

S9

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Aircraft Band Monitoring A Sidebender's Bill Of Rights Antenna Height: Problems?



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...Here's what CB'ers all across the country said.

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—H.R. Castro, VRB, Monserrate D-67, Salinas, Puerto Rico

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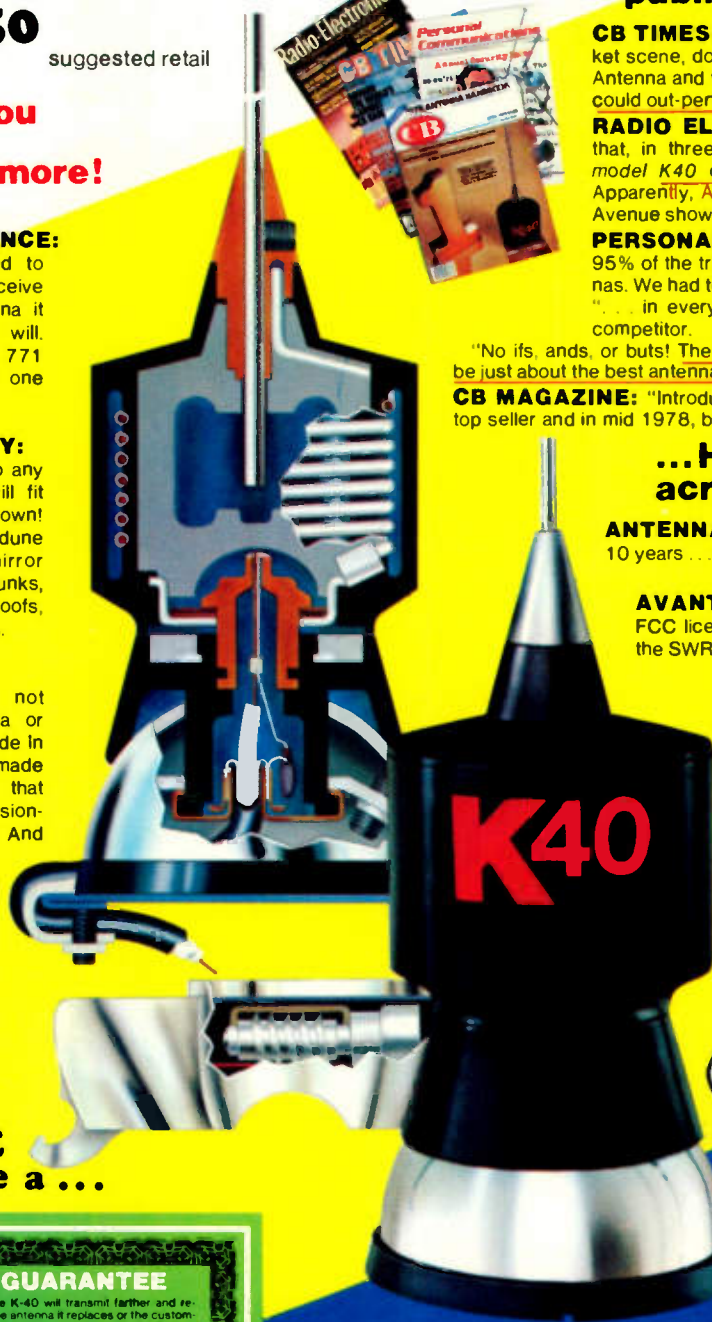
—John A. Blum, Box 446, Zellenople, PA

SHAKESPEARE: "... I've been a CB'er for three years and the K40 is the best I've ever had. Better in reception and transmission than my Shakespeare."

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S9 HOBBY RADIO

AMERICA'S OLDEST AND LARGEST CB MAGAZINE

VOLUME 21 NUMBER 12

DECEMBER 1981

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Cover Photo Courtesy of Cobra/Dynascan Corp.

WARNING: INDIVIDUALS INSTALLING CB OR OTHER ANTENNAS ON THEIR HOMES SHOULD BE CAUTIONED THAT CONTACT WITH POWER LINES MAY CAUSE SERIOUS INJURY OR DEATH. READERS ARE ADVISED TO HANDLE ANTENNA INSTALLATIONS WITH GREAT CARE, AND TO WEAR INSULATED BOOTS AND RUBBER GLOVES WHILE WORKING NEAR POWER LINES.

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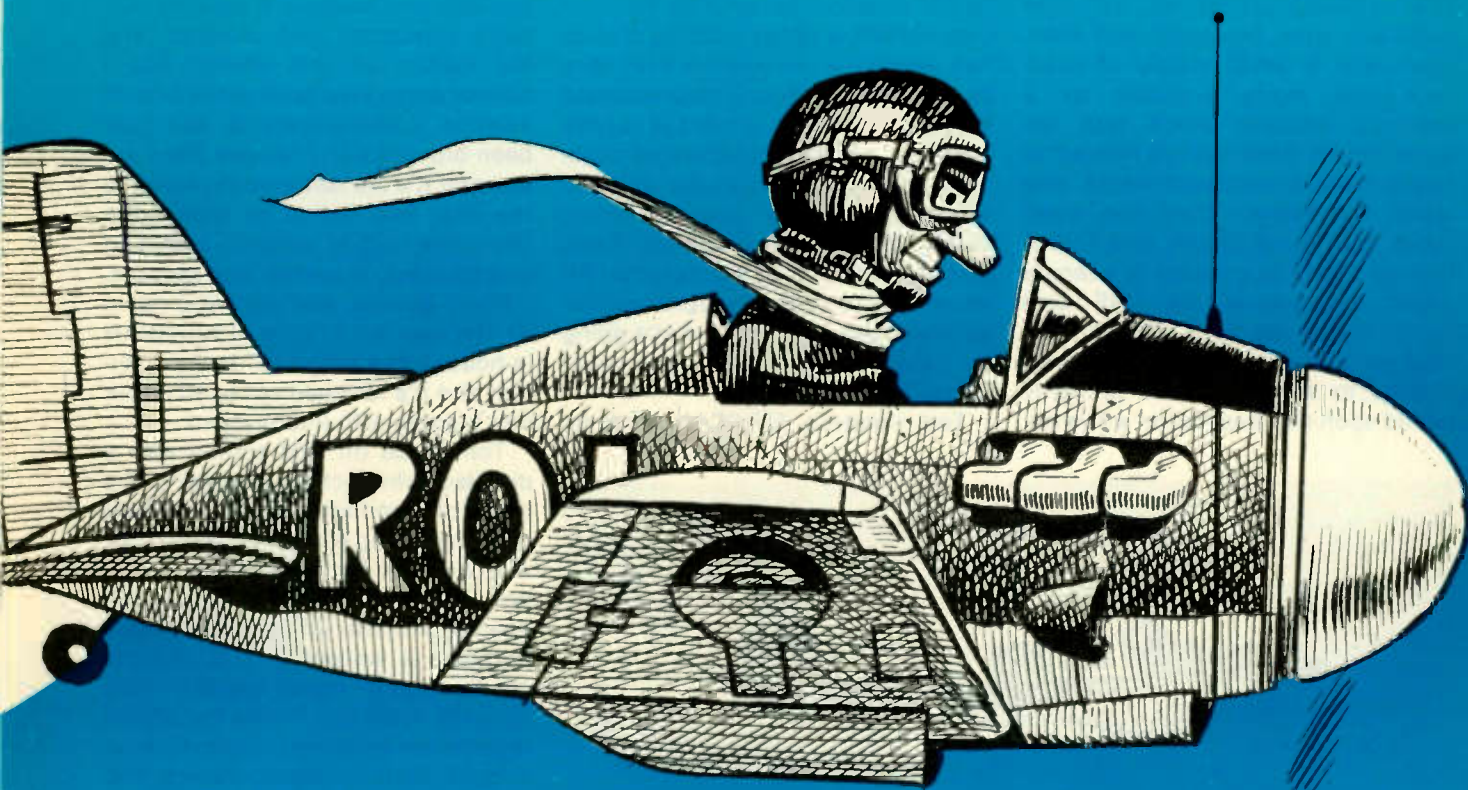
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Monitoring The "GREAT DREAM"





WHAT'S REALLY GOING ON BEHIND-THE-SCENES!

Much has been said over the years about the "romance" of aviation, and justifiably so for the notion that we might leave the ground and soar through the heavens like birds is certainly the stuff of which dreams are made. This great notion has intrigued the likes of Icarus, Leonardo, Orville and Wilbur Wright, Sikorsky, Lindbergh, Wiley Post, John Glenn, Earhart, Billy Mitchell and so many more that it is an unending list which

includes commercial, military, and private interests. Even those whose share of this dream does not involve leaving *terra firma* are considered to be a part of it—and that includes air traffic controllers, ground crews, ticket agents, and now communications monitors whose intrigue with the art and science of aviation has led to an intense and evergrowing interest in monitoring the exciting communications which are a necessary

part of aviation in the age of high technology and the conquest of aerospace.

Not all that long ago the only members of the communications monitoring field who could participate in all of this were a small hard-core legion of those who listened on communications receivers, armed with tattered pieces of paper containing frequency information which was carefully passed from one

monitor to another for hand copying. When the VHF band began beckoning to aviation communications, some few almost primitive tunable receivers were produced and then, eventually, a small supply of scanners was made available by a cautious industry which was not quite certain if the public's interest in hearing these communications was worth the bother. Only two short years ago *Radio Shack* said that it had *no* plans to produce a scanner which incorporated the VHF aero band (108 to 136 MHz). Things have changed, and they changed *fast*! Thanks to several factors primarily based upon the fascination with avia-

tion, but no doubt helped along by things such as the publication of the 1st Edition of Tom Kneitel's AIR-SCAN directory of aviation frequencies in 1979, a rather startling clamor has arisen—a demand for VHF aero band scanners. Today sophisticated VHF aero band equipment is readily available, either as specialized scanning units or incorporated into the standard scanners covering public safety bands. And yes, even *Radio Shack* recently changed its mind! All to satisfy the public's surprisingly insatiable curiosity about what's going on behind-the-scenes of "the great dream" of flight.

Tom Kneitel's AIR-SCAN is an in-

tegral part of this movement, being revised and expanded to reflect the numerous changes and additions in the vast and complex frequency patterns connected with aviation. The 3rd Edition of this useful, and I believe *necessary*, book in the area of aviation communications has just been brought out. Changes there are aplenty! It's the last word in providing the vital information on monitoring the entire field of aviation, including emergencies, searches and rescues, military patrols, and well, you name it! The new 3rd Edition of AIR-SCAN is housed in a nifty 5½" by 8½" format and it's fattened out to 80 pages just bulging with information!

Tom leads off this edition with a detailed introduction explaining the tricks of monitoring the aeronautical band, including equipment, antennas, what to look for, how to get QSL's, and lots more. There is also a new special section which shows large portions of an actual U.S. Government aircraft radio registry from about 50 years ago, listing the official registration numbers of many historic aircraft, their callsigns, owners, and actual radio operating frequencies. This is followed up with a handy glossary of the terminology used in aviation communications, the words and terms which confront the listener.

The hard data sections come up next, with a huge section showing state-by-state listings of about 20,000 frequencies used at about 6,500 specifically designated landing areas—large and small, public, private, commercial and military. This section outlines control towers, arrival and departure frequencies, Unicom, Multicom, FAA Flight Services, ground control services, radar approach, airport terminal information services, and miscellaneous (manufacturers, flight schools, agricultural, etc.).

A newly added section in AIR-SCAN presents details of international aircraft designator markings and this lets you quickly determine the nationality of any aircraft which you might hear. All nations are covered.

This is followed by a "log" showing a breakdown of all of the various significant frequencies in the VHF aero band and their specific purposes and uses, such as governmental, rescue, air traffic control, law en-



General Aviation ("private flying") has increased in popularity at a phenomenal rate during the past few years. This has offered the VHF aero band listener many new stations and frequencies to monitor.



The high cost of fuel, aided by conservation considerations, has brought about new interest in sparing craft. Communications between these craft, the tow-planes and the ground makes for fascinating VHF aero band listening.



The new 80-page 3rd Edition of the popular AIR-SCAN guide has all you need to know in order to hear all of the exciting action on the VHF aero band. As a bonus, it also provides much information on worldwide HF aeronautical frequencies.

forcement, military, and so on.

My favorite section is next, the listings of the VHF aeronautical enroute stations! These stations are used for private "company" communications by the world's airliners and they reveal a wide variety of fascinating chatter ranging from serious (equipment malfunctions) to hilarious (everything from wrestling spouses to passengers indignant for



It's not all fun and games on VHF aero since there are several frequencies where you're liable to hear search and rescue operations which take place over both land and sea.



The mainstay of the VHF aero band is the commercial airliners which can be monitored on many different frequencies. None are as interesting as the "enroute" channels which are used for private "behind the scenes" company communications—most of which the airlines would just as soon prefer the public not monitor.

the most outrageous reasons). Couple of thousand frequency listings here show all of the remote transmitter sites used. These frequencies reveal an unending drama all hours of the day, each day of the week.

All of the FAA's Air Route Traffic Control Centers are listed next, together with their remote transmitter sites for each "center." I note that Tom has now managed to include in

this section apparently unlisted frequencies which do not appear in any other material I have researched independently on my own.

A new section then follows. It shows international HF/SSB frequencies used for aero communications throughout the world, each frequency being shown with the name of the area of the world in which it is in service. This information is a bonus and is invaluable to all listeners having communications receivers, since these receivers can be used to supplement the things which can be heard on an aero band scanner.

Yet another new section shows all of the FAA's Flight Watch (aviation weather) stations together with their numerous individual remote transmitter sites.

At the tail end of AIR-SCAN's 3rd Edition, there is a convenient section which permits the user to write-in quick-reference data for all locally used aero frequencies at individual nearby landing areas.

All you'll really need to know to track down just about any communications service in this band you'd want to hear in the U.S.A. (now including listings for Alaska, Hawaii, Puerto Rico, and the Virgin Islands), and all of Canada and Mexico. I don't for one minute doubt Tom's claim that the 3rd Edition of AIR-SCAN is the largest collection of aviation frequency data ever assembled into one single volume. Lots of "unlisted" data here, stuff just not available elsewhere! Oh, and Tom has spectacularly decorated this edition with lots of eye-popping QSL cards from ground and aircraft stations!

If you aren't yet into monitoring the VHF aero band, undoubtedly you will be before long. If you are already a part of the world of aviation by means of monitoring, then here's *the* book which is known as the standard reference guide or *the bible* of this aspect of the hobby, in its latest and (by far) greatest expanded edition.

The 3rd Edition of AIR-SCAN is available from many electronics specialty stores or may be ordered by mail direct from the publisher, CRB Research, P.O. Box 56, Commack, NY 11725. The price is \$7.95 per copy, postpaid (allow time for delivery). If you want it zipped off to you by fast First Class Mail, include \$1 additional. Happy (armchair) flying!

Reviewed by Dr. Carl Phillips, Sr.,
KCA6AJ

CB NEWSWIRE

YOUR CB NEWSPAPER

DECEMBER 1981

RADIO OPERATORS DISCOVER THE K-CAR

Amateur radio operators are discovering Chrysler's K car.

The mobilized "hams," like everybody else who drives, are faced with moving into smaller cars to make their gasoline dollars go farther.

But the radio buffs have had a particular problem: where to put their transmitter-receiver equipment in a small car?

Most have grown up in the era of larger U.S. cars in which equipment fits fairly easily in the center of the front seat area between the instrument panel and the floor.

In many smaller cars, however, the room isn't there. Available space is fur-

ther used up by shift level, console and the "hump," or transmission tunnel.

Some "hams" who have moved to smaller cars, resort to carrying their gear on the front seat, and sometimes in the rear seat, which further compromises passenger space.

"We don't have the problem anymore now that the K cars have arrived," said Bob Karl, a veteran Southfield, Michigan, amateur radio operator known over the airwaves as W8HS.

"There's plenty of room for my gear on the floor beneath the instrument panel in the K car—and I carry two sets stacked on upon the other. 'Ham' operators are spreading the word about the new American cars which can accommodate the equipment."

Karl thanks Chrysler design engineers for making maximum space available, especially where "ham" operators want it. "There's plenty of room even in a manual transmission car with floor-mounted gearshift," Karl said. "And the arrangement works fine even with three people sitting in the front seat."

Maximum interior in a well-performing high mileage car is what



the Plymouth Reliant and Dodge Aries K cars are all about. Chrysler engineers effectively achieved mid-size car interior room on a chassis that is comparable to subcompact cars.

The key to this space efficiency, is Front Wheel Drive and Chrysler's new compactly-designed 4-cylinder engine.

In FWD, the engine is positioned horizontally between the front wheels, and a transaxle feeds power directly to the front wheels. This eliminates the north-south engine placement and the driveshaft and rear axle to power the wheels. So there's virtually no tunnel or "hump" in the floor.

10-4!

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HY-GAIN MICROWAVE TOWER OPERATIONAL

The first Hy-Gain microwave tower is now operating in Manteca, California. The 80-foot, self-supporting structure was completed in April for Big Valley Cablevision. Another identical tower is being installed in Stockton, Ca., also for Big Valley Cablevision.

Hy-Gain, a division of Telex Communications, Inc., first produced towers for its communications anten-

nas, but recently expanded to microwave towers of modular design for various antenna loads. Self-supporting towers to 300' (92 m) and guyed towers to 700' (214 m) are designed by registered engineers and meet EIA, UBC and local codes. Hy-Gain provides complete turnkey construction and installation service worldwide.

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2 1/2 Million Awarded To CB'er !!

A Cleveland, Ohio man who was paralyzed when he fell after being shocked by a Cleveland Electric Illuminating Co. transmission line was awarded \$2.5 million by a Cuyahoga County Common Pleas Court jury.

It was the largest personal injury award ever granted in the state.

Craig Kroon Van Diest, 25, fell 30 feet from a citizens band radio tower on June 7, 1975, when an antenna he was helping to install at a friend's house touched a 4,600-volt high tension line owned by CEI.

He suffered a broken back and severed spinal cord which caused permanent paralysis from his waist down. Kroon Van Diest sat in a wheelchair during the three days of testimony.

"I thank the jury, I thank everyone," he said after the trial. "I really don't know what to say."

When told that the award was the largest in the state's history, Kroon Van Diest said, "I'm tingling all over. I just can't believe it happened."

Kroon Van Diest, who works at Cleveland Metropolitan General

Hospital helping to fit patients with orthopedic appliances, wants to be an architect.

Lawyers for Kroon Van Diest argued that CEI had strung *uninsulated* high tension wires through a residential area, presenting a real and constant danger to the public. The suit asked for \$3 million in compensatory damages.

CEI lawyers argued that when safety measures are taken, the wires are not dangerous and Kroon Van Diest's accident was not the company's fault. Thomas Hermann, CEI's lawyer, said the utility will appeal the award.

The Kroon Van Diest family members were as ecstatic as they were disbelieving over the award. "I'm elated, absolutely astounded," Kroon Van Diest's mother, Mary M., said. "I could not believe my ears when the judge read the verdict. It happened so fast."

"I'm still flabbergasted," said his father, John C. "What can I say? At least now my wife and I know that Craig will be taken care of after we're gone. I still don't believe it."

Thomas G. Longo, Kroon Van Diest's lawyer, said he has lived with the case for almost six years. "I'm happy that the jury has given Craig the opportunity and the means to live as normal a life as it is possible for him to live," Longo said.

Kroon Van Diest said he will return to his job at Metro General and will continue his architectural studies.

Pope John Paul II Acknowledges CB'ers

Vatican City...At an audience held here on May 2, 1981, the Pope provided blessings to all CBers who have assisted in disasters and emergency services. This was present representing all CBers were George Vardinojanis, President World CB Union, Pietro



Albertelli, President of the Rome CB Club and Enrico Campagnoli, General Secretary of the World CB Union of Milan. For additional information, contact: Gerald H. Reese, Executive Director, REACT International, Inc., 75 E. Wacker Drive, Chicago, IL 60601. Telephone: (313) 346-0978.

ARE YOU A GOOD OPERATOR? BE ONE— IT'S EASY!

Best communications practices dictate that, whenever possible, AM and SSB transmissions be isolated from one another on different frequencies. Sidebanders predominantly utilize the following channels (although there are local variations): 16, 17, 18 and 31 through 40.

AM operators are requested to avoid use of these channels, and, likewise, Sidebanders are requested to confine their operations to those frequencies which are normally used for Sideband operators. It is only through voluntary mutual cooperation in matters such as these, that maximum usefulness of both modes of operation, AM and SSB, can be achieved.

LOCAL REGULATION OF

ANTENNA

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The people involved in regulating the height and location of antennae in a residential area are: judges, lawyers, city planners, councilmen and neighbors. These people should not have the responsibility of drawing up regulations and ordinances that limit height and location of radio and TV antennae for personal use in homes.

We say this because they are not as familiar with electromagnetic waves as they are with water and sound waves. Water and sound waves they can see, feel and hear with their natural senses.

To be aware of the electromagnetic environment, people have to use an instrument that will convert the electromagnetic waves to sight and/or sound, such as radio or TV receivers. Incidentally, other electronic devices respond to electromagnetic waves to the extent that they (the devices) do not operate properly. These devices include electrocardiographs used in hospitals and many entertainment devices, electronic organs, electronic guitars, stereos, computers, burglar alarms, garage door openers, cable TV and Direct Broadcasting Satellite.

Let us make this point. The reason people don't know about electromagnetic waves in the environment of the home is because they have not been told about the electromagnetic environment and its effect on their use of electronic entertainment apparatus. This is basically why the people are buying home entertainment electronic appliances that are not interference proofed, and

why the city Councilmen are requiring transmitting antennae and receiving antenna to be down among all of the service wiring, behind trees, chimneys and other obstacles.

We quote from the QST Magazine of July 1981 on page 49 from their article titled "The Leagues Fight Against Restrictive Tower Ordinances." They make a fundamental point in the top paragraph of the right hand column. "Once the public and local government officials better understand that poorly designed home entertainment devices are RFI (radio frequency interference) susceptible and see the FCC doing something to solve this problem, local government will be less pressured to adopt restrictive legislation aimed at the radio amateur." We agree with only part of that sentence and reword it to say...once the public, including the public officials, are informed that home entertainment electronic devices are not supposed to intercept radio transmissions, they will be less pressured, but not sufficiently less pressured. We suggest a national publicity campaign will get the job done. We don't think giving the FCC jurisdiction over electronic entertainment devices and arguing with councils about Federal Preemption of interference regulations will accomplish what is needed.

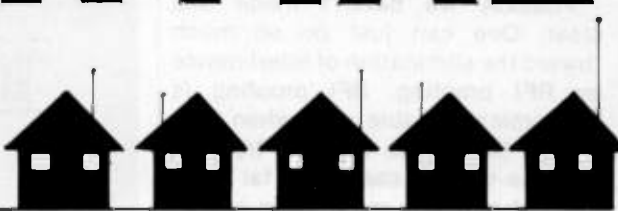
We admit a substantial contribution to the interference is in the design of the home entertainment appliance. But another substantial amount of interference comes from the antenna location (of the transmitter) with respect to the entertainment device. And that is why we suggest a nationwide publicity campaign to inform the public which includes the local officials. When the public has been educated they will not buy consumer products that have not been RFI proofed, and they will influence



the local officials to let them put up antennae that are not down among the neighborhood wiring where they will induce interference into the homes. Our second point then is that a well-located antenna will complement the RFI proofing to allow complete relief.

We doubt that the Feds will ever have the resources to settle all of the local officials to let them put up antennae that are not down among the neighborhood wiring where they

IN A RESIDENTIAL AREA



will induce interference into the homes. Our second point then is that a well-located antenna will complement the RFI proofing to allow complete relief.

We doubt that the FEDS will ever have the resources to settle all of these *local problems*. When we argue Federal Preemption of local laws we assume the FCC will "do something to solve this problem" quoting QST. But the FCC is closing offices here and there and the President is going to *git this guvmint off'n our backs*. They, the new administration, want to go back to the old days when the *LOCAL GUVMENT* was supreme. Let's argue Federal Preemption and make all of the law we can but as a practical matter lets educate the public about the electromagnetic environment. We might even get the Environmental Protective Agency on our side but they may fire most of them. Let's do like the President does and go to the public. Let's advise the public not to buy any entertainment gadgets that are not RFI proofed and let's tell them that antennae should be properly located for best results. Of course we don't want to run this campaign just in the name of the CB'er or amateur, the public might think we are biased.

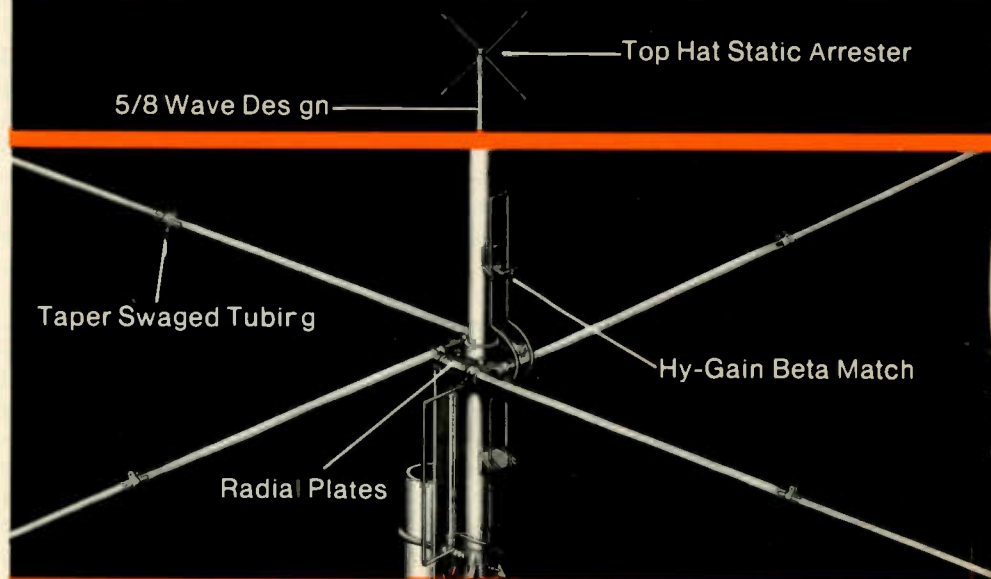
Millions of people, other than communicators, need high and well-located antennae. UHF TV stations don't have near the number of viewers that the VHF TV stations have. UHF doesn't propagate so good through the wires, trees and buildings. FCC says in their pamphlet, "UHF-TV Comparability," that people using a UHF station should have an outside antenna that is located by probing around the yard for location and height that will give a good picture, that is one that is as good as VHF, in fact they say a well-located antennae could improve a VHF picture.

CB'ers need a high antenna and there are several million of them. They need a high antenna so they won't feed so much of their energy into the power lines and TV cable and telephone lines.

Possibly we haven't made this clear. One can just do so much toward the elimination of interference by RFI proofing. RFI proofing is economically viable only when it is limited to exclude a signal from an antenna that is reasonably far away and not pumping most of its energy

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3. Taper Swaged Tubing.

Hy-Gain uses taper swaged, heavy-gauge, aircraft quality, seamless aluminum tubing for all radiators and radials. This gives our collinears less wind loading and more stability than with most other designs available.

4. The Top Hat Static Arrester.

Hy-Gain engineering expertise developed what we call the "Top Hat" Static Arrester. This wire configuration atop many of our base station antennas is designed to reduce precipitation static to an absolute minimum, resulting in crystal-clear, two-way communication.

5. Radial Plates.

High wind survival and extra years of high performance are assured because of our rugged construction techniques. A good example of this is the machine-formed radial plates fitted to each Hy-Gain omnidirectional antenna. These precision plates hold the radials firmly in place, thus preventing them from loosening or even falling off.

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The world's most popular CB base antenna Hy-Gain was the first to design a 5/8 wave collinear antenna. It was the ultimate omni when we invented it and it still is. Its impressive 5.3 dB gain in all directions has become the industry standard that other 5/8 wave omnis are measured against.

The Penetrator's signal is compressed at the horizon for extra power and distance because of its extra long 22' 9" (6.9m) radiator length. Its unique top hat discharges static buildup to nearly eliminate noise. This is not just another ground plane antenna; its superb design and heavy-duty construction will handle 1500 watts of power with no problem because there are no power-robbing loading coils to burn out.

Model 500 The Super Penetrator

- 5.3 dB gain
- 1500 watts power handling capability
- Low signal-to-noise ratio
- Compressed signal for extra power

Model 473 CLR II

This is the most copied 5/8 wave colinear antenna on the market. The CLR II achieves a powerful, no-nonsense 4.2 dB gain at the horizon, and a big 500 watts of power handling capability. This is, by far, the best value in Base Station Antennas available today.

Model 410 The Original Long John

This five-element yagi with 24' (7.3m) boom delivers an amazing 12.5 dB forward gain with 31 dB front-to-back ratio.

For long distance, high powered action, this one has all other five-element yagis beat. This famous Hy-Gain Long John can handle 2000 watts of power with ease. Top quality materials and exclusive Beta Match feedpoint system with direct dc ground guarantees efficient power transfer and increases your talk power 18.4 times the normal output of your radio.

Model 542 SDB-6

Two 12' (3.7m) beams on a 14' (4.3m) cross boom for 12.7 dB forward gain.



directly into the stereo, or what have you. This limitation needs to be made clear to the public. The FCC has informed applicants for broadcasting licenses that there is a *blanketing area*. We quote the FCC:

"73.315(e)...'blanket areas' of FM Broadcast Stations which are defined as those areas adjacent to the transmitters in which the reception of other stations is subject to interference due to the strong signal from the stations. Where it is found necessary to locate the transmitter in a residential area where problems appear to be excessive, the application must include a showing concerning the availability of other sites..."

The bottom line is this. We need a publicity campaign that will inform the public of the "blanket area." Let's call it the electromagnetic environment. When the public is so educated they won't buy anything that is not RFI proofed and when the *city fathers* are so educated they will realize the necessity for high and well-located antennae. When that situation exists, we won't have to pass another law and depend on Uncle Sam. The City Inspector might drop around and say something like this: "Ed...Miz Jones says you are getting into her TV, Computer and Burglar Alarm; maybe you had better move your antenna down there in the corner of the yard away from all of the wires and raise it up 60 or 70 feet.

The FCC could just be left out of the picture except for their responsibility for regulating power, frequency, harmonics and spurious emissions of commercial transmitters and improperly adjusted and operated personal-use transmitters.

TOMCATTIN' WITH TOMCAT!

ACROSS THE CHANNELS WITH S9'S EDITOR
TOM KNEITEL, TOMCAT/SSB-13



I do not deny that I was a college student during the 1950's, and as such, am a member of what history has dubbed the "Nothing Generation." Sure, we had a couple of panty raids going for us, but for the most part we just sat around in our *white buck* shoes and spun Johnny Ray and Patti Page 45 RPM platters. Some of the more serious of our lot managed to plow through books by people like Sartre, Ayn Rand and other eggheads who were supposed to be trying to offer opinions on that state of being which was concerned with existing in the earth plane.

Well, years have gone by and I haven't really pondered much upon the philosophical realities of life, guess I was just too busy trying to wrestle with them; however I'd sure have been willing to bet the collection of Tex Ritter records I used to have that it certainly wouldn't be the FCC, *ol' Uncle Charlie* which would have sent me into a state of philosophical reverie pondering the human state of being.

It all started innocently enough one day last summer when I was notified by the FCC that it had adopted a "new plan" for conducting a review of all of its rules that have, or will have, a *significant economic impact* on a substantial number of *small entities*. Seems that this review is required by the Regulatory Flexibility Act of 1980.

The FCC is supposed to be going over each of its myriad of rules and regulations to consider if the rule is still needed, what types of comments or complaints are connected with that rule, the complexity of the rule, if the rule overlaps or conflicts with other federal/state/local rules, and if technological developments have changed the importance of the rule.

The idea behind all of this is that, according to the FCC, "all current rules will be reviewed by January 1, 1991, and all rules adopted in the future

will be reviewed within 10 years of their adoption. Not bad, since some of the basic concepts the FCC has about the CB service date back to almost 30 years! But that's not what really stopped me in my tracks. It was the FCC's decision to base their survey on how the various rules and regulations affect "small entities."

Small entities? Really! Looking up the meaning of the word "entity," just so I could possibly figure out what *Unk* was babbling about *this* time, I found that an entity is, "1) being; existence, 2) a thing that has definite, individual existence in reality or in the mind." Ah, dear old *Uncle Charlie*, but what *is* reality? If only we could but know! Perhaps that is, ultimately, the root of all of the problems with that agency; *they* know the answer to the \$64,000 question which has evaded everybody from Aristotle to Kerouac, and *we* don't!

Is a *small entity* a person less than 5 feet in height? Is it a person's mind—albeit a small mind? Is an entity a dream, or a hope for a 27 MHz service which seems to exist only in the minds of those of us who actually use the band?

And why are only *small* entities to be considered, and not all entities including medium, large and extra-large ones? Don't they count too? Does the FCC presume to delineate between the rights of assorted sizes of entities? That's probably unconstitutional.

Besides that, who is to define what is a "significant economic impact"? It's a highly complex value judgement with so many variables, most especially when applied to those who exist "in reality or in the mind," that it would seem to exceed even the majesty of the FCC.

I spoke to my pal Elroy about this over the radio the other day and he seems to think that either A) the folks at the FCC may finally have discovered an alternative to tobacco, and/or B) when they chang-

ed the name of the "Office of Chief Engineer" to the "Office of Science and Technology," they were putting the world on notice that the agency had moved out of the era of spark gap radio and into the realm of cosmic intelligence—a location pegged somewhere between euphoria and Emporia (which is 160 miles south of Washington).

Anyway, for several hours each day I contemplate the meaning of reality, meditate upon how the FCC is now going to gear their rules to take into account those who have "definite, individual existence in reality or *in the mind*." All I can come up with is that as soon as somebody perfects ESP, the FCC plans on having a book of rules and regulations governing it all as well as calling for type acceptance of folks' heads. If that's the case, I wonder if they will keep the *Average Minds (AM)* on the same frequency as the *Single Side Brain (SSB)* operators! In any event, I'm taking no chances and am immediately filing a petition calling for additional channels.

Of course, it *could* be that (just for this once) I'm totally wrong. Elroy just called me on the radio again and told me that he takes it all back about the FCC reaching nirvana or karma. Says he has a new outlook on things. Seems he was cogitatin' all night and when he woke up he found himself "a mite itchy" due to his discovery of the true and actual meaning of the term "small entities." Says he even used up two whole cans of *Raid* attending to the matter. Elroy's now convinced that the FCC's secret master plan is to change all regulations for flea-powered transmitters.

Guess I'll put away my philosophy books. Elroy always did have a way of getting to the seat of any problem a lot better than me anyway.

GLIMMER OF HOPE DEPT.: The FCC came up with a "working paper" which was a study of the status and potentials of personal and amateur Radio. In fact, it is called "Deregulation Personal and Amateur Radio," and it calls for "greater flexibility than now exists in personal radio regulation." That sounds pretty good to us here and reasonably like what *S9 Magazine* has been saying for almost 20 years.

Citing "restrictions that may inhibit new technologies," the paper suggests deregulation or at least liberalization of things such as "mandatory technical standards" for CB transceivers, CB licensing, certain restrictions for Amateur repeaters and 3rd party traffic.

The FCC is also rearming the back burner for the long discussed 900 MHz "Personal Radio Service," in the hopes that it can include a wide spectrum of advantages including conventional voice communications, computer to computer links, electronic mail, TV, etc. They feel that such a radio service could possibly make do (at least in non-urban areas) as a substitute for communications presently being carried out in the business radio service, the land mobile services, over mobile telephones, rural radiotelephones, and even VHF marine radio.

However the most dramatic proposals contained in this paper are far more interesting and are part of the FCC's stated desire "to strengthen Amateur radio's technical orientation." These include consideration for a code-free VHF ham ticket ("for technically qualified applicants," which means an exam), expanded HF operating privileges for Tech Class ham licensees, and allowing "some" ham operations on 27 MHz CB frequencies as well as the proposed 900 MHz PRS band. Finally, the paper suggests that "recreational and hobby uses for personal radio have explicit recognition in the rules."

This is quite a large load of information to try to digest, however on the surface of it I would tend to think that they were definitely on the right track and may well have finally started to creep into the 1980's at the FCC. The primary unfortunate factor in all of this is that the one single person at the FCC who has devoted Herculean efforts to squashing, smothering, retarding, and delaying the evolution and growth of 27 MHz communications has recently been placed in the job of being "in charge" of the CB service! It remains to be seen if this "working paper" is anything more than a paper tiger, or if, indeed, it has teeth—how much support it gets from 27 MHz operators, Hams, and other licensees; and how much effort is put into killing it by reactionary forces within and without the FCC.

It looks like we may all get the opportunity (again) to stand up and be counted!

Tomcat!

Tomcat's Mailbag

By S9 Editor
Tom Kneitel



Tomcat answers some of his more interesting mail in this column from time to time. Address your letters to Tomcat's Mailbag, S9 Magazine, 14 Vanderverter Ave., Port Washington, N.Y. 11050.

ON TOP OF OLD SMOKEY?

There's a certain mountain, the top of which happens to be an excellent location for some weekend 27 MHz operating of a rather exotic nature—at least when the weather permits. Moreover, there is a primitive pathway which has been made to the summit by some of us 4-wheeling operators who know this place and have been using it for the past 5 years. This mountain is in Vermont, part of the Green Mountains range, however it doesn't have a name of its own. We call it "Skip Top." Is there some way that we can get this name shown on maps and give this mountain a good and proper name?

Barry Martin,
Laconia, N.H.

A check with the government reveals that it's possible for any citizen to pick whatever name he/she selects to give to any hill or mountain which doesn't already bear an official name, except that you can't name it after yourself. The fact that you don't think it has an official name isn't good enough. You have to check it on a topographical map of the U.S. Geological Survey. Also, you have to write to the Chamber of Commerce or county clerk to get them to confirm that the peak is not named. Then, send your suggested name to: Executive Secretary of Domestic Geographical Names, U.S.G.S. National Center, Mail Stop 523, 12201



Sunrise Valley Drive, Reston, Va. 22092. These people tell me that they accept about 1,000 new names per year by this method and that your request isn't as oddball as I thought it was when I called them on your behalf to find out about it!

SET FROM "NOWHERE"?

My latest triumph! While carefully shopping at coffee breaks and electronics flea markets, I've been able to build a small but (if I do say so myself) stunning collection of antique (pre-1970) CB radios. Included in this are rigs from Hallmark, Gonset, Globe, General Radiotelephone, and eci Courier. My latest and hopefully greatest acquisition is one called a Pomije Electronics Transcendor 1000. Problem is that I can't find anybody that ever heard of it or its manufacturer! It seems to be a set from

"nowhere." Mine is in pretty good condition, too. Is there any way you or your readers might be able to give me any leads on the source of this oddball CB rig?

Harvey N. Dien,
Rochester, Minn.

The rig you located is basically a Johnson Viking Messenger I, 'neath the strange faceplate. I'm surprised you didn't notice (or at least mention) the striking resemblance to the Johnny Messenger I. Apparently the Pomije version was privately produced by Johnson for the other company (located in Minnesota along with E.F. Johnson Co.), or was simply Johnson itself operating under another name in order to market this particular set. The set dates from about 1961 and I don't think that very many were produced. I'd say that you bagged a nifty little catch! Congratulations!

A HULL OF A NERVE

In a recent issue's Mailbag you mentioned that you were a boater. It was an aspect of the Tomcat which had remained unknown to me, even after my several years of attempting to get a handle on "where you're at." I'm a boater myself—a 26-foot sailboat is my pride and joy. It's fully decked out with CB and I monitor Channel 13. What's yours?

Andy MacCauley,
Sailboat WAYWARD WIND
Imperial Beach, Calif.

I have a 35-foot powerboat, the MOONRAKER. Its communications, of course, include ham and CB; also HF/SSB marine radio and VHF FM marine radio, callsign WRZ-4167. During the boating season I do most of my writing while aboard—one hand on the typewriter keyboard, the other holding a fishing pole. Good sailing.

BITE THE BULLET

I thoroughly enjoyed your July editorial where you offered suggestions on how to stall off or even eliminate FCC monetary forfeitures. I have to say that more than a year ago I had tried that exact same method of pleading poverty, confessing ignorance, blaming my indiscreet actions on the malevolent influences of others, and promising never to do it again. I sent no monies, but instead begged for a reduction in the \$100 bite they wanted from me. Later they wrote back and said they would take \$50 instead of the \$100 they had originally asked for. I responded with another letter describing my wretchedness and poverty, but I sent them no money. That was months ago and I haven't heard from them since. How come 27 MHz operators are the only ones who are subject to these FCC rip-off "fines"? Please don't use my name or location if you run this letter; you can guess why.

SILVER BULLET,
Pacific Northwest

By no means are CB'ers the only ones the FCC hits with notices stating that they are "apparently liable" to pay "monetary forfeitures;" other radio services have reflected far more severe penalties. Just recently the FCC asked the operators of FM broadcast station KRMQ (Provo, Utah) to fork over \$20,000 for assorted

"violations." Mainly Uncle Charlie was unhappy that the transmitter was set up in a location which had not been authorized by the FCC, that the antenna was 140 feet high (when it had been approved at 75 feet height) also, the station hadn't gotten FAA approval for the antenna. In responding to the FCC, KRMQ blamed "surveying errors" saying the tower was erected to accommodate the state of Utah and other communication users. KRMQ also said that it didn't realize that FAA approval was required for the tower. The FCC said of these excuses that KRMQ had failed to comply with its specifications set forth in its authorization, and that these things resulted "from a lack of adequate professional help and supervision." Even though the operators of KRMQ asked for FCC approval to sell the station only 2 weeks after it first went on the air with tests of the transmitter last December, the FCC still ordered the owners to pay up the \$20,000! Howzat grab ya!

COURTESY, WHA?

There are all-too-often a gaggle of squeaky-voiced AM teenagers holding down the fort with long-winded silliness on some of the Sidebanding frequencies hereabouts, such as Channels 36, 37, 40, etc. Several times I've asked them to take it to another channel (there are always several open frequencies between 1 and 30), but they won't go. In fact, they become insulting and nasty, pointing out that they can use any frequency they want to use. Is there a solution to this (apparently common) problem?

E.C. McT.
Indianapolis, Ind.

The solution would be for the FCC to formally separate AM and SSB operations on the CB channels the same way these transmission modes have been separated in other radio services. Your problem isn't a new one, I can assure you and it's probably one of the reasons most Sidebanders are wary of letting youngsters into their organizations. While I wouldn't like to characterize all teen operators as being lids or otherwise freshmouth creeps, I must admit that this delegation seems to have far more than its reasonable share of them. My own approach to

the solution is to ask them to use an AM channel, and follow the request up with my Sideband communication. If they've gone, they won't be upset by it. If they haven't gone, they will be quickly gone after a few seconds of a Sideband signal dropped on their ears. I don't argue anything with them nor give them a chance to give me a hassle—I just request them to move and then instantly switch over to Sideband. Works every time.

LONG AGO AND SO FAR AWAY

My problem is that I bought an SBE Model LCMS-8 from a local CB dealer. He said that he didn't have any paperwork for this radio. I have been trying very hard to find a schematic and tune-up specs for this radio. Even a request to SBE itself proved frustrating. They wrote back a form letter to say that they were bankrupt and that they were therefore not responsible or liable for problems on my set, nor were they able to provide service, parts, or even technical information on their products in the CB, scanner, or ham fields. Any help from S9 readers would be appreciated.

Anthony A. Carlgren,
3827 Briggs Ave., #5
Erie, PA 16504

When I bought my Stoner SSB rig the manual said that technical bulletins would be sent, plus QSL's, etc. If the Stoner whizworks has folded (as my local CB dealer has informed me, just before he himself folded), that would explain my empty mailbox. But now where do I turn for warranty work and parts? In 3 years when an IC fizzles, what do I do then?

Ken Barnes,
Station KPCC-FM
1570 E. Colorado Blvd.
Pasadena, CA 91106

I own a CPI frequency counter, Model FT-76. It needs to be repaired. My local CB repairman said he could do it if he had a schematic or even a block diagram. I cannot locate the company at its last known address. Please advise me as to any sources of this schematic.

Skip Smith,
72 West Main Street,
Warren, MA 01083

Maybe readers can help these fellows, whose letters are represen-

tative of an increasing number of inquiries I've received about companies which produced equipment a few years ago but no longer seem to be active—at least in the domestic CB field. If readers can suggest sources of warranty or other repair work (or even schematics and service or operating manuals) for rigs such as Stoners, Trams, CPI's, Brownings, SBE's, and other popular, better grade equipment produced in the mid and late 1970's, please send this information along to me and I will see that it is printed in S9. Maybe this would be a worthwhile service which could be offered by CB shops looking to increase their business, certainly the schematics of most leading CB rigs have been published by various sources such as SAMS. As a service to S9's readers, I'm willing to give some free publicity to service techs performing these repairs. It's sad to learn that there are many fine older CB rigs which are like time bombs in that they could become permanently useless as the result of the breakdown of a single \$1 component which nobody knows where to obtain or how to replace!

"FLAT SIDE"

I'm confused. I've heard that vertically polarized antennas can't receive a transmission from a horizontally polarized antenna and vice versa. I know that it doesn't seem to make any difference on a BCB radio, but what about CB radios and scanners? There is a "flat-side" antenna radio club in this area which uses only horizontal polarization and it seems to me that if cross-polarization doesn't work they have eliminated the chance to communicate with almost all other CB operators.

Jerry Kelly,
Arlington, Texas

People who read theory books and don't bother to check things out in practice, will insist that cross-polarization won't work. But, as you point out, it doesn't make any difference on a regular BCB radio. In fact, it doesn't make an enormous amount of difference anywhere in the radio spectrum below about 30 MHz, and doesn't get to be a pressing problem until you're well into UHF. If it did, "rabbit ears" could never receive TV, since TV signals are horizontally

polarized and rabbit ears are usually close to being vertical. What happens is this: At the lower frequencies, where wavelengths are relatively long, the polarization gets twisted around very rapidly after leaving the transmitting antenna. No matter which way the signal is polarized, by the time it gets to the receiving antenna it is a mixture of vertical, horizontal, right circular, left circular, and a little of everything else as well. The lower the frequency, the more complex the polarization gets, so on BCB reception you'll never notice a difference. By the time you reach the 27 MHz band you can tell some difference, but in actual practice we're talking about 6 DB (one S-unit). In the TV and scanner spectrum, the difference is more pronounced, and when you're working with UHF, then there are situations in which two different signals on the same frequency can be kept separate by transmitting one vertical and the other horizontal (TV satellites—or "birds"—operate on this principle). Some CB clubs have found that horizontal ("flat side") communications helps the members communicate amongst themselves easier by chopping the "interfering" vertical signals from non-members down by an S-unit; some say it aids in working skip.

LET'S PLUG THIS ONE!

CB rigs are made with provisions to accept a PL-259 coaxial plug for the antenna connection. Scanners are made to accept a so-called "Motorola" plug, except for handheld scanners which can use an external antenna which may be connected by means of a mini-plug of unknown description and unlocatable source. There is possibly some logic to all of this, but it somehow escapes me. Please explain.

Sherm Hawkins
Charleston, W. Va.

Beats me, Sherm! But it's not as bad as the early 1960's when different brands of CB rigs used an assortment of different antenna connectors; at least they eventually standardized to accept the PL-259 type. What with the PL-259, the most popular type currently used in the field of personal communications, certainly it would be a service to the public if scanners of all types were manufactured with the SO-239 type socket installed, especially since the popular use of

"prepared" coaxial cable (with a connector at each end) is made up with PL-259's. Actually, the use of assorted RF connectors such as the BNC's, Type N, etc., could probably be disconnected in favor of the PL-259/SO-239 combo in most consumer-oriented communications equipment operating below 512 MHz without any appreciable degradation in signal quality. Possibly some scanner manufacturer has an opposing view and could explain why standardization to the PL-259 would be a bad idea.

APRIL SHOWERS BROUGHT AUDIO SOURS

My CB rig came equipped with a dynamic mike but it didn't offer the talk power I wanted so I replaced it with a crystal mike. It made a definite improvement in voice quality and clarity and worked great for several months but for one day this spring, and wouldn't you know, it was during a heavy rainstorm when it went out on me—I discovered it when trying to call for aid when I got stuck in a local flood area. Well, I'm back with the dynamic again, but I don't like it as much as the crystal mike. Was it a defective crystal or what did I do wrong to have it die on me?

Arne Magnusson, UNIT 398-D,
Mounds View, Minn.

You really didn't do anything wrong. You just stumbled upon the one major disadvantage of the crystal mike—the fact that it's a crystal! To be more specific, it's a crystal of Rochelle Salt, a substance which drinks up as much moisture as a shaker of table salt on a rainy day. There are some crystal mikes which seem to be able to hack it in mobile installations, but you aren't the first reader who seems to have had this sort of problem. They are totally free of this problem in base station installations, where temperature and humidity are under pretty close control. I lost a couple of crystal mikes stored in my garage a few winters ago because I made the mistake of leaving them when the rains began. If you liked the sound of your late crystal mike, try the ceramic version of the same mike from the same manufacturer; it will probably perform about the same as the crystal, but the ceramic mike button will stand up better under high heat and moisture conditions.

NOT "QUASHED," BUT "VOIDED"

Your July issue "Radar Column" alleges that I had "apparently violated state motor vehicle laws" in quashing a speeding ticket issued to a police official responding to an emergency call.

Not so. Maryland law provides that the head of a law enforcement agency has the authority to void tickets before they have been submitted for legal action when he has reason to believe that an error has been made (such as the officier writing down the wrong name or license number).

In this case I felt that an error had been made. Possibly you may disagree with my judgement, but I would appreciate your correcting the impression that I violated the law in what I did. Incidentally, it is the only ticket I have voided in the 20 months I have been Chief of Police.

John E. McHale, Jr., Chief of Police
Prince Georges County Police
Forestville, Md.

DON'T GO AWAY ANGRY— JUST GO AWAY!

There is an operator in this area who seems to take extra effort to get on the air with his cronies and spend hours saying the most terrible things imaginable about any other operators who happen to arouse his anger. It's been going on for a long time now and all it takes to trigger him off is something as minor as a person not clearing off a channel when "his nibs" feels like using it. Within hours the "treatment" can start, complete with snide comments about a person's religion, politics, nationality, race, friends, job, financial situation, personal life. By the time they are through there isn't much which hasn't been said, and all of it 100% lies. After listening to this practically every night for months (a new operator under discussion each time) I decided I had enough. I waited for them to start doing the hatchet job on any operator known personally to me, and the first time it happened I let them rattle on for about 15 minutes and then I jumped right into the thick of things and gave them "both barrels," refuting each and every one of their statements about my friend. Mostly they told me to "shut up," but the next night I was horrified to note that these efforts had earned me the

right to being the evening's star attraction. I cannot even repeat most of the things which were said about me except to tell you that I received the longest and worst grilling anybody had ever gotten! And, yes, it was both humiliating and infuriating, and I got a first hand inside look at how they were simply making up everything they were saying since they had no facts about my work, my husband or anything else about my life. They even made up what nationality they figured I might be and spent at least an hour running that group of people right into the ground. I don't know if you've heard about this type of thing before but I would like to bring it to your attention. What can be done about it?

(name withheld by request)
Houston, Texas

Using a radio for character assassination isn't anything new and certainly isn't limited to 27 MHz stations; you can hear it in all of its various degrees on ham, marine radio, and even broadcasting stations. I've always felt that if you've got a gripe with another operator the best way to express it is to keep it on a one-on-one "eyeball" level, saying whatever is bugging you, and not running all of the dirty linen over the air to the total boredom of everybody else. You don't mention in your letter that anybody before you attempted to defend themselves or their friends with these creeps. I suspect that you were the first one to try it because you are apparently their best (and perhaps only) audience. You were the answer to their prayers, a patsy they could be reasonably well assured to hear everything they said. For that reason they'll probably make you a regularly scheduled topic. Most operators ignore these kind of people, don't try to inject themselves into their conversations, and take in stride anything which might be said over the air by such cliques. What you did was obviously well-intentioned but nevertheless a very bad approach. Tune off their channel, forget them, and let them play their little game by themselves. There are so many really great people to meet on CB, why waste all of your time listening to these pathetic individuals entertaining themselves?

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HE'S A REAL RADIO OPERATOR!

I'm sick of all these people who are crying and moaning about the "bothersome CW tests" on Amateur exams. Some folks have the illusion that CB is supposed to be Amateur Radio, but it's far from it. If we just start giving ham tickets out to anyone, we will have the twin brother of CB. I think that the words "Morse code" scare a lot of people off and they just start complaining without trying to learn it. I hope that the FCC will never drop the requirement for ham tests. That's the trouble with everybody these days, they want something for nothing.

Tom Balon, WB3FNF,
USS MILWAUKEE (AOR-21),
Fleet Post Office, N.Y.

There you've got it gang! Although the process by which it takes place is not explained, it has now been revealed that by going through the process of memorizing CW you will shed all of your wicket 27 MHz ways and emerge as a better person, and (more importantly) the type of ham operator which the world definitely needs more of—like this chap. It would be terrific if someday one of these radio snobs would stop babbling just long enough to explain the need for learning CW (which is a horse and buggy communications medium in the midst of a technological explosion) in order to operate a 2-meter FM transceiver feeding into a repeater, or to operate a Sideband rig on 20 Meters, or an RTTY station, or Slow Scan TV—or anything other than a CW station. Sure, those who wish to be permitted to operate CW should be required to pass a test in CW, but I fail to see the relevance in waving around a CW test as some mysterious dividing line between those who are alleged to be "competent" operators and those who aren't. This guy, along with his CW test as to separate-the-men-from-the-boys, is still parroting the old "ham" party line of more than 20 years ago which was no more than a paranoid reaction to the unused 11 Meter ham band being reassigned to the newly created Class D (27 MHz) CB Service. It's this guy's kind of attitude, more than any fear of taking a test, which seems to keep many people out of ham radio. Luckily for everybody, he's not representative of most of those who operate on the ham bands—most I've

spoken to, at least, simply take the CW requirements as a necessary evil and part of the FCC's own desire to look backwards into the past whiel being little interested in the present and future, giving lip service to a set of antiquated 60 year old international radio regulations which are alternately ignored or adhered to by all nations of the world (including our own) as the need suits.

VOICE SCRAMBLER FOLLOW-UP

What was the outcome of S9's several articles questioning the suitability of Motorola's odd ad campaign for their DVP voice scrambler, where they attempted to depict scanner users as crooks? You suggested that we all write to Motorola to register our complaints and I took your advice. They never responded to my letter.

Pat Meehan,
Ft. Wayne, Ind.

They never answered my letter either, Pat, although it does seem that they did decide to withdraw their offensive ad campaign in the light of what was obviously an avalanche of mail. Last thing I heard about the whole affair was in the form of a letter written to me 6 months after our original story ran. It was from one of the honchos at Motorola who told me that he wanted "to set the record straight." He denied that Motorola intended to "characterize the majority of scanner users as criminals." Instead, he claimed, it was "to focus attention on a very real problem faced by law enforcement officials and to provide a solution, i.e. Digital Voice Privacy." He disagreed that it was part of an anti-scanner campaign, and also said that our comments in a follow-up story were incorrect stating that Motorola did not respond to complaint letters received. They said they sent out 5,000 responses (guess you and I weren't in that group, Pat). The fellow signed off with a parting shot, challenging us to "consider a follow-up article about Digital Voice Privacy...this revolutionary technological concept...a fascinating story." I took him up on his offer and told him that S9 would be happy to run a story explaining their infernal gizmo. That was eight months ago and I'm still waiting for them to send it to me! They're not too good at answering their mail at Motorola.

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Turner has combined noise cancelling features and the range-boosting advantages of a power mike. Noise cancelling keeps your transmission free of background noise while the preamp circuit assures you full modulation, maximum range and optimum clarity.

If you're really serious about CB, put your money where your mike is.

Serious CB operators who want to get the most from their transceivers have been setting aside the microphones that came with their radios and replacing them with Turner Microphones. In the United States, they've been doing this since the 1950's. Now they are doing it in 33 countries around the world.

Why?

Radio manufacturers, in order to keep the cost of radios competitive, have designed simple, inexpensive microphones that are just that and nothing more. Turner amplified mobile mikes, on the other hand, with 0 to 15 dB gain controls can supply the extra "talk power" that will fully modulate the radio. Noise cancelling Turner mikes eliminate the unwanted background noise in truck cabs and tractors while delivering clear modulation of the desired signal. Amplified Turner desk mikes with gain controls, push-to-talk switches and lock levers allow the base station operator ease of operation, flexibility and much more "talk power" than the original microphone.

So, if you want to improve your radio's performance quickly, inexpensively and effectively, then get serious and put your money where your mike is — on a Turner Microphone.



Super Sidekick

This is an outstanding base station mike for SINGLE SIDEBAND operations. The Super Sidekick power mike has two gain adjustments to match the sensitive input requirements of both high and low impedance transceivers. If you're a sidebender — you'll be QSA-5 with this mike.



+3B

The rugged die-cast case, temperature-stable silicon transistors and humidity-resistant ceramic element make this power mike practically indestructible. Maximum -23 dB output is easily adjusted by a gain control on the front panel for powerful audio — free of QRM.

RK 56

This is the "truckers' favorite" A combination of economy and exceptional noise cancelling, dynamic performance. In large truck cabs, an extra long rugged coil cord provides easy mike handling and the noise cancelling feature blocks out unwanted background noise for clearer transmissions.

TELEX® TURNER®

TELEX COMMUNICATIONS, INC.

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ON THE SIDE

S9'S MONTHLY COLUMN FOR SIDEBANDERS

BY BILL SANDERS / SSB-295, KW-5304, KBAH6794

FIXEM-UP: GETTING NATIONAL NUMBERS

Single Sideband operators don't use "handles." Instead we identify by special sideband numbers. Those many readers who write to us asking how they may obtain a set of these numbers are advised that we recommend obtaining a set of permanent national numbers from the SSB Network, which is the largest, most prominent, and oldest Sidebanding organization in the world. There are no dues! We suggest that ALL Sidebanders now avail themselves of the opportunity to become part of the vast network—future sidebanders, new sidebanders, and even experienced old-timers with "this many" local and regional numbers. A self-addressed stamped envelope sent to The SSB Network, P.O. Box 908, Smithtown, N.Y. 11787, will bring you information on how you can become a vital and important part of the national Sidebanding movement, and at last obtain a number which is part of the uniform International Sideband Identification system, recognized throughout the world.

AT LONG LAST A BILL OF RIGHTS FOR SIDEBANDERS

For years now I've been hearing Sidebanders talking about the need for a concise and clearly focused set of general goals or ideals towards which all serious operators might strive in respect to attaining just and reasonable operating conditions and rights. While all seem to agree that the lack of such guidelines has been a major stumbling block in getting everybody headed in the right direction towards achieving those goals, there have been no suggestions as to how to bring the fuzziness into the necessary focus.

Yes, a suggestion *here* and a suggestion *there* has been offered, however for the most part they have been either too limited in scope or they somehow didn't have that *spark* (for lack of a better word) to capture the essence of what most operators say they feel when questioned about what it would take to say, "Here are those things for which we, as serious and dedicated 27 MHz communicators, stand; those rights which we claim are (and must be) ours." One reader, I recall, summed it up well

when he told me that it was like feeling vaguely hungry and then standing at the open refrigerator door for 10 minutes looking over all of the food and not being able to select anything that would fill the need for that exact and specific twinge of hunger. I suppose that's as close an analogy as anybody might come up with. I knew just what he meant and if you're a "refrigerator surveyor" you'll also know what he meant too.

I have kept a modest folder containing letters and cards relating to the search for the missing goals and rights and when I happened to hook up with the SSB Net's Jim (SSB-9) on the air several months ago, we

how managed to get on the topic and I mentioned my file folder. He had one of those file folders too, it seems, a huge one containing letters from many Sidebanders complaining about the need for and lack of some universal goals and/or rights which could be used to adequately sum up what many people feel about 27 MHz Sidebanding. Also another folder filled with specific suggestions as to what might be contained in such guidelines. He said that he had been in the process of sorting it all out and compiling it into one concise document which would bring all of these factors together. That sounded fine to me, and I promptly sent him



THE SSB NETWORK'S SIDEBANDERS' BILL OF RIGHTS

I am an American. I am also an active 27 MHz Single Sideband operator. So that I might fully enjoy my birthright as an American, it is my wish to obtain the maximum benefits of the arts and sciences of communications and to attain the fullest unincumbered utilization of my communications equipment. I believe that in order to do this I must claim recognition of certain rights, to wit:

I claim that my right of free speech should not be abridged

I claim my right to share equally in the benefits of technological developments and advances and that none shall seek to permit others to utilize them while selectively depriving me of those benefits.

I claim that it is not reasonable to attempt to establish a workable set of regulations which, in part, are contrary to the natural propagation of electromagnetic waves within the ionosphere, and I must therefore claim the right not to be held at fault when signals from my station follow natural laws of propagation.

I claim the right to be permitted to fully and freely operate my communications equipment without being restricted by any selective, unnecessary, unjustifiable or obsolescent regulations.

I claim the right to conduct my communications operations without fear of harassment, excessive fines levied against me, nor cruel and unusual punishment.

I claim the right to be secure from unreasonable searches (whether they be called "station inspections" or by any other name) and unreasonable property seizures, without a duly executed warrant.

I claim the right not only to petition the Government for a fair redress of my grievances, but to fully expect that my petitions will be given honest consideration and will be fairly acted upon within a reasonable amount of time.

I claim the right to be critical of any person, agency, or institution which is aloof to these things, and I further claim that, as an American, no person, agency, or institution may be empowered which may diminish or enjoin my inalienable right to the pursuit of happiness. Likewise, I pledge my support of and alliance with all persons, agencies, and institutions seeking to guarantee that these rights will not be diminished or enjoined.



Signature: _____ S A M P L E

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whatever I had and told him to see if it might add to whatever he already had. Actually I'm quite adept at assigning work and passing along ticklish jobs to others. You ought to see me in action.

I know that much thought and effort went into putting this information together. After sorting through innumerable categories of complaints and demands, what ultimately emerged is basically known as "The Sidebanders' Bill of Rights" in its finalized form. It is based upon operating conditions and situations in the United States only since it would have been impossible to draft something of this nature which would be relevant to operators in more than one nation. But I am pleased that it adequately represents that which has been expressed by most active operators suggesting that something along these lines be set down on paper. In fact, it does an excellent job of it and my hope is that it will serve its intended purpose in solidifying and formalizing those various thoughts which so many of us have had now and again, but which we could never actually put in writing.

The Sidebanders' Bill of Rights is unabashedly upbeat and positive, patriotic and firm in establishing and reaffirming the fact that, as Americans, we recognize that we are guaranteed certain rights under the Constitution of our great nation—and that we need not and *will* not settle for anything less. I think that in this time of resurgence of unity and pride in who and what we, as Americans, are, this document is *most* appropriate. And, as someone pointed out to me, it's just as important to identify "wrongs" as well as our "rights," and the *Sidebanders' Bill of Rights* takes those into full account too!

This is an important document and perhaps a turning point in the development and evolution of Sidebanding as a distinctive and separate sub-service within the 27 MHz communications community, certainly it is a statement which calls out for and will no doubt receive, the wholehearted support of all Sideband operators who share a dedication to Sidebanding. It's the kind of thing which deserves to be displayed in a place of honor on the wall of your radio room to serve as a reminder of what a unified Sideband stands for;

and to advise all others what we expect, deserve, and want are those things to which we are fully entitled under the laws of our nation. Hopefully it will inspire others to join our resolve.

Copies of *The Sidebanders' Bill of Rights* have now been made up. These are handsomely designed and beautifully lithographed on heavy cloth textured colored stock—totally suited to being framed and displayed. Here is how to obtain your own personal copy:

1) If you are a member of the *SSB Network*, until 31 December 1981 you can obtain your copy FREE by sending a stamped self-addressed return envelope (with 39¢ in uncancelled U.S. postage stamps on it). Address your request to Dept. BOR, *SSB Network*, P.O. Box 908, Smithtown, NY 11787. *Be sure to state your SSB Network Active Grade Membership number.* If you wish your copy to be sent to you "flat" (unfolded) you must supply a 9 x 12 inch return envelope; otherwise you can send a #10 (4½ x 9½ Inch) long envelope. Do not *send* any envelope smaller than a #10, such as the postcard-sized kind, or ones made for greeting cards.

2) If you are sending an application to become a member of the *SSB Network* this month, you can request (only at the time you file your application) that you receive a copy of the *Sidebanders' Bill of Rights* along with your membership packet. Be sure to supply the self-addressed stamped reply envelope as described above. After 31 December the members' price will be \$1 per copy; until 31 December new applicants can obtain at no cost.

3) If you are *not* a member of the *SSB Network*, you can obtain a copy of *The Sidebanders' Bill of Rights*, this month only, for \$1 plus a self-addressed stamped return envelope. See instructions above for the amount of postage and type of SASE to supply, also for the address. After 31 December, the cost to *non-members* will be \$2 plus a SASE.

Here's a hint—if you're not yet a member of the *SSB Network* and you see this notice early enough, you can obtain a membership application and send it in before 31 December! That way you'll not only receive your copy free but you'll also become a member of this worthwhile international organization, founded in 1964, which

is dedicated to the unity and advancement of Sidebanding.

NEW ADAPTOR

The MFJ-210, Digital Dial Adapter, is a new product that will let you read out your frequency on your frequency counter from a receiver or transceiver.

Your frequency counter works fine when you transmit an AM carrier, right? But what does it do when you go to the receive mode or transmit SSB? Just a lot of random numbers? Now, you can solve this problem with the Digital Dial Adapter.

Just place the Digital Dial Adapter between your VFO output and frequency counter. Now you can read your VFO frequency directly or if your



VFO operates backwards (when VFO frequency goes up, actual frequency goes down) the Digital Dial Adapter will compensate for this with just a flip of a switch.

The MFJ-210 has a calibration knob on the front panel so you can calibrate it easily when bands are changed. This also lets you compensate for heterodyning errors which might occur within your rig as well as those caused by switching from upper to lower side band.

The MFJ-210 is designed to work with rigs that have a VFO tuning range of 5.0-5.5 MHz. This includes most Kenwood, Drake, Ten-Tec, Heath and some Yaesu rigs.

There is a second model, the MFJ-211, that is designed to work with the Yaesu FT-101 series and other rigs that have a VFO tuning range of 8.7 to 9.2 MHz.

The MFJ-210 and 211 measure 3" x 4" x 1" and are black and eggshell white in color. There is a red LED to indicate "on."

The MFJ-210 and MFJ-211 are available from MFJ Enterprises, Inc., P.O. Box 494, Mississippi State, Ms. 39762. Write to them for more information. Please mention that you read about it in *S9/Hobby Radio Magazine*.

The Radar Column

by "Jammer"

RADAR PULLED OVER LICENSE ISSUE

Until Mansfield, Ohio, city officials can resolve the issue of whether police have been operating their radar units without proper licensing, the department's two functioning units will be taken off the streets, according to Service Safety Director Richard Roberts.

Roberts said that of the police department's nine radar units, three have been sent for repairs, four are not operational and are earmarked for repairs and the remaining two will be sidelined until the license issue is resolved.

The licensing question arose July 7th in a hearing for an alleged speeder, who claimed police could not produce a federal license authorizing the use of their K-55 radar device.

Since the hearing, city officials have been searching for the license. Mr. Roberts says that if the city of Mansfield persists in bringing him to trial, he will take the city to federal court for the licensing violations.

Stay tuned for the next round.

JUDGE TAYLOR OF MICHIGAN WANTS FAIRNESS FOR DETECTOR OWNERS

Berrien Chief District Judge Ronald J. Taylor has asked Governor William Milliken to have signs posted at the state line warning visitors that radar detectors are illegal in Michigan.

Following is the text of the letter sent by Taylor to Milliken:

I am enclosing herewith a copy of a letter received by my office July 27 from a Mr. Bill Kavanagh, a resident of Varna, Il. This letter is representative of numerous similar letters to which I have been required to respond over the last two years as chief judge of this court.

You will note that the complaint involves being ticketed for possession of a police radar detector. Since the Court of Appeals of this state has established these devices are illegal in Michigan, I, of course, have no choice but to so inform the defendants and to enforce the law in connection with these cases.

The purpose of this letter is not to take issue with the Court of Appeal's opinion, but rather to br-

ing to your attention an issue of what I believe to be fundamental fairness.

I might say that I have no doubt that Berrien County has a significantly higher rate of arrests for these devices than other counties since we have two major highways from Illinois and Indiana entering this county over which thousands of cars travel daily.

It would seem to me, Governor, that in a time when the economy in the State of Michigan is strained, to say the least, and the dollars brought in by virtue of our state's heavy tourist industry are of great importance to our economy, we can ill-afford the bad public relations which are occurring throughout the United States by virtue of our strict enforcement of this law with no notice whatever to those persons driving across our borders.

Obviously, from the tenor of this letter and the many others I have received, this situation is creating a great deal of ill will directed against the State of Michigan, the Michigan State Police and the court system of this state. I believe that a simple notice posted at the border would remedy much of this ill will and hard feelings.

Accordingly, I am requesting that you take all necessary efforts as soon as possible in order that some sort of highly visible sign indicating this prohibition be established at the main entry points to the State of Michigan and, particularly, to the I-94 entrance at New Buffalo.

I believe that this relatively simple and inexpensive device would go a long way toward cutting down the number of honest out-of-state citizens arrested and brought before our courts, and would dispel the image that Michigan is trying to "trap" out-of-staters for the monetary gain of our court system.

If you have any questions or comments regarding this matter, I would be most delighted to discuss it further with either of you or your representative. Thanks for your attention to this matter and best personal regards.

The letter was signed, Ronald J. Taylor, Chief Judge, Fifth District Court. It also included a short letter from Berrien County Prosecutor John Smietanka concurring with Taylor's position.

STATE LIABLE IN TROOPER ASSAULT

New York State is liable for a state trooper's assault on a motorist arrested on the thruway for having a radar detector in his car, a state Court of Claims Judge has ruled, ordering a second trial on the issue of damages.

In a decision which had been reserved after the March trial on the liability issue in the \$100,000 lawsuit filed by David Hill of Clay, Onondaga County Judge James O'Shea assessed the culpability of Trooper T.H. King at 65 percent and that of Hill at 35 percent.

O'Shea said Hill precipitated the trouble when he lunged at the trooper and tried to retrieve the radar detecting device King had removed from Hill's car. But, the judge said the trooper reacted with excessive force.

Hill, an employee of an automotive supply firm which was considering adding radar detectors to its inventory, testified that he had contacted two law enforcement officials before placing the device in his car, and both had assured him it was legal.

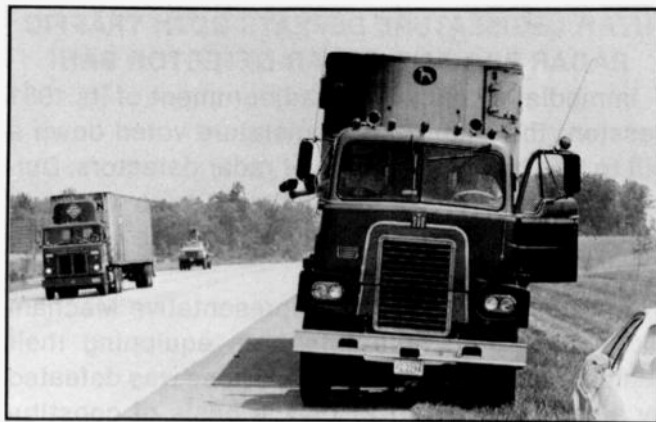
Hill testified that, after arguing with the officer over the legality of the device, he was spun around, hit on the back of the neck, pushed some 15 feet to the police car and then draped face down over the fender while the police officer handcuffed him.

Judge O'Shea ruled that the officer's actions amounted to "an assault and battery for which the state must be held liable."

FUZZBUSTERS NO LONGER ILLEGAL IN HOOSIER STATE

An Indianapolis appellate court ruled that the state's portable police radio law does not apply to radar speed detectors. The reversal handed down in *State vs. Lawrence W. Wallman* marks the first time the issue has been addressed at the appellate level in Indiana and follows the defeat of a bill in the past session of the state legislature aimed at prohibiting radar detectors.

Enforcement of the Indiana statute #35-44-3-12 has been erratic over the past two years and has included confiscation of some motorists' radar detectors. The statute, which refers to portable police radios and scanners, carries a criminal penalty. The appellate decision backed defendant Larry Wallman's contentions by calling the statute "unconstitutionally vague." Citing the Due Process Clause of the Fourteenth Amendment to the U.S. Constitution and the Supreme Court Interpretation, the appellate opinion states that "a law forbidding or requiring conduct in terms so vague that men of common intelligence must necessarily guess at its



meaning and differ as to its application violates due process of law."

Although the appeals court overruled the defense contention that the statute does not strictly apply to radar detectors, they conceded that the word "signals" used within the statute is intended to mean "voice transmissions." Within the court's opinion brief it was noted also that the statute was enacted in 1933 while traffic radar was not put into use until 1940.

It is anticipated that the Indiana appellate decision will be cited in several other state courts where mobile scanner laws are presently used to apply to radar detectors, although initial drafting of these laws generally preceded police use of traffic radar.

NEVADA LOWERS SPEEDING FINES

Nevada has joined Montana in circumventing the federally mandated 55 mph speed limit by charging only minimal fines for violators up to 70 mph. Despite the new \$5.00 energy fine, Federal Highway Administrator Raymond Burnhart said that he would not cut off highway funds to states that adopted the plan.

Western states wanting to ax the federal speed limit have been repeatedly threatened with the loss of federal road building funds—in Nevada's case, \$66 million a year.

Under the new Nevada law, speeders stopped for traveling between the posted 55 mph and 70 mph will be charged only a \$5.00 fine for "an unnecessary waste of a resource short in supply." The previous fine was \$2.00 for every mile over 55 mph.

Drivers will get no demerit points towards revocation of their licenses for an energy-wasting ticket. But violators traveling over 70 remain subject to current penalties and fines. The new law does not apply to roads where the posted speed is less than 55.

UTAH LEGISLATURE DEFEATS BOTH TRAFFIC RADAR BILL AND RADAR DETECTOR BAN!

Immediately prior to the adjournment of its 1981 session, the Utah State Legislature voted down a bill to ban the sale and use of radar detectors. During the same session, legislators also voted to defeat a bill proposed to curtail the use of police radar on Utah's highways.

The bill, introduced by Representative Meham to prohibit Utah motorists from equipping their vehicles with radar detection devices was defeated by a margin of 45 to 21 on the basis of constitutional issues and problems surrounding the enforcement of such a law. These issues, which have led to the defeat of similar bills in over 40 other states, include one of constitutional preemption. Congressional mandate, under the Communications Act of 1934, prohibits states from legislating in the area of radio reception and thereby includes radar detectors which are radio receivers tuned to the frequencies used by police radar. Inherent conflicts with interstate commerce guarantees and the first amendment right of free speech are counted among constitutional issues affecting the passage of such state laws.

Practical issues of enforcement have repeatedly prevented states from outlawing radar detector use such as the law enacted in the State of Virginia, where Federal litigation is still pending. Illegal search and seizure and the abrogation of due process under the law have plagued enforcement efforts. The drafting of such laws also proves troublesome by their very definition which many times encompasses devices not intended for prohibition.

Another bill pending before the same legislative session dealt with the curtailment of police radar use and was also defeated by the margin of 18 to 9. The introduction of this bill by Senator K.S. Cornaby reflects the comprehensive re-evaluation of radar's fallibilities currently spreading throughout the state and federal agencies.

The findings of a three-year study commissioned by the federal Department of Transportation were recently published in the "Federal Register" and catalogs technological standards heretofore absent in police radar units. Conducted by the National Bureau of Standards, this study provides substantial evidence that today's police radar is subject to numerous errors and irregularities which result in undeserved speeding tickets. Some experts contend that as many as 30% of all tickets issued with radar are issued in error.

On the basis of these findings, the government

plans on developing a "qualified products list" of those units which meet certain specifications. It is uncertain how many units in use today, if any, will qualify. Federal plans also include a mandatory training program for police radar operators which to date is left to the discretion of local, regional and state law enforcement agencies.

While it is certain that only some state police agencies will be affected by these upgraded equipment and training standards—thereby effecting reliability levels on only a fraction of the nation's 85,000 operating radar units—some states have chosen to enact their own radar guidelines for standards of operation and performance. Reluctant to await federal implementation, or dissatisfied with the standards proposed, several states, like Utah, have introduced radar bills. Florida, for example, began close scrutiny of police radar three years ago in a widely publicized Dade County case in which a judge dismissed over 80 speeding citations based on the conviction that radar evidence was unreliable. Since that time, the Florida legislature has enacted a law placing stringent controls on radar operation. A special committee is now in the process of developing guidelines which some anticipate may be more rigid than those advanced by the federal government. A few other states' bills are now pending for passage into law—law enacted to combat the problems of radar equipment and operator error.

IF YOU WERE THE JUDGE

Norton was driving two police officers bananas and they didn't even know it. Staked out along a highway with a radar device, the two officers waited for the opportunity to ticket speeders, but they failed to bag one. Norton was the reason.

Further down the highway, just beyond a bend in the road, Norton was sitting on top of a big rock. He held a large poster that proclaimed in big letters "BEWARE—RADAR AHEAD." Speeders slowed down before they could be ticketed.

When the two lawmen finally discovered Norton's "subversive" activities, they arrested him on charges of disorderly conduct. The police officers complained in court that Norton was interfering with the performance of their sworn duty—to arrest speeders. Norton claimed he was exercising his right of free speech.

If you were the judge, would you convict Norton?

The judge ruled no! He held that while Norton's act of displaying his poster was not particularly praiseworthy or meritorious, it was a form of free speech that is protected by the first amendment.

JAMMER BILL GOES TO GOVERNOR

The Iowa Senate has given final legislative approval to a bill that would prohibit the possession, use, or sale of radar jamming devices.

The Senate approved the bill 47-1, clearing for consideration by Governor Robert Ray. The Iowa House had passed the bill earlier on a 96-2 vote.

The bill would prohibit the use, sale, or possession of such devices in a vehicle operated on the highways. It would also allow a police officer to seize a radar jamming device resulting in a possible fine of \$10.00.

The House had considered including a band on radar detection devices but backed away from consideration on that matter.

SPEED TRAP "WISE GUYS" ANGER COPS

The South Lebanon (Penna.) Police have a different sort of "speeding" motorist on their hands.

In addition to citing the motorist who exceeds the speed limit in marked zones, the police have now had to ticket "wise guys" who creep through the traps at ridiculously slow speeds.

One motorist, fined for going 3 mph in a 25 mph zone learned a new law: "impending traffic, or Section 3364-A" of the Pennsylvania Motor Vehicle Code.

According to South Lebanon Ptl. Robert Lengle, "Some clowns go around the block four or five times and come through so slowly each time that they slow down motorists behind them, who might have otherwise been caught speeding."

TRAFFIC TICKET CLINICS OPENING

Ever since 1977, when the U.S. Supreme Court opened the door for attorneys to advertise their services, the field of law gradually has become more specialized. The ultimate example of this trend may be the Traffic Clinic, a franchise operation that specialized in handling traffic violation cases.

The mastermind of the operation is Bobby Kizer, who opened his first clinic in his native Lubbock, Texas over a year and a half ago. Since then he has launched three additional clinics in Amarillo, Houston and Dallas.

For a one time charge (\$45 for in town tickets and \$75 for highway violations) his clinic works diligently towards having a violation removed from a driver's record—even if it means making a number of appeals. The only circumstance where a client has to dish out more money is when his/her case ultimately is lost; then he or she must pay the initial fee plus the fine assessed by the court.



INTERESTING DECISION BY WISCONSIN JUDGE

In a recent speeding case in the city of Manitowoc, Wisconsin City (City vs. Raymond Gilbert), Municipal Court Judge Steven R. Alpert handed down the following guidelines:

"Certification is not required at this time. The operator, however, must have inservice training, on-the-job training, experience and must have read the manual for the radar unit used. If machinery is going to replace man's judgement, that machinery must be scrupulously used. Very often those citizens involved in speeding charges have limited contact with the courts and police. Their confidence in the merit and integrity of the system must be maintained."

Since the officer did not comply with the above guidelines, the charges against Gilbert were dismissed.

ANOTHER STATE TO SET UP RADAR COMMISSION

William J. Burkhead, Delegate for the state of Maryland, has recently introduced a House Joint Resolution requesting the creation of a commission to study whether radar speed measuring devices are sufficiently reliable to be used as evidence of vehicular speed and whether police officers are receiving proper training in the operation of these devices.

Twelve members will be appointed to the commission and their findings and recommendations should be reported to the General Assembly by July 1, 1982.

LEGISLATIVE UPDATE

Since the start of 1981, the legislators in various states have been pretty busy drafting either anti-radar detector legislation. The following states currently have bills to ban radar detectors: Indiana, Iowa, Kansas, Maryland, Nebraska, New York and Utah.

PHONY RADAR GUN DOES THE TRICK!

Silver Spring, Pennsylvania Police Chief John Toomey climbed out of his yellow unmarked police cruiser and took up his position along the road.

"Watch this," he said.

"Toomey clasped both hands on the handle of what appeared to be a radar gun, raised it to eye level and drew a bead on the oncoming traffic. Like magic, the traffic slowed. The oncoming drivers have been fooled again. It's not a radar gun at all—it's a hair dryer!

It may sound like a dirty trick, but the Silver Spring Police Chief says he is more interested in safety than handing out tickets.

Other disguised radar guns include one that was a tomato can, painted black, hung out of the back window by a coat hanger. Toomey says just about anything like his devices will slow down traffic. His favorite phony radar gun is one with a black cardboard tube taped to a black-painted, pistol type hair dryer. An aluminum foil disc covers the business end.

RAPID CITY, IOWA'S POLICE DROP RADAR USE

Rapid City police are no longer using radar while cruising city streets as a result of the new federal standards involving radar.

It seems that a restriction has been put on moving radar but Rapid City police are still turning their units on when their patrol cars are at a standstill.

The Rapid City radar shutdown went into effect on April 22nd and Police Chief Jim Anderson said that fewer traffic citations have been handed out as a result.

LIFE IN THE FAST LANE

There's been a lot of talk about life in the fast lane recently, but this is the best: A few motorists were recently passed on Interstate 4 (Florida) by an in-service hearse rigged to conduct the world's fastest funeral procession. The hearse was equipped with a Fuzzbuster® !

HIGHER GAS PRICES AND MILEAGE

Higher gasoline prices have not discouraged American drivers, Boardroom Reports says.

Between 1973 and 1979, the cost of a gallon of gas rose 220%. During this same time, the total miles driven went up 12% and the total number of vehicles increased by 18%. Higher prices have not discouraged Europeans either. In England, France, and Germany, where prices rose just as dramatically, total mileage either stayed constant or increased.

CHAMBERS CASE UNDER ADVISEMENT

Nebraska District Judge Raymond Case has taken an appeal by the Cass county Attorney's office under advisement in a traffic case involving Omaha Senator Ernest Chambers.

Chambers was ticketed in 1979 for driving 66 MPH on Interstate 80 near the Greenwood interchange. He fought the citation, and based his defense on the accuracy of radar used to clock his speed.

"55" MAKES MOST PEOPLE LAWBREAKERS

The Prohibition Era created a new nation of lawbreakers and the 55 MPH speed limit has done the same thing, an Indiana State University criminologist says.

Edmund Grosskopf accused the U.S. Department of Transportation of manipulating statistics to show the 55 MPH speed limit is saving fuel and lives.

He said the Department of Transportation "manages to support their contention by including only selected information in its reports." The D.O.T. omits information on charges in the number of miles driven, registered vehicles and variations in the number of licensed drivers, Grosskopf said.

According to Grosskopf, Illinois state police in 1979 estimated 90 percent of the motorists on interstate highways were exceeding the speed limit.

"Nothing is wrong with enforcing traffic laws except when it becomes the sole occupation of police agencies," he said.

VIDEO RADAR IN USE

Police Sgt. Jim Latham smiled at the facial expressions of motorists last month, driving on Park Boulevard as they suddenly saw the numbers on their speedometers splashed across the portable screen alongside the street.

For the past month, Plano, Texas police have been using a variation on hand-held radar to tell speeding motorists—and everyone else—just how fast the offending driver was going.

The new system uses a conventional radar gun. But the one-foot figures appear on a screen for all motorists to see.

Plano is the only city in the Dallas area to use the video radar display, but cities in Washington, West Virginia, and Kansas have also toyed with the new technology.

The Plano police department is restricting use of the new radar to school zones, where speed limits may change four times each school day.

SPEED TRAP LIST CONTINUES

One of the richest revenue ticket producing areas in Texas is a two mile stretch of U.S. 59 that runs through Splendora, Texas. Police Chief Wally Wiegath says that his officers write 500 to 800 traffic tickets a month, and most are on this short stretch of U.S. 59 about 36 miles north of Houston. The chief says there is a quote of 50 tickets a month, if they want to keep their badges. The chief says he does expect his men to write radar tickets.

How much money does this little town of 1,000 people make from the alleged speed traps? The chief says he doesn't have the exact figures, but a former city official says it approaches a half million dollars a year. So much that there is no city property tax, a nice city hall, and a new police station.

Splendora covers only two and a half square miles, but these two miles of state highway and its speed controls have made it famous throughout Texas.

MICHIGAN STATE POLICE INVALIDATE 28 SPEED TRAP TICKETS

A total of 28 tickets have been invalidated because procedures were not followed in a program which used an airplane to clock speeders on I-94 in Berrien County.

The problem stemmed from officers failing to run test cars through the traps to verify that speeds recorded in the airplane were correct. "It was an honest mistake," commented Lt. Geoffrey Horvath, supervisor for the Fifth District. "We didn't perform our checks as we had planned so it's our obligation to correct the mistakes. We didn't feel it was fair for people to be ticketed because of our mistake." Horvath said the courts have been contacted, as well as the people who were erroneously ticketed.

The verification is not required by law, but Horvath said police conducted the checks to insure validity in the tickets. He said the results of the airplane program are still being evaluated to determine whether the project could be continued.

ANOTHER RADAR TICKET CHALLENGED

While many people would have handed over \$50 to pay the fine for speeding, George Gagnon has gone to court twice to protect the same speeding ticket.

Gagnon says his real target is not the speeding ticket, but indiscriminate use of police radar guns that brought him into court in the first place. Gagnon also argues that as now worded, Montana law is too vague in describing the radar guns that police use to check speeders.

Good luck George!



PUBLICITY BETTER THAN COPS

A study by two university researchers suggests newspaper stories enforce the 55 MPH speed limit more effectively than platoons of radar equipped police officers.

And whether the stories are critical or favorable of the speed restriction makes no difference; the greater the number of newspaper stories concerning the law, the greater the public's compliance with it said Carol Kohfeld, assistant professor of political science at the University of Missouri—St. Louis.

Conversely, as newspapers carry fewer stories about the speed limit and related stories about gasoline supplies, speeders proliferate, Miss Kohfeld said.

Miss Kohfeld and Tom Likens, a professor of research at the University of Denver, are in the midst of a two-year study to determine the effects of the news media on compliance with the nationwide 55 MPH speed limit.

The study is part of a larger \$78,000 study, funded by the National Science Foundation, concerning compliance with governmental regulations.

SPEED TRAP LIST OPEN TO PUBLIC

Bethlehem, Pennsylvania Township District Judge Dennis Monaghan says information concerning motorists who paid fines on charges in a controversial Freemansburg speed trap is available to those who have a legitimate interest in getting the case before the county court.

The judge said he anticipated an organized move to fight the citations and compiled such a list in response to the hundreds of phone calls he received regarding the controversial September 1980 speed check incident. He said he was surprised to learn a request for the information was turned down by his office.

Several groups of people are planning to fight what they consider to be illegal speeding arrests.



SHOP TALK

On The Technical Scene of HOBBY RADIO

By Doctor Rigormortis, the Radio Doctor
PO Box 10723, Edgemont Sta., Golden, CO 80401

Hi! We have thus far explored and identified radio performance problems caused by faulty or inferior accessory equipment connected in the signal lines of a radio station. Performance losses occur to some extent in every equipment or device operated in the coaxial lines of a station. Ideally, only coaxial cable will be connected between radio and antenna, however, in actual practice, we eventually get around to hooking up a wattmeter. Then, perhaps a frequency counter, and later, a monitor scope. Later, a coaxial (antenna) switcher is required to select one of two or more antennas. Ultimately, other devices such as linear amplifier and receiver preamplifier are acquired and connected in the signal lines. Sooner or later, a given radio station has quite a number of instruments and devices hooked up between the radio and antenna. Any and all such accessories reduce transmitting and receiving performance to some extent! By now, many reader/operators have performed the simple test suggested recently to determine the actual extent of any loss caused by station accessories. This month we will overcome a few of these newly discovered losses.

Of prime importance is the necessity of operating **QUALITY** accessories. Bargain-basement instruments are seldom worth obtaining because of inferior construction and resulting negative effects upon station performance. Price of an instrument can provide an insight to quality, however the final determination is made **ONLY** by operation of the unit "in line" at the station with a comparison of performance at that point with previously *known* performance. Therefore, when purchasing new or used instruments, it is a good idea to obtain the dealer's or seller's assurance that

the unit may be returned for full refund if performance is unsatisfactory. If that assurance is not given, then insist upon a demonstration of the equipment: first "in line"; then out so that a performance comparison may be made. If any device absorbs $\frac{1}{2}$ -watt or more of transmit power (with 4-watts input) or $\frac{1}{2}$ -S Unit of received signal, **DON'T BUY IT!** The best "cure" for accessory performance problems is preventative: acquire accessories of reputable and quality manufacture.

It is ordinarily not worth the effort to attempt to correct problems caused by inferior design or construction. This includes home-made equipment and much of the "surplus" material on the market. It is always best to acquire **QUALITY** equipment, even if the cost is higher.

Some of the problems commonly affecting performance characteristics of accessories can be corrected with little effort. These problems include deterioration of mechanical and electrical connections; broken or loose wires; and short circuits caused by solder flecks and other debris. The first step toward resolution of the problem is identification of the troublesome accessory. Remove it from the station; open the case; and perform the following procedure:

- 1) Examine the interior of the instrument for loose solder and other metallic debris. Clean dirt and residue from switches, contacts, relays and the SO-239 connectors. (Use a pure, spray-cleaner solvent designed for electronic use).
- 2) Check for loosened nuts, bolts, rivets and mechanical mounting of interior subassemblies. Tighten or replace as necessary. Methodically examine the mechanical mounting of the SO-239 connectors (female

counterparts of PL-259 coaxial connectors). The external metal structure of each SO-239 **MUST** be firmly and solidly mounted to the metal case of the instrument. (Plastic-cased accessories are not suitable). Correct any looseness in the SO-239's.

- 3) Examine the interior of the instrument for loose or broken wires and other connections. Be especially observant of the quality of solder connections to the hot-lead of each SO-239. Resolder any such connections if they appear dull or corroded.

- 4) Check the female portion of each SO-239 for tightness of fit when a PL-259 is inserted. If the PL-259 is loose in the SO-239, then the SO-239 must either be replaced (recommended) or carefully repaired.

- 5) All accessories designed to be connected in the coaxial lines have an input and an output SO-239 connector. Check the circuit inside the unit between the two connectors for a clean, metal-to-metal connection. There may be other circuitry involved, but in all cases there should be a direct connection between the input and output connectors. Some accessories may have a relay wired between the two. If so, it is essential that the relay contacts be bright and shiny: clean and unpitted. The relay(s) if present, should be fed or connected with coaxial cable to and from the SO-239 connectors. **UNSHIELDED WIRE IN THE SIGNAL PATH THROUGH ANY ACCESSORY IS TOTALLY UNSATISFACTORY!**

- 6) Replace the case and tighten securely. All accessories should have a metal case which shields the interior 100%!

Steps should be taken to remedy any discrepancies noted from the above procedure. Much can be done by operators, but if any doubt exists, refer service to a competent techni-

(continued on page 35)

ON THE COUNTERS

S9'S MONTHLY PRODUCT REVIEW

THREE MORE MIDLANDS!

Three 40-channel mobile CB radios are new from Midland. All three units feature large-scale, easy-to-read L.E.D. 40-channel indicators; full-range, variable squelch control; precision P.L.L. tuners; and the legal maximum 4-watt output power.



Model 77-202

Model 77-202 is a multi-featured, high-end CB radio with a built-in SWR bridge for antenna/radio impedance matching; MIC Gain and local/distance switch for optimum reception in strong or weak signal areas; and a small chassis with compact control arrangement for greater operating and mounting convenience.

The Model 77-151 CB radio offers great value, excellent reception and convenient design features. Equipped with MIC Gain and local/distance switching for optimum signal reception, this unit's compact chassis allows versatile mounting in smaller vehicles. The arrangement of the front panel controls is designed for quick operator association and convenience.

Model 77-102 offers outstanding value in a basic mobile CB. It features a high-visibility, electronic signal/power/modulation meter and most-often-used controls on driver's side for quick and easy access. The new compact design allows easy installation in today's smaller dashboard areas.

Hand Held CB Radio

Model 75-720 is a new 2-watt, 3-channel CB hand-held from Midland. It features a pushbutton L.E.D. indicator light and full range variable squelch con-



Model 77-151

trol. The 75-720 operates on any of three of the 40 CB channels (channel 11 installed).

This unit comes complete with a shoulder belt carrying case, hand strap and battery condition meter.

New CB Base Station

Another new product in the Midland CB line is the Model 78-999, a full-power, 40-channel SSB/AM base station. This deluxe unit boasts many features including: adjustable microphone gain control; RF gain control; switchable noise blanker and noise limiter; switchable high frequency filter; and built-in SWR bridge and calibrator.



Model 77-102

EMERGENCY TWO-WAY RADIO FOR THE CAR

If you are caught in a highway emergency, or your car breaks down in the middle of nowhere, what can you do? Most of the solutions, up until now, have been dangerous, or at least risky: walking long distances in a deserted areas to look for a phone, signalling to any passing stranger that you are in distress, losing precious moments waiting for help when an emergency occurs.

Now there is a new solution. Midland International Corp. has just introduced an emergency two-way radio called the Ready Rescue. This easy-to-use, two-way radio, designed for use in automobiles, is ideal for obtaining prompt aid in an emergency situation, without even leaving the car. In addition to functioning as a safety device, the Ready Rescue can be used to obtain road or weather information, making it a convenient companion anytime...anywhere.

The Ready Rescue has Channel 9 for emergency assistance, Channel 19 for road information, and 38 other CB channels—all with the maximum legal 4-watt output power permitted by the FCC.

This emergency two-way radio has the same type of helical antenna used by police and fire departments on their hand-held, two-way radios. With this exclusive antenna system, the user can attach the antenna to the magnetic-mount base (with a 10-ft. cord), and place it on the roof of the car, for in-car use while traveling. Midland's unique antenna system also allows the user to attach the antenna directly to the unit for use either inside or outside the car.

For more information, mark 46 on our Reader Service.



FM WIRELESS INTERCOM HEADPHONES

FM Wireless Intercom Headphones provide superb 2-way intercommunication without wires. Micro-electronic breakthroughs have made it possible to compact an entire narrow band FM communication receiver and transmitter into a standard size headphone. "Limiting" circuitry prevents transmitter overload at close range, while a sensitive "capture range" allows operation up to 150 yards. FCC certified and *license free!*

Markets of interest include *Hobby Radio, Television, Recording and Video*. Uses: Communications between directors, producers and operators of TV, Video and Recording Studios; Intercom for equipment installers during remote Radio, TV or Video set ups; etc. Wireless Intercom Headphones will release users from the restrictions of cords and the time involved in wiring other intercom systems.

Designated as model TR-50, the R-Columbia FM Wireless Intercom Headphones have a built-in crystal controlled FM transmitter, superhetrodyne receiver, standard 9 volt battery supply, and 7" receiving antenna. A sensitive squelch circuit drives the receiver into "quieting" during times of no transmission. Each operator hears his own side tone as an indicator that transmission is taking place. Five channels are available for operation. Soft, foam filled vinyl, ear cushions surround the ear without pressure. Complete adjustability for individual custom fit. (Request bulletin 7S) Contact R-Columbia Products Co., 2008 St. Johns Ave., Highland Park, IL 60035.

INTERFERENCE FILTERS

Electronic Specialists announces a line of compact, easy-to-install interference filters especially designed for CB.

Now neighborhood and family complaints of TV or FM interference caused by CB operation can be eliminated in seconds. Three models are available. A tunable model permits adjustment for maximum effectiveness in the immediate area; a pre-tuned model is factory adjusted for maximum TV and FM interference ejection; and a factory tuned model is designed for installation directly on the affected TV or FM receiver.

For more information, contact: Electronic Specialists, Inc., 171 South Main Street, Natick, Massachusetts 01760.

Mark number 54 on Reader Service Card.

GLOBAL SPECIALTIES DEBUTS FREQUENCY STANDARD

Global Specialties Corporation (formerly known as the Continental Specialties Corporation) has announced their new Model 4401 Frequency Standard, a time and frequency reference expected to be used as an oscilloscope timebase calibrator and in many other applications.

The Model 4401 Frequency Standard incorporated a unique crystal oven oscillator developed by Global Specialties for their recently announced 650 MHz Frequency Counter (Model 6001). This oven is specified as being accurate to within 0.5 parts per million over a 0-50°C temperature range, although the company reports that all units built and tested so far perform within 0.3 ppm. Aging is 1 ppm/year. Global Specialties has applied for a patent on this new crystal oven oscillator, which is said to combine analog and digital techniques in performing this well at a very low cost.

Twenty-five output frequencies are available. In



addition to a full-time output at 10 MHz, one of 24 secondary outputs may be selected between 0.1 Hertz and 5 MegaHertz through the combined action of a pushbutton 8-decade output scanner and a x1/x2/x5 multiplier selector switch. Both the 10 MHz output and the selected output are buffered 50 Ohm TTL-compatible-square waves, are short-circuit-proof, and are available at front panel BNC connectors.

The model 4401 is factory calibrated to the National Bureau of Standards via WWVB, and the calibration control inside the case is user accessible.

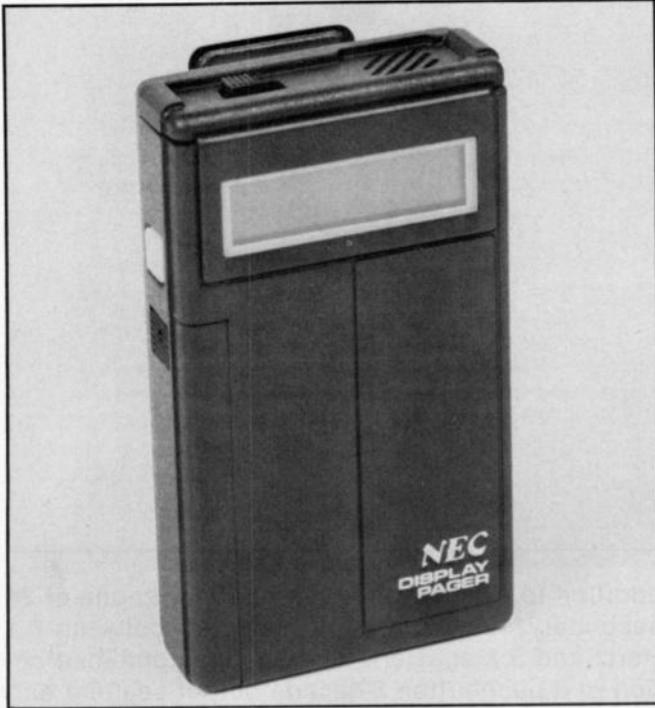
While company spokespeople project the majority of sales to be as an inexpensive timebase calibrator for use in maintaining and calibrating oscilloscopes, they are quick to point out the variety of applications available for the 4401. These include timekeeping for microprocessor systems (0.5 ppm is one minute in 3.8 years); chronometry; time-lapse photography; and innumerable applications as frequency counter calibrators, external timebase sources, precision clocking and other time and frequency domain reference use.

For additional information write Global Specialties Corporation, P.O. Box 1942, New Haven, Connecticut 06509.

Mark number 65 on Reader Service Card.

DIGITAL DISPLAY PAGER

The Mobile Radio Division of NEC America, Inc., has introduced the NEC digital display pager. The digital display pager, model R3D3-1A, is completely solid-state and incorporates a microprocessor which expands its features. These include the ability to display a calling party's telephone number up to 10 digits and to store and retrieve two calls with a numerical display.



In addition, since the display pager can quickly respond to a paging signal from the base station, 20,000 to 40,000 pagers can be operated on a single radio frequency in the service area. This capacity allows this pager more effective use of radio frequency in comparison with the capabilities of conventional "tone and voice" pagers.

The NEC digital display pager offers three paging modes. Incoming calls may be detected by a "beep tone," "light" (LED), or "vibration." It operates on the 138-174 MHz VHF band and uses a liquid crystal display panel.

The NEC digital pager is compact, measuring about 3½" x 2" wide and runs on one standard "A" size 1.5V penlight battery which lasts for about five months.

To round out the NEC digital display pager's versatile features, it offers basic binary simplicity of the digital signal with NEC's exclusive Error Cor-

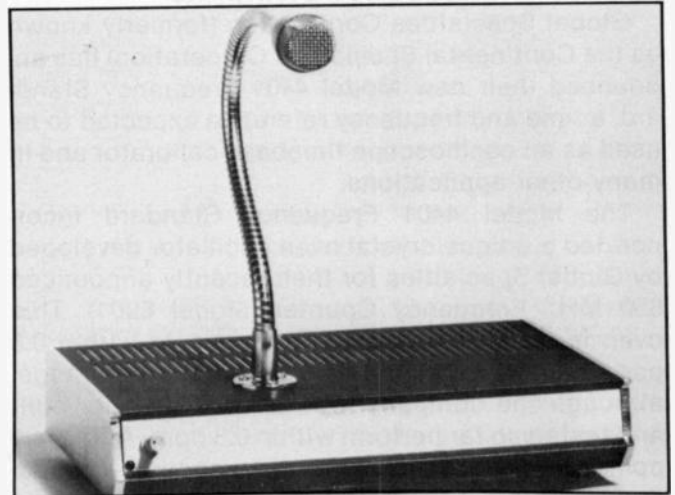
rection System. This system effectively minimizes the occasion of 'falsing'—signals which are incorrectly deciphered or not picked up at all.

For more info contact: NEC America Inc., 532 Broad Hollow Road, Melville, NY 11747, or mark 44 on Reader Service.

HANDS OFF!

A totally hands-free 2-way conversation is now possible with a new Talk-A-Phone intercom system, providing the necessary communications link between the receptionist and visitor.

New "Automation" models, developed by Talk-A-Phone technology, eliminate the necessity for either party to operate any controls during conversation. Persons at both locations talk and listen hands-free, without using controls, freeing each person to do other things while communicating over the intercom.



A newly developed feature of the system, Automatic Voice Level Adjustment, senses the voice level variations of the person speaking, and automatically delivers a consistent volume level. Normal volume, without feedback, is maintained in both directions, whether either person speaks softly or loudly.

A special feature, standard with the system and ideal for drive-up/walk-up applications, is Talk-A-Phone's vehicle noise suppression circuitry, which automatically passes voice through, while suppressing background vehicle noises.

Two new models are offered. Both come equipped with a built-in adjustable microphone, pilot light, sound silencer, and built-in ability of remote

to signal master by "buzz" if desired.

Model TAP-1, shown in the photo, is a completely self-contained Master unit designed for totally hands-free 2-way conversation with a single remote station. At Master's option, sounds from remote can be temporarily silenced, during which remote can contact Master by "buzz."

Model TAP-6, provides the same 2-way hands-free function to one remote station, and in addition, has the capacity to selectively call and converse by using controls with up to 6 additional remote stations. Remotes can be used in such areas as office, storage, warehouse, security guard, etc., and can signal Master by "buzz" as well as reply to Master hands-free.

Both models TAP-1 and TAP-6 lie flat on a surface, counter, shelf or table; or come with an optional overhead mounting bracket, new to the line, which can be mounted out of the way, above the user, giving convenient access to the microphone.

Talk-A-Phone remote stations for use with the system include regular indoor and outdoor units, available with or without origination switches. Various remotes are available in flush mounted, wall mounted or desk style.

CB Usage Tips From S9

(CUT OUT & PLACE AT OPERATING POSITION)

Preferred & Designated Channels

Channel 8 Agricultural operations
 Channel 9 Emergencies and travel info.
 Channel 13 Maritime and RV's
 Channels 16 to 18 Single Sideband only
 Channel 19 Trucks/Vehicles in transit*
 Channels 31 thru 40 Single Sideband Only

*Note that in many areas there are also 1 or more additional channels designated and/or normally used for in-transit vehicles, often Channels 10 and/or 12. This is especially true in metro areas and their suburbs where Interstate Highways are on 19 and secondary roads such as parkways are on alternate channels. Base stations are requested to avoid using all area in-transit vehicle channels in order to permit their full, free, unobstructed and exclusive use by in-transit vehicles.

Stations using power mikes should be cautious that their audio levels are set to a level which will not cause voice distortion, over modulation, or splashover on adjacent channels.

Single sideband stations now generally operate on Channels 16, 17, 18, and 31 through 40, although this may vary in specific areas. Stations using standard AM transmission are requested to avoid use of local Sideband channels, likewise Sidebanders are requested to confine their transmissions to those channels established locally for their use.

... Use S9 READER SERVICE

JOIN THE WINNER'S CIRCLE AND RECEIVE THE SECRET OF PERFECT CB SIGNALS

• THE KEY TO PERFECT CB SIGNALS •
BANDIT I must improve your CB's performance and signal or you pay absolutely nothing!

• HERE'S THE SECRET •

Is There A Secret Method? Yes, and the **BANDIT I** has it. The Newest, Most Secret, Patented **VMT Microtron™** Tuned Coil That Allows More Powerful CB Signals and the Lowest SWR Over the Broadest Bandwidth — A Favorite of the Illegal Channel Users.

We Also Have Achieved Maximum Signal Strength For Our Legal Operators.

- Recommended by Satisfied Customers Worldwide.
- Over 2,000 New Dealers and Distributors in 1980 Alone.

MICROTRON™
TUNING RINGS

VMT COIL

1 FULL YEAR
GUARANTEE

U.S.A.
MADE

UNDER \$40.00 COMPLETE

TRY IT ENTIRELY AT OUR RISK

You may be hesitant about improved CB signals, because of this

TRY A BANDIT I FOR 10 DAYS

Get unbelievable results and derive more pleasure from your CB or return the **Bandit I** to your dealer for a full refund.

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"The Antenna Innovators"
 501 Glengary
 Holland, Ohio 43528

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To receive manufacturer's information about products advertised or editorially mentioned in this issue... Circle the numbers on the coupon to correspond with the key numbers at the bottom of the advertisement or editorial mention that interests you.

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29	30	31	32	33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48	49	50	51	52	53	54	55	56
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127	128	129	130	131	132	133	134	135	136	137	138	139	140

Coupon expires one month after cover date of issue.

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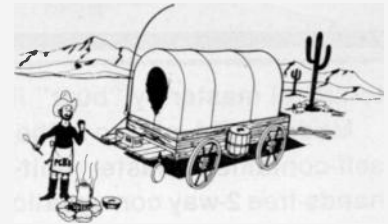
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THE CB PIONEERS' CORNER



By Judy, SSB-99/PCBS-99

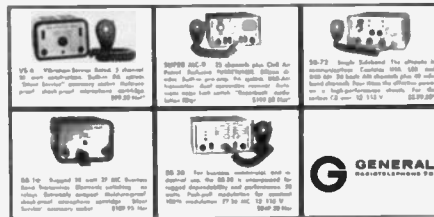
This month I'd like to say a few words about the General Radiotelephone Company, formerly of 3501 West Burbank Blvd., Burbank, Calif. If ever there was a company which deserved to survive CB Radio's early years and share in the better days which were to lie ahead, it most definitely was General Radiotelephone. Without a doubt this was a company ahead of its time, almost visionary, and not at all afraid to be innovative during a time when most other early CB manufacturers were taking things on a cautious step-by-step basis.

The driving force behind General Radio Telephone consisted of two fellows, Oscar Shapiro and Charles Messenger. Oscar was the business end of General, Charlie handled the engineering and supervised the production. While Oscar was intense, dynamic and a whirlwind of energy, in contrast, Charlie was a big easy-going kind of guy who knew many of the early CB'ers and would often be heard on the air communicating via CB. While it may be that these two *seemed* like the original odd couple, they were actually quite a helluva team—at least while General was on the scene.

I can't quite pin down when General Radiotelephone commenced its operation, except to say that it was early in the CB game. That is to say that by mid-1961 they were producing their Model MC-4—I have no detailed information on the previous models in this series.

The MC-4, however, was quite a rig! A gold-brushed aluminum faceplate 'neath a stark black cabinet was what first caught your eye, but that wasn't the half of it! Basically it was a unit which sold for \$200, offering a tunable receiver featuring 3 IF stages plus an RF amplifier—it also had 4 fixed frequency receive channels. The transmitter had 6 transmit channels, but General had the guts to offer as factory "stock" a feature which many owners of other early transceivers

were installing on their own—an external crystal socket to make it easy to plug in any crystal without groping around the innards of the set. The transmitter, in those days before FCC type acceptance, was a 6BQ5 modulator which could produce 100% Class A modulation in the 6GM5 final, even if the user should decide to make a few minor internal modifications and run the final up to its full potentials of 15 watts! Some nerve, eh?



Another great feature of the MC-4 was its unique tone signal, commonly known as a "tweety bird." A push of a button on the front panel would send out over the airwaves devastating, pulsating tones, which were guaranteed to alert everybody on the channel to your presence, and when the skip was rolling in you could wake people up with this thing from Tacoma to Timbuktu, especially if propelled by your souped-up 15 watt signal!

The MC-4 operated from all voltages, had a series gate noise limiter, built-in S-meter/FSM and was blatantly designed with the hobbyist in mind, right down to the set's two front panel rack-mounted type handles. That it did not specifically conform to the hopes and desires of the FCC's CB regulations did not seem to create any conscious pangs in the mind of the manufacturer, neither did it do anything but create a brisk demand for General's high quality rigs. It wasn't long before the company had made an excellent reputation for itself with hobbyists, even though its ads all carefully pointed out that the FCC rules did not actually permit the use of more than 5

watts input in the CB service. Undoubtedly, 95% of these units were being run at the full 15 watts within a few days after they were purchased!

In late 1962 General Radiotelephone announced the Model MC-5 which they dubbed "the world's most advanced 11-meter two-way radio." While the set had the same external look of the MC-4, inside they had added new ultra-low-drift oscillators for greater stability, new Zener diode shunt noise-clamp in addition to the existing noise limiter, a *more* penetrating *tweety bird*, and some modifications to increase talk tower. The price remained the same. The rig was well received!

Within only a month or so after the MC-5 was first announced, Charlie Messenger realized that several experiments were being conducted within the industry which could lead to the eventual production of Single Sideband 27 MHz equipment. The MC-5 was then equipped with a receive adapter (\$20, optional) which was essentially a BFO but which would permit the reception of SSB signals—should anybody ever actually start transmitting them on 27 MHz. General also, at that time, re-named the rig the *MC-5 Sidebander*. Simultaneously, General announced a combination "sideband transmission adapter and AM linear amplifier." This \$100 unit was intended to run 50 watts PEP on SSB on 10 or 11 meter bands when driven with only 3 watts. I do not know if any of these transmitting units were actually produced or sold, at least I never saw one or have come across any operator who had seen one.

Around the same time, General came out with their Model VS-2 transceiver. This was a 6-channel, heavy-duty, no-frills unit featuring electronic switching, solid state power supply, and solid-as-a-rock construction. It sold for \$140 and was intended for industrial CB use, for mounting in *Jeeps*, fork lifts, tractors, or elsewhere in critical applications

subject to heavy vibration.

The company kept new innovations coming—by 1965 they were up to Model MC-8, still \$200, but offering “30 watt construction, all-channel operation plus a chance to operate on 26.620 MHz (CAP frequency). By a year later they were producing the MC-9 which had DSB (double side-band reduced carrier) modulation design. They also had the SB-72 SSB rig, featuring (for \$400) full SSB operation plus DSB reduced carrier.

Then, in 1967, for reasons unknown to persons outside the company itself (so far as I can ascertain), something went awry at the company. The aggressive sales presentations came to a halt, the innovative designs seemed to stop, and the company looked to all as if it had simply withered and died of a mysterious malady. This was at a time when its reputation and track record was at its peak, and when there was a healthy demand for General Radiotelephone's equipment.

Why did the company falter in 1967? If you know, I'd very much like to hear about it. Was it due to problems between the partners? Was it because they had overextended themselves financially? There is no doubt that something drastic must have taken place—a dynamic company which seemed to have so much going for it was hardly a candidate for such a mysterious disappearance. Today, the old General MC-series sets are regarded by old timers as being almost legendary in terms of design, innovations, appearance, and production quality. It was a real “insiders” series, many people will point out to you when you mention General Radiotelephone Co., a series produced with amazing foresight and a knack for knowing the types of features which would have high-user appeal.

Do you know? If you do, please let me know and I'll pass the information along to my readers. I wanted to thank the SSB Network's Russ, SSB-1, for giving me much of the information I had in this column, and for pointing out that General Radiotelephone was a company which was long overdue for being spotlighted in the Pioneers Column! Russ reports that he owned several units in the MC-series, and the one he still owns is as good as the day it came from the factory 15 years ago!

(SHOP TALK continued from page 28)

The technician or service facility should be instructed to perform an Insertion-Loss Test and to perform corrective maintenance if the insertion loss exceeds 0.5 db.

Frequency counters and coaxial switchers are notorious performance thieves! Most frequency counters, however, can be configured to operate with no connection to the signal lines! Counters usually have two different inputs: 1) a pair of SO-239 connectors for connection to the coaxial cable system, and 2) a special connector (Type BNC or N) for the additional input. The latter is highly preferred because a short length of wire may be connected to it to form an antenna which will pick up signal from the air. If this fails to give enough signal to the counter, the wire may be lengthened, or fashioned into a pick-up loop placed inside the transmitter. Operating in this manner, the frequency counter will have no insertion loss or effect upon station performance! It is very important that a frequency counter be operated with no connection to the signal lines between radio and antenna!

Coax or antenna switchers are the worst offenders for stealing performance from a radio station. Many are constructed in unshielded, plastic cases and virtually all use DC-type switches (toggle, slide or rocker) which are not suitable for radio signals! Most coax switches available in CB stores are of this inferior type, and to make matters worse, the wiring inside is not shielded! There are few, if any, quality-made coaxial switches available on the market for under \$100. Next month I will provide a parts list and diagram showing how a high-quality coax switch may be made for around \$25. It will have an insertion loss of 0.2db or less!

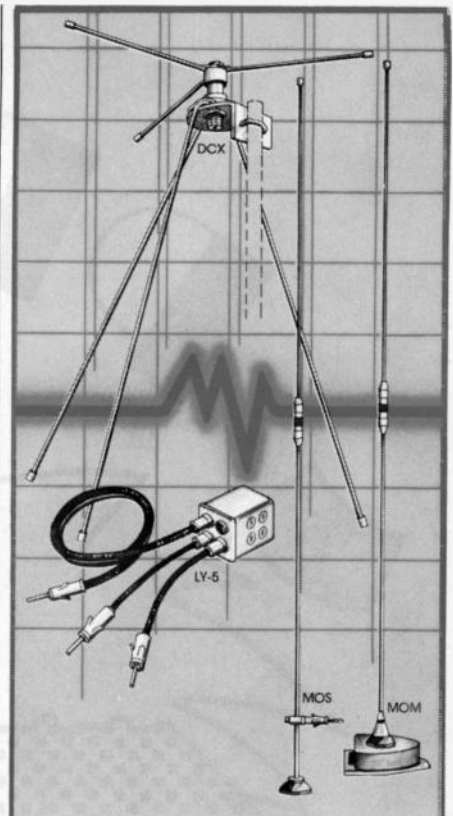
Well, friends and fellow radio enthusiasts, that's it for this month and for 1981! Merry Christmas and Happy New Year to all!

**Abused children are
helpless.
Unless you help.**



Write: National Committee for
Prevention of Child Abuse,
Box 2866, Chicago, Ill. 60690

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Cardswappers Unlimited

S9's Column for QSL Cardswappers

Conducted By: Dorothy Ferrentino



The Cardswappers Unlimited Column is dedicated to the hobby of swapping or exchanging CB QSL cards (wallpaper). The below listed CB'ers have submitted their names to this column to indicate that they invite other CB'ers to send them QSL cards for swapping purposes, and will respond to all who do so with a QSL of their own. Those readers wishing to swap cards with these people, should mail QSL cards directly to the addresses indicated, and NOT to the offices of CB RADIO/S9.

Readers wishing to be listed as Cardswappers are requested to obtain a copy of our rules and standards for becoming a part of this column. These rules were outlined in the December (1979) issue of CB RADIO/S9; a reprint is available for 25 cents and a self-addressed stamped envelope. Address all requests to: Dorothy Ferrentino, Cardswappers Unlimited, CB RADIO/S9, 14 Vanderventer Ave., Port Washington, NY 11050.

- | | | | |
|--|--|----------------|--|
| KBBY 1862 | Robyn, Pres. Ind. Card Swappers, POB 2681, Kokomo, IN 46901 | Red Devil | 2000 Center, Box 1134 Berkeley, CA 94704 |
| Free State SSB'ers USS-2001 | J.P. Tinker, RT 2, Box 61 Jefferson, MD 21755 | KAST-6919 | Mildred S. Bugbee, Rt 1, Box 39, Pennville, IN 47369 |
| KAOZ-9736 | POB 14786, Philadelphia PA 19134 | Unit 776 | Jerry Willis, FMC TMC 1 Box 43, APO 09710 NY |
| KAIF-3799 | The Daley's, 22 Teetsel St Saugerties, NY 12477 | Unit-451 | 11632 Las Lucas, Santa Ana, CA 92705 |
| Turtle/Muttley Lady Soul | POB 509, GIG Harbor, WA 98335 | Magic Man | John Jessee, 727 Webster Mexico, MO 65265 |
| Save Used Stamps Mr. Magic | The Marsh's, 4971 Hwy H. Kewaskum, WI 53040 | Bar-B-Q/ | The Roberson's Box 11014 Parkwater Station, Spokane, WN 99211 |
| KMV 2120 | C. Mitchell, Box 2607, Providence, RI 02907 | SSB-9718 | Jack B. Richter, 23 E. George St., Yoe, PA 17313 |
| KPM-0221 | Dale Berry, Box 187, Lupton, MI 48635 | SSB-451 | 2000 Center Box 1134 Berkeley, CA 94704 |
| The Raccoon The Oldies' Fan Big Dollar/ Unit 183 | Harold-Martin, 101 Diplomat Plaza, Morton Illinois 61550 | KAYL/ 1977 | POB 3268, Marion, IN 46925 |
| Rhein Main Sidebanders | Jim Thompson, Rt. 6, Box 90A Ada OK 74820 | 26-AT-188 | Op. Mike F. Johnson, 154 Allington Pl Chester CH4 7DU ENGLAND |
| KDO-0025 | Hazel Gettinger, 78 Hudsonsdale St., Weatherly PA 18255 | Dirty Old Worn | John P. Tinker, Rt 2 Box 61 Jefferson, MD 21755 |
| | 78 Hudsonsdale St., Weatherly, PA 18255 | R-Cat-6 | Al Eisner, Vinnell (Sang) Corporation, POB 5396 Riyadh, Saudi Arabia |
| | Jay Ehret, POB 173, Oaklyn, NJ 08107 | Unit 46 | Daren, POB 44, Juniper, New Brunswick, Canada EO5-IPO |
| | Vernon Ferguson Founder US of TX QSL Club POB 183 Henderson TX 75652 | KBRR-7594 | Mildred-Poole, 806 Woodsdale Rd., Wilmington, DE 19809 |
| | Pres Jerry Willis, FMC TMP1 Box 43, APO 09710 NY | KND 6021 | Al Eisner, Box 058 Vinnell (Sang) Corp., APO New York, 09038 |

T-Bird David Procner, Shuler Rd., Box 15, Stoneboro, PA 16153

Buffalo Skinner Pres. Kentucky Colonel QSL Swap Club, POB 5715 Lexington, KY 40555

KGC 1045 The Blanchettes, 1 South St., Danielson, CT 06239

SSB-1186-B L.P. Sell Sr, 9423 Waverly Dr., El Paso, TX 79924

KFO-3678 John P. Tinker, RT 2, Box 61, Jefferson, MD 21755

KES-1734 W. Cummings, 106 Haskell St., Westbrook, Maine 04092

WASHINGTON OUTLOOK

WHAT'S HAPPENING AT UNCLE CHARLIES'

DISMISS CASE AGAINST MARYSVILLE, OHIO, CB OPERATOR

FCC Administrative Law Judge Edward Luton has dismissed a show cause order issued by the Commission's Private Radio Bureau directed to a CB operator in Marysville, Ohio, alleging that the operator's CB transmissions were causing the heart pacemaker of a neighbor to malfunction.

The proceeding began last February after Commission personnel responded to complaints by Helen Hinderer of Marysville, Ohio, alleging that transmissions from a CB radio licensed to a neighbor, Walter C. Jones, were causing her cardiac pacemaker to malfunction. After administering tests, FCC personnel determined that Jones' CB operation was causing interference to Hinderer's pacemaker and ordered him to stop transmitting between the hours of 10 p.m. and 6 a.m.

Subsequently, the Commission received complaints from Hinderer that Jones had violated the order and had made transmissions during the "quiet hour" period on February 13 and 14 which resulted in an emergency hospital admittance by Hinderer.

On March 11, 1981, the Private Radio Bureau issued an order against Jones to determine if Jones had been operating during the time period alleged by Hinderer; whether he possessed the necessary qualifications to remain a licensee; whether his license should be revoked and whether a cease and desist order should be directed against him to prevent unlicensed operation.

After hearing testimony and reviewing the facts of the case, Judge Luton found that the Private Radio Bureau had not sufficiently proven that Jones was home at the time of the alleged transmissions nor that Jones' transmissions were directly related to the malfunctioning of Hinderer's pacemaker. He said that Jones had admitted operating a CB radio at the

time in question, but had sufficiently shown he was not using his own equipment and was not in Marysville at the time.

FCC REVOKES AMATEUR LICENSE KOMGQ

The FCC Review Board revoked the license of Jerry J. Wells, Pueblo, Colo., for Amateur Radio Station KOMGQ and suspended his Amateur Advanced Class Operator License for the remainder of its term—May 1982. However, the Board found that revocation of Wells' license for Citizen Band Radio Station KDY-0265 was not warranted.

In making its findings, the Board affirmed the initial decision of FCC Administrative Law Judge Frederic J. Coufal released last January 21, in which the judge concluded that Wells' Amateur station license should be revoked and his Amateur operator license suspended because Wells had used his Amateur equipment to transmit on an unauthorized frequency in violation of Section 97.61(a) of the Commission's rules. However, the Board did not agree with Judge Coufal that the one-year waiting period be waived to allow Wells to reapply for an Amateur license within 90 days.

While Wells admitted liability for all the CB rule infractions specified against him, except for the charge that he limited the inspection of his CB station, Judge Coufal concluded that this admission could not be permitted to contradict the record evidence that Wells was using Amateur equipment and was operating under color of authority of his Amateur license. The Review Board agreed with Judge Coufal's conclusion that Wells had not violated the CB rules and that his CB license should not be revoked, and that Section 301 of the Act did not justify revocation in the circumstances of this case.

(In directing Wells to show cause

why his licenses should not be revoked and suspended, the Private Radio alleged that Wells made radio transmissions on a frequency assigned for use by U.S. Government stations, in violation of Section 301 of the Communications Act which prohibits unlicensed radio operations. The order further stated that if Wells were transmitting under color of his CB license, he was in violation of numerous CB rules.)

While Section 312 of the Communications Act does not require revocation as a sanction in every case of proven rule violation, the Review Board said that revocation was appropriate in this case. Willful operation of radio transmitting equipment on an unauthorized frequency has been described by the Commission as "a most serious matter," the Board stated.

REVIEW BOARD ORDERS AMATEUR OPERATOR TO FORWARD EXPIRED LICENSES TO FCC

The FCC Review Board has ordered John W. Munson, Jr., Los Angeles, to forward his expired amateur radio license for station K6EOA and operator's licensee to the Commission.

While adopting her findings of fact, the Board partly reversed a March decision by Chief Administrative Law Judge Lenor G. Ehrig revoking Munson's station license and affirming the Private Radio Bureau's order suspending his operator's license for the remainder of the license term.

Ehrig concluded that on October 2, 1979, Munson violated FCC rules concerning station identification, one-way communications, unidentified radio communications and interference to communications; that he refused to allow FCC engineers to inspect his station licenses and logs; and that Munson, while insane, had threatened to kill Commission personnel and that this insanity and inability to act lawfully, had it come to

the Commission's attention, would have warranted the agency's refusal to grant Munson's original license application. Thus Munson was not qualified to be or remain a licensee, she found.

Ordinarily such findings would warrant affirmation of the suspension order and revocation of the station license, Ehrig said. She rejected Munson's contention that the issues were moot because his station license expired January 23, 1981, before the judge reached a decision. Revoking Munson's license would assure he could not obtain renewal during a five-year grace period after the expiration, would eliminate the burden of retrying the case if Munson filed a new application and would clear the way for a California court to issue its final order on Munson's felony conviction stemming from the threat to kill FCC employees, Ehrig concluded.

Because Munson's station license had already expired, the judge erred in revoking that license and in affirming the suspension order for the operator's license, the Review Board said in response to exceptions filed by Munson. It said it was powerless to consider administrative remedies in this case.

However, since the Private Radio Bureau and Judge Ehrig were concerned that without formal action Munson could use the grace period to seek a new authorization with no reevaluation of his qualifications, the Board ordered him to forward the expired licenses to the Commission.

FCC REVOKES AMATEUR LICENSES OF TWO MEN; SUSPENDS ADVANCED CLASS LICENSES

FCC Administrative Law Judge Joseph P. Gonzalez has revoked the licenses of W. Reed Everhart, Wood, Pa., for Amateur Radio Station W3HUM, and of James O'Rourke, Everett, Pa., for Amateur Radio Station WA3YQC. Judge Gonzalez also affirmed suspension of both men's Amateur Advanced Class Radio Operator Licenses for the remainder of their terms.

The judge made his findings in response to motions by the Private Radio Bureau for summary decisions. The purpose of a summary decision is to avoid a useless hearing where no issues of fact remain to be resolved.

The Bureau contended that the facts in both cases clearly indicated

that Everhart and O'Rourke obtained Amateur licenses by fraudulent means with the assistance of Robert W. Kirkham, in willful violation of FCC rules.

It added that Everhart compounded his culpability by referring to Kirkham other individuals who had been unsuccessful in passing the required qualifying examination, and that such actions subvert the FCC's entire Amateur licensing program and clearly warrant license revocation and suspension. Everhart did not take issue with the Bureau's summary of the facts in the case or its request for revocation and suspension of his license.

The Bureau said that although O'Rourke withdrew his request for Kirkham's assistance, it stated that there was no indication that O'Rourke brought the fraudulent scheme to the FCC's attention! Therefore, the Bureau stated that revocation of O'Rourke's Amateur radio station license and suspension of the Advanced Class operator license were warranted.

Judge Gonzalez stated that the undisputed facts indicate that Kirkham offered to assist Everhart in obtaining a preferred call sign; that Everhart gave Kirkham a signed FCC application form which Kirkham mailed directly to Richard C. Ziegler, then FCC Supervisor for the FCC's Gettysburg, Pa., licensing facility. At Kirkham's request and as a favor to him, Ziegler completed Everhart's application indicating that Everhart had passed the required examination, even though he had not taken it.

Judge Gonzalez stated that Everhart knew when he received his Advanced license that he had not taken the requisite qualifying examination, even though he alleged that it was Kirkham who actually requested the upgrading. By accepting the license instead of reporting Kirkham and Ziegler to the Commission, the judge said Everhart clearly endorsed their actions on his behalf. He added that Everhart compounded his initial culpability by referring other individuals to Kirkham and by so doing helped to perpetrate the fraudulent scheme.

Therefore, Judge Gonzalez concluded that "Everhart demonstrated that he lacked the requisite qualifications to remain a Commission licensee."

Although the Bureau acknowledged O'Rourke's claim that he withdrew his request for Kirkham's assistance, it stated that there was no indication that O'Rourke brought the fraudulent scheme to the FCC's attention. Furthermore, the Bureau contended that O'Rourke's acknowledgement of wrongdoing, after the facts became known to the Commission was outweighed by his fraudulent behavior. Judge Gonzalez said, that by attempting to circumvent the FCC's requirements and by failing to bring the fraudulent scheme to the Commission's attention O'Rourke demonstrated that he lacks the necessary qualifications to remain a Commission licensee.

Thus, Judge Gonzalez granted the requests for summary decisions, and resolved the issues against Everhart and O'Rourke in the Bureau's favor.

REGULATORY REVIEW WORKING GROUP ESTABLISHED

A Regulatory Review Working Group (RegRev Group) has been established in the Office of General Counsel. As announced by Chairman Fowler during oversight hearings before the House Subcommittee on Telecommunications, Consumer Protection and Finance on July 23, the task of this group is to assist the Bureaus and Offices in comprehensive, systematic review of each of the Commission's rules and policies looking toward the overall agency objective of eliminating unnecessary rules, regulations and policies.

Reflecting the importance of the project, the RegRev Group will be coordinated by the Acting Associated General Counsel who will be supported by a team of attorneys from the General Counsel's Office, economists from the Office of Plans and Policy and members of the Chairman's personal staff. The group also consists of senior-level Bureau and Office representatives.

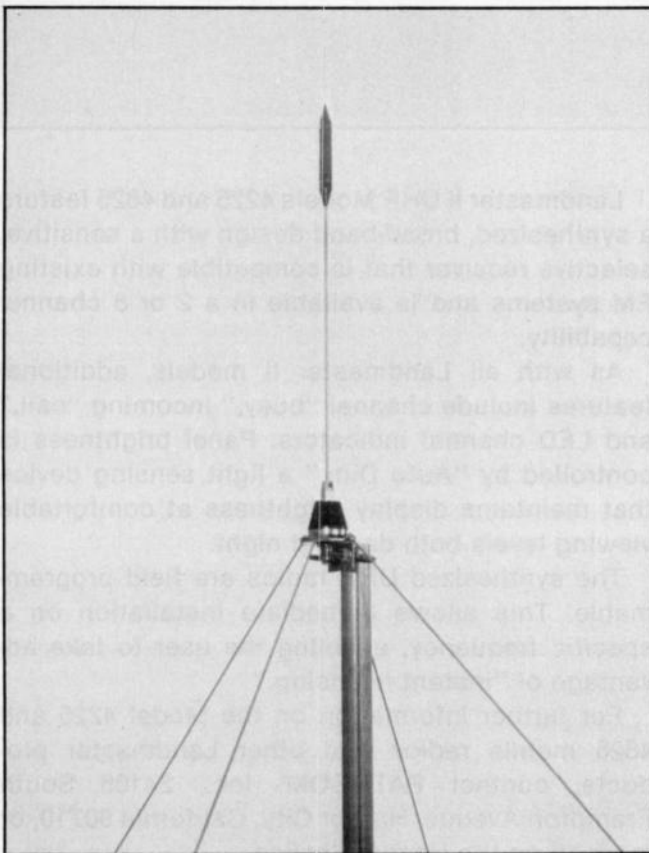
The initial function of the RegRev Group is to perform a "zero-based" legal and economic analysis of rules prioritized by the Bureaus and Offices to evaluate those rules for consistency with their original intended economic purpose and statutory authority. The product of this analysis will serve as the basis for the Bureaus and Offices to prepare recommendations for action by the Commission.

THE MONITOR POST

RICK MASLAU/KNY2GL SCANS THE CHANNELS

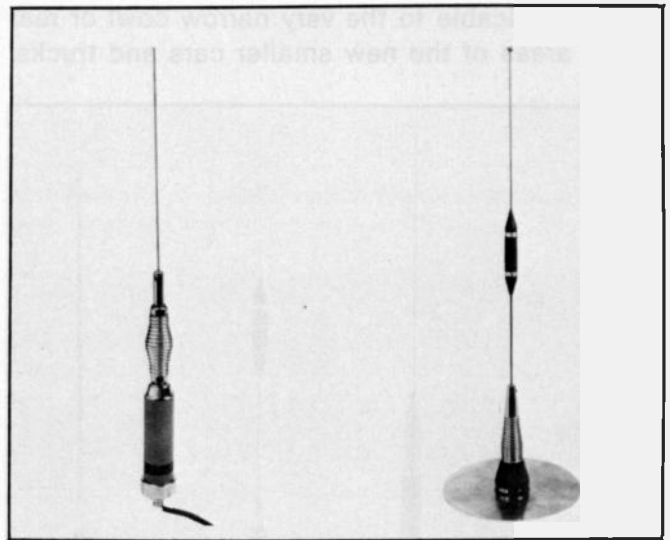
MONITOR BASE ANTENNA

Responding to the growing demand for an inexpensive but good performing full coverage antenna in the consumer marketplace, the Antenna Specialists company has introduced model MON-38 covering all of the popular low band, VHF, UHF and T-band frequencies. Increasing numbers of casual listeners are discovering what professionals already know—that an external antenna in most instances will substantially increase the number of stations that may be heard, especially the low powered portables in the public safety services, most of which cannot be picked up by the radio's built-in telescope whip. The new MON-38 weighs just 1 pound and is designed for very simple assembly and installation. Its 18" radials are stainless steel and the phasing coils are waterproof. The antenna mounts easily on any pipe or tubing up to 1 1/4" in diameter. The antenna terminates in an SO-239 receptacle; cable is not provided.



VHF, UHF MOBILE ANTENNAS NEED NO GROUND PLANE

The Antenna Specialists Co. also announced the availability of two vehicular antennas especially designed for use on vehicles with fiberglass or other non-metallic bodies such as ambulances, van or small commercial boats. Model ASP-861 is designed for coverage of the 144-174 MHz band while model ASP-862 covers UHF from 445 to 470 MHz.



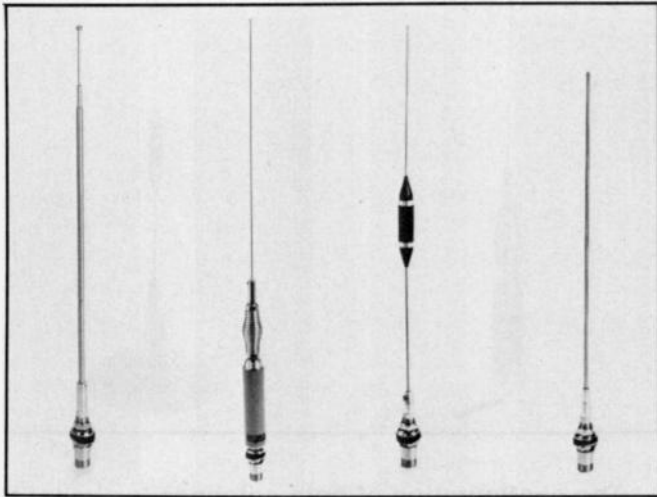
The configuration of both antennas is similar to their standard A/S counterparts. Both antennas are supplied with Antenna Specialists' standard 3/8" hole mount with an adjustable feature allowing it to be used on any thickness up to 3/8".

Model ASP-861 is a 1/2-wavelength end fed VHF vertical antenna. The electrical conversion for use without a ground plane is accomplished within the coil itself, resulting in satisfactory performance with a reasonably predictable radiation pattern and avoidance of excessive cable heat. Accommodating power up to 100 watts, the antenna exhibits average gain of 2db with a VSWR of 1.5:1 or better over 1.5 MHz bandwidth. The whip is high grade 17-7 PH stainless steel, terminating in a stainless steel shockspring, with base and fittings of chrome plated brass or aluminum. The antenna is furnished with 17 ft. of RG58/U cable complete with PL259 connector.

Model ASP-862 is a 5 dB gain UHF antenna accommodating maximum power of 100 watts. VSWR is 1.5:1 or better over 9 MHz bandwidth. It is a low profile antenna with stainless steel shockspring and 17-7PH stainless steel radiator with center phasing coil. To avoid radiation pattern control problems at UHF, the antenna is furnished with a 6" metal disk to simulate a ground plane. 17' of RG58U cable and connector are provided.

NEW VEHICULAR ANTENNAS FOR NARROW AUTO BODIES

Keeping pace with the sweeping trend toward narrower, smaller car bodies, the Antenna Specialists Co. has developed a complete line of "mini-mount" land mobile antennas for frequencies from low band to 470 MHz. The new line features a small but extremely rugged "x-cowl" mount applicable to the very narrow cowl or rear fender areas of the new smaller cars and trucks.



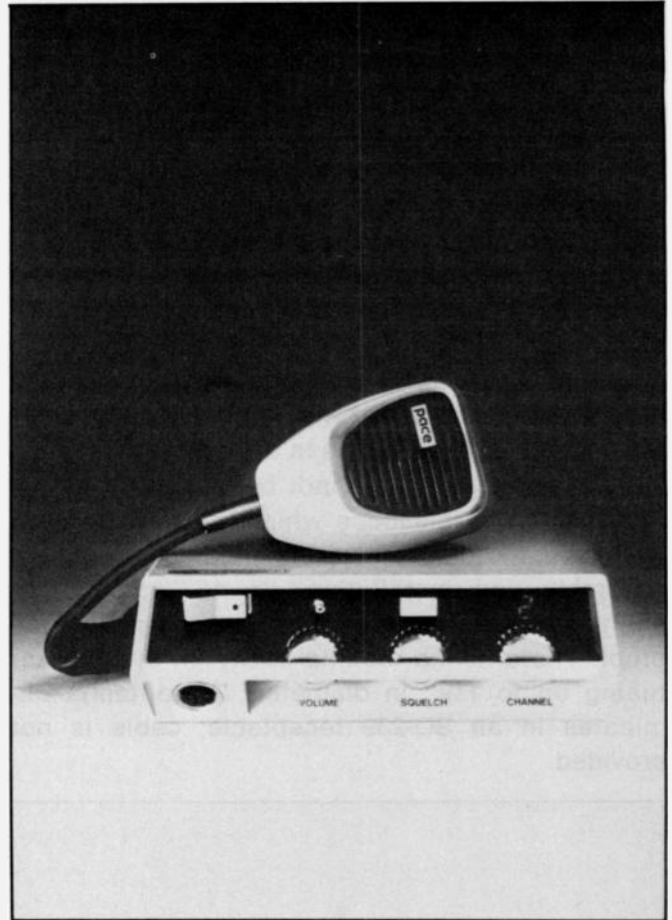
The new mount may be adjusted as much as 15° from horizontal to maintain vertical alignment of the whip. The mount is accommodated by a single, conventional 3/4" hole. All metal parts are either stainless steel or plated brass.

Coils, whips and associated hardware are identical with their standard Antenna Specialists antenna counterparts in each style and frequency range. They are electrically identical, assuming similar mounting configurations. The whip assemblies may easily be removed for car wash entry; the mount itself is waterproof.

The line also includes four disguise antennas. All except the disguise models are field tunable. For further information on A/S products contact: The Antenna Specialists Co., 12435 Euclid Avenue, Cleveland, OH 44106, or mark 43 on our Reader Service Card.

LANDMASTER TWO-WAY RADIOS

PATHCOM, Inc. announced delivery of the new UHF Models 4225 and 4825 in the popular Landmaster II radio series, featuring frequency range from 406 MHz to 512 MHz.



Landmaster II UHF Models 4225 and 4825 feature a synthesized, broad-band design with a sensitive, selective receiver that is compatible with existing FM systems and is available in a 2 or 8 channel capability.

As with all Landmaster II models, additional features include channel "busy," incoming "call," and LED channel indicators. Panel brightness is controlled by "Auto Dim," a light sensing device that maintains display brightness at comfortable viewing levels both day and night.

The synthesized UHF radios are field programmable. This allows immediate installation on a specific frequency, enabling the user to take advantage of "instant licensing."

For further information on the Model 4225 and 4825 mobile radios and other Landmaster products, contact PATHCOM, Inc., 24105 South Frampton Avenue, Harbor City, California 90710, or mark 45 on the Reader Service.

**REGENCY INTRODUCES THE 50 CHANNEL
D810 PROGRAMMABLE SCANNER WITH
DIRECT ACCESS KEYS**

Regency Electronics, Inc., has introduced the D810 scanner. The D810 has 50 channels covering eight bands as well as eight separate direct access banks.

The direct access keys allow the user to hear preprogrammed channels to the most common public service frequencies for police, fire, emergency, weather, aircraft, mobile telephones, marine and for the first time in any scanner, *even FM music broadcasts*, with the touch of a button. Fifty programmable channels are included so that the user may choose from among his favorite frequencies for the normal scanning mode.



The D810 has a permanent memory which allows programmed frequencies to be stored for up to 9 years *without* battery backup. Other features include search, priority channel, digital clock, count, scan delay, dual level display, backlighted keyboard, and L.E.D. indicators for the direct access channels.

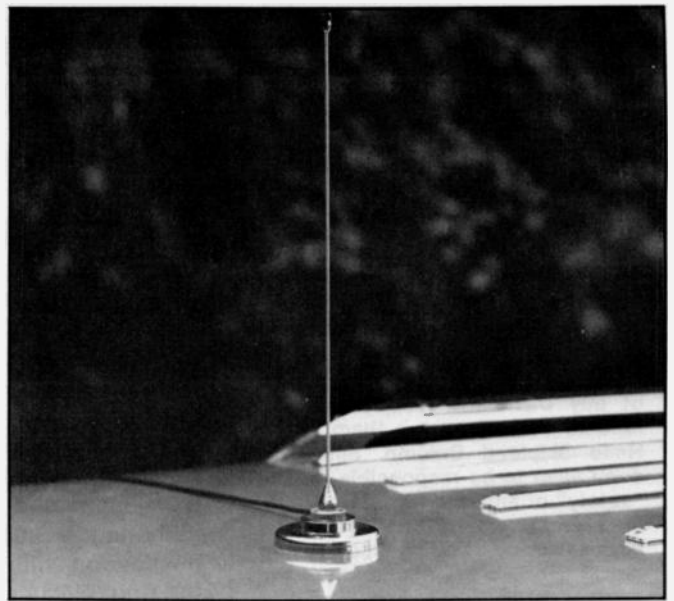
The D810 is available at a list price of \$499.95.

More information is available from Regency Electronics, Inc., 7707 Records Street, Indianapolis, Indiana 46226, or by marking 53 on the Reader Service card.

TRIPLE BAND MOBILE MONITOR ANTENNA

The new M-80 series tri-band mobile monitor antenna, just introduced by Armstrong Industries, Watseka, Ill., is claimed to provide up to 3.5 dB gain and covers HF (25-50 MHz), VHF (130-174 MHz) and UHF (450-512 MHz) bands.

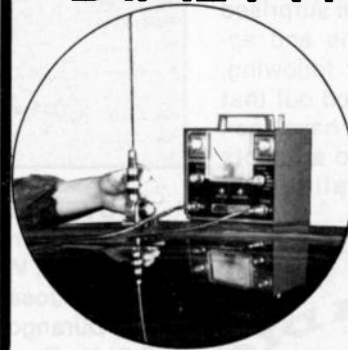
Available in magnetic or trunk lip mounting styles, the antenna has a 36½" stainless steel radiator and solid 18 gage copper wire load. The antenna whip has a ¾" x 24 thread and may be purchased separately for use with other Armstrong



mounts. All fittings are solid brass, chrome plated. Eighteen feet of RG-58AU coax with a standard Motorola connector is furnished for hook-up to any 3-band scanner.

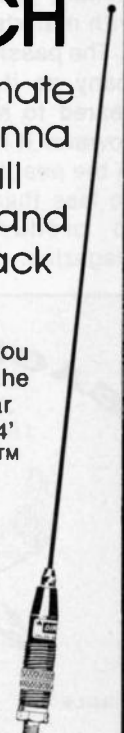
VSWR is 1.5:1 at 40 MHz, 1.12:1 at MHz and 1.02:1 at 480 MHz. Impedance is 50 ohms. For further information, contact: Armstrong Industries, P.O. Box 237, Route 24 West, Watseka, Ill., 60970.

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Valor keeps you in touch on the road with our newly designed foreign car and hatchback kits. Available in 2' and 4' lengths, the kits include a Dial-a-Match™ antenna and a new style hatchback or trunk mount design that rotates in 30° increments for best angle. Wafer co-ax termination and 18' black RG58 Valor-Flex cable with PL-259 connector. Fully pre-wired for easy installation. Visit your local Dealer or Contact:



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CIRCLE 12 ON READER SERVICE CARD

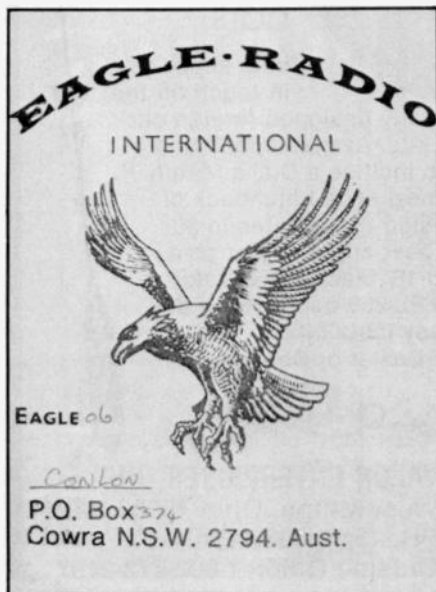
HELLO SKIPLAND!

By Craig, VX-42/Unit 342-X-ray/SSB-7042

Readers of this column are requested to let us know any overseas addresses they come across or hear on the air. We would also like to receive copies of any DX cards received by our readers so we can run them in the Hello Skipland Column. Since we don't wish to be responsible for the "safety" of any rare DX QSL's we request that readers send in copies (Xeroxes or other office type copying machine prints are fine) and not the original cards.

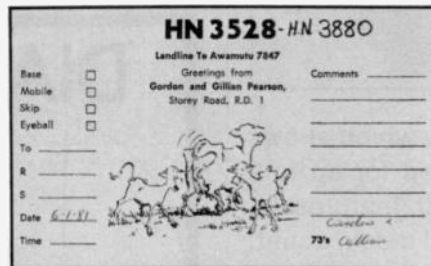
We have received word that Australia's fine CB publication *CB Action* decided to discontinue publication with its 54th issue. This is unfortunate since it was the only professionally produced English language CB publication published in the Southern Hemisphere. (Yes, we are aware of the small publication which comes from New Zealand but it can hardly be considered professionally produced and seems filled with material pirated from others).

The passing of *CB Action* surprised many as it was well done and appeared to have a popular following, however it has been pointed out that in the past five years there have been no less than 6 other failed attempts to produce an Australian CB magazine.



In an effort to attempt to fill the void left by *CB Action's* demise, an Australian CB'er named John Ham, with the "help of his friends," advises us that he will be producing a bi-monthly hobby publication called *CB Radio News*. This will be done on a trial basis and if it seems to be gathering a suitable response the publication will be continued after the first 3 issues. Price for the first 3 issues is \$2 (Australian funds) by surface mail anywhere in the world or \$5 in Australian funds for overseas airmail. The amount of \$5 in Australian funds is roughly equivalent to \$7 in U.S. funds; \$8 in Canadian funds—however they cannot accept checks as payment, cash only.

The address of *CB Radio News* is 18 Malvina Parade, Gorokan, N.S.W. 2263, Australia. We wish them luck!



OVERSEAS ADDRESSES

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UNIT 007, Brian, P.O. Box 227, Seaford, Vic. Australia
ALPHA 35, Adrian, P.O. Box 791, 1400 Germiston, Tvl., Rep. of S. Africa
WQD-4, Caixa Postal 212, Araras CEP 13600, Sao Paulo, Brazil

E.C.A. 58, Erik Rasmussen, Birkeveien 8, 5030 Landas Bergen, Norway
 INDIA GOLF 27, Werner Hanse, Marienstrasse 57, 2390 Flensburg, W. Germany
 SATURN, Stefan Harms, Christian-Lohse-Strasse 26, Itzehoe 2210, W. Germany
 BIG RED, Joan Hanse, 853 Springvale Rd., Mulgrave 3170, Vict., Australia
 SANDCASTLE 265, Francisco Antonio da Costa, Box 830, Campo Grande, Mato Grosso, Brazil 79100
 CARTOUCHE, Juul, Box 10, 3220 Aarschot, Belgium
 PAPA BRAVO PAPA, Petro Petrides, Box 61, Paleon Faligrion, Athens, Greece
 RED DEVIL, Mike Henderson, 5 Fitzgerald St., South Yarra 3141, Vict., Australia



WISKEY-SIERRA, Willy Schwind, P.O. Box 140, Ettelbruck, Luxembourg
 THE VIKINGS, Jan & Gunnel Andersson, P.O. Box 263, 510 52 Malsryd, Sweden
 (Jan & Gunnel were in Florida for 10 months and hope that the friends they made while they were stateside will keep in touch.)
 SSB-0198, Michael Thomsen, P.O. Box 221, Fredericia, Denmark 7000
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 MIKE VICTOR, Mario Viscardi, P.O. Box 299, Eikenhof 1872, South Africa



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 UNIT 31, Jihn Austin, Main Road, Emerald 3782, Vict., Australia
 SINBAD, Dietmar Jacobs, Haart 130, 2350 Neumunster 1, W. Germany
 LOK-1, Michael Forduhn, Namedorfstr. 16, 3000 Hannover 72, W. Germany
 SUSI 1, Susanne Parzybok, Russelstrasse 13, Bergkamen-Mitte, W. Germany
 PINGUIN 4, Karl Laier Jun., Wiesenbacher Strasse 23, 6903 Neckargemund, W. Germany
 SANDCASTLE 335, Marianne Granat, Box 67087 Bryanston, S. Africa 2021



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 WASA 2, Wolfgang Borner, Robert, Schumann Str. 18, 6520 Worms/Rh., West Germany

SMOKY, Rod Coote, Hauptstrasse 23, 3110 Uelzen 8, W. Germany
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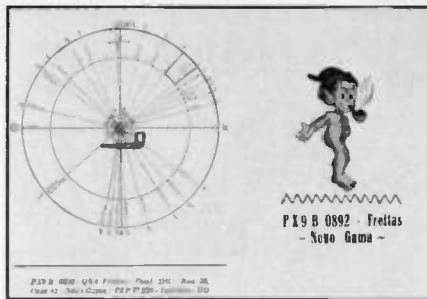
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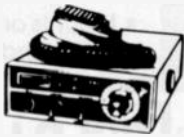
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As you tune the AM channels these days you'll note that a great many CB'ers are now using "Unit Numbers" in addition to or instead of "handles." Many people think "handles" have pretty much *had it*, as they are heavily duplicated and all-too-often difficult to copy through the chatter on a crowded channel, also, a growing number of operators tend to think of AM "Unit Numbers" as sounding a lot more professional and less "cutsey" than "handles." There are other advantages too, all of which makes the idea of "Unit Numbers" on AM channels sound even more appealing. For more information on AM "Unit Numbers" and an application for receiving or registering your own AM "Unit Number," send a self-addressed stamped return envelope to Z-Tech, P.O. Box 70-FXM, Hauppauge, NY 11788. AM "Unit Numbers" are a strong trend as CB Radio continues to evolve, expand, and mature.

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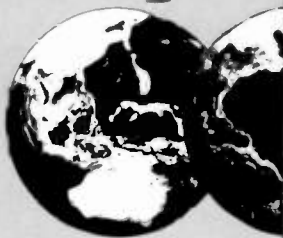
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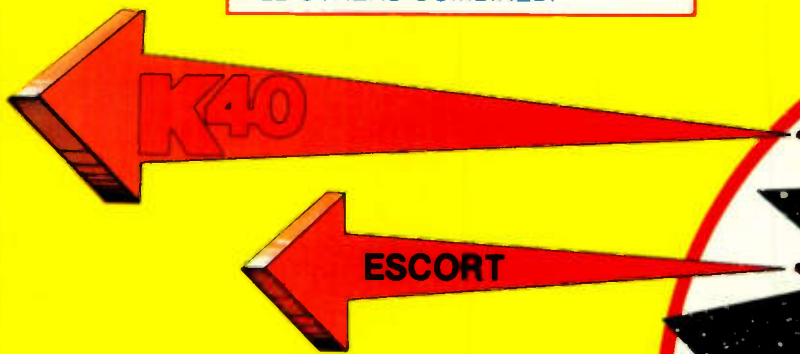
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AUTOTRONICS	1.30 MILES
FOX	1.25 MILES



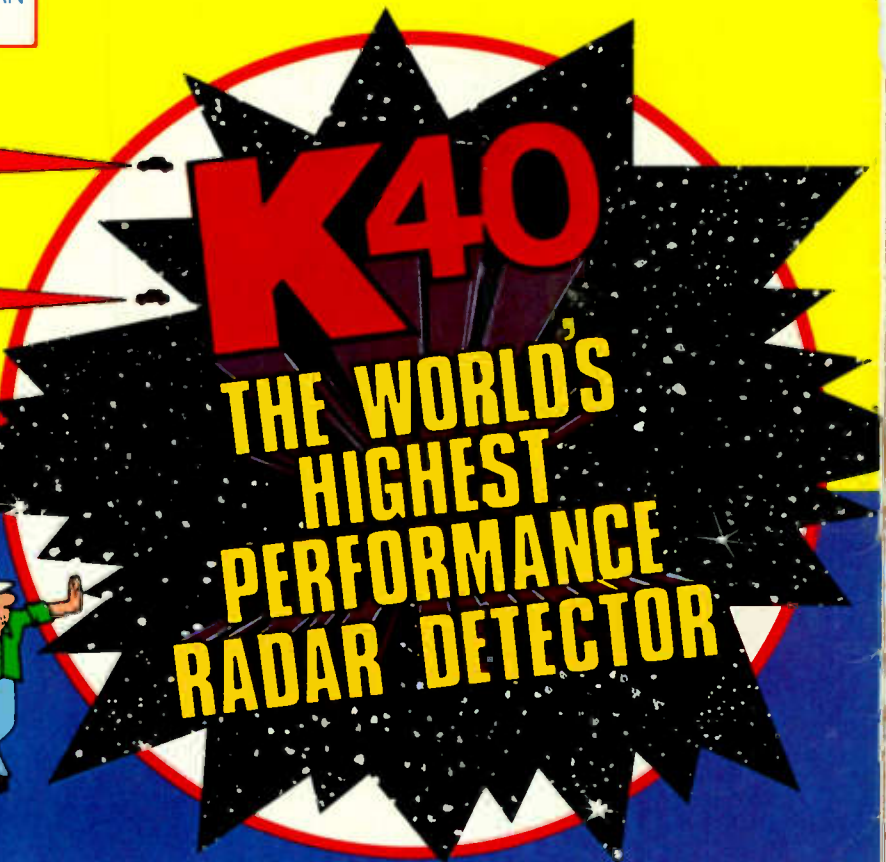
OUTPERFORMS ESCORT
 THE K40 OUTPERFORMED THE ESCORT 17% ON K-BAND AND 34% ON X-BAND. THE K40 AVERAGED 28% MORE DISTANCE THAN ESCORT AND 60% FURTHER THAN ALL OTHERS COMBINED.

*April 24, 1981 TKI International



\$380⁰⁰
 IT COSTS MORE BECAUSE IT'S MADE BETTER!

DOUBLE GUARANTEE
GUARANTEE 1: We're so convinced our K40 Radar Detector will Intercept Police Radar Better Than Any Commercial Radar Device, we'll allow you to test our K40 in your car for 7 days . . . If not satisfied with its performance, return to your K40 dealer who installed it for a prompt and full refund.
GUARANTEE II: Unconditionally guaranteed for 12 months. Guaranteed against cracking, chipping or rusting. Guaranteed against mechanical failure. Guaranteed against electrical failure. No exclusions. No gimmicks. For a FULL 12 MONTHS.



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