

Electric shock incident

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A member has reported an incident in which a ship's electrician received a 220V AC shock.

What happened?

The incident occurred when working on a 24V remote input/output (RIO) module on joy-stick electrical equipment. The electric shock was transmitted from the left hand to right hand due to the fact that the path of least resistance was across the body and to ground through the factory fitted anti-static earth strap. The electrician suffered minor burns to the left hand.

Our member noted the following:

- Live conductors should not be present at worksites if the correct controls are in place, and advice from the manufacturers of electrical equipment is always properly followed.
- Personal risk assessments were not adequate due to complacency in the task to be undertaken.
- Harm could be caused to any person when they are exposed to 'live parts' that are either touched directly or indirectly by means of some conducting object or material.
- Damage could be caused to electronic equipment when they are exposed to 'live parts' that are either touched directly or indirectly by means of some conducting object or material.
- As part of the isolation process the equipment had to be checked to ensure electrical energy had been isolated or disconnected from its source, this should be done using a voltage tester/probe and compatible proving unit.
- Although electrical tasks are undertaken on all members' worksites on a regular basis, this incident acts as a reminder that live parts normal mains voltage, 230V AC, can cause; electrical burns, permanent injury and electric shocks, which can prove to be fatal.

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