



**US Army Corps
of Engineers®**
Engineering and Support Center,
Huntsville

Safety Office

Mishap Lessons Learned



Subject: ELECTRICAL MISHAP – 03 JAN 2019

Event: A contractor employee was working from an 8 foot fiberglass ladder while changing a light bulb in a canister light on the second floor mezzanine. While attempting to turn the light bulb the glass of the bulb broke. Without de-energizing the circuit and applying LOTO he retrieved a pair of pliers and attempted to remove the rest of the bulb. His hand made contact with the exposed electrical internal parts of the bulb and he was shocked. The shock caused him to drop his tool down to the occupied area of the first floor of the facility as well as causing him to kick off the ladder falling at least 5 feet to the floor. Despite this happening the worker went down stairs, retrieved his tool, ascended the ladder and changed the second bulb in the canister. Ultimately the fall resulted in a fractured arm and a recordable Class C mishap.

Root Cause: Not locking out the energized circuit when exposure to hazardous energy was possible.

Lesson Learned: Do not allow work to be performed on exposed energized equipment or circuits.

Recommendations:

1. Require Activity Hazard Analysis for all tasks (in this case removing broken bulbs).
2. Do not allow employees to work on energized equipment.
3. Ensure proper training of employees (HECP and LOTO)
4. Ensure proper precautions are in place to prevent materials from falling onto people below the work area.
5. Ensure proper mishap notification procedures are known and followed by all employees.