

Ames Blue Alert- Researcher experiences electrical shock

A researcher working in Ames Laboratory reported receiving a mild electrical shock to his left hand when he was working inside a laser interlock relay box in December.

The researcher had been trained in Basic Electrical Safety and Lock out/Tag out three months earlier. He opened the back of the relay box in an attempt to dampen the sound from the relay operating the flashing lights.

Employees should remember that institutional training does not grant authorization to work with live electronics, or to open panels and distribution boxes. Institutional training provides a level of safe practice to be followed during and after equipment- or task-specific training provided by the manufacturer or at the Group level. The principles of Lock out/Tag out require the control (locking/tagging out) of all hazardous energy sources for the equipment prior to maintenance and service, including repair. Employees should also remember that testing of exposed contacts to confirm energy control is required.

A suggested line of demarcation is the cord/flexible connection to equipment. The following are examples of equipment considered “utility” service, and therefore outside the access authorization for employees-

- electrical panels
- disconnects
- motor starters
- laser interlocks
- X-ray interlocks
- outlets
- lights/light switches
- hood controllers

Employees are also reminded to promptly report ALL contact with live electrical parts to line management and ESH&A. Prompt reporting allows the correction of conditions that might lead to a more serious exposure.

Questions and comments should be directed to G. P. Jones (4-4161), Shawn Nelson (4-9769), John Hjortshoj (4-4823) or Mark Grootveld (4-7895).