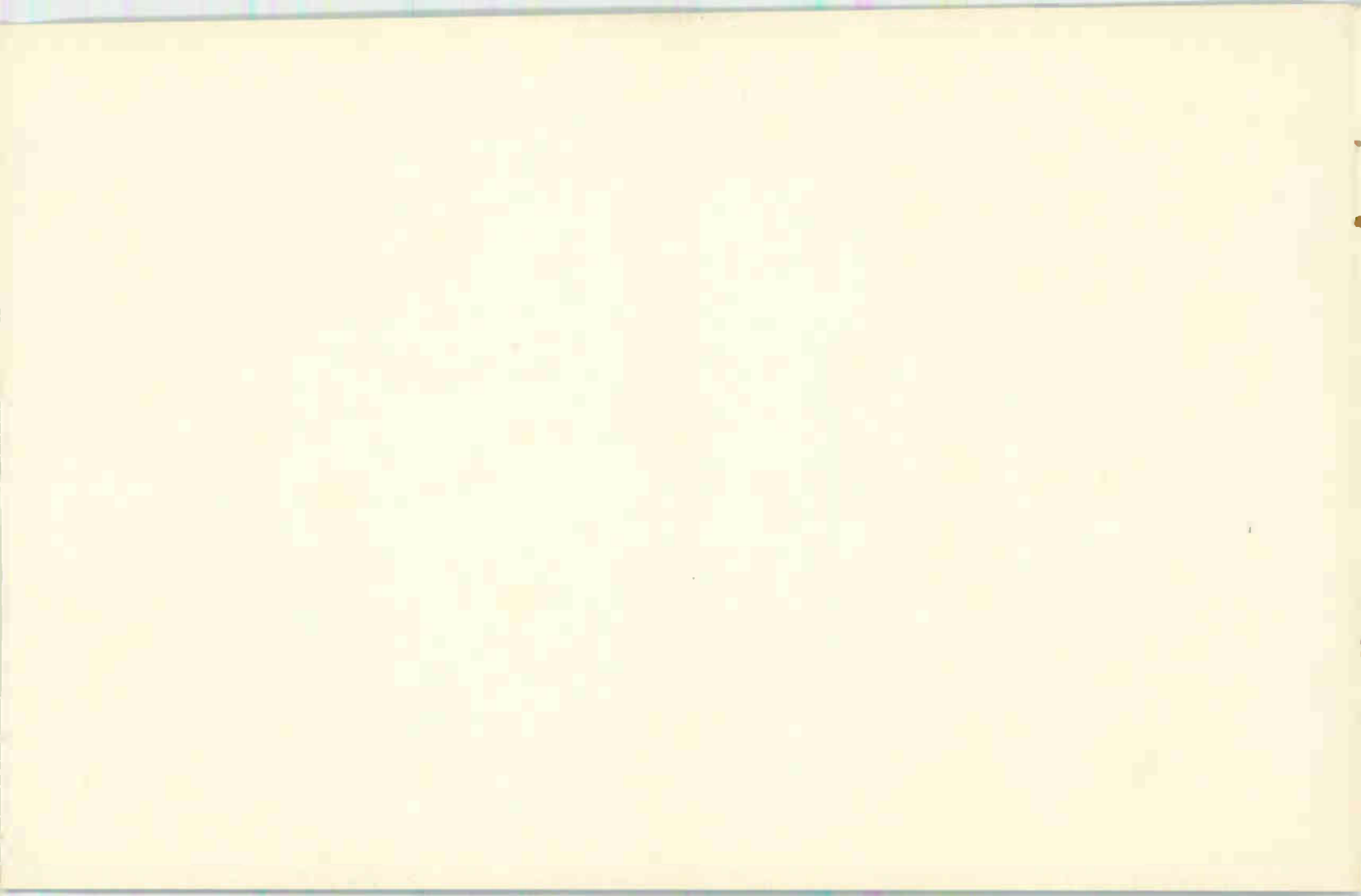




CB

**RADIO
GUIDE**

THE ASSOCIATED PRESS



CB RADIO GUIDE



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RADIO — All Around You, Everywhere

The air around you is alive — alive with the unheard sounds of music and voice, the chatter of interstate truckers, the sweeping chords of a concerto, the rattle of rock, and even the crackling whispers of distant stars.

Radio waves, unfelt, unseen, traveling at the speed of light — so fast that a music lover in California can hear the symphonic swirls of the Boston Pops sooner by a split second than can the concert-goer watching Arthur Fiedler conduct in the music hall where the sound travels through the air as vibrations.

Indeed, radio waves have changed modern life as much or more than nuclear weapons, gunpowder and all the lethal inventions of the last century. They have brought continents together, left no nation isolated from another. They have brought new ideas, teaching, medical advice, emergency information into the homes and schools of the most remote villages.

They are kin to the most exotic of energy-transferring rays, the laser beams that might one

day be used as weapons in space a la Flash Gordon and Buck Rogers. Yet they are as benign as the generator in your car, or a child's toy magnet, both of which create the kind of energy that can beam rays into space.

In the last ten years, just one tiny sliver of the spectrum of those radio waves has created a new popular movement, a commercial craze that by the end of 1976 had reached a dollar mark of \$3 billion. Today, Citizens Band radio is one of the biggest selling new electronic wonders. More than 70 firms make or import CB radios. It has become a tool and a toy, with its own special language and its own subculture.

An estimated 20 million Citizens Band radio sets were in use by 1977, and many more Americans than that were licensed to use them. The number grows with every month of every year. In fact in 1976 more Citizens Band radios were sold than in all of the 28 years that the radio bands had been available for the personal use of the American public.

Anyway you measure it, CB is a unique phenomenon. Industry sales topped a million units for the first time in 1973, more than doubled in 1974, doubled again in 1975, and again in 1976, reaching 10 million units a year.

The impact this has had on the nation can be measured by the forest of antennas moving down the highway. In 1974, one out of every 33 vehicles carried CB. By 1976, it was one of every 12.

In 1974, one of five interstate trucks carried CB. In 1976, three out of five long-haul trucks were CB-equipped, one out of every 11 passenger cars, four out of five recreational vehicles, one out of seven pleasure boats.

What makes CB so popular? Television commercials hint at the basic motivation of many CB'ers — almost a macho type of appeal, the fighter pilot in his cockpit radioing his wingmate that there are bandits at four-o'clock, or the besieged and beleaguered radio operator on a sinking vessel in a raging storm calling for help and sticking to his post. Or the winging camaraderie of the rough and tough truckers, students of the road who guide their ponderous rigs skillfully through

all kinds of weather and highway conditions. Or the mere fact that so many people feel alone and sometimes afraid on the endless ribbons of concrete that now span the nation where they might run out of gas, or blow a tire, stalled and stymied on an impersonal racetrack as night pressed in.

All of these overblown images have an element of truth to them. But the purposes of CB break down into three very ordinary words, very practical words, stripped of those emotional contexts. The words are — information, convenience, emergency.

Congress, in the Communications Act of 1934 said it simply, ordering the Federal Communications Commission “to make available, so far as possible, to all the people of the United States, a rapid, efficient . . . radio communication service.”

That, of course, included all kinds of radio service, some of which were probably not even in the dreams of the congressmen who passed the law. Today the radio waves carry everything from television programs to space communications. It is the FCC's job to divide up the available frequencies, govern their use, and make sure that every American's right to the airwaves is protected. CB

radio is just one slice of that great big pie, but an increasingly popular one.

Whatever the glamor and hobby aspects of CB radio, probably the greatest reason for its emergence as "everyman's" portable communications service is its practical utility. The driver of a CB-equipped vehicle is no longer alone. With CB "ears" or antenna, one can reach down the road to find out driving conditions from other drivers, hear about tie-ups caused by accidents, speed traps, detours. In short, CB ties drivers together, so that those trailing behind can hear of trouble before they get bogged down in it.

More important, CB is the avenue for highway cries for help. An estimated 40 million emergencies and requests for assistance were handled by CB radio in 1976. Seventy-nine percent involved road-related incidents, and a quarter of those were accidents. The various voluntary CB groups whose members monitor the airwaves for emergency calls now number over 3,000. And more and more law enforcement agencies are joining in the monitoring of Channel 9, the national emergency channel on CB radio. State Police in Arkansas, California,

Georgia, Maryland, Michigan, Missouri, Mississippi and Ohio have joined or have plans to join the informal CB network.

The value of this — the separation of the tool from the toy — can only be seen when that antenna-equipped car or truck stops at the scene of an accident on a lonely road, and in minutes summons help for the injured who might otherwise die. In this day, when medical techniques can pull people back from the edge of death, the urgency of that kind of communications is even more acute.

CB has other uses, less urgent but quite practical. The CB driver who has a home base station as well as a portable unit in his car can call ahead to give advance word of his arrival, or advise of his delay. Commercial drivers keep in touch with their dispatchers for information on other pick-ups and deliveries along their routes. In other words, CB saves trips and worry.

It is not, of course, a new thing. Even in 1974, one of 28 families in America had at least one CB radio, and in rural areas the number was one of 15. In Iowa alone, one of four vehicles was CB equipped.

One of the prime reasons truckers carry CB — and they were the ones who gave the first push to the current craze — was to cope with the national speed limit born of the oil crisis and the gasoline shortage and the need to keep on a tight delivery schedule. If that was a way of circumventing the law, it was also a useful tool in a period of adjustment. Today, the same forewarning of police presence and speed traps actually extends the arm of the law on the long stretches of highway that no force can effectively patrol. Instead of arresting a lot of people for breaking the speed limit, the presence of one patrol car “taking pictures” can slow traffic to the limit for miles beyond its location. And, for the driver in a CB convoy, his own foot on the gas pedal is no longer his only law. If he drives irresponsibly, he’ll hear it from others in his path. In other words CB has become an extension of the community on the road. The CB-driver knows he is no longer alone. And he no longer needs mutter “that crazy driver” to himself.

Just as important to the trucker is the ability to pass on word of road trouble or delay to his home base, or to his delivery point. Granted,

trucking is not a split-second business, but hours of delay because of a disabled rig can ruin a perishable cargo, or upset marketing plans in a super-market in a distant city.

When the truckers struck in those days of the new national speed limit and the gas shortage, Citizens Band radio became their medium of protest. But realistically it also helped at a time when road economy was essential. The resultant publicity, the popular songs of the road, the quaint lingo of the long-haulers carried on a broader message to others in automotive America, to businesses that operate fleets of vehicles or have employees on far-ranging assignments. Telephones are not always available.

For the average citizen who has installed a home station, as well as one in his car, a simple CB call can spare going out on errands when he gets home. It can alleviate worries when the weather is bad or roads are tied up. Convenience, whether it is stopping to pick up a quart of milk or summoning a tow truck, is part of CB appeal. And naturally, the more isolated an area in which a person lives, the more valuable CB becomes.

CB is not the answer to all things. But anyone can measure the utility of this kind of communications to his own life.

The mere fact of a two-way radio that can reach up to 150 miles away — sometimes — is its own excuse for being. It also says something for this democracy where the use of such a utility is open to all. Licensing is easy, a matter of filling out a couple of forms. The equipment is easy to use, no more difficult than any of the other electronic devices in our lives. And it is cheaper than color television.

Like anything else you buy, CB is offered with a hundred and one different frills and fancies. The wise buyer will choose carefully and pick out the kind of equipment appropriate to his needs. There's no sense to a 12-foot television screen in a ten-foot room. Besides, CB is something to share with the rest of the nation. Being a good neighbor begins here. Knowing the area in which you'll be doing most of your CB communications, and learning some simple rules of courtesy are part of owning and operating a CB set. If you want to be a "good buddy," be one.

A SHORT HISTORY OF RADIO

Man's knowledge of his world builds so slowly, one brick laid patiently upon another. In the early 1800's an American physicist, Joseph Henry, and a British physicist, Michael Faraday, working with electromagnets, discovered separately the theory that when a current is generated in one wire it can produce a current in another wire even when the two wires were separated by some distance.

The British physicist James Clark Maxwell suggested in 1864 that electrical impulses travel through space at the speed of light. A German physicist, Heinrich Hertz, had proved that Maxwell was right only 24 years later. Four years after that, a French physicist, Edouard Branly, invented a device that could pick up these radio waves and ring a bell.

In 1895, Guglielmo Marconi sent radio signals over a mile, and in 1901 received the first overseas radio message, from England to Newfoundland.

In 1900, Reginald Fessenden, a product of Thomas Edison's laboratory, demonstrated the

first voice broadcast, and five years later he broadcast phonograph music, the first disc jockey, but with a very tiny audience.

John Ambrose Fleming of Great Britain and Lee DeForest of the United States worked on and developed various vacuum tubes for radio reception and by 1908 the passengers and crew of the S.S. Republic were saved in the first sea rescue using radio.

By 1920, stations KDKA, Pittsburgh, and WWJ, Detroit, were making the first regular commercial broadcasts. The first network was established in 1923 and became the National Broadcasting Company in 1926.

In the years that followed, frequency modulation or FM transmission appeared. President Roosevelt spoke to an estimated 90 million people two days after Pearl Harbor. The transistor was developed in 1947. Radio moved into space with the rocket and broadcast back from the moon and Mars. Scientists built huge radio antenna to listen to the radio energy emitted from distant stars

partly in the hope that someone out there was talking.

The Federal Communications Commission established the Citizens Radio Service in 1947 to permit personal short distance radio for both business and personal use. There was only a limited band area provided and equipment was expensive and range limited.

In 1958, the FCC established Class D service, allocating frequencies formerly assigned to amateur radio. These were lower frequencies and provided more reliability and range. At the same time, technology was pressing ahead and developed transistorized equipment that made Citizens Band radio less expensive and more compact, less energy consuming.

Beginning in 1977, the FCC authorized the new use of channels that almost doubles the original 23 channels set aside for the Citizens Band. The new authorization adds available channels within the 23 channel range by allowing sets to split available carrier signals into upper and lower ranges. More about that later.

PUSH TO TALK

A lot of people have trouble understanding things they cannot see. So, naturally, a lot of people don't understand how that black box can pick up radio signals and turn them into sound. You don't have to understand how radio works to enjoy Citizens Band radio, but it helps.

Radio waves are a form of electromagnetic energy, and they can, by their nature, induce currents in any conductor they strike — like an antenna for instance. They recreate in the antenna the same characteristics that they had when they were transmitted.

When you push the PTT or Push To Talk button on your mike, it sets a number of events in motion. Your voice is converted in the microphone to weak audio signals which are then fed into an audio amplifier and boosted. Next the signal goes to the modulator, where it is wed to a carrier signal. The carrier signal is selected by you when you pick the channel you want to transmit on. Your selection keys a quartz crystal which begins to oscillate or vibrate in the selected frequency. That

signal is fed into the modulator and combined with the signal from your voice.

It is as if you called the tune by selecting a channel and the oscillator played it and your voice signal became the dancer.

The combined signal is fed into the power amplifier where it is boosted, flows through the coaxial antenna cable and out the antenna.

It radiates out at the specific wave length you selected and can be picked up by any conductor within your range. Suppose that you had picked Channel 11, which is the national "calling" channel. Suppose that someone down the road is "listening" to the same channel. Along with all the other signals zipping through the air is your call. It is received by his antenna, induces a weak but true signal and flows into the radio frequency amplifier of his set. It is boosted and sent to the mixer where his oscillator has told the set to select Channel 11 signals. Now amplified, your signal enters a detector which removes the carrier signal from the audio part of the signal, just as your modulator had

joined them together in the first place. The audio signal, after a trip through a noise limiter and an audio amplifier, now comes crackling through his loudspeaker: "Breaker one-one, this is KZR-4787. . ." And you are on the air.

Every set has some basic controls. There is an on-off switch, of course, and it may be part of your volume control. The volume control only raises or lowers the signal you hear. It doesn't do anything to the power you are putting out.

The channel selector is just as obvious in its function. It clicks as you turn it to the channel you want to use, ordering up the appropriate frequency from the oscillator.

The squelch control can cut out some of the background noise that your set picks up, and enable you to hear weak signals more clearly.

There are additional controls available to limit noise by blanking it out rather than reducing the level. There are fine tuning controls to help you zero in on stations whose signals may be slightly askew. There are RF gain controls to reduce the sensitivity of your receiver to strong signals and help eliminate noise. Some sets have a switch that

enables them to transmit at lower power for local calls so that you don't overload the airways.

In short there are many refinements available, some of which allow code or selective calling which enable you to avoid the flood of CB calls and recognize someone special who is trying to reach you.

There are also ways to monitor a second channel when you are using another one. Some sets monitor Channel 9, the emergency channel, and give it automatic priority.

Some sets are built to pick up special weather channels as well as CB channels. By carefully evaluating your needs, and the areas in which you are going to operate most of the time, you can almost tailor-make the kind of rig you want by selectively shopping for what's on the shelf. But it starts with you and the intelligence you apply to getting the right CB radio for your purposes.

The airwaves are there, reserved for your use. The quality and versatility of the set you choose will determine how much of that air space you can use.

Two things to look for in any CB are weight and power control. The generator and battery in your car will provide fluctuating levels of energy, depending on whether the car is moving, idling or the engine is off. Your CB radio should have a voltage regulator built-in.

CB radios are as much desired by thieves as by customers, and that's where weight comes in. Most CB owners find it provident to take their CB unit with them when they leave their vehicle, carrying it in an attache case for convenience. Obviously a heavy, bulky set argues against that. The CB thief is not finicky. He'll take anything that isn't driven into the ground. He also doesn't worry about weight, since he plans to unload his loot as soon as he can. So while the owner might one day forget to disconnect and carry his CB set with him if it is too heavy, the CB thief will not.

One more basic thing to check when you're shopping for a CB: CB radios are built for 12 volt systems, and if your car is old it may have only 6 volts, in which case you'll need a DC converter. Also your CB must be grounded to the frame of your vehicle. But it makes a difference whether your set is built for negative or positive ground, which refers to the side of the battery that is grounded, the positive or negative poles. The wisest choice is a set which will work with either ground, and additional protection against mistakes is available in sets with built-in safeguards against the reverse flow of electricity. That protection may be a fuse which will blow, or a block that will prevent the set from working if it is hooked up backwards. In either case the set is protected against damage.

“THIS IS MOTHER SUE-PERIOR”

That's the handle for a Roman Catholic mother of three daughters, and it proves one thing. CB is not for male machismo alone. “Mother Sue-Perior” is a girl named Sue who hails from Southern California, and who handled much of the family's CB talk during a recent vacation-trailer trip to Oregon.

Your handle, the name that you choose to be known by on the CB airwaves, usually tells something about your personality, or what you'd like your personality to be. Behind the relative anonymity of the CB microphone, some very shy people bloom into names like Passion Fruit, Captain Fantastic, Electric Lips and Love Bear.

They may be names your parents never gave you, but they are part of the CB mystique. Many of them go for alliteration, like Deputy Dog, Melancholy Monkey or Cadillac Cowboy, or simply Dum-Dum.

Whatever the handle you choose, your real name on the highways is your call sign, the letters and numbers assigned to your license. The Federal

Communications Commission requires that every transmission be identified by the call sign. So you might be the Cookie Monster, but you are also KEG 4321.

And when that gal named Sue signs off, she says, “This is Mother Sue-Perior, KVG 4356, down and gone.”

The Federal Communications Commission is very clear about the use of call signs, although in everyday CB talk a lot of people forget. It would be wise to get in the habit and spare yourself the chance of a fine or loss of license. The FCC rule is clear: “All transmissions from each unit of a citizens radio station shall be identified by the transmission of its assigned call sign at the beginning and end of each transmission or series of transmissions. . . .” The penalty is up to a hundred dollars, or worse, the loss of your air privileges.

Like any rule, whether on the road or on the sea or in the air, there are good reasons. Your handle is only an informal name, like John or Jane, and there will be other people with the same

name. But your call sign is yours alone. The call sign is also a way to trace those people who misuse the airwaves with abusive language or behavior. It is easy to get a CB radio and license. It doesn't require a psychiatric test. Perhaps in some cases it should. But the use of the call sign makes every transmitter accountable.

Wise CB operators will simply not communicate with stations that refuse to give their call signs. There are thieves and unsavory characters on the road. Besides, if no one talks to an individual who insists on breaking the rules, he'll have no choice but to get off the air.

By now everyone knows about CB language, good buddy. It's reached into everyday slang, and even youngsters use parts of it in daily conversation without benefit of CB. But for all its quaintness, CB language has a purpose. It is a concise, stylized way of getting information across. It should be. Its history is rooted in the road talk of truckers whose business it is to make time, drive efficiently and safely and stay out of trouble.

So while it sports phrases that sound furtive or evasive, those phrases are rooted in CB's history

more than today's necessity. Is there a cop in the country who doesn't know who Smokey is? Or what "put the pedal to the metal" means? Or that "double nickels" means the national 55 mile an hour speed limit?

Most of the language is just plain poetic common sense. Try "hole in the wall" for tunnel, or "hot pants" for fire or smoke in the engine. Or "skating rink" for a slick road surface. Can "fluff stuff" be anything but snow?

The trucker's legacy to CB talk is beautiful and kind, and is born of the fraternal feeling of the lonely cab and the long road. So some of the phrases have the feel of a warm fire on a dark night.

"Keep the bugs off the glass and the bears off your tail," means don't speed and don't get caught speeding. "Keep the greasy side down and the shiny side up," doesn't need an explanation in a business where accidents frequently mean death.

Roadside restaurants vary so much that people used to say that wherever the trucks stopped was good food. They should have known something about the trucker's stomach. His own lingo for

these culinary emporia says more about their variability: Coffee Pot, Chew and Choke, Bean Pot. And coffee, that pep pill of the highway, becomes mud, black water, road tar, thirty weight.

Much of the CB language reflects the truckers' preoccupation with police. Besides Smokey and bear, County Mountie means a sheriff, Cub Scouts are sheriff's men, Local Yokel is a small town officer, Tijuana Taxi is a marked police car, "bear in a plain blue wrapper" is a policeman in an unmarked blue car, camera and variations is radar. Spy in the sky, fly in the sky, eye in the sky are all police aircraft. Smokey on the ground is a dismounted trooper, Smokey on rubber is a trooper in his car, Smokey with ears is a trooper with a CB radio of his own.

Bubble gum machine is the flasher-light on police or other emergency vehicles, and feeding the bears is paying a fine.

Places get their own special designations. Flagtown is Flagstaff, Arizona. Dice City is Las Vegas. The Dirty Side is New York and New Jersey. The Shaky Side is the west coast. Circle

City is Indianapolis. Cigar City is Tampa, Florida. Chi Town is Chicago. Cin City is Cincinnati. Choo Choo Town is Chattanooga. B-Town is Birmingham, Alabama. Big A is Amarillo, Texas, or Atlanta, Georgia. Big D is Dallas. Big M is Memphis. Big T is Tucson. Hairy Town is Harrisburg, Pennsylvania, Cactus Patch is Roswell, New Mexico. Cactus City is Phoenix. Beertown is Milwaukee. Hilltown is San Francisco. The Bikini State is Florida. Astrodome City is Houston. Motor City is Detroit. Music City is Nashville. Mormon City is Salt Lake. Mardi Gras Town is New Orleans. Tinsel Town is Hollywood. It's Hot Lanta for Atlanta. Radar Alley is Interstate 90 running through Ohio.

Almost every element of a trucker's life finds its way into CB slanguage. Sleep and the lack of it, for instance. A trucker reports he's checking his eyes for pinholes. Cut some Z's is catch some sleep. Nap Trap is a motel or roadside rest area. Nod out is self-explanatory. Pajama Wagon is a tractor with sleeping space.

The road and the airwaves are to share, and the truckers know this better than anyone else. So

naturally CB jargon deals with sharing — and with those who don't.

On the CB airwaves, alligator, channel hog, motor mouth and ratchet jaw are clear enough for anyone trying to find some airspace. Jaw Jacking is idle talk on the airwaves. Let the channel roll, or lay down, means let someone else talk. Mike fright pertains to a shy or novice CB operator. A nickel's worth means five minutes of continuous conversation, the most the FCC allows. Pull the big switch, or cut the coax (pronounced co-axe) means to turn the CB off. Running barefoot is using CB without a license. A potty mouth or bucket mouth is a foul-mouthed operator.

When a CB'er refers to a bad scene, he talks about a badly congested radio channel. Road hog is self-explanatory, and rolling road block is a slow-moving vehicle. Roger Ramjet is someone exceeding the speed limit by over 20 miles an hour.

A lead pedal is a slow moving vehicle. A sheep herder is a driver of questionable ability. Rat race is the rush hour and an ulcer is heavily congested traffic.

CB language is nothing if it isn't colorful and descriptive. Fireworks are the flashing lights of several police cars. Willie Weaver is a drunk driver. Harvey Wallbanger is a reckless driver. Blinkin Winkin is a school bus. Big Rigger is an arrogant driver. Brush your teeth and comb your hair means shape up, there are smokeys around. A midnight shopper is a thief. Fuel is go-go juice or motion lotion.

The garage is a hangar. A bed bug hauler drives a moving van. A blown pumpkin is a flat tire, but donuts and tennis shoes are truck tires. A livestock hauler is a bull hauler or a shoat and goat man. A bone box is an ambulance or a hearse. Grass is the median of a highway, and dust is the other side. A haircut palace is a low bridge or overpass. When your truck is empty, you're hauling post holes or sailboat fuel. And when you're rolling at top speed, you've got one foot on the floor and one hanging out the door, and she just can't do no more.

A pepper shaker spreads cinder or ash on slippery pavement and a salt shaker spreads salt. A

trampoline is a rented bed at a truck stop. A twister or a mixing bowl is a highway interchange.

The FCC doesn't like people using bad language on the airwaves, and no one else does either. So "Mercy" with various inflections has replaced everything else. Negatory sometimes doubles for negative, a reverse form of affirmatory. Something over your shoulder is behind you. The FCC comes in for some CB banter, too. It is The Friendly Candy Company, now shortened to Candy Man, or in some cases Uncle Charlie.

As much as the truckers have lent their culture to the airwaves, so have the police and radio operators. The police 10-code is useful to know. The CB 10-code differs in some respects, and it is wise to use only ten numbers that are pertinent to avoid confusion. For instance, when the police report ten-ten, they mean a fight is in progress. But in the CB code it means message completed, standing by. Ten-11 to the police means a dog case. But to the CB'er it means speak more slowly. And to the CB'er 10-89 means a radio repairman is needed. But it means a bomb threat to the police.

HOW TO TALK ON CB AND HOW TO CONVOY

Channel 19 is the busy mobile channel on the spectrum of CB frequencies. This is the trucker's channel, and it is the one most likely to give you information on the road ahead as you listen to the trucks and other motorists report what they see.

This is also the channel most likely to be filled with CB jargon, and one of the most crowded. So the CB'er should keep his requests and his answers concise and precise. In some areas Channel 10 is also an important mobile channel.

Channel 11 is designated as the national calling channel by the FCC. That means it is not for extended conversations. It is used to establish contact with another party, and then both parties move to another channel to talk.

It can also be used for radio checks, a way of finding out how well your set is sending. To ask information, wait until the channel is clear and broadcast, "Breaker 11. This is KVG 7654 for a radio check."

If the channel is not clear you will be asked to hold or stand by until it is. If it is clear, you will probably get an immediate reply from a good buddy nearby. He will identify himself by his call sign and handle and tell you to go ahead. You ask him how you are being received. If you are coming in strong, he'll say, "Wall to wall and ten feet tall," and probably add the meter reading.

Or suppose you want to join a convoy. You dial Channel 19, and wait for a break in conversation. then you come on: "Breaker one-nine. This is KVG 7645 for an eastbounder on interstate four-nine-five."

You've identified yourself and asked for a break on Channel 19, given your direction and highway. The reply from someone headed in the same direction of I-495 might be: "10-4, breaker. This is ZHJ 8643, The Mother Sue-Perior, north-bound on four-nine-five at mile marker three-five. What's your 20? Bring it on."

He's identified himself properly, given his location and by asking your "20" wants to know yours. You come on: "Entering the fast triple-

track from the twister at mile-marker two-nine. Do you have a front door? C'mon."

You've given your location and asked if there is a convoy leader ahead "beating the bushes" for Smokeys or on watch for problems ahead. Your Good Buddy will come back:

"Roger, our front door is Hardnosed Harry, and he reports that you are the new "back door" and have to keep your eyes peeled over your shoulder for Smokeys on rubber. He will sign off and say he is "on the side" or "10-10," which means he has ceased transmission but is listening.

The convoy has a front door looking for problems ahead, a back door looking for trouble from behind, and everyone else is in "the rocking chair," protected fore and aft.

Of course the back door doesn't just look out for Smokies. He keeps an eye open for approaching emergency vehicles with lights flashing like ambulances and irresponsibly-acting drivers who are overtaking the convoy and should be given a wide berth. While the CB'ers say the front door is beating the bushes, the back door is raking the leaves.

If there is no convoy when you hit the highway, you can form one easily enough, just by establishing which CB vehicles are in range, who is in front and who is behind. When a convoy stretches out beyond CB range, it is the duty of those in the rocking chair to relay messages from front and back doors.

The fact that Smokey alerts exist doesn't answer the question as to whether they are legal or not. In some states, CB'ers have been prosecuted successfully for alerting others to Smokies with radar gear. But many law enforcement officers see the CB'ers in a positive light. They can't be everywhere, but if the CB network reports their presence, an awful lot of vehicles slow down for miles beyond a police car's enforcement range. Their job is to prevent accidents, not just to arrest lawbreakers, and CB radio helps them do their job. Also a growing number of police cars carry CB too, white rabbits with ears they are called sometimes. And they can pick up a lot of CB goings-on.

They also recognize the good work that CB'ers do in the emergency field, and as an aid to law enforcement.

There are some simple bits of CB jargon that will help in everyday conversations, like break or breaker to get someone's ear. If you're looking for someone in particular, go to Channel 11 preferably, and ask for whatever handle it is to "answer his phone" or simply broadcast blind that "I'm looking for one 'Mighty Mouse,' " or whatever your Good Buddy's handle is.

When you've asked a question or expect a reply, say simply, "Go" or "Come on." Or, if you're asking whether you were received, say, "Do you read?" or "Got a copy?"

If your answerer says you got stepped on, he means your signal was covered by interference and he may ask you to "Say again" or "Bring it back."

There are so many ways to say "okay," from roger to 10-4, or any combination of roger and four. When you're signing off, say clear or gone or down. If you're standing by, give a 10-10 or an "on the side."

Or extemporize with your thanks or your good wishes.

One thing is most important about CB. While you should know how to talk on it, it is more

important to know how to listen. In populated areas, on superhighways, you can frequently get the information you want about road conditions just by tuning in on channel 19. You may not be able to find out a good steak house without asking,

but frequently a good ear will tell you how clear the road is, or what the pavement conditions are or whether there is trouble ahead. And it takes some of the pressure off the channel as well.

CHANNEL 9—EMERGENCY!

Channel 9 means emergency and nothing else.

The FCC set up this channel as the national emergency frequency for Class D CB use and it has come to mean a valuable national communications resource. Above all other channels, the integrity of this one must be respected.

With some 20 million CB sets operating in the United States, you can understand the impact Channel 9 has, even if only a small percentage of sets monitor it.

And the recorded instances of saved lives and disasters met and criminals apprehended are legion. It can also get the CB operator help too, if immediate action is required. But the circumstances must be urgent and critical.

Several national organizations have been set up to monitor Channel 9 and provide further transmission of emergency calls. One of these is REACT, the Radio Emergency Association Citizens Teams.

Its teams replaced the downed telephone wires in the terrible Xenia, Ohio, tornado, and have even reached out into the Atlantic to relay word of disabled boats. REACT claims 70,000 members, has a working relationship with the American Red Cross, and in some areas with the Civil Air Patrol.

ALERT, the Affiliated League of Emergency Teams, is smaller with some 14,000 members. But together with REACT and other radio groups they form a human framework that makes Channel 9

work, and work on a 24-hour basis. Not that individual CB'ers can't contribute. In fact, REACT has formulated some specific rules for anyone reporting an emergency or aiding in it.

Basically, however, REACT asks its members and others to respect the nature of an emergency call, not to panic, nor let your ego take hold. You are doing a duty for a fellow citizen and his life may depend on it. That should be satisfaction enough.

Stay calm, and keep your report concise and precise. Be courteous and respect the fact that someone else's priority may come ahead of yours. His case may be more grave or more urgent. To aid in precision, make numbers precise digit by digit, as in Interstate nine-oh. Static and other noise can create havoc with your signal picked up on a distant set.

When possible, use phonetics to spell out names or places, so there will be no doubt and no confusion.

Any clear phonetic system will do, but the International Phonetic Alphabet is the most widely

uniform system used. It appears on page 26. When you receive a message, repeat it if time permits to make sure you have it right. If you are close enough to a telephone, don't bother with your CB. Report the trouble to the appropriate authority by phone. That will avoid delay, insure accuracy and keep Channel 9 free for other trouble.

Common sense should tell you what is important and how important in terms of an emergency. Obviously situations involving loss of life or property come first.

Situations that could be dangerous come next whether it is a vehicle on the highway that endangers other traffic or a person in something other than immediate and imminent danger. The FCC is clear:

All Citizens radio stations shall give priority to the emergency communications of other stations which involve the immediate safety of life of individuals or the immediate protection of property.

The FCC does not permit the use of the international distress signal Mayday or any other distress signal unless the station is broadcast from boat, plane, or other such vehicle threatened by

grave and imminent danger, asking immediate assistance.

You would no more broadcast Mayday when your car is skidding out of control, than you would use Channel 9 to broadcast the fact that it is snowing.

Keep a list of emergency telephone numbers with your CB set, and in your local area think ahead to what you would do if you encountered an emergency. If the police in your area monitor CB's Channel 9, that is important to know. If they do not, you will be faster getting to a phone or getting the information to someone who has a phone.

Countless people have been helped by CB's Channel 9. Cars on fire at roadside, people in a hurry to get to hospitals, boats in trouble, even an injured mountain climber, lost hunters, lost children.

The Highway Association Modulators is a tight group of individuals and teams in both the United States and Canada, requiring teams of at least five members. There are also at least two organizations which provide community watches

against crime and aid the police. They are Community Radio Watch and the Highway Radio Patrol International.

The experience of all of these organizations should be heeded. Don't use Channel 9 as a locator for trouble. Unless you are asked, stay away from the scene of an accident or disaster if the authorities are already there.

Don't try to play cop. Call the police. Don't move an injured person, unless he is in peril if he is not moved. If you do arrive at the scene of an accident, park off the road and ahead of the cars in trouble.

Very often your CB radio is the fastest, best way to bring the most appropriate help to an accident. That should be your first thought.

CB is of only limited use in marine accidents or boats in trouble. Some boats carry CB sets, but the U.S. Coast Guard prefers the use of VHF Marine Channel 16, which is not in the CB frequency band. One of the drawbacks of CB is its limited range. That does not mean you don't report a boat in trouble if you know of one. When you

do, follow the same rules for precision and conciseness you would on the road. Make certain to iden-

tify yourself, give your location, what the nature of the trouble is, and what you intend to do about it.

GO LICENSE YOURSELF

There are three things that adult Americans can have for the asking: the vote, a social security number, and a license to talk.

You have to wait for the first two until the bureaucracy processes your application. But the license to talk — on the air — you can get for the price of a letter, instantly.

In short, you can go license yourself.

It requires two simple forms. The first is FCC Form 555-B, and when you have filled it out, you will keep it as your Temporary Permit to operate your Class D Citizens Band Radio. You must certify that you are at least 18, do not represent a foreign government, have applied for a permanent license, and have not been in trouble over the operation of radio facilities.

Your temporary permit will carry your temporary call sign after you have filled it out. Simple.

The call letter K plus your first and last initials and your zip code. KJB-11050.

At the same time you fill out Form 555-B, you must also mail Form 505, your application for your regular license. Again, simple. Your first name, middle initial, last name, printed or typed in the boxes the form provides. Date of Birth — 12-31-28. If you are registering as other than an individual, put the name in Item 3. Mailing address goes in Item 4. Check state abbreviations used by FCC.

Item 5 is a little unusual. If you give a rural delivery route, a general delivery number, or a post office box in Item 4, the FCC wants to know specifically where you can be found. So, as the FCC indicates, Item 5 should say something like Rt. 2, 3 miles north of York.

Item 10 should be read carefully.

When you sign, you are certifying that you are a qualified applicant, that you will order

and read the rules (Part 95, *Regulations*), that you will follow the rules and not abuse the privilege. Note that (in large print) the form says clearly that willfully false statements are punishable by fine and imprisonment. Don't fool around with Uncle Charlie, as CB'ers call the FCC.

But once you mail your Form 505 and fill out your temporary Permit, you are in business. You, or members of your family living at your residence, or your employees, regardless of whether they are yet 18, can use your radio station or stations. You can use five stations with your temporary permit, and as many as you have requested when the FCC approves your Form 505. You agree to let the FCC inspect your station and your station records, and the temporary permit should be kept in a safe place. You can make photocopies of the permit to keep with the station or stations. The location of the original temporary permit should be noted on the photocopies. Your set should also carry a card with your name, address and temporary call sign.

Additional copies of *FCC Regulations* (Part 95) can be ordered from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. The price is \$1.50, payable by check or money order with your request. Ask for Stock Number 004-000-00324-1. Part 95 is revised annually, and prices are subject to change. Please notice that you are **REQUIRED** to order up a copy of Part 95. The copy we have provided frees you of that requirement.

Because of the flood of license applications, the FCC has given its Gettysburg office handling those applications its own zip code. The address is FCC, Gettysburg, Pa. 17326. All other mail should be addressed to FCC, Gettysburg, Pa. 17325.

Lest you think of the FCC as a formal and forbidding organization, you might consider the fact that its old address for Citizens Band applications was Post Office Box 1010. Ten-ten in the ten code means "transmission completed, standing by." The reason for the new address was that too many people were standing by for too long.

SMOKEY'S A FRIEND

More and more Smokey is finding CB radio a friend indeed. Fort Worth, Texas, police patrolling the freeway use CB, and it plugs them into the road community. Their handle is "Chase One" or "Chase Two."

When these Smokies need a clear path, they simply put the word out on CB, and it is passed

down the line: "Breaker one-nine eastbounders. Please pull right. Chase One's running hot at your tailpipe on a call. Can you give him some daylight?"

That incident, reported in *The Arizona Republic* by CB columnist E.Z. Strange, ended with Smokey's terse gratitude: "I thank you. We gone."

SOME TIPS

The Electronic Industries Association, which represents CB manufacturers, offers these tips for CB highway users.

—Limit your conversations on the trucker channels (usually 19 and 10) to getting or giving directions and reporting emergencies and road hazards.

—Only use Channel 9 for emergency purposes.

—Always use your call letters when reporting a problem. Report your precise location. If the channel is in use, call for a "break."

—If there is an emergency in your area, don't add to the congestion. Don't slow down to gawk or try to render assistance you aren't qualified to provide. On the other hand, if the accident or breakdown is in an isolated area and there is need for assistance, calling in isn't enough. Stop immediately and see what help you can provide until the professionals arrive.

—Law enforcement officials emphasize that the most effective assistance CB'ers provide is in the form of reports identifying drunk and unsafe

drivers or speeders, hazardous road conditions, accidents, the need for an ambulance or other

emergency vehicle, potentially dangerous obstructions on the highway, or stranded motorists.

YOUR CB SET WHAT TO LOOK FOR

On January 1, 1977, the Federal Communications Commission opened up 17 additional channels for Citizens Band radio use. The move simply allowed the splitting of the former channels into two parts, permitting a more efficient use of allotted frequencies.

But for the CB buyer, it poses some questions. Should he put out up to \$500 for a new 40-channel model? Should he have his old 23-channel model modified by the manufacturer for about the same cost as a new model? Should he be happy with the old 23-channel model, costing something like \$150?

Each buyer has to answer those questions for himself. The reason for expanding the number of channels was simply that there were 20 million CB users and things were getting crowded. For the time being, those buying the new 40-channel sets should

reduce some of the pressure on the original 23 channels. In some areas, especially rural geographies, there isn't much overcrowding on the original 23, and thus no real need for the additional channels. Each buyer has to measure his present and future needs for himself. Talk to other CB owners when you are ready to buy your set to get an idea of what the CB population pressures are in your area. It could be 23 channels are enough.

"More and more people are coming to realize that 23 channels are adequate in less congested areas," says John Sodolski, vice president of the Electronic Industries Association's Communications Division. "The existing channels will be increasingly easier to use and less crowded after the additional ones are made available."

The difference in price is considerable — on the average something over \$200 — so it is not a casual decision. It can be likened to the difference between buying a good black and white television set, or putting out some more money for color.

The essential channels are available on either set — the highway or truckers channel 19 and emergency channel 9. The other talk channels are the ones being split to provide more voice room.

UNCLE CHARLIE HAS EARS TOO

The Federal Communications Commission gets an awful lot of mileage from its enforcement teams, and they range far and wide to keep the CB airwaves clean.

There are four teams, based in Long Beach, California, Grand Island, Nebraska, Laurel, Maryland, and Powder Springs, Georgia. Each team has eight to nine members.

They move in unannounced in any area and monitor CB conversations. They take notes. The final stage of their investigation is zeroing in on violators or suspected violators and inspecting stations. They may be on location a few days or many.

They patrol in unmarked cars, and sometimes a monitoring truck. They are equipped with radio

direction finders, and they can easily pinpoint base station violators.

Probably the most frequent violation is failure to identify, using a handle and neglecting to use the station call letters. Second, probably, is a violation of the five minute rule on transmission time. Other violations are an indication the station is using excessive power, has too high an antenna and is transmitting too far.

CB interference with television is generally handled by FCC field offices, acting on complaints written or telephoned in.

When a foul mouth defiles the airways, and the field enforcement teams hear him, they may move in, or they may only identify him and tape

record his transmissions. It is a criminal offense, and the FBI is the prosecuting body.

When the special teams have found a violator, he will receive one of two forms. Form 793 lists the violation, and gives the violator ten days to respond, after which the FCC may or may not take further action. Form 793L is a Notice of Apparent Liability. The suspected violator may deny the field team's findings and ask for a hearing. He may admit he was in violation. In any case he is subject to a fine of \$50 per set.

"We can pretty much saturate an area when

we move in," an FCC spokesman says. Admittedly the prime enforcement value is the randomness of the field checks. You never know when Uncle Charlie is listening.

Lest he sound like a bugbear, Uncle Charlie is compassionate too. He is most reluctant to lift your license, unless you really deserve it.

In the fiscal years 1972-76, there were 40,197 violations reported, and 13,808 notices of violation issued. In the same period, there were 507 licenses revoked.

INTERNATIONAL PHONETIC ALPHABET

(A) ALPHA
(B) BRAVO
(C) CHARLIE
(D) DELTA
(E) ECHO
(F) FOXTROT
(G) GOLF
(H) HOTEL
(I) INDIA
(J) JULIETTE
(K) KILO
(L) LIMA
(M) MIKE

(N) NOVEMBER
(O) OSCAR
(P) PAPA
(Q) QUEBEC
(R) ROMEO
(S) SIERRA
(T) TANGO
(U) UNIFORM
(V) VICTOR
(W) WHISKEY
(X) XRAY
(Y) YANKEE
(Z) ZULU

FCC FORM 505

APPLICATION FOR CLASS C OR D STATION LICENSE IN THE CITIZENS RADIO SERVICE

April 1976

INSTRUCTIONS

A. Print clearly in capital letters or use a typewriter. Put one letter or number per box. Skip a box where a space would normally appear.

B. Enclose appropriate fee with application. Make check or money order payable to Federal Communications Commission. **DO NOT SEND CASH.** No fee is required of governmental entities. For additional fee details see FCC Form 76-K, or Subpart G of Part 1 of the FCC Rules and Regulations, or you may call any FCC Field Office.

C. Mail application to Federal Communications Commission, P.O. Box 1010, Gettysburg, Pa. 17325

NOTICE TO INDIVIDUALS REQUIRED BY PRIVACY ACT OF 1974

Sections 301, 303 and 308 of the Communications Act of 1934 and any amendments thereto (licensing powers) authorize the FCC to request the information on this application. The purpose of the information is to determine your eligibility for a license. The information will be used by FCC staff to evaluate the application, to determine station location, to provide information for enforcement and rulemaking proceedings and to maintain a current inventory of licensees. No license can be granted unless all information requested is provided.

1. Complete **ONLY** if license is for an individual or Individual Doing Business AS

FIRST NAME

INIT

LAST NAME

2. DATE OF BIRTH

MONTH

DAY

YEAR

3. Complete **ONLY** if license is for a business, an organization, or Individual Doing Business AS

NAME OF BUSINESS OR ORGANIZATION

4. Mailing Address

4A. NUMBER AND STREET

4B. CITY

4C. STATE

4D. ZIP CODE

(See reverse side of this form, for filling in Item 4C.)

5. If you gave a P.O. Box No., RFD No., or General Delivery in Item 4A, you must also answer items 5A, 5B, and 5C.

5A. NUMBER AND STREET WHERE YOU OR YOUR PRINCIPLE STATION CAN BE FOUND

(If your location can not be described by number and street, give other description, such as, on RT. 2, 3 mi., north of York.)

5B. CITY

15 empty boxes for city name

5C. STATE

2 empty boxes for state

(See reverse side of this form for filling in Item 5C.)

6. Type of Applicant (Check Only One Box)

- Individual
- Association
- Corporation
- Business Partnership
- Governmental Entity
- Sole Proprietor or Individual/Doing Business As
- Other (Specify) _____

7. This application is for

- New License
- Renewal
- Increase in Number of Transmitters

**IMPORTANT
Give Official FCC Call Sign**

7 empty boxes for call sign

8. This application is for (Check Only One Box)

- Class C Station License
(NON-VOICE—REMOTE CONTROL OF MODELS)
- Class D Station License (VOICE)

9. Indicate number of transmitters applicant will operate during the five year license period (Check Only One Box)

- 1 to 5
- 6 to 15
- 16 or more (Specify No. and attach statement justifying need.)

10. CERTIFICATION I certify that:

- The applicant is not a foreign government or a representative thereof.
- The applicant has or has ordered a current copy of Part 95 of the Commission's rules governing the Citizens Radio Service. See reverse side for ordering information.
- The applicant will operate his transmitter in full compliance with the applicable law and current rules of the FCC and that his station will not be used for any purpose contrary to Federal, State, or local law or with greater power than authorized.
- The applicant waives any claim against the regulatory power of the United States relative to the use of a particular frequency or the use of the medium of transmission of radio waves because of any such previous use, whether licensed or unlicensed.

THIS APPLICATION WILL NOT BE PROCESSED UNLESS SIGNED AND DATED.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ATTACHMENTS ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.



11. SIGNATURE	12. DATE
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Signature of: Individual applicant, partner, or authorized person on behalf of a governmental entity, or on officer of a corporation or association

Sometimes it becomes necessary to return an application. By putting your name and address in the area below, you will enable us to return quickly any application which needs correction or clarification: 1) Put your name on the first line in regular order (for example, Joe Doe); 2) Put your number and street on the second line; 3) Put your city, state, and zip code on the third line.

If necessary, use abbreviations to stay within the guidemarks provided.

ORDERING PART 95 OF THE FCC RULES AND REGULATIONS

The 1976 edition of Part 95, Citizens Radio Service, is for sale at \$1.50 per copy. Order from: Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. Order by Stock Number: 004-000-00324-1 PLEASE NOTE: Part 95, Citizens Radio Service, is revised annually. The prices of government publications are subject to change without notice. Therefore, the price charged for 1977 and later editions may differ from that shown for the 1976 editions.

For Items 4C and 5C: use the two-letter state abbreviations below for filling in these items.

Alabama	AL	Kentucky	KY	Ohio	OH
Alaska	AK	Louisiana	LA	Oklahoma	OK
Arizona	AZ	Maine	ME	Oregon	OR
Arkansas	AR	Maryland	MD	Pennsylvania	PA
California	CA	Massachusetts	MA	Puerto Rico	PR
Colorado	CO	Michigan	MI	Rhode Island	RI
Connecticut	CT	Minnesota	MN	South Carolina	SC
Delaware	DE	Mississippi	MS	South Dakota	SD
District of Columbia	DC	Missouri	MO	Tennessee	TN
Florida	FL	Montana	MT	Texas	TX
Georgia	GA	Nebraska	NB	Utah	UT
Guam	GU	Nevada	NV	Vermont	VT
Hawaii	HI	New Hampshire	NH	Virginia	VA
Idaho	ID	New Jersey	NJ	Virgin Islands	VI
Illinois	IL	New Mexico	NM	Washington	WA
Indiana	IN	New York	NY	West Virginia	WV
Iowa	IA	North Carolina	NC	Wisconsin	WI
Kansas	KS	North Dakota	ND	Wyoming	WY

TEMPORARY PERMIT

(Do not use for license renewals)

If you will use a Temporary Permit, FCC Form 555-B, complete the following:

I hereby request a temporary permit pursuant to my certification
on FCC Form 555-B.

My temporary call sign will be

K





CB RADIO GUIDE

FCC RULES AND REGULATIONS

THE ASSOCIATED PRESS

The material in this booklet, extracted from the Federal Register, Vol. 42, No. 27 (Wednesday, February 9, 1977), states the FCC rules and regulations pertinent to the operation of citizens band radio.

FCC Regulations, Part 95

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- ### APPLICATIONS AND LICENSES
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Subpart D — Citizens Band (CB) Radio Service

GENERAL

§ 95.401 Basis and purpose.

These rules are designed to provide a private short-distance radiocommunications service for the business or personal activities of licensees, all to the extent that these uses are not specifically prohibited in this part.

§ 95.403 Definitions.

For the purpose of this part, the following definitions shall be applicable. For

other definitions, refer to Part 2 of this chapter.

(a) Definitions of stations.

Citizens Band (CB) Radio Service station. A station in the Personal Radio Services licensed to be operated for radiotelephony only, on an authorized frequency in the 26.96-27.41 MHz band.

Mobile Station. A station intended to be operated while in motion or during halts at unspecified points.

(b) Miscellaneous definitions.

Antenna structures. The term "antenna structures" includes the radiating system, its supporting structures and any appurtenances mounted thereon.

Control point. A control point is an operating position which is under the control and supervision of the licensee, at which a person immediately responsible for the proper operation of the transmitter is stationed, and at which adequate means are available to aurally monitor all transmissions and to render the transmitter inoperative.

Dispatch point. A dispatch point is any position from which messages may be transmitted under the supervision of the person at a control point.

External radio frequency power amplifiers. As defined in § 2.815 (a) and as used in this part, an external radio frequency power amplifier is any device which (1) when used in conjunction with a radio transmitter as a signal source is capable of amplification of that signal, and (2) is not an integral part of a radio transmitter as manufactured.

Harmful interference. Any emission, radiation or induction which endangers the functioning of a radio-navigation service or other safety service or seriously degrades, obstructs or repeatedly interrupts a radio-communication service operating in accordance with applicable laws, treaties, and regulations.

Man-made structure. A man-made structure is any construction other than a tower, mast or pole.

Omnidirectional antenna. An antenna designed so the maximum radiation in any horizontal direction is within 3 dB of the minimum radiation in any horizontal direction.

Person. The term "person" includes an individual, partnership, association, joint-stock company, trust, or corporation.

Remote control. The term "remote control" when applied to the use or operation of a personal radio services station means control of the transmitting equipment of that station from any place other than the location of the transmitting equipment, except that direct mechanical control or direct electrical control by wired connections of transmitting equipment from some other point on the same premises, craft or vehicle shall not be considered to be remote control.

Single sideband emission. An emission in which only one sideband is transmitted. The carrier, or a portion thereof, also may be present in the emission.

Double sideband emission. An emission in which both upper and lower sidebands resulting from the modulation of a partic-

ular carrier are transmitted. The carrier, or a portion thereof, also may be present in the emission.

Station authorization. Any construction permit, temporary permit, license, or special temporary authorization issued by the Commission.

APPLICATIONS AND LICENSES

§ 95.411 Eligibility for station license.

(a) Subject to the general restrictions of § 95.413, any person is eligible to hold an authorization to operate a station: *Provided*, That if an applicant for a station authorization is an individual or partnership, such individual or each partner is eighteen or more years of age. An unincorporated association, when licensed under the provisions of this paragraph, may upon specific prior approval of the Commission provide radiocommunications for its members.

NOTE: While the basis of eligibility in this service includes any state, territorial, or local governmental agency, or any agency operating by the authority of such governmental entity, including any duly authorized state, territorial, or local civil defense agency, it should be noted that the frequencies available to stations in this service are shared without distinction between all licensees and that no protection is afforded to the communications of any station in this service from interference which may be caused by the authorized operation of other licensed stations.

(b) No person shall hold more than one station license.

§ 95.413 General citizenship requirements.

A station license shall not be granted to or held by a foreign government or a representative thereof.

§ 95.415 Standard forms to be used.

(a) *FCC Form 505. Application for Station License in the R/C or CB Service.* This form shall be used when:

(1) Application is made for a new station authorization.

(2) Application is made for modification of any existing station authorization in those cases where prior Commission approval or certain changes is required (see § 95.435).

(3) Application is made for renewal of an existing station authorization, or for reinstatement of such an expired authorization.

(b) *FCC Form 555-B. Temporary Permit in the CB Service.* This form shall be used when application is made by an individual for temporary operating authorization.

(c) *FCC Form 703. Application for Consent to Transfer of Control of Corporation Holding Construction Permit or Station License.* This form shall be used when application is made for consent to transfer control of a corporation holding any station authorization.

§ 95.417 Filing of applications.

A) To assure that necessary information

is supplied in a consistent manner by all persons, standard forms are prescribed for use in connection with the majority of applications and reports submitted for Commission consideration. Standard numbered forms applicable to this service are discussed in § 95.415, and may be obtained from the Washington, D.C. 20554, office of the Commission, or from any of its engineering field offices.

(b) All formal applications for new, modified, or renewal station authorizations shall be submitted to the Commission's office, Gettysburg, Pa. 17326. An application for a temporary permit shall be made by completing and making the certifications required by FCC Form 555-B. Applications for consent to transfer of control of a corporation holding a station authorization, requests for special temporary authority or other special requests, and correspondence relating to an application for a station authorization shall be submitted to the Commission's Office at Washington, D.C. 20554, and should be directed to the attention of the Secretary.

(c) Unless otherwise specified, an application shall be filed at least 60 days prior to the date on which it is desired that Commission action thereon be completed. In any case where the applicant has made timely and sufficient application for renewal of license, in accordance with the Commission's rules, no license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

(d) A temporary permit may not be held by an applicant already holding a station

license.

(e) Failure on the part of the applicant to provide all the information required by the application form, or to supply the necessary exhibits or supplementary statements may constitute a defect in the application.

(f) Applicants proposing to construct a radio station on a site located on land under the jurisdiction of the U.S. Forest Service, U.S. Department of Agriculture, or the Bureau of Land Management, U.S. Department of the Interior, must supply the information and must follow the procedure prescribed by § 1.70 of this chapter.

§ 95.419 Mailing address furnished by licensee.

Except for applications submitted by Canadian citizens pursuant to agreement between the United States and Canada (TIAS No. 6931), each application shall set forth and each licensee shall furnish the Commission with an address in the United States to be used by the Commission in serving documents or directing correspondence to that licensee. Unless any licensee advises the Commission to the contrary, the address contained in the licensee's most recent application will be used by the Commission for these purposes.

§ 95.421 Who may sign applications.

(a) Except as provided in paragraph (b) of this section, applications, amendments thereto, and related statements of fact required by the Commission shall be personally signed by the applicant, if the

applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; or by a member who is an officer, if the applicant is an unincorporated association. Applications, amendments, and related statements of fact filed on behalf of eligible government entities, such as states and territories of the United States and political subdivisions thereof, the District of Columbia, and units of local government, including incorporated municipalities, shall be signed by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction.

(b) Applications, amendments thereto, and related statements of fact required by the Commission may be signed by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall in that event separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

(c) Only the original of applications, amendments, or related statements of fact need be signed; copies may be conformed.

(d) Applications, amendments, and related statements of the fact need not be signed under oath. Willful false statements made therein, however, are punishable by fine and imprisonment. U.S. Code, Title 18, section 1001, and by appropriate admin-

istrative sanctions, including revocation of station license pursuant to section 312(a)(1) of the Communications Act of 1934, as amended.

§ 95.423 Defective applications.

(a) If an applicant is requested by the Commission to file any documents or information not included in the prescribed application form, a failure to comply with such request will constitute a defect in the application.

(b) When an application is considered to be incomplete or defective, such application will be returned to the applicant, unless the Commission may otherwise direct. The reason for return of the applications will be indicated, and if appropriate, necessary additions or corrections will be suggested.

§ 95.425 Amendment or dismissal of application.

(a) Any application may be amended upon request of the applicant as a matter of right prior to the time the application is granted or designated for hearing. Each amendment to an application shall be signed and submitted in the same manner and with the same number of copies as required for the original application.

(b) Any application may, upon written request signed by the applicant or his attorney, be dismissed without prejudice as a matter of right prior to the time the application is granted or designated for hearing.

§ 95.427 Partial grant.

Where the commission, without a hear-

ing, grants an application in part, or with any privileges, terms, or conditions other than those requested, the action of the Commission shall be considered as a grant of such application unless the applicant shall, within 30 days from the date on which such grant is made, or from its effective date if a later date is specified, file with the Commission a written rejection of the grant as made. Upon receipt of such rejection, the Commission will vacate its original action upon the application and, if appropriate, set the application for hearing.

§ 95.429 License term.

Licenses will normally be issued for a term of 5 years from the date of original issuance, major modification, or renewal.

§ 95.431 Types of operation authorized.

Stations are authorized as mobile stations only; however, they may be operated at fixed locations in accordance with other provisions of this part.

§ 95.433 Transfer of license prohibited.

A station authorization may not be transferred or assigned. In lieu of such transfer or assignment, an application for new station authorization shall be filed in each case, and the previous authorization shall be forwarded to the Commission for cancellation.

§ 95.435 Changes in terms of license.

(a) Commission approval is required to increase the number of transmitters authorized for a particular station.

(b) Commission approval is not required to change either of the following terms:

(1) Name of a licensee (without changes in the ownership, control or corporate structure).

(2) Mailing address of a licensee.

Although prior approval of the Commission is not required for any of these changes, prompt written notice must be furnished to the Commission as soon as possible after the change has been implemented. This notice, which may be in letter form, shall contain the name and address of the licensee as they appear in the Commission's records, the new name and/or address, and the call signs and classes of all radio stations authorized to the licensee under this part. This notice shall be sent to FCC, Gettysburg, PA, 17325, and a copy shall be maintained with the records of the station.

(c) Commission approval is not required to substitute transmitting equipment at any station, provided that the equipment employed is included in the Commission's "Radio Equipment List" and is listed as acceptable for use in this service.

§ 95.437 Limitations on antenna structures.

(a) All antennas (both receiving and transmitting) and supporting structures associated or used in conjunction with a station operated from a fixed location must comply with at least one of the following:

(1) The antenna and its supporting structure does not exceed 20 feet in height above ground level; or

(2) The antenna and its supporting structure does not exceed by more than 20 feet the height of any natural formation, tree or man-made structure on which it is mounted; or

(3) The antenna is mounted on the transmitting antenna structure of another authorized radio station and exceeds neither 60 feet above ground level nor the height of the antenna supporting structure of the other station; or

(4) The antenna is mounted on and does not exceed the height of the antenna structure otherwise used solely for receiving purposes, which structure itself complies with subparagraph (1) or (2) of this paragraph.

(5) The antenna is omnidirectional and the highest point of the antenna and its supporting structure do not exceed 60 feet above ground level and the highest point also does not exceed one foot in height above the established airport elevation for each 100 feet of horizontal distance from the nearest point of the nearest airport runway.

NOTE: A work sheet will be made available upon request to assist in determining the maximum permissible height of an antenna structure.

(b) Subpart I of Part 1 of this chapter contains procedures implementing the National Environmental Policy Act of 1969. Applications for authorization of the construction of certain classes of communications facilities defined as "major actions" in § 1.305 thereof, are required to be accompanied by specified statements. Generally these classes are:

(1) Antenna towers or supporting structures which exceed 300 feet in height and are not located in areas devoted to heavy industry or to agriculture.

(2) Communications facilities to be located in the following areas:

(i) Facilities which are to be located in an officially designated wilderness area or in an area whose designation as a wilderness is pending consideration;

(ii) Facilities which are to be located in an officially designated wildlife preserve or in an area whose designation as a wildlife preserve is pending consideration;

(iii) Facilities which will affect districts, sites, buildings, structures or objects, significant in American history, architecture, archaeology or culture, which are listed in the National Register of Historic Places or are eligible for listing (see 36 CFR 800.22 (d) and (f) and 800.19); and

(iv) Facilities to be located in areas which are recognized either nationally or locally for their special scenic or recreational value.

(3) Facilities whose construction will involve extensive change in surface features (e.g. wetland fill, deforestation or water diversion).

NOTE: The provisions of this paragraph do not include the mounting of FM, television or other antennas comparable thereto in size on an existing building or antenna tower. The use of existing routes, buildings and towers is an environmentally desirable alternative to the construction of new routes or towers and is encouraged.

If the required statements do not accompany the application, the pertinent facts may be

brought to the attention of the Commission by any interested person during the course of the license term and considered de novo by the Commission.

STATION OPERATING REQUIREMENTS

§ 95.451 Station authorization required.

No radio station shall be operated in this service except under and in accordance with an authorization granted by the Federal Communications Commission.

§ 95.453 Posting station license and transmitter identification cards or plates.

(a) The current authorization, or a clearly legible photocopy thereof, for each station (including units of a station) operated at a fixed location shall be posted at a conspicuous place at the principal fixed location from which such station is controlled, and a photocopy of such authorization shall also be posted at all other fixed locations from which the station is controlled. If a photocopy of the authorization is posted at the principal control point, the location of the original shall be stated on that photocopy.

(b) The current authorization for each station operated as a mobile station shall be retained as a permanent part of the station records, but need not be posted.

§ 95.455 Authorized frequencies.

(a) The following frequencies may be used for communications between stations:

MHz — 26.965; 26.975; 26.985; 27.005; 27.015; 27.025; 27.035; 27.055; 27.075;

27.085; 27.105; 27.115; 27.125; 27.135;
27.155; 27.165; 27.175; 27.185; 27.205;
27.215; 27.225; 27.235; 27.245; 27.255;
27.265; 27.275; 27.285; 27.295; 27.305;
27.315; 27.325; 27.335; 27.345; 27.355;
27.365; 27.375; 27.385; 27.395; 27.405;

(b) Special conditions.

(1) These frequencies are available on a shared basis with other stations in this service.

(2) These frequencies are subject to no protection from interference due to the operation of industrial, scientific, or medical devices within the 26.96-27.28 MHz band.

(3) The frequency 27.065 MHz shall be used solely for:

(i) Emergency communications involving immediate safety of life of individuals or the immediate protection of property or

(ii) Communications necessary to render assistance to a motorist.

§ 95.457 Policy governing the availability of frequencies.

(a) Each frequency available for use by stations in this service is available on a shared basis only, and will not be assigned for the exclusive use of any one applicant; however, the use of a particular frequency may be restricted to (or in) one or more specified geographical areas.

(b) All applicants and licensees in this service shall cooperate in the selection and use of the frequencies assigned or authorized, in order to minimize interference and thereby obtain the most effective use of the authorized facilities.

§ 95.459 Telephony only.

(a) Transmitters used at stations in this service are authorized to transmit telephony (voice), either single or double sideband.

(b) Tone signals or signalling devices may not be used, except for functions such as tone operated squelch or selective calling circuits used primarily to establish or maintain voice contact. Signals may not be used solely to attract attention or to control remote objects or devices.

(c) The transmission of audible tone signals or a sequence of tone signals for the operation of the tone operated squelch or selective calling circuits shall not exceed a total of 15 seconds duration. Continuous transmission of a subaudible tone for this purpose is permitted. For the purposes of this section, any tone or combination of tones having no frequency above 150 hertz shall be considered subaudible.

§ 95.461 Permissible communications.

Stations are authorized to transmit the following types of communications:

(a) Communications to facilitate the personal or business activities of the licensee.

(b) Communications relating to:

(1) The immediate safety of life or the immediate protection of property in accordance with § 95.463.

(2) The rendering of assistance to a motorist, mariner or other traveler.

(3) Civil defense activities in accordance with § 95.477.

(4) Other activities only as specifically

authorized pursuant to § 95.465.

(c) Communications with stations authorized in other radio services except as prohibited in § 95.501 (a) (3).

§ 95.463 Emergency and assistance to motorist use.

All stations shall give priority to the emergency communications of other stations which involve the immediate safety of life of individuals or the immediate protection of property.

(b) Any station in this service may be utilized during an emergency involving the immediate safety of life of individuals or the immediate protection of property for the transmission of emergency communications. It may also be used to transmit communications necessary to render assistance to a motorist.

(1) When used for transmission of emergency communications certain provisions in this part concerning use of frequencies (§ 95.455); prohibited uses (§ 95.501(a) (3)); operation by or on behalf of persons other than the licensee (§ 95.465) and duration of transmissions (§ 95.469 (a) and (b)) shall not apply.

(2) When used for transmissions of communications necessary to render assistance to a traveler, the provisions of this part concerning duration of transmissions § 95.469 (b) shall not apply.

(3) The exemptions granted from certain rule provisions in subparagraphs (1) and (2) of this paragraph may be rescinded by the Commission at its discretion.

(c) If the emergency use under paragraph (b) of this section extends over a

period of 12 hours or more, notice shall be sent to the Commission in Washington, D.C., as soon as it is evident that the emergency has or will exceed 12 hours. The notice should include the identity of the stations participating, the nature of the emergency, and the use made of the stations. A single notice covering all participating stations may be submitted.

§ 95.465 Operation by, or on behalf of, persons other than the licensee.

(a) Transmitters authorized in this service must be under the control of the licensee at all times. A licensee shall not transfer, assign, or dispose of, in any manner, directly or indirectly, the operating authority under his station license, and shall be responsible for the proper operation of all units of the station.

(b) Stations may be operated only by the following persons, except as provided in paragraph (c) of this section:

- (1) The licensee;
- (2) Members of the licensee's immediate family living in the same household;
- (3) The partners, if the licensee is a partnership, provided the communications relate to the business of the partnership;
- (4) The members, if the licensee is an unincorporated association, provided the communications relate to the business of the association;
- (5) Employees of the licensee only while acting within the scope of their employment;
- (6) Other persons, upon specific prior approval of the Commission shown on or

attached to the station license, under the following circumstances:

(i) Licensee is a corporation and proposes to provide private radiocommunication facilities for the transmission of messages or signals by or on behalf of its parent corporation, another subsidiary of the parent corporation, or its own subsidiary. Any remuneration or compensation received by the licensee for the use of the radiocommunication facilities shall be governed by a contract entered into by the parties concerned and the total of the compensation shall not exceed the cost of providing the facilities. Records which show the cost of service and its nonprofit or cost-sharing basis shall be maintained by the licensee.

(ii) Other cases where there is a need for other persons to operate a unit of licensee's radio station. Requests for authority may be made either at the time of the filing of the application for station license or thereafter by letter. In either case, the licensee must show the nature of the proposed use and that it relates to an activity of the licensee, how he proposes to maintain control over the transmitters at all times, and why it is not appropriate for such other person to obtain a station license in his own name. The authority, if granted, may be specific with respect to the names of the persons who are permitted to operate, or may authorize operation by unnamed persons for specific purposes. This authority may be revoked by the Commission, in its discretion, at any time.

(c) An individual who was formerly a

station licensee shall not be permitted to operate any station licensed to another person until such time as he again has been issued a valid radio license, when his license has been:

- (1) Revoked by the Commission.
- (2) Surrendered for cancellation after the institution of revocation proceedings by the Commission.
- (3) Surrendered for cancellation after a notice of apparent liability to forfeiture has been served by the Commission.

§ 95.467 Telephone answering services.

(a) Notwithstanding the provisions of § 95.465 a licensee may install a transmitting unit of his station on the premises of a telephone answering service. The same unit may not be operated under the authorization of more than one licensee. In all cases, the licensee must enter into a written agreement with the answering service. This agreement must be kept with the licensee's station records and must provide, as a minimum, that:

- (1) The licensee will have control over the operation of the radio unit at all times;
- (2) The licensee will have full and unrestricted access to the transmitter to enable him to carry out his responsibilities under his license;
- (3) Both parties understand that the licensee is fully responsible for the proper operation of the station; and
- (4) The unit so furnished shall be used only for the transmission of communica-

tions to other units belonging to the licensee's station.

(b) A station licensed to a telephone answering service shall not be used to relay messages or transmit signals to its customers.

§ 95.469 Duration of transmissions.

(a) All communications or signals, regardless of their nature, shall be restricted to the minimum practicable transmission time. The radiation of energy shall be limited to transmissions modulated or keyed for actual permissible communications, tests, or control signals. Continuous or uninterrupted transmissions from a single station or between a number of communicating stations is prohibited, except for communications involving the immediate safety of life or property.

(b) All communications between stations (interstation) shall be restricted to not longer than five (5) continuous minutes. At the conclusion of this 5 minute period, or the exchange of less than 5 minutes, the participating stations shall remain silent for at least one minute.

(c) All communications between units of the same station (intrastation) shall be restricted to the minimum practicable transmission.

§ 95.471 Station identification.

(a) The call sign of a station shall consist of either three letters followed by four digits or shall consist of four letters followed by four digits. The call sign of a station operating under a temporary

permit shall consist of three letters followed by five digits.

(b) Each transmission of the station call sign shall be made in the English language by each unit, shall be complete, and each letter and digit shall be separately and distinctly transmitted. Only standard phonetic alphabets, nationally or internationally recognized, may be used in lieu of pronunciation of letters for voice transmission of call signs. A unit designator or special identification may be used in addition to the station call sign but not as a substitute therefor.

(c) Except as otherwise provided, all transmissions from each unit of a station shall be identified by the transmission of its assigned call sign at the beginning and end of each transmission or series of transmissions, but at least at intervals not to exceed ten (10) minutes.

§ 95.473 Station location.

(a) A station may be used or operated anywhere in the United States subject to the provisions of paragraph (b) of this section.

(b) A mobile station authorized in this service may be used or operated on any vessel, aircraft, or vehicle of the United States: *Provided*, That when such vessel, aircraft, or vehicle is outside the territorial limits of the United States, the station, its operation, and its operator shall be subject to the governing provisions of any treaty concerning telecommunications to which the United States is a party, and when within the territorial limits of any

foreign country, the station shall be subject also to such laws and regulations of that country as may be applicable.

§ 95.475 Dispatch points and remote control.

(a) No authorization is required to install dispatch points.

(b) Operation of any station by remote control is prohibited except remote control by wire upon specific authorization by the Commission when satisfactory need is shown.

§ 95.477 Civil defense communications.

A licensee of a station authorized under this part may use the licensed radio facilities for the transmission of messages relating to civil defense activities in connection with official tests or drills conducted by, or actual emergencies proclaimed by, the civil defense agency having jurisdiction over the area in which the station is located: *Provided*, That:

(a) The operation of the radio station shall be on a voluntary basis.

(b) Such communications are conducted under the direction of civil defense authorities.

(c) As soon as possible after the beginning of such use, the licensee shall send notice to the Commission in Washington, D.C., and to the Engineer in Charge of the Radio District in which the station is located, stating the nature of the communications being transmitted and the duration of the special use of the station. In addition, the Engineer in Charge shall be

notified as soon as possible of any change in the nature of or termination of such use.

(d) In the event such use is to be a series of pre-planned tests or drills of the same or similar nature which are scheduled in advance for specific times or at certain intervals of time, the licensee may send a single notice to the Commission in Washington, D.C., and to the Engineer in Charge of the Radio District in which the station is located, stating the nature of the communications to be transmitted, the duration of each such test, and the times scheduled for such use. Notice shall likewise be given in the event of any change in the nature of or termination of any such series of tests.

(e) The Commission may, at any time, order the discontinuance of such special use of the authorized facilities.

STATION ADMINISTRATION REQUIREMENTS

§ 95.501 Prohibited communications.

(a) A station shall not be used:

(1) For any purpose, or in connection with any activity, which is contrary to Federal, State, or local law.

(2) For the transmission of communications containing obscene, indecent, profane words, language, or meaning.

(3) To communicate with an Amateur Radio Service station, an unlicensed station, or foreign stations except for communications pursuant to § 95.463 (b) and § 95.477.

(4) To convey program material for re-

transmission, live or delayed, on a broadcast facility.

NOTE: A station may be used in connection with, administrative, engineering, or maintenance activities of a broadcasting station. A station may be used in the gathering of new items or preparation of programs: Provided, that the actual or recorded transmissions of the station are not broadcast at any time in whole or in part.

(5) To intentionally interfere with the communications of another station.

(6) For the direct transmission of any material to the public through a public address system or similar means.

(7) For the transmission of music, whistling, sound effects, or any material for amusement or entertainment purposes, or solely to attract attention.

(8) To transmit the word "MAYDAY" or other international distress signals, except when the station is located in a ship, aircraft, or other vehicle which is threatened by grave and imminent danger and requests immediate assistance.

(9) For advertising or soliciting the sale of any goods or services.

(10) For transmitting messages in other than plain language. Abbreviations including nationally or internationally recognized operating signals, may be used only if a list of all such abbreviations and their meaning is kept in the station records and made available to any Commission representative on demand.

(11) To carry on communications for hire, whether the remuneration or benefit received is direct or indirect.

(b) A station may not be used to com-

municate with, or attempt to communicate with, any unit of the same or another station over a distance of more than 150 miles.

(c) A licensee of a station who is engaged in the business or selling radio transmitting equipment shall not allow a customer to operate under his station license. In addition, all communications by the licensee for the purpose of demonstrating such equipment shall consist only of brief messages addressed to other units of the same station.

§ 95.503 False signals.

No person shall transmit false or deceptive communication by radio or identify the station he is operating by means of a call sign which has not been assigned to that station.

§ 95.505 Current copy of rules required.

Each licensee in this service shall maintain as a part of his station records a current copy of Subpart D of Part 95, Personal Radio Services, of this chapter. Additional requirements of a technical nature may be found in Subpart E of this part.

§ 95.507 Answers to notice of violations.

(a) Any licensee who appears to have violated any provision of the Communications Act or any provision of this chapter shall be served with a written notice calling the facts to his attention and requesting a statement concerning the matter. FCC Form 793 may be used for this purpose.

(b) Within 10 days from receipt of notice or such other period as may be specified, the licensee shall send a written answer, in duplicate, direct to the office of the Commission originating the notice. If an answer cannot be sent nor an acknowledgment made within such period by reason of illness or other unavoidable circumstances, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay.

(c) The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. In every instance the answer shall contain a statement of the action taken to correct the condition or omission complained of and to preclude its recurrence. If the notice relates to violations that may be due to the physical or electrical characteristics of transmitting apparatus, the licensee must comply with the provisions of § 95.621 and the answer to the notice shall state fully what steps, if any, have been taken to prevent future violations, and, if any new apparatus is to be installed, the date such apparatus was ordered, the name of the manufacturer, and the promised date of delivery. If the installation of such apparatus requires a construction permit, the file number of the application shall be given, or if a file number has not been assigned by the Commission, such identification shall be given as will permit ready identification of the application. If the notice of violation relates to lack of attention to or improper operation of the

transmitter, the name and license number of the operator in charge, if any, shall also be given.

§ 95.509 External radio frequency power amplifiers prohibited.

No external radio frequency power amplifier shall be used or attached, by connection, coupling attachment or in any other way at any station.

NOTE. — An external radio frequency power amplifier at a station will be presumed to have been used where it is in the operator's possession or on his premises and there is extrinsic evidence of any operation of such station in excess of power limitations provided under this rule part unless the operator of such equipment holds a station license in another radio service under which license the use of the said amplifier at its maximum rated output power is permitted.

§ 95.511 Transmitter Service and Maintenance.

(a) Except as provided in paragraph (b) of this section, all transmitter adjustments or tests while radiating energy during or coincident with the construction, installation, servicing, or maintenance of a radio station in this service, which may affect the proper operation of such stations, shall be made by or under the immediate supervision and responsibility of a person holding a first- or second-class commercial radio operator license, either radiotelephone or radiotelegraph, as may be appropriate for the type of emission employed, and such person shall be responsible for the proper functioning of the station equipment at the conclusion of such

adjustments or tests. Further, in any case where a transmitter adjustment which may affect the proper operation of the transmitter has been made while not radiating energy by a person not the holder of the required commercial radio operator license or not under the supervision of such licensed operator, other than the factory assembling or repair of equipment, the transmitter shall be checked for compliance with the technical requirements of the rules by a commercial radio operator of the proper grade before it is placed on the air.

(b) Except as provided in § 95.621 and in (c) of this section, no commercial radio operator license is required to be held by the person performing transmitter adjustments or tests during or coincident with the construction, installation, servicing, or maintenance of transmitters used at stations authorized prior to May 24, 1974: *Provided*, That there is compliance with all of the following conditions:

(1) The transmitting equipment shall be crystal-controlled with a crystal capable of maintaining the station frequency within the prescribed tolerance;

(2) The transmitting equipment either shall have been factory assembled or shall have been provided in kit form by a manufacturer who provided all components together with full and detailed instructions for their assembly by non-factory personnel;

(3) The frequency determining elements of the transmitter, including the crystal(s) and all other components of the crystal oscillator circuit, shall have been

preassembled by the manufacturer, pretuned to a specific available frequency, and sealed by the manufacturer so that replacement of any component or any adjustment which might cause off-frequency operation cannot be made without breaking such seal and thereby voiding the certification of the manufacturer required by this paragraph;

(4) The transmitting equipment shall have been so designed that none of the transmitter adjustments or tests normally performed during or coincident with the installation, servicing, or maintenance of the station, or during the normal rendition of the service of the station, or during the final assembly of kits or partially preassembled units, may reasonably be expected to result in off-frequency operation, excessive input power, overmodulation, or excessive harmonics or other spurious emissions; and

(5) The manufacturer of the transmitting equipment or of the kit from which the transmitting equipment is assembled shall have certified in writing to the purchaser of the equipment (and to the Commission upon request) that the equipment has been designed, manufactured, and furnished in accordance with the specifications contained in the foregoing subparagraphs of this paragraph. The manufacturer's certification concerning design and construction features of station transmitting equipment, as required if the provisions of this paragraph are invoked, may be specific as to the particular unit of transmitting equip-

ment or general as to a group or model of such equipment, and may be in any form adequate to assure the purchaser of the equipment or the Commission that the conditions described in this paragraph have been fulfilled.

(c) Any tests and adjustments necessary to correct any deviation of a transmitter of any station in this service from the technical requirements of the rules in this part shall be made by, or under the immediate supervision of, a person holding a first- or second-class commercial operator license, either radiotelephone or radiotelegraph, as may be appropriate for the type of emission employed.

§ 95.513 Modification of transmitters.

(a) Transmitting equipment type accepted for use in this service shall not be modified by the user. Changes which are specifically prohibited include:

(1) Internal or external connection or addition of any part, device or accessory not included by the manufacturer with the transmitter for its type acceptance. This shall not prohibit the external connection of antennas or antenna transmission lines, antenna switches, passive networks for coupling transmission lines or antennas to transmitters, or replacement of microphones.

(2) Modification in any way not specified by the transmitter manufacturer and not approved by the Commission.

(3) Replacement of any transmitter part by a part having different electrical characteristics and ratings from that replaced

unless such part is specified as a replacement by the transmitter manufacturer.

(4) Substitution or addition of any transmitter oscillator crystal unless the crystal manufacturer or transmitter manufacturer has made an express determination that the crystal type, as installed in the specific transmitter type, will provide that transmitter type with the capability of operating within the frequency tolerance specified in § 95.615 (a).

(5) Addition or substitution of any component, crystal or combination of crystals, or any other alteration to enable transmission on any frequency not authorized for use by the licensee.

(b) Only the manufacturer of the particular unit of equipment type accepted for use in CB stations may make the permissive changes allowed under the provisions of Part 2 of this chapter for type acceptance. However, the manufacturer shall not make any of the following changes to the transmitter without prior written authorization from the Commission:

(1) Addition of any accessory or device not specified in the application for type acceptance and approved by the Commission in granting said type acceptance.

(2) Addition of any switch, control, or external connection.

(3) Modification to provide capability for an additional number of transmitting frequencies.

§ 95.515 Tests and adjustments.

All tests or adjustments of radio trans-

mitting equipment involving an external connection to the radio frequency output circuit shall be made using a non-radiating dummy antenna. However, a brief test signal, either with or without modulation, as appropriate, may be transmitted when it is necessary to adjust a transmitter to an antenna for a new station installation or for an existing installation involving a change of antenna or change of transmitters, or when necessary for the detection, measurement, and suppression of harmonic or other spurious radiation. Test transmissions using a radiating antenna shall not exceed a total of 1 minute during any 5-minute period, shall not interfere with communications already in progress on the operating frequency, and shall be properly identified as required by § 95.471, but may otherwise be unmodulated as appropriate.

§ 95.521 Inspection of stations and station records.

All stations and records of stations in this service shall be made available for inspection upon the request of an authorized representative of the Commission made to the licensee or to his representative. Unless otherwise stated in this part, all required station records shall be maintained for a period of at least 1 year.

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EMERGENCY

10-333



CITIZENS BAND RADIO CODES

- 10-1 Receiving Poorly
- 10-2 Signal Good
- 10-3 Stop Transmitting
- 10-4 OK, Message Received
- 10-5 Relay Message
- 10-6 Busy — Standby unless Urgent
- 10-7 Out of Service, Leaving Air
- 10-8 In Service, Subject to Call
- 10-9 Repeat Message
- 10-10 Transmission Completed, Standing by
- 10-11 Talking too Rapidly
- 10-13 Weather and Road Report
- 10-17 Urgent (Business)
- 10-18 Anything for Us?
- 10-19 Return to Base
- 10-20 Location
- 10-21 Call by Telephone
- 10-23 Stand By
- 10-24 Assignment Completed
- 10-25 Do You Have Contact With.....?
- 10-30 Does Not Conform To FCC Rules
- 10-33 Emergency Traffic at This Station
- 10-34 Trouble at This Station
- 10-35 Confidential Information
- 10-36 Correct Time
- 10-37 Wrecker Needed At
- 10-38 Ambulance Needed At
- 10-43 Traffic Tie Up At
- 10-46 Assist Motorist
- 10-49 Traffic Light Out
- 10-50 Break Channel
- 10-66 Message Cancellation
- 10-68 Repeat Message
- 10-70 Fire
- 10-77 Negative Contact
- 10-78 Need Assistance
- 10-82 Reserve Lodging
- 10-84 Telephone Number
- 10-91 Talk Closer to Mike
- 10-92 Talk Farther from Mike
- 10-94 Give a Test With Voice
- 10-99 Unable to Receive You
- 10-200 Police Needed At



CB
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