COMMUNICATE THE EASY WAY! Pg. 19

S9

ICD

SEPTEMBER 1968

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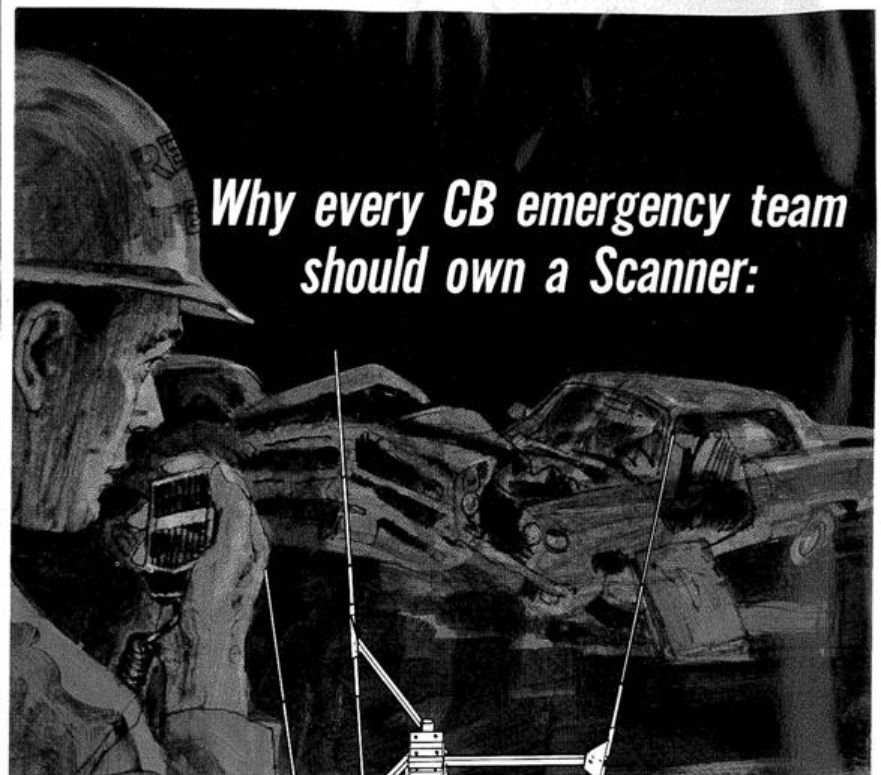
the citizens band journal

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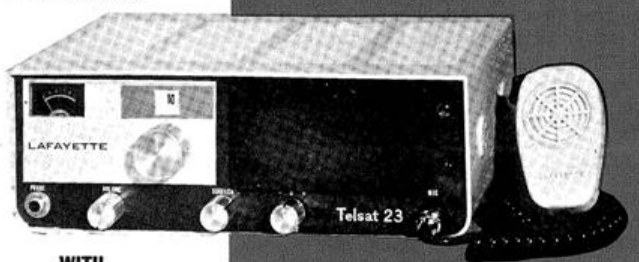
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READER MAIL



EASY HAM LICENSE

Editor:

The proposals which you support would remove the confusion on 11 meters, only to drop it in the lap of amateur radio. Your June editorial is obviously a case of telling your readers just what they would like to hear. What ever happened to the idea of a man working his way toward a goal instead of having it handed to him on a silver platter?

Dean Lewis, KRP7224/WA9QKE
Ellwood City, Pa.

There are a lot of us wondering what happened, Dean.

Dear Sir:

In your June editorial you firmly refuted the statement that CB is siphoning away prospective hams. In my brief exposure to CB it was obvious to me that all CBers were not interested in anything more than ham-type operation–rag-chewing, working skip, etc. Aren't there any CBers who want to do this legally on the ham bands? I'm not trying to condemn CBers, nor am I trying to say that every CBer would make a good ham; but it is obvious that many potential hams were lured away by notions of easy skip working and rag-chewing without limit.

Tom Albertin, WB2YBX
Hagaman, N.Y.

With people like the ARRL running ham radio, maybe most CBers figure it's worth risking a stiff fine on CB rather than doing it "legally."

PATCHED UP

Dear Tom,

Please give me information as to where I may obtain arm patches for our CB club. I'd like to get samples and prices.

Dave McDonald, KRK5378
504 Columbus Road
Streator, Ill. 61364

Anybody out there in CB land who can be of aid to Dave, please do your stuff.

CB-CHILDRENS BAND?

Tom,

I saw, in an old issue of S9, a letter about "children" under 18 operating a radio. I'm 14 years old and have a Technician grade ham ticket. I belong to the AREC (Amateur Radio Emergency Corps) and the Coffeyville Amateur Radio Club. I've been licensed since 1965 and have helped in many CB emergencies. So it would seem that some "children" can do justice to a microphone.

Chuck Vest, KNH9425/WAØTDJ
Coffeyville, Kan.

SURVEY

In reference to S9's frequent reader surveys, you people seem to be the only ones around who take an interest in those poor souls of the CB manufacturing world who rack their brains to produce better CB gear for the public. The industry really needs the guidance of the people who actually use the gear. I don't care whether or not you print this letter but I do want you to know that there is at least one CBer who appreciates your efforts; but I'm sure I'm not alone.

Don C. Loudon
Crestview, Fla.

No, our reader survey indicates that there are a few others out there with you.

INTERESTED PARTIES

Tom:

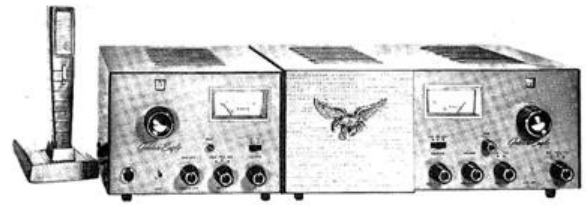
A few issues back you had a letter from a couple of gals expressing a desire for the CB manufacturers to work together to get CBers a few hobby channels and some easier rules. I believe that the writers of the letter had sent copies of it to all CB manufacturers. What was the outcome of this letter and these good ideas? What was the reaction of the manufacturers?

Anthony LoBonaccio
Jersey City, N.J.

The manufacturers reacted as expected–that is, they didn't react at all. You see, it's a pretty well-kept secret, but the rank and file of CB manufacturers simply couldn't care less about hobby channels, easier operating rules and whatever. While the majority of today's CBers may want this, they represent only a teeney-weeney fraction of the overall CB market potential which the manufacturers envision materializing in a few years. They feel that, while today's CBers may want to get hobby privileges, tomorrow's millions upon millions of operators will not be interested in them. Rather, they expect that the CBers of tomorrow will be interested only in using it for a few minutes a month during hunting or fishing trips, for calling his wife with instructions on when to start dinner, etc. In the meantime, until this great day (and market) comes into being, most manufacturers are content with playing a waiting game, trying out various equipment designs on today's operators and hoping that none of the

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SUCCESS HAS NOT SPOILED BROWNING



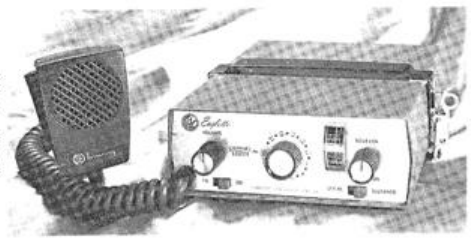
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Vol. 8, No. 9
September, 1968

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editorial

KQD4552 rides again!

by **TOM KNEITEL**
EDITOR, S9

LINEAR LINES

Ever hear of a linear amplifier? Sure you have; it's a mysterious black box which you secretly connect to your base or mobile rig so that you can run as much as 250 illegal watts on the 5-watt CB channels. It permits you to disrupt or totally destroy all CB communications on your channel for about 100 miles around and it can usually be counted upon to do likewise for most of the communications on the 2 or 3 channels to each side of your own. As an additional benefit, it makes you a prime pigeon for loss of your license and/or a healthy fine. This comes about when your brother CB'ers (the 5-watt variety) begin squawking to the FCC because you are causing such a ruckus. In due time, the FCC sends around the nice man with the gold and blue badge to do his James Bond bit and–Bingo!–another linear amplifier operator bites the dust. Of course, while the FCC man is in the area he brings his portable spy kit along so he can make the trip as profitable as possible by pulling in a whole batch of 5-watt operators along with the linear.

For the honor and pleasure of being a linear operator you must first purchase the piece of equipment. Of course, you'll pay dearly since a 250-watt linear sells for about $250. This is because CB'ers aren't supposed to know that almost anybody with even the most rudimentary knowledge of junk-box electronic construction can probably build one for about $50. But surely, anything which sports an exotic name such as the Black Cat, Hornet, Raider, Maverick-250, Bandit II, Jewel Box, Long Ranger or Super Long Ranger, *must* be worth from $100 to $250 just on the basis of the model name alone!

At one time, in CB's earlier and wilder era, there were many major and well-known CB equipment manufacturers busily at work turning out these transmitter boosters. It was almost a respectable product line. It soon, however, became apparent that all that the manufacturers were accomplishing was the setting up of their customers for FCC problems. They soon abandoned the market, leaving it to several scavenger outfits who continued to build the devices and peddle them on a hit-and-run basis. S9 had voluntarily stopped taking ads on linears, even if they contained the "fudge factor" phrase of "Illegal on 11-meter CB channels." This sentence was supposed to clear the manufacturer of any ill feelings you might have when you got caught using his illegal product.

You see, even though the linears were advertised only in publications supposedly for the exclusive interest of CB'ers, linear amplifiers have always been advertised as being "able to be operated on any frequency between 20 and 50 mc/s" or something along those lines. This implies that, while the thing is (wink! wink!) illegal on CB, it could still be used on frequencies used by other radio services such as industrial and ham radio. What you aren't told is that the linears can't be licensed by industrial users because they aren't FCC type-accepted or approved for such use; hams wouldn't buy one because of the ridiculous price; and most hams either don't run this much power on these frequencies or they go out and buy equipment which is already capable of running this much, or more, power. No, a 20-50 linear is strictly a CB'ers dish with the big fudge phrase supposedly making everything hunky dory with the FCC since they aren't supposed to realize that the units are being (heh! heh!) sold for the exclusive use of CB'ers by manufacturers who couldn't care less about either the fate of their customers or the state of CB.

When major companies pulled out of the market and when the major publications stopped accepting linear ads, the linear amplifier market began to wither; for a while at least, CB communications became almost a pleasure in many areas. Then suddenly the linears started popping up again–suddenly we began seeing the old familiar FCC fines for operators running over power (this month, KOD8081 in Brooklyn, N.Y. got caught), suddenly there were the same old unnecessarily strong signals jamming all communications.

Yes, the scavenger outfits were back in full

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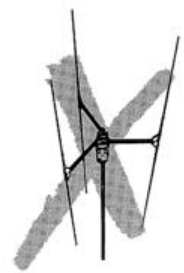
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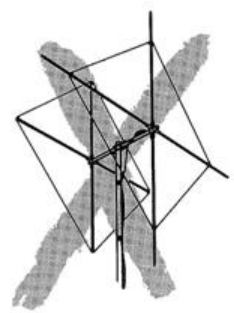
THE 6-60M MOBILE ANTENNA *U.S. Patent Pending*
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THE 6-60M BASE ANTENNA *U.S. Patent Pending*
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The SKIPPER

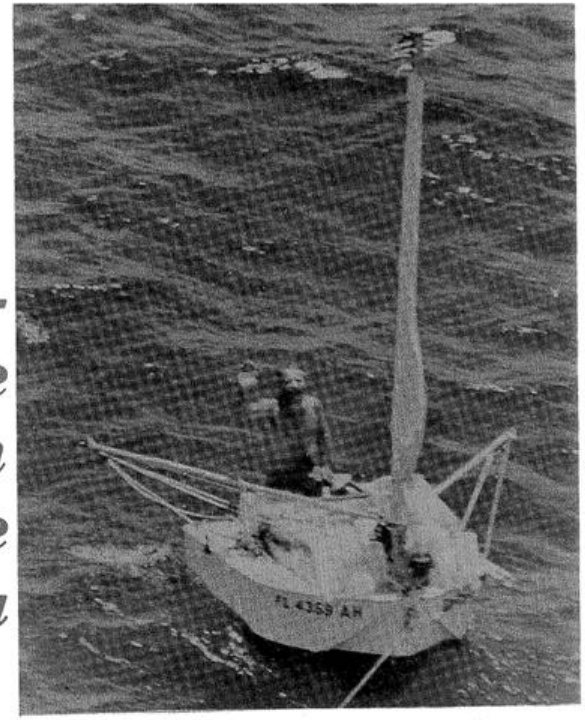
The SKIPPER: new low priced solid state 23 channel CB transceiver • superb dual conversion FET/IC no-overload receiver • advanced design noise limiting • illuminated S meter and channel • solid state T/R switching • Speech Clipping • 100% modulation • P.T.T. mike • Local/Distant sensitivity • external speaker jack • Public Address • Exclusive "All Position" Safety Breakaway Mount • 3 lbs: 1¾ x 6 x 8 **$159.95**

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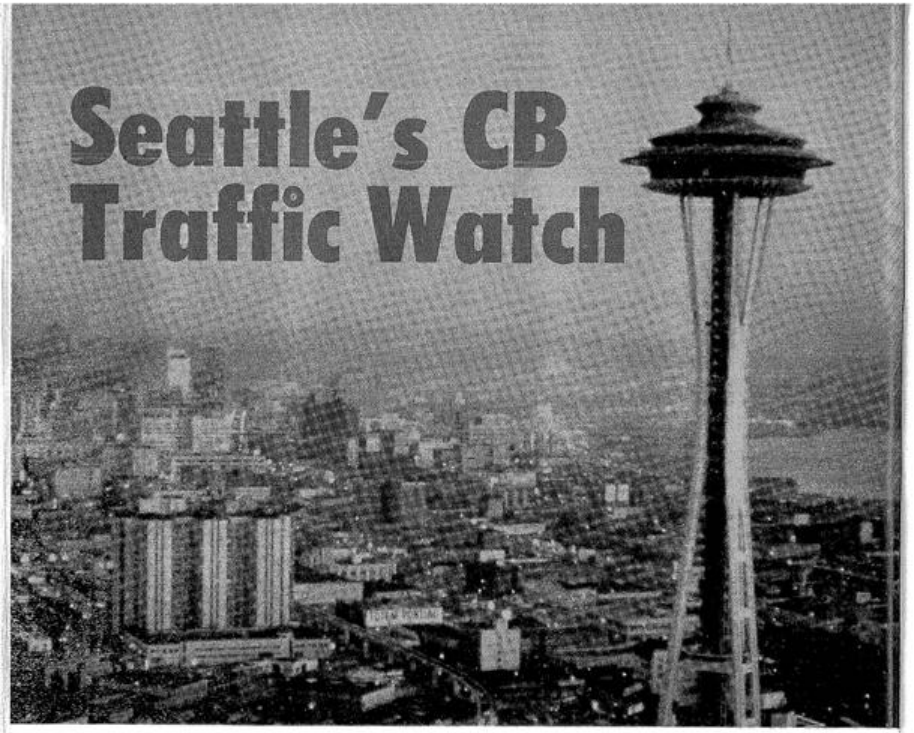
Johnnie Vihlen, earphones clamped to her pretty head, spent several chair-wriggling hours each evening for weeks trying to make CB contact with her adventurer husband, Hugo. Hugo, it seems, had taken a notion to establish a world record by sailing his 5-foot 11-inch sailboat, the "April Fool," across the Atlantic from Casablanca to Miami. Taking with him his trusty CB rig, Hugo had set sail from Casablanca, advising his wife to listen for his calls between noon and 2 P.M. Sundays and from 6 to 8 P.M. on Wednesdays. He was to be on 13; but Johnnie didn't hear him there no matter how hard she tried.

The 36-year-old Hugo was seen by a Spanish Ship about 900 miles east of Puerto Rico almost a month earlier, but that seemed to be the vanishing point. By June 12th, one day short of Hugo's estimated 75-day schedule to be in Miami, the Coast Guard had requested its planes and cutters to watch for Vihlen. CBers in Puerto Rico and throughout Southern Florida were listening, as



Continued on page 70

Seattle's CB Traffic Watch



STATION PITS CB AGAINST TRAFFIC HELICOPTERS IN SEATTLE BATTLE FOR RUSH-HOUR RADIO RATINGS

The highest operating CB unit on the West Coast—and possibly the world—is a much used Amphonol 650 operated by Seattle disc jockey Jim French of radio station KIRO. Jim broadcasts from the 580-foot studio level of that city's famous Space Needle. CB'ers from the entire Puget Sound area have been reporting traffic snarls to Jim each morning now for almost three years. Sometimes the CB network does more than simply report traffic conditions.

"I once relayed a call from a man whose CB-equipped Mustang lost a front wheel," says Jim French, who operates under KIRO's CB callsign KRD2355. "Additionally, we've summoned both the Washington State Patrol and an ambulance for a young woman who collapsed at the wheel as she drove onto the freeway."

"We've even helped 'follow' a hit-run driver after he side-swiped a CB'er in his car. The victim radioed the fleeing hit-run vehicle's position," Jim French continues, "while I and the [illegible] by telephone to the Seattle Police Department. Several other CB-equipped vehicles joined the chase and the culprit was apprehended within 10 minutes."

These incidents are only sidelights of the unique KIRO/KRD2355 operation. Primary objective is to provide the radio station's audience—which numbers over 650,000 weekly—with the most accurate traffic information available. Twice daily Seattle's CB network swings into operation; first, during the six-to-ten A.M. "The Jim French Show" and secondly, during "The Don MacDonald Show," broadcast between three and five P.M.

CB VS. WHIRLYBIRD

With prompt coverage of traffic conditions being a highly competitive and saleable broadcast commodity, there is surprising cooperation between KIRO and another Seattle station which employs a traffic control helicopter to provide on-the-air reports.

◀ View of Seattle, Washington at dusk, showing height relation of Space Needle installation to surroundings. KIRO radio, which broadcasts from the Needle, reports dependable 20-mile coverage with its Amphenol 650. Area motorists, equipped with channel nine rigs, report traffic conditions on major arteries; station rebroadcasts this information to commuters.

In addition, the newsroom at radio KJR has a CB transceiver, and though the general public is unaware of the fact, KJR supplies helicopter-reported traffic information to KIRO via CB. KIRO reciprocates by alerting the KJR helicopter of any important traffic snarls reported through the CB network. In this manner both stations improve their ability to alert motorists of dangerous conditions or time-consuming delays.

How does the two-way radio communications network approach compare with the "flying reporter" technique used in other metropolitan areas?

"In Seattle," says Jim French, "the most certain method for covering the freeway traffic scene on a full-time basis seems to be by ground transportation. The reason for this is that winter rains, fog and occasional snow inhibit airborne reporting. For its insignificant cost, the CB system has proven to be practical and dependable; it allows our listeners to "get into the act." Providing of course, that they are CB'ers.

Approximately 40 work-bound mobileers report in with regularity, averaging about 15 on a daily basis. This number is more than adequate to cover those major arterials of interest to KIRO's commuter audience. Few participants can appreciate, however, what the Needle's elevation contributes to Jim's Amphenol 650 over typical mobile or base station installations. Interference is "unbelievable" at times, although a 20-mile radius can generally be depended upon even during rush hour periods.

"On an active morning or afternoon when we have extra heavy traffic," Jim continues, "it is fairly common for two or more CB'ers to hit their mikes and report simultaneously, often regarding the same traffic incident." Sorting them out is often difficult, especially since Jim French and Ron MacDonald operate alone without aid of an engineer in the studio booth.

CHANNEL 9 CLEARS FOR KIRO

Before installing the Amphenol base unit, KIRO officials took a survey of area CB enthusiasts to determine which channel would be best for network operation. Overwhelmingly, those polled recommended channel nine.

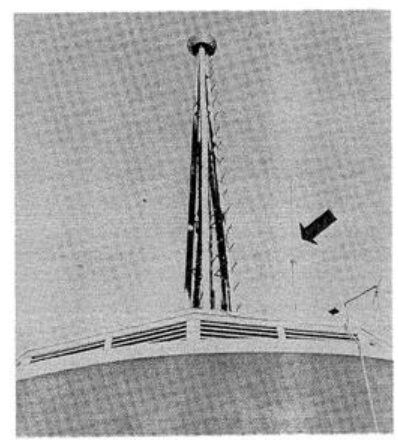
What would on the surface appear a poor choice of operating frequency has worked out exceptionally well in service. According to the station, incidence of incorrect information from CB'ers has been minimal and—of particular interest to emergency monitoring people—casual conversation on channel nine has "dropped to almost nothing during high-traffic hours." Indeed, most Seattle area CB users are anxious to participate in the informal highway reporting network. Courtesy and consideration are the order of the day.

A typical on-the-air exchange concerning a recent traffic accident was taped for S9 to illustrate the no-nonsense use CB is receiving in Seattle.

Continued on page 71



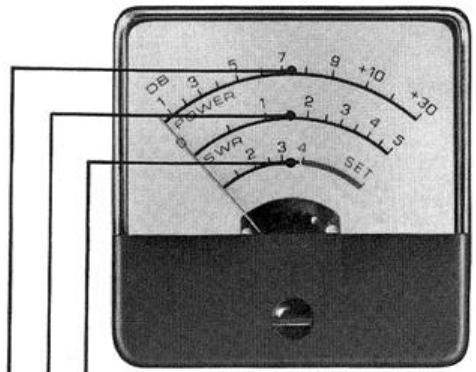
At height of morning rush hour, disk jockey Jim French reports accident to Washington State Patrol as commercial plays. Four-car crash was seen by passing CB'er, who radioed French direct over KIRO.



At elevation of nearly 600 feet, it's no wonder the CB traffic network is so effective! Arrow points to 27 mHz coaxial used in conjunction with Amphenol 650. Large structure is KIRO's broadcast antenna, cut for operation at 710 kHz.

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3. "S" meter measures strength of incoming signals.



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B&K

Where Electronic Innovation Is A Way Of Life



The Ins and Outs of CB Horse Trading

The art of horse trading has developed considerably since the days of the wild and wooly west. Although there are now undoubtedly fewer horses around, the art has been passed on to the field of electronics. Fortunes have been made through the applied knowledge of this art. Best of all, you too can enroll in the *Society of Happy Horse Traders*. All that you require is one or more pieces of obsolete or otherwise unwanted CB equipment, and the desire to get something just a little bit better. The first and most important step is to locate the local electronic horse trader (used equipment dealer). Having located this establishment, you would be well advised to prepare the equipment for examination. The exterior condition should be clean and shiny, the working parts in proper order. If for any reason the equipment is defective be prepared to discolse this fact and furnish the symptoms (most horse trading emporiums have well staffed repair departments). If you have made any modifications to the equipment you should similarly be prepared to disclose same and provide a schematic showing the changes. Instruction books, manuals and similar items should accom-

The methods and procedures of horse trading are quite simple. You must first resign yourself to the fact that the allowance that you will receive is below the price that you have paid for the equipment. This can be offset by the reduced price on the used equipment that you will purchase. It may be of interest to note that allowances are higher when new equipment is being purchased. Most horse trading establishments are in business for the purpose of making money, except for one or two that have since gone bankrupt. The odds on making an even swap for another piece of equipment are therefore nil. As a typical example let us look at the following trade in allowances on a piece or electronic gear.

continued on page 35

Equipment Desired	Allowance	Cash
$235.00 used	$175.00	$60.00
275.00 new	200.00	75.00
119.00 new	100.00	19.00
110.00 used	105.00	5.00
500.00 new	275.00	225.00

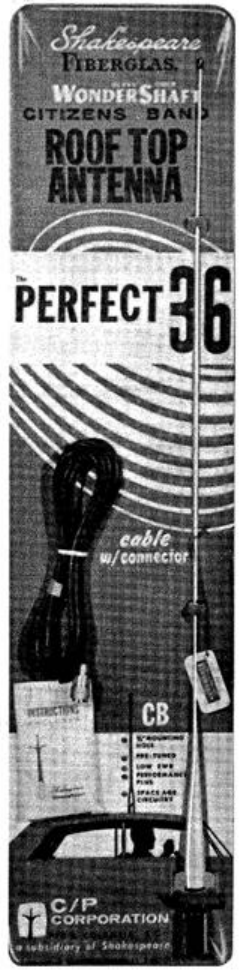
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The PERFECT 36 is a citizen's band breakthrough by Shakespeare's internationally famous engineer-designers. The easily installed, performance-shaped, 36-inch fiberglass roof-top mobile antenna has rugged solid-state construction and handsome rocketry design. And our patented parallel fiber process completely encloses this ultra-sensitive, space-age circuitry in a power-pack unit providing the maximum performance and range-expansion which "turns country miles into city blocks." Fiberglass perma-durability eliminates problems caused in other antennas by moisture, rain, dust, salt air, extreme cold, vibrations, abrasions, and other physical hazards. Fiberglass' flex-strength inhibits "set" damage on impact with doors, frames, low limbs, etc., insuring that our non-corrosive, anti-static antenna never gets "out of tune." In bringing this bold, new shape to the market, we made no compromise between performance and structural make-up. With The PERFECT 36 we have created tomorrow's finest antenna today.



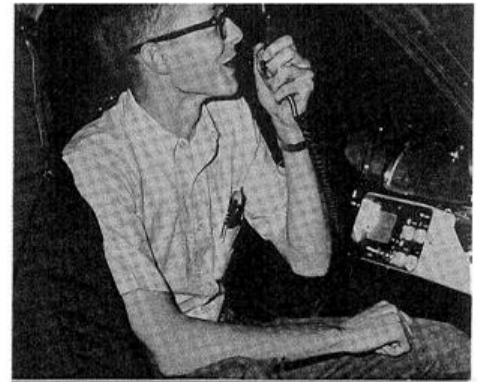


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COMMUNICATE THE EASY WAY

It's Not How Long You Make It
It's How You Make It Sound!

You can't be exposed constantly to CB without having it sink in that there is a basic weakness somewhere in the operating procedure most people use. Here we have a most useful and flexible medium for the exchange of intelligence, but we are goofing many of its advantages by our stupid practices. Our gear has been brought to a high state of satisfaction, but there are a number of bumps in the characteristic curves of our operating procedure which could stand some smoothing out.

Fundamentally the trouble would seem that we have never rationalized our operating technique. It has grown up, largely as a carryover from practices used in ham radio and other phone and CW radio services, and with no standards of its own. Nobody has worried about it, nobody has thought much about his procedure. I think that if each of us pitch in and do our share, we can make it easier for ourselves and everybody else on the band.

CB operators as a class have never taken kindly to anything that smacked of regimentation. We are individualists.

One of our prime inanities is the practice of carrying into our operation the jargon which is peculiar to code (CW) operation. It must sound like the dickens to a newcomer on the band or to a casual listener who tunes the channels just to see what CB is all about. In telegraphy words must be spelled out, letter by letter. It is therefore natural that abbreviations and shortcuts should have come into widespread use; they make it easier to convey intelligence faster. These shortcuts have no place in CB. It's difficult to understand why we CBers drag in by the heels a bunch of CW abbreviations designed for the brasspounder but which have no place in a medium where voice can be used. Perhaps we do it to imply to others that we are so knowledgeable about radio that we even know CW operating practices.

Besides the so-called "Q" signals ("QRM," "QRX," etc.), we are living with such other CW messages such as "K" (instead of "come in" or "go ahead"), and even the old telegraphers' worn out "73" and "88" messages.

Instead of saying that there is QRM (or the even more idiotic "QR-Mary") why not simply use the word "interference?" Is QRX any easier to say that "wait?" Must 73 be tossed in to eliminate saying "best regards" (although I can't really see why you would be sending another CBer your best regards, especially since the other station would normally be part of your own network if you were operating within the scope of the FCC's rules). We even seem prone to saying "Well, I guess I'll be saying best seventy-threes now." Mangled as it is, that of course manages to convey the sender's "best best regardes."

The point is that we have in our possession the most flexible medium in the world for communications; why should we use an artificially-concocted shorthand designed for transmission of intelligence via a series of dot and dash sounds?

For instance, the human laugh. Did you ever laugh over a telegraph key? If so, you didn't do it by spelling out the chuckles and yuk-yuks. You did it by slowly and deliverately spelling out the letters H and I. That has been agreed upon by CW operators as the thing to do when they want to let each other know that something was funny. Do you then suppose that there is something strange about the CBer who, when he thinks a laugh is indicated, says, "Hi" or "Aich eye" instead of actually laughing? With a medium which transmits his very breathing and the shuffling of papers on his operating table, why does a fellow have to say, "Hi," and generally without even the slightest trace of mirth?



I'd also like to say something about the uniquely unfunny use of special words to add a bit of joviality to a CB callsign. I'm talking about the fellows who say things like "Kelly's Bar and Grill Double Niners, Ada from Decatur, and a Seven from heaven" instead of "KBG9987." If phonetics are necessary to clarify a callsign, there are standard radio phonetics which will do a good job (Kilo Bravo Golf for KBG). The FCC also doesn't see the humor in these fancified callsigns and you might wind up with a violation notice for failing to properly identify your station.

GOOD COMMUNICATIONS

There are established ways to send and receive messages on CB–ways which have proven themselves to be the best for getting messages through the ether. Do you know them? Do you use them?

UNITS OF THE SAME LICENSE

When calling one of your own units you say, "KGB9987 Base calling Unit 2." The mobile unit responds with "KBG9987 Unit 2 to Base, over." When the communications are finished, the base announces "KBG9987 Base clear with Unit 2." The other unit says, "KBG9987 Unit 2 clear with Base." It is a waste of time to say things like "KBG9987 Base to KBG9987 Unit 2" if you are working a station within your own license.

MOBILE UNITS

If mobile units of the same licensee want to communicate, the practical way to do it is like this: "KBG9987 Unit 2 calling Unit 4." The other station responds with "KBG9987 Unit 4 to Unit 2, over." At the end of communications, say "KBG9987 Unit 2 clear with Unit 4," and "KBG9987 Unit 4 clear with Unit 1."

OTHER STATIONS

When you want to communicate with another licensee you say "KBG9987 calling KXX2345," or "KBG9987 calling KXX2345 Unit 3," etc. The other station answers, "KXX2345 Unit 3 to KBG9987." Communications end with "KBG9987 clear with KXX2345 Unit 3," and "KXX2345 Unit 3 clear with KBG9987."

REACT & OTHERS

It's possible for a mobile unit to call an unknown or unspecified station when in need of road directions or other aid. In this case, the mobile unit gets on the air and says something like, "KBG9987 Unit 2 calling any REACT station." or "KBG9987 Unit 2 calling any station for road aid." The station replying to this call then answers "KXX6789, REACT, to KBG9987 Unit 2." The mobile station then continues the communication by using the other station's FCC assigned call.

Mobile units can, if absolutely necessary to do so, raise help by interrupting the communications on a channel and breaking in. This is a last resort which should be done only in an emergency or when the channel is being tied up for long periods of time in violation to FCC regulations. To break in you come on the air between the transmissions of the other stations and repeat the work "Break" several times. When the other stations hear you (you may have to try several times before they do) they will say, "Go ahead, breaker." Then you say, "KBG9987 Unit 2 is breaking with a request for an ambulance at an accident scene." The other stations will then either assist you or permit you to contact another station with your message.

CALLING CHANNEL

Always use Channel 9 to make your calls, then switch to another channel as soon as you raise the other station. Keep Channel 9 clear for calls and emergency traffic when you aren't engaged in communications. DO NOT TIE UP CHANNEL 9!

IN GENERAL

In general, transmit only when necessary. The telephone is the place for idle chit chat. Do not make long transmissions; keep them as short as possible. Long-winded discussions belong on telephone. If you've got a long message then ask the other station to give you a call on the telephone. CB does not replace the telephone; it is meant as a means of sending a message when a telephone is not available–and today any mobile unit can reach a telephone within a few minutes if he is asked to do so by his base station. Of course, almost all base stations have telephones and there is little reason for base stations to tie up the CB channels by chatting with each other, if you want to be realistic.

CB is also not a means of entertainment–it is not the place for music or comic personalities whose main purpose is to impose their theatrical frustrations on a captive audience of other CBers monitoring the channel.

MINOR NOTES

The perpetual use of the editorial "we" at one-man CB stations just leaves "us" cold. There is no reason for this use of the word at a CB station.

Another overworked expression is the use of the word "handle" in place of the word "name." Frankly, I have a name, and I hope you do too. If you have a handle, then perhaps you are some kind of pot and have missed your true calling. Every time I meet a guy with a handle I would like to take him by his handle and place him on a stove.

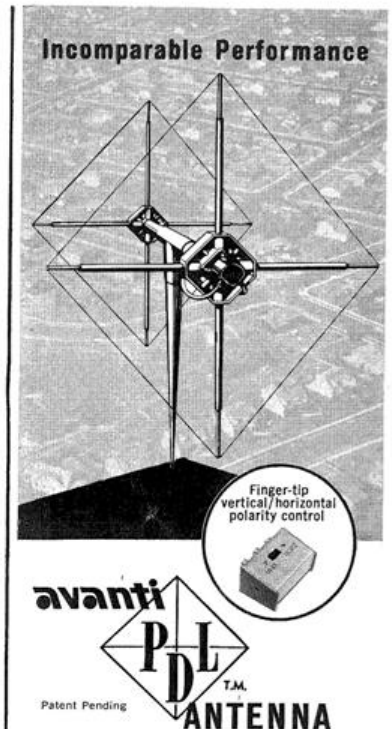
More sour notes: A contact is either solid enough to permit you to say your message once or else the contact is so poor that it should be ended until conditions are better. If it is so poor that you must repeat each sentence 3 times then call it quits for now.

It's also pretty stupid to repeat the other station's entire previous transmission to let him know he got through. Parrots bring big money in a pet shop but are a big pain on CB. Have you ever had to listen to, "OK on your last transmission Bill, fine business on your location at Main Street, okay on your looking for a club to join and your new rig, and on your high SWR." This type of operation is typical of the type of operator who eventually ends up with a violation notice from the FCC for a multitude of sins. Stay clear of him.

And stay clear of any operator who is clearly violating FCC rules by running overpower (either by means of linear amplifiers or otherwise), talking too long, working skip, participating in lengthy round-table discussions over-the-air, etc. Be especially shy of those wise guys who don't use callsigns but instead call themselves names like "Long John," "Candy Man," "Texas Jim," and the like. These fellows are out cruising for trouble–and they usually find it; don't let it be while talking to you! Never encourage CBandits by talking to them!

USEFUL TOOL

CB can, and should be, a tool as useful as a hammer or a car. If you use it properly it can be. Misuse of CB, either from lack of knowledge or because of a misguided sense of humor, chips away at your investment in CB equipment. If you feel the need to be an entertainer, why not try the stage? There's one leaving for Denver in an hour.



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The Companion IV

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what you should know about DIRECTION FINDING

. . . YOU MAY HAVE TO USE IT SOMEDAY SO WHY NOT UNDERSTAND IT!

There is an ever-growing popularity of electronic gear in our lives; CB is but one of the devices now becoming part of the lives of many folks. Direction-finding gear is another—it is often part of the gear on a CB-equipped small boat, is a must for tracing down power line interference on CB frequencies, has been used to locate bootleg CB stations and lost CB equipped boats, and has even been put to use by some CB clubs in so-called Part 15 hidden transmitter hunts.

For a hidden transmitter hunt, a walkie talkie is hidden by one member of a CB club. It is left on in "transmit." The members of the club then take to the hills by foot and mobile unit, equipped with DF gear, and try to locate the transmitter. It's a lot of fun, it's legal, and it's good experience for the members of any CB club aspiring to get involved in emergency monitoring. A company called Gold Line makes a very nice DF loop tuned to CB frequencies which can be used for this purpose. It works with any CB rig and can be purchased through many larger CB dealers.

To give those more or less uninitiated members of our fraternity an idea of the electrical and practical background of radio direction finding, the following explanation is offered. Commercial engineers are hereby cautioned not to read further into our over-simplified chatter for fear of being shocked by some heresy which may not fully agree with your favorite textbook!

WAVE PROPAGATION

At frequencies above 1500 kc. the ground-wave attenuates rapidly and is of little importance, except for transmission over very short distances. All waves, regardless of frequency, vary from time to time in their direction of travel. These variations have been observed on extremely long waves but are more severe as the wavelength decreases. Such variations are often caused by the phenomena of reflection and refraction of electromagnetic waves from or through banks of ionized layers of the atmosphere. As a result, the receiving equipment is influenced not only by the main wave, which we may consider as coming directly from the transmitter, but by many other waves traveling longer paths and coverging at the receiver because of having been reflected or refracted by regions having such electrical characteristics as to produce a prism or lens action. Obviously, these several portions of the received signal will arrive at the receiver from various directions and in various phases. Short-wave communication ordinarily depends upon the ability of the ionosphere to refract the high-frequency sky wave back to earth at the receiving point without excessive attenuation. As a result, the strength of the signal received from a distant transmitter depends on the transmitted frequency, conditions in the ionosphere and the angle at which the transmitted waves enter the ionized regions.

DIRECTION FINDERS

The fact that radio waves *normally* propagate away from the transmitter along a great-circle route can be utilized in direction finder (DF) work. A direction finder is a receiving device with which one can determine the travel line of radio waves coming from a distant station. Most practical DF systems make use of a loop antenna, which is essentially a large coil of any convenient shape, so mounted as to be easily rotatable. Such an antenna

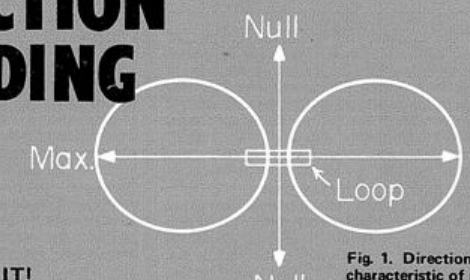


Fig. 1. Directional characteristic of plain loop antenna.

bearing is then taken of the unknown station and its angular displacement in relation to the "reference line" is drawn. The unknown station must then be located somewhere along this second line. If, for example, an unknown station is 30° "to the right" of the known station, a pencil line is drawn at the angle to the reference line. If the loop is mechanically or electrically unbalanced, due to a bent loop, bent index pointer, stray pickup, or whatever, the error is automatically cancelled out because the plotted lines merely indicate relative directions rather than absolute directions which, after all, would necessitate sophisticated instruments.

HUNTING METHODS

At the start of a "hunt," the operator tunes in a known station for use as a reference point and the bearing is noted and drawn. Usually the reference lines have been previously inked in for a number of

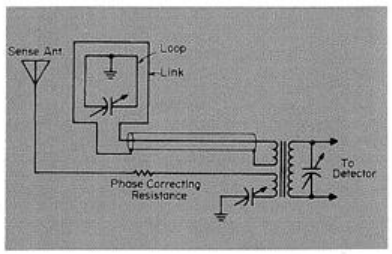


Fig. 4—Obtaining a "sense" of bearing.

strategic locations. A bearing is then taken on the unknown station and is plotted as so many degrees off the first reference line. The operator then drives to a second location some distance away and repeats the process. The plotted lines normally intersect. If the angle of intersection is very acute, or the lines do not intersect within the limits of the map, one or both readings may be in error. If either of the first two sets of bearings is thought to be doubtful, the operator drives to a third location and repeats the process. If the plotting of three "unknown" lines results in the formation of a dot where the three lines cross, a perfect "fix" has been obtained and the operator drives to that location. If the three-line intersection forms a small triangle, the transmitter is quite likely within the area enclosed. If a large triangle has been formed, the transmitter location is still probably within its designated limits, but in this case it may be advisable to take a fourth and even fifth bearing from other locations before driving to the indicated area. It is important that a good "fix" be obtained before dusk, as bearings taken after that time are notoriously unreliable because of the night effect.

After arriving at the designated area, the problem of triangulation is repeated, but now the bearings are not necessarily plotted. If the area is small, or in unsettled territory, the operator makes mental note of his bearings as he drives along, and so continuously narrows his search. When the transmitting antenna is approached, the signal strength will suddenly increase while the receiver is still several wavelengths away. This increase is very noticeable. In some cases the receiver will "block" if sufficient RF gain control has not been provided. If this happens the operator can note, while driving in a straight line, the approximate limits between where his receiver commenced to block and where it resumed oscillating. The transmitter will probably be midway between those limits. If the receiver does not block, the operator continues "triangulating" until he has determined the transmitter location. This is not always as easy as it may sound, since the radiation is not from a point source but rather from a "line base." If you consider the electrical length necessary for an antenna to resonate on, for example, 160 meters, and assume the station to be hidden in one of a group of adjoining buildings, the difficulties are obvious. In such cases the best procedure is to drive some distance away from the blocking or induction field area and take several very careful bearings, noticing whether the lines cross at the head or in the middle of a particular block. Further readings taken at right angles will determine if the transmitter is on one or the other side of the street.

Field-strength measurements, while helpful, are very misleading. If a field strength meter is carried *across* rather that *along* one of the major transmitting lobes of the radiating system, the observed field strength readings will be much greater at a distance of several hundred yards than when almost under the transmitting antenna but within one of its null zones. In practical direction finding, as in anything else, the skill and experience of the operator is one of the chief factors.

CONCLUSIONS

Some of the precautions, practices and beliefs reached after a number of hidden transmitter hunts are listed for the guidance of any others contemplating such an event.

1. Keep hunts within a 5 mile radius of the starting point (or whatever the maximum range of your walkie talkie is).
2. Utilize as clear a channel as possible.
3. Make up a set of complete rules and adhere strictly to them in order to prevent misunderstandings.
4. Offer a worthwhile prize to the winning team.

If your club is looking for a worthwhile, honest-to-goodness stirring activity, this could be it! SB









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Guglielmo Marconi
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As an active CBer, you are probably aware that you can hear stations from all over the western hemisphere. When conditions are perfect you can hear stations from all over the world on the CB rig sitting on the base. CB uses only a tiny segment of the shortwave spectrum, and there are many other services that can be heard in the 3-to-30 megacycle (mc) range. CB is found at the top of this spectrum, around 27 mc.

When skip is making your nerves jangle and you want to throw the base rig out the nearest window because you can't contact your mobile unit, you'll find interesting listening elsewhere.

More and more CBers have utility band receivers covering the 30-50 and 152-174 mc bands . . . did you know that skip will bring in stations from all over the United States? This writer, in Pennsylvania, recently listened to the Missouri State Police as they were setting up roadblocks in an attempt to catch a fleeing car containing bank robbers that had just held up a bank in Alton, Illinois. They were busy! BBC television audio can be heard on 41.50 mc when the skip is coming in from Europe; this is what the technician-licensed radio amateurs checked to see in order to know when the six-meter (50-54 mc) amateur band would be opening to Europe during the IGY of 1957-58. It was possible to work all continents on six meters (just below TV channel 2) in those years.

True, the long haul skip on the low band is an exception and not the rule. Short skip occurs almost every day during the summer months . . . just turn on channel 9. If you have a shortwave receiver to tune the lower frequencies, you don't have to depend on "freak" conditions. You can tune in stations all around the world both day and night.

Local and international broadcast and amateur bands are scattered over the frequency spectrum from the standard AM band all the way up to (and just beyond) the CB frequencies. If you choose the right frequency, given the time of day or night, you can span the world as easily as you would tune in your local AM station.

Speaking of AM, one of the finest receivers for listening to distant stations sits in the driveway, contained within a mass of metal resting on four pieces of rubber. The car radio, built for rugged use and tough reception conditions, is probably one of the best radios you own. At night you've heard many stations throughout the United States, Canada and Mexico. Those of you on the East coast also have heard the propaganda in Spanish and English out of the Cuban outlets. Some of you, heard (until recently) Radio Swan which was later to become Radio Americas on 1160 or 1165 kc (our editor had several articles on this station in *Electronics Illustrated*). Did you know that during the winter months, around sunset and again just after midnight, you can hear European AM stations? Over there they operate on every 9 kc starting on 530 kc, rather than our 10 kc divisions beginning on 540 kc. As a result, a great many fall between the US 10 kc assignments; with the massive power some stations run (tiny Andorra runs 300 kw on 818 kc), a few are fairly easy to hear.

(If you maintain a file of back copies of *S9*, look up "BCB DX Handbook" in the December 1966 issue.)

Listening is an enjoyable hobby for a great many people, called "shortwave listening (SWLing)." SWLing implies casual listening without a specific effort to dig out the rare stations, whereas DXing implies active searching for rare and distant stations (abreviated DX). The SWL (shortwave listener) listens to shortwave, but the DXer tunes all frequencies from AM to TV in his quest for DX.

A DX station need not be a distant station. For example, on shortwave, I would not consider the BBC in London or Radio Moscow or even Radio Australia DX, as these stations are always well-heard in their transmissions to North America. However, the low-powered regional broadcasters in Africa are good DX. On the broadcast band (BCB), WLS-890 in Chicago with its 50,000 watts cannot

The Monitor Post



It's sure surprising to see how we seem to think along the same lines, you and S9—we announced last month that we were studying the possibilities of giving regular S9 coverage to information on police, fire and other emergency radio networks on the HF, VHF and UHF bands. We liked the idea, and from the looks of your mail, you did too. We decided to give it a trial whirl for a few months to see how it goes. If you support the column with letters and station loggings we'll keep it. If it's a one-sided correspondence we'll call it quits and chalk it up as a good try.

Of the large batch of mail received for this column, we noted that among the most popular requests for information were those asking for details on the radio system used on the New Jersey Turnpike—and these requests didn't all come from New Jerseyites! No wonder, since most well-seasoned drivers know that New Jersey's Turnpike is one of the worst speed traps in the entire nation, the crowning achievement of a state which is known for its abundance of speed traps. New Jersey, which ranks 46th in size of all the states, has an average of one radar speed trap for every 40 miles of suburban roadway. State agencies operate 48 of the 512 traps operating there and most of them seem to be infesting the Turnpike. These are aided by unmarked cars and all manner of other snares for the motorist.

The New Jersey Turnpike is, as a matter of fact, a rather poor road with a speed limit below what you have come to expect from a limited access road which charges a high toll rate. It seems that its main purpose is to prey on ininerant out-of-state motorists who have no other choice but to use the road when going between New York City and the outer world. No wonder so many folks would like to listen to what's going on there!

The Turnpike police antics take place on 154.83 and 155.19 mc/s (cars and dispatchers), while the speed traps talk amongst themselves on 45.82 mc/s. Both radar bands (2455 and 10525 mc/s) are used. The New Jersey Highway Authority holds down the fort on 154.95 and 158.91 mc/s. The N.J. State Police are on 44.94, while the Palisades Interstate Park Police are on 154.89 and 155.01 mc/s. Driving through New Jersey? Lotsa luck!

The low-power broadcast station at the San Antonio, Texas, HemisFair has been granted authorization for a 1,000-watt transmitter on 171.25 mc/s. The station provides news and information to visitors who hear it on rented receivers. This station should now be heard over a great range since they had previously been using only 250 watts. Antenna is at 140 feet and is omni-directional.

Washington, D.C., police will be using their new channels of 159.27 and 159.35 mc/s to augment their existing network. These channels, normally used by forestry stations, were assigned to MPD after a long hassle.

In other new FCC assignments of interest we note:

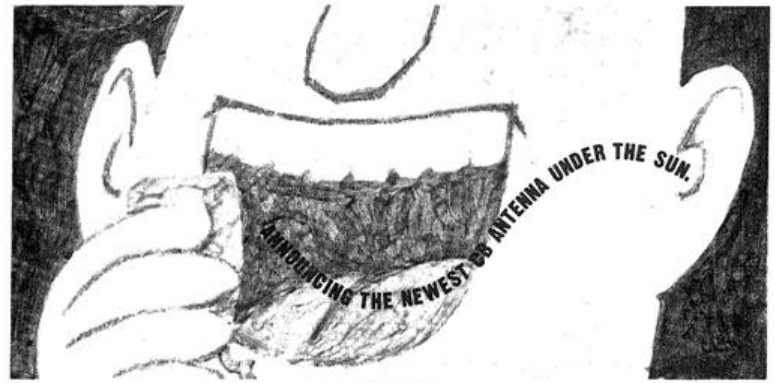
Fire Departments: San Bernardino County (Calif.) added 154.28; Orange County (Calif.) added a base in Santa Ana on 46.14; Oakland County (Calif.) took their mobile units 154.28 and 154.31 and moved them to 154.27 and 154.355; Niagara County (N.Y.) put a base station in Wilson on 46.06.

Auto Emergency: Automobile Club of Maryland in Baltimore set up a base and 6 mobiles on 150.92; and in Milwaukee the Automobile Emergency Radio Service Corp. put a base and 25 mobiles on 452.525.

Police: Solano County (Calif.) put a base in Vacaville on 154.86; Colorado State Police added 154.665, 154.695, 154.905, 154.935 and 155.31 to Denver; Camden (N.J.) put base stations on 460.07, 460.125, 460.225; Utah Highway Patrol added 155.505 and 155.58 to S. Salt Lake City; Florida State Police added 45.06 to Tallahassee; Paterson (N.J.) added a temporary base on 39.68; New Mexico State Police added a base on 39.78 in Santa Fe; Riverside County (Calif.) added a base on 42.34 in Riverside; Idaho State Police moved their Deer Point station on 151.205 to Boise on 151.145.

Special Emergency: Peoria City CD (Ill.) added 47.50; St. Thomas Hospital in Akron (Ohio) on 155.16; Austin (Tex.) CD on 155.28; St. Mary's

Continued on page 71



THE GOLDEN ROD

Now there's a ruggedly constructed, high performance, vertically polarized, omni-directional, easily-installed half-wave base station antenna and it doesn't cost you a fortune.

It's the Golden Rod, from Hy-Gain. And man, it's a big "10-4"! It develops a transmitting gain of 3.5db through pattern compression and a lower angle of radiation.

And a unique base feed section provides perfect 52 ohm match and places it at DC ground potential which substantially lowers the residual noise level and gives a gain as high as 19db in signal to noise ratio.

The Golden Rod is constructed of heavy wall, gold iridite aluminum tubing so it'll last you a lifetime. (All steel hardware is iridite treated to MIL specs, too.)

FOR THE STRONGEST SIGNAL UNDER THE SUN!

Another golden reason for owning the Golden Rod: Foreshortened "high performance" arcuate radials make it easy to install anywhere. (Rugged double grip bracket fits masts up to 1⅝".)

Look over the specs below and then get down to the best distributor under the sun (he stocks all Hy-Gain antennas) and look over the Golden Rod.

We think you'll find it's worth its weight in gold!

Specifications

Gain	3.5db
Signal-to noise ratio	up to 19db
SWR at resonance	1.25:1
Input impedence	50 ohms
Overall height	17'3"
Diameter of radiator	1¼ to 7/16
Wind survival	80 miles per hour

The Golden Rod from Hy-Gain

NOW! THE BEST COSTS $40. LESS!

This special "get the best for less" offer available at the following KAAR dealers . . .

R. H. Sassaman Co., Inc.
Mobile, Alabama
Millet's Radio Communications
Mesa, Arizona
Hunter Electronics
Tucson, Arizona
Carlton-Bates Company
Fort Smith, Arkansas
Carlton-Bates Company
Little Rock, Arkansas
Dick's Radio & TV
El Sobrante, California
Two Way Radio Sales
Fresno, California
Squire Communications
Gridley, California
Valley Transformer Co.
Stockton, California
Buddy Sales
Reseda & Ventura, California
Weatherbie Electronics
San Jose, California
Fortiers T.V., Inc.
Santa Rosa, California
Unicomco
Denver, Colorado
Marine Sound Lab
Wethersfield, Connecticut
Sumac Services
Atlanta, Georgia
Morton Electronics
Boise, Idaho
Allied Radio Corporation
Chicago, Illinois
RMD
Chicago, Illinois
Puts Radio Sales
Peoria Heights, Illinois
Industrial Electronics
W. Lafayette, Indiana
Electronic Applications Co.
Burlington, Iowa
Howard Electronics
Wichita, Kansas
Electronic Products Co. (EPCOR)
New Orleans, Louisiana
Boyers Two Way Radio
Headquarters
Hagerstown, Maryland
Glen Marine Products
Glen Burnie, Maryland
Radiophone of New England
Bedford, Massachusetts
Rad-Comm Systems, Inc.
Detroit, Michigan
Electronics Unlimited
St. Paul, Minnesota
Midwest Mobile Radio Service
St. Joseph, Missouri
Electronic Specialists
Great Falls, Montana
Deuce Way Radio Sales
Reno, Nevada
C. Wheeler Distributing Co.
Albuquerque, New Mexico
Coastal Electronics
New Bern, North Carolina
Heath Communications
Heath, Ohio
Brewer Communications
Porter, Oklahoma
United Radio Supply
Portland, Oregon
Electronic Equipment Co.
Nashville, Tennessee
Radio Communications Co.
San Antonio, Texas
Manwill Supply Co.
Ogden & Salt Lake City, Utah
Central Utah Electronic Supply
Provo, Utah
House of Insurance
Richmond, Virginia
E. Smola & Co.
Newport News & Norfolk, Va.
Photo-Tronics, Inc.
Seattle, Washington
Amateur Electronic Supply
Milwaukee, Wisconsin
Denco TV
Casper, Wyoming

KAAR Skyhawk
MARK II



regular $269.95

yours for just $229.95

23 channels with all crystals included

It's the new 5-year-ahead, 23-channel MARK II. Complete with the industry's only 2-year guarantee.

Now...move up to Skyhawk and save!

(No other transceiver gives you all these space age components.)

- Tantalum capacitors
- Sealed plug-in relay
- Filtered power leads
- Paging
- External speaker jack
- Illuminated signal level meter with dynamic modulation indication
- Glass epoxy circuit board
- Provision for plug-in selective call
- Amplified Zener diode voltage regulator
- 2⅝" high x 6½" wide 9¼" deep

You've always wanted Kaar quality . . . now get it at the price of an ordinary CB transceiver. Inside its handsome epoxy wood grain panel is the powerhouse of the CB world . . . **judged first in quality and beauty, by experts the country over.**

Save on KAAR Skylark!
Get all the features of the Skyhawk in this rugged 11-channel beauty. **Reg. $179.95,** now! **$159.95.** Includes channel 9 crystals.

KAAR ELECTRONICS CORPORATION
1203 WEST ST. GEORGES AVE., LINDEN, N.J. 07036

continued from page 15

As you can see the allowance made varies quite widely according to the price of the equipment desired. Rarely if ever will you receive change in a trade transaction unless the equipment sought is quite inexpensive. From the data developed you can readily see why most equipment dealers will be reluctant to give you an estimate of the value of your equipment without knowing what you are looking for in return. The obvious procedure is to first select the equipment you desire and then to discuss the equipment that you wish to trade in. In the majority of cases, the emporium will insist on testing your equipment prior to giving you a price. It is not too wise for you to object to this procedure. Conversely you should request the same privilege.

The matter of guarantees on the new equipment is also quite important. It is not uncommon for equipment to be sold on an *"AS IS"* basis. In this case, the price paid should be low enough to provide for any possible repairs. If available you should insist on a full list of the symptoms. It is often possible to pick up a rather valuable item for a low price with only a nominal amount of repairs needed. It is advisable to avoid any item where parts availability is poor. The basic art of horse trading can provide the Citizens Bander with a market for his used equipment, it can also help him take the step to more elaborate equipment at relatively little cost. The rules, as you can see, are quite flexible. The profits can be great. At all times you should remember the expression "Caveat Emptor," Let the buyer beware.

Horse Traders' Check List

Equipment Desired

1. *Will it fulfill your requirements as to power, frequency sensitivity, selectivity and size?*
2. *Is the appearance good, fair or poor?*
3. *Is it electrically good, fair or poor?*
4. *Has it been modified?*
5. *Are schematics and or manuals available?*
6. *Are replacement parts available?*
7. *Is it factory wired or kit built?*
8. *Are there any guarantees?*
9. *Can you test the equipment?*
10. *If it is an "AS IS" sale does the price warrant the risk?*
11. *Does the present condition or age prevent any possible future resale or trade of the equipment.*
12. *What is the reputation of the "Horse Trading Emporium"?*

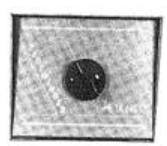
Equipment Being Traded

1 THROUGH 7 ABOVE.

8. *Is the Allowance sufficient to obtain the new equipment with a moderate cash outlay?*
9. *Has the equipment outlived its usefulness to you?*

By following the above check list you can be reasonably secure in the knowledge that the trade you make will be both satisfying and lucrative.

Like To Make "S" Meters Bounce?



- **Converts AM sets to double sideband modulation controlled carrier.**
- **Only $29.50**
- **Works with any tube type set with 10k or higher screen resistor in RF output stage.**
- **Write for free brochure.**

Electronic Engineering Company **Wabash, Indiana 46992**

Phone 219-563-2294



ODDS 'N ENDS

by HERB FRIEDMAN, KBI9457/W2ZLF

As we promised last month, we checked out a solid-state ignition system to see if there really was a reduction in mobile noise level. We obtained an Allied Radio (Knight Kit) Capacitive-Discharge Ignition System–which is really a kit version of the Delta system (at a savings of $10)–and installed it in our Dodge Dart.

As far as mobile noise was concerned, we could neither hear nor measure any reduction in noise level. So until proven otherwise, we consider the claim that a solid-state ignition reduces mobile noise levels to be the usual technical hogwash found on 11 meters.

One thing we did get from the Knight system was a sharp improvement in engine performance . . . so much so we felt it rated a special report; and if the pictures come back from the drug store in time, you will find it in this issue. If not, look next month.

This year's vacation trip took us along the backwood trails and unfortunately, we found that once off the main roads a cry for assistance via CB was a cry to the winds. While many areas of the Northeast corridor are blanketed by CB "emergency teams" and channel 9 "traveler aids," the services get lost off the main roads and the travelers stuck on one of those one lane "country roads" has about as much chance of getting CB assistance as the Cubans have of getting a democracy while Fidel still breathes. What about it fellers; while you're setting up your channel 9 or 11 monitoring how about including something other than those Federal concrete ribbons?

But vacation wasn't a total bust as far as CB goes. Knowing that I faced innumerable "kiddielands"–with the usual 10,000 people and their lost children, I latched onto a couple of real cheap CB items that proved to be worth a million. I'm referring to the Radio Shack's *CB receiver* and *CB transmitter.* These are separate shirt-pocket size CB receivers and transmitters. I clipped a receiver to each kid and my wife and I each carried one of the transmitters (and she learned how valuable a shirt pocket can be). We let the kids run "wild," and whenever we had to round them up we paged them on their receivers. Things worked out just great: I didn't have to climb through holes marked "Daddies must duck" and the kids didn't get lost. At about 8 bucks a unit it's the best CB investment I've made in years.

One of our "he was a good boy" youths gunned down three innocent citizens. Turns out the suspect was arrested in 1967 for blasting away with a handgun during two burglaries. Our *bleeding hearts* gave him "youthful offender" treatment. So one year later there are three dead and four wounded because some people can't believe a 17-year-old with a gun is as dangerous as a 30-year-old with the same gun. (And the first person who writes in: "See, we need a good Federal gun law" gets his CB license revoked. What we need is some good anti-crime laws to keep "animals" in cages.)

And let us not forget that when the "students," supported by their old man at $3000 per year or a taxpayer-supported grant, decided to wreck a few buildings at Columbia University and kidnap a university official, they kept in touch with other "revolutionary " (hoodlums) via walkie-talkies (according to newsreel films). Isn't it about time we get a law making the use of CB gear in *crimes* such as kidnapping, night-riding, church-bombing and insurrection a Federal offense?

PERSONALIZED ENGRAVING

ELECTRIC **ON-THE-AIR SIGN** WITH CALL



Works on 110 VAC

$12.95

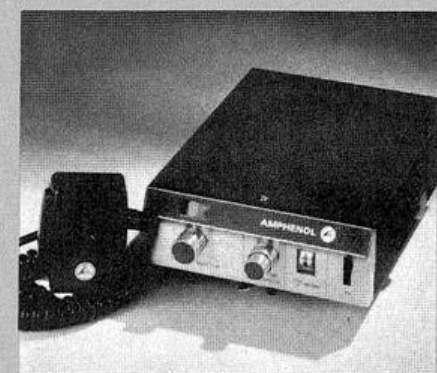


Metaltex Lapel Bar — $1.50 Metaltex Tie Clip — $2.25

ARNOLD'S ENGRAVING

2041 Linden St. Ridgewood, N.Y. 11227

Announcing the power-mite 23



AMPHENOL 777

Great big 23-channel CB in a little bitty box

- 5 watts, 23 channels, ready to use, in a 6½" wide, beautifully designed package.
- Push on/Push off switch lets you preselect volume.
- Channel selector illuminated and magnified for fast, sure tuning.
- So sensitive it can pull in signals as weak as one microvolt.
- Need a PA system? Just flip a switch for 4-watts minimum of audio power.
- Lighted POWER/S meter for on-the-dot tuning.
- Ceramic filter to insure no interference from adjacent channels.
- Blue and silver control face complements car or boat interiors.
- Designed to meet not only existing FCC specs, but also new proposed specifications.

Take time out now to write for specs and name of your nearest dealer.

AMPHENOL

Amphenol Distributor Division, Dept. S2-98, 2875 South 25th Ave., Broadview, Ill. 60153

(The price? Just $169.95 for all of it.)

We take your CB needs seriously

So seriously that we build all of our solid-state CB radios with the same precise quality and exactness that we do our electronic components. To get more enjoyment from CB, move up to Amphenol.

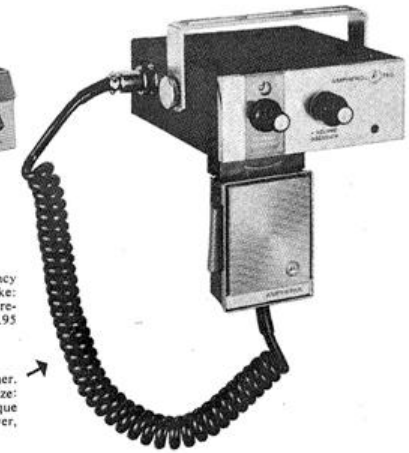
AMPHENOL

For the name of your nearest Amphenol Dealer write:

Amphenol Distributor Division Dept. **S5-98**
2875 South 25th Avenue, Broadview, Illinois 60153
(We'll even return your postage.)



MODEL 777—5 Watts; 12-14 VDC; Channels: 23 frequency synthesized; Size: 6½"W x 2"H x 10"D; Wt: 5¾ lbs; Mike: High output, dynamic, "push-to-talk"; Superheterodyne receiver, dual conversion, 19 transistors, 10 diodes. $169.95



MODEL 750—PEEWEE CB . . . perfect for the beginner. 5 Watts; 12-14 VDC; Channels: 6, channel 9 installed; Size: 4¾"W x 2"H x 5½"D; Wt: less than 3 lbs; Mike: unique speaker/mike, "push-to-talk"; Superheterodyne receiver, 13 transistors, 4 diodes. $79.95



MODEL 85—A pair of low-cost, high-performance hand-helds for unmatched radio communications over shorter distances. 100 Milliwatts; Power Supply: 9 VDC only, batteries are included; Channels: 1 available, channel 9 installed; Size: 6"H x 2½"W x 1½"D each; Weight: 21 oz each; Antenna Length: 41" extended; Superheterodyne receiver — 10 transistors, 1 diode. $49.95 pair.



MODEL 80—A powerful 3-watt hand-held for the hunter or camper. 12 VDC only (Order batteries separately); Channels: 2 available, channel 11 installed; Size: 8"H x 4"W x 2"D; Weight: 2 lbs each with batteries; Antenna Length: 34" extended; Superheterodyne receiver —13 transistors, 2 diodes. $119.95 ea.



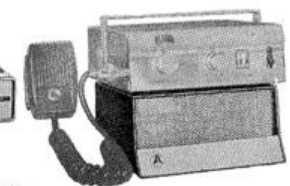
MODEL C75—A hand-held unit with sensitivity equal to most five-watters, yet the smallest 1½-watt hand-held available. 12 VDC only (Order batteries separately); Channels: 2 available, channel 11 installed; Size: 8"H x 4"W x 2"D, 2 lbs with batteries; Antenna Length: 40" extended; Superheterodyne receiver—11 transistors, 2 diodes. $89.95 ea.



MODEL 675—All new electronic circuitry is free from power-robbing mechanical devices. 5 Watts; 12-14 VDC, only; Channels: 10 available, channel 11 installed; Size: 2½"Hx6½"W x 9"D; Weight: 5 lbs; Mike: High output, ceramic, "push-to-talk"; Dual conversion, superheterodyne receiver —17 transistors, 5 diodes. $159.95



MODEL 725—Simplicity is the beauty of this compact. 5 Watts; 12-14 VDC, only; Channels: 8 available, channel 9 installed; Size: 6"W x 2"H x 8"D; Wt: 4 lbs; Mike: High output, dynamic, "push-to-talk"; Superheterodyne receiver— 14 transistors, 3 diodes. $99.95



MODEL 790 Pedestal—110 VAC Power Supply instantly converts all 5W-12/14 VDC units into a full power base station. $29.95

COMING EVENTS

COMING EVENTS

COMING EVENTS

MAUMEE VALLEY CB RADIO CLUB 1968 ROUNDUP, September 22nd, Memorial Colisium, Fort Wayne, Indiana. Contact: Victor Lambert, 606 Lower Huntington Road, Fort Wayne, Ind.

CENTRAL N. H. 3rd ANNUAL CB JAMBOREE, August 25th, Highway Hotel Convention Hall, Concord, N.H. Contact: P.O. Box 181, Concord, N.H.

KINGFISHER CB RADIO CLUB 3rd ANNUAL JAMBOREE, Nova Scotia CB Jamboree, August 16th, 17th and 18th, in or about Halifax. More info forthcoming.

ELECTRIC CITY CB JAMBOREE, September 15th, Tawasentha Park, Schenectady, N.Y. Contact: Raymond Jellisons, 943 Strong Street, Schenectady, N.Y.

4th ANNUAL JAMBOREE, August 24th and 25th at Millers Falls Rod and Gun Club, Turners Falls, Mass. Sponsor, Mohawk Valley CB Club, P.O. Box 462, Greenfield, Mass.

5th ANNUAL BELL CITY JAMBOREE, October 5th and 6th, Lake Compounce, Bristol, Conn. Contact: Bell City CB Radio Club, Box 441, Rockville, Conn.

2nd ANNUAL JAMBOREE, UNITED CB RADIO CLUB, August 18th, Clementon Lake Amusement Park, Clementon, N.J. Contact: Roy Boody, P.O. Box 58, Stratford, N.J.

2nd ANNUAL CB JAMBOREE, August 17th and 18th, Spa Ten Fours, Ballston Fairgrounds, Ballston Spa, N.Y. Contact: Jamboree Committee, P.O. Box 227, Saratoga Springs, N.Y.

LINCOLN METRO RADIO CLUB JAMBOREE, August 24th and 25th, Hy-Gain Electronics Corp., Highway 6 N.E., Stevens Creek, Lincoln, Nebraska. Contact: Doug Ludwig, 2610 S. 54th, Lincoln, Nebraska.

ALLEN COUNTY CITIZENS RADIO CLUB JAMBOREE, August 11th, Allen County Fairgrounds, Route 30 S., 2 miles east of Lima, Ohio. Contact: Bud Wehrman, 1427 S. Sugar St., Lima, Ohio.

ANNUAL NATIONAL CB COFFEE BREAK, September 15th-18th, hosted by the Southern Nevada CB Ass'n. Hotel Sahara, Las Vegas, Nevada. Contact: Hotel Sahara, Las Vegas, Nevada, Att. L.M. Norman.

11 METER CB RADIO CLUB, Milford, Ohio, Coffee Break, September 1st, Camp Freelander, Miamiville, Ohio. Contact: P.O. Box 64, Milford, Ohio.

ELM CITY MODULATOR OF NEW HAVEN COUNTY 1st Annual Weekend Jamboree, September 21st and 22nd, Mountainside Park, High Hill Rd., Wallingford, Conn. Contact: P.O. Box 18, North Haven, Conn.

THE McKENZIE CB RADIO ASS'N. 6th Annual CB Jamboree, September 14th and 15th, Lane County Fairgrounds, Eugene, Oregon. Contact: P.O. Box 1601, Eugene, Oregon.

CB RANGERS 3rd ANNUAL JAMBOREE, September 15th, Ludlow Fish and Game Grounds, Ludlow, Mass. Campers welcome. Contact: Kendall D. Collins, 173 Marion Street, Springfield, Mass.

FALL FESTIVAL CB JAMBOREE, September 14th and 15th, Sponsor, Emergency CB Monitors, P.O. Box 1542, Huntsville, Als. More info forthcoming.

2nd ANNUAL SOUTH SHORE CB CLUB COFFEE BREAK, September 8th, Adventurer Inn, Whitestone, New York. Contact: G. McDowell, P.O. Box 143, Merrick, New York.

2nd ANNUAL DIABLO VALLEY CB JAMBOREE, September 29th, Concord Coliseum, Concord Calif. Contact: P.O. Box 302, Concord, Calif.

HIS AND HERS CB CLUB FALL DANCE AND RAFFLE, September 21st, Sabre Room, Hickory Hills, Ill. Contact: His and Hers CB Radio Club, P.O. Box 192, Oak Lawn, Ill.

LOWER VALLEY CB RADIO CLUB JAMBOREE, September 8th, National Guard Armory, Westbrook, Conn. Contact: Arthur Bennett, 19 Whitewood St., Old Saybrook, Conn.

THE MERIDAN CB RADIO CLUB will hold their 2nd Annual Jamboree, September 1st, Highway 45 South, Meridian, Miss.

FLORIDA STATE CB ASS'N CONVENTION AND JAMBOREE, August 31st, September 1st and 2nd, West Palm Beach Civic Auditorium, Lakes Blvd., West Palm Beach, Florida. Contact: Jacks, 5471 Mobilaire Beach, West Palm Beach, Florida.

QUI-CO CBRL DRIVE IN, September 15th, Drill Fire Co., Reading, Penna. Prizes and surprises.

IA-ILL. CB CLUB COFFEE BREAK, September 1st, Nauvoo State Park, Nauvoo, Ill.

PENNA. TEENAGE CB ASS'N. JAMBOREE, September 1st, Willow Mill Park, between Harrisburg and Carlisle, Penna. Contact: Art Keeler, P.O. Box 2326, Harrisburg, Penna.

JAMBOREE, SPONSORED BY THE MACON AREA CB CLUB, September 8th, Macon County Fairgrounds Park, sough edge of Macon on Highway 63, Macon, Missouri.

ANNUAL WISCONSIN JAMBOREE, September 1st, Wilsonian CB Club, American Legion Building, Wilson, N.C. Contact: Paul Cannon, Box 22, Farmville, N.C.

BATAVIA CHANNEL 14 CLUB 1st JAMBOREE, August 31st and September 1st, South Alabama Fire Hall, South Alabama, New York, on Route 63 North. Contact: Mary Forkey, 18 Kutchins Place, Batavia, N.Y.

BERKSHIRE 5 WATTERS COFFEE BREAK, October 13th, Grange Hall, 1123 West Street, Pittsfield, Mass.

EAST TENNESSEE AREA WIDE CB JAMBOREE, August 31st, September 1st, Jefferson County Fairgrounds, Jefferson City, Tenn. Contact: Area Wide Jamboree, P.O. Box 60, Jefferson City, Tenn.

5th ANNUAL INTERNATIONAL CB CAMPOUT, August 31st and September 1st and 2nd, Snoqualmie River Park, Fall City, Washington. Contact: Harry Johnson, 12816 23rd Avenue N.E., Seattle, Washington.

Continued on page 70

AUSTRALIAN POLICE NETWORKS

These Australian low frequency police networks can be heard in the United States and Canada with some effort, patience, and a half way decent receiver/antenna system. Stations shown without callsigns do not have callsigns assigned and identify by their location name. Most stations run several hundred watts on 'phone and use omni-directional antennas.

AUSTRAL. CAPITAL TERR.

6905 kc/s

VL2CP	Canberra

STATE OF WESTERN AUSTRALIA

1690 2020 2316 4010 4560 5180 6890 6920 kc/s

VL5AL	Adelade (portable)
VL5AP	Adelade
VL5AT	Oodnadatta
VL5AU	Oodnadatta
VL5AV	Renmark
VL5BC	Port Augusta (portable)
VL5BD	Port Pirie
VL5BE	Wallaroo
VL5BF	Whylla
VL5BG	Mt. Gambier
VL5BH	Bordertown
VL5BC	Port Augusta (portable)
VL5GC	Maree
VL5GQ	Kingooyna (portable)
VL5GR	Port Lincoln
VL5GY	Leigh Creek (portable)
VL5HQ	Hawker (portable)
VL5HY	Woomera (portable)
VL5IB	Blinham (portable)
VL5IC	Pemong (portable)
VL5ID	Adelaide (portable)
VL5IP	Woomera (portable)
VL5KB	Adelaide
VL5KC	Port Lincoln (portable)
VL5KD	Whyalla (portable)
VL5KE	Port Pirie (portable)
VL5KF	Mt. Gambier (portable)
VL5KG	Morgan (portable)
VL5KH	Adelaide (portable)
VL5KI	Tarcoola (portable)
VL5KK	
VL5KN	
VL5KO	Coobra
VL5KP	
	Evelyndowns
	Mt. Sarah
	Mt. Willough
	Muldorina
VNZ2	Port Augusta
VNZ3	Port Augusta

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6905 10505 13730 kc/s

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VL5DD	Darwin
VL5DE	Elliott
VL5DT	Katherine
VL5HE	Alice Springs

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1630 2260 4780 4815 kc/s

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VKC2	Melbourne
VL3PJ	Geelong
	Ballarat
	Benalla
	Bendigo
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	Warragul
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STATE OF WESTERN AUSTRALIA

3252 4560 7660 kc/s

VL6JA	Albany
VL6JB	Bunbury
VL6JC	Kalgoorlie
VL6JD	Narrogin
VL6JE	Geraldton
VL6JF	Northam
VL6JI	
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STATE OF TASMANIA

1790 2344 3252 5180 kc/s

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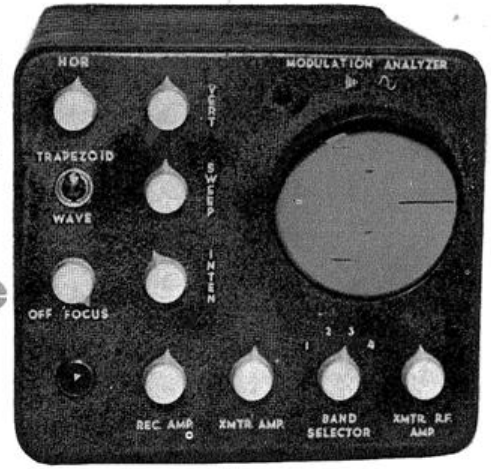
3252 6905 kc/s

VJC	Broken Hill
VKG	Sydney
VKG3	Newcastle
VKG6	W. Maitland
	Dubbo
	Golburn
	Lismore
	Murrombong
	Parkes
	Redfern
	Tamworth
	Wagga-Wagga

STATE OF QUEENSLAND

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VKR	Brisbane
VKU	Rockhampton
VL4CX	Cairns
VL4CY	Mackay
	Atherton
	Coolangatta
	Durrie
	Gympie
	Innisfall
	Ipswitch
	Maryborough
	Southport
	Toowomba
	Townsville



Front panel of the modulation analyzer. The six controls at the upper left are self explanatory, being normal 'scope controls. At the bottom, from left to right are the pilot light, receiver i.f. gain control, transmitter link tuning, C_4, input bandswitch, S_1 and transmitter input tuning, C_3.

The CB-ALYZER

THE PRETTY SCOPE CHECKS YOUR MODULATION

After the laborious process of using the regular lab oscilloscope several times to check percentage of modulation, it became very apparent to me that a modulation analyzer would be highly desirable. Then the thought arose that the CB-alyzer should also be able to check the modulation of the received signal as well.

With these goals in mind and determination as the motivating force, a program of headscratching was immediately launched. The headscratching soon developed into hairpulling and before long I was in orbit.

The input circuit in the modulation analyzer. It consists of an automatic switchless electronic changeover from receive to transmit. This is accomplished by the fact that the resonance of the receiver and transmitter input circuits of the CB-Alyzer, are widely separated with no noticeable interaction.

A wave envelope or trapezoidal pattern can be presented on the scope by the flick of a switch. The trapezoid pattern will have a bright spot at the apex of the pattern when the modulation is in excess of 100 percent. Modulation patterns are explained in any radio handbook.

The CB-Alyzer will give constant modulation monitoring. It will aid in checking on splatter caused by over modulation.

The Circuit

By means of the bandswitch S_1 inductance L_2 and capacitor C_3, coverage from 3.5 to 60 *mc* is obtained. Capacitor C_4 acts to shunt L_2 and gives a small degree of control over the signal being coupled into the tuned circuit of L_1 and C_3. Capacitor C_3 has sufficient control to vary the amplitude over a wide range. The 6C4 is used as an infinite impedance detector giving good linearity over large values of input signal voltage with very light loading on the tuned circuit.

With audio applied to the horizontal plates and S_2 in the TRAPEZOID position, the pattern will be displayed on the c.r.t. A 60 cycle sweep voltage is used for the horizontal deflection when S_2 is in the WAVE ENVELOPE position. The wave envelope pattern will give better results if an audio generator is employed.

Controls and circuit were designed so that the picture display was available with a limited number of adjustments.

A question may arise concerning resistor R_1, which is connected between the gain control R_2 and B plus. This little device will allow a smoother and broader control of the gain rather than having it all bunched up on one end of the control. The ON-OFF switch S_3 was placed on the focus control to reduce the possibility of a burned spot on the c.r.t. should the unit be turned on inadvertently. This switch could also be used in conjunction with the r.f. gain control, sweep control or intensity.

One end of a 10 mmf capacitor should be connected to the plate of the last i.f. in the receiver. A short length of RG-58/U should be used in the receiver and connected to the other end of the 10 mmf capacitor with the shield ungrounded at the condenser end. Place the condenser as close to the plate connection as possible to minimize the detuning effect on the receiver. Ground the other end of the shield to the receiver chassis. The i.f. circuit in the Modulation Analyzer is not critical and can be used with most of today's receivers providing the i.f. transformer, T_1 is of the same frequency as the i.f. of the receiver.

The r.f. pickup loop from the transmitter consists of one or two turns of heavy wire with one end attached to ground and the other end attached to the center conductor of a suitable length of RG-58/U. The distance of the pickup loop from the final tank coil will have to be determined by the trial. The signal can be audibly monitored through J_1, connected to the cathode of the 6C4.

Construction

Construction is not complicated in any way. There are, however, a few things that should be remembered. The power transformer should be located as far from the c.r.t. as possible to minimize the distortion caused by magnetic fields. It should be placed, preferably to the rear of the c.r.t. If, for some reason, the transformer must be located along side of the c.r.t. the magnetic coupling can be greatly reduced by rotating the transformer into a position which produces the least amount of coupling. The interference can be further reduced by proper placement of MU-metal shields over the transformer

C_3—140 mmf variable Hammarlund HF-140
C_4—35 mmf variable Hammarlund HF-35
J_1—Open circuit phone jack
J_2, J_3—R.C.A.-type phone jacks
L_1, L_2—See text
S_1—1 pole, 4 position rotary switch (Mallory 3215J)
S_2—S.P.D.T. toggle switch
S_3—S.P.S.T. on shaft of focus control
T_1—I.F. transformer to match receiver i.f.
T_2—Filament transformer 6.3 v. @ 1.2a. Stancor P-6134
T_3—Power transformer 650 v. c.t. @ 55 ma., 5 v. @ 2a., 6.3 v. @ 2a. Stancor PC-8407

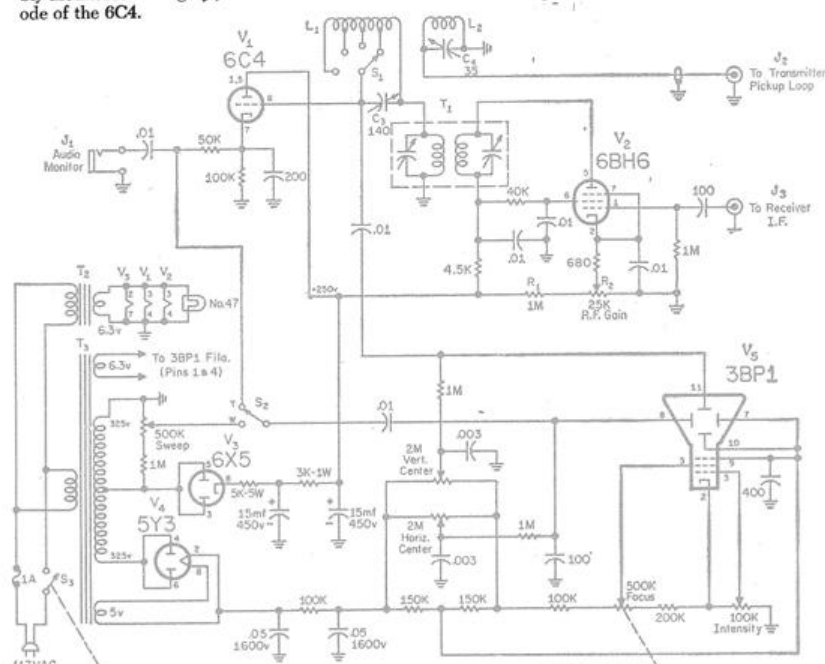


Fig. 1—Circuit diagram of the Modulation Analyzer.

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S9 Lab Reports

KNIGHT-KIT KG-372 CAPACITIVE DISCHARGE IGNITION KIT

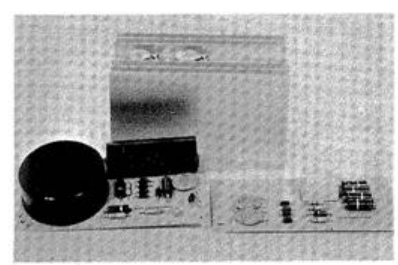
Since several readers had requested that we test a "transistor ignition" in terms of reduced mobile noise level, we built and installed the KG-372. Unfortunately, the mobile noise was reduced not one iota; but there was such a sharp improvement in overall engine performance that we decided many CBers would find a solid-state ignition system of considerable value—hence, this report.

The Knight KG-372 appears to be the nationally-known and proven-performance Delta system—but in kit form, with the kit representing a savings over the wired Delta units of approximately $10. The purpose of the KG-372 Capacitive Discharge system is to eliminate the distributor points as the "control" for the ignition coil. In normal operation the coil builds a magnetic field when the points close; when the points open, the field immediately collapses, inducing a very high voltage in the coil's secondary, which in turn "fires" the plugs.

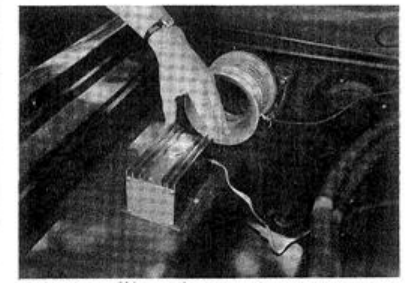
At high speed operation the points close and open so quickly the coil's magnetic field does not get a chance to build to its full strength, and often the engine does not deliver it maximum.

The capacitive-discharge system attempts to remove the problem by eliminating the points as a direct control for the coil. Here's how it's done: the KG-372 has a DC to DC convertor that delivers approximately 400 v.d.c. to a capacitor which is in series with the ignition coil. An SCR (silicon-controlled rectifier) is also in series with the capacitor. When the points are closed the SCR is held open by a complex "holding" circuit. When the points open, the SCR holding voltage is released and the SCR "fires," allowing the capacitor to discharge into the coil. The charge on the capacitor is constant regardless of engine speed; hence, the "spark voltage" is also more or less constant regardless of speed.

Another advantage is that the points now interrupt only the minute current required to fire the SCR rather than the heavy current of the coil's primary, so point life is sharply extended.



1—The Knight Capacitive-Discharge Ignition System is supplied in kit form and uses a printed circuit board. The ignition coil terminal board assembly is supplied pre-wired. Photo shows the two completed PC boards ready for installation in the cabinet.



2—Three screws mount the completed unit to a fender or firewall. It is best to position the unit in a direct air flow, away from the engine heat.



3—Two connections on the ignition coil, which can be easily removed, connect the KG-372 to the ignition system.

PERFORMANCE

When the Knight KG-372 was installed in a 6-cylinder car we could note no improvement in gasoline mileage under normal driving conditions, nor did we note any improvement in low-speed operation. But high-speed and "kickdown" performance was improved. When we increased the spark plug gap, as suggested in the manual, there was a sharp increase in high-speed and "kickdown" (floored accelerator) performance, and the car's performance esentially equalled that of the same car with an 8-cylinder engine and a standard ignition system. For example, with pre-solid-state ignition the car could accelerate from a standstill to 40 mph past a given distance reference. With the

Knight KG-372 and the increased plug gap the car hit almost 55 mph at the checkpoint.

INSTALLATION

The Knight KG-372 takes about 5 minutes to install. Three screws hold the control center to the fender or firewall. A pre-wired harness attaches in about 30 seconds to the two ignition coil primary terminals. The harness is held in place with supplied thumbnuts that allow the original distributor terminals to be re-connected in seconds.

For additional information write to Allied Radio, Dept. JR, 100 N. Western Ave., Chicago, Illinois 60680. Say you saw it in S9.

TEST REPORT: HARTMAN MARINE RDF-101 RADIO DIRECTION FINDER

Many people (yachtsmen in particular) who have looked into the possiblities of buying a radio direction finder have not gotten past the looking stage, because while a look is free, a radio direction-finding outfit can run from $200 to almost $500 for the DF receiver and compass unit. Not only that, it often takes an hour to set up the gear for DFing, plus an additional 5 to 10 minutes to get a reading.

Today you plunk down a fast $59.95 for Hartman's RDF-101 DF receiver/compass unit, completely eliminate the setup time, and get an immediate (less than 3 minutes) bearing without the additional use of rulers, T-Squares and surveyed rubber lines.

Using the RDF-101 is as simple as unpacking the small set and tuning in a known broadcast station. You then rotate the entire unit so that the built-in compass points to north on the indicator. Next you rotate the DF loop until the null meter is in a minimum position. You can then read the magnetic bearings of the radio station from your location by using the calibrated scale on the loop. Mark this on your chart and then repeat the process with at least 1 more station. Where the two bearing lines intersect, that's your location.

The internal compass is pre-aligned and compensated with the radio section of the unit. The use of broadcast band stations for DF bearings eliminates the dependency on beacon stations which require the homing system of navigation, also doing away with tidal charts and wind calculations. A listing of broadcast stations along with their exact locations is provided with the set.

The unit itself is housed in an attractive case made of high-impact plastic. The power for the set is from a self-contained battery. The transistorized radio receiver incorporated into the unit is most adequate for its intended purpose and can be given double duty as a receiver for entertainment listening as well as for DFing.

We took the RDF-101 out for a test. Going into Long Island's Great South Bay, just below Bay Shore, we headed to a point where the exact geographical co-ordinates are known. We then tuned at random, from one end of the band to the other, making a number of bearings as we tuned. Plotting all of these bearings (there were about 12) on a marine chart, we found that none contained an

Continued on page 71

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Panel view of the handy transistor tester. The zero to 2.5 ma meter may be replaced with a zero to 1 ma meter if greater sensitivity is desired. See text.

When working with transistorized equipment you may save yourself a lot of time and trouble if you take the precaution of checking each transistor to be sure it is of the correct type and in good operating condition. There is no need to make a series of precision laboratory tests, for frequently all you want is to be sure of the type of transistor and its working order. A simple tester that will perform these functions is shown in fig. 1 and the photograph.

For a rapid test of a transistor, be it either PNP or NPN, it need only be connected across the terminal strip provided for E, B and C. However, setting of the meter is first accomplished by a shorting switch between the E and B terminals or a simple jumper wire across the same points on the terminal posts. When a short is present across E and B, R_3, a 200 ohm wirewound pot, is adjusted for full scale deflection on the meter (2½ ma).

Now the transistor is connected to the terminal posts. (This can be done quickly if "Press to Insert" type posts are used.) If the meter swings full scale the transistor is shorted no matter what type, NPN or PNP.

If there is no meter movement at all depress the "Press for Test" button and if the pointer still does not move then the slide switch is probably in the wrong position. Shift the slide switch to the second position (NPN or PNP) and observe the meter reading. It should now show a slight reading. This reading represents the emitter-collector leakage.

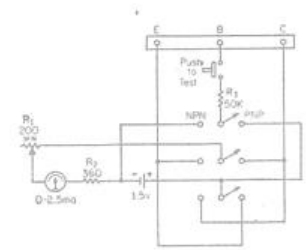


Fig. 1—Circuit of the simple transistor tester. It will show whether a transistor is PNP or NPN, test leakage and amplification. The "push to set" button may be installed or a simple jumper from the E to B post may be used.

Depress the "Press for Test" button and the meter should indicate an increase of several divisions. If, however, no increase is shown, the transistor is defective.

A meter of higher sensitivity may be used, such as a zero to one ma, if the limiting resistor, R_2, is raised in value. S9

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NORTHERN

At the May meeting of the ENFIELD CHAPTER OF RADIO RESCUE SERVICE which was held in the Police Conference Room at the Town Hall of Enfield, the annual election of officers took place.

Taking over the duties and responsibilities of the office of President for the year 1968 was Mr. Alan Doty. This is his first term as president of the organization. Mr. Richard Maggio was elected to the office of Vice-President. The office of Treasurer went to Mrs. J. Doty. Rene St. Germain was re-elected Operations Officer. Mrs. Rusty Rivers will be serving her fourth term as Recording Secretary. The duties of the Public Relations office were taken over by Art Gemme, Jr. Richard Hebert continued in his position as Purchasing Agent. Let us not forget the Ladies Auxiliary, which does an outstanding job right alongside the men of this organization. They elected as President Mrs. Miriam Gemme. Final office for which elections are held is the office of Corresponding Secretary, which is an important office like all other offices and cannot be left out of any organization. This office was taken over for a second term by Mr. Gerald Backer.

A friendly reminder that all RADIO RESCUE SERVICE meetings which are normally held every second Sunday of the month, are open to the public and anyone who wishes to attend is more than welcome.

THE SELLERSVILLE ASSOCIATION OF BROADCASTERS received their new CB club call letters on June 8, 1968. They are KBQ3986, which will be used on emergencys and when motorists are in trouble.

Signs bearing the call sign and channel 22 will be posted along the main roads into Sellersville. Special units to reply to emergency calls are units 9, Fire Co. units, 10 Police and unit 11 Hospital. For public information on camp sights, etc., units 1 and 2 will reply.

The S.A.B. is considering the possibility of starting a SWL,DX Radio Club. People who are interested should contact Mr. Dave Snyder, 255 High Street, Sellersville, Penn. 18960, USA. This club would be international; all are welcome to join or inquire.

CENTRAL

Toledo, Ohio—LUCAS-WOOD COUNTY REACT—will go out on Courtesy Patrol again over the 4th of July weekend. They will start patroling on Wednesday at 6 P.M. and end on Sunday at 1 A.M. The route will be the Detroit-Toledo Expressway with the dispatcher's radio room in the Walbridge Post of the State Highway Patrol. There will be several Courtesy Patrols over the holidays during the year besides having monitors standing by on Channel 9 24 hours a day. The call letters are KNN6699. Several towns around Toledo have given them permission to put signs up that tell traveling CB'ers how to reach them. They had a very successful raffle to pay for signs and their upkeep. On August 18, 1968, the Annual Picnic will be held in Woodville Park, Woodville, Ohio.

THE MISSOURI STATE CITIZENS RADIO SERVICE ASSN. held their annual meeting for election of officers on June 16, 1968, at the Missouri State Bank in Sedalia, Mo. Elected officers for 1968-1969 are: President, Jim McCune, KLH3964, Kirksville, Mo.; Vice-President, Roy M. White, KNH9538, Chillicothe, Mo.; Secretary, Garry Santee, KPH1679, Green City, Mo.; Treasurer Jim Giffen, HNH8597, Corder, Mo.; Board of Directors: Joe Payne, KGH3872, Sedalia, Mo.; Bob Lyle, KNH5244, Raytown, Mo.; Wayne Sleeper, KNH5808, Marshall, Mo.; and Tom Daily KGI0623, Brunswick, Mo.

Any citizens band radio club wanting information about the State Association may contact: James L. McCune, 606 W. Patterson, Kirssville, Mo. 63501; Roy M. White, 216 Gale, Chillicothe, Mo. 64601 or Garry Santee, Green City, Mo. 63545.

A nationwide appeal for public assistance to police and other emergency forces has been heard and at least one group, an organized body of Citizens' Band radio operators based in Vigo County, is attempting to answer the call for help.

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

NORTHERN

At the May meeting of the ENFIELD CHAPTER OF RADIO RESCUE SERVICE which was held in the Police Conference Room at the Town Hall of Enfield, the annual election of officers took place.

Taking over the duties and responsibilities of the office of President for the year 1968 was Mr. Alan Doty. This is his first term as president of the organization. Mr. Richard Maggio was elected to the office of Vice-President. The office of Treasurer went to Mrs. J. Doty. Rene St. Germain was re-elected Operations Officer. Mrs. Rusty Rivers will be serving her fourth term as Recording Secretary. The duties of the Public Relations office were taken over by Art Gemme, Jr. Richard Hebert continued in his position as Purchasing Agent. Let us not forget the Ladies Auxiliary, which does an outstanding job right alongside the men of this organization. They elected as President Mrs. Miriam Gemme. Final office for which elections are held is the office of Corresponding Secretary, which is an important office like all other offices and cannot be left out of any organization. This office was taken over for a second term by Mr. Gerald Backer.

A friendly reminder that all RADIO RESCUE SERVICE meetings which are normally held every second Sunday of the month, are open to the public and anyone who wishes to attend is more than welcome.

THE SELLERSVILLE ASSOCIATION OF BROADCASTERS received their new CB club call letters on June 8, 1968. They are KBQ3986, which will be used on emergencys and when motorists are in trouble.

Signs bearing the call sign and channel 22 will be posted along the main roads into Sellersville. Special units to reply to emergency calls are units 9, Fire Co. units, 10 Police and unit 11 Hospital. For public information on camp sights, etc., units 1 and 2 will reply.

The S.A.B. is considering the possibility of starting a SWL,DX Radio Club. People who are interested should contact Mr. Dave Snyder, 255 High Street, Sellersville, Penn. 18960, USA. This club would be international; all are welcome to join or inquire.

CENTRAL

Toledo, Ohio—LUCAS-WOOD COUNTY REACT—will go out on Courtesy Patrol again over the 4th of July weekend. They will start patroling on Wednesday at 6 P.M. and end on Sunday at 1 A.M. The route will be the Detroit-Toledo Expressway with the dispatcher's radio room in the Walbridge Post of the State Highway Patrol. There will be several Courtesy Patrols over the holidays during the year besides having monitors standing by on Channel 9 24 hours a day. The call letters are KNN6699. Several towns around Toledo have given them permission to put signs up that tell traveling CB'ers how to reach them. They had a very successful raffle to pay for signs and their upkeep. On August 18, 1968, the Annual Picnic will be held in Woodville Park, Woodville, Ohio.

THE MISSOURI STATE CITIZENS RADIO SERVICE ASSN. held their annual meeting for election of officers on June 16, 1968, at the Missouri State Bank in Sedalia, Mo. Elected officers for 1968-1969 are: President, Jim McCune, KLH3964, Kirksville, Mo.; Vice-President, Roy M. White, KNH9538, Chillicothe, Mo.; Secretary, Garry Santee, KPH1679, Green City, Mo.; Treasurer Jim Giffen, HNH8597, Corder, Mo.; Board of Directors: Joe Payne, KGH3872, Sedalia, Mo.; Bob Lyle, KNH5244, Raytown, Mo.; Wayne Sleeper, KNH5808, Marshall, Mo.; and Tom Daily KGI0623, Brunswick, Mo.

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ter. The C.B. Club now has well over 100 members and operates a Civil Defense Rescue Unit with the Chattanooga-Hamilton County Civil Defense. The club's rescue units do all the searching for victims of drowning and missing persons, along with every member available in case of an emergency or disaster.

The rescue unit consists of four rescue squads, with 8 to 10 men in each squad. The club has a Communications Division with Will Norris in charge. The traffic and security division handles the traffic at the drowning scene. In the transportation division are two trucks both equipped with rescue gear and a two-way radio for communication with the sheriff's office in addition to the C.B. radio in all members' autos and boats. The club uses channel 13 for stand-by and channel 19 for operations.

Chief Ralph Barger heads the entire operation with two Assistant Chiefs, Ray Campbell and Harley Thompson. All the men are volunteers.

The recently-activated RADIO PATROL EMERGENCY SERVICE AND COMMUNITY WATCH, of which Leslie G. Collins is the chief, this week installed a citizens band radio transmitter-receiver in the Sheriff's Department which will now monitor calls on CB Channel 9 around the clock.

At a meeting of the group Sheriff Haynes explained the radio hook-up.

Haynes announced a new public service program designed to encourage residents "to be good citizens by helping to maintain law and order" through reporting suspicious and unusual occurrences to the Sheriff's Department as soon as they see them. People may telephone in or those with CB radios may contact the Sheriff's Department via CB Channel 9.

"I am asking for special cooperation from all persons who drive vehicles equipped with two-way radios," said Sheriff Haynes. "The name of our special program for these drivers is N.C. Radio Patrol Emergency Service and Community Watch. All we ask is that the driver report any suspicious act or unusual occurrence like a street crime, fire or an automobile accident and our office can relay the details to the police network by radio."

Collins said that all members of that patrol are requested to monitor CB Channel 9 and to use it for emergency calls only.

WESTERN

In the CB CHIT CHAT columns of the June issue we reported on the progress in California of the Assembly Bill authorizing the issuance of state automobile license plates bearing CB call letters. This has been a special project of Bill Allen KOX5781 and the CB TRIAL BLAZERS CLUB for over two years. Mr. Allen has just reported that the State Assembly approved and passed the bill. Even though the fee to be charged those desiring plates will be reasonable, the plan will be more than self-supporting. However, in order to get this project under way by January 1969, and before there are any fees collected, the Assembly appropriated $50,000 to finance the start. The Bill now goes to the State Senate and the CB TRAIL BLAZERS CLUB, Bill Allen and their many CB supporters hope for an early passage.

The annual Steak-Fry of the HI-DESERT CB RADIO CLUB was successfully held on June 15th at Knotts Sky Park, Twenty-Nine Palms, California. While the turnout was not quite what the club expected, over 100 CB'ers enjoyed their steaks and had a wonderful get-together. Some of those in attendence traveled many miles to take in this affair. Just to mention a few of the communities represented there, CB'ers from El Centro, Santa Monica, Long Beach, Redondo Beach, Apple Valley, San Bernardino, Highland and Baldwin Park attended. The evening gathering was MC'd by Loren Welsh and Bill Correll. Drawings were held for over 80 door prizes.

THE DESERT EARS CB CLUB has been successful in its efforts to set up a relief fund known as the EMERGENCY ALLOWANCE RELIEF SUBSCRIPTION (EARS) fund. First conceived by member Harold Hawley, KOX3674, the plan went into effect on May 12th and calls for a designated cash amount to be paid to a beneficiary named by the participating member to help with immediate expences, in the event the member passes away. Sixty percent of the members qualified for the first six-month period and it is expected that this percentage will increase by the renewal date of October 31, 1968.

THE SPORTSMEN CB CLUB of Highland, California, has been quite busy the past several months, judging from their June News Letter-Coffee Breaks once a month, picnics, fishing trips, etc. Sounds like they know how to enjoy real living. The president of the club is Louis Meyers, KOX4982; other officers are: A. Campbell, V. Pres.; Clair Bluder, Secretary; and W. Disney, Treas.

On May 21, 1968, a group of six men agreed to start a new Citizens Band Club named TEXARKANA EMERGENCY NET which will meet on Sunday afternoons.

The Officers appointed are as follows: President, Jack Clemons, KBO8489, 39th and Pine Street, 23 Channel Base and Mobile; Vice President, Bill Robertson, KQV6647, Unit 3, 908 Tucker Street, Mobile CB Radio; Chairman of the Board, G.A. Bears, KQV6647, Base and Mobile Monitor Station, 18 hours. Board Members: Travis Clemons, KBL6862, Base and Mobil, Boat and Motor; Johnny McGuirt, KBK5083, Base and Mobil, First Aid Instructor; Jewel McKin, KBN6751, Base and Mobil, Mechanic and Heavy Machinery; Henry Reness, 908 Tucker Street, Base and Mobil, Electrician and Safety; Advertising Director, Al Walsh, KBR1950, Boat man, Safety Instructor; National Advertising Director, F.S.M. Bailey (Radio Red), KEH1065, Base 12 Units avail.

The purpose of the group is to better aquaint the public with the usefulness of Citizens Band Radio, to help our community in any unseen emergency that may arise and to be trained and qualified to work with the Law Enforcement, Civil Defense, Red Cross or wherever needed.

Each member's wife automatically becomes a member. (Ladies are helpful in making coffee and sandwiches, monitoring, making bandages, first air, keeping order and preventing harsh words.

At present the club has 14 members (wives making 28). We also voted to have socials along to help attract other members. Texarkana has two other clubs, the ECO Channel 11 and the Tex-Ark CB Club which is affiliated with REACT-Channel 9. Both clubs are doing fine, but they offer no training for emergency services. So another club was formed using Channel 13 for their club channel. Signs will be installed on major highways to let the public know who, when and where they can get help; also some papers will be printed with all call letters and service stations, motels, wreckers, Police, Sheriff and Highway Patrol numbers.

Plans are in the making to adopt the Community Watch Program. Shreveport, La. Hope Ark, and several East Texas cities and cities in the four states area are working with their fellow officers, helping their community more and giving the CB'ers something to do besides chit chat.

The TEN Club will have a paper out once a month and all the news of the area, lists of sick CB'ers and other subjects of interest to all CB'ers of this area will be included. PASO ROBLES—K.C. Davis was elected president of the LOS PADRES CITIZEN'S BAND RADIO CLUB at the group's

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meeting this week. He replaces past president Fred Kullgren.

Also new in office are Tom Tarpley, vice president; Pearl Tarpley, secretary; and Jerry Dunlap, treasurer. New members of the board of governors are Jodie Coley and Richard Davis.

Fred Kullgren takes over as disaster chairman; Mrs. C. Davis as public relations chairman; and Steve Dunlap as entertainment chairman.

Local radio fans were invited to the Santa Maria Radio Club barbecue July 28th, at the Union Oil Picnic grounds.

This past year has seen the club increase by 38 units. Help has been extended by the units in assisting at accidents, searching for three lost children, locating a camper's lost wife, routing a motorist to a Salinas hospital and helping locate a Boy's School escapee.

The Radio Club used 11 radio units to report the Pioneer Day Parade entries to the judges' stands along the parade route, a first for the club this year.

With the help of all members more and more use of the mobile radios will be been this year for the betterment of the area, making instant communication possible in the furthest recreation, camping and forest areas.

The Club's joining of the National Radio Emergency Associated Citizens Team (REACT) this year has proven to be of great help to the motorist and to advertize our town to a better advantage.

There were 92 calls for directions to Lake Nacimiento, sporting goods stores, restaurants and motels; one forest fire and one care fire call; six reports of wrong-way drivers on the freeway; three of road hazards in storms; seven for roadside car repairs; several requests for rest locations and overnight camping areas; one emergency relay call to the hospital to be ready for a heart attack victim enroute from the Parkfield area with a Highway Patrol escort (which turned out well after several anxious moments). Thanks go to the Atascadero Radio Club for helping with his emergency.

UTAH VALLEY CIRCUIT BREAKERS ELECT OFFICERS: As of June 26, 1968, the Utah Valley Circuit Breakers C.B. Club met in their Annual Election Meeting to elect the following new officers for the ensuing year of 1968-1969: President, Ernest Steel, KPE0677, Springville; Vice-President, Welby Beathers, KPE0638, Provo; Secretary, Lynn Warner, KPE3131, Spanish Fork; Treasurer, Joseph W. Sheridan, KPE1385, American Fork. The Board of Directors are as follows: three years, Ray Proctor, KPE1505, Orem; two years, Bill Smith, KPE0135, Edgemont; one year, Vernon Peterson, KBM8899, Provo. Fred Hewitt was elected as the Public Relations manager. We wish the incoming officers the best of luck and thanks go to the outgoing officers for a job very well done in the past.

SEARCH AND RESCUE MISSION BY C.B. On June 27, 1968, two young and youthful individuals were climbing the celebrated Mt. Olympus just east of Salt Lake City, Utah when Mark Mallory, 17, and his friend, Bob Greenwell, slipped and fell 200 feet or more, breaking the leg of Mr. Mallory. Mr. Mallory, who is a ham, was fortunate in having a pair of Walkie Talkies with him. He put out a call for help on C.B. Channel 9, the emergency channel for that area. The call was picked up by Mrs. Vaida Mabus KRE0499 at her residence in Salt Lake City. She immediatly notified the Sheriff's Office. The boys were rescued and returned to Salt Lake City for treatment, afterwhich they were released to their homes. Hats off to the Sheriff's Office, its Possee and Mrs. Mabus for quick thinking in an emergency. (Mrs. Mabus is the wife of Lorin Mabus, President of the Utah Citizens Band Association in Salt Lake City.

UTAH STATE C.B. CAMP OUT. A state-wide C.B. Camp Out was held June 23rd, at the American Fork Canyon. It commenced at 8:00 a.m. and continued throughout the day until midnight. Many door prizes were given away and drawings were held. Participants enjoyed sports, fishing, etc., and a large breakfast was served throughout the morning. The state-wide CBers campout is Utah's answer to expensive jamborees, held annually during the month of June in some cool mountain retreat. Mobiles passing through on that particular day were invited to attend as guests from out-of-state, and many did so. The most distant guests came from New York and California. The three organizations that participated as hosts to CBers at large were as follows: Utah Valley Circuit Breakers, Utah County; Utah Citizens Band Association, Salt Lake City and Salt Lake County; and the Weber/Davis County Citizens Band Association from Weber and Davis Counties in the north end of the state. These three organizations want to thank the out-of-state mobiles that went considerably out of their regular routes to attend our Campout and make it a great success. We sincerely hope that they enjoyed our pure mountain air, sports and fishing that was a part of the Campout, and we invite them to attend again next year. We particularly want to thank the advanced party who went up the canyon the previous day and put the camping area in shape and erected the homing transmitters for visiting CBers. Thank you for your cooperation!

89



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CB IN ACTION

By Joe Wanger
National Sales Manager, Pearce-Simpson, Inc.
CB/Industrial Two-Way Radio Division

Time for another Pearce-Simpson Companion II award. This time it goes to Mr. Edmund T. Dorner, Civil Defense Director of Melvin, Illinois.

March 7, and the afternoon sun brought warmth that beckoned outside activity, so I called a "Weather Watch" drill and dispatched seven mobile units to their assigned positions. During the exercise, a local front moved through the area, giving birth to sudden ground fog. We were about to terminate the drill when a weak "break break" was heard, followed by, "For God's sake, please answer me." I answered: KPJ 7171, Unit 1, reads you, breaker what is your trouble? These are the events that followed.

The breaker replied: I am lost in the fog with my homemade gyrocopter and can't land. Unit 1: What is your position? Copter: I don't know; I haven't seen the ground for 15 minutes. Unit 1 to mobile units: Can any of you hear his engine? Unit 3 reported hearing his engine over map section 2C, with an approximate heading of south by southwest and close to the ground. Unit 1 to copter: You are over Peach Orchard Township; how much fuel do you have left? Copter: Only about 10 or 15 minutes. Unit 1: You sound close to the ground. Can you gain altitude? Copter: Yes, I can get above the fog. Unit 1: Good! Climb above the fog and circle. Can you see the sun or western sky for a direct bearing? Copter: Yes. KPJ 7171 to units 5 and 7: report to the southwest corner of section 3A. I will meet you there with some illuminating fuses.

Upon arriving at 3A, units 5 and 7 were each given five fuses, with instructions to space them in the half-mile square open field. Unit 1 to mobiles: Who can hear his engine now? Unit 6 reporting: He is over Sector 5A and circling. Unit 1 to copter: Head due north. We have marked a large clear field with bright yellow flares; we will direct you down through the fog when we hear your engine. Copter: I am heading north now, but my fuel tanks sound empty. Unit 1: I can hear your engine. Head northwest. Copter: OK. Unit 1: you have passed the last power lines. Start your descent. Copter: OK. I am coming into the fog now. I can see a glow. I see the light. Here I come.

At this point, the copter engine stopped and all was quiet for a minute. Then we heard someone yelling, "I'm over here by the flare." We made our way through the fog toward the voice to find a shaken-up but safe airman. The only damage was to his walkie-talkie, which he had dropped during landing.

Edmund T. Dorner
Box 79, Melvin, Ill. 60952

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"CB in Action" is your story. You can win a Sentry II if we run your account of any event in which CB played an important role in helping you or your community. Send your story to Joe Wanger, Pearce-Simpson, Inc., P.O. Box 800, Biscayne Annex, Miami, Florida 33152.

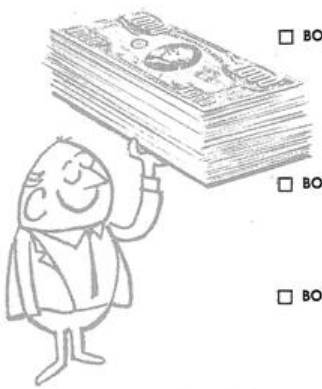
READERS' BONANZA!

TAKE YOUR PICK OF THESE GIFTS!

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

☐ BONUS ITEM #1 — **CB License Holder.** Away with lost or crumpled CB licenses! This clear plastic CB license holder will allow you to display your CB license (as required by law) without it getting dirty. Really handsome and well worth its retail value of 50¢.

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



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

☐ BONUS ITEM #4 — **CB Operator's Guide.** Book containing summary of major CB rules and regulations, PLUS glossary of CB words and expressions, PLUS directory of CB channels, PLUS call area map and guide to all current prefixes, PLUS sample CB messages, PLUS 10-Codes, PLUS instructions for using REACT and HELP monitors.

☐ BONUS ITEM #5 — S9's colorful "Hot Shot" window card, a 4 by 5 inches yellow and black card for your mobile unit window which identifies your vehicle as an "Emergency Radio Unit." Identical to those used by regulation emergency agencies. Sells for 50¢.

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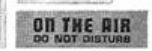












1. THE CB IDENTIFICATION CARD. Wallet size 2-color ID card for all CB'ers, shows your name, callsign, all details of your CB operating. Specifically designed for and by CB operators for official CB identification purposes. Price: 25¢ each, 5 for $1, 10 or more 15¢ each. No C.O.D. **Enclose self addressed stamped envelope with each order for 1 or more cards.**

2. MONITOR CHANNEL 9 DECAL. Identify your mobile unit or base station as standing by on Channel 9, the National CB Calling and Emergency channel. Decal is in 3 colors, is 3 inches in diameter, high quality material will transfer easily on to 'most any surface. Price: 50¢ each, 25 or more decals 25¢ each. No C.O.D. **Enclose stamped self addressed envelope with each order for 1 or more.**

3. EMERGENCY RADIO UNIT CARD. An almost exact replica of mobile window cards used by emergency agencies using radio communications. Card is large and printed on heavy bristol board stock for easy viewing when mounted on your sun visor. Most law enforcement agencies will immediately recognize your vehicle as being one authorized to perform emergency work. Price: 50¢ each, 25 cards $6.25. No C.O.D. Enclose stamped self addressed envelope for each order for 1 card. **For bulk orders, enclose 15¢ for First Class postage.**

4. PROJECT AID CARDS. In the event you must violate any of the normal CB operating rules while performing any emergency radio service or aid with your CB unit, you are required to notify the FCC in Washington and your local FCC District Office. Project aid cards are pre-printed post cards designed to save you time, bother, and sweat when doing this miserable task. Thousands already used. Price: 50 cards for $1, 25 sets or more for 50¢ per set of 50 cards. No C.O.D. **Enclose 25¢ for First Class postage or 6¢ for Second Class postage for each order of 50 cards.**

5. WHO'S WHO IN CB DIRECTORY. A giant book listing the most active fellows and gals on the band, their addresses, their hobbies, occupations, ham calls, whether or not they swap QSL's, etc. 99 pages with 4-color cover. $2 per copy, postpaid. No C.O.D.

6. CB OPERATORS GUIDE—NEW REVISED 1968 EDITION. The one and only CB Operator's Guide prepared by the S9 staff. Tells you all of the hows and whys of CB operating, FCC rules and regulations, current CB prefixes and their locations, CB lingo, how to call other stations, REACT monitors, 10-code, channels, etc. Don't settle for any of the shabby imitations which are around, get the original for 25¢ per copy (25 or more, 10¢ each). No C.O.D. **Enclose stamped self addressed envelope for each order of 1 copy.** Bulk orders sent postpaid.

7. S9 GUIDE TO INTERFERENCE ELIMINATION. Finish once and for all your problems with television interference, power line noise and interference, and mobile ignition noises with our popular booklet. Prepared by experts, it covers all problems you're faced with. Price: $1 per copy, postpaid. No C.O.D.

8. KING OF THE BAND. Would you believe a wild and zany multi-colored poster showing the ultimate "King of the Band" CB operator—a truly amazing fellow. We will rush you this with your own callsign or name printed across the top of the throne. Price: 50¢ each. No C.O.D. **Enclose a 5¢ postage stamp.**

9. CB WALL CERTIFICATE. The living end. This is a fancy-bordered official looking certificate emblazoned with a spread-winged eagle across the top. Wording says: "CITIZENS BAND RADIO STATION," with your callsign printed in large letters. **Price: 25¢ each, enclose 5¢ stamp for postage.**

10. CAR DISABLED NOTICE. Guard your stranded mobile unit against vandals, thieves, and parking tickets with this large card which announces "Notice To Police: CAR DISABLED, Have gone for assistance, will return shortly. For Information Regarding this Vehicle, Telephone: _____" Back of card is blank so you can print club or store publicity and give them out at jamborees or to those whom you aid. Keep one in the glove compartment. Price: 50¢ each, 3 for $1, 20 for $5, 50 for $10. **Enclose 5¢ stamp for less than 4 cards, larger orders sent postpaid. No C.O.D.**

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c/o S9 MAGAZINE,
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11050

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 (circle item numbers).

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CARD SWAPPERS UNLIMITED

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

SACA
470 J. Dziak, KKD4931, Trenton, N.J.
471 C. Zapata, KLT0191, Lajas, P.R.
472 C. Prichard, KRD1114, Hoquiam, Wash.
473 R. Corriveau, KOA6907, Lewiston, Me.
474 B. Westbrook, Carnesville, Ga.

PX-25
831 R. Baier, Haledon, N.J.
832 R. Phillips, KRP6304, Machias, N.Y.
833 R. Lachame, KQA8906, Biddeford, Me.
834 D & M Shaw, KRM0916, So. Charleston, Ohio
835 R. Corriveau, KOA6907, Lewiston, Me.
836 P. Bovat, KMA9469, Fairfax, Vt.
837 A. Kingsley, KOA4592, Malden, Mass.

PX-50
714 D. Martin, KBM5393, Perry, Iowa
715 R. Lachame, KQA8906, Biddeford, Me.
716 D & M Shaw, KRM0916, So.Charleston, Ohio
717 R. Corriveau, KOA6907, Lewiston, Me.
718 A. Kingsley, KOA4592, Malden, Mass.

PX-75
580 J. Pier, KRP9452, Binghamton, N.Y.
581 R. Lachame, KQA8906, Biddeford, Me.
582 R. Corriveau, KOA6907, Lewiston, Me.
583 A. Kingsley, KOA4592, Malden, Mass.
584 D & M Shaw, KRM0916, So.Charleston, Ohio

PX-100
519 R. Lachame, KQA8906, Biddeford, Me.
520 R. Corriveau, KOA6907, Lewiston, Me.

PX-125
379 D. Martin, KBM5393, Perry, Iowa
380 R. Corriveau, KOA6907, Lewiston, Me.

PX-200
237 C. Prichard, KRD1114, Hoquiam, Wash.
238 B. Bitowf, KOD6313, Hawthorne, N.J.

PX-225
184 C. Zapata, KLT0191, Lajas, P.R.

PX-250
231 R. Clinch, KLQ0423, Vernon Center, N.Y.

PX-275
137 B. Light, KMA2652, Norwalk, Conn.

PX-1300
104 L & M Laney, KPF0371, Verona, N.D.

PX-1400
104 L & M Laney, KPF0371, Verona, N.D.

PX-1700
101 H. Shaffer, KRJ6906, Paducah, Ky.

MSA
339 C. Zapata, KLT0191, Lajas, P.R.
340 C. Prichard, KRD1114, Hoquiam, Wash.
341 P. Bovat, KMA9469, Fairfax, Vt.

SSC-1
323 C. Zapata, KLT0191, Lajas, P.R.
324 B. Bitowf, KOD6313, Hawthorne, N.J.

SSC-2
236 C. Prichard, KRD1114, Hoquiam, Wash.

SSC-4
156 H. Shaffer, KRJ6906, Paducah, Ky.
157 J. Cooper, KRK5724, Milwaukee, Wis.

SSC-5
141 B. Light, KMA2652, Norwalk, Conn.
142 R. Clinch, KLQ0423, Vernon Center, N.Y.

SSC-7
127 L & M Laney, KPF0371, Verona, N.D.

SSC-20
108 D. Theisen, KNM0810, Norwalk, Ohio

SSC-21
103 D. Theisen, KNM0810, Norwalk, Ohio

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

2QU147 G. Delaney, 308-47th St., Union City, N.J.
6Q0054 G. Poore, 2505 Congress Pky, N.W., Athens, Tennessee
KAA2424 J. King, Box 1182, Raleigh, N.C.
KAA4564 G. Thayer, A303 Iroquois Dr., Salamanca, N.Y.
KAJ0765 J. Kirkland, Rt. 7, Raleigh, N.C.
KAS3030 D. Byrd, 901 Sunny Lane, Raleigh, N.C.
KBC6229 P. Conant, 139 N. Main St., Florence, Mass.
KBI2251 M. French, 35 Southwood Dr., Old Bridge, N.J.
KBI6025 M. Latterman, Box 608, RDI, Princeton, N.J.
KBK0349 D. Goebel, Jr., 10 Youngstown Rd., Fairfield, Connecticut
KBK2465 D. Poust, 1215 Cornwall Rd., Lebanon, Pa.
KBK3934 C. Pearl, 1632 Tuley Rd., Hamilton, Ohio
KBK4468 R. Lendzioszek, 12 Hampton Terr., Easthampton, Massachusetts
KBK4688 The Velpels, 4125 Roxton La, Ft. Wayne, Ind.
KBK5682 D. Davis, 42011 Gainsley Dr., Utica, Mich.
KBK5708 D. Henry, 1558 E. 45th St., Cleveland, Ohio
KBK7096 D. Snyder, 425 Greenwood Dr., Sharon, Pa.
KBK7631 J. Salerno, 376 Taulman Rd., Orange, Conn.
KBK8762 J. Lafferty, 8Dowman St, Union City, Pa.
KBK9400 B. Kelly, Hornell RD2, N.Y.
KBK9940 M. Ebersoles, 1531 Oak St., Lebanon, Pa.
KBL0939 L. Budd, 512 Ray Ave., Ashland, Ohio
KBL1163 R. Dean, 3 E. Main St., Apt. 9, Westminster, MD.
KBL1510 G. Ellis, 1456 Virmay Dr., Gilbertsville, Pa.
KBL3190 H. Douglass, 1236 Maiden Choice La., Arbutus, Maryland
KBL3213 W. Hylton, 608 Beverly Ave., Covington, Va.
KBL4705 J. Quimby, 8 Euclid Ave., Bradford, Mass.
KBL4792 B. Friz, 132 S. Franklin, St. Boyertown, Pa.
KBL5065 J. Eakins, 319 State Hwy #1, Grover City, Calif.
KBL5654 C. Ford, 308 Spruce St., Appalachia, Va.
KBL8973 T. Goatoam, 213 South St., Wattsburg, Pa.
KBM0163 B. Wilchel, Box 3546, N. Las Vegas, Nev.
KBM1056 F. Walker, 45446 N. 7th St. E., Lancaster, Cal.
KBM2247 J. Leber, 2206 1st St., Perry, Iowa
KBM2974 T. Chelf, 420 Evans St., Muscatine, Iowa
KBM4644 J. Greene, Box 61, Madison Hgts., Mich.
KBM5393 D. Martin, 1907 W. 3rd St., Perry, Iowa
KBM6211 W. Harrington, Box 2, Wickliffe, Ky.
KBM6947 J. Dennis, Rt. 1, Box 261, Gobles, Mich.
KBM7691 C. Stevens, 9697 S. Ave. Ext., Poland, Ohio
KBN1164 The Miranda's 157 Porter St., Prov., R.I.
KBN2384 M. McDonald, Box 2266, Odessa, Tex.
KBN2425 D. Horstmann, 1637 Rutherford Ave., Pittsburgh, Pennsylvania
KBN5237 C. Henry, 408 Martin Dr., Irwin, Pa.
KBN7286 E. Clark, Jr., 1060 Eastwood Dr., Inkster, Mich.
KBN8391 F. Ceci, 934 Delaware Ave., Olean, N.Y.
KBN8766 D. Guerne, 199 W. Norton, Muskegon, Mich.
KBN9267 E. Owen, 816 E. 12th, Hopkinsville, Ky.
KBN9470 H. Freiermuth, 657 S. 4th St., Lindenhurst, L.I., New York
KBO1602 J. Levy, 1004 Electric St., Scranton, Pa.
KBO2543 P. Knapik, 20 Donald Ave., Passaic, N.J.
KBO6801 R. Newquist, 3150 Hayes St., N.E., Minn., Minn.
KBO7755 L. Palmer, 6120 Reinhard St., Phila., Pa.
KBO7893 G. Barlup, 11 Louis La., S., Enola, Pa.
KBP4512 R. Davis, Box 352, Elon College, N.C.
KBP4644 R. Cummings, 2221 1st Ave. N., Texas City, Tex.
KBQ0282 R. Bell, 1822 Cooper St., Saginaw, Mich.
KBQ4255 The Browns, Star Route, Box 555, Eustis, Fla.
KBR3481 W. McMahon, 1607 Rutherford Ave., Pgh. Pa.
KCD1896 H. Taylor, S. Dupont Rd., Penns Grove, N.J.
KCG0346 B. Curtis, Rt. 2, Elkins, W.Va.
KCJ5002 J. Kirkland, Rt. 7, Raleigh, N.C.
KCJ7737 A. Clarke, 1009 Hamilton Ave., Clifton Forge, Va.
KDC0912 H. Welch, 908 Lima St., Wapakoneta, Ohio
KDC2091 C. Kreuger, 1028 Espyville Rd. N., Marion, Ohio
KDD6155 R. Abercrombie, 5225 Clairmont Ave. S, Birmingham, Alabama
KEB1661 B. Fancher, Box 7, Darling Miss.
KEJ5174 L. Larison, 1521 Edison, Burbank, Calif.
KFA6150 Sgt. D. L. Conant, CoB, 228th Avn, 1st Cav., Div, Apo, SF, 96490
KGI3589 C. Fleagle, Rt. 1, Abilene, Kan.
KGI7912 D. Stoneburg, Box 11221, Ames Ave., Sta., Omaha, Nebraska
KHD0502 K. Perkins, R#1, Liberty Farm Tr. Pk., Valparaiso, Indiana
KHI2695 B. Lehmier, 1408 Home Ave., Akron, Ohio
KHI9979 G. Taylor, 123 N. Adolph Ave., Akron, Ohio
KJH0080 R. Grubbs, Rt. 3, Winston-Salem, N.C.
KKA4210 D. Clogston, Starks, Maine
KKA5753 P. DeFilippo, Box 144, Wallingford, Conn.
KKA7341 M. Benoit, Lambs Grove, Spencer, Mass.
KKA8873 C. Dufresne, 35 Elm St., Holyoke, Mass.
KKB0355 B. Cutter, Box 104, W. Somerville, Mass.
KKB0748 T. Pluta, 31 Stony Hill Rd., Indian Orchard, Mass.
KKB1758 V. Taylor, 14 North St., Plymouth, Conn.
KKD0498 C. Henry, 1216 84th St., Brooklyn, N.Y.
KKD2292 H. Meyer, 50 Knickerboker Rd., Plainview, L.I., New York
KKD3784 L. Waller, 330 W. 28th St., New York, New York
KKD4931 J. Dziak, 1441 N. Olden Ave., Trenton, N.J.
KKD5214 T. Bobrick, 30 Fern Ct., Hicksville, N.Y.
KKD6425 J. Marra, 160 E. Lakeview Ave., White Plains, N.Y.
KKG3074 H. Peer, Jr., 617 Halliard Ave., Beachwood, N.J.
KKK0471 J. Kirkland, Rt. 7, Raleigh, N.C.
KKK2318 J. Plunkett, 2903 Ajax Ave., N.W., Roanoke, Va.
KKK3635 H. Engle, Box 709, Graham, N.C.
KKK6850 B. Pepitone, Box 3096, Chula Vista, Calif.
KKM9702 J. Wolfe, 1707 Merrycrest Dr., Memphis, Tenn.
KKV7967 T. Richey, 817 Hillside Dr., Sherman, Tex.
KKX2834 G. Strainline, 1171 W. Miracle Mile, Tucson, Ari.
KLC2270 D. Rismoen, Box 181, Longview, Washington
KLF1859 C. Marx, 411 Toronto St., St. Paul, Minn.
KLI0478 B. Oswald, 7401 Zephyr Pl., Maplewood, Mo.
KLJ1267 R. Ewing, Sheldon, Ill.
KLK2564 K. Belongia, 932 Park Ave., Racine, Wisc.
KLK5134 L. Potterbaum, 1815 Neville St., Metropolis, Ill.
KLL0854 B. Falconites, 505-26th St., Cairo, Ill.
KLM4842 B. Hazen, 231 N. Mead, Zanesville, Ohio
KLN5752 C. Martin, 130 Clark St., Elyria, Ohio
KLN6383 R. Saltsman, 412 Water St., Salineville, Ohio
KLN6667 V. Haun, W2 Maywood Pk., Chesterland, Ohio
KLN7441 T. Smock RMSN, USS COOK(APD-130) FPO San Francisco, Calif. 96601
KLN9961 O. Bluhm, 1483 E. Bellum, Muskegon, Mich.
KLP9660 H. Clark, Ashford Sta., Ellicottville, N.Y.
KLQ0828 T. Richards, 205 N. Thompson Ave., Springfield, Ohio
KMA0000 S. Albert, 132 Withington Pl., Newton, Mass.
KMA0861 R. Drakopoulos II, 27 Douglas St., Haverhill, Massachusetts
KMA2652 B. Light, 28 Newfield St., Norwalk, Conn.
KMA4164 J. McDonald, Warren, N.H.
KMA7120 S. Schuler, 55 Dora St., Prov., R.I.
KMA7146 J. Rushford, Box 71, Orange, Mass.
KMA2961 C. Rogers, III, Box 178, Middletown, Conn.
KMA9599 J. Wyndyka, Palmer Rd., Box 329, Ware, Mass.
KMA9748 The Vienneaus, 93 Collins Rd., Bristol, Conn.
KMA9953 R. Corr, 7 Courtland St., Farmington, N.H.
KMB0400 J. Taylor, 1621 S. Main St., Waterbury, Conn.
KMD1027 B. Connelly, 89 Stephan St., Kingston, N.Y.
KMD4253 H. Wells, 135 Lincoln St., Kingston, N.Y.
KMD4874 A. Mai, Box 444, Valley Stream, N.Y.
KMD6979 E. Koulter, Room 23 Valeria Home, Peekskill, N.Y.
KMG0285 C. Bell, 407 Pomeroy St., Ridley Pk., Pa.
KMG3744 O. Bullitt, 133N.W.103rd St., Miami Shores, Fla.
KMI1553 M. Lambert, Star Rt, 1, Keyser, W.Va.
KMI2028 T. Guthrie, 3408 Toledo Terr., Hyattsville, Md.
KMK4070 M. Downey, 119 Gawain Dr., Newport News, Va.
KMK3371 C. Dyer, Rt. 1, Box 71-A, Troy, N.C.
KMM7927 H. James, 215 7th St. W. Alexander City, Alab.
KMM9038 J. Ganoe, Box 8482 Chattanooga, Tenn.
KMP0369 G. Lindstrom, Jamison Trailer Pk., Lot 1, Millington, Tenn.
KMR6064 V. Moore, Rt. 2, Hartje La., Conway, Ark.
KMX0743 B. Cittell, 3017 Killybrooke La., Costa Mase, Calif.
KMX2993 J. Ummel, 516 Calle Granada, Santa Barbara, Calif.
KNA0526 J. Stevenson, 2000 W. Capital Ave. # 109 W. Sacramento, California
KNA2893 E. Fell, 4018 E. Third Ave., Napa, Calif.
KND1879 C. McDonald, Box 115 Somers, Montana
KNH0935 P. Nosler, 1126 Prairie Pk. Rd., Wichita, Kan.
KNH2587 F. Mauler, RFD1, Olmitz, Kan.
KNH4243 B. Laub, 2007 Menard St., St. Louis, Mo.
KNH6376 B. Hayes, 1302 E. McArthur Rd., Lot 46, Wichita, Kansas
KNH7106 K. Russell, RR4, Box 57, Jefferson, Iowa
KNH9874 J. Krueger, Box 9024, Long Beach, Calif.
KNI0361 J. Guernsey, 434 S. 9th, Salina, Kans.
KNJ0681 R. Coslet, 457 N. Calumet, Chestertown, Ind.
KNJ4674 H. Beesley, 8444 S. Halsted St., Chicago, Ill.
KNJ6066 C. Stone, 279 Old Orchard Rd., Paducah, Ky.
KNK1200 L. Tharp, 3219 Dalewood Ave, S.E., Cedar Rapids, Iowa
KNK3110 W. Neumann, Box 94, Gurnee, Ill.
KNM0038 E. Holder, 648 Plum St., Coshocton, Ohio
KNM0810 D. Theisen, 53 Norwood Ave., Norwalk, Ohio
KNM4627 R. Patterson, 9806 Larnder Ave., Cleve., Ohio
KNN1873 R. Neff, 1306 Blaine Ave., Cambridge, Ohio
KNN2326 E. Packard, 118 River St., Lodi, Ohio
KNN3349 S. Hogg, 3327 Stettinius Ave., Cincinnati, Ohio
KNN6380 L. Goings, 617 Hamilton St., Toledo, Ohio
KNN6972 E. Burr, 104 Milan Ave., Norwalk, Ohio
KNP3245 G. Thayer, A303 Iroquois Dr., Salamanca, N.Y.
KNP3607 W. Kakareka, Jr., RD3, Moscow, Pa.
KNP8576 P. Lundy, 48 Sodus St., Clyde, N.Y.
KNY2021 A. Simpson, Box 441, Ridgeway, Pa.
KOA0054 S. Rowe, 12 Hauser St., Milford, Conn.
KOA0137 P. Dould, 308 Vine St., Athol, Mass.

KOA4313 B. Siano, 195 Williams St., Longmeadow, Mass.
KOA4592 A. Kingsley, 530 Highland Ave., Malden, Mass.
KOA5743 P. Aucoin, 37 McDonald St., Spencer, Mass.
KOA7350 N. Bibeau, 742 Laurel St., Longmeadow, Mass.
KOA8586 Lendaioszek, 12 Hampton Terr., Easthampton, Massachusetts
FOB0960 C. Cookman, RDl, Middlebury, Vt.
KOB0740 B. Gregoire, 15 School St., Spencer, Mass.
KOD0626 M. Krieger, 874 E. 48th St., Brooklyn, N. Y.
KOD1488 H. Clark, Box 236, Sta. A., Marlboro, N. J.
KOD1886 J. Scanlon, 141 Wester Ave., Albany, N. Y.
KOD2927 R. Lenhard, 122-37 Benton St., Springfield Gardens, New York
KOD3656 H. Adamkewicz, 164 Stuben St., Jersey City, N. J.
KOD4155 P. Farr, Box 657, Livingston Manor, N. Y.
KOD4457 R. Skalberg, al4 Charles Ave., Massapequa Pk., New York
KOD6313 B. Bitowf, 128 Post Ave., Hawthorne, N. J.
KOD7277 V. Genduso, 33 Connecticut Ave., Long Beach, New York
KOD7795 N. Drucker, 13-03 Sunnyside Dr., Fair Lawn, N. J.
KOG1979 D. Trayes, 341 Miller St., Bangor, Pa.
KOG2249 Capt. J. Keeley, 110 W. 19th St., Wilmington, Del.
KOG3888 B. Hopkins, Miller Rd., Chester Springs, Pa
KOG4806 R. Held, 546 Vine Ave., Toms River, N. J.
KOI0163 E. Webb, Rt. l, Box 78, Ellendale, Del.
KOI0185 Gay &Ruth, Rt. l, Box 121 A, Westernport, Md.
KOI1420 B. Weese, Box 430, Keyser, W. Va.
KOI1730 D. Harvey, 8804 1st Ave., Silver Spring, Md.
KOI3190 P. Hartman, 81 Lincoln St., Keyser, W. Va.
KOK0854 E. Barksdale, Rt. 2, Brookneal, Va.
KOK1177 B. LaFoon, 4419 Ben St., N. W., Roanoke, Va.
KOK4126 D. McClain, 2514 Arrington Rd., Richmond, Va.
KOM2837 J. Powell, Rt. l, Ward, S. C.
KOM5455 J. Morse, 1314 S. Beltline, Cola, S. C.
KOM5861 H. Curran, 1199 Constitution Rd. S. E., Atlanta, Ga.
KOM6330 M. King, 61 Lake Forrest La. N. E., Atlanta, Ga.
KOM8147 W. Lambert, 127 Lovvorn Rd., Carrollton, Ga.
KOP1799 G. Echement, 1911 Old Coachman Rd., N, Clearwater, Florida
KOR3033 F. Barrett, 1019 11th Ave., Laurel, Miss.
KOP1489 G. Cannon, Rt. 2, Box 53B, Winter Garden, Fla.
KOR4525 B. Bruce, 1105 Peach St., Vidalia, La.
KOT1603 D. Thomson, 3103 Bennington, Pasadena, Tex.
KOV5136 D. Asbill, 1004 E. 40th, San Angelo, Tex.
KOV7026 C. Allen, 512 Williams St., Longview, Tex.
KOX0062 F. Pontius, 475 Camino Parocela, AptB, Palm Springs, California
KOX2631 M. Ozenghar, Box 188, 29 Palms, Calif.
KOX7430 G. Luziere, 18 Toyon Rd.,Santa Clara, Calif.
KOX7713 R. Ehman, 956 S. Arapahoe St., Los Angeles, Calif.
KPA0221 J. Otto, 10080 Lilac Dr., St. Louis, Mo.
KPA0390 J. Schiedels, 4379 N. Eddy Ave., Fresno, Calif.
KPA4456 G. Anderson, 1043 Jay St., Marysville, Calif.
KPA6319 R. Nelson, Box 16234, San Francisco, Calif.
KPC3372 F. Charlan, 3641 S. E. Nehalem St., Portland, Ore.
KPC3604 R. Stainbrook, Jr., 1272 Reedy Dr., N. E., Salem, Oregon
KPD2970 J. Brandner, 1810-11th Ave. S., Great Falls, Mont.
KPF3409 P. Mathiowetz, Box 224, New Ulm, Minn.
KPH1798 G. Heltzell, RR3, Box 142, St. Charles, Mo.
KPH9173 R. Zerr, 532 N. Benton, St. Charles, Mo.
KPI0513 H. Carroll, 1707 Bellaire, K. C., Mo.
KPJ0558 F. Gero, 1018 E. Merchant, Kankakee, Ill.
KPJ2453 B. Waller, RR2, River Rd., Keokuk, Iowa
KPJ3869 W. Usedly, 4510 W. Scenic Dr., Peoria, Ill.
KPK1117 R. Di Matteo, Box 81, Westmont, Ill.
KPK1188 J. Rynning, Box 17-61764, Pontiac, Ill.
KPK3595 W. Walker, Rt. l, Pontiac, Ill.
KPK4084 K. Frandsen, 3916 S. Anthony Blvd., Ft. Wayne, Ind.
KPK6177 R. Lentz, 6051 W. Leon Terr., Milwaukee, Wisc.
KPK7025 D. Semonick, 114 Arlington Dr., Danville, Ill.
KPM0503 J. Good, 1019 Somerset Dr., Charleston, W. Va.
KPM0695 J. Zimmer, 2818 Audubon Rd., Columbus, Ohio
KPM0701 Mr. Lonely, 2169 Williamson Ave., Flint, Mich.
KPM4118 P. Thomas, 131 Stanley Ave., Findlay, Ohio
KPM5351 F. Davis, RR1, Box 425, Hastings, Mich.
KPN5993 A. Fallert, 121 N. C St., Hamilton, Ohio
KPN7093 J. Faucett, 6092 Longford Rd., Dayton, Ohio
KPN8950 R. Dickinson, 7009 Oakwood Rd., Parma Hts.,Ohio
KPQ0024 G. Radaker, 4720 Pine Ave., Erie, Pa.
KPQ2018 R. Friend, 236 W. Pearl St., Butler, Pa.
KPQ2189 R. Klose, Middleburg, Pa.
KPQ2341 I. Smith, 419 Water St., Danville, Pa.
KPQ2692 J. Haught, 15 Railroad St., Milton, Pa.
KPQ4959 J. Heslop, RDl, Box 86, New Paris, Pa.
KPQ5964 J. Laver, Rt. 5, Meadville, Pa.
KPQ6719 D. Wheeler, Rd. l, Lake Desolation Rd., Middle Grove, New York
KPQ7219 D. Chopan, 56 Cleveland Ave., Salamanca, N. Y.
KPQ7338 F. Bean, 5 S. Main St., Castille, N. Y.
KPQ7870 W. Smalt, 15 Erie St., Cohocton, N. Y.
KQA0000 H. Katseff, 179 Paulson Rd., Waban, Mass.
KQA0240 P. O'Toole, 35 Olney Ave., Lincoln, R. I.
KQA0287 R. Charon, 68 MarySt., Aldenville, Mass.
KQA0540 F. Fascione, 236 Country Club Rd., New Britain, Connecticut
KQA0700 F. Gardiner, 45 Sterling St., Worrester, Mass.
KQA1613 J. Moran, 57 Esmond St., Esmond, R. I.
KQA2302 A. Neslusan, Jr., 44 Pearl St., Webster, Mass.
KQA2397 E. Papoosha, 49 Troiana Rd., Hamden, Conn.
KQA2463 M. Reynolds, Mr., Box 43, White River Jct., Vt.
KQA2607 R. Norton, 4 Gould St., Millbury, Mass.
KQA3772 E. Smith, 19 Kellogg St., Portland, Me.
KQA5315 D. Moquet, 371 Valleybrook Rd., Orange, Conn.
KQA5437 C. Evans, 113 Foster St., Lawrence, Mass.
KQA7294 F. Fisher, Box 381, E. Hampton, Mass.
KQA8906 R. Lachance, 16 Congress St., Biddeford, Me.
KQA9218 V. Peck, 148 Montauk Ave., New London, Conn.
KQD0650 S. Tillman, 32 Glenwood Rd., Plainview, N. Y.
KQD0704 B. Singer, 25 Glenwood Rd., Plainview, L. I., N. Y.
KQD2016 D. Haff, 1891 Smith St., Merrick, N. Y.
KQD2813 B. Oppenheimer, 54 Winslow Rd., White Plains, New York
KQD4030 J. Rush, 189 Smallwood Ave., Belleville, N. J.
KQD4122 G. Janisszewski, 178f Amsterdam Ave., Schenectady, New York
KQD4262 S. Vasti, 26 Monroe Ave., Hicksville, N. Y.
KQD5091 J. Beyer, 217 A E. Marshall, San Gabriel, Calif.
KQD5891 G. Barry, Jr., 41 Washington St., Middletown,N.Y.
KQD7020 L. Miller, 4533 Kings Hwy, Brooklyn, N. Y.
KQD7403 L. Spencer, 45 Mobile Manor, Cutts Rd., Kittery, Maine
KQD7756 A. Allen, 610 Prospect Ave., Spring Lake Hts., N. J.
KQG0250 J. Gundel, 193 Mansion Rd., NewtownSq., Pa.
KQG0326 W. Sattizahn, 132 S. Warren St., Orwigsburg, Pa.
KQG0682 C. Shevlin, Box 6284, Phila, Pa.
KQG1148 J. Bowman, 47 N. 19th St., Harrisburg, Pa.
KQG1300 R. Skiles, 517 Terrace Rd., Lancaster, Pa.
KQG1499 S. Fidler, Rt. 2, Box 16, Dennisville Rd., Woodbine, New Jersey
KQG2466 C. Dawson, Box 103, Pedricktown, N. J.
KQG3451 R. Greenberg, Box 3006, Harrisburg, Pa.
KQG5125 F. Goff, Jr., 317 Mecray La., Maple Shade, N. J.
KQG5262 J. Resch, 947 Clark St., Lancaster, Pa.
KQD7984 The Bootlegger, 1508 7th Ave., Waterullet, N. Y.
KQI0868 V. Rocks, 3102 Juneau Pl., Baltimore, MD.
KQI2214 C. Marshall, 4135 Brookfield Rd., Baltimore, Md.
KQI2291 J. Moore, 742 Ridgeway Ave.,Morgantown, W. Va.
KQI3010 W. Patterson, Box 45, Perryville, Md.
KQI3619 E. Kerge, 9311, 4th St. Lanham, Md.
KQK2321 M. Foster, Box 5012, Fayetteville, N. C.
KQK3090 R. Vanover, Box 402, Clintowood, Va.
KQK3490 J. Thomas, 4202 White Pine Dr., Chesapeake, Va.
KQK3911 C. Moore, Rt. 4, Box 34, Thomasville, N. C.
KQK3740 F. Quinn, 216 E. 10th Ave. Ext., Lexington, N. C.
KQK4664 J. Goss, 23 Pickard Cir., Lexington, N. C.
KQK5154 C. Morris, Rt. 3, Box 16, W. Church St., Elizabeth City, N. C.
KQM1297 H. Starr, 1808 Tobey Rd. Chamblee, Ga.
KQM3495 D. Billingsley, 512 Lambuth, Jackson, Tenn.
KQM8143 R. Riggs, Rt. 3, Ridgeway Dr., Athens, Tenn.
KQM8834 R. Rouse, 295 Georgia Ave., Bristol, Tenn.
KQP2037 P. Jolly, Box 1824, Plant City, Fla.
KQP2046 J. Johnson, Box 202, Jacksonville, Fla.
KQP3546 B. Brown, 5749 Antilles Dr., Sarasota, Fla.
KQP3552 H.Goodwin, 4856 Samona Dr., S., Jacksonville,Fla.
KQP4165 J. Colley, Jr., 2403 Stevens, Sanford, Fla.
KQP4381 M. Muraida, Rt. l, Box 649, Lake Placid, Fla.
KQP5735 R. Hendricks, 1518 United St., Key West, Fla.
KQR0866 D. Elder, 838 Oakwood St., Jackson, Miss.
KQR2255 L. Towns, Rt. 2, Box 179, Arcadia, La.
KQR4026 W. Bruce, 2032 Robert Gray St.,Vidalia, La.
KQT0766 J. Groce, Box 303, League City, Tex.

S9 - all CB RADIO

KQT2169 D. Whittle, 700 W. San Antonio St., Lockhart, Tex.
KQV3242 The Scarsellas, Box 251, Branby, Mass.
KQV4719 P. Cox, 1613 S. Howard, Moore, Okla.
KQV6815 G. Gilchrist, 1807 Walnut, Duncan, Okla.
KQX0682 C. Petersen, 1660 Shoreline Dr., Santa Barbara, California
KQX2555 B. Braden, 9580 Fontana Ave., Fontana, Calif.
KQX3414 J. Husted, 1606 Van Horne La., Redondo Beach, California
KQX3563 Motel Calico, I.S.15 & Ghost Town Rd., Box 275 Yermo, California
KQX3563 O. A. Russell, I.S.15 & Ghost Town Rd., Box 275 Yermo, California
KQX7648 J. Ingram, 207 Salida Del Sol, Santa Barbara, Ca.
KQX8513 C. Cartwright, 9719 Oleander St., Fontana, Calif.
KQX8823 C. Parrish, 5019 La Sena Ave., Baldwin Pk. Calif.
KQX9248 J. Nichols, Box 911, Chula Vista, Calif.
KQY1085 S. Garber, 156 S. Martel Ave., Los Angeles, Calif.
KRA1857 D. Smith, Rt. l, Box 1070, Penryn, Calif.
KRA2194 S. Bell, 1632 Pearl St., Modesto, Calif.
KRA3191 A. J. Lum, Box 856, San Luis Obispo, Calif.
KRA4609 B. Radcliff, 916 Princeton, Modesto, Calif.
KRA2682 G. Pickens, 3424 Douglas St., Sacramento, Calif.
KRC2555 E. Kosko, 5901 S. W. Brugger, Portland, Oregon
KRC2670 G. Evitt, 8021 Old Pacific Hwy N., Castle Park, Washington
KRD0476 L. Harris, Box 182, Hoquiam, Wash.
KRD1279 L. Vanhoozer, 223 15th St., Black Eagle, Mont.
KRF1449 D. McLaughlin, 800 Patricia, Ann Arbor, Mich.
KRF2870 The McLains, 3858 Bryant N., Minn, Minn.
KRF2894 G. Morke, 1307 10th Ave. N., St. Cloud, Minn.
KRH1675 T. Frank, 6829 N. W. 5th Ct., Des Moines, Iowa
KRH2574 V. Moellering, 11744 Poggemoeller Ave., St. Louis, Mo.
KRH7743 The Andersons, 11517 Burton St., Sugar Creek, Missouri
KRH8176 G. Littell, Rt. 4, Fort Dodge, Iowa
KRI0348 J. Kling, Jr., 423 North 6th St., Plattsmouth, Nebraska
KRJ1076 C. Galloway, 1504 North 30th St., Terre Haute, Indiana
KRJ3908 B. Beckett, 512 N. Douglas, Shelbyville, Ill.
KRJ4935 J. Dvorak, 234Church St., Mishicot, Wisc.
KRJ6906 H. Shaffer, 1612 Madison St., Paducah, Ky.
KRJ7577 W. Dunivan, 313 Weston, Valparaiso, Ind.
KRJ9054 W. Skinner, 8638 Calle Mirador, El Cajon, Calif.
KRJ9775 R. Williams, 2545 E. 27th St., Granite City, Ill.
KRK0565 C. Johnson, 135 N. Longwood St., Rockford, Ill.
KRK0584 E. Bush, 5172D Teal Court, Beale AFB, Calif.
KRK0664 D. Beaston, 1603 Oak, Quincy, Ill.
KRK3566 B. Dort, 1616 B Ave.N. W. Cedar Rapids, Iowa
KRK3625 B. Armbuster, 804 So. Main St., Belvidere, Ill.
KRK5378 D. McDonald, 504 Columbus Rd., Streator, Ill.
KRK5724 J. Cooper, 4541-W. Fond Du Lac Ave., Milwaukee, Wisconsin
KRK8328 E. Klink, 3519 Highcrest Rd., Rockford, Ill.
KRK8637 C. Herendeen, 2818 Normandy Dr., Mishawaka, Indiana
KRK8937 D. Lowe, 3306 Houston St., Indianapolis, Ind.
KRM0145 K. Doty, Rural Rt. l, Mt. Cory, Ohio
KRM0196 D. Johnston, 937 E. North St., Lima, Ohio
KRM0643 B. Eggleston, P. O. Box 61, Hastings, Mich.
KRM1424 W. Riley, Guilford Lake, R. D. l, Hanoverton, Ohio
KRM1861 B. Heffner, 386 N. High St., Cortland, Ohio
KRM5594 F. Morales, 177 Ridgemoor, Battle Creek, Mich.
KRM5711 M. Bugbee, 243 W. Ann Arbor, Pontiac, Mich.
KRM5857 S. Eisnaugle, 240 Water St., Jackson, Ohio
KRM6736 D. Rylands, 327 Ruth St., Bay Village, Ohio
KRM6980 P. Richardson, Box 97, Minerva, Ohio
KRM6916 J. Alexander, 2676 W. Mi...gton Rd.,
KKM7381 J. Stankewich, 216 Lincoln Ave., Niles, Ohio
KRM7824 B. Wright, Box282, Willoughby, Ohio
KRM8227 R. Bennett, Rt. #4, Box 207, Elm Grove., W. Va.
KRM9075 J. Mobley, 3351 Bishop St., Toledo, Ohio
KRN0448 B. Powell, 5329 Knollwood Ave. Parma, Ohio
KRN1822 S. Beal, 3381 Charring Cross Dr., Stow, Ohio
KRN2049 W. Haskell, P. O. Box 6865, Grosse Pointe, Mich.
KRN4733 T. Zavarelli, 1791 Center Ct., Alliance, Ohio
KRN5737 R. Onuschak, 1966 Connecticut Ave., Youngstown, Ohio
KRN5794 L. Pratt, 345 Broadway Ave., Bedford, Ohio
KRN6744 J. Worthy, 260 Hayes Ave., Cuyahoga Falls, O.
KRN6763 B. Kibby, 2386 Overbrook Ave., Elm Grove, West Virginia
KRN6775 B. Watters, Old Rt. 30 & 7, R. D. 2, Box 39 East Liverpool, Ohio
KRP0327 L. Stemerman, 695 Fern Dell Dr., Elmira, N. Y.
KRP2485 T. Piacenti, 141 W. Thirwell Ave., Hazleton, Pa.
KRP2493 H. Kline, Box 33, Ford Cliff, Pa.
KRP2886 R. Knittel, 513 Gifford St., Syracuse, N. Y.
KRP3725 J. Hillman, Box 500, Selinsgrove, Pa.
KRP3762 L. Smith, 501 Scribner Rd., RD2, Corfu, N. Y.
KRP4268 J. Pratt, Lime Lake, New York
KRP5219 W. Byers, 190 6th Ave., Clarion, Pa.
KRP5748 J. Sell, 4118 Willow Ave., Castle Shannon, Pa.
KRP6333 B. Kerstetter, Box 77, Gowen City, Pa.
KRP7139 M. McGranaghan, 849 S. Union St., Olean, N. Y.
KRP7318 J. Arnold, 16 E. 4th St., Watsontown, Pa.
KRP7771 M. Dumic, 2723Grandview Ave., McKeesport, Pa.
KRT0149 J. Geliga, Calle Progreso 163, Aguadilla, P. R.
KRU0053 F. Stauber, 3529 N. Shore Dr., Spenard, Alaska
BRS25120 R. Dean, 251 High St., Berkhamsted, Hertfordshire England
CO2PELA O. Reyes, Carmen No. 277, Vibora, Habana, Cuba
OH2834 G. Kock, Box 17-166, Helsingfors 17, Finland
ONL170 J. Camille, Box 634, Brussels, Belgium
WIAL2039 R. Girdo, Box 324, Bankstown, NSW, Australia
WPE0EUV P. Nosler, 1126 Prairie Pk Rd., Wichita, Kan.
WPE1FJP A. Arthur, 266 Pleasant St,ReadAp12, South Weymouth, Mass.
WPE1GVL J. Dould, 208 Vine St., Athol, Mass.
WPE2KKM J. Blumenfeld, Belmont Dr., Monticello, N. Y.
WPE2QGD J. Blumenfeld, Belmont Dr., Monticello, N. Y.
WPE8FIH P. Verville 11 208 Montezuma St., Hancock, Mich.
WPE8JLL B. Kaiser, RR2, Maple Lake, Paw Paw, Mich.
WPE8JMQ D. Wise, 76 Prospect St., Tiffin, Ohio
WPE9JFZ R. Lumaye, 158 Coolidge St., Green Bay, Wisc.
XM6-4378 S. Nearing, P. O. Box 172, Dominion, Nova Scotia, Canada
XM11-705 M. Coulthrad, 129 E. Osborne, N. Vancouver, British Columbia, Canada
XM11319 D. Pearson, 2896 Yale St., Vancouver, B. C.
XM13982 F. Marshall, Stephenson P. T. Rd., R. R. #1 Wellington B. C., Canada
XM421823 A. Kaye, 121 St. Dennis Dr., Apt. 825, Don Mill, Ontario, Canada
XM452526 E. Towns, 1 Chapel St., Brampton, Ontario
XM424719 R. Duffy, 113 Craven Rd., Toronto, Ont. Canada
XM43316 D. Whatmough, 284 Main St., W. Hamilton, Ont. Canada
XM481409 J. Zakos, 356 King St. E., Kingston, Ontario, Canada
XM521975 G. Gauvreau, P. O. Box 91 Station 'S' Montreal, Quebec, Canada
XM524830 B. Boyer, 113-5th Ave., LaSalle
XM525570 A. Philippon, 65 1 ere Rue Est, La Sarre, Quebec
XM561321 L. Picard, 713-106e Ave., St. Georges De Champlain, Quebec, Canada
XM65915 V. Anderson, 194 Guilford St., W. St. John, New Brunswick, Canada
XM55878 G. Gagnon, 658 IleeAve., Quebec 3, Canada
XM632376 R. Cybulski, 24 Rock Haven Dr., Birch Cove, Halifax Co., Nova Scotia, Canada
XM64247 D. Peach, 9 Cottage St., Glace Bay, N. S., Canada
XM65218 B. Glenn, Chipman, New Brunswick, Canada
XM651120 I. Cheeseman, 503 Prospect St., St. John W., New Brunswick, Canada
CENTRAL3250 D. Sigo, Box 268, Goodland, Indiana
SWLREF11.100 J. Parmantier, 12Ave., Du Colonel,

EDITORIAL

Continued from page 8

swing again–and even with the implied blessings of a few of the more respected manufacturing names in CB; companies, some of which "get religion" at the drop of an FCC phone call, make noises the likes of which would even bring a smile to the lips of the coldest FCC inspector.

The scavengers are back because, at long last, they have again been given a medium to peddle their wares–in fact, the model names and prices of the linears mentioned in this editorial were taken directly from their ads (complete with fudge phrases) in the July issue of a so-called "Picture Newspaper For the CB'er." Along with their screaming ads loudly claiming "FANTASTIC 33 TIMES TRANSMIT POWER GAIN" and "INSTEAD OF A TIGER IN YOUR TANK, PUT A BLACK CAT IN YOUR TRUNK," we see, side-by-side, the legit ads of a few of the giants of the CB industry who are either unaware or unconcerned about the fact that right this very minute, linear amplifiers and those who make, sell and use them, are contributing to the destruction of the CB service and consequently threatening their lucrative $50-million per year CB market.

Our complaint isn't with the homey little "CB Picture Newspaper" which runs these fantastic ads–the folks who put out the paper are newcomers to CB and probably aren't aware of what's going on; besides, they have had to claw and scratch for every possible penny just to keep from vanishing into the night like other CB newspapers which just stopped publication .

Our gripe is with those who make the linear amplifiers–outfits like Elenco, Wawasee, Beth Electronics, D&A Manufacturing (and their respective dealers)–who are preying on some hapless CB'ers who don't always know right from wrong and grasp at this quickie chance to increase their signal range–CB'ers who don't realize that they could vastly increase their coverage (legally and at a fraction of the cost of a linear) by installing an antenna which will give their signal some gain.

We can do no more than stand in wonder at some of the legitimate CB manufacturers who not only look the other way while this hanky-panky is going on (EIA, where are you now that we need you?), but actually seem to help make all of this possible by lending their good names and support to the only medium presently available for scavenger manufacturers to offer their over-priced, over-rated, and illegal junk to even a small portion of the CB public.

If you're a CB'er who gives a damn about the future of this radio service; if you're a manufacturer who cares about whether or not you'll have customers in a few years, then you've got some things to think about and do today.

ORPHANS IN THE STORM

We think that CB, that homeless and shabby orphan of the FCC, is really quite a well-to-do sport? That is, at least in terms of our contribution to Uncle Sam's budget.

The FCC rakes in about $4-million a year in license fees from the various radio services, broadcast, point-to-point, CB, ham, industrial, ship, aircraft, etc. CB'ers who send in applications at an average rate of almost 21,000 per month, paying $8 per, contribute well over $2-million of this ante. That's more than half of the total.

TV broadcasters, whose business incomes total about $3-billion per year, but who number 655, pay only $150 for a construction permit, a 3-year station license, or a license renewal.

Radio broadcasters, all 6053 of them, pay only $75 each– even network stations!

Radio and TV broadcasters have been known to present some of the most misleading program material in the history of communications–rigged quiz programs, fake contests, fantastic advertising claims for products which either do nothing or, at best, speed you along on your way to your eventual reward. Yet they continue, almost unchecked, almost unscolded, by their benovelent Uncle Charlie in Washington.

CB'ers, on the other hand, for all of our financial contributions, are made to swallow crow with each press of our mike buttons. With our measley 5-watt stations we are relentlessly fined, raided by FCC inspectors, sent endless violation notices and made to tow the line with the most impossible set of operating rules with in human imagination. And every once in a while, the FCC tries to scare the bejabbers out of us by making the threat of closing down the service or putting a freeze on new CB licenses.

How hollow this threat sounds in light of our financial contribution to the operation of this agency. This is especially true now that it has been learned that the FCC wants to work things out so that their budget is increased to a whopping $21-million per year. They want to expand their monitoring network (Why Uncle, what big monitoring stations you have. All the better to hear you with, my dear), add staff members and so on.

One of the methods now being considered for raising this extra loot includes increasing the license fees for radio and TV broadcast stations to a level commensurate with their commercial values. One wonders if, in the wonderfulness of their benevolence, the FCC will again come running to us, their rag-tag nephews, to help them pay the mortgage; and we, like the sheep we seem to be, will weep a little but still come through in the end–only to have the FCC continue their harsh treatment of us and our problems.

Old Hiram used to say, "Anybody who lets hisself git whipped, deserves to git whipped!"

STILL FIXIN' THE PLACE

Last month we switched over to a new printer who promises faster and better service, more color in our pages, and jazzier color covers. We also changed to a space-age typesetting system which is so new that it's been made available to only a few select publishers. We have added several new reader features, and this month we are trying a new SWL column because we have found that our readers want this information. In addition, we are placing a large number of additional copies of S9 on newsstands each month.

But we aren't finished yet!

Now that we're all fancified-up, we have the option to run a larger issue–more pages; the dream of every editor and reader. For one thing, we hope to run our news column, CB Chit-Chat, in larger and easier-to-read type. We will be expanding the scope of its coverage to include more and more news of interest and importance to CB'ers. We have ol' John Krejc (by the way, that last name is pronounced "Craig," for the benefit of those of you who always ask) slaving away at the typewriter on an overtime basis. Is he on your club's mailing list? Does he receive each and every news release, club paper and photo your club has to offer? He's even had to move to new quarters to give him more working room, so check his new address in this issue to make certain that your information is still reaching him as quickly as possible. John runs all items sent to him, you don't have to belong to a select two or three "in" clubs, as with some other publications, to get written-up. John is especially interested in more photos!!! Send in photos of anything and anybody involved in CB! WE WANT PHOTOS!!! Color photos might even be used on our cover!

And don't overlook the fact that many newspapers run stories about CB and CB'ers. Why not cut them out when you come across them and send them along to S9? CB needs all of the publicity and public relations it can get–let us give national coverage to the deeds of your local operators!

Support for CB's own publication, S9, means more than subscribing–it means participating, being an activist in the very creation of the publication on a regular monthly basis. We want to hear your views and opinions, receive news and photos of your activities, whether you're a club of 300 or a loner. If you made a new mobile installation–let us know; if your club worked in a parade, let us know; if you're a good-looking gal CB'er–put a mike in your hand and send us your photo. If you went on a vacation, send a photo and fill us in. Did you have a jamboree? Where are the photos?

Why not write some articles for us? Technical, non-technical; anything which will be of interest to your fellow CB'ers. All we ask is that it be typewritten, spelled so that we can make out what you're trying to say and complete in its coverage. Don't worry about the literary style–we've got a whole staff of editors who get a gleam in their eye at even the mere thought of a manuscript to rework. And we pay for articles–not bad when you think that you'll become a famous CB author to boot!

While participating in S9 means more than just subscribing, don't forget that the subscription does play a part in all of this. The overwhelming support you have given us in the past year has made our expansion program possible, and for this you have earned the heartfelt thanks of the entire S9 staff–a dedicated crew who have put a lot of work into the publication during these past 6½ years. But don't rest on your laurels, if you don't already subscribe, why not do it right now while the brass here is in a receptive mood to my expansion plans (I have a few ideas which I haven't yet unloaded onto them). Does your CB club participate in our cut-rate club subscription plan? Our circulation department will send details pronto if you let them know. Have you told any of your non-subscribing friends about S9? Why not? The more readers we have, the better the chance we will have to get things done for CB'ers and the CB service.

In other words, we want you to be more than just a reader or subscriber–we want you to be part of the publication. We want you to spread the word among your buddies.

We need you. We're depending upon you to help us and to keep S9 expanding at the same rate that the entire CB service is growing! S9 is more than your publication. If you're a CB'er–S9 is you, and you are S9!

DEALER/MANUFACTURER CB SEMINAR

Just in case you haven't heard, there's going to be a major CB industry pow-wow to coincide with CB's 10th anniversary this month. Anybody involved in retailing or manufacturing CB gear is invited to attend.

The seminar will be on Saturday, September 14th, at the Statler Hilton Inn (at the airport) in Indianapolis, Ind.–for those of you driving there, it's on Interstate 465. The idea is to promote better communication among all persons involved in the business end of CB. Registration is at 11:30 A.M., lunch is at noon and from 1:30 to 4:30 there will be a series of 9 seminars, from which those attending can participate in any three. Topics covered will include: Charge accounts and time sales, expanding your CB business, handling customers with CB service problems, tax and accounting forms, EIA market development plan, advertising for the small dealer, a look at CB's future and a workshop on point-of-purchase displays. Each seminar will be conducted by a leading member of the industry.

At 4:30 there will be a social hour, followed by dinner at 5:30. I don't know how I get hooked into these things, but somehow or other I wound up as the guest speaker, discussion leader and general target in the center arena of the dinner. It should be fun, but the first one who laughs when I start groping for words gets my granny's voodoo curse on all of his transistors. At 7:00 the dinner will end and a social get-together will then ensue until the wee hours. The social shindig is open to

the general public (admission tickets can be obtained from many CB dealers).

The seminar is non-profit and any monies collected beyond that required for expenses will be donated to the EIA CB Market Development Plan. Preliminary registration fee (includes lunch and dinner) is $12.50. At the door the registration fee will be $15 per person.

For more details or to register contact John T. Stiles, Electronics Center, 530 North Meridian, Greenwood, Ind. 46142. Telephone 317-881-8604. Hope to see you there! SB

COMING EVENTS

Continued from page 40

EL SOBRANTE CB ALERT 2nd ANNUAL STATE BAR-B-QUE, September 15th, Alvarado Park, Richmond, California.

COFFEE JAMBOREE, August 11th, Club Grounds, Montoursville, Penna. Sponsor, Lycoming CB Radio Club, R.D. 3, Montoursville, Penna. Jamboree control, Channel 11.

BUCKEYE CB ASS'N. 2nd ANNUAL JAMBOREE, September 29th, Fayette County Fairgrounds, Washington, Ohio. Contact: L.W. Smith, 624 Circle Avenue, Washington CH, Ohio.

CENTRAL VALLEY RADIO CLUB COFFEE BREAK, September 14th, F.E.S.M. Hall, Manteca, California. Contact: P.O. Box 149, Manteca, California.

NORTH GEORGIA CB CLUB, 6th Annual CB Jamboree, Dalton, Ga., Highway 71, 5 miles north of Dalton, August 31st and September 1st. Contact: Richard Bolding, 805 West Crawford St., Dalton, Ga.

RANGERS CB CLUB, COFFEE BREAK, 3rd Annual Coffee Break, September 8th, St. Mary's Sportsman Farm, 4 miles north of St. Mary's Penna. Contact: James Van Alstine, Bucktail Road, St. Mary's Penna.

JAMBOREE, September 7th and 8th, National Guard Armory, LaPrade Street, Hopewell, Va. Sponsor, PIONEER CB CLUB OF HOPEWELL AND WONDER CITY CB CLUB OF HOPEWELL, VA.

BLACKFORD COUNTY CB JAMBOREE, September 29th, Blackford County 4-H Building, Hartford City, Indiana. Contact: Ralph Vetor, 616 Airedale Drive, Hartford City, Ind. SB

CB'er HOME FROM THE SEA

Continued from page 11

were the fellows in the Bahamas.

Even though his mother believed him to be shipwrecked, Johnnie never gave up hope. She figured that he was stuck in the doldrums, adding, "I'm sure the phone's going to ring one of these days and there he's going to be at the other end—snuck in on us." And so she kept up her vigil, often at the CB station of Bill and Alice Blackwell (KOP 1793 and KOP 0491) in Homestead, Fla.; monitoring in vain until 3 A.M. some evenings.

At one time, near his expected arrival date, one of the Miami CBers flashed that there was a small boat which looked like Hugo's heading towards shore; but it was a case of too many people hoping to see someone who just wasn't there. It wasn't Hugo's boat.

Still they listened, but all they were able to hear were the many CB-equipped fishing boats off the Florida coast. Bill Blackwell said, "We tried to get them to move to another channel and keep this one clear but they wouldn't."

Just when Johnnie was, as she said, "about to blow my stack," guess what happened? That's right, on June 21 (only a few days late) Hugo completed his 4,700-mile journey. He ended up in the Gulf Stream which began carrying him northward. Though disappointed at having to be taken ashore by the Coast Guard at Ft. Lauderdale (just north of Miami), he was still given a hero's welcome.

And he deserved one! SB

THE CB - ALYZER

Continued from page 44

controls until the spot is centered. Then adjust the FOCUS to obtain a small sharp spot. Turn the receiver on, and with S_2 in the TRAPEZOID position, grass, in the shape of a small trapezoid should be present. Adjust the i.f. of the Modulation Analyzer for maximum deflection on the c.r.t. with the receiver GAIN on the analyzer set at approximately 50 percent. This completes the adjustments for the received signal.

By adjusting the pickup loop at the transmitter, setting the selector switch, S_1, and C_3 combination, the desired amplitude can be obtained. Remember to turn the transmitter off when working near the final tank circuit. If sufficient amplitude is not obtainable, the pickup loop at the transmitter will have to be adjusted.

The fact of the c.r.t. may be marked as shown in fig. 2. When a signal is modulated 100 percent with no clipping, the excursion on either side of the carrier should be the same distance (Y). In other words, the distance from the carrier to the apex or point of the trapezoid should be equal to the distance from the carrier to the base and the base should be twice the height of the carrier (2X). When the apex of the trapezoid does not come to a point, the signal is being negatively clipped or indicates less than 100 percent modulation. It is not wise to clip too heavily; need I say more? SB

LAB REPORTS

Continued from page 48

error of more than 1°; many were without error.

It was especially interesting to check out the readings for stations WNBC and WCBS since both of these stations (which are located many miles from Bay Shore) operate from the same antenna tower, but more than 100 kc/s apart in frequency. Their DF bearings were identical on the RDF-101. It was even possible to get 1° error bearings on low-powered local stations heard over long hauls.

If you've been putting off buying a DF unit either because of the price or because you had heard that DFing was complicated or tricky, we suggest that you home in on the Hartman Marine RDF-101. It's made by Hartman Marine Inc., 65 Seventh Ave., Newark, N.J. 07104. SB

THE MONITOR POST

Continued from page 32

Hospital in Minneapolis (Minn.) on 33.04; Victory Memorial Hospital, Waukegan (Ill.) on 33.04; Christ Hospital in Jersey City (N.J.) on 155.34; Good Samaritan Hospital in Dayton (Ohio) on 33.08; Presbyterian Hospital of Dallas (Tex.) on 33.04.

Reader Frank Merriwell of McKeesport, Pa. reports hearing some very weak mobile unit signals on 33.58 mc/s and asks if we can guess at what they were. Well, 33.58 is a fire channel and the mobile units could be from any one of a number of FD's in Ohio which use it. We'll have to have more information than you gave us to pin down which one you heard. In any event, it was a good catch via skip reception.

Mike Horwich of Nutley, N.J., says that he's been listening on the marine channel of 156.9 and has logged some N.Y. harbor communications: KEA411 of Western Union; KEB616 of Turecamo Towing Co.; KFL979 of Jurz Agency. He also reports hearing experimental station KI2XIK on about 162 mc/s. This one is actually on 161.6 and is in New Hyde Park, L.I., N.Y.

Alfred Kelly, Jr., Albuquerque, N.M. picked up skip signals from the Anne Arundel County (Md.) Police on 39.58 mc/s. Their call is KGB645. He's also got Spokane PD (Wash.) via KEY815 on 39.58 mc/s and also an armored car service in Jamaica, N.Y. on 44.00 mc/s—call was KBQ301.

Right in the heart of Chicago, Wilson Hartley says that he has a copy of CRB Emergency Radio Service Monitoring Bulletin No. C-1, which lists all police, fire and emergency stations in the Chicago area. He is checking off stations he has logged and has already marked down 71 of them—well, he's got a few hundred more to go yet! Willie says that he even has all 5 of the Evanston, Ill., FD stations logged down on 154.19.

The CRB monitoring bulletins are now available for the following metropolitan areas: New York City, Chicago, Southern Calif. (police), Detroit, Boston, San Francisco, Washington D.C. and Philadelphia.

CRB's newest directory is No. FLA-1, Florida Statewide. This shows callsigns and frequencies of state, county and municipal (cities over 5,000 population) police and fire units; also forestry and other emergency radio networks within the entire state.

All of the CRB Emergency Radio Services Monitoring Bulletins are $1 each, and worth many times that if you're doing any kind of emergency monitoring. Order them from Communications Research Bureau, P.O. Box 56, Commack, N.Y. 11725. SB

CB TRAFFIC WATCH

Continued from page 12

A transcript follows.

"KRD2355, KRD2355. This is KND1426."

"KRD2355 here."

"Yes, Jim; we have a two-car accident here, south of Empire Way exit on Interstate Five northbound. It's blocking three northbound lanes."

"Roger, KND1426; any injuries?"

"None that I can see. It's a rear-ender and the guys are out of their cars talking it over. But the cars are crossways. It's slick out here, Jim. Tell everybody to really slow down. Over."

"Okay. Is the Patrol there yet?"

"Ten-nine?"

"Has the Washington State Patrol arrived there?"

"Ten-four, they just drove up."

"All right, fine. KRD2355 clear with KND1426."

"Thanks, Jim. This will be KND1426 clear."

KIRO now has its sights on a 23-channel AMphenol 777 transistorized transceiver to replace its faithful servant, the 650. Station personnel point out, however, that the original Amphenol unit has operated daily without fail for over two years. The antenna, mounted on the Space Needle's uppermost point next to the spire, is an omnidirectional vertically-polarized coaxial cut for optimum performance on channel 9.

Interestingly, the KIRO/CB network approach, first of its kind in the nation, has done much to spur audience interest in Citizens Band radio communications. Both licenses and operator respect for emergency-use channels are definitely on the increase, reflecting the obvious public relations benefits of effective applications of CB communications. SB

READER SERVICE
Check page 55

DX KORNER

Continued from page 30

cies are used at night and the higher frequencies are used in the daytime. During the transition hours, you'll find almost all the remaining bands in use. Those broadcasters beaming transmissions to the other side of the world have to do some calculations to pick the right band, as transmissions can start in a night zone and wind up being received in a day zone (or vice versa). As a result, a compromise may have to be found, and some stations are required to alter frequencies often to take advantage of the best reception conditions.

The amateur bands are quite popular in the eyes of the beginning SWL. Indentifications come rather quickly (US hams have to identify at least every 10 minutes); with the appropriate callbooks addresses are easy to find. Two weekends a year when there is an international DX contest on, you can hear over 150 countries in just 40 hours. As you might expect, amateurs can operate from areas of the world where there would be no other radio station; thus many rare areas of the world can be logged. Radio amateurs also provide the backbone of communications for expeditions, such as those in the arctic zones.

The 160-, 80-, and 40-meter bands are local communication devices during the daylight hours, but they become continent-spanning at night. Some amateurs stay away from 40 meters, since high-powered transmitters often tear up several kc. Moscow is best known for this. The 20-meter band is a very popular DX band, useable during the daylight hours. 15 and 10 meters, more alive during the day when skip is in, seem to be only moderately active and are quiet at night.

Utility band DXing is quite different from SWBC and ham band DXing. You have your choice of many different types of services, as mentioned earlier, and lists of stations are needed to DX these services adequately. As this segment of the hobby is rather specialize we'll hold it in abeyance until interest is shown by the *S9* readership.

What kind of information is around? How can the DXer know what is going on? Listen to the broadcasts beamed our way for schedules at the opening and closing of transmissions. A majority of European outlets begin English services on the hour or half-hour throughout the evening hours, and these are preceded by tuning signals which give you the chance to fine-tune the station before they begin.

One of the most popular stations in the world is Radio Australia. On Sunday mornings on 9.580 at 8 a.m. *EDT* you can hear "DXers Calling," one of the oldest information shows going. The program includes the latest tips on new stations, rare DX and programming schedule changes.

To find out what is going on in the way of amateur radio DX, just listen. If something unusual [illegible] you can bet there will be hams talking conversations you hear-find out what frequency and what time a new country can be heard.

There are numerous publications to help the beginning DXer. I've mentioned some of the better ones in "BCB DX Handbook" which appeared in the December '66 *S9* and "SWL DX Handbook" in the April '67 issue; I'll review them again in future columns.

The future of DX KORNER is up to you, the *S9* readers. Our beloved editor has given me his blessings to put a column together, but its continuance depends upon the support of those CBers who are also interested in DXing, whether it be BCB, SWBC, ham, utility (including the police bands), FM or TV. Your questions and reception reports should be mailed to me, care of *S9*. I will attempt to answer any and all questions on the hobby and will edit your reception reports for the column. I will make suggestions and discuss subjects of importance as they develop. DXing, whatever the frequency, is an interesting hobby and I hope you'll give it a try. Until next time, good DX. **S9**



READER MAIL

Continued from page 4

"radicals" will rock the FCC boat too hard until their dream boat comes in. I think that you'll agree that their past actions indicate that they are not too interested in making waves.

OVERSEAS NOTES

Dear Tom-

An issue of S9 came into my hands and I was really delighted by its contents. It's a pity that your magazine, owing to a lack of currency, is not distributed in our country.

Zdenek Kvitek
Tr. Kpt. Jarose 8
Brno
Czechoslovakia

Readers might like to send this fellow a CB card.

I'm with the 709th Military Police Bn. in Germany. It's a shame that CB isn't allowed here and the German government is even stricter than the FCC. I have a friend who is a German policeman and he's always asking me if I can get him copies of S9 printed in the German language.

Robert R. Chandler, KEB1177
APO, N.Y.C.

Hey gang—Bob will be back stateside by the time this issue reaches the stands. Why not give him a big welcome by dropping him a card at P.O.

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.

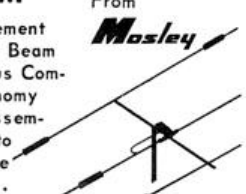
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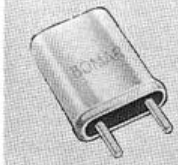
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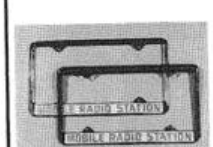
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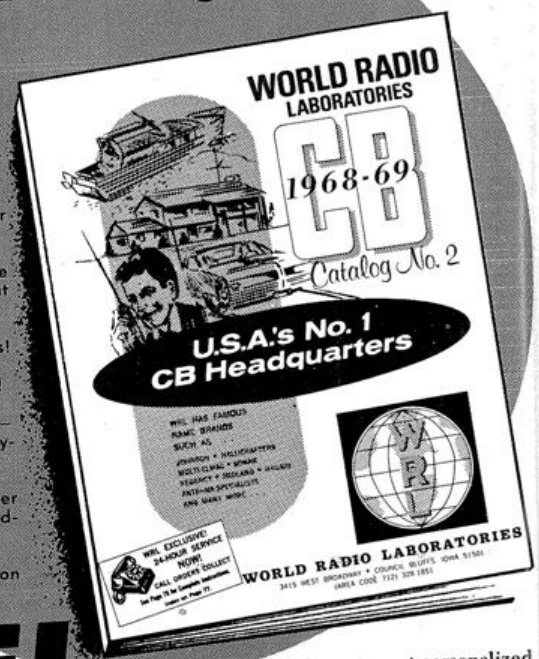
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The Wilds Cat

(It's for roughing it, if you are.)

When you pile the family in the camper and go rumbling off into the great outdoors, you don't want an antenna that's going to get bushwhacked to bits.

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It's got a high tension folding device so you can mount it right on top or on the side of your camper and never have to worry about it getting roughed up. All 48" of it folds the second anything comes in contact with it, but keeps on working even though it's at a 90° angle.

Another thing: It mounts on a bracket that screws onto the camper with the screws that are already on the camper. So you don't have to drill any holes or rip up the aluminum in any other way.

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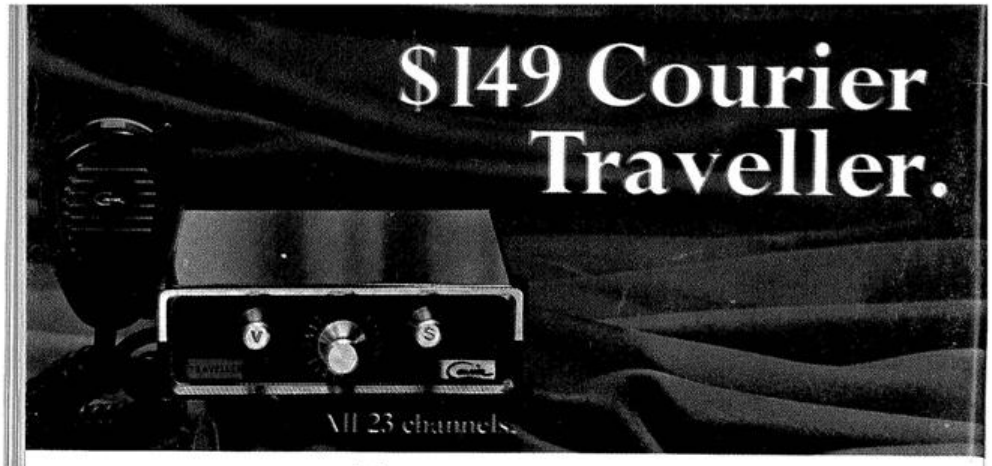
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Because there's nothing like catting around the wilds with the Wilds Cat.



THE HELLCAT 6 FROM Hy-Gain

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