# <u>MSAD 75</u> <u>Safety Guideline</u>

## **Use of Apple Power Cords**

April 6, 2011 Rev. 1; Dec. 9, 2013

### **Background:**

During instruction with a Apple Lap Top Computer utilizing a power converter a individuals have experienced an electrical shock. The incidents were reported and investigated.

All devices were inspected. During the investigation of the incidents it was determined that plugging the Apple power converter block directly into the power strip on the side of the A/V cart or an outlet utilizing the "Duck Head" folding prong adaptor MAY have contributed to the incident due to the physical characteristics of the devices.

### **Discussion:**

Photo #1 shows the arrangement of plugging the Apple Power Converter Directly into the A/V Cart power strip. Note how the two Prong "Duck Head" power blades of the converter can become exposed. If someone were to inadvertently touch one of the blades and the metal housing an electrical shock could occur.

The "Duck Head" blades can become exposed due to a variety of factors:

1) The spring device on the converter can weaken over time allowing more movement of the assembly.

2) The weight of the power converter tends to pivot on the blades since the power strip is narrower than the converter leaving the upper portion of the blades exposed.

3) The power converter does not include a ground plug (Laptops are internally grounded) as added friction to keep the gap tightly closed.

Photo #2 shows a safer means of plugging your Apple Power Converter into an A/V cart power strip or Outlet.

By removing the "Duck Head" two prong device from your power converter and attaching the three prong AC power cord into the converter and power strip/outlet there is very little chance of the plug blades becoming exposed because you have the added benefit of the ground plug holding the connection more firmly together and having the converter block supported by the A/V cart top/desk rather than hanging over the side. This is the recommended configuration.

#### **Reminder:**

Always report any incident of an electrical shock to your administrator and if you suspect any equipment is defective remove it from service and report it to the appropriate personnel for corrective action (IT, Facilities, Library Services, etc.)



