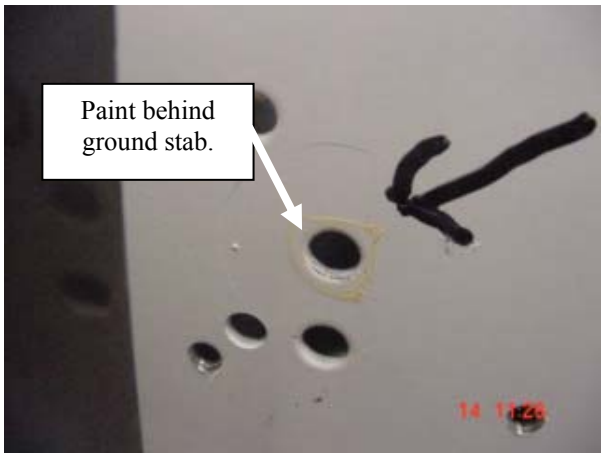
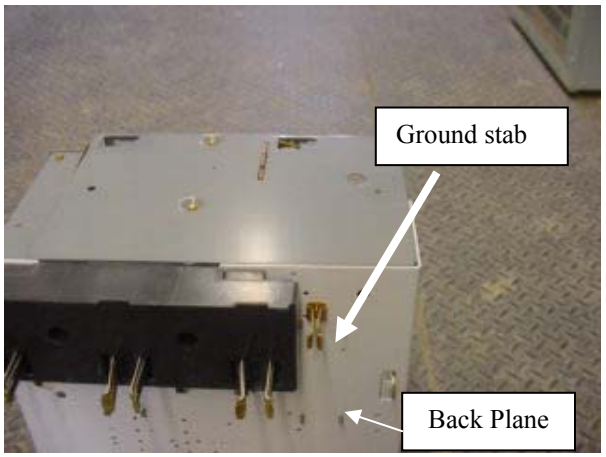
SAFETY BULLETIN

Electrified Panel Door Caused Electric Shock

An electrician opened a cubicle door of an Allen-Bradley MCC and noticed that the cubicle was energized. Further investigation indicated that the back plane of the cubicle was not grounded. (The back plane is normally used as ground reference for the instrument transformer, which is acceptable provided that the back plane is properly grounded).
As shown in the left-hand photo, this cubicle came from the factory with paint between the ground stab and screw connection. As part of the corrective action all the panels in this field with Allen Bradley MCCs were checked and another cubicle was found to be improperly grounded with 120 volts on the door.





In both cases removing the painted surface and ensuring the connections were tight repaired the poor grounding issue.

Recommended Actions:

Check all Allen Bradley MCC panels for this hazard.
Check other manufacturers' panels for similar improper grounding.
As a permanent fix electricians will properly ground all back panels and join the back panels properly to ground regardless of ground stub condition.
In the interim wear gloves, for all activities, when touching or working on Allen Bradley panels. This does not change the general safety standards currently in place regarding the wearing of gloves.

How to safely approach any electrical panel

Treat electrical panels as energized. Touch the panel door with the back of your hand before grabbing any handles or attachments on a panel. An electrical charge can cause your muscles to contract and you can 'latch on' and not be able to release your grip if you touch it with the front of your hand. If there are any indications that the panel is energized, call an electrician immediately. Secure the area and do not allow other workers to approach the electrical panel.

For more information contact Alfie Studer at (780-639-5207), or Ron Kucy at (780-639-5221) at Imperial Oil Resources.