MSC LOCKOUT/TAGOUT PROGRAM

Military Sealift Command (MSC) ships transport equipment, fuel, supplies and ammunition to U.S. forces worldwide. MSC operates their ships to support the U.S. Navy fleet, to preposition U.S. military supplies and equipment at sea, to conduct special mission support, and to provide transoceanic transportation of defense cargo. Estimates have been published that nearly 40 million workers in the United States are exposed every year to the energizing, start-up or release of stored energy due to inadequately secured machinery or equipment. The Occupational Safety and Health Administration (OSHA) reports that implementation of Lockout/Tagout Programs could prevent 120 deaths and 60,000 injuries each year.

Energized systems on board ships are powered by various sources. Power from electricity, hydraulics, compressed air, steam and coiled springs, all pose risk of injury to workers and damage to property. MSC established its highly successful Lockout/Tagout Program to allow workers to physically lock out machinery and equipment prior to servicing them. The Lockout/Tagout Program reduces that risk of personal injury and property damage. Since equipment and machinery power sources come in many forms, there are situations when it isn’t feasible to attach a lockout device and lock. In those cases, a tagout system alone must be used.

In 1995, USNS PATUXENT (T-AO 201) Chief Engineer Ray Blanchet observed the use of lockout/tagout at a Louisiana shipyard. Recognizing its potential, he recommended it for MSC’s use and began augmenting lockout/tagout on the PATUXENT, an underway replenishment oiler, along with the existing tagout program. MSC selected five vessels in addition to the PATUXENT as test platforms. Upon approval by the Commanding Officer of MSC in January 1997, procedures were implemented and lockout devices and padlocks were supplied for each MSC civil service manned vessel. The MSC Safety Office developed and
distributed a video tape on lockout procedures, a second video tape describing lockout devices, a 40 page lockout/tagout handbook, lockout tags with photo identification, a lockout/tagout record sheet, and “Lockout Before Servicing” labels.

The MSC Lockout/Tagout Program requires both a tag and a locking device with a padlock to secure an energy source whenever possible. An identification tag is attached to the energy source with the locking device and padlock. It serves as a visual warning that the energy source is secured and is not to be reenergized. These special identification tags provide a photograph and the name, title, and comments by the person who attached it. The locking device and padlock physically secure the power source, providing a positive barrier between the power source and the person working on it. The only individual authorized to remove a lock or tag, is the person who installed it. In an emergency, the ship’s Master or Chief Engineer may remove a tag or lock, only after verifying to ensure that no one would be adversely affected by reenergizing the system.

MSC’s Lockout/Tagout Program allows ships’ electricians to work on minor tasks, such as locking out power to a light switch, without prior notification or approvals. Such projects are termed “Small Tasks” and can be performed on the spot if they don’t affect other systems, and if the person performing a “Small Task” completes it prior to departing. Electricians also carry the locks and lockout devices and with them, avoiding the need to return repeatedly to a lockout station.
Under the previous tagout system, an MSC worker had to track down three separate approvals before starting a task, consuming valuable time that could have been spent fixing the problem. The Lockout/Tagout Program requires just one approval signature. Each section maintains its own lockout/tagout station and authorized personnel. Contract personnel and shipyard employees assigned to work on MSC ships are required to follow MSC Lockout/Tagout procedures for taking equipment and machinery out-of-service.

Annual savings realized through implementation of the MSC Lockout/Tagout Program now exceed $1.1 million per year. The cost savings in labor from inception of the Lockout/Tagout Program through calendar year 2010 are approximately $14 million. Since March of 1997, MSC has not experienced a single lockout/tagout-related mishap.