

# IF ENEMY BOMBERS APPROACHED OUR COUNTRY, WHAT WOULD YOU DO...?

When the Air Raid alert sounds, how would you learn what is happening and what you should do?  
Prompt, accurate, civil defense information can help save your family, your life!  
The CONELRAD system of public emergency broadcasting is the surest and fastest way of receiving *official* civil defense instructions, information, and news.

When attack is coming, here's *how* and *where* you can find out where to go and what to do.



# REMEMBER! CONELRAD WILL BROADCAST:

**PRE-ATTACK** information and instructions. Where to go. What to do. When to do it.

**EVACUATION** instructions, directions, routes and assembly areas.

**WARNING** when to take shelter. When actual attack is imminent. When it is safe to come out of your shelter.

**FALLOUT** information and instructions. Where fallout is expected. When it is expected. When it is safe to return to an area or come out of your shelter after the danger of fallout has passed and the radioactivity has dropped to safe levels.

**NATIONAL INFORMATION** of top importance. Broadcasts from the President and other national and State leaders of vital interest to you.

GPO : 1955 O—365524



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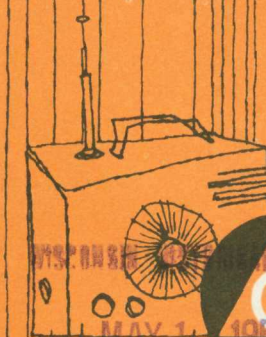
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# dial 640 1240

The Federal Civil Defense Administration has produced or cooperated with private producers in the production of a timely film—CONELRAD. Ask your local civil defense director or TV station to arrange a showing.

"CONELRAD," a 10-minute, black and white film, explains the CONELRAD system.

# 640 CONELRAD 1240



FEDERAL CIVIL DEFENSE ADMINISTRATION





**IF YOU ARE LISTENING  
TO ANY RADIO OR TELEVISION SET  
WHEN THE ALERT SOUNDS,  
YOU WILL HEAR A MESSAGE  
LIKE THIS:**

"We interrupt our normal program to cooperate in security and civil defense measures as requested by the United States Government . . . This is a CONELRAD radio alert . . . Listen carefully: This station is now leaving the air. During the CONELRAD alert there will be no FM or TV programs. The only program on the air will be on your standard radio at 640 or 1240 kilocycles, beginning after a short period of silence. Be patient. Tune the dial of your standard radio receiver to 640 or 1240."

If you are NOT listening to a radio or TV set when this announcement is made, you will know the CONELRAD system has gone into operation when you hear the civil defense sirens or attack warning signals . . . Tune your AM (Standard) radio immediately to the proper dial setting—640 or 1240—and listen for the official broadcast.

**REMEMBER: When an alert sounds,**

**ALL NORMAL BROADCASTING WILL CEASE.**

After a short period of silence, CONELRAD stations will return to the air at 640 or 1240 kilocycles on your standard AM radio. This off-the-air period is due to necessary broadcasting-equipment changes. It will vary for different areas. Contact your local civil defense director for the approximate time lapse in your area.

## WHAT IS CONELRAD?

The system is officially entitled "Plan for CONTROL of ELectromagnetic RADiation"—CONELRAD for short . . . It is a system devised by the broadcasting industry and the Government, working together to bring you official information and civil defense instruction in times of emergency.

## WHY DO WE NEED CONELRAD?

Without it, enemy bombers could tune their direction finders to a station broadcasting in a target city and "beam" right in to their targets. To prevent this from happening in World War II, all stations went off the air—just when life-saving civil defense information and instructions were vitally important to the people under attack. CONELRAD stations CAN continue to operate, even under actual attack conditions, and still deny enemy bombers this navigational aid!

## HOW DOES CONELRAD WORK?

When CONELRAD goes into operation, ALL stations first sign off the air with a standard alert announcement. The stations of the CONELRAD system then reduce power and change their broadcasting frequency to 640 or 1240 kilocycles. Then they *return* to the air.

CONELRAD stations in each city join in a "cluster" of three or more stations. These "cluster" stations broadcast a common program. One station in a "cluster" is on the air for only a few seconds. Then another cluster station picks up the *same* program as the other station leaves off.

You will hear a **CONTINUOUS** program without interruption, although the volume may vary as the program is "switched" from a station near you to one at a more distant point. However, by turning the volume up until you can plainly hear the weakest station, you should always receive a continuous and uninterrupted program.

The effect of this "switching" on a bomber direction finder is to make it swing erratically, so that it cannot "fix" or "home" on a single station.

With many CONELRAD stations in operation, all on 640 or 1240 kilocycles, this completely confuses the "homing" capability of the finder. Many tests conducted by our own Air Force have proved that the CONELRAD system eliminates broadcasting as a navigational aid.

## WHAT ELSE YOU SHOULD KNOW ABOUT CONELRAD:

First, CONELRAD is the only safe broadcasting system yet devised to keep you informed of important civil defense instructions and news without helping enemy bombers find their targets.

Second, CONELRAD may be used in one of two different ways, depending on your location:

### 1. CONTINUOUS METHOD:

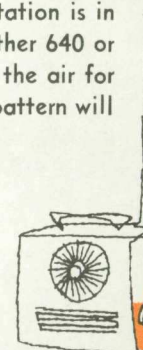
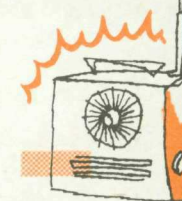
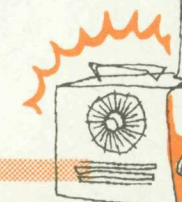
If you are in or near a large city, you will hear a continuous program of civil defense instructions and reports at 640 or 1240 kilocycles, or both, during the CONELRAD operation.

### 2. ON-OFF METHOD:

In some smaller communities where only one station is in the CONELRAD system it will broadcast at either 640 or 1240 kilocycles for a short period, then be off the air for a period of minutes. This on-the-air, off-the-air pattern will continue until the end of the alert.

### NO BROADCAST:

Due to the reduction in transmitting power and the use of two common frequencies (640 and 1240 kc.) throughout the Nation, interference between stations may limit coverage obtainable in some suburban and rural areas. If you are in such an area, your radio may go silent or interference may prevent you from distinguishing the civil defense message being broadcast. This problem is being studied jointly by the Government and the broadcast industry.



## WHAT CONELRAD MEANS TO YOU

CONELRAD will give you civil defense instructions and information that may mean the difference between life and death for you and your family:

**WARNING** CONELRAD will go into effect simultaneously with the first warning from the Air Defense Command. The surest, safest way to *know* what to do when you hear the sirens is to tune to your CONELRAD station at 640 or 1240 on your AM radio dial.

**SHELTER** Your local civil defense director may order you to take shelter if immediate attack is threatened. Only CONELRAD can bring you instructions in your shelter. A battery-operated portable radio with an outside aerial is your best insurance. (Local power may fail.) On all new sets the CONELRAD frequencies of 640 and 1240 are marked. Find out which frequencies will be used in your city. It may be both. If your set isn't marked, mark it NOW!

**EVACUATION** Your civil defense director may order an evacuation of your city when attack threatens. The order will come to you by CONELRAD as well as the public outdoor warning sirens and from Police and Civil Defense Officers. CONELRAD will supplement warnings with full instructions. If evacuation is by car, keep your auto radio tuned to CONELRAD for the latest instructions. Information on routes, assembly areas, and the imminence of attack can be flashed to you instantly as you travel: Although the reduced transmitting power of CONELRAD stations may make reception erratic beyond 25 miles, reception within this distance should cover most evacuation routes and reach into most assembly areas. Plans for public emergency broadcasts along evacuation routes and the "fringe" areas are being developed.

**FALLOUT** Because of the heavy amount of radioactive fallout produced by large atomic and hydrogen bombs, your civil defense director may order you to take shelter or evacuate an area even though your own city may not have been bombed. Areas lying down-wind from a bombed city may become contaminated. Even if you have just been evacuated from your city, you may have to take shelter or reevacuate to another area out of the fallout pattern. CONELRAD will bring you this vital information.

**TELEVISION AND FM (FREQUENCY MODULATED) BROADCASTING STATIONS WILL REMAIN OFF THE AIR FOR THE DURATION OF THE ALERT!**



"This station is now leaving the air. During the CONELRAD radio Alert there will be no FM or TV programs. The only program on the air will be on your standard radio at 640 or 1240 kilocycles, starting in a few minutes. Tune your standard radio receiver to 640 or 1240 kilocycles for official instructions, news, and official information."

If you are not listening to your radio or TV set when this announcement is made, when you hear the civil defense sirens or attack warning signals, you will know that the CONELRAD system has gone into operation. Tune your AM (Standard) radio at once to the proper dial setting—640 or 1240.

**What kind of radio should you have for receiving official information?**

As long as the flow of electric power is uninterrupted, your regular AM (Standard) radio set will do the job.

However, a battery-operated or portable radio is your best insurance that you will continue to receive official civil defense news and instructions even if local power fails. If you possibly can, have such a radio in your shelter area.

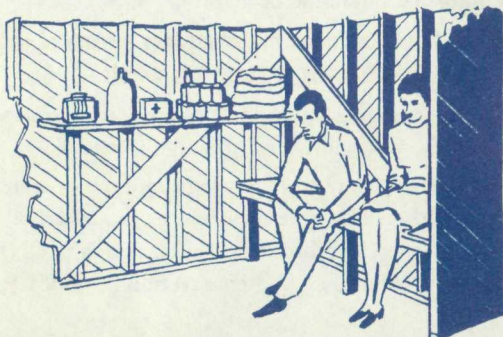
Your automobile radio will be a useful auxiliary set. Auto radios are battery operated. Unless your car is damaged or not operating, you can count on your car radio for receiving official civil defense information via the CONELRAD system.

But even the best radios aren't much help if you and all members of your family don't know where to tune in or haven't marked the dial setting with the CONELRAD numbers—640 or 1240.

**Who gives the signal for CONELRAD to start and stop?**

The Air Defense Command, U. S. Air Force, will order the attack warning which will activate the CONELRAD system. AM (Standard) radio stations will switch, in a matter of minutes, to the emergency broadcasting system on one of the two officially designated CD frequencies—640 or 1240 kilocycles (marked as 64 or 124 on most radio dials).

The Air Defense Command, U. S. Air Force, also determines when it is safe for radio to resume normal broadcasting following the radio Alert.



CONELRAD

640 1240

CONELRAD

640 1240

CONELRAD

640 1240

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For sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. \$2.25 per 100 copies.

GPO: 1953 O - 273037

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**Case of  
Attack!**

TUNE YOUR **AM** RADIO DIAL TO



OR



640 1240

FOR OFFICIAL INFORMATION



FEDERAL CIVIL DEFENSE ADMINISTRATION





## What would you do if . . .

enemy bombers *were* to attack our country? How do you find out quickly what is happening and what to do?

Prompt, accurate civil defense information could help save your life, your neighbor's . . . your city.

The CONELRAD system of Public Emergency Broadcasting is one of the surest and fastest ways of getting word to you under attack conditions. If our country is ever attacked, here's *how* and *where* you will get official civil defense news and instructions.

In a civil defense emergency, remember to use your AM (Standard) radio. *Tune to 640 or 1240 on your Radio Dial*  
Your AM (Standard) radio will keep you in touch with what is happening.

Your television set and FM (frequency modulation) radio will go off the air in a civil defense emergency, because their broadcasting beams could be used as direction finders by enemy bombers. Use your AM (Standard) radio.

**TUNE IMMEDIATELY TO 640 OR 1240  
ONLY FOR OFFICIAL CIVIL DEFENSE  
NEWS AND INSTRUCTIONS**

### Why should you tune to 640 or 1240 on your AM (Standard) radio?

Because they are the *only* dial settings where you will receive authoritative civil defense information.

The broadcasting industry and the government, working together, have devised a special system of AM (Standard) radio broadcasting to bring you official information in time of emergency.

The system is officially entitled "Plan for *CON*trol of *EL*ectromagnetic *RAD*iation"—CONELRAD for short.

Remember that name, CONELRAD. Remember what it means—"Tune your AM (Standard) radio to either 640 or 1240."

Under the CONELRAD emergency broadcasting system, you will be able to receive radio programs from three different sources—local, State, and National. Programs originating locally will be broadcast direct. Line connections are arranged for programs originating on a State or regional basis. By using the existing network structures and line connections between stations, defense officials can broadcast programs which will reach the entire country.

### What else should you know about CONELRAD?

First, CONELRAD is the only safe broadcasting system yet devised to keep you informed of important civil defense news and instructions without helping enemy bombers reach their targets.

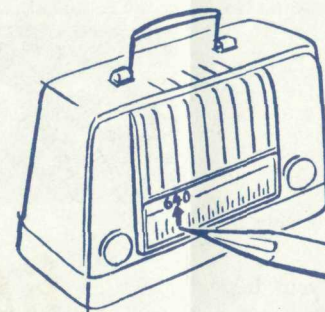
Second, CONELRAD may affect your radio listening habits in three ways:

1. **CONTINUOUS METHOD:** If you are in or near a large city, you will hear a continuous program of civil defense instructions and reports at 640 or 1240 kilocycles, or both, during the CONELRAD radio operation.
2. **ON-OFF METHOD:** In some smaller communities your local radio station, operating at either 640 or 1240 kilocycles, will be on the air for some seconds, off the air for some minutes, on the air again, and off the air again in this continuing pattern until the end of the Alert.
3. **NO BROADCAST:** Unfortunately, CONELRAD cannot guarantee civil defense broadcasts for everyone because of technical limitations. Due to the reduction in transmitting power, a few parts of the country which normally receive AM (Standard) radio broadcasts may no longer be able to hear the diminished signal. Your radio *may* be silent, though experts are working to prevent this possibility.

### Which number (640 or 1240) is the right one for your city?

Every effort will be made to tell you long in advance which AM frequency (640 or 1240) will be used in your community. In most large cities, both frequencies will be used. If you do not know which to rely on, tune from one of these dial settings to the other until the broadcast comes in.

Do not be alarmed if you receive no information for a brief period after the radio Alert has been announced. It takes a little time to switch from regular broadcasting to the special CONELRAD system. Wait a few minutes and then try 640 or 1240 again, whichever is designated for your area.



**Suppose the signal "fades" . . . is sometimes strong and sometimes weak. Does that mean anything?**

Yes, it does. When the CONELRAD continuous method is in operation, all stations in a community are required to reduce power and to broadcast a common program. Each station is on the air for only a few seconds at a time. Then another local station picks up as the other leaves off. You will hear a single program but it is coming to you from a number of different stations—some of which are nearer to you than others.

This may cause a signal that is sometimes weak and sometimes strong. If this happens, turn the volume up to the point where you can hear plainly, even though it may occasionally be quite loud.

**If some communities use 640 and others use 1240, how will you know that you are tuned to the official civil defense broadcast for your city?**

Find out as soon as possible from your local civil defense office or radio station which frequency will be used in your community. Then mark it permanently on your AM (Standard) radio dial, so you will always know the correct setting. In order not to help the enemy, there will be no station identification in an emergency. Even if you are tuned to another city, however, it will be one quite near to you and the news and information should be helpful.

**How will you know when the emergency system of radio broadcasting is going into effect?**

If you are listening to any kind of radio or television set when the alert sounds, you will hear a message like this:

"We interrupt our normal program to cooperate in security and civil defense measures as requested by the United States Government . . . This is a CONELRAD radio Alert . . . Listen carefully! **OVER** →"