**Purpose:** The purpose of this Safety Gram is to provide guidance in terms of hazards associated with Electrical Circuit Breaker Panels (ECBP) located throughout all buildings on campus. Regulatory clearance, and access to ECBPs will be discussed through the identification of key regulatory compliance points, IAW CFR 1910.303, and established Standard Operating Procedures. This document serves as an awareness tool and an SOP for Electrical Circuit Breaker Panels.

**Scope & Applicability:** Electrical Circuit Breaker Policy is applicable to all faculty, staff, and students, temporary/term, contract, and permanent employees as well as visitors who are located within NSAM/NPS labs, machine shops and other facilities.

**What is the Purpose of an Electrical Circuit Breaker Panel:**
A circuit breaker is an automatically-operated electrical switch designed to protect an electrical circuit from damage caused by overload or short circuit. Its basic function is to detect a fault condition and, by interrupting continuity, to immediately discontinue electrical flow throughout the panel. It is the interrupt between the service and the branch circuits of the panel.

This process protects wires from damage that would occur given an overload; the wiring would heat up and eventually could cause a fire.

**OSH 1910 Regulatory Requirements Associated with Electrical Circuit Breaker Panels**

- Emergency Access - Adequate Workspace Available in front of Circuit Breaker Panel – may not be used for storage - 36” clearance in front and 30” width.

- All Switches on Circuit Breaker Panel will be clearly labeled – identifying locations of the specific circuit breakers.

- Circuit Breaker Panels will not have open spaces on panel – poses serious electrical hazard - do not touch or insert tools into the space – the situation poses a serious electrical hazard - installed blank covers will occupy open spaces.
Reset Circuit Breaker Switch

An overloaded circuit breaker will switch off in order to protect an electrical system. A tripped circuit breaker can be easily reset by following a few simple steps.

- Locate the breaker box. Look inside the breaker box for a circuit breaker switch that has flipped off or is somewhere in the middle between on/off. Some breakers have a red window that shows when the breaker has tripped.

- Push the switch to a full “off” position and then turn it completely on. You should hear a “click” of the switch when it is on and the power should be restored to the tripped circuit.

- Once you have restored power to the specific circuit then you should be able to operate electrical devices without circuit breaker problems.

- If the same circuit breaker continues tripping after you have reset it, there may be a problem and it should be reported to base Public Works. Since circuit breakers trip when they detect too much power use for the circuit, the situation can create a fire hazard.

Standard Operating Procedures:

- If Circuit Breaker Pops at your work site (electrical power shuts off suddenly) – contact the Base Public Works – Trouble Desk #2526
- Do not attempt to open the Circuit Breaker Boxes – leave that to trained professionals.

*Do not attempt to work on your electrical wiring, switches, out outlets unless you are properly trained and equipped to do so. Electrical components in a building can easily cause an electrical shock, burn, or even death.*