# Engineering Physics / C.E.D.T. Research Hazards Safety Report

# Ian Wigboldus

# 1. Potential Hazard Description

The project will included the use of a low powered laser of Class 2. The laser will be in the near infrared range making it less visible to a human eye and therefore more dangerous. It also uses a street camera which is a source of high enclosed voltage.

Due to elevated shelving in the lab there will always be a hazard of falling objects such as boxes or other equipment.

My secondary project will involve the use of LEDs which are a bright source of light and may pose a hazard.

# 2. Routine Operating Procedure

The laser should be set up in an area where there are little to no reflective surfaces to prevent stray reflections hitting anyone in the lab. Also it is important to set up the laser at a height that is not the same as eyelevel for the research or any other person working in the area. Covers should be placed over windows and curtains can be used to block the laser from leaving the working area. The researcher and any other person in the lab should always be wearing protective glasses, as needed to protect against the used laser.

The Street Camera should always be placed on a secure surface, and also be grounded at all times. If any damage is done to the casing of the camera it should be immediately turned off and unplugged to prevent anyone from getting a shock and to prevent chance of an electrical fire.

As per standard lab procedure pants and closed toed shows should always be warn in the lab. As well anything put on a shelf should be stacked neatly and in a balanced position where it will not be easily bumped or pushed off. Any cords should be away from the walking areas in the lab to prevent trips.

When using the LED lights, make sure they are not shining near or around others eyes. This may momentarily disorient that person and they could hurt themselves. All efforts should be made to not look directly at the light when it is fully shining.

### 3. Emergency Preparation

In case of an emergency the operator should dial 88. As well any equipment that is running should be turned off. The supervisor and EOHSS should be notified of the incident and an Incident Report must be filled out within 48 hours