

LINEWORKER SAFETY GEAR

1875-1900

Electrification begins

In the early years, linemen learn basic principles and hazards in real time. Safety standards are non-existent, and most line equipment is handmade.



Early headgear

It's not uncommon for linemen to wear hats made of felt or leather for protection.

Digging spoon

Workers dig holes by hand with digging bars, spoons and shovels.

Bare hands

Linemen rarely wear gloves for protection, opting instead to work barehanded.

Homemade belts

Linemen fashion belts to wrap around waist and pole—or they climb freestyle.

Climbing spikes

Homemade climbers lack pads and have only upper and lower straps.

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1901-1925

Safety beginnings

Safety rules and formalized training become available, but they're limited. During this period, linemen de-energize lines to restore power, but as demand grows, live line work becomes more common.

Homemade hot sticks

Linemen make their own hot sticks and slather them with varnish to keep moisture out.

Rubber gloves

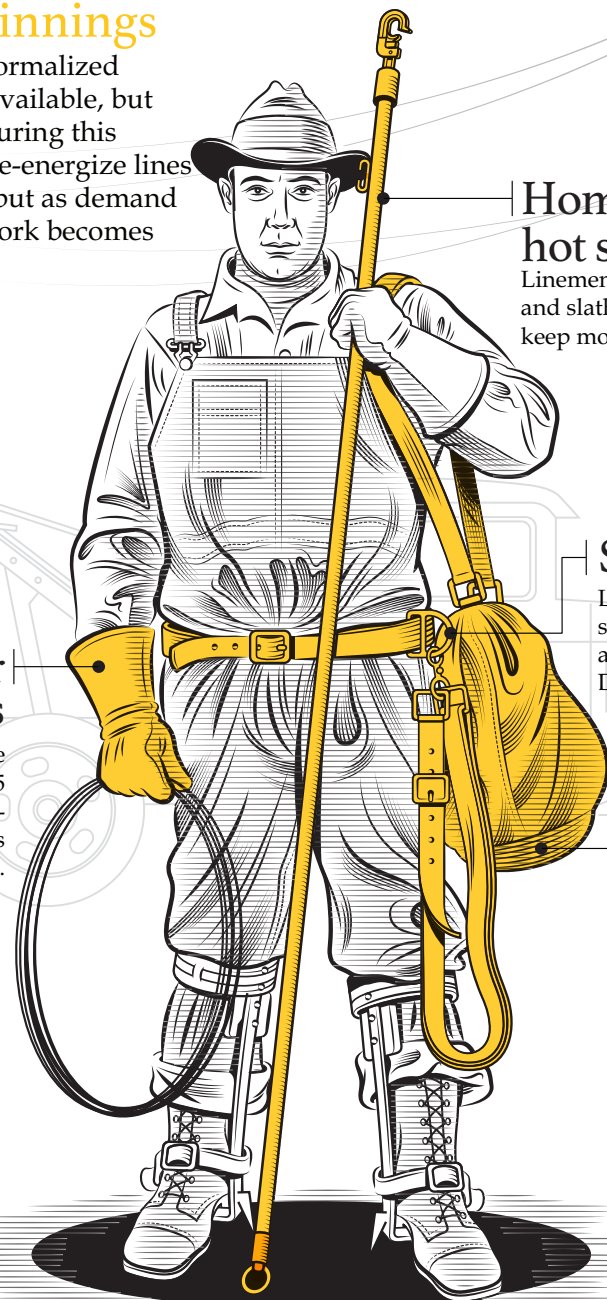
Safer rubber gloves are introduced around 1915 along with other rubberized equipment, such as line hoses and blankets.

Standardization

Linemen belts and safety straps are more standardized and adjustable and attach to D-rings.

Leather tool bags

Leather bags store and carry climbing and work tools.



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1926-1950

Safety training improves

The electric industry develops more formalized safety rules and procedures to protect lineworkers. In the late 1930s, apprentice programs with stricter standards also begin.

Hats

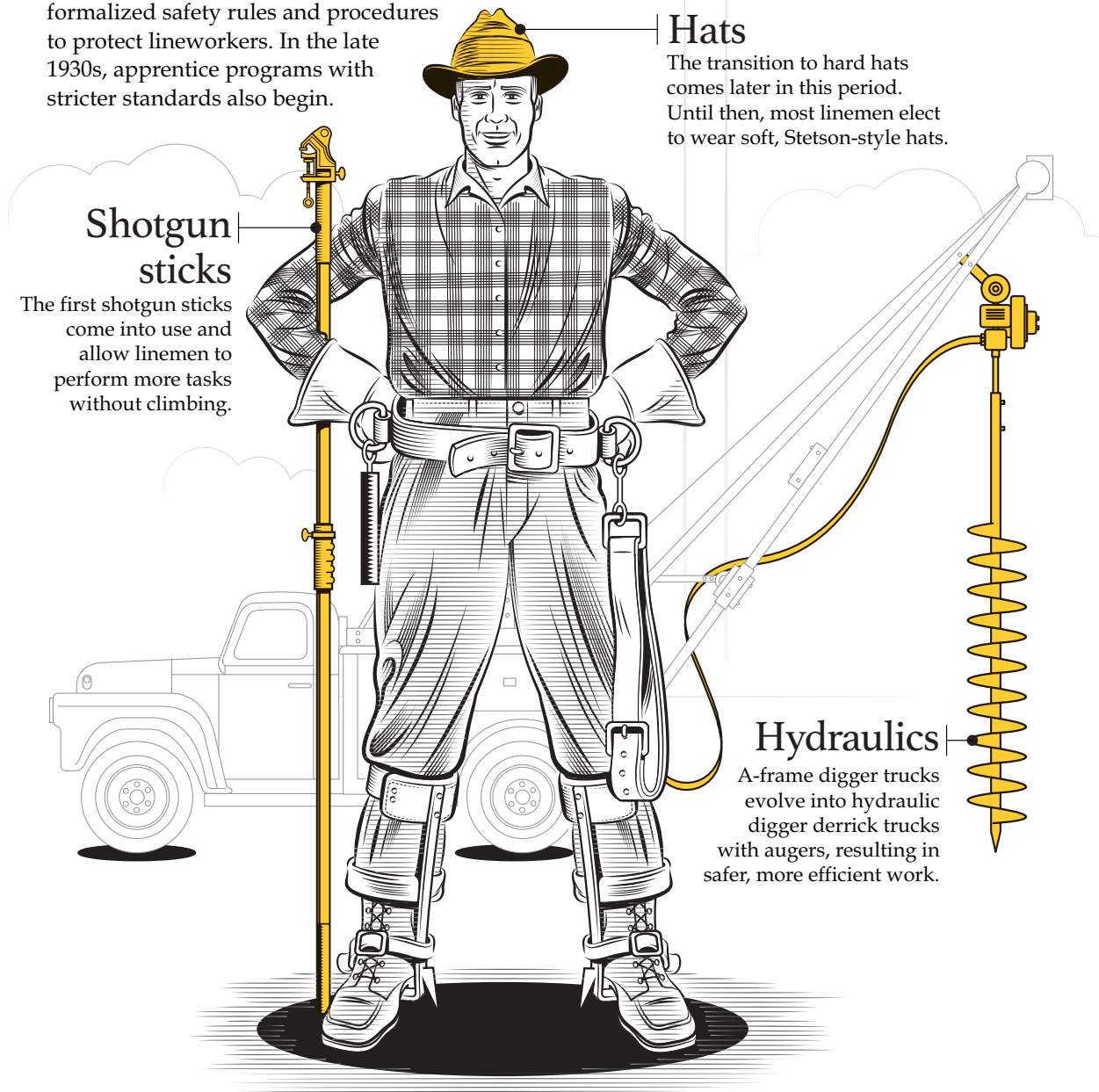
The transition to hard hats comes later in this period. Until then, most linemen elect to wear soft, Stetson-style hats.

Shotgun sticks

The first shotgun sticks come into use and allow linemen to perform more tasks without climbing.

Hydraulics

A-frame digger trucks evolve into hydraulic digger derrick trucks with augers, resulting in safer, more efficient work.



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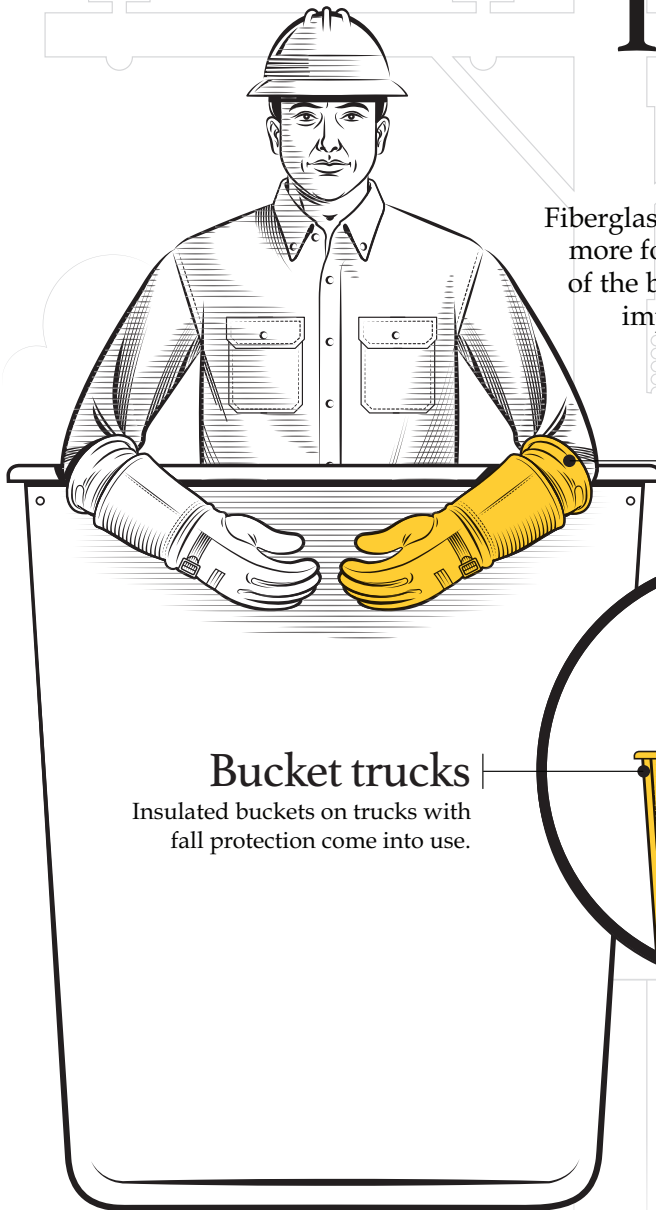
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1951-1970

New heights and faster communication

Fiberglass sticks evolve to “rubber gloving,” with more formalized rules and training. The advent of the bucket truck, utility undergrounding and improved communications are major steps.



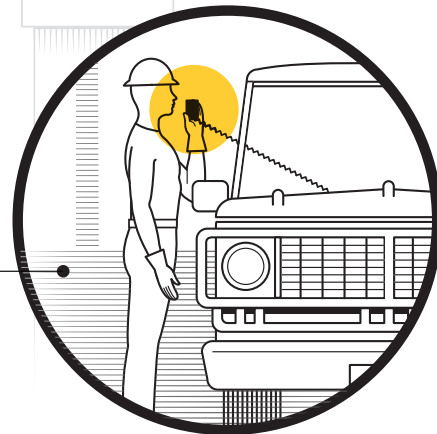
Bucket trucks

Insulated buckets on trucks with fall protection come into use.



Rubber glove protectors

Linemen wear two pairs of gloves – leather on top of rubber – for more protection.



Two-way radios

New applications of radio technologies improve communications during emergencies and storm restoration.

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1971-1990

New law of the land

President Richard Nixon signs the Occupational Safety and Health Administration law. Underground line installation gains widespread use. Material-handling bucket trucks and hydraulic and mechanical compression tools also improve work conditions.

Hard hats

Head protection made from thermoplastics gains widespread use.

Rubber sleeve improvements

New sleeves extend to the shoulders for extra protection.

Telescoping or extendo stick

Made of fiberglass, the extendo stick lets workers perform tasks like opening and closing switches or removing tree limbs while staying on or near the ground.



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1991-present

Watching out for workers

OSHA begins requiring utilities to provide lineworker clothing to protect from arc flashes and “fall protection” devices like body harnesses and fall-arrest lanyards.

Harnesses

Linemen aren’t climbing as much, so body harnesses and lanyards are valuable backup support.

Insulated hard hats

Linemen now wear hard hats insulated with a special polyethylene that protects against blows to the head.

Clothing

Arc-rated clothing is written into OSHA-required personal protective equipment.

Battery-operated crimper

Lightweight mechanical crimpers mean no more squeezing connectors by hand.

Tablets

Mobile devices help lineworkers troubleshoot problems using SCADA and meter data instead of climbing a pole or going up in a bucket.

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