

“We Thought That One Was A Ground”

The operator raised the boom instead of running the winch.

10 MIN

NFPA 70E Art. 110.6 · OSHA crane clearance requirements

NIOSH FACE 88-22

WHAT HAPPENED

1988 · Chemical plant · Pipefitting contractor · 51- and 36-year-old welders, 4 days on the job

A five-man crew used a rented 58-foot crane to reposition a welding shed inside a chemical plant. The shed had been set down directly beneath a 12.4 kV three-phase line 27 feet above ground, and the boom had been extended up between the lower ground and telephone wires and the energized conductors. Four crew members took hold of the structure to rotate it by hand. When the foreman called for a lift, the operator — a pipefitter with no crane training — raised the boom instead of running the winch. The building rose about four feet and the boom contacted an energized conductor at 7,200 volts to ground. Two men died. A third survived with burns.

WHY IT HAPPENED
The ten-foot minimum approach distance was not maintained, the lines were never de-energized, and an untrained operator was running the crane.

WHAT THE STANDARD REQUIRES

- Boomed equipment does not operate within the minimum approach distance of energized lines.
- Only trained, qualified operators run powered equipment — no exceptions for “just moving it.”
- Ask the utility to de-energize and ground the lines, then VERIFY it was done.
- Never position a load, or people, underneath an energized line.

TALK ABOUT IT — DO NOT SKIP THIS PART

1. A survivor told investigators they thought one wire was a ground because it was not insulated. Every conductor up there was uninsulated. What do we assume about lines overhead?
2. Who here has operated equipment they were not trained on because it was quicker?
3. Four days on the job. What does a new person on this crew actually get told about the lines?

WHAT WE WILL DO DIFFERENTLY HERE

ATTENDANCE

PRINT NAME	SIGNATURE	PRINT NAME	SIGNATURE