COMMANDER NAVY REGION HAWAII
SAFETY NEWSLETTER
June 2004
www.hawaii.navy.mil/Safety/index.htm

ELECTRICAL SAFETY

Electrical current exposes workers to a serious, widespread occupational hazard; practically all members of the workforce are exposed to electrical energy during the performance of their daily duties, and electrocutions occur to workers in various job categories. Many workers are unaware of the potential electrical hazards present in their work environment, which makes them more vulnerable to the danger of electrocution.

Electrical contact consist of four main types:

- Electrocution (fatal)
- Electric shock
- Burns
- Falls

Electrical accidents cause thousands of injuries and deaths in industry every year. Unsafe working conditions and unsafe acts are the underlying causes of all of these accidents. Learn to spot, correct and prevent these culprits and you'll make your workplace safer.

CORRECT UNSAFE CONDITIONS

Unsafe working conditions result from faulty equipment or hazards in the environment. Equipment with defective insulation or parts, improper grounding, loose connections or unguarded energized parts is just plain dangerous to work with. Environments containing flammable vapors, liquids or gases; corrosive chemicals and wet or damp locations are also dangerous when electrical equipment is in use. Take action to correct the hazards:

- Always check equipment cords and attachments before each use.
- Make sure all equipment is properly grounded and plugged into grounded circuits.
- In wet locations, ensure Ground Fault Circuit Interruption (GFCI) device is used.
- Never modify or remove a guard. Guards protect you from energized equipment parts.
- Be aware of flammable chemicals, and follow your Safety Department procedures for operating electrical equipment in their vicinity.

PREVENT UNSAFE ACTS

The most common unsafe acts include using tools or equipment too close to energized parts, intentionally using tools that are obviously defective or unsafe, and failing to shut off electrical equipment for repairs, servicing or inspections. Don't be a victim of unsafe acts:

- Keep clear of energized parts. Be aware of the conductive materials tools around you, and keep them far from sources of electricity. Remember, steel wool, metallic-cleaning cloths and some chemical solutions are conductive.
- Never use equipment you know is damaged. No shortcut is worth an electrical shock. Report any damaged insulation or loose parts or connections you find.
- If you must work with energized parts and lockout/tagout is not possible, always use protective equipment, such as rubber gloves, sleeves, blankets and mats, or non-conducting tools rated for the voltage of the parts. Ensure this equipment is maintained so that it does its job.
- Be aware of your Safety Department's Lockout/tagout Program and procedures to ensure equipment is turned off, and stays off, during maintenance and repairs.

LOCKOUT AND TAGOUT

1. Always lock or tag the energy sources to gear and equipment before you start to do maintenance or repairs on them. You may need to lockout or tagout something during construction, installation, adjustments, inspections, and modifications.
2. Energy sources include electrical, hydraulic, and pneumatic. Some energy is potential, such as the energy stored in capacitors, compressed air or springs.
3. Never remove or ignore locks or tags on machinery or circuits.
4. Don't try to bypass lockouts or tagouts.
5. Remember that tagouts are warnings only.
6. Before you start to tag or lock something out, make sure everyone affected knows what is going on.
7. Locks and tags must be durable; readable if exposed to water or chemicals; easy to identify; standardized in shape and color; marked to identify who's using it.
8. Know the six steps to de-energizing something and applying a lockout or tagout:
   - Understand the equipment and its energy source. Is there a checklist or written procedure?
   - Turn off the equipment.
   - Isolate all the sources of energy.
   - Apply the lock or rag.
   - Control any residual energy.
   - Verify your work. Check to ensure energy is off.

Summer Fun

The 101 Critical Days of Summer

Memorial Day marks the beginning of the 101 Critical Days of Summer. These are called the "Critical Days of Summer" because the off-duty fatality rates are usually higher during this period. Of course here in Hawaii we have 365 days of summer and every one of them is critical when it comes to the safety and well being of our Sailors, Marines, and Civilian workforce. During the 101 Critical Days our fatality rates are usually the result of motor vehicle accidents and recreational mishaps.

As many of you know, personal motor vehicle (PMV) mishaps result in the largest number of off-duty deaths each year. Non-fatal off-duty PMV mishaps also result in a significant number of lost workdays. Many of these PMV mishaps are preventable. Prevention methods could be something as simple as wearing your seatbelt. A few other mishap contributors are driving under the influence of alcohol or while fatigued/tired, or even speeding, which is more common among our young people here in Hawaii. All of these are preventable. If you're going to drink, get someone that is *not* drinking to drive. If you are tired or fatigued take a nap before driving. As far as speeding goes, studies have shown that you don't get to your destination that much quicker if you speed rather than if you were to go the speed limit. The difference is in seconds, not minutes. The results can be devastating! Don't speed, you'll do yourself a favor.

Other recreational mishaps include water-related mishaps. Drowning is one of the leading causes of summer deaths. This is another activity that alcohol doesn't mix well with. Alcohol impairs your thinking and causes you to do things that you wouldn't normally do. If you are boating wear a personal floatation device (PFD) and ensure that the weather is going to remain good for the duration of your trip. Swim in authorized swimming areas only! Sandy Beach is not a place that is recommended for swimming and you should use extreme caution if you are going there to surf, boogie board, bodysurf, etc. Serious head and neck injuries are common when large waves break in shallow water/shore breaks. Your part in helping our Navy family reduces the number of injuries and fatalities this summer is simple…think before you act! Obey posted speed limits, don't drink and drive, and don't go diving or kayaking alone. The bottom line is *if there is a very real potential for injuries, don't do it*.

Heat Stress (Injuries)

During warm weather conditions, personnel become susceptible to increases in both temperature and humidity, both of which can have very serious repercussions. All personnel must be aware of the ramifications of increased heat and humidity and be properly prepared. Individuals must be gradually acclimatized to prevent heat injuries. It normally takes approximately three weeks of gradually increased physical activity before an individual is considered to be fully acclimatized. Heat stress problems can, and do, occur in all aspects of physical activity; recreational, work, training, on duty and off.
Classic Heat Stress injury recognition of signs and symptoms and general treatments are shown below. There are three basic types of heat injuries. Of the three, heat stroke is the most serious and is considered a serious life-threatening emergency. Immediate action is a **must**. Heat stroke is fatal for roughly 50% of its victims.

Injury Type	Signs/Symptoms	Treatment
Heat Cramps	Exhaustion Abdominal Cramps Large Muscle Cramps	Drink water Replace Electrolytes Stop Activity
Heat Exhaustion	Profuse Sweating Tired/Confused Flushed Complexion Nauseous/Headache Faint/Light Headed	Cool and Shade Drink Water Fan/Spray Water Stop Activity Loosen Clothing/Cool Skin
Heat Stroke	Irrational/Confused Stopped Sweating Dry Skin Weak, Thready Pulse/ Unconscious Weak/Faint	Immediate Medical Care Immediate Cooling Fan or Spray Water Remove Clothing, Immerse or Sponge down Replace Fluids/Water

Note: Heat stroke is a life threatening medical emergency. ***When in doubt, treat for heat stroke****. Be aware that the signs/symptoms shown above will not be present in all cases.*

During hot weather activities, use common sense and follow these recommended actions:

- Schedule hard labor or outside work during the cooler hours in the morning or evening, if possible.
- Take regular rest breaks, if possible in the shade.
- Gradually acclimatize yourself to the heat.
- PT in the cooler morning or evening hours.
- Drink generous amounts of water before and during the activity.
- If you feel faint or sick, stop and rest immediately.
- Protect your skin. Sunburned skin does not sweat (a necessary body function that cools the body).
- Avoid salt tablets.

June's Training Reminders
(At Bldg. X-11 unless otherwise noted)
Indoctrination (PWC/PACDIV)
8 June - 0800-0930
Lockout/Tagout
10 June - 0715-1100
Respirator Training
Bldg. 40
17 June - 0730-0930
Fall Protection Training
18 June - 0730-1100
AAA DIP
NAVSTA Pearl Harbor
21 June - 0700-1530
AAA (Offender) Training
30 June - 0700-1500

Safety Director
(808) 474-3953, Ext. 358
Management Analyst
(808) 474-3953, Ext. 358
Compliance Division
(808) 474-3953, Ext. 355
Evaluation Division
(808) 474-3953, Ext. 340
Industrial Hygiene Division
(808) 474-3953, Ext. 366

HOW WE GET HURT AT PEARL HARBOR

Mishaps that occurred in the Month of May

- Pipefitter strained left shoulder when using hammer drill above shoulder height resulting in **4 Lost Work Days.**
- Cook suffered burns to left arm, stomach, and right foot while removing water from steamer resulting in **Lost Time.**
- Carpenter injured back while loading truck resulting in **6 Lost Work Days.**
- Firefighter injured right ring finger while loading fire hose resulting in **4 Lost Work Days.**

Quotable Quotes

"So, what's a seatbelt cost, anyway? Nothing, right? Comes with the car, and most people never consider the cost of the thing. But it's priceless, isn't it? Unless you can put a price tag on the value of human life, there's no way to determine what you'd pay for a buckled seatbelt one nanosecond after you simultaneously realize you need it, and discover you don't have it on. Probably, you'd give everything you have to one right about then, wouldn't you? But, you'd be too late right about then, wouldn't you?" -- Bill Mooberry, Former Executive Direction of the Naval Safety Center

Consumer Safety Recall

The Consumer Product Safety Commission (CPSC) has issued the following product recall. Consumers/users should stop using recalled products immediately unless otherwise instructed by manufacturer.

Name of product: Modular Test leads used for electrical testing multimeters.
Manufacturer: Fluke corporation of Everett, Washington.
Hazard: Electrical leads used to connect probes of handheld digital multimeters when testing for the presence and amount of voltage present in electrical circuitry can result in incorrect multimeter readings. This poses a serious shock or electrocution hazard if the consumer touches live wires that the meter has read as having no electrical current.
Description: The recalled test leads are red and black with no permanent probes attached. They have the Fluke logo on the connector.
For additional information, call Fluke Corporation at 888-401-9940 or visit the Naval Safety Center's web site at www.safetycenter.navy.mil