lbs. Complete with a channel 9 transmit crystal, mike with hanger and 117 VAC power cord.

138S013, Model DX-12 \$119.95
Buy two & Save \$14.90 \$225.00
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86S066—MOBILE Mounting Brackets
(underdash mt.) \$2.95 ea.
86S065—6/12 Volt DC
Power Cord \$2.95 ea.

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You get: DX'er Transceiver, Push-to-Talk Mike, AC Cord, Crystal for Channel 9, Hy-Gain VP-II Antenna, 50' RG-58/U, Two PL-259 Plugs, Two UG-176 Adapters. Wt. 27 lbs. ZZS029 Base \$139.95 — \$7.00 per mo.
- 2. BUY TWO — Save \$29.84 — \$265.00 — \$14.00 per mo.**
- 3. Mobile Station Package — Save \$6.87**
You get: DX'er Transceiver with built-in DC Supply, Push-to-talk Mike, Cord, Crystal for channel 9, New-Tronics FGB-27 Cowl-Mount whip with cables & plugs, 6/12 V Power Cord, Underdash Mounting Bracket. Wt. 23 lbs.
ZZS030 — \$124.95 — \$6.00 per mo.
- 4. BUY TWO — Save \$28.64 — \$235.00 — \$12.00 per mo.**
- 5. Buy One Base Station & One Mobile Station**
ZZS031 — Save \$31.69 — \$247.55 — \$12.00 per mo.

WORLD RADIO LABORATORIES, INC. • 3415 WEST BROADWAY • COUNCIL BLUFFS, IOWA

short between the coax braid and the balun braid—there is NO CONNECTION there between the two braids. Wrap the connection to the antenna wire with several turns of tape for weatherproofing, and the driven element is completed.

As to the coax you use, incidentally, either RG58/U or 59/U will do. The nominal impedance of the Quad as described here is about 75 ohms, and 59/U provides a perfect match. If you're starting with freshly bought coax, by all means get 59/U, but if you have a long enough piece of old 58/U around, by all means use it. The impedance mismatch will be small and will not affect the Quad's performance that much.

THE BOOM

Now we come finally to the problem of spiders and boom. The fully home-brew method uses two 18" by 18" squares of 1/2-inch plywood as the plates (spiders) to hold the spreaders (bamboo poles) in place, and a 4 1/2-foot piece of 2 x 2 lumber as a boom. You also will need 16 U-bolts, 8 6-inch angle brackets and a larger U-bolt for clamping the 2 x 2 boom to your mast. This method is sturdy and inexpensive, but has the disadvantages of weather exposure and wind load.

As shown in the illustration, four poles are clamped to each plywood square as spreaders, with two U-bolts holding each pole in place. The squares are then fastened to each end of the 2 x 2 boom with four angle brackets, and the boom to the mast with the larger U-bolt. The construction is largely self-explanatory from the illustration.

Notes on Wooden Construction: Take one of your poles with you when you buy the 16 U-bolts, and get the bolts as nearly as possible to fit snugly over the pole—larger bolts will hold, but they press on only one surface and tend to crush the pole. Get galvanized bolts and angle brackets and brass or otherwise weatherproofed screws for fastening the brackets, or everything will quickly rust and corrode solid and if you ever want to adjust or disassemble your Quad you won't be able to do it without a hacksaw. To retard warping and splitting of the boom and plates, prepare everything with several coats of varnish or outdoor paint after you have drilled the U-bolt holes. A nice light-blue paint on the plates and boom will make the antenna less conspicuous against the sky. In fastening the 2 x 2 boom to the mast, make a shallow groove in the boom which just fits the mast—no more than half an inch deep so you don't weaken the boom. To make a perfectly snug fit, wrap heavy sandpaper around a section of the mast and use this as a sort of giant round file to make the groove. Be sure when you get the 2 x 2 piece for the boom that you have a good dry piece of lumber, or

later warping will twist the whole affair out of shape.

One of the major problems of the wooden Quad is that the two plywood plates offer considerable wind load—if a good brisk wind happens to blow at right angles to the plates, you have what amounts to two wooden sails up at the top of your mast. One way you can cut down on this problem somewhat is to drill several one-inch holes in the plates after you have drilled the U-bolt holes, as shown in the illustration. These holes won't weaken the plates much, and although they don't cut down the wind load all that much, they will at least help.

By far the easiest way to home-build a Quad is to do the whole thing of metal and eliminate the weathering and wind load problems from the start, plus gaining permanent strength and durability. The Cubex Company (3322 Tonia Avenue, Altadena, California) supplies what they call a "Foundation Kit" exactly for this purpose. For \$27.50 Cubex will send you a package of two aluminum spiders to hold the poles, special metal straps to fasten the poles into the spiders, a ten-foot length of 2-inch aluminum tubing which you cut to make boom and mast stub, plus a clamp for fastening the boom to the mast. Having made Quads by the plywood-plate method described above, by wiring poles directly to the ends of booms, by using metal angle-irons welded together to make spiders, and by about every other possible method, I finally have put together a Quad with the Cubex kit, and I recommend it highly for ease of assembly and sheer ruggedness. For pure strength, the Cubex foundation should stand up easily to a hurricane, and in fact looks like nothing would bring it down short of an attack by angry neighbors armed with sledgehammers.

Complete your Quad from details given in the March S9.

S9

Francis Fiberglass Antennas . . .

The research team that received two Naval Ordnance Development Awards for fiberglass research, now offer these new fiberglass antennas . . .

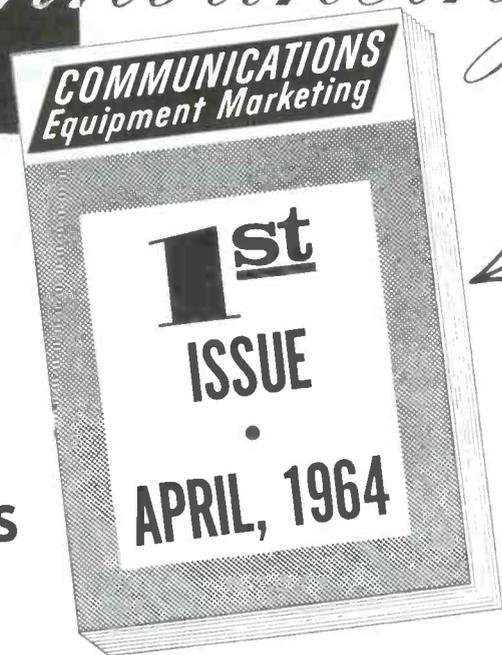
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Build the SIGNAL SNATCHER MARK II

A 2 STAGE LOW NOISE NUVISTOR PREAMP

by ELWOOD C. THOMPSON, 19W5462

The article on the "Signal Snatcher" in the Dec. '62 issue of S9 brought many comments and inquiries from all over the United States and from GRS stations in Canada. Many asked "How about a *two* stage pre-amp"? A challenge like that couldn't be ignored, naturally, and the result is the improved version shown here. If you were one of the builders of the original model and find that you could use even more RF gain, this new, improved version should more than satisfy your requirements.

The aim of good receiver design is to maintain the best signal-to-noise ratio at the receiver output. Regardless of the noise figure (more about this later) the receiver that is improperly designed to *match* the signal will be a less efficient receiver. Many commercial CB receivers are a compromise in this respect.

The noise generated within a receiver, and not that coming in on the antenna, is the limiting factor in CB receiver sensitivity. The more gain an RF amplifier stage provides for a given amount of noise generated, the better will be its weak-signal performance. Tube performance falls off as we go higher in frequency and the RF amplifiers have to be run "wide open" to produce enough gain to make these weak signals audible. There is still a lot of external noise, but much of the "hiss" that is characteristic of a "hot" CB receiver is tube noise, generated within the receiver itself.

For the reception of weak signals, it is desirable to have as much gain as possible ahead of the mixer stage of your regular receiver. This would insure that the signal level would be strong enough to completely

override the noise from this stage. In general, the best signal-to-noise ratio can be obtained from a receiver when the first RF stage or stages are operated at maximum gain. It should have provision for control of overall gain of the stages. For good signal-to-noise ratio, one must strive for high gain RF amplification, exclusive of regeneration. Two stages of grounded-grid RF amplification (as used in this model) are better than the cascade circuit using these same tubes. The gain per stage is low, hence the two stages. The noise figure is lower than anything on the market and is extremely stable.

PARTS LIST

- C_{1,3,6,8} 5 uufd. disc ceramic capacitors, 500 volts
- C_{2,4,5,7} 9,10,11 .001 ufd. disc ceramic capacitors, 600 volts or more
- R_{1,3} 68 ohm, 1/2 watt resistors
- R_{2,5} 18K ohm, 2 watt carbon resistors
- R₄ 1000 ohm pot, IRC Q11-108
- V_{1,2} 6D54 Nuvistors
- J_{1,2} Coax connectors (UG-274 or 50-239)
Nuvistor sockets (2) Cinch 133-65-10-003

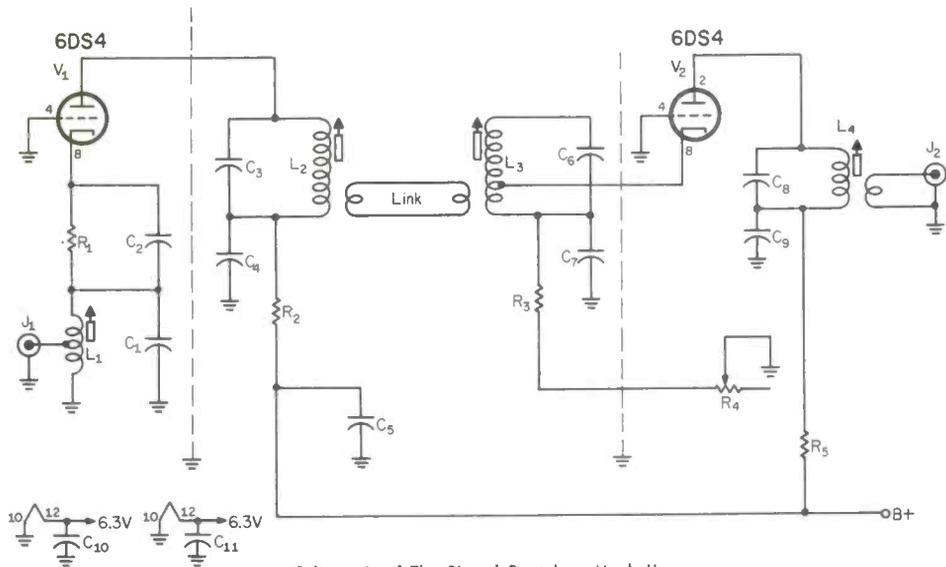
COIL TABLE

Wind all coils on Cambridge Thermionic CTC-LSM (white slug)

- L₁ 18 turns #30 enam. Tap at 7 turns from ground end.
- L₂ 18 turns #30 enam.
- L₃ 18 turns #30 enam. Tap at 6 turns from ground end.
- L₄ 18 turns #30 enam.

Interstage coupling link: 1 turn of #22 plastic insulated hookup wire.

Output link: 2 turns #22 plastic insulated hookup wire.



Schematic of The Signal Snatcher, Mark II.

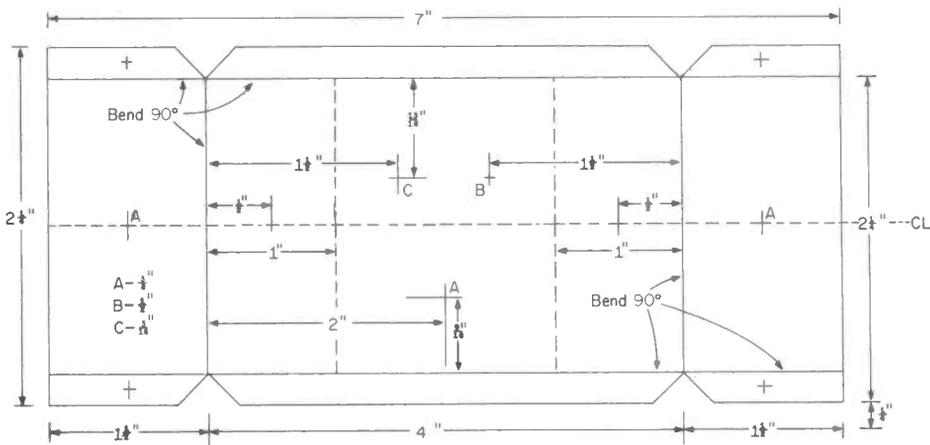
Using two 6DS4's, with their remote-cut-off characteristics, helps reduce co-channel interference. The gain control in the second stage helps tremendously when a strong signal comes on the band. Nuvistors, as used in this circuit, just loaf along. By now, you should be sold on the virtues of Nuvistors and as time goes on, will probably be seen as standard equipment in all commercial CB equipment.

As shown in the schematic the preamplifier is known as a cascaded grounded-grid RF amplifier. Actually, the preamp will provide more than enough gain, even for the most

conscientious CB'ers, striving for that last ounce of performance. The circuit is straightforward and no difficulty should be encountered if you follow the circuit, drawings and construction outline.

The cathode of each stage taps on the coils to provide the best "mismatch" to achieve the best noise figure. The bandpass circuit between stages permit higher "Q" tuned circuits, resulting in better image rejection and a more uniform response than would be possible with capacitive coupling.

If this is your first crack at constructing an S9 project, a word or two about it might



Chassis plan of the Signal Snatcher.

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 • FREE — 4 PAIRS OF CRYSTALS — FREE (Specify channels)

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• JOHNSON MESSENGER III (+BIG BONUS) **\$189.95**
 (inclds. pair Channel 11 crystals)
 Remove from car — use as Walkie-Talkie!
 • FREE — 10 PAIRS OF CRYSTALS — FREE (Specify channels)
 • AC POWER SUPPLY **\$ 29.95**

• TRIUMPH 10 TRANSISTOR WALKIE TALKIE **\$33.95**
 (Noise limiter, bias stabilizer, adj. squelch, Channel 7)
 (Uses 8 penlite cells at 85¢ add'l.) (Extra crystals \$4.95 pr)
 • BONUS! FREE PAIR OF CRYSTALS (Specify channel!)

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 Complete with 50-ohm match (\$30.00 val.)
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 • TERRIFIC GAIN — TERRIFIC PRICE

• ANTENNA SPECIALISTS SUPER MAGNUM **Sale \$29.95**
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 2. \$2.95 Mobile (CB) Handbook

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 Body mount, heavy spring, 102" stainless steel whip

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• COMMAND CB CRYSTALS **Each \$ 1.49**
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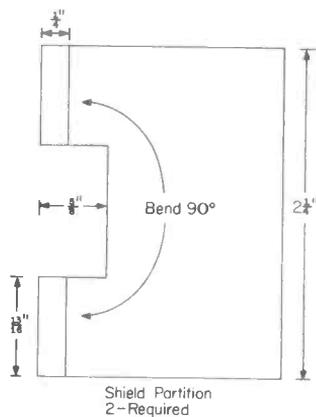
• TURNER 254C Desk Stand CERAMIC MIKE **Sale \$ 10.99**
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Check items wanted. Return ad or order with check or money order.
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Internal shield dimensions.

be helpful. The original "Signal Snatcher," featured in the Dec. '62 issue is a must on your reading list. If you don't have this issue, it may be had by writing Hal Weisner, KBG-4528, Circulation Manager, S9 Magazine. Price is \$1.

LET'S GET TO WORK!

Although there are many ways one could lay out a preamplifier circuit, we elected to build this model on a slightly longer and wider chassis box than in the original model. This type of construction allows easy access to all the components during wiring and testing. Again, it should be emphasized to follow closely the drawings so as to obtain the same results.

1. Layout the main chassis box and shielding members as shown in figure 2.

2. Drill mounting holes for coaxial connectors, tube sockets, coil forms, shields, and gain control.

3. Bend chassis (starting with the outside flanges) and shield partitions.

4. Wind coils L₁, L₂, L₃, L₄. Be sure to provide tap points on coils L₁ and L₃ as outlined in coil table.

5. Wire capacitors C₁, C₃, C₄, and C₅ across coils.

6. Mount Nuvistor sockets, coaxial connectors, and all coils.

7. You'll find it an easier job if you wind the interstage coupling link and output link before making any connections to the coils. The links should be wound in the same direction as the other windings and at the top of the coils.

Continued on page 60

HALE 'N HEARTY

by ALVIN HALE



"How's this for a tried and proven CB rig?"



"Pssst! Cheap communication systems?"

ALL NEW 3 COLOR 1964 CB MAPS—Yes the famous red-on-white S9 map has been sold out. We've reprinted it in striking red and black on a gold background, big 8½" on 11" size, and on heavier paper too! You won't want to miss this CB value, and they will be gone before you know it. These are only 35¢ each, postpaid. Bulk orders of 10 or more, only 25¢ each. Order now! Send to: Wall Certificate, S9 Magazine, 300 West 43 St., New York, N. Y. (10036)

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- 3 IT IS MANUFACTURED TO STRICT MILITARY SPECIFICATIONS. For quality assurance it is manufactured under strict compliance with Mil Q9858.
- 4 IT HAS HAD OVER 2,000,000 MILES OF FIELD TESTING FOR EVALUATION AND COMPARISON. It has been field tested and compared to other antennas far over 2 years by independent laboratories under all weather and terrain using all popular transceivers and antennas.
- 5 IT CANNOT AND WILL NOT CORRODE. BECAUSE: it is all brass and stainless steel construction, and chrome plated to strict military specifications.
- 6 IT OPERATES IN ALL KINDS OF WEATHER. BECAUSE: Teflon wire is used on all transformer windings with Mylar for insulation.
- 7 IT DOES NOT REQUIRE DETACHING OR TIE DOWN WHEN GARAGING, BECAUSE: taper ground 42" flexible stainless steel whip bends to small radius.
- 8 IT DOES NOT REQUIRE CUTTING OR CLIPPING FOR TUNING. A small recessed screw-driver slot adjusts for perfect match in seconds.
- 9 IT MOUNTS AT ANY CONVENIENT LOCATION. BECAUSE: Standard PL-259 fitting connects to many existing mounts or may be mounted anywhere with Standard UG363U fitting.

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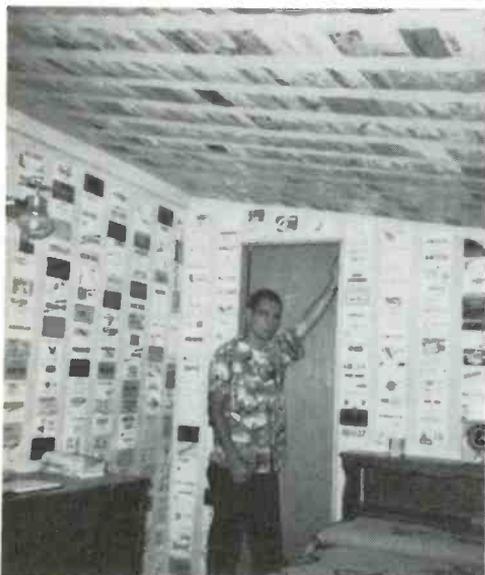
SOME DISTRIBUTOR TERRITORIES OPEN.

February 1964 • S9 • 29

DAN'S CB PARADISE

DROOL-WITH-ENVY DEPARTMENT

by FRANK KARCHER, KDD1150



pass by. In the little more than 13 months that Dan has been radioing, he has collected more than 8,000 QSL cards and he has them all over four walls and ceiling covering them completely. This is always quite a sight for a visitor to see. Each visitor signs a guest log.

Dan now operates a 23 channel Browning with a Magnum 27 antenna. The antenna is located on top of a fire tower just outside of the radio shack. It is an ideal spot for radioing because the elevation is more than 3000 feet above sea level and it is right on the edge of a big dropoff. Dan can easily talk to stations 80 to 100 miles away daily. His 23 channel Halli-crafter CB-3A is now mobile and he uses a Range Expander on it. He has a Jeep with a Globe CB100 and also uses a Webcor Walkie Talkie for talking to his base when he goes for a hike in the mountains. The monitor channel in this area is Channel 11.

On the desk with the Browning is a control panel which is used to switch CB voice receive to many different places; to the fire tower for monitoring outside or at the picnic area; to the living room; to the den; or to the storeroom and workshop. A switch can also pipe it to a Webcor Tape Recorder. Also on this panel is an antennae switch; jacks for all speakers on the grounds for the tape recorder; manual switch for the "On The Air" sign; and a four way selector switch for changing the antennae to other radios or to a direct ground in the case of a severe lightning storm. A blitz-bug is used on all antennas. There is also a jack for earphones.

Outside and on the side of the firetower, Dan has installed a four-element Gizmotchy Beam. He can switch from the Magnum 27 antenna to either the vertical or horizontal Gizmotchy.

An intercom set is used between the radio shack and the living room of the house. Be-

A person traveling along the Blue Ridge Parkway high in the mountains near Spruce Pine, North Carolina would never realize that just 900 feet from the main highway, hidden completely from a persons' view, was a complete CB paradise. This is the case of Dan Guthrie. His radio shack is complete in every detail and I will try to explain it to you.

Dan, age 20, got into CB Radioing a little more than a year ago. He applied for his license January 1st, 1962 and received it on April 3rd, 1962, thus becoming KDB1435. On June 1st, 1962 he bought a new Halli-crafters CB-3A and so his radio life started. Before long, he had equipped his set with 23 channels.

His shack is located at milepost 324.8 on the Blue Ridge Parkway and CB'ers passing by are always welcome to stop by for a chat, a cup of coffee, and an exchange of QSL cards. Many persons are radioed in as they

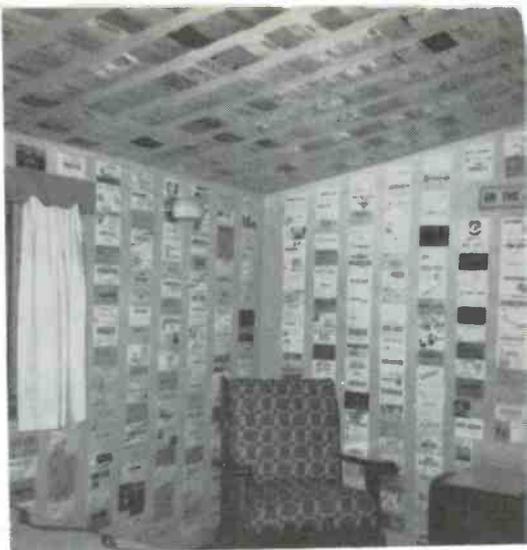
cause of the high winds at times on the mountain, installed on the tower is a Lafayette Wind Anomometer for wind directions and velocity so that Dan will know which way is best to head the beam antennae towards the wind in case of heavy winds. The meter itself is on the radio table next to the antennae rotor switch.

Dan has a selection of mikes that he uses for his Browning but the one he uses the most is the Astatic D-104. He also has the Browning mike and the Turner model 254C desk mike.

Many persons stop by to talk back to their base stations, should it be within their range. A "notice" is posted on the Browning reading as follows: "After you have made contact immediately switch to another channel." Channel 11 is rather busy in this area and Dan does not like to tie it up or use it unnecessarily.

To complete his weather station and besides the Wind Anomometer mainly for the many persons that call for a weather report on the mountains (mostly in the winter) he has a barometer, indoor-outdoor thermometer, snow gauge, and a rain gauge. A 24 hour clock hangs above the radio and next to the six inch exterior speaker for the Browning.

FCC Rules and Regulations (Part 19) governing the Citizens Radio Service is near the radio and constantly in view. Also nearby is a complete set of call books and many books of addresses that has accumulated. These addresses are from persons that Dan has sent a card to. If one of his cards has



been answered with a card then an "X" is placed by their call letters. Their call letters are also filed in the back of the book and a page number lists where it can be found in that book. He now has five books of names and addresses.

There are 1453 QSL cards on the walls and ceiling but they are completely full, so a two drawer file is on the end of the desk with the cards indexed as to states. Dan has never knowingly or willingly missed sending an answer to any card that he has received, however they do come in so fast at times that he admits to getting a little behind in answering cards.

On one wall and to the side of the radio desk is a large Rand McNally wall map (2½ by 4 ft.) of the United States. A map tack is put in the map for each town or city that he has received a card from. This is not done for each card, but for each different city that a card is received from.

On a shelf right above the Browning, Dan has a Hallicrafter S-38 receiver that he uses for listening to hams and other stations. He is seriously thinking of going into Ham Radio sometime in the future.

He is an active member of the Lake City CB club of Marion, North Carolina, and he handles many relays for the club members.

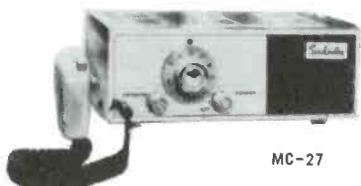
All of the S9 magazines since their start are handy for references. A pair of Dalmation dogs lay on the floor by Dan as he radios his friends. There is no telephone on the small ranch so the radio is his only means of communications.

All of this seems to me like a real "CB Radio Paradise."

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MC-27

- Press to talk ceramic mike with coil cord and mike jack
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- 6 channel crystal controlled transmit and receive
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- Universal power supply offering 6 and 12 volt DC and 117 Volt AC... all in one unit
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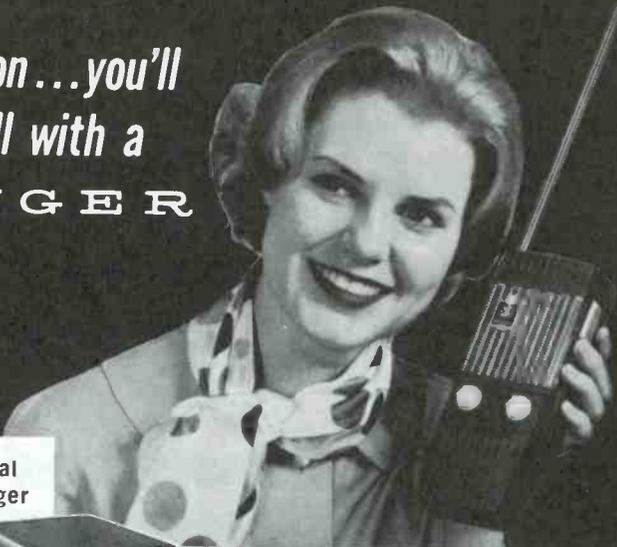
CITY _____

ZONE _____

STATE _____

February S-9

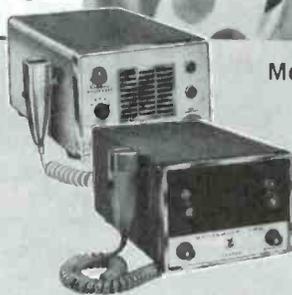
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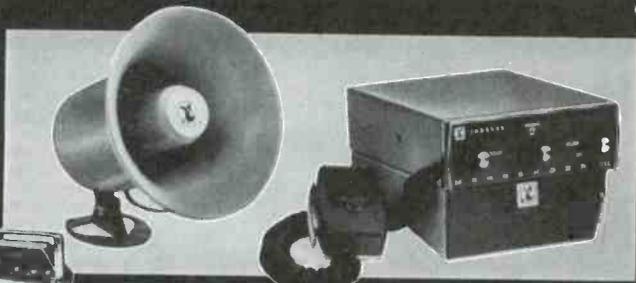
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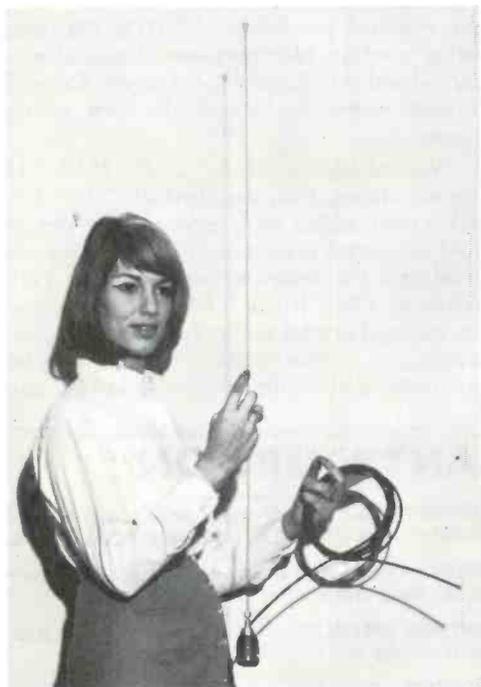


ON THE COUNTERS

An old-line communications company has just entered the CB field, G.A.M. Electronics, Inc., 138 Lincoln St., Manchester, N. H. Their new unit is known as the GAM-11 and it's a base-loaded type mobile antenna only 38 inches long, intended for roof, cowl, or

channels. Price is \$14.50 direct from the company or from GAM's dealers throughout the country.

Last month we told you about the new International Crystal EXECUTIVE 750 trunk-mounted remote-controlled CB delight. We didn't know it at the time, but we had an *early* scoop on the unit that the photos weren't yet released. This month it seems



trunk lid mounting. It features a tunable loading coil at its base and when correctly adjusted the SWR is less than 1.2:1 on all 23



that we have caught up with ourselves, so we can now give you a peek at what the thing looks like. Here you see all that goes "up front" under the dashboard or in the glove compartment. The trunk unit is about the same size as a standard EXECUTIVE 50 or 100. The EXEC 750 should certainly save a lot of domestic battles ("You're not going to put that big radio under *my* dashboard"!) because you get all 23 channels in less than the size of a small transistorized 1 watt unit (by the way, the EXEC 750 runs



The Pearce-Simpson Companion II

a "full" five watts input). If you want further information on this, and some other new EXEC units, drop a card (QSL will do) to Uncle George, International Crystal, 18 North Lee, Oklahoma City, Okla. Tell the old Rebel that S9 sent you and he'll send you some jazz that he sends only to special customers and accounts.



We recently noticed our Editorial Assistant, Lilia, dancing the pachanga around the office. When questioned as to the reasons for such strange behavior (she usually does the paso-doble), she told us that her native land of Colombia just purchased 1000 Cadre CB rigs for their Civil Defense network, with the eventual possibility of 50,000 CB units being used for such purposes. The deal was formalized by Colombian Consul General Ernesto Caro, in New York. Nice going, Cadre!

Pearce-Simpson, Inc., 2295 N.W. 14 Street, Miami, Fla., launched its COMPANION with added crisp new cabinet design and advanced communications features, including a transistorized power supply (115 VAC/12 VDC. It has 5 fixed channels, plus an external crystal socket for maximum flexibility, an illuminated channel selector indicator, and an illuminated slide rule tun-

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Johnson Tuneables—Xtals & 1½ Watt Handie-Talkie
NEW MESSENGER III ALL TRANSISTORIZED.

APELCO MODEL AR 10, COMPLETELY RUGGEDIZED.

Tele-Mate—The first all transistorized unit with
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ANTENNA SPECIALISTS—Including the MIGHTY MAG-
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STINGERS—Tried, true and beautiful!

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ing dial for the receiver. Also included is all hand-wired circuitry, superior squelch circuit, pre-set noise limiter, aludized weather/rust proof aluminum chassis, jack for S-meter, and a modulating light for transmit, to name a few of the features. It weighs-in at 12 pounds and sells for \$189.50.

A note from National Press, Inc., North Chicago, Ill., advises that they are, in fact, *not* interested in QSL business, as indicated in the October, 1963, issue of S9. Please cross them off the list in your October issues, gang.

Echo Communications Inc., Box 223, Cedarburg, Wisc., has announced their new "Commander" walkie talkie unit. This is a Part 15 set which is delivered with a channel 7 rock. The circuit contains 9 transistors and 1 diode and is operated from penlight batteries (75 hours life). The unit sells for \$89.95 per pair.

A new catalogue of all kinds of electronic goodies has just been released by DeMambro Radio Supply Co., 1095 Commonwealth Ave., Boston, Mass. The catalogue contains 184 pages covering the products of over 90 volumes.

DON'T LOOK AT THIS



We warned you. If you dared to look at the above seal you have incurred the curse of the great Yona Schimmel on all of your CB equipment. Do not be surprised if your 6AQ5's fill with potatoes or liver.

There is only one hope left. If you subscribe to S9 RIGHT NOW we will have our official curse-lifter sing an incantation for your rig.

If the incantation doesn't work (and it won't) you will need a subscription to S9 to advise how to get your station working properly again. S9 will give you, each month, simple construction projects, humor, general interest features, late FCC news, club news, and new products. Don't wait, the BIG SWITCH IS TO S9—the leader! Rip out the postage-free envelope hidden between pages 48 and 49, fill it in, enclose loot, and fling it into the nearest mailbox!

Rates: 12 issues—	\$5
24 issues—	\$9
36 issues—	\$13

S9 MAGAZINE
300 West 43rd Street
New York 36, N. Y.



A Part 15 FM transmitter which fits into a shirt-pocket has been announced by Kinematix, Inc., 1616 North Damen Ave., Chi-

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DeWald	T-910B	1115	\$ 44	5 T	11 T	yes	110
Eico	760	2646	\$ 39	1 T	11 T	yes	110
Globe	CB-100	2589	\$ 59	3	11	no	12 & 110
Gonset	G-12	2788	\$ 69	4	11	no	12 & 110
Hallicrafters	CB-3	1151	\$ 89	8	11	no	12 & 110
Hallicrafters	CB-3A	1292	\$ 99	8	1	no	12 & 110
Hallicrafters	CB-3A	276	\$ 99	8	1	no	12 & 110
Hallicrafters	CB-3A	1175	\$109	8	11/S-meter	no	12 & 110
Hallicrafters	CB-3A	2616	\$ 99	8	11	no	6 & 110
Hallicrafters	CB-3A	2617	\$119	8	11/S-meter/HA-3	no	12 & 110
Hammarlund	CB-23	3 in stock	\$149	23	23	no	12 & 110
Hammarlund	HQ-105TR	1149	\$139	1 T	11 T	yes	110
Hammarlund	HQ-105TRS	333	\$149	1 T	2 T	yes	110
Heath	CB-1	1963	\$ 29	1	11	yes	110
Johnson	Messenger I	2 in stock	\$ 74	5	11	no	12 & 110
Johnson	Messenger II	299	\$119	10	11	nc	6 & 110
Johnson	Personal 100mw	1843	\$ 59	1	11	no	batteries
Johnson	Personal 1w	1155, 2656	\$ 89	1	11	no	batteries
Knight	C-27	372	\$ 49	2 T, 2 R	1 T, 11 R	yes	110
Knight	KN-2500	2736	\$ 69	6/S-meter	7 T, 9 T, 15 T, 7 R	yes	110
Lakeshore	D-55	987	\$ 79	5	11	no	12 & 110
Metrostar		1121	\$ 79	8	9	yes	12 & 110
Philmore	TC-612	1033	\$ 29	3	15	no	12
Polytronics	PCN-12	3 in stock	\$ 99	4	7	no	12 & 110
Polytronics	Polycom II	764	\$ 79	4	11	no	12 & 110
Raytheon	TWR-2	504	\$ 79	5	11	no	12 & 110
Regency	CBM-27	299	\$ 59	2 T	11 T, 20 T	yes	110
Regency	CBM-27	881	\$ 59	2 T	11 T	yes	6
TEXAS Research	Hallmark 2-12	2597	\$ 69	12	6/S-meter	no	12 & 110
USL		2 in stock	\$ 39	5 T	11 T	yes	110
Vocaline	ED-27	1390	\$ 69	1	1	no	12 & 110

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(Show area code when possible)

Send latest Bulletin on new and used C.B. gear.

ago 40, Ill. Dubbed the IMP II, the little unit fits inside of a cigarette pack, and will transmit a signal up to 200 feet with perfect clarity and fidelity on any frequency within the FM band (88 to 108 mc/s). It weighs 7½ ounces and sells for \$49.95 complete with mike and leather case. It's FCC type approved.

S9 Lab

Reports

THE INTER-MARK CIPHER 1000



This month we put the Inter-Mark Cipher 1000 through its paces in the S9 Lab. The rig is a portable Class D unit which is operated from 18 volts worth of flashlight batteries or from an external AC power supply (optional accessory).

The basic circuitry of the unit is centered around 15 transistors. The receiver is a single channel superhet job with a 455 kc/s IF, the transmitter is, likewise, a single channel unit with crystals supplied for channel 11 operation. The Cipher has a built in chrome plated telescoping whip antenna, but the set may also be used in conjunction with a standard external CB base station or mobile antenna via a Motorola type socket on the side of the cabinet. An earphone is supplied with the unit and may be plugged into a socket which is provided on the front panel.

The Cipher 1000 is basically a two piece unit, that is to say that both the speaker and

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- ENCODER-DECODER
- NO TROUBLESOME RELAY
- SUPERIOR NOISE IMMUNITY
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- PREAMPLIFIER FOR GREATER "TALK POWER"
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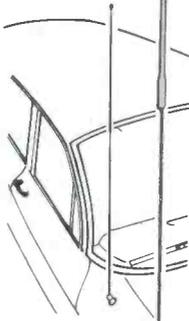
For Tops in CB-AM Mobile Performance

Hy-Gain's

DUO-TOPPER

**Completely Packaged
Ready to Install**

The Duo-Topper, designed to replace an existing AM broadcast whip, is a highly efficient mobile antenna for use on both Citizens Band and AM broadcast wave lengths. Duo-Toppers feature Hy-Gain's exclusive top loading technique that has proven in test after test to deliver performance far superior to that attainable with base and center loaded antennas. Additionally, it offers today's improved version of the industry's first unique, solid state isolating coupler designed to adapt a Citizens Band antenna for use in CB transmission and reception and for AM reception. The sleek, chrome plated telescoping Duo-Topper with its thin-line Topper capsule permanently encapsulated in polyethylene plastic extends to an overall height of 50 inches—telescopes down to 28 inches for low garaging. The Model TTMP Duo-Topper comes completely packaged, ready to install with chrome plated mount, solid state coupler, AM radio plug, PL-259 connector and all necessary coaxial cable. Net Weight, 2 lbs. An outstanding value, the Model TTMP sells for\$14.95 CB Net



Non-Telescoping Model TMP

Same as Model TTMP above except 50" Topper whip is high-flex 290M PSI stainless steel and does not telescope. Comes completely packaged, ready to install same as Model TTMP. Sells for \$14.95 CB Net

See them today at your favorite Hy-Gain distributors or write for the name of the distributor nearest you.

HY-GAIN ANTENNA PRODUCTS CORP.

8449 N.E. Highway 6
Lincoln, Nebraska



the mike are located in the push-to-talk mike case, and the batteries and circuitry are in the silver and black cabinet section. Actually, the speaker is dynamic and is the same unit as the mike. A volume control and variable squelch are located on the cabinet section.

We took the unit back into the dungeon which we call the S9 Laboratory and had our deft engineer, Bill, KBI1480, put it through its paces on the bank of test gear. The unmodulated output of the Cipher 1000 was slightly less than half a watt, although it kicked up to well over a half watt on modulation peaks. Modulation sounded quite good, although it was noted that it was slightly lacking in high frequency response.

The receiver section checked out with a 5 uv sensitivity for 10 DB signal-to-noise, and a 1 uv signal opens the squelch and can be copied. Image rejection of the unit is 12 DB.

With the set operated from indoors in downtown New York City, we ran a check with KBC8384 and 2Q4117, located about a mile away and they seemed to copy us without any particular difficulty—and don't forget that this was on Channel 11, which is as crowded as Main Street.

The Cipher 1000 sells for \$129.95, weighs 7 pounds. The manufacturer, Inter-Mark Corp., is located at 29 West 36th St., New York, N. Y. 10018. The set is sold through dealers, and the manufacturer will furnish you with the name of a local dealer if you want to see the Cipher 1000 in person.

THE COMTRAN C-II AUDIO COMPRESSION AMPLIFIER

The battle for what CB'ers like to call "talk power" has recently added a new weapon, the Comtran C-II audio compression amplifier. This is a relatively small device which connects between your mike and the mike input on your rig (no internal wiring changes required in the rig). Even the power supply is self contained because the C-II operates from its own 9 volt battery. Since the C-11 is fully transistorized, the battery life almost equals "shelf life."

What the compression amplifier does for you, in effect, is make your signal *sound* louder (it doesn't increase the wattage of

Continued on page 61

THIS MONTH'S BRAINWASHING: *Subscribe!*

PART 15 KORNER

by DEAN DETTON, NORTHERN 17

74 S9 MAGAZINE
300 WEST 43 ST.
NEW YORK 36, N. Y.

Leonard Carbalan, NORTHERN 2235, 294 W. Front St., Clearfield, Pa., asks that we again run the P-15 channel designation letters together with the corresponding frequencies. We're glad to help you out Len, and we might add that if you have difficulty in ordering crystals for these frequencies, you can easily find them in any catalogue under the "radio control crystals" section.

From Kalamazoo, Mich., we hear from Harrold Stafford, Jr., CENTRAL 751, Sec.-Treas. MCEU, Kalamazoo County, 711 Stockbridge Ave., Kalamazoo, Mich. He says that he was amazed that his P-15 signal could travel to such great distances. He added some kind words about S9, for which we were (and still are) most grateful.

A question from Jeff Shipley, of Clinton, Ill. Jeff wants to know how to increase the power if his Lafayette HE-82 walkie talkie. There are several ways which this might be accomplished Jeff, however the set would

PART 15 CHANNELS	
Channel A	26.995 mc/s
Channel B	27.045 mc/s
Channel C	27.095 mc/s
Channel D	27.145 mc/s
Channel E	27.195 mc/s
Channel F	27.235 mc/s
Channel G	27.245 mc/s
Channel H	27.265 mc/s

then be running too much power for legal P-15 operation (just like running 8 watts on Class D).

CENTRAL 1596 is a strange and rare bird. He's a P-15'er alright, but he gets his kicks on the standard broadcasting band with his Knight-Kit Radio Broadcaster. He's got a novel idea for his antenna too! Really increases his range. Bob says that he still makes the scene on 11 meter P-15 with his Lafayette HE-82 walkie talkies.

Here's another novel P-15 application. This time we hear from James McShane, 2436 Fontenelle Blvd., Omaha 4, Nebr., that he is operating in the FM broadcast band

APPLICATION FOR FREE PART 15 STATION IDENTIFIER CERTIFICATE

To register your Part 15 "unlicensed" CB station with S9 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
300 West 43rd Street
New York 36, N. Y.

Name: _____ CB Call: _____

Address: _____

City: _____ Zone: _____ State: _____

Part 15 Channel: _____ Type of unit: _____

No. of units: _____ Date: _____

Signature: _____

LOOK!



**CB PLATES
FOR YOUR "MOBILE"**

ATTRACTIVE LOW-COST IDENTIFICATION PLATES

Rugged colorful "license-size" CB plates for your car! Choice of Red, Blue or Black on white background. (Ask about special plates for your CB Club, too.) Embossed steel, baked enamel finish. Quality guaranteed! \$2.00 ea. or 2 for \$3.50

Order Today. (And ask about special club plates.)

COLUMBUS MARBLE WORKS

P. O. Drawer 791 — COLUMBUS, MISS.

LET'S CLEAR THE AIR About C/B Crystals

TO THE CITIZENS BAND USER WHO KNOWS AND WANTS THE VERY BEST: Today's James Knights Citizens Band Crystals are built with the same care that is exercised in the production of crystals used in space programs and by the Army, Navy, Air Force and other discriminating users. All Golden Line Crystals exceed the industry standard, set up in the Military Specification MIL-3098. All crystals including Citizens Band, are unconditionally guaranteed.

**DISTRIBUTOR AND
DEALER INQUIRIES
INVITED**

THE JAMES KNIGHTS CO.
Sandwich, Illinois

using a G.E. Tunnel Diode. Sounds wild!

In Topeka, Indiana, two P-15 equipped safecrackers got hung up by an alert CB serviceman. It seems that Elmer Henshaw, who conducts a radio-TV shop in Topeka was tinkering with a faulty CB rig on the workbench late one night. As he was peaking up the receiver he heard a voice say, "Somebody just pulled up here in front. I guess it's all right. Just a couple living nearby. They're going in."

Henshaw then heard a buzzing noise and the voice then asked, "Are you drilling now?" Another voice answered, "We're drilling but we're having a tough time."

Deducing that he had tuned in on a conversation between safecrackers and their lookout, Henshaw called upstairs to his XYL, Betty, and asked her to look out of the window. He then contacted the town marshal. "Hold on, horses and buggy coming," said the voice.

Peering from the upstairs window, Betty saw a horse pulling an Amish carriage—right past her own 10-20. Henshaw told the town marshal that the crooks were not more than two blocks away.

"Watch me through the store window and I'll signal when it's clear," said the voice. "This thing isn't working good, I'll clear out of here and come in and help," the voice added. Betty then watched the lookout man climb out of his car parked in front of a neighboring hardware store. The town marshal, who carries no gun, then crept closer and got the license number of the crooks' car.

It turned out to be a close thing. The robbers, unable to crack open the safe, drove away before the police arrived but a patrol car halted them on the outskirts of town.

The robbers were locked up in jail. Their confiscated walkie talkie was turned over to Henshaw—for repairs!

Bob Crownover, CENTRAL 1596, P.O. Box 211, Waynesville, Ohio wants to work out some experimental skip skeds. He's using a homebrew rig on the roof. He's interested in Part 15 single sideband. Look for him on Channel 10, also on the broadcast band (he has a Knight-Kit Radio Broadcaster/Amplifier. He has a pretty wild antenna which we are going to try out in the S9 lab, and if it is legal and does what he says it will, we'll do an article on it.

CB CASEBOOK

by **LEE AURICK, KCD5514**
MT. PLEASANT RD. RFD 1
COLUMBIA, PA.



This month's mailbag brings to light one of the most aggressive and rapidly expanding CB club groups with whom your reporter has ever come in contact.

They call themselves the Dutchess County Five Watters, Inc., and from all reports they will probably have to change their name to something like the Five-County Five Watters before long.

Organized in April 1962, and incorporated in New York State in June of that year, the club has had hard-driving and far-sighted leadership ever since. The original incorporators were Roy Normandin, Ernie Davis, Joe Schmitt, Thomas Johns, and James Harrison, Jr.

Public Service has characterized this group since it was first organized. At present the club is affiliated with the Sloper-Willen Ambulance; a local skin-diving club; a local hard-hat diver, and an airplane and pilot

who is on call for search and rescue operations. CB radio ties all phases of the emergency organization together.

How ambitious can you get? For example: How many organizations have their own Blood Bank? The Dutchess County Five Watters do, and their forty active members appear to know what to do with it, and how to use it.

Every time they send out a call for mobile stations they succeed in obtaining the support of between twelve and twenty units, reporting ready for action.

Involving the county Sheriff's office at an early point in their organization led to permission to mount their own antenna on the roof of the Dutchess County Sheriff's Office in Poughkeepsie, New York.

In addition to the mobile units, eight



marine units are also on call, day and night.

Many of the members are employees of the Montgomery Ward store in Poughkeepsie, and this store has kindly offered to place their CB equipped vehicles at the club's disposal in the event of emergencies.

To date, the club has demonstrated on many occasions that they operate in the public interest. Some of these are: three searches for lost children; a search for a lost man; a search for an escaped convict; communications following a train wreck; and two accidents on the new Beacon-Newburgh bridge.

The club has just about lost count of the motorists whom they've helped, with road assistance or directions, and are now rapidly filling a scrap book with thank-you notes and clippings.

Not content to rest on their laurels, the group is presently working on emergency affiliation with the New York State Guard, Coast Guard, Red Cross, New York State Security Forces, and the further implementation of communications with the Dutchess County Sheriff's Office.

Ray Coult, one of the prime-movers in the Five Watters, has indicated very successful results of the first county-wide network. The initial test was so well organized that the twelve stations throughout the county were

contacted in less than three minutes. Eventually, each base station will have between five and ten mobile units under its direction in a local network.

Future plans are projected to include additional communications with four surrounding counties.

As evidence of their success, by the time you read this, the Five Watters will have rung in the New Year with a dance party attended by 150 couples.

Ray tells your reporter that it has been a great deal of work to get the club to their present level of organization, but this year's slate of officers has carried on the wonderful start. The officers are: President, Herb Ireland! Vice President, Charles Villa, Recording Secretary, H. A. Mix, and Treasurer, Joe Schmitt.

Clubs with this public spirited approach to CB radio are truly serving in the public interest. Your reporter would like to have similar information about other groups, and in particular, details as to how they have made a contribution through the use of CB radio. This column will continue to be devoted to the recording of such events, as well as to reporting important commercial applications of radio in the Citizen Radio Service.

How about telling us about your CB organization, or use of CB radio?

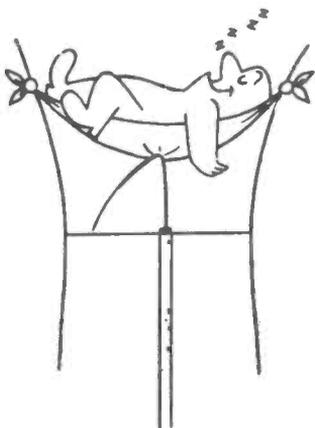
AT LAST: A PART 15 HANDBOOK & CALLBOOK

You bugged us for months for it, so we whipped together an unbelievable book of Part 15 goodies. Yes a complete callbook of the thousands of Part 15 stations registered with S9 (complete to date of callbook publication), plus a Part 15 call area map and features on how to obtain maximum use and enjoyment from your Part 15 "legal hobby" CB station.

UNBELIEVABLE

Reserve your copy now before they're all gone. If you have a registered S9 Part 15 identifier the book is only 50¢ per copy (be sure to let us know your identifier number or send in an application for one when ordering). Price is \$1.00 if you aren't registered.

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ANTENNAS

by **ED NOLL, KCC2618**
BOX 23
CHALFONT, PA.

LET'S RECAPITULATE

The beginning of a new year is often a time for looking back and looking forward. So should it be for the citizens bander. Has he taken a more mature attitude toward CB operations? I think there are indications of a much more mature approach in terms of wise utilitarian use of the band plus more considerate and efficient operational procedures. Business, personal, and public service uses are coming on strong; we hope the hamming, skip craze, self-centered, and stirring-up-turmoil uses of the band will be relegated to the past.

Certainly the last several years have given us invaluable experience in the field use of CB equipment and antenna systems. We have gained a sensible understanding of the favorable attributes and limitations of CB operations. By not expecting "too much" and striving for most effective utilization of "possible results" we are at last getting the "big picture." *Good results* are a function of *good equipment* and *good operation*.

PROPAGATION

What have we learned about propagation? We have come to understand what signal line-of-sight transmission means in terms of reliable results. At range extremes we have discovered that results are variable—actual signal line-of-sight fluctuates with atmospheric conditions. As a quite general statement we can state that extended range transmission is more likely at night, early morning hours, and during the warm weather seasons.

Skip conditions are an erratic occurrence. Skip contacts are illegal and do not represent a reliable form of communications. Skip is more nuisance than excitement with respect to CB operations.

Within the signal line-of-sight range we have come to expect uniform propagation characteristics; day in and day out the coverage is there, unchanging and reliable. Five watts of input power does a fine job.

POWER

Interference, poor operating procedures, and less than optimum installations are the major causes of poor radio communications; the five watt maximum power limit is not to blame. More power output, more than likely, would increase the severity of the interference at a faster rate than it could possibly increase the area of reliable coverage.

The fine results obtained with hand-held units of two watts and less also point up the heretofore short-sighted clamor for more watts. In line-of-sight communications of the CB type, power is rather unimportant so long as all units are restricted to the same maximum.

Sensitive and selective receivers more than make-up for the low power restrictions in a way that minimizes rather than increases the possibilities of interference.

Effective power output has been increased without increasing power input by using sideband transmission. This mode of modulation concentrates more power in the sidebands while the carrier power is suppressed. It is the sidebands that always carry the useful information. Carrier heterodyning is also avoided with sideband transmission.

BASE STATION ANTENNA

How many base station antennas have you tried? The try and try again search for the most appropriate base antenna has been rather widespread the last two years. It seems that for the majority of installations the ex-

tended vertical (coaxial, collinear, or $\frac{5}{8}$ th wavelength) have been the most appropriate. The quarter-wave ground plane has many supporters. The extended vertical provides gain without sacrificing the omnidirectional horizontal radiation pattern, as do the beam antennas. Their overall length approaches 20 feet and thus they take full advantage of FCC maximum height requirements, by extending twenty feet above the twenty foot limit. The quarter-wave ground plane is a solid design, providing good matching and a favorable vertical radiation pattern.

Some beam antennas (three-element types mainly) are in use for specialized needs. Most employ vertical polarization and are rotated by motors. Some beams have become casualties of wind or have been taken down because they were eventually considered to be too much of an eyesore. To a great extent they have been replaced by extended verticals.

This does not mean the directional antenna has been ruled out. Two or more verticals can be used in various phased combinations when a directional pattern is advisable. A simple switching arrangement can be used to change the orientation of the directional pattern. Hence a change in directivity can be accomplished without physical rotation of the antenna. Some very practical arrangements will be detailed in this column over the next several months. The remote field strength indicator described last issue can be used to check out, adjust, and monitor this style of antenna.

MOBILE ANTENNA

What type of mobile antenna are you using today? Mobile antenna lengths have been on the decline. The full length $\frac{1}{4}$ -wave whip is dropping into the minority. Most of them you do see are tied down or have been broken off to a considerably shorter length.

The loaded $\frac{1}{4}$ -wave mounted on cowl, roof, or rear has taken over. As you know many of these are tunable or can be adjusted in physical length. Good matching and favorable mounting position permit them to outclass the full quarter-wave.

TRANSMISSION LINES

The standard coaxial types still dominate the field. Types with lower loss dielectric are becoming increasingly popular for base antenna installations where there is a long

span of line between antenna and transceiver.

Many mobile antennas now come through with specific lengths of line attached that permit the most favorable operation of the given style of antenna. Or the manufacturer recommends that some exact length of line be used between antenna and transceiver.

ANTENNA TEST EQUIPMENT

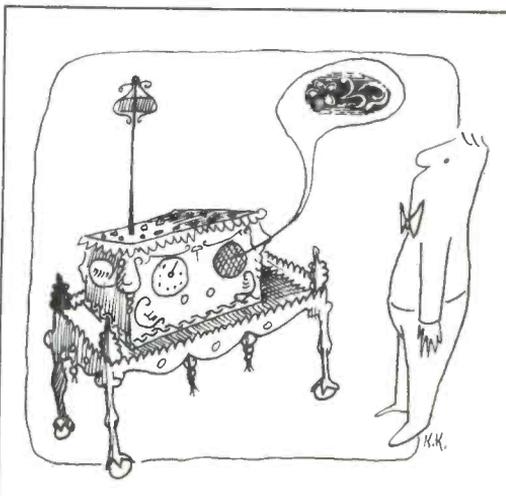
Most CB'ers now use some type of antenna tester, usually a field strength indicator or an SWR meter. The SWR meter is often quite touchy to use; the field strength indicator provides a rather certain indication of just how much influence any change has on relative power output.

The SWR meter does well in peaking a 50-ohm matched system. However, for systems that are less than ideal the readings can be quite misleading and may vary substantially with point of insertion and overall line length.

In-line wattmeters are also in use; they provide a calibrated measure of RF power output. They too have their limitations because they are calibrated for 50-ohm matched conditions. Poor SWR and resonant effects can cause erratic readings.

Despite limitations the antenna tester is a rather essential and certainly important piece of equipment for adjusting and monitoring CB antenna systems. With the trend in the direction of tunable mobile antennas and phased base station antennas such instruments are of increasing importance.

S9



CARD SWAPPERS UNLIMITED

This month's mail bag brings a card from Janice Strange, KDH0958, 2212 Lakeview Street, Lakeland, Fla. We ran a card from Janice in the December S9 and Janice says that by December *first* she had already received 722 cards, including one from a SM-43245 in Sweden. That's what we call results! She asks that we mention that she is still in need of cards from Colorado, Montana, Idaho, New Mexico, North Dakota and Mexico. Janice asks, "Where are they hiding?"

Want to add some wallpaper to a busy CB store? We have a request from Bob Fisher of Allen Electronics, 41-42 Main Street, Flushing 55, N. Y. Bob's card is nifty, the call is KBG4196, and all cards he receives will help to decorate the store.

Forest City Card Swap, 440 Washington Street, Middletown, Conn., is open for correspondence. It's a 10 member club wanting to swap QSL's. One of the club members, Bernard A. Bastura (of the club's address) needs North Dakota, Idaho, Oregon to complete 50 states.

A letter from Herb Riggle, KHG9069, ("The Old Mule Skinner"), RD #5, Gainesville, Ohio, 43701, says that even though he sends out 250 cards a month, he has yet to receive one from Alberta, New Brunswick, Prince Edward Island, Saskatchewan and Puerto Rico. Can anyone help him out with these?

Lou Bonante, 270 Walton Avenue, South Orange, N. J. isn't as specific in his QSL needs, he cables a frantic SOS: "I am in desperate need of cards. Please ask your followers to send some!"

The old "Texas Catfish" (P.O. Box 9345, Ft. Worth, Texas) qualifies for all of the S9 awards except MSA. He needs Prince Edward Island. He has cards from England, and several cards out to addresses in France.

We didn't know that "youse guys" were interested in overseas cards so much. Never let it be said that S9 doesn't "give the readers what they want." Try these on for size (but we don't guarantee any results):

Y09-8588 Nicolae Duja, P.O. Box 95, Bucuresti, Romania
OK2-917 Pavel Fischer, Brno 12, Dobrovského 74, Czechoslovakia
PY1-13332 Emanuel Filho, P.O. Box 359, Niteroi, R. J., Brasil
SM3-3256 Tord Grip, P.O. Box 1403, Bollnas 3, Sweden

Let us know if you want more of these!
We're here to meet your wishes.

Here are the lucky and proud Swappers' Award winners for this month:

- SACA 18 Ethel Shagi, KID2541, Verona, Pa.
19 Howard Ray, KDD2601, Caroleen, N. C.
20 Mark T. Ewing, KCG2291, Stauton, Va.
21 Jeffrey Weiss, KBI3023, So. Orange, N. J.
22 Elwyn Beam, 5Q2178, Vale, N. C.
- PX-25 70 Ethel Shagi, KID2541, Verona, Pa.
71 Adelbert Ekenbarger, KD10928, Hialeah, Fla.
72 Alvin W. Hampson, 17Q1067, Alamota, Kans.
73 Donald Becker, Denver, Colo.
74 Frank E. Anderson, KCJ2269, Danville, Va.
75 Elwyn Beam, 5Q2178, Vale, N. C.
76 Howard Ray, KDD2601, Caroleen, N. C.
77 Louis Bonante, KBI4170, So. Orange, N. J.
78 Al Shuhart, Jr., 2W9926, Hartsdale, N. Y.
79 Norm Payea, KHG6668, East Tawas, Mich.
80 John Adams, KEB2231, Fayetteville, Ark.
81 Lloyd J. Gosa, Jr., KDD7884, Americus, Ga.
- PX-50 58 Ethel Shagi, KID2541, Verona, Pa.
59 Adelbert Ekenbarger, KD10982, Hialeah, Fla.
60 Alvin W. Hampson, 17Q1067, Alamota, Kans.
61 Frank E. Anderson, KCJ2269, Danville, Va.
62 Elwyn Beam, 5Q2178, Vale, N. C.
63 Howard Ray, KDD2601, Caroleen, N. C.
64 Louis Bonante, KBI4170, So. Orange, N. J.
65 Arno Feltner, KED0775, New Braunfels, Tex.
66 Barry Schaffer, KBG8599, New York, N. Y.
- PX-75 25 Ethel Shagi, KID2541, Verona, Pa.
26 John Moore, Omaha, Nebr.
27 Frank E. Anderson, KCJ2269, Danville, Va.
28 Elwyn Beam, 5Q2178, Vale, N. C.
29 Howard Ray, KDD2601, Caroleen, N. C.
30 Louis Bonante, KBI4170, So. Orange, N. J.
31 J. Raymond DeShong, KJC0448, McConnellsburg, Pa.
32 Tom Marvin, KCJ3489, Richmond, Va.
33 Bob Pacheco, KFD4374, Santa Clara, Calif.
34 Harry Alvis, KCJ0456, Lynchburg, Va.
- PX-100 11 Jack Washington, KID1899, Pittsburgh, Pa.
12 Ethel Shagi, KID2541, Verona, Pa.
13 William Guggenheim, 2Q0887, Clinton Corners, N. Y.
14 Elwyn Beam, 5Q2178, Vale, N. C.
15 Howard Ray, KDD2601, Caroleen, N. C.
16 Harry Alvis, KCJ0456, Lynchburg, Va.
17 Tom Watson, KDD2173, Huntsville, Ala.
- MSA 6 Ethel Shagi, KID2541, Verona, Pa.
7 John Moore, Omaha, Nebr.
- SSC-1 9 Howard Ray, KDD2601, Caroleen, N. C.
SSC-2 3 Howard Ray, KDD2601, Caroleen, N. C.
SSC-7 1 Dan Guthrie, KDB1435, Spruce Pine, N. C.
SSC-8 1 Dan Guthrie, KDB1435, Spruce Pine, N. C.

If you want a free copy of the rules for winning these awards, send a stamped self-addressed envelope to: Swappers Awards, S9 Magazine, 300 West 43rd Street, New York, N. Y. 10036.

Two news items to remember for this month. 1: please send only cash or stamps for Swappers Awards, no checks or money orders. All checks and money orders will be returned with the applications to the senders. 2: We have received a number of heavily cancelled and otherwise mutilated QSL's for

QSL 

YY4-325

VALENCIA - EDO CARABOBO VENEZUELA

MANUEL LANDA
 P. O. BOX **537** CARACAS VENEZUELA

YY 5MLR-1038

Confirmo QSO con 2Q4574

Fecha: _____ a. m. p. m.
 Hora: _____
 Su Señal: _____ Trans: _____
 Recep: _____ Antena: _____

73 y D X

YY5-EMR-1452



ROMA and ED ROEBER APARTADO 11557
 CARACAS VENEZUELA

YY4-167



73's y D DEBE VALENCIA CIUDAD INDUSTRIAL DE VENEZUELA

GRU: SISON ROJAS L. QTR: APARTADO 04 Valencia, VENEZUELA

Confirmo QSO con ESTACION EDC 8002 Fecha: Oct. 12, 1963 QTR: _____

MANEJA 11 motor. CANAL 50 TRANSMISOR Lafergata HT-21

RECEPTOR Sane ANTENA 3 element. beam

Hay complicación con este QSO al cual espero se repita pronto.

Atentamente *[Signature]*

Credits for these cards are: YY4-167 sent in by Burton Porter, KHC8002; YY5MLR1038 sent in by Bod Schapert, 2Q4574; YY5EMR1452 sent in by Dave Lorenson, KHA9509. Send in your cards for exhibition here, we'll return them to you a few days after receipt (unharmd, too).

listing in our monthly swappers' directory. We would greatly appreciate your enclosing your cards in envelopes when sending them to us for listings. This is for your own protection and to insure that your name and 10-20 will be listed correctly. By the way, we expect that from time to time we will be running some of your cards in S9; you'll stand a better chance of making the team if you don't mark up your card when you send it in to us.

If you have received cards from interesting or foreign stations, please send them into S9. We'll keep them for a few days and make a photocopy to run here (we'll give you full credit too!).

If you want to be listed as a card swapper for the April issue, you must send us your card to get here not later than February 12th. Be listed every month if you wish, but send us a different card for each month. No letters please. Address your cards to: Cardswappers, S9 Magazine, 300 West 43rd Street, New York, N. Y. 10036.

Here's the gang for this month:

- 1Q2302 Hugh Stacy, 13 Hudson St., Natick, Mass.
- 1Q2577 Warren Manchester, RFD 4, Esmond, R.I.
- 1Q3280 Frank Flood, 81 Prentice St., Waltham, Mass.
- 1Q3584 Marty Newfield, P.O. Box 44, Taunton, Mass.
- 1Q5507 Jim Mott, 40 Narragansett Ave., Wakefield, R.I.
- 1Q6865 Tom Howarth, 52 Lincoln St., Esmond, R.I.
- 1W1619 Howard Gokey, 315 Riverside Ave., Torrington, Conn.
- 1W2963 Arthur Van Wart, 11 Perkins St., Arlington, Mass.
- 1W7223 Gerry Lecours, 34 Bridge St., Monson, Mass.
- 1W9494 Gary Sibulkin, 67 Trenton St., Manchester, N. H.
- 2A5504 Ellis Daigle, 882 Oregon Ave., Schenectady, N. Y.
- 2Q0602 Arthur Hamm, Church St., Philmont, N. Y.
- 2Q2301 Al Augustyn Jr., 2029 Caroline Ave., Linden, N. J.
- 2Q3439 Tom Grimke, 1482 E. 95th St., Brooklyn, N. Y.
- 2Q4574 Bob Schappert, Wampus Ave., Armonk, N. Y.
- 2Q5468 Wait Alexander, 1233 Woodruff Ave., Hilliside, N. J.
- 2W9041 Frank Sommor, 144 Elm St., Dover, N. Y.
- 2W9929 Al Shuhart Jr., 35 Lakeview Ave., Hartsdale, N. Y.
- 3Q2542 Bob Diehl, 240 York St., Hanover, Pa.
- 3W2369 Bob Drake, 229 Wynnewood Ave., Lansdowne, Pa.
- 5Q2178 Elwyn Beam, Rt. 2, Vale, N. C.
- 5W3016 Roy Mabe, P.O. Box 269, Biscoe, N. C.
- 5W4076 Carlos Brown, P.O. Box 8354, Charlotte, N. C.
- 6Q0914 Paul Skidmore Jr., Rt. 1, Rockwood, Tenn.
- 6Q1861 Henry Hobbs, 1629 Bloomingdale Pk., Kingsport, Tenn.
- 6W2675 Bobby Morehead, Rt. 2, Box 412, Shelby, N. C.
- 6W4390 Claude Witt, 206 Dunbar Lane, Crossville, Tenn.
- 6W7515 Terrell Craven, Rt. 1, Box 32, Royston, Ga.
- 7Q1709 Carl Jaynes, 2114 LaSalle St., Sarasota, Fla.
- 8Q1362 Jack Hixon, 2320 North Magnolia, Pensacola, Fla.
- 10W0572 Charles Beard, Seminary Hts., Weatherford, Tex.

16Q1960 Ralph Srenson, Box 131, Bay City, Wisc.
17Q1067 Alvin Hampson, Alamota, Kansas
17Q1339 Jack Doggett, 8060 Doma Dr., Des Moines, Iowa
17Q3732 Jack SchAAF, 1300 E. 65 No., Kansas City, Mo.
17Q3947 Al Polley, 1608 E. Nevada, Marshalltown, Iowa
17W5449 Henry Hawkins, 501 W. 10th St., K.C., Mo.
18B2648 Glenn Davis, 6143 N. Rockwell St., Chicago, Ill.
18B2698 Maxine Dick, Kokomo, Ind.
18Q0229 Barney Ross, 4022 Cameron, Hammond, Ind.
18Q3647 Pierre LaBounty, 2007 Ridge Ave., Rockford, Ill.
18Q4913 Thomas Loadbetter, R.R. 4-Box 40, Muncie, Ind.
18Q6133 Melvin Baer, 6429 N. Glenwood Ave., Chicago, Ill.
18Q9633 Bruce Paulsen, Rt. 1, Box 316, Mundelein, Ill.
19A5964 Stan Sickler, 2310 Commor, Hamtramck, Mich.
19Q0132 Charles Hellberg, 1404 7th St., Parkersburg, W. Va.
19Q1001 Tim Hamilton, P.O. Box 572, Wooster, Ohio
19Q4389 J. Miley, 999 S. Diamond St., Mansfield, Ohio
19Q7288 Gary Sowers, 130 Leonard Dr., Battle Creek, Mich.
19Q7698 Chuck Cerny Jr., 2393 Green Rd., Cleveland, Ohio
19QA0442t DeFrain, 226 So. 3rd St., Harbor Beach, Mich.
19W3863 W. McKeever, Box 573, Lakeside, Ohio
19W4980 Joan Webster, 10170 Hycy Park, Romulus, Mich.
19W8179 Paul Klein, 213 Franklin, Sidney, Ohio.
20Q0255 Philip Lundy, 48 Sodus St., Clyde, N.Y.
20Q0682 Elmor Banta, W. Nanticoke, Penna.
20Q4011 Morris Kemmer, Rd. 4-Box 426, Mountaintop, Pa.
20W1258 Wait Hall, R. D. 2-Box 16, Altoona, Pa.
20W4590 Jud McNamara, R. D. 3, Towanda, Pa.
20W5494 Don Kalbflesh, R. 6, Chambersburg, Pa.
24W0566 Dick Corbett, 1720 Merrick Dr., Adelphi, Md.
KA18922 Greg Smith, 1232 Graynold Ave., Glendale, Cal.
KBA1497 George Hodge, 15 Alderberry Rd., Buzzards Bay, Mass.
KBA2291 George French Jr., 95 Victoria Lawn, Stratford, Conn.
KBA2454 Martin Straus, 151 Whipple Rd., Esmond, R.I.
KBA3432 Leo Ducharme, 204 Alsace St., Manchester, N. H.
KBA4497 Tipper Flint, Shannock Hill Rd., Shannock, R.I.
KBA4590 Russ Warner, P.O. Box 635, Meriden, Conn.
KBA4936 Steve Cornells, Box 121, Shannock, R.I.
KBA4948 Lenny Ouellette, 767 Dix St., Manchester, N. H.
KBA5557 Ted Cummings, Bellflower Rd., Billerica, Mass.
KBA6387 Bob Sullivan, 41 State St., Monson, Mass.
KBA6744 Richard Peloquin, Winter St., Berlin, N. H.
KBA7570 Rick Duguay, 50 Wendell St., Athol, Mass.
KBA8472 William Harrington, Box 1391, Springfield, Mass.
KBA9135 Grace Straus, 151 Whipple Rd., Esmond, R.I.
KBA9470 Isabel Howarth, 52 Lincoln St., Esmond, R.I.
KBA9476 Robert Caisse, Rt. 44-A, Mansfield Depot, Conn.
KBA9964 Howie Scanlon, Thayer Rd., Higganum, Conn.
KBB0784 Steve Ewing, Atkinson, N. H.
KBC1118 Frederick Welch, 599 Washington, Wellesley, Mass.
KBC1977 A. Masciarelli, P.O. Box 297, Clinton, Mass.
KBC2228 Jerry Marder, 101 Hobart St., New Haven, Conn.
KBC2451 Eric Ruderman, 21 Drury Lane, Wakefield, Mass.
KBC3387 Eva Mott, 40 Narragansett Ave., Wakefield, R.I.
KBC3484 Doug Ward, 155 Kibbe Rd., E. Longmeadow, Mass.
KBC3548 Gary McTrottes, P.O. Exchange St., Fair Haven, Conn.
KBC4611 Ralph Campbell, 16 Mora St., Dorchester, Mass.
KBC5095 Leonard Butkiewicz, 1480 Corbin, New Britain, Conn.
KBC6097 Gary Shamel, 61 Alcott St., Acton, Mass.
KBC6427 Kenny Edelstein, 29 Tower Hill, Lawrence, Mass.
KBC7046 Gilbert Phillips, 12 Roton Ave., Rowayton, Conn.
KBC7179 Larry Martin, 175 Winthrop St., New Britain, Conn.
KBC7591 Paul Trueman, 14 Beacon Manor, Naugatuck, Conn.
KBC7935 Katherine Perry, P.O. Box 155, New Bedford, Mass.
KBC8446 Alvin Arthur, P.O. Box 27, So. Weymouth, Mass.
KBC9823 Mike Cashin, 2 Trickett Rd., Lynnfield, Mass.
KBD0772 Hevry Marino, 213 Pine St., Manchester, N. H.
KBD3161 Stephen Foss, 78 Wachusett Ave., Lawrence, Mass.
KBC0998 John Patois, 131 N. 2nd St., Paterson, N.J.
KBC1130 John Flynt Jr., 3441 Jackson Ave., Wantagh, N.Y.
KBC1385 Jerry Gleir, 28 Harriet Place, No. Massapequa, N.Y.
KBC4196 Bob Fisher, 41-42 Main St., Flushing, N.Y.
KBC4952 Al Aronowitz, 91 Haussler Terr., Clifton, N.J.
KBC6124 Lynn Chance, 2022 William St., Schenectady, N.Y.
KBC7067 Charlie Smutny, 125 Cochran Place, Valley Str., N.Y.
KBC7175 Paul Bedrin, 32 Chatham Terr., Clifton, N.J.
KBC7687 Robert Thacher, R.R. 1-Box 59-B2, Hudson, N.Y.
KBC7954 Dick Cotton, 28 So. Franklin Ave., Lynbrook, N.Y.
KBC8087 Bill Golembuski, 39 Chelsea Ave., Newark, N.J.
KBC8764 Mark Margolin, 22 Sager Pl., Irvington, N.J.
KBC8977 Bob Breitung, RD. 1, Stone Ridge, N. Y.
KBI0724 Chip Diesser, 927 Paulding St., Peekskill, N.Y.
KBI1163 Ruth Wutrich, 64 Camp St., Sidney, N.Y.
KBI3023 Jeff Weiss, 285 Walton Ave., So. Orange, N.J.
KBI3589 Roy Overbaugh, 542 Visccher Ave., Schenectady, N.Y.
KBI4015 Bob Gregilovich, 24 N. Bridge St., Paterson, N.J.
KBI4170 Lou Bonante, 270 Walton Ave., So. Orange, N.J.
KBI4313 Bob Wanderer, 115-25 Metropolitan, Kew Gardens, N.Y.
KBI5108 Midge Mayo, R.R. 1, Box 298, Crarville, N.Y.
KBI5604 Kenneth Johnston, 93 W. Tremont Ave., Bronx, N.Y.
KBI6526 Carl Buzymowski, 175 Sherman Ave., Trenton, N.J.
KBI6584 Raymond Hebda, 626 Indiana Ave., Trenton, N.J.
KBI6714 Bob Hoch, 43 Seacord, New Rochelle, N.Y.
KBI7287 Joe Levine, 3758 10 Ave., N.Y., N.Y.
KCC1998 Jim Manfield, 103 Stamm Blvd., New Castle, Del.
KCC2170 Francis Reiss, 121 Chestnut St., Allentown, Pa.
KCC2467 Harry Bowen, 85 Delaware Ave., Penns Grove, N.J.
KCC2653 Ginger Mansfield, 103 Stamm Blvd., New Castle, Del.
KCC3224 Frank Lake, 1101 Laurel Rd., Beverly, N.J.
KCC3264 Irvin Lichtenstein, 7807 Thouron, Philadelphia, Pa.
KCC4134 Fred Heilbron, 1036 Woods Ave., Lancaster, Pa.
KCD0117 Albert Friedrich, 421 E. 24 Ave., No. Wildwood, N.J.
KCD2149 Robert Hugenin, P.O. Box 131, Buck Hill Falls, Pa.
KCD2249 Frank Dowler Jr., 5144 Whitehall Dr., Clifton Hts, Pa.
KCD2649 Jack Daqui, 25 Dunsinane Dr., New Castle, Del.
KCD4080 Bob Moore, 42 Belmont Ave., Wilmington, Del.
KCF0823 Jim Croos, 755 S. Potomac St., Hagerstown, Md.
KCF0889 Gene Mangus, 2909 Kingwell Dr., Wheaton, Md.
KCF1042 Lee Holler, 378 Shenandoah, Winchester, Va.
KCF1224 Harold Channell, 306 E. Duncan, Alexandria, Va.
KCF1781 Reginald Martin, 124 Scott Dr., Manassas Pk. Va.
KCF1983 Chas. Elvia Huff, 1917 Lexington, Hagerstown, Md.
KCF2541 James Lofton, 120 N. Loudoun St., Winchester, Va.
KCF2762 Bob Gallery, 5013 Westport Rd., Chevy Chase, Md.
KCG0276 Lew Hoeffler, 1266 Haddaway Rd., Baltimore, Md.
KCG0706 Ed Becker, 4305 Franconia Rd., Alexandria, Va.
KCG0774 Lew Reinberg, 4118 Kantland Ave., Baltimore, Md.
KCG0845 Bob Land, 4803 70th Pl., Woodlawn, Hyattsville Md
KCG1851 Jim Torrance, 6717 Pemberton St., Bethesda, Md.
KCG2216 Tim Cross, 755 S. Potomac St., Hagerstown, Md.
KCG2351 John Slawter, Aurora, W. Va.
KCG2499 Sonny Weddle, Box 342, Hagerstown, Md.
KCG2584 Larry Kayser, 630 Highland Way, Hagerstown, Md.
KCG2599 Rick Myers, 6031 Atteentee Rd., Springfield, Va.
KCG2698 Walter Shaffer, Box 265, Egton, W. Va.
KCG2727 Bob Lofton, 712 Loudoun St., Winchester, Va.
KCG3310 Alan Mantzer, 133 Elm St., Hagerstown, Md.
KCG3573 Bill Hart, 603 Hayes Ave., Hagerstown, Md.
KCI0599 Earl Thompson, 700 Raleigh St., Roanoke Rps., N.C.
KCI0672 Claude Thompson, Box 67, Saltville, Va.
KCI2336 John Cherry, 5949 Jefferson, Newport News, Va.
KCI3170 Ruth Ingram, 416 Player Dr., High Point, N.C.
KCI3368 S. A. Beaman, Box 341, Rt. 1, Snow Hill, N.C.
KCI5425 Harold Simmons, 5349 Jefferson, Newport N. C.
KCI6644 Dearie Thompson, Box 67, Saltville, Va.
KCI6888 H. L. Elliott, 554 Maple St. Ext., Graham, N. C.
KCI6898 Cox Family, 79 Floyd Lane, Pulaski, Va.
KCI6908 Claudia Cherry, 5949 Jefferson, Newport Nöws, Va.
KCI6953 J. L. Gatlin, 33 Century Dr., Portsmouth, Va.
KCI0456 Harry Alvis, Lake Court Ave., Lynchburg, Va.
KCI2269 Frank Anderson, 73 Bishop, Danville, Va.
KCI2292 Hazel Stubbs, Box 1076, Rockingham, N. C.
KCI2780 R. Harris, 513 McDonald Ave., Charlotte, N. C.
KCI3487 Dwight McDowell, 715 North Dr., High Point, N. C.
KCI3489 Tom Marvin, 3207 Garland Ave., Richmond, Va.
KCI4529 Tom Robinson, 513 Coffman Blvd., Chesapeake, Va.
KCI5092 Doug Paynter, 1001 E. Jefferson, Charlottesville, Va.
KCI5269 Lawrence Paysour, Box 591, Dallas, N. C.
KCI6400 Mammie Simmons, 5949 Jefferson Av., Newport N., Va.
KCI6670 Don Cribb, 1929 George Ave., Peru, Indiana
KCI6981 Clara Storn, 5949 Jefferson, Newport News, Va.
KDB0371 Bill Howell Jr., 545 Palmetto La. S. W., Aiken, S. C.
KDB0605 Floyd Broome, Rt. 4, Lake Tahoma Rd., Marion, N. C.
KDB1435 Dan Guthrie, Box 362, Spruce Pine, N. C.
KDB2967 Jim Wofford, Atco, Georgia
KDB2311 Bud Mundy, P.O. Box 1012, Black Mountain, N.C.
KDB3123 John Dillard, 202 E. Commercial Ave., Monterey, Tenn.
KDB4372 Harold Brock, P.O. Box 25, Florence, Ala.
KDB4538 Howard Trip, 1821 Reynolds, Charleston Hts, S. C.
KDB4928 Paul Sheriff, 312 Piedmont, Westminster, S. C.
KDB5817 Smitty Smith, 325 Moreland Way, Hapeville, Ga.
KDB7003 Marvin Baker, 302 W. Dechard, Tullahoma, Tenn.
KDB7012 Don Earnest, 125 Griffin Ave., Bessemer, Ala.
KDB7309 Robert Wood, 1625 3rd Ave., Tuscaloosa, Ala.
KDB7921 Jack Calvert, 278 Moreland Way, Hapeville, Ga.

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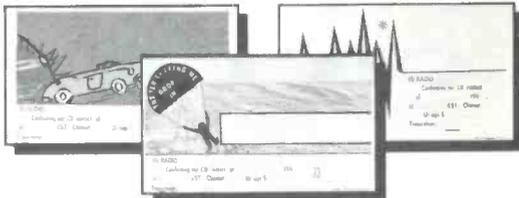
KDB8082 Butch Franklin, 226 Alabama St., Bessemer, Ala.
 KDD0550 George Hoover, PO Box 86, Polkville, N.C.
 KDD0588 Richard Brown, 1321 Cherokee Rd., Florence, S.C.
 KDD0634 Pat Lane, Lone Mountain, Tenn.
 KDD0748 Mike Jones, 711 Rollingwood Rd., Aiken, S.C.
 KDD0860 J. Hall, Rt. 1, Norman Park, Ga.
 KDD1522 Don Huntley, PO Box 2642, Asheville, N.C.
 KDD2134 Mike Ashby, 316 S. Franklin, Tullahoma, Tenn.
 KDD2416 Susie Smith, 325 Moreland Way, Hapeville, Ga.
 KDD2601 Howard Ray, Box 284, Caroleen, N.C.
 KDD3270 Johnie Trawick, 708 Hull St., Ozark, Ala.
 KDD3398 Rheid Queen, PO Box 83, Polkville, N.C.
 KDD3451 Guy Jackson, Box 1361 Sta. K, Atlanta, Ga.
 KDD3611 R. David, 1602 N. Main St., Shelbyville, Tenn.
 KDD3814 Joe McGee, Rt. 1, Starr, S.C.
 KDD3990 Jean Ashby, 316 S. Franklin, Tullahoma, Tenn.
 KDD4121 Romie Murray, Rt. 2, Ellenboro, N.C.
 KDD4308 W. Deal Bradford, 2313 22nd Ave. S., Birmingham, Ala.
 KDD4342 L. D. Davis, 826 Tate St., Marion, N.C.
 KDD5349 Bob Powell, 500 E. Oakwood Av., Huntsville, Ala.
 KDD5720 Vivian Hall, 416 Dixie Ave., Tifton, Georgia
 KDD5759 Bob LaPlantes, 1556 Sumner N. Charleston, S.C.
 KDD6136 Don Davis, 103 Kathleen Pk., Marion, N.C.
 KDD6135 R. Abercrombie, 520 Rosewell La., Birmingham, Ala.
 KDD6991 Louise Sheriff, 312 Piedmont St., Westminster, S.C.
 KDD7095 Lee Engram, 110 Walker Dr., Anderson, S.C.
 KDD7506 Bob Gray, Box 664, Forest Park, Ga.
 KDD8736 Bufford Greene, Rt. 5, Shelby, N.C.
 KDD7568 Bill Beam, 510 Gaines Av. S.W., Russellville, Ala.
 KDD7608 Layman Curtis, 734 Croley Dr., Nashville, Tenn.
 KDD8653 Larry Quinn, Box 433, Caroleen, N.C.
 KDD9162 Irene Beam, 510 Gaines Av. S.W., Russellville, Ala.
 KDD9291 Al LaPlantes, 1556 Sumner, N. Charleston, S.C.
 KDE1590 Bob Pearson, 1308 S. Morgan St., Shelby, N.C.
 KDE2003 Powell Garrison III, N. Hill Dr., Crossville, Tenn.
 KDE2033 Robby Hoyle, Rt. 5-Box 515, Shelby, N.C.
 KDH0242 Jim Prideaux, 2535 9 Ave., Bradenton, Fla.
 KDH1183 J. Rice, P. O. Box 135, Stuart, Fla.
 KDIO659 Don Cook, 2043 S. Atlantic, Daytona Beach, Fla.
 KDII145 Jimmy Hopper, 11881 S. W. 198 Terr., Miami, Fla.
 KDII654 Jo Ann Bernstein, 4221 Wisconsin, Tampa, Fla.
 KDII2568 Dan Henry, Rt. 2, Box 28-I, Ocala, Fla.
 KDI3426 Dozier Hendry, Rt. 3-Box 1000, Greenville, Fla.
 KDI3558 Tom Smith, 1626 No. Bumby, Orlando, Fla.
 KDI4024 Bob Smith, Rt. 1-Box 46, Palatka, Fla.
 KEA0661 James Jones, 508 N. Front St., Amory, Miss.
 KEA2853 Bob Wallenburg, 4911 Western, New Orleans, La.
 KEB2460 John Pfeiffer Jr., 1257 E. Avery, Pensacola, Fla.
 KEB3682 George Allen, P. O. Box 2872, Jackson, Miss.
 KED2428 Bill Gibson, 628 W. Hollywood, San Antonio, Tex.
 KEG0565 T. White, 2802 42 St., Lubbock, Texas
 KEG1327 Fred Hout, 5620 Watauga Dr., Keller, Tex.
 KEG2312 Margaret White, 2802 42 St., Lubbock, Tex.
 KEG2477 Wilcox Radio, 98 Circle Dr., Big Spring, Tex.
 KEG2600 Cecil Mayo, 4001 James, Ft. Worth, Tex.
 KEHO131 Richard Cline, 915 S. E. 1st, Mineral Wells, Tex.
 KEHO221 Texas Catfish, P. O. Box 9345A, Ft. Worth, Tex.
 KEHO325 Spud Murphy, P. O. Box 44, Plainview, Tex.
 KEH3689 Dewey Dean, 707 So. Knoxville, Tulsa, Okla.
 KEH3891 Richard Oldham, 103 So. Kirkwell, Wichita Falls, Tex.
 KEH3915 Johnie Turpen, 1406 W. 12 St., Plainview, Tex.
 KEH4108 David Fair, 1911 Vincent, Brownwood, Tex.
 KEH4168 Jim Warren, Box 4304, Wichita Falls, Tex.
 KEH4193 Archie Todd, P. O. Box 1374, Pegg, Okla.
 KEH5024 Stephen Grant, P. O. Box 177, Deport, Tex.
 KEH6557 Ben Berger, 3614 Del Norte Blvd., Temple, Tex.
 KEJ1462 Larry Goldberg, P. O. Box 3571, Van Nuys, Cal.
 KEJ1576 Windy Spencer, 7738 Norwalk Blvd., Whittier, Cal.
 KEJ5225 Chuck Spaulding, 8618 Whittier Blvd., Pico Rivera, Cal.
 KFA0101 Rene Spencer, 7738 Norwalk Blvd., Whittier, Cal.
 KFA0669 Frank Neal, 3120 Leonard St., Bakersfield, Calif.
 KFA0705 Fred Hart, 5800 Gladly St., So. Gate, Calif.
 KFA0763 Greg Smith, 1232 Graynold Ave., Glendale, Cal.
 KFA0930 James Cotom Sr., 9201 Greenleaf, Whittier, Cal.
 KFA1028 Thomas Martin, 1679 Manor Circle, Pomona, Cal.
 KFA2621 Joe Henderson, 3116 Leonard, Bakersfield, Cal.
 KFA4500 Ruth Neal, 3120 Leonard St., Bakersfield, Cal.
 KFA4892 Ralph Cozad, Box 805, Oxnard, Calif.
 KFA5573 Chestine French, Box 502, Pacoima, Calif.
 KFA6496 Kenny French, Box 502, Pacoima, Calif.
 KFA6876 Jim Cantor, 3745 3rd Ave., Los Angeles, Calif.
 KFA6946 James Lehman, Box 694, Las Vegas, Nevada
 KFA7242 Ira Conklin, 13007 Duffield Ave., La Mirada, Cal.

KFA8272 Maxine Henderson, 3116 Leonard, Bakersfield, Cal.
 KFC2034 Mike Kandarian, 1915 Loyola Dr., San Jose, Cal.
 KFC4044 Leroy Clark, 601 Schwerin, San Francisco, Cal.
 KFD4344 Jack Green, 26973 Creole Place, Hayward, Cal.
 KFC4494 Dan Watrous, 211 Portola Way, Tracy, Calif.
 KFD0142 Gene Masters, 2729 Daffodil, McKinleyville, Cal.
 KFD0320 Ken Poindexter, 61 Atherton Ave., Pittsburg, Cal.
 KFD0961 Ralph Stone, 72 Palm Dale Ave., Daly City, Cal.
 KFD1525 Chuck Watrous, 421 W. 12th St., Tracy, Cal.
 KFD1705 Bill Boyer, 13613 San Pablo Ave., San Pablo, Cal.
 KFD1943 Gene Wulff, 1466 Sundown Lane, San Jose, Cal.
 KFD2434 David Webb, 47478 Hoyt St., Fremont, Cal.
 KFD3168 Arnold Johnson, 10444 Coloma, Rancho Cordova, Cal.
 KFD3779 Jim Pruitt, 346 Illinois St., Vallejo, Calif.
 KFD4125 Art Krugman, 2090 Sahara Way, Santa Clara, Cal.
 KFD4125 Ron Orchid, 1838 40 Ave., San Francisco, Cal.
 KFD4374 Robert Pacheco, 1644 Stardust Ct., Santa Clara, Cal.
 KFD4878 Jerry Goldfarb, 1707 Gladstone Ave., San Jose, Cal.
 KFD4878 Carol Bergal, 3770 Acapuco Dr., Campbell, Cal.
 KFD4886 Wayne Heimstoh, 26355 Esperanza, Los Altos, Cal.
 KFP0537 Dan Cochran, Rt. 2, Box 182-A, McMinnville, Oreg.
 KFF1077 Randall Schaub, 8611 N. E. Pacific, Portland, Oreg.
 KFF1307 Arlie Knowlton, Box 31, White Salmon, Wash.
 KFG0222 Don Wagner, 1509 S. W. Blvd., Coos Bay, Oreg.
 KFG0601 Ken Davenport, 3201 N. E. 119, Vancouver, Wash.
 KFG1329 Les Knowlton, Box 31, White Salmon, Wash.
 KFG1489 James Wagner, 926 1/2 Union, Hood River, Oreg.
 KFI1219 Jack Sudduth, 8103 16 S. W., Seattle, Wash.
 KFJ0883 Bud Spaulding, 1324 Broadway, Everett, Wash.
 KFJ1361 Cliff Sillman, 1706 Calif. Ave., Seattle, Wash.
 KGB1886 G. Ashley, Box 252, Diamondville, Wyo.
 KGC0267 Raymond Turek, 137 Teal St., Denver, Colo.
 KGC1052 G. Anderson, 1696 Del Sur SW, Albuquerque, N. M.
 KGC1053 Don Becker, 7267 Lipan, Denver, Colo.
 KGE1429 James Staberg, 707 Pine St., Hudson, Wisc.
 KGE1811 Gary White, 516 7th S. W., Rochester, Minn.
 KGF0277 Kenny Dill, 312 Elmwood, Hoyt Lakes, Minn.
 KGF0290 John Calkins, R. 2-Box 174, New Auburn, Wisc.
 KGF1391 Van Burbie, 1209 Eagle, Rhinelander, Wis.
 KGF2153 Stella Burbie, 1209 Eagle, Rhinelander, Wis.
 KGF2924 R. George, 901 First Ave., Grand Rapids, Minn.
 KGH0731 John Moore, 2017 So. 107 St., Omaha, Nebr.
 KGH2155 Delmar Gault, R. 2-Box 224, Augusta, Kans.
 KGH4099 Jeff Church, 2044 So. 86 Ave., Omaha, Nebr.
 KGI1798 Jeré Bruning, RFD 2, Robinson, Kans.
 KGI3887 Dick Morgan, 1629 S. Oak Grove, Springfield, Mo.
 KGI4047 Lee Ellis, 1212 No. 11 St., St. Joseph, Mo.
 KGI4051 Larry Fisher, 218 Player St., Marshalltown, Iowa
 KGI5191 Margaret Hejtmank, Delia, Kansas
 KGI5771 Bill Roney, Lot 31 Pine St., Andrews AFB, D. C.
 KHA3300 Jim Rigsby, RR. 1, Waterloo, Ind.
 KHA5150 Virg Mansfield, 600 W. 7th, Muncie, Ind.
 KHA5591 Shirl Wilson, Rt. 1, Box 117, Round Lake, Ill.
 KHA6706 Russell Mahoney, RR. 1, LaFontaine, Ind.
 KHA8376 Gordon Velpel, 801 S. Franklin, Garrett, Ind.
 KHA8748 Pete Lindsey, 607 W. Highland, Owensboro, Ky.
 KHA9054 John Brabender, 3525 Olbrich, Madison, Wis.
 KHA9921 Joe Davis, 2404 7 Ave., Moline, Ill.
 KHA9932 Hansen Bros., 2nd Ave., Clinton, Iowa
 KHA9945 Fran Copeland, 320 154 Place, Calumet City, Ill.
 KHB2011 Chuck Lawson, RR. 3-Box 207, Chesterton, Ind.
 KHB2233 Harold Conley, 1516 Hedge Rd., Champaign, Ill.
 KHB3042 Pete Korondan, Box 462, Whiting, Ind.
 KHB3439 Dwight Delaney, Rt. 1, Box 87D, Colgate, Wis.
 KHB4607 Stewart Dorn, Hillsboro Rd., New Castle, Ind.
 KHC0558 Bob Clamptitt, Box 21, Heltonville, Ind.
 KHC1455 Carl Shoaff, 806 W. Pecan, Carbondale, Ill.
 KHC1999 Dick Kasprzak, Rt. 1-Box 400, McFarland, Wis.
 KHC2157 Wayne Oehler, 10821 W. Cameron, Milwaukee, Wis.
 KHC2715 Ronald Leinweber, 1166 S. 4th St., Aurora, Ill.
 KHC3569 W. Swanson, Box 226, Rt. 3, Crown Point, Ind.
 KHC5818 Frank Engle, 1324 S. Randolph, Garrett, Ind.
 KHC6236 Don Roth, 4678 N. 49 St., Milwaukee, Wisc.
 KHC6983 Fred Cook, 726 So. Indiana, Kokomo, Ind.
 KHC7421 Bill Duvencek, 1331 11th Ave., Green Bay, Wisc.
 KHC7409 Russ Cronkhite, 7 So. 3rd St., Williamsport, Ind.
 KHC7542 Eira McGinnis, 605 W. 106, Jonesboro, Ind.
 KHC7850 Carl McKeever, Box 7, Wolcottville, Ind.
 KHC8267 Betty Prindle, Box 319, Livia, Ky.
 KHC9341 Art Stone, 7524 So. Colfax, Chicago, Ill.
 KHC9366 Buss Thompson, R. 1, Walton, Ind.
 KHC9636 Gary Luttrell, 222 Warren, Williamsport, Ind.
 KHC9788 Leroy Rothrock, 300 Washington, Williamsport, Ind.
 KHC9968 Jim Morin, 1310 E. Oakland, Bloomington, Ill.

KHD0192 John Buffum, 2424 W. Antoinette, Peoria, Ill.
 KHD0360 Irene Gonsiorowski, 8234 N. Newcastle, Niles, Ill.
 KHD1207 Donald Sapp, R. R. 3, Williamsport, Ind.
 KHD1549 Charles Stence, 339 So. College St., Flora, Ill.
 KHD2772 Al Webber, Box 421-A-1, Spring Grove, Ill.
 KHD3625 Beecher Ruh, 6814 N. Oleander Ave., Chicago, Ill.
 KHD3841 Mike O' Cull, 8104 Witherington, Indianop., Ind.
 KHD4016 James Stowers, Rt. 4, Box 135, Valparaiso, Ind.
 KHD4408 Terry Reuland, 238 Ingleside, Aurora, Ill.
 KHD4705 George Newberry, 1027 W. Douglas, Freeport, Ill.
 KHD5915 David Swank, RR. 2, Box 214, Attica, Ind.
 KHD6023 Frank Reed, Box 152, Dalton City, Ill.
 KHD6373 Leo Bohan, 2506 Manchester, Louisville, Ky.
 KHD8820 Theodore Margwarth, Box 265, Effingham, Ill.
 KHD9802 Genevieve Bristow, RFD. 1, Utica, Ky.
 KHG0189 Gary Ritenour, Box 291, Coolville, Ohio
 KHG0850 Andrew Arison, Box 386, Spencer, W. Va.
 KHG2085 Jim Galiatis, 8204 Dodge, Warren, Mich.
 KHG4775 Howard Ingleright, 926 So. 13th, Niles, Mich.
 KHG4945 C. Cooley, 1006 Hooven Ave., Hamilton, Ohio
 KHG6668 Norm Payea, 1198 Court Dr., E. Tawas, Mich.
 KHG7213 John Oswald, 1322 Lander Rd., Mayfield Hts., Ohio
 KHH0177 Al Newman, 24199 Laureldale Rd., Shaker Hts, Ohio
 KHH1667 Stephen Hodges, Box 123, Frankfort, Mich.
 KHH2790 Ralph Shelley, 832 Simpson, Kalamazoo, Mich.
 KHH3585 Mazie, 5660 Hipp St., Dearborn, Mich.
 KHH4313 Albert Hizer, Rt. 3, Box 338A, Clendenin, W. Va.
 KHI0227 Bill Allen, 915 Hazard Ave., Kalamazoo, Mich.
 KHI0606 Buck Gray, 22532 Byron Rd., Shaker Hts, Ohio
 KHI1517 Rocky Boyd, Box 1061, Lincoln Park, Mich.
 KHI2511 George Gravely, 736 Churchill Dr., Chastn, W. Va.
 KHI2703 James McClure, Rt. 1-Box 217, Yawkey, W. Va.
 KHI2909 Vern Allen, 801 E. Court, Sidney, Ohio
 KHI3547 Jim Harvey, 174 Curtis Rd., E. Tawas, Mich.
 KHI3697 Stan Koch, Caro, Mich.
 KHI4213 Carl Wardin, 2195 N. Fordney Rd., Hemlock, Mich.
 KHI4746 Bob Schweickart, Rt. 1, Box 351, Pedro, Ohio
 KHI5117 Bob Malone, Kimberly P. O., Kimberly, W. Va.
 KHI5717 Sandy Stafford, 710 Stockbridge, Kalamazoo, Mich.
 KHI7258 Thomas King, 120 Arnold Circle, Mt. Clemens, Mich.
 KHI8525 Dolores Patrick, 851 Mackenzie Dr., Lima, Ohio
 KHI8546 Bill Rosen, 4334 McKee, Covington, Ky.
 KHI9492 Jimmie Waddell, 1529 Stone, Flint, Mich.
 KHJ0065 Donald Fox, 409 Magnolia, Celina, Ohio
 KHJ0165 Leo Murdock, 3314 10th Ave., Pt. Huron, Mich.
 KHJ1478 Bill Brandell, 309 Denver Ave., Lansing, Mich.
 KHJ1886 Eldon Schumaker, 2790 Queen Ct., Cincinnati, O.
 KHJ2471 Jack Sayer, Box 193, Malta, Ohio
 KHJ5187 Nolen Dillon, 347 Charles, Grand Rapids, Mich.
 KHJ5419 Don Hall, Rt. 1, Sistersville, W. Va.
 KHJ8999 Harold Stafford, 711 Stockbridge, Kalamazoo, Mich.
 KIC0172 Bob Rogers, 227 Green, Wilkinsburg, Pa.
 KIC0517 Richard Pschirrer, 13 Perine, Dansville, N.Y.
 KIC0918 Bill Jacobs, P. O. Box 213, Painted Post, N.Y.
 KIC0922 Bud Mohr, Box 141, Oxford, N.Y.
 KIC1700 Ben Jackson, 132 Killewald, Tonawanda, N.Y.
 KIC2015 Roland Waddell, Box 147, Mooers, N.Y.
 KIC2126 Richard Snively, Waynesboro, Pa.
 KIC2421 Richard Crisman, 232 Grant, Franklin, Pa.
 KIC2516 James Sankovitch, 9 Eicher, Uniontown, Pa.
 KIC2553 Thurston Fleming, 327 Parsells, Rochester, N.Y.
 KIC2823 Marion Banta, W. Nanticoke, Pa.
 KIC2881 Mike Ripski, 72 Mooney Rd., Plymouth Twp, Pa.
 KIC3347 Bob Eddingers, RD. 3, Muncy, Pa.
 KIC3500 Ruthie Bopp, 350 W. 5th St., Lewistown, Pa.
 KIC3833 Bob Swiharts, 425 Front Ave., Salamanca, N.Y.
 KIC4574 Raymond Martz, Star Rt., Box 42, Hustontown, Pa.
 KIC4636 Geo. Goodman, 1058 Rankine Ave., Erie, Pa.
 KIC5720 Bill Calvert, 1134 6 Ave., Duncansville, Pa.
 KIC5739 Lance Thrall, 318 Price, Jamestown, N.Y.
 KIC6334 Roger Gaborski, 110 Baird St., Rochester, N.Y.
 KIC7232 W. Johnston, Box 1421, Selfridge AFB, Mich.
 KIC7620 Janet Ford, Needmore, Pa.
 KIC7651 Ray Saunder, Saunders Rd., Clinton, N.Y.
 KID0007 Fred Martz, Hustontown, Pa.
 KID0186 Michael Reshetar, 102 1/2 Walnut Binghamton, N.Y.
 KID0343 Marcus Downes, Fort Littleton, Pa.
 KID0768 Jack Carlson, 109 Katherine, Pt. Allegany, Pa.
 KID0802 Jim Baney, RD. 1, Renfrew, Pa.
 KID0918 Robert Allen, 46 Jackson, Attica, N.Y.

Continued on page 60

DEALERS—QSLers—LOOK WHAT'S NEW!



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GARFIELD, N. J.**

ATLANTIC

The Fairfax-Prince William C.B. Club of Falls Church, Va., recently elected the following officers to guide them in 1964. President, Gail Boseley, KCG0308; Vice President, Ken Easter, KCF2056; Sect'y, John March, KCG2967; Treas., Ray Kidwell, 4Q0905. At their November meeting, Bob Burkholder, KCG1150, won a 13 pound turkey. The club also will give away a \$500.00 Go-Kart.

COMING EVENT—Tentative plans for the Second Annual Hootenanny Jamboree, of the North Georgia CB Radio Club will be held Friday, Saturday, Sunday and Monday of the Labor Day weekend. The place—Albertson Lakes, five miles north of Dalton, Georgia, just off Highway 71. The North Georgia CB Radio Club is just over 3 years old and have an active membership of 55. At present the club provides the city with an Auxiliary Police force. They are also planning a club bloodbank. More info. on the forth coming Jamboree can be had from Albert Orr, Jr., Box 32, Tunnel Hill, Ga.



"King Size" mobile display of CB Dealer James York, York Sporting Goods, of Marion, Kentucky. York covers a 200 mile radius area of Marion, Kentucky with this specially designed mobile merchandiser. He "chalks up" volume sales right out of the trailer at regional CB Jamborees, shows and festivals. The mobile unit attractively displays the Pearce-Simpson CB line plus assorted accessories, "everything in CB."

The Central South Carolina Citizens Radio Club, Columbia, South Carolina, recently held their annual elections. President, Rock Davis, KDB1044; Vice President, Tommy Grimes, KDB1937. Treasurer, James Davis, KDD5664; Secretary, Bill Moon, KDB4697. It might be interesting to note that the CSCRC has acquired land on the Saluda River, within a short distance of the city. Plans have already been made for the club to erect their clubhouse. The club paper "The Carrier" which has been out of circulation for several months will be back shortly. Anyone wishing information of their club paper should contact—Eddie and Susie Crisp, KDB2168, CSCRC, P.O. Box 1808, Columbia South Carolina.

Officers of the Murfreesboro C.B. Radio Club, 1315 Minerva Dr., Murfreesboro, Tenn. which meets the second Sunday of each month at 2 P.M. are Pres., Bill Gannon, 6W6318; V.P. Gleen Sewell, KDB0051; Sec.-Treas., Wally Spencer, 6W1988.

PACIFIC

The Tracy, California Citizens Band Radio Club, known as the Tracy "C" Beams, recently assisted the Tracy Police Dept., on Halloween night by patrolling the city with assigned areas. Spencer Lamb, KFC3883, club President and Bill Assad, KFC2019 were operating the base controls located in the basement of the Police Dept. Keeping track of the mobile units was in the hands of Betty Hoard and Janice Palmquist. Thanks to Gene Hoard, KFD1382, who reported the pranks who earlier in the evening caused trouble. The relief station for refreshment was established at the home of Russ and Alta Elstons, KFD1426. All in all the club did a highly rated job. Thanks to Danny Watrous, KFC4494.

Recently the "Central Oregon CB's Club," Search and Rescue Unit was called upon to help search for two lost boys who were deer hunting in the Wanoga Butte area. The boys were found safe and sound the next morning. A comment from one of the State Police officers, "The club was of great help in the search." The odd part of the story is that it was a passing motorist picked up the boys and brought them into the camp site.



The Santa Clara County Citizens Radio League of San Jose, California, is led by President Dick Southern. "Break Break" is their club paper, which celebrates its first birthday. Co-Editor of the fine publication is Rosalind Hoxsie. The club monitors channel 11.

The Manteca California REACT group was called out to help the local Police Dept. search for a missing 7 year old boy recently. The boy was last seen November 18, 1963. The REACT base station was set-up in the Manteca Police Station with Hank Roland, KFD1312 at the controls. Some 8 local REACT members joined in the hunt. At 11:40 p.m. the same day, with no success and the weather still getting colder the Manteca group called for more help from the Tracy "C" Beams REACT. Thirty minutes later, 12 Tracy members were on their way to Manteca some 15 miles away. After an all night search the boy was found in an empty garage in a new housing development by Eldon Hicks, KFD2034

Unit 3 and the boys father. Manteca members who participated in the search were Bill Milligan, KFC4471, Hank Roland, KFD1312, Al Weis, KFD1265, Bob Hicks, KFD3359 unit 1 and Eldon Hicks unit 3. Hats off to the many members of the Tracy club for their part. Thanks to D. L. Watrous KFC4494.

COMING EVENT—The Washington State Citizens Band Association is holding a Convention, April 25th and 26th at the Edmond Meany Western International Hotel, Seattle, Washington. For further info contact: Bob Garmire, 1822 N.E. 169th, Seattle 55, Washington.

CENTRAL

The Suburan Mobile Radio Assn., P.O. Box 2, Madison Heights, Michigan boast a membership of 30, 14 probationary members and 5 applications pending. The club recently sponsored 2 reliability rallies in the area with great success. President is Donald Seese, KHG5355.

New President of the Illinois Valley Citizen Banders is Dick Jackson, 18W5026. The club is holding a contest for a new heading for their club paper. The executive board will judge the entries and of course their decision will be final. How about it members, let's see some of those snappy titles. Any club wishing to exchange papers write: Editor, Illinois Valley Citizen Banders, P.O. Box 141, Peoria, Illinois—Zip 61601.



Shown in the above photo is derby coordinator Burt Woodring, 19A8358, and John Flemming, KHG8541 conferring with the Akron, Ohio Civil Defense director Dorothy Koller.

"Happy Birthday" to the Macomb CB'ers club of Mt. Clemens, Michigan. The club formed a little more than a year ago, and grown into a fine well rounded group. President of the club is Vincent L. Cuker, 19W9224. Vince is also editor of the club publication, "The Citation." Co-Editor is Thomas E. King, KHI7258. Roving reporter is Wilbur R. Johnston, KIC7232.

From Darlene McLaughlin, 18Q0429, Sec. Treas. of Ia. Ill. C.B. Club, a heartbreaking and sad note. Yesterday I attended the funeral for Everet Rostenbach, KHA8659. The day before the funeral for Virgil Foster was held in Muscatine, Ia. His call was KHA8652. Everet and Virgil were standing on a pick-up truck, unbolting a piece of pipe that was holding an antenna to an unused telephone pole. The antenna slipped loose and fell across a 7200 volt country service line electrifying both the men. They were knocked to the ground, the pipe fell on Everet's shoulder and he fell on Virgil. It was 40 minutes before the power could be shut off and the bodies could be removed. This information is being sent for the sole purpose of helping

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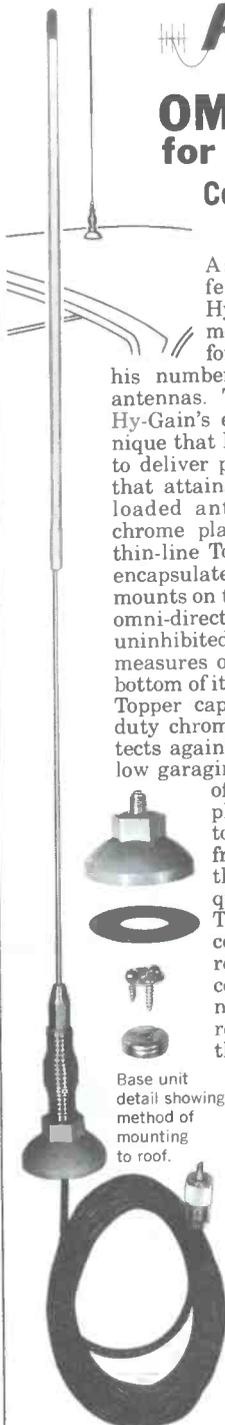
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to show the danger involved in installing and removing C.B. antennas, and to remind our C.B. friends to take sufficient safety measures to prevent a repetition of this horrible accident.

Ken Bailey, 18QA0565, of the Chicago Citizens Radio League Inc., has undertaken the job of registering the serial numbers of all C.B. radio-telephone transceivers operated by members. The purpose of this service is of course, to aid in the recovery of their equipment in case of theft. If you have not already registered your equipment, please list your name, call sign, make, model, as well as the factory serial number and bring it to the next meeting or mail it directly to Ken Bailey, 4622 N. La Vergne, Chicago, Ill.

Found in the Transmitter, club paper of the Ingham County Club news of Mason, Michigan, by Ron Andrus, KHJ2596, comes this. Man, like Ingham County C.B. Club news is way out "In Front." No other paper printed today swings quite like the Ingham County C.B. news. Those cats that print up the Transmitter are way out, man like gone that is, like these cats are the one that swing. When you are looking for the best man this is the place, the news found in the Transmitter.

Twenty members of the Nineteener's Citizens Radio Service, a CB Service organization in Akron, Ohio, operated the official communications network at the 26th All American Soap Box Derby held in the Rubber Capital of the World recently. The event, sponsored by Chevrolet, newspapers, radio and television stations, and nonprofit Service Organizations, entailed the use of four base stations and sixteen walkie-talkies, for crowd control and official racing communications.

A letter received from, "Some St. Louis County CB'ers."

We have a CB'er in our area whom some of us feel deserves extra notice. Marie Smith of Kirkwood, Mo., is a telephone operator who finds time to also be a tireless CB'er. We can always depend on her station being available in case of emergency and those of us who have had occasion to call upon her for assistance really appreciate KGH4001. Many times in the past months she has had to summon the State Patrol to a serious accident in which, no doubt, speed was essential and the minutes she saved by being there to answer a mobile call have been invaluable. "A salute to Marie Smith."

The Midwest CB'ers C-19 Horizontal Club of Garrett, Indiana, was founded Sept. 15, 1963. Strange title for a club, but here's the story. They have a net control system set-up using Wayne Cress, KHB0291, in Syracuse, Indiana as control center. Their monitoring channel is 19. They have four districts with a director in each district. They are Gig Taylor, 18Q2217, for the North; J. R. Cox, KHA3979, for the East; Gerald Fountnight, KHB2091, for the South and Thomas Albin, KHC8038, in the West. They have found that their CB communications cover a much greater distance horizontal than vertical and since their members are scattered throughout the Midwest area, they found it necessary to rotate their club meetings from one district to another, trying to give all members equal driving distance. The club meets once every two months on the third Sunday of the month. Their goal is to promote friendship and better communications among members and fellow CB'ers. President of the group is Wayne Cress, KHB0291. News of the club comes from Secretary, James Houser, KHD4624.

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NORTHERN

President of the Pennridge Radio Club, Quakertown, Pa., is Donald F. Berle, KCC1541. Let's hear more. Don. A newly formed club the Southern Dutchess CB Radio Club, Hopewell Junction, New York states its main purpose is to aid in emergencies and to work wherever the club services are needed. The clubs members are

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from the Southern Dutchess County area. A crash membership campaign is under way. Club headquarters are located in Hopewell Junction, N. Y. Meetings are held the 4th Wednesday of each month. The club monitors channel 15, 24 hours a day. News of the club comes from Minard Coons, KB11539.

Membership of the Tri-County Emergency Communications Net, Inc., Dover, N. H. recently donated \$50.00 to the "Thresher Memorial Fund." This fund is being set-up to provide education for the dependents of the victims of the Thresher disaster. Hats off to the group on their contribution.

COMING EVENT—The 5th Annual Club CB Picnic of the Five-Eleven Radio Club, Inc., of Pittsburgh, Pa., will be held September 13, 1964 at White Swan Park, Parkway West, near Greater Pittsburgh Airport, Allegheny County, Pa. The club is planning a bigger and better picnic than the one last year. Mark your calendar now for this event.

The Keystone CB Radio Club of Uniontown, Pa., boast an active membership of 35 and was organized some 16 months ago. The club monitors channels 12 and 18. A 24 hour job of monitoring is being handled by the Hazen Cab Co., 20Q1503 of Uniontown. Officers of the club are—Bunny Smith, KIC6777, President; Ross Stickle, KIC1779, Secretary; Harold Metheny, 20Q2126, Treasurer; John Korhman, 20Q5484, Sergeant-at-arms. Tony Feretti, KID0941, club member, has done a wonderful job of preparing refreshments at the close of their meetings. Thanks to Jim Sankovich, S9 A.P.R.E., KIC2516 for the above.

COMING EVENT—February 2nd the 2nd Annual Roller Skating Party of the Hudson-Essex Chapter of the CBRRL at the Olympic Park Roller Skating Rink, Irvington, New Jersey.

The Lycoming Citizens Band Radio Club Inc. of Montoursville, Penna., boast a membership of 78. Yes, Les, 3W1027 I counted the list twice. Just a rumor—the biggest thing being planned and still in the beginning stages if the first C.B. Socialite Annual Jamboree, to be held during the summer of 1964.

The club says, since the Chatterbox, their club paper, was born, 23 issues ago, the paper has come a long way to becoming one of the best paper known to C.B. Clubs in the area.

Officers that will guide the Bergen County Chapter of MCEU are Larry Katz, KBG1472, President; Renee Shaw, KB13529, Vice President; Art Smith, KBG3510, 2nd Vice President; E. Shaw, KB13529, Sect'y; Mel Londner, 2Q3150, Treas.

Still waiting the news from the Otter Valley Citizens Radio Club's elections which was held recently. Their club paper, the QRM, was all prettied-up for the holiday season. Let's hear the result, fellows.

The Five Watt Whips, of Lowell, Mass., meets the second and fourth Sunday of each month at 7:30 p.m., American Legion Post 247, Tyngsboro, Mass. CB'ers in the area are always welcome to attend.

The Sociable "5" Watts, serving the Tri-State Area, which monitor channel 9 meets the second and fourth Wednesday of each month. Clubs interested in exchanging papers write: Sociable 5 Watts Club, Roy Shetler, Enon Valley, Pa. 16120.

WESTERN

The communication team, headed by Les LeSaulnier, 11W5622, and made up of members of the Hi-Desert CB Radio Club ably handled the communications for the Pioneer Pass Golf Tournament. This annual 3 day affair, starts with the contestants playing the 18 hole course in Yucca Valley, the first day, and up over the Pass, along the rugged mountain road to Big Bear the second, then finishing the third day by playing the Big Bear course. Tournament headquarters were kept in constant touch with all contestants as they progressed along the mountain road, by means of CB. Les and the CB'ers that made up the team are to be congratulated for a job well done. The Tournament Committee has announced that the job of handling the communications for next year, would again be handled by the Hi-Desert CB Radio Club. The committee was very pleased in which the CB team handled the affair.

The Redwood Citizen Banders of northern California located in the Eureka-Arcata-McKinleyville area, advises that they have changed their meeting place to the recreation hall at the McKinleyville Airport. They will continue to meet at 7:30 p.m. the 2nd Thursday of each month. All CB'ers in these areas are invited to attend. The dues have been raised from 50¢ to 60¢ per month to take care of the cost of renting the hall. The

club coordinated with the Humboldt County Sheriff's Dept. for a Halloween Patrol. 13 mobile units took part and were handled by 3 base stations. Eureka base worked channel 7, Arcata base used channel 9 and McKinleyville monitored channel 17. The entire communication setup was coordinated by Deputy Sheriff Ken Masters, KFC4093. The group received a letter of commendation from Sheriff Bill Pederson signed by Under-Sheriff Gene Cox, for a job well done. The Redwood club continues to grow. They report a total of 51 paid members as of November. The club newspaper has proved to be quite a success, they are receiving subscription from non-members.

The Instant Action Squad has been added to the 10-99 Club, Inc., Orange County, California. This is a group of radio operators who have dedicated their time and equipment to community service. They will be well trained, not only in the field of communications, but in First Aid, and all forms of search and rescue operations. They will also be able to handle the little emergencies that seem to frequently arise throughout Orange Co. Search for lost persons, aid to stranded motorists, and many others. This is the purpose of the Instant Action Squad, sponsored by the 10-99 Club, Inc. of Orange County. A dedicated club with a sincere desire to be of service to their community and their fellow man.

The December meeting of the Denver CB Club was the last one held in the Security Life Building. The club will move to the Western Federal Savings Bank Bldg., starting with the January meeting. Meetings start at 8:00 p.m., the 2nd Wednesday of each month. The December meeting was also a Christmas affair. The club served refreshments. Sounds like the Denver club really enjoys their meetings. The REACT Team of the club has 47 active members as of December 8th meeting which was held at Ralph Rickerson's home. Ralph's call is KGC1880. Herb Brown, 15W1898, is Chairman of the Team.

Glad to hear from the Citizens Emergency Mobile Patrol. The new officers for 1964 are: President, Brian Kincaid, 11A3134; Vice President, Scott Stucker, KEJ-5772; Secretary, Skeet Maxwell, KEJ4349; Treasurer, Carl Otten, 11W9130. CEMP club meetings are held the first Wednesday of every month, 7:30 p.m., club headquarters, 8209 Crebs Ave., Reseda, Calif. They would like to exchange club news letters with other CB clubs. Contact: CEMP P.O. Box 924, Reseda, Calif. As in the past years, they will aid in handling the communications during the New Year Rose Parade in Pasadena. The club also helps in handling communications at the Riverside International Raceway.

News from Louisa Welsh, KEJ1102, of the El Camino Real CB club in San Gabriel Valley reports continued growth in the club membership. The bowling league made up of 4-man teams from the club membership, is enjoying a very successful season. Everyone is really enjoying these social evenings each week. Doug Brazier, KEJ7436, reports the ideal hunting trip in Utah. Doug picked a high spot, turned on his CB rig and listened to the "mail" from all parts of the country while waiting for the deer. He got his deer. Invitation to all CB'ers in the Valley, to attend the El Camino Real clubs meeting. They meet the 4th Thursday of the month, VFW Hall, Azusa, Calif. Your welcome, see you there.

The Santa Barbara CB Radio Club have held their nominations and will have elected the new officers for 1964. No report yet, will have complete list in this column next month. The November outing for the SBCBRC and families was a transmitter hunt and Weiner roast. The club members caravaned over San Marcus Pass to Paradise Camp. Bill Mayfield, KFA0532, had the fire ready for the Weiner upon the arrival of the caravan. The coffee for all the group was furnished by Larry Cloer, KEJ5001. Herb Hartley, KEJ6466, who formerly furnished news for this column has moved to 202 S. Garrett, Siloam, Ark. Good luck Herb, let's hear from you.

The 10-99 Club of Orange County, California, reports the election of officers for 1964 has been completed. A lively and spirited evening resulted in the following selections. Buck Bukove, 11W8358, President; Ed LeFever, 11Q2279, Vice President; Eileen Inns, 11Q2714, Secretary; Geri Gilbert, KFA3928, Treasurer; Ralph Reynolds, 11Q3850, Sgt.-at-Arms. Congratulations to the new officers, and we all wish them a very productive and successful year. RMF General meetings are held the 4th Thursday of each month at 1104 W. 8th Street, Santa Ana, 8:00 p.m., regular coffee break every Monday 8:00 p.m., Freddi's, 1212 So. Bristol, Santa Ana.





WASHINGTON OUTLOOK

"Never underestimate the power (or number) of CB'ers," should be the slogan today. We say this because the FCC, which should certainly be in the optimum position to predict the future number of CB'ers in any given area, has goofed in the 20th call area. Some call areas, it should be noted, were provided with dual prefixes in case they ran out of calls for the original prefix. The 2nd call area, for example, was assigned both KBG and KBH for 1962, and KBH was never used. The 20th call area probably didn't look very promising and they were given only one prefix for 1963. Guess what happened? Yes, they ran out of calls. Along about Autumn the KID calls ran out and they had to come up with a "fill-in" prefix until the 194 KIE prefix came of age. The new prefix was selected to be KJI, and that's now about the scarcest stateside prefix "what am."

A number of times you may have read (*not* in S9) that the Chief of the FCC's Amateur & Citizens Radio Division, Ivan H. Loucks, was "out to get CB'ers." You were told that Loucks eats CB'ers for breakfast. You were told that his New Year's Resolution was to send CB to Saturn (or beyond). You heard that he was about the biggest natural enemy to CB'ers there ever was. We kept telling you that this wasn't so, and you replied by sending us letters asking if we were "putting you on." Well, you will probably be very interested in a few items from a speech which Mr. Loucks gave to the Quarter Century Wireless Association, a club of old time Ham operators.

Loucks gave the Amateurs (in general) quite a dressing down, telling them that "... the Amateurs have passed up the opportunity to be of public service and a new and enthusiastic group of radio licensees has taken over. Yes, I refer to the Class D station licensees in the Citizens Radio Service. These licensees, operating low-power units in the eleven meter ISM band, have organized

themselves into local groups which are currently performing many of the functions for which Amateur radio has been noted in the past. They have conducted search and rescue operations, they have provided communications in fighting forest fires, and they have affiliated themselves with Civil Defense organizations for all types of local civil defense communications. In addition, they have organized, almost on a national scale, in a program to help any part of the traveling public in need of assistance or information in the towns or on the highways of the nation. In short, if the Amateurs do not look to their laurels, the so-called Citizens Banders will shortly replace the Amateurs in the public esteem for the public service activities in which they engage."

Loucks then went on to propose that the civil defense efforts of Hams and CB'ers be integrated to increase the capabilities of CD programs.

On the other hand, Loucks recognized that there is a high incidence of "problem children" in the CB service, and said that "many persons seem to confuse their own personal interests or convenience with that of the public at large."

To us, it looks very much like Mr. Loucks easily recognizes the "pluses" of CB, but is not being taken in by the fanatic fringe element in CB which consists of a number of noisy individuals and at least one CB club which is trying to achieve national status by attacking the FCC and its officials.

Here's what-happened-to-who for this month:

6W6454, Plato P. Powers, Atlanta, Ga., given a notice of apparent liability in the amount of \$100 for not replying to FCC notices.

11Q0153, Lawrence Perry, Buena Park, Calif., served with a notice of apparent liability in the amount of \$100. Reason not available at press time.

12W0716, Robert Louis Lenz, Oakland,

Calif., hearings terminated on station's show cause notice. The FCC will now decide if the license will be revoked.

12W3522, R. W. Crawford, Jr., Hayward, Calif., hearings terminated on his show cause notice.

12W4784, Raymond D. Hill, San Francisco, Calif., hearings terminated on his show cause notice.

KBC3510, Arthur W. Smith, Teaneck, N. J., served a notice of apparent liability in the amount of \$100 for violation of 19.61(a), non-substantive messages.

KDB8001, Ernest C. Fortenberry, Cleveland, Tenn., directed to show cause why his licenses should not be revoked for repeated failure to respond to official notices concerning alleged violations of 19.61(a), non-substantive messages, and 19.61(f), talking more than 5 minutes.

KDH1734, Vincent R. Banville, Sr., Fort Lauderdale, Fla., hearing scheduled on his show cause notice. Examiner James D. Cunningham will preside.

KEE0583, Frank J. Pasket, South Houston, Texas, hearings terminated on his show cause notice.

KEJ4695, Danny's TV Service, Anaheim, Calif., served with a notice of apparent liability in the amount of \$100.

KFA0557, Fred E. Kruse, Long Beach, Calif., his request was granted for a reconsideration of the Oct. 14 order which revoked his license, to the extent of modifying that order to move the revocation back 40 days to Dec. 30 and without prejudice to Kruse's applying for a new license after January 29th, and the Commission dismissed without prejudice Kruse's application for modification of license to change address.

KFA0843, Kenneth L. R. Waterman, Redondo Beach, Calif., sent a notice of apparent liability in the amount of \$100 for failing to respond to official FCC notices.

KFA1316, Roger Phillip Grider, Long Beach, Calif., directed to show cause why his license should not be revoked for repeated failure to respond to official notices concerning alleged violation of 19.61(a), non-substantive messages, and 19.61(f), talking more than 5 minutes.

KHH3074, David J. Ohlert, Grosse Pointe City, Mich., directed to show cause why his license should not be revoked. Reason not available at press time.

KHI5265, Lester D. Brill, Jr., d/b/a Brill Electronics Co., Allen Park, Mich., sent a notice of apparent liability in the amount of \$100. Reason not available at press time.

S9

SEE-MORE'S CB STATION

Continued from page 10

the state nuts institution, callin' da state nuts institution. Round up two loose nuts from da confedrid army that is gettin' violent approachin' from da rear."



Boy, things was really sizzlin'. Da fregussys was blocked for 'bout 4 thousand miles. The aerial was so hot it burned a hole in da roof. Sparks was flyin' from da ceiling up above. People starts runnin' up and down da street on my block and a dog was howling. There was a loud explosion from da attic. I jumped out da winder, landin' in some poison ivy and was grabbed by two men wearin' some kinda Dick Tracy badges. These guys said dey came from Federal Communists Association and demanded to see my license. Dey said I was bootleggin'. I don't see how they knowed that! I had a small still in da cellar, but I never told nobody and never sold no liquor. Well anyways, no more rayo for me! My eyes closed wid poison ivy and I can't see nothin', and my case comes up on Tuesday.

When I gits out of jail and rebuilds my house back, I might be interested in knowin' where I can swipe another water cool tube at.

S9



KBG4303 RIDES AGAIN

Continued from page 7

CB IN ENGLAND?

A recent issue of a magazine called "ARMS Mobile News" came to the top of the incoming mail pile and revealed some worthwhile news. The "ARMS Mobile News" is a Ham radio publication from Great Britain, and this particular issue contained an article called "Do We Want A Citizens Band In The United Kingdom?," and sub-titled, "Calculated to cause heated controversy and strong opposition from the GPO." The GPO is the English equivalent to the FCC or DOT. The author, Norman Fitch (G3FPK), takes the stand that there *should be* a CB based on the various conveniences which CB could provide, plus the fact that CB would reduce crime by establishing a gigantic network of mobile two-way volunteer police patrolers. He also feels that such a band would greatly reduce the number of Ham band bootleggers. Describing the possibility of a CB service in England as a "golden opportunity," Fitch says that the whole concept is not a new one inasmuch as several years ago there was a proposition to a CB band to be established on 70 megacycles. Mr. Fitch's proposal is for a band which is exactly the same as the U.S. band, or on an unused part of the 10 meter Ham band. He suggests that the 5 watt U.S. limit be adopted and that antennas should be limited to omni-directional types at restricted heights.

This is the first concrete and workable plan we've seen from England and it certainly bears watching.

CALLING ALL DEALERS

We frequently receive requests from our advertisers to furnish them with names of CB dealers in certain cities or states. Our files contain several thousand such names and addresses, but we realize that there are obviously many dealers who have escaped our ever-watchful eyes. If you are a CB dealer and aren't on our mailing list (if you are, you would have received a mailing we sent out in October) please let us hear from you. If you're not sure whether or not you're on our list, drop us a card anyway and we will double check you to make sure. Your presence on our dealer/jobber list will assure you of being "in" on some pretty fantastic offers and programs now on the drawing boards of leading S9 advertisers.

CB IN DUTCH

One of our European readers, Jim Vasten-

houd, tells us that there has been considerable pressure on the Netherlands Telecommunication Union in Holland for a CB band. The NTU finally decided to go ahead with the plan and have set aside 23 channels which correspond to the U.S. CB channels. Ten of the channels are for usual CB communications, 3 for "translation installations," 2 for wireless microphones, 2 for remote control of garage doors, 2 for special applications, and 4 for remote control of model aircraft and ships. Licenses are available at \$4 per year. Sets have a 5 watt limit.

WHAT HAPPENED?

A recent copy of "The Transmitter," publication of The CB Rangers Club of Butler, Pa., came past today. The Rangers were one of the first local clubs to join up with the ACBA, although from the tone of their editorial it looks as though they are now beginning to feel that they donated their dues to a "will o' the wisp." The editorial starts off with the question, "What has happened to the ACBA? Is it true that it is falling apart? Is it being used by someone just to make a profit to sell CB'ers merchandise? If you are asking yourself these questions lately, you are just one of hundreds who are doing the same thing."

They frankly admit that they "can well understand the reason many CB'ers hesitate to join and support the ACBA . . . It seems that they would start up and collect a nice little bundle in membership fees and dues and overnight they would be gone and never be heard from again." Get the point?

S9 ENDORSES NATIONAL CB CLUB

Alright, you bugged us for months to endorse a national CB organization and we finally saw one which doesn't offend us. No dues, either! In fact, all you have to do to join is to send your QSL card together with a *self addressed, stamped, envelope* to Grace Langlotz, KCI2290, P.O. Box 4581, Richmond, Va. The merry group is known as "Skip Talkers Drinking and Quilting Society," and members will all receive a membership card from Grace. The aims of the club? Never could find out, but Grace is such a charmer we didn't much care after the eyeball QSO we had in the S9 office a few weeks ago!

HELLO CANADIANS!

The sudden and rather unexpectedly large surge of interest in S9 in Canada has reaped benefits for our North of The Border neighbors (or neighbours, if you will). We have appointed Mr. John Burnup, XM49-405, as our Canadian Editor. John will be reporting

monthly on the rapidly growing Canadian CB scene for us, and his extensive experience on the staff of one of Canada's best CB club publications is certainly a bonus. All Canadian readers (both individuals and clubs) are invited to keep John supplied with material for his new monthly column, which will commence in the March issue (if plans go as expected). John is looking for photos, CB activity stories, club bulletins, or anything else which you want to see in his column, "Canadian CB Capers." John's 10-20 is 926B Cummings Avenue, Ottawa 7, Ontario.

LEGAL BEAGLE

The current confusion regarding the legal obligations of CB'ers has brought numerous reader inquiries. To fully explain the situation, we have commissioned one of the nation's leading lawyers to hash over the subject in terms which all of us can understand. He's active on the air and an expert on the topics he will write about. This will be a series of articles and will commence in the March issue—it will be something that you cannot afford to pass up. Some of the subjects covered include legal aspects of mobile operation, clubs, antennas, and so on. It will explain your legal obligations and rights in instances of complaints from neighbors, the City Fathers, etc. All in all, pretty valuable and interesting stuff.

By the way, did you say that you *still* haven't subscribed to S9? *Shame* on you! With newsstand copies getting harder to find with each passing month of increasing demand, you may goof up and miss an issue. C'mon, don't be a loner, there's a postage free envelope between pages 48 and 49 which you can use. It's only 5 measley bucks for a whole year's worth of 12 issues. And the *BIG* surprises are yet to be announced!

WHO'S A HAM

ACBA's latest battle cry is that S9 (*and yours truly*) doesn't have the best interests of CB'ers at heart because the "editor of S9 is a Ham radio operator." While there's no denying the truth that I am an Amateur operator, I fail to see any specific examples of this fact marring my view of CB. Let's face it, I was an active CB'er for many years prior to my obtaining an Amateur license. I didn't even consider becoming a Ham until I met the head man at ACBA, Bob Cooper, who encouraged me to take out a license—because he himself was (and still is) a very active Ham operator. In fact, Bob was a Ham for many years *before he took out a CB license*, at my encouragement. Of course the fact that Bob is a Ham (his calls are W5KHT and

K6EDX) is supposed to be a *BIG secret*—so don't tell anyone you read it here because it may break the ACBA's big bubble. Another big battle cry is that S9 is published by the same company which publishes CQ Magazine for Hams—somewhere along the line the ACBA forgets that it's self-appointed chief was the originator, publisher, and editor of his own Ham publication, "VHF Horizons" (you have never heard of it because it folded up after only a few issues for lack of reader interest). Sometimes I wonder if they must disinfect the typewriter at ACBA headquarters after they write such things. Apparently they are too busy writing these idiotic charges to answer the challenge we gave them to prove their membership claims.

SPECIAL GUEST EDITORIAL

by Dennis Comer, KHH3743, Editor
The Frequency Beat
5 Watters of Lake County, Ohio
NATIONAL CLUBS?

How would you like to make \$10,000 in just a couple of months? All it would take is about \$100 to start the ball rolling. If I got your attention, read on. First we think of a suitable name for a national, country-wide organization. For example: "The Preservation for CB'ers of America, Inc."

The *Inc.* does not stand for *Incorporated*, it means "I need cash."

We start our project by having membership cards printed. Then we mimeograph a sheet telling all CB'ers of the benefits we offer, like, "Get in the swing with the rest of the gang, join the PFCBA and MAKE the FCC do what we want!"

"We are pushing for a grand total of 100,000 members.

"All it costs is 100 pennies for membership, and if you want to rook your five friends and get them to join this club too, you will get a white beany with your call letters on it.

"Members are cordially invited to purchase, at official club prices, the club ring and de-code-ograph and club handbook with all the secret codes and handshakes and the club flag and the easy to assemble club-house and the club badge with the secret compartment and the club rules and the invisible ink and the uniform and the sword and everything!"

And so-on and so-on.

All the above is just to point out a few things to investigate before you drop those pennies in the mail.

Does the organization *ACTUALLY* do anything constructive which will benefit YOU, as an individual? Are you *absolutely certain* that the organizers will work in YOUR personal best interests?

But the biggest thing to do is to *investigate*, find out *what they have been doing* and *what they plan to do*.

It would certainly seem that the noisiest of these so-called "national clubs" hasn't done anything good yet but plans to populate our channels with all manner of lawbreakers.

KHH3743

Dennis summed up what we've been trying to say for months. All we can add is "amen."

CARD SWAPPERS

Continued from page 51

KID1294 John Grierson, 46 Kohlman, Rochester, N.Y.
 KID1328 Ron Conley, 45 Murray, Rochester, N.Y.
 KID1405 Jim Baney, RD. 1, Renfrew, Pa.
 KID1633 Gary Shannon, 226 E. Walnut, Butler, Pa.
 KID1668 James DeRenzo, 163 W. Genesee, Clyde, N.Y.
 KID2220 Laura Baney, RD. 1, Renfrew, Pa.
 KID2225 Dave Helfrick, RD. 3, Fayetteville, Pa.
 KID2519 George Newcomb, Box 10, Clinton, N.Y.
 KID2541 Ethel Shagi, 6950 Shannon Rd., Verona, Pa.
 KID2617 George Thayer, Box 23, Burnt Cabins, Pa.
 KID2849 Jim Henry, RD. 4, Mountaintop, Pa.
 KID4353 Tom Becht, 903 McConnell Ave., Erie, Pa.
 KID4375 Jerry Carroll, RD. 2, Canandaigua, N.Y.
 KID5295 Clarence Hendricks, RD. 3, Werner, Greenville, Pa.
 KID6404 Stanley Panasewicz, RD. 2, Hunlock Creek, Pa.
 KID7290 Bill Stephens, 1402 Spruce, Hollidaysburg, Pa.
 KID7936 Joseph Zinno, 409 8 St., Altoona, Pa.
 KID8012 Harold Hunt, 18 Pleasant, Bradford, Pa.
 KID8032 Carl Knight, 253 W. Washington, Bradford, Pa.
 KID8308 Martha Swiharts, 425 Front, Salamanca, N.Y.
 KID8452 John Humenansky, 264 Slocum, Swoyersville, Pa.
 KID8581 John Hancock, RD. 1, Mt. Union, Pa.
 KID9418 Jack Florentine, 4603 McKinley, Hamburg, N.Y.
 KJF0140 George Hollendursky, 4223 Acton Pl, Wash., D.C.
 KJF0275 Ronnie Edmonds, Washington, D.C.
 KJ0350 Herb Palmieri, 100 Maple, Saratoga Springs, N.Y.
 XM11958 Louis Boda, Box 3, Hope, B.C., Canada
 XM13500 Leo Benard, Box 696, B.C., Canada
 XM41198 Barbara Burton, Stouffville, Ont., Canada
 XM411442 Verna Massam, 2263 Dundas, W., Toronto, Ont.
 XM411443 The Massam's, 2263 Dundas, W., Toronto, Ont.
 XM411520 Al Moody, 128 Morden, Oakville, Ont., Canada
 XM41831 Douglas Ferguson, 61 Cranbrooke, Toronto, Ont.
 XM412415 Doug Crossley, Box 93, Oakville, Ont., Canada
 XM43844 Bill James, 225 Bendamere, Hamilton, Ont., Canada
 XM49393 G. Pacer, 924 Cummings, Ottawa, Ont., Canada
 XM49565 Ed Skulsky, 72 Britannia Rd., Ottawa, Canada
 XM49569 Gerry Lebrun, 19 Pinehurst, Ottawa, Canada
 XM51384 Eddie Wald, 5695 Eldridge, Montreal, Que., Canada
 XM521995 Ian Black442 Grosvenor, Montreal, Canada
 XM63378 Ken Stratten, RCAF, Greenwood, N.S., Canada
 XM15065 Ben Biro, 295 Bassett, Penticton, B.C. Canada
 XM63108 William Halo, 201 High, New Glasgow, Canada
 XM65150 Vaughan DeMerchant, Box 13, Perth, Canada
 YY5-179 Eduardo Insam, Box 2251, Caracas, Venezuela
 Atl. 787 Bob Malone, Kimberly P. O., Kimberly, W. Va.
 Cent. 1490 Bill Keilman, 413 W. 7th, Connersville, Ind.
 North. 2140 Alvin Arthur, Box 27, So. Weymouth, Mass.
 North. 2189 Robert Allen, 46 Jackson, Attica, N.Y.
 Pac. 502 Greg Smith, 1232 Graynold, Glendale, Cal.
 WPE1FJP Alvin Arthur, Box 27, So. Weymouth, Mass.
 WPE2KME John Patois, 131 N. 2nd St., Paterson, N.J.
 WPE3CGR Dick Moore, 42 Belmont Ave., Wilmington, Del.
 WPE6EJV Greg Smith, 1232 Graynold, Glendale, Cal.
 WPE6EWU Allan Hart, 5800 Gladly St., So. Gate, Cal.
 WPE8FMA Reg Mahoney, 3402 Staunton, Charleston, W. Va.
 WPE4GDZ Bob Malone, Kimberly P. O., Kimberly, W. Va.
 VE1PE2D D. Belliveau, Box 213, New Glasgow, N. S. Canada
 New England, Box 635, Meriden, Conn.
 Jack Tate, c/o Custard Stand, Saltville, Va.
 D. Pulos Jr., 445 So. 4th Ave., Mt. Vernon, N.Y.

SIGNAL SNATCHER

Continued from page 28

8. Wire R₁ and C₂ to the cathode (pin 8) (solder) of the input tube. Keep cathode leads short.

9. Mount filament bypass capacitors C₁₀ and C₁₁ to pins 12 on both sockets (crimp at socket). Solder the free end to the chassis.

10. Solder tap on the input coil (L₁) to center post of the coaxial connectors nearest pin 8 on the socket.

11. Solder bottom of the above coil to chassis.

12. Solder the top of the input coil to R₁ and C₂ (cathode resistor and bypass capacitor).

13. Solder bottom of plate coil (L₂) to pin 2 of the first stage.

14. Mount shield partitions to separate input and output of first stage.

15. Mount gain control (R₄) so that leads are facing inward to sockets.

16. Bend and solder middle lug of gain control to chassis.

17. Solder tap on coil L₃ to pin 8 of second stage Nuvistor.

18. Mount and solder capacitor C₇ to chassis.

19. Mount and solder resistor R₃ to left hand terminal of gain control.

20. From top of plate coil (L₄), wire in the plate dropping resistor (R₅) and the plate bypass capacitor C₉. One end of this cap. goes to chassis ground. Since most CB base stations use tube models and operate from a built-in power supply that puts out about 250 volts, the plate dropping resistors (R₂ and R₅) can be 18K ohms @ 2 watts.

21. Mount second shield partition.

If you use flashing copper for the chassis and shields, the metal work should be completed up to the point where the parts are ready to assemble on the chassis. The copper may be polished with steel wool. The outside of the chassis box can either be sprayed with a clear finish or a finish to match your receiver. This prevents an oxide coating forming over a period of time.

If signals are used to set up the preamp, they should be peaked for *greatest rise over noise* for a given signal, rather than maximum "S" meter reading or the loudest volume.

All tuned circuits can be set with a grid-dip meter or can be pre-set to channel 9.



LETTERING & EVERYTHING RADIO

NAME _____

Address on 3x5 Card _____

2nd of _____

to me _____

RADIO STATION _____

FOOP may not mean anything but we got you to look at our ad for wild, wild QSL cards. Four wacky styles, only \$1.00 per 100 cards, \$2.00 for 250, \$3.50 for 500. Add 10¢ per 100 cards for postage. Add your own call letters and you're in business. Samples, 10¢.

Nustabour 1440 - 54th Street B'klyn 19, N.Y.

CB SHOP

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 advertisers and equipment contained 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 QSL CARDS—100 two-color \$3.00 postpaid, samples—10¢. Rusprint, Box 7575, Kansas City, Missouri 64116.

Quality QSL's—New Low Prices. Samples 10¢, 25¢, 50¢. Savory, 172 Roosevelt, Weymouth, Mass.

CB LOG BOOKS—50 pages BIG, loads of entries per page, space for all needed information. This is THE ORIGINAL CB log book—best seller since 1960. Only \$1 postpaid. Harewood, 1536 Lexington Avenue, New York 29, N. Y. (limited supply at this price)

UNWANTED CB gear kicking around your CB shack? Everybody has some! Turn it into fast cash with an inexpensive (10¢ per word, no minimum) S9 classified ad which will be read by more CB'ers than an ad placed anywhere else at any price. You'll probably be deluged with checks. Closing dates on the 15th of the 2nd month preceding date of publication.

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

CB—QSL CARDS—From \$1.00 per 100 up. Write for catalogue and samples 10 cents. Sacandaga Press, Broadalbin, N. Y. 12025

FREE SAMPLES—CB QSL CARDS—\$4.00 PER 100—TWO COLOR—POSTPAID. QSL PIONEER, P.O. BOX 2451, PATERSON, NEW JERSEY.

CB QSL's—Samples 25¢ (Deductible) T-P PRINTING, 2734 Westerville Road, Columbus 24, Ohio, KHJ2735.

CB QSL'S. New styles, Quality stock, Samples 10¢. Sunset Print Shop, Walpole, N. H. 03608

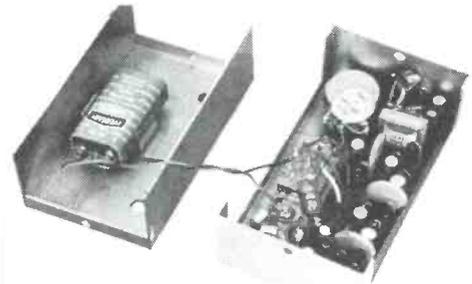
LAB REPORTS

Continued from page 40



The Comtran Model C-II Compression Amplifier is a neat and small self-powered unit. Mic jack is at the left with the output gain control at the right. The LOCAL-DISTANT switch at the center cuts the amplifier in or out of the microphone circuit. The output cable with plug is for insertion into the mic jack of the transmitter.

your rig) while not causing illegal overmodulation. In instances where communications may be accomplished without the need for "blasting modulation," the unit can be switched out of the mike line to give you the modulation you had prior to the insertion of the C-II. The gain of your modulation is also under control from a pot on the device.



Interior view of the Model C-II. The three transistor stages are mounted on a small printed-circuit board at the right. The other round-ended objects are tiny electrolytic capacitors. A 9-volt transistor-radio battery is held in the cover at the left.

Checking the Comtran C-II on the air gave all indications that the thing really does substantially increase "talk power" and give the extra kick needed to get a CB rig through the QRM or a hectic CB channel. There is some loss of low frequency response which takes away from the natural quality of the voice, but this seems a small price to pay for the pluses of audio compression.

We were more than pleased with this little unit, it certainly is lower in cost and less complex than a number of other units which offer similar benefits. Price is \$29.95 from Comtran Associates, Inc., 2847 Cropsey Avenue, Brooklyn 11214, N. Y. Look into this one, it's a winner!

S9

(Advertisement)

CB IN ACTION

By Len Haas,
Sales Manager,
Pearce-Simpson, KBG7527



Time for another Companion award winner—and an exciting story it is! The scene is San Luis Obispo, California and James A. Ostrand KEA1118 put CB into Action and was instrumental in apprehending a beserk ex-German soldier. But let him tell you for himself:

"Dear Mr. Haas:

"My wife, Fusako, and I are personal users of CB radio, and therefore aren't on the air as often as some of the business users that we read about in your monthly S9 feature. We do, however, have our share of interesting experiences, and we know that you, being interested in CB in Action, will want to know of a situation that we participated in recently.

Last Sunday morning, while visiting a CB'er friend in Sunnyvale, we were talking to a couple parked on a mountain-top about 65 miles away, and had just cleared when they called for help. The girl, (Linda Adams) hurriedly explained that "Two grubby looking men are trying to force their way into our car." I immediately called the Marin County Sheriff's Department by telephone (long distance) and relayed the distress call to them. Quick action by Sheriff's deputies enabled them to apprehend the intruder as seen in the enclosed newspaper clippings.

Since then, several people living in the San Francisco area have written to us to let us know that our experience made headlines in the San Francisco papers. This has provided much publicity for CB radio, and should go far to show that the Citizens Band is a lot more than just a play-thing. In our case, it was a necessity!

Sincerely yours,

(Signature)

James A. Ostrand, III, KEA1118"

The event certainly did hit the papers. We received clippings from the San Francisco Examiner, the San Luis Obispo County Telegram-Tribune and several mentions of the incident from other California CB'ers . . . all certainly helping to get the benefits of CB across to a public which still is not aware of its many accomplishments.

A few more details of this harrowing experience as related in the papers:

The suspect, an ex-German soldier (6'4" tall), tried to enter the parked car. The driver started the car and managed to throw the attacker off his bumper. Two deputies sped to the scene and caught the accused locked in his car. He backed up and tried to hit the policeman. A wild chase followed with thirteen shots being fired by the police with a .38 Colt. A Magnum .357 finally stopped the fleeing car. The attacker was unhurt and it took four officers to handcuff him.

A well deserved Companion is now on its way to James A. Ostrand, III. Keep up the good work!

Win a Companion II

Pearce-Simpson now has its brand new, advanced design Companion II on the market. And you can win this outstanding CB performer simply by sending us your CB in Action experience. Just tell us how you used CB to help your community. Write to Len Haas, Sales Manager, Pearce-Simpson, Inc., 2295 N.W. 14th Street, Miami 25, Florida.

ABSOLUTELY BEST PROTECTION YET! Large federal warning decals displayed on your windshield warn against the serious crime of tampering with or stealing your CB equipment. A necessity in alerting the public and preventing your losses. Rush \$1.00 for each pair of three color decals to: ARTCO, Box 8202, Atlanta 6, Georgia 30306. Return mail delivery!

QSL's. Top quality, reasonable price. Samples 20¢. CB Press, Box 281, Oak Park, Illinois 60303.

Ideal CB Service Instruments. Triplet % Modulation Meter, 5 watt 50 ohm dummy and Ferris 18-C Microvolter connected to CB Band only. All Three \$50.00 FOB Chicago, Ill. Fritz Franke, 919 Ridge Court, Evanston, Ill.

CANADIAN CB call area maps in 2 blinding colors on high quality paper—only 25¢. Get both the Canadian map and the 35¢ 3 color U.S. maps for only 50¢. Order now, supply limited. Order from: Wall Certificate, S9 Magazine, 300 West 43rd St., New York, N. Y. 10036.

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

Picture of yourself, home, equipment etc., on CB—QSL's made from your photograph. 250-\$7.50 or 500-\$10.00 postpaid. Samples free. Write to Picture Cards, 129 Copeland, LaCrosse, Wis.

GLOSSY 3-COLOR QSL CARDS. 100-\$4.50. Free Samples. Rutgers Vari-Typing Service, Thomas Street, Riegels Ridge, Milford, N. J.

For Sale—New and used C.B. and 2 way F.M. Radio Equipment. Send For List. Dealer Ing. Invited. Becom Co., Seminary Hts., 817—LY 4-5172, Weatherford, Tex. 76086

QSL's. GORGEOUS RAINBOWS, ETC. BEAUTIFUL QUALITY. (NO JUNK!) LOW PRICES. SAMPLES 10¢ REFUNDABLE. HARMS, KDI-1143, 905 FERNELD, EDGEWATER, FLORIDA.

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.

CALL CARDS—BADGES—DECALS—"GOODIES." ILLUSTRATED LITERATURE WITH SAMPLES 25¢. 1W6216 % Errol Engraving, Westfield, Mass.

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, Calif.

SOUTHEASTERN CB'ers: Repair, calibration by FCC authorized personnel. Top quality work at reasonable prices. Ship your unit(s) to LAFAYETTE RADIO & ELECTRONIC ASSOCIATES STORE, 2611 N. Lumpkin Road, Columbus, Georgia 31903.

FIRE EXTINGUISHERS, for mobile and base, all type fires, guaranteed 20 years, solid brass, \$4.95 and \$9.95 with bracket. KB14857, W.M.B. Company, Box 833 Athenia Station, Clifton, N. J. 07013

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, Florida.

CB transmitters \$6.00. Other bargains, send 10¢ for list. Vanguard, 190-48—99th Ave., Hollis 23, N. Y.

"ALTERNATOR FILTER" The original designers and manufacturers, \$2.50. Voltage Regulator Filter, \$2.50, Low-Loss 3-30 mcs tunable generator filter, \$2.50. **ENGINEERED PRODUCTS CO., SPRINGBORO, OHIO.**

CB'ers—Our easy-do Dual Conversion adapter kit improves selectivity, increases sensitivity. Often copied but never duplicated. For HE-15, A, B; 800; 910, A, B, C; Mark VII; 770, 1, 2; Messenger; GW-10 etc. \$15.50, with tubes \$17.50. Also, Speech Clipper-kit complete \$17.85 or \$5.00 deposit plus COD. Results! Not promises. There is a difference. Free literature Dept. #12S, Bainbridge Radio Electronics, 2839 Briggs Avenue, New York 58, N. Y.

ABSOLUTELY BEST PROTECTION YET! Large federal warning decals displayed on your windshield warn against the serious crime of tampering with or stealing your CB equipment. A necessity in alerting the public and preventing your losses. Rush \$1.00 for each pair of three color decals to: **ARTO, Box 8202, Atlanta 6, Georgia 30306.** Return Mail Delivery!

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

CB-QSL's over 100 designs, samples—10¢. Rogers, KOAAB, 961 Arcade, St. Paul 6, Minn.

NOW—cards of distinction for discriminating CB'ers. Your photo on cards from snapshots or send us your ideas and designs for custom work by professional artist, samples 25¢. Dick McGee, 1444 Home Street, Jacksonville 7, Fla.

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

CB QSL's, 100 for \$3.00, samples 25¢, Redbird Printers, Freedom, Indiana.

WANTED—Dealers to handle Poly-Comm and Mesur-Matic products in Rocky Mountain Region. Contact Cross Commissary, Distributor, Box 162, Douglas, Wyoming.

QSL's High Quality Regular or Raised Printing FREE SAMPLES. Frier Specialties, 21 Harvard, Schenectady 12304.

QSL CARDS HIGH GLOSS FREE SAMPLES
DOT'S HOBBY PRINT SHOP
HAINES CITY, FLA.

Write to our advertisers for special product news

PLASTIC CALL-SIGNS

13WG210

1 1/4" molded figures (select Gold / Black / Red or White) on 3 x 9 beveled panel (select Black / White / Green or Yellow). Clear, solid plastic base, \$3.50 m.o.—postpaid U.S.

CARR PLASTICS.

Box 18222-S. Indianapolis, Ind. 46218.

LET'S TRADE

We need used gear and we're trading high. What do you have and what do you want? If you are ready to switch to Business Radio with 10 to 150 watts of power this is your chance to trade in your CB gear for a good price. We handle all major brands of CB and AM Business Radio equipment.

KNOX ELECTRONIC SUPPLY, INC.

67 N. Cherry St., Galesburg, Illinois.



BIG CLUB or CALL BANNER SALE!

BUY 1 24"x48" Club Banner at \$16.85
Get an Exact Duplicate for only \$1.00

A million uses-
Meetings
Pictures
Trips

C. B. SOCIALITES
PLAISTOW, N. H.

This beautiful custom-made CLUB or CALL Banner is a new introductory offer. Each felt letter is stitched to a heavy fast-color wool felt background. Reinforced with stitched felt border. 3 pole loops at top. Any 2-color combination. This low price includes 20 letters. Extra letters only 36¢ ea. **EASY TO ORDER** - Specify 2448CB. Print CLUB Name or CALL, City & State. State any 2-color combination. Take advantage of this big offer - Order your Banners TODAY!

NEW CALL PATCHES

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New "Audio-Aid-All" Clipper-Filter kit, fits any transceiver, boosts modulation, aids reception, \$10.99. Hy-Gain Mark II Colinear, \$29.95. Omni-Topper, \$10.97. Best buy: DP = 2 BC/CB antenna coupler, \$4.99. Noisejector, NJ-7, \$4.49. Postpaid! For Heathkits, our preamps double reception! SK-3 Preselector kit fits GW-10, GW-11, \$8.99. SK-4 Preselector kit fits GW-12, \$8.99. Wired, \$11.99. Postpaid! HOLSTROM ASSOCIATES, Box 8640-S, Sacramento, California, 95822.

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