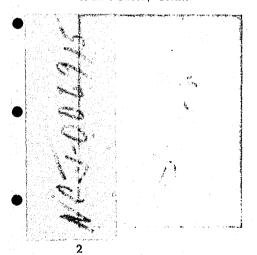


Regard every fallen wire as dangerous. When you spot one on patrol or when one is reported to you, notify the power company so that repair crews may take immediate, expert action.

By SHERMAN R. KNAPP* Chairman of the Board, Northeast Utilities, Wethersfield, Conn.



HOT WIRES:

The Hows and Whys;
The Do's and Don'ts

*Mr. Knapp joined the Connecticut Light & Power Co. in 1928, after graduating from Cornell University, as an electrical engineer. He was elected president of Northeast Utilities in 1966, following affiliation of the Connecticut Light & Power Co., The Hartford Electric Light Co., and Western

Massachusetts Electric Co. He assumed his present position on Apr. 1, 1968.

This article first appeared in the June 1961 issue of the Bulletin, Because of its important interest to members of law enforcement, Mr. Knapp has updated it for reprinting here.

FBI Law Enforcement Bulletin

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The electric company which you know today is in most instances quite different from that which you knew even 5 or 10 years ago. As the electrical energy requirements of this Nation continue to skyrocket, the technology of the industry races ahead at an ever-increasing rate to keep pace with the demand for energy. This article is designed to help you as a law enforcement officer know what is involved in terms of public safety and your role.

for target practice by persons of all ages. And hard to find today is a police officer who has not done his share of chasing young, eager climbers down from utility poles and electric towers.

Each one of these instances requires that the law enforcement officer know the hazards and procedures involved in an electric power emergency where there is a fallen or dangerous wire. Every electric wire is a potential hazard and should be considered dangerous.

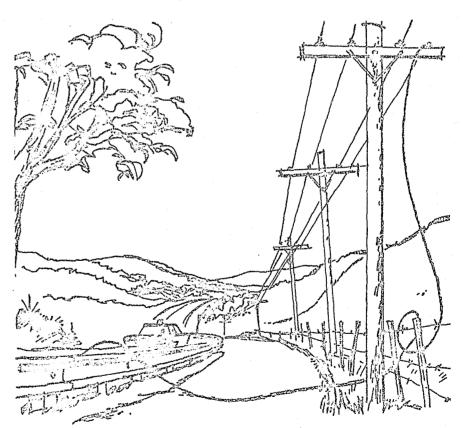
Some fallen wires snap, twist, and spew lethal sparks as they bite the ground. Others lie quietly with no warning rattles like a snake, but potentially just as deadly. Do not go within 6 feet of any fallen wire.

Preventive measures are always the best in any situation, whether it be automobile maintenance, weapons maintenance, or electrical accident prevention. Thus, when boys and girls attempt to play on or near electrical equipment, they should not just be summarily chased from the area, to return again after you leave. In your role representing legal authority, you can do much to impress upon children the hazards involved and the potential threat to life. You can make these points in school pro-

power. It can be just as deadly as the cartridge in your handgun or the speeding automobile. As bullets and speeding cars represent energy in motion, so also electricity is energy in motion—power.

Its voltage is like the water pressure at a hose nozzle. But unlike water pressure, there is no "safe" voltage for human beings. Water from a garden hose can make you just as wet as water from a firehose; you can be killed just as quickly with a .22 caliber gun as with a .44 magnum weapon; and you can get just as "shocked" from 120-volt house current as from a 345,000-volt transmission line.

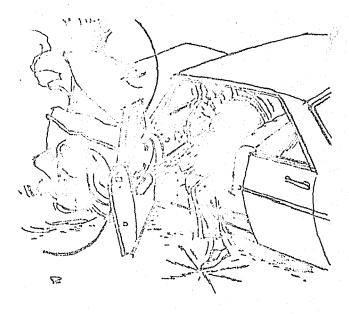
The law enforcement officer is frequently first on the scene when overhead wires come down as a result of storms, cars hitting utility poles, falling rotten tree branches, civil disturbances, or subotage. Increasingly evident to us all is the strange fascination which insulating devices high atop transmission towers or poles hold



Keep yourself and others away from metal highway dividers and metal fences of all kinds. A fallen wire draped over such dividers and fences can energize them for great distances.



Keep out of the danger zone. Never get closer than 6 feet to fallen wire. Keep crowds back and out from under overhead lines. Set flares. Reroute traffic if necessary.



Impress upon motorist the fact that, should be step from his vehicle, he would make himself part of the electric circuit from the wire to the ground, just as the victim is doing in the above drawing.

grams, and your cooperation, if called upon, can be invaluable in assuring the safety of young people in the community.

Equally important is the fact that, if schools in your area have not instructed students in the hazards of electricity, you can perform a significant community service by suggesting such a program and then helping to

initiate it. A few pleasant hours in a classroom is a small investment toward preventing the day when you might have to rush the burned, broken form of a child to an emergency ward only to find that you were not fast enough.

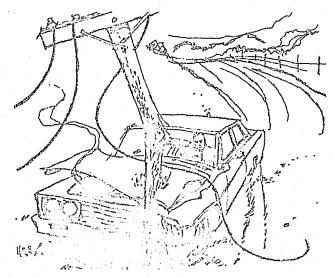
Your local electric company is ready to assist in all possible ways to formulate a meaningful education program.

The Emergency Strikes: What To Do First

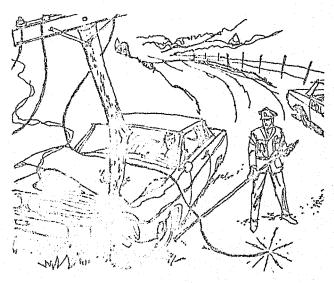
As a law enforcement officer, you should know the basic A B C's of an electric power emergency:

- A. Advise your headquarters of the emergency condition immediately.
- B. Brightly light the area if in darkness hours and keep people at least

Remind driver of damaged vehicle that vehicle is "hot" or energized when it has a fallen wire draped over it. Tell him that as long as he stays in the vehicle, he is perfectly safe.



Do not attempt to handle wires unless properly equipped or trained. Make sure that stick of wood, the wooden pole, or the rope you use to remove fallen wire from vehicle or victim is free of dampness.



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100 feet away, Electric power emergencies frequently occur when it is raining and the wet ground increases the hazards.

C. Cement is sale; metal can be deadly. Keep everyone from any kind of metal structure, fence, guardrail, or highway divider. Even a rusty old barbed wire fence may be energized by a fallen wire draped across it miles away and out of sight.

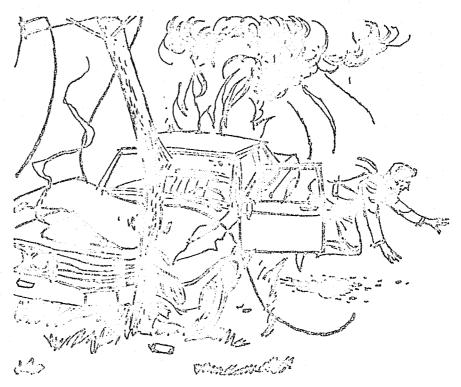
In a hurricane, tornado, forest fire, flood, or large civil disturbance, fallen wires may be multiplied by the hundreds. In such instances electric companies borrow skilled professional service restoration and linecrews from each other to augment trained manpower. In such large disasters, you have your own job to perform, but you must be prepared to cope with the special and unusual conditions prevalent with many fallen wires, even as you go about your own emergency functions.

You must be additionally prepared for the moment when you may face an electric power emergency alone and make the quick but proper decisions about people, power, and yourself.

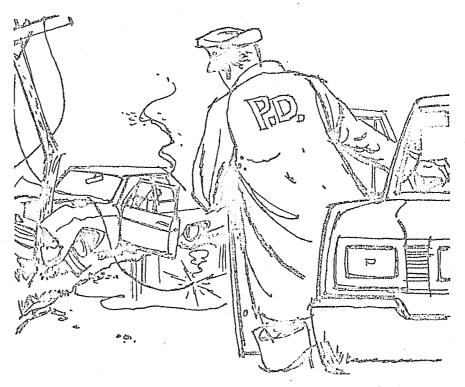
Rules To Remember

Electricity, from a powerline or a thundercloud, seeks to reach the ground. Therefore, one rule to remember at all times is: Do not let yourself or others get into a circuit between one wire and another, or between one wire and the ground.

In a typical power emergency, a car hits a utility pole and causes a wire to snap and fall on the car. The occupants are perfectly safe as long as they stay in the car. Call the power company. If the car catches fire, tell the occupants to leap, not step, from the car. To step out would put them in the circuit, with deadly results. If the occupants are too injured to respond,



Sometimes occupants of a vehicle must leave in a hurry. Instruct them to leap free of the vehicle with no part of their bodies or clothing touching the energized vehicle and the ground at the same time.

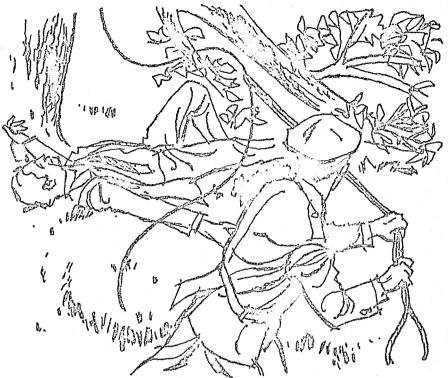


Don't be a dead here! Don't make foolhardy rescue attempts. Remember, your rubber boots and rain gear are designed to protect you against getting wet—not against getting electrocuted.

with your car you may be able to push the other car out of contact. But before you get out of your car, take a good look around, or it might be your last; there might be another fallen wire behind you or hooked to your bumper. If so, exit leaping from your cruiser.

Rescue Aids

Many police carry a length of dry rope, an ax, and blankets in their cars. The rope can be flung around the fallen wire to pull it free from a vehicle or victim, or it can be used as a snare to help extricate unconscious persons trapped in burning cars or tangled wires. The ax is to be used to cut a fallen wire with one true swing only when all other rescue efforts with wooden poles, sticks, or dry rope have failed. In most cases, leave the cutting of potentially dangerous wires on the



Never try to cut fallen wires without proper equipment. A long, dry rope can, however, be used to pull a fallen wire from a victim. Try to lift wire clear of victim while keeping it, at some point, in contact with ground. Danger is reduced considerably this way.

Sometimes a rope can be used to pull victim free from a vehicle or snarled, fallen wire. After victim is completely clear of wire, begin artificial resuscitation immediately. This is a matter of life or death. Every second counts.



ground to trained power company linemen. The blankets, of course, are carried to keep a victim warm while artificial resuscitation is being administered. Carbon dioxide and dry powder extinguishers, usually carried in police cars, also can be used safely to fight electrical fires.

Lifting a Fallen Wire

Sometimes, a long, dry stick can be used to lift a fallen wire from a victim. A garden rake at least 6 feet long will answer the purpose.

In any rescue attempt, you must protect yourself; dead heroes aren't any good to anyone in trouble. Do not rely, under any circumstances, on rubber boots, raincoats, rubber gloves, or ordinary wirecutters to help protect you. Above all, do not touch the wire, or allow even your clothing to touch the wire or the victim.



END