



# SECURITY FACTS!!



A Quarterly Physical Security and Security Technology Newsletter

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## In This Issue...

**Force Protection Equipment Demonstration**

**Fire Protection**

**Lock Talk**

**Lock it Up Right!**

**Save the Cost of a New X-07 Lock!**

**Frequently-Asked Questions**

**Advantages of Modular Vaults**

**Key Control Update**

**For Assistance or Info**

**Puzzled About Container Storage?**

**Warranty Procedures on X-07 & CD-X07 Locks**

**GSA Optional Form 89**

**Contributions Welcome!**

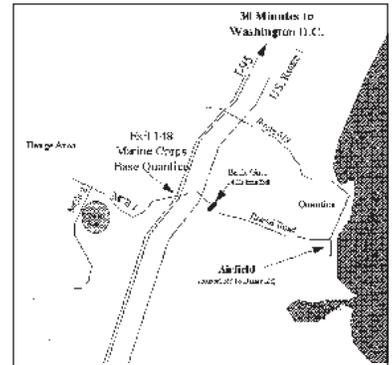
## Force Protection Equipment Demonstration See Progressive Advancements in Force Protection Technology

The second annual Force Protection Equipment Demonstration (FPED II) will be presented May 3 through 6, 1999, at Quantico Marine Corps Base, Virginia. The Joint Chiefs of Staff, the Office of the Under Secretary of Defense for Acquisition and Technology, the Joint Non-Lethal Weapons Directorate, and the Department of Justice will host this event.

State-of-the-art and commercial off-the-shelf force protection components and systems will be showcased. Selected equipment that is identified by the Department of Defense as possible solutions to force protection requirements will be prioritized for procurement and testing in FY2000.

Manufacturers will demonstrate equipment in the following categories:

- Interior, exterior, perimeter and tactical security sensors and surveillance systems
- Explosive detection systems
- Blast protection/mitigation equipment and materials
- Vulnerability assessment/analysis tools
- Barrier delay and denial technology
- Non-lethal weapons and technology
- Personnel protection gear
- Automated entry control equipment/systems
- Communications equipment
- Explosive ordnance disposal equipment



Quantico Marine Corps Base

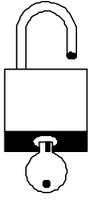
On-line registration, general information, and regular updates can be found on the FPED II web site: <http://www.csc.com/fped>.

## Fire Protection

Fire resistant containers for the protection of computer media against structure fires are now available. NFESC TechData Sheet, "Protecting Electronic Media from Fire," TDS-2054-SHR, provides information on the configuration, testing, and performance of these containers. Fire Cooler Models 1000 and

1100 have passed UL-listed testing. Both of these models are easy to use as stand-alone systems or in drawers of legal-sized, GSA-approved, security file cabinets. For more information on fire resistant containers and updated product testing, contact the DoD Lock Program Technical Support **Hotline**.

## lock talk...



### Wondering What These Terms Mean?

- Hub:** A lock component which redirects rotational motion from a spindle or shaft to linear movement of a latch or bolt.
- Spindle:** A component which transfers rotary motion from outside a lock or latch case to an inner mechanism.
- Split Spindle:** A multi-piece spindle which allows a knob or lever to be installed on only one side of a door.

*Courtesy of The Professional Glossary of Terms relating to Cylinders, Keys and Master Keying, compiled by the ALOA-sponsored National Task Group for Certified Training Programs, Master Keying Study Group*

### Security Facts!!

Published By  
**NFESC**



Using Appropriated Funds

The views and opinions expressed in this publication are not necessarily those of the Department of Defense.



# Tools &

# EQUIPMENT



## LOCK IT UP RIGHT!

### Only One High Security Padlock Meets Requirements

Although several padlocks have been approved by the Department of Defense (DoD) as high security padlocks, only the **Sargent and Greenleaf (S&G) Model 833C** meets the requirements of the current military specification for high security padlocks, MIL-P-43607G.

The Hi-Shear LK1200 and the S&G 831B are examples of padlocks previously approved for high security applications. Although these padlocks were approved at one time, they do not meet performance requirements. Both of these padlocks use Medeco keyways that are not protected by a patent that prohibits unauthorized duplication of keys.

High security padlocks are mandated by DoD to secure arms, ammunition and explosives, and chemical and special weapons. Critical assets such as these require the highest level of physical protection available.

It is also important that padlocks used to secure storage structures meet the most current requirements. **The 833C is the only padlock available that provides the required resistance to forced entry.** The keyway used in the 833C is restricted to DoD and protected by patent and Federal law.

Continued use of the LK1200 and 831B in high security applications is approved until service is required. At that time, they must be replaced with the S&G 833C.

**No attempt should be made to repair, cannibalize, or assemble locks from parts.** Mixing locks from unmatched locks alters

performance and risks exposure to compromise.

**The S&G 833C is available from the Defense Industrial Supply Center (DISC) in Philadelphia, PA.**

Ms. Kim Nguyen is the item manager for high security padlocks. When ordering, use the following National Stock Number: 5340-01-217-5068.

**For Navy activities,** these

padlocks are also

available from the Naval Surface Weapons Center, Crane, IN. For information, call:

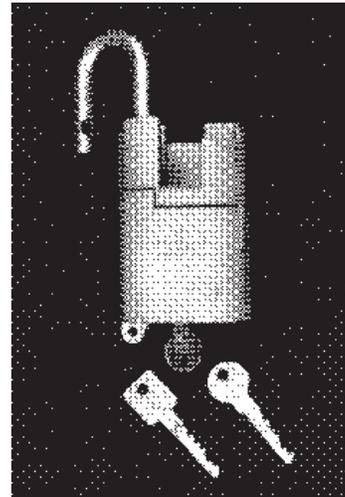
**NSWC Crane**

**Defense Locking Systems Branch  
(812) 854-1354 or DSN 482-1354**

**All other non-Navy activities contact:**

**Defense Industrial Supply Center  
(DISC)**

**(215) 697-3137 or DSN 442-3137**



*Sargent and Greenleaf Model 833C padlock with keys.*

## Save the Cost of a New X-07 Lock!



Article Courtesy of  
Security Officer, Eglin AFB

*If operated properly, the X-07 lock should provide trouble-free service for many years. The two most common problems opening an X-07 are:*

- (1) The dial turns but there is no display on the LCD.*
- (2) After entering the combination and turning the dial to the right, "OP" is displayed but the bolt does not retract.*

*The most common causes of the first problem are:*

- The dial hub is loose on the spindle.*
- The LCD is defective.*

*The most common causes of the second problem are:*

- The stepper motor is stuck or defective.*
- The reed switch is defective.*

Some replacement parts (LCD, stepper motor, and reed switch) are covered by warranty if the lock is less than two years old. (Replacing the reed switch will require replacing the lock case). The repair call will generally cost approximately \$100.00 for labor.

*If the dial is forced, the setscrews in the dial hub may cut grooves around the spindle.* The dial becomes loose on the spindle, and turning the dial will not power up the lock, resulting in no numbers displayed. In some cases, the two pieces of the spindle may have broken apart.

*If the bolt does not retract after "OP" is displayed and the dial is turned to the right, try this simple diagnostic:*

Turn the dial to the left. Either the "OP" will disappear, or it will remain on the LCD. If the display disappears, the problem is the stepper motor. Often, smacking the front of the container door or drawer will shake the stepper motor so its gear can move. To do this, dial the combination to obtain the "OP" display, then hit the front of the container (NOT the dial or dial ring) with a deadblow mallet, and continue turning the dial to the right.

*If the display remains, the problem is the reed switch.* NO AMOUNT of hitting the drawer or door will help. Call the **Hotline** for further instructions.

*The last cause is the most serious. There is no way to remedy a defective reed switch except to replace it.* This will require a forced entry to the container. 

### The X-07 Lock is a Delicate Piece of Equipment!

Operate the lock with a smooth action using full wrist turns, and when the dial stops, stop turning it. Further turning will cause the spindle to come loose or break.



## Frequently- Asked Questions

*The answers you need are here!*

*What is the drop dead date for retrofitting or installing Mas-Hamilton X-07 locks on my security containers?*

No final date has been established but the Inspector General is currently looking for this lock on all GSA-approved security containers.

*I need replacement keys for my Sergeant and Greenleaf 831B or Hi-Shear LK1200 high security padlocks. Where can I get them?*

Replacement keys for the LK1200 and 831B are no longer available because those locks do not meet requirements of the current specification on high security padlocks. Replace these locks with a Sargent and Greenleaf 833C, available from Defense Industrial Supply Center. The NSN is 5340-01-217-5068 and the current cost is \$170.45 each. See the article on page 2 for more info.

*Are my X-07 and CD-X07 combination locks Y2K compliant?*

Yes. Because there are no internal clocks in these locks, Y2K compliance is not a problem. 

# We the Next Winner!

Share your experiences  
and solutions with us!

Just fill out the "Wanted"  
form and mail.

Your contributions are  
welcome!



# Advantages of Modular Vaults

The latest version of the “*Information Security Program*,” dated January 1997, allows the use of modular vaults for the protection of classified information. Requirements for these vaults and secure rooms follow:

### Vault Construction Requirements

**Floors and Walls:** Eight-inch reinforced concrete designed to meet structural requirements. Walls must extend to the underside of the roof slab.

**Roof:** Monolithic reinforced concrete slab with a thickness determined by structural requirements, but not less than eight inches.

**Door:** The vault door and frame unit must meet the requirements of Federal Specification AA-D-600, Class 5 vault door.

### Secure Room Construction Requirements

**Walls, Floors, and Roofs:** Must be of permanent construction. Construction materials can be plaster, gypsum wallboard, metal, wood, or any other material offering resistance to and evidence of, unauthorized entry into the area. Walls must be extended to the true ceiling and permanently attached using construction industry standards.

**Doors:** Doors and frames to a secure room must be constructed of wood or metal. The hinge pins of outswing doors must be welded or otherwise designed to prevent removal. The door must be equipped with a built-in, GSA-approved, combination lock meeting Federal Specification FF-L-2740.

**Windows:** Windows that are less than 18 feet above the ground (measured from the bottom of the window), or that are easily accessible, must be covered (i.e. wood, gypsum wallboard, or metal), or constructed with materials that provide the same protection as the walls, floors, and roofs (i.e. polycarbonate or laminated glass).

**Utility Openings:** Openings such as ducts and vents should be less than 96 square inches (8 inches by 12 inches) or with a maximum dimension of 6 inches (6 inches by 24 inches). Larger openings must be hardened using barriers recommended in Military Handbook 1013/1A, “*Design Guidelines for Physical Security of Facilities*.”

### Modular Vault Construction Requirements

Federal government requirements for modular vault systems were prepared by the General Services Administration (GSA) and established in Federal Specification AA-V-2737. Vault systems approved under this specification can be used for the storage of classified material, as armories, or as sensitive compartmented information facilities.

Modular vaults offer many advantages compared to standard concrete construction. Modular vaults can be:

- Constructed and operational in a short period of time compared to conventional vaults
- Erected inside an existing building (dependent upon the structural capabilities of the building)
- Expanded and/or reconfigured
- Removed when no longer needed
- Reassembled at new locations

GSA-approved modular vault panels may be purchased from:

Custom Vault Corporation (703) 684-4482

(Exclusive distributor for International Vault, Inc.)

Modular Vault Systems, Inc. (410) 636-0280

Mosler, Inc. (800) 568-7233 or (800) 667-5371 



## Key Control Update Available Mid-1999

The updated “*Guidebook on Lock and Key Control*” will be published soon. Look for information on these subjects:

- *Mechanical and electronic access control systems descriptions*
- *Lock and key control program procedures*
- *How to establish an electronic access card control program*
- *Key control software and equipment*
- *Special lock and key control requirements for critical assets*
- *DoD requirement references for lock and key control* 



## For Assistance or Information

DoD Lock Program Technical Support Hotline:

(805) 982-1212 or DSN: 551-1212

Email: [dodlock@nfesc.navy.mil](mailto:dodlock@nfesc.navy.mil)

DoD Lock Program Web Site: [locks.nfesc.navy.mil](http://locks.nfesc.navy.mil)

STP Training

(805) 982-1575, DSN: 551-1575

DoD Lock Program Technical Management Office

Drawer Head Replacement Program

(805) 982-1567, DSN: 551-1567

(805) 982-1573, DSN: 551-1573

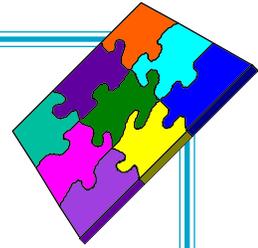
Security Technology Project

Security Engineering Division

(805) 982-1574, DSN: 551-1574

(805) 982-1581, DSN: 551-1581

 Printed on recycled paper



## Puzzled about Container Storage? Internal Labels Tell the Story!

Internal and external labels are used to identify GSA-approved security containers. All labels were located inside the container prior to the authorization of external labels in 1961. Internal certification and protection labels provide information about the container. These labels are found on one side of the control (locking) drawer of a drawer-type container, or on the exposed inside surface of the door of a door-type container or vault door.

The **certification label** lists the container's manufacturer, model number, serial number, date of manufacture, and applicable contract.

The **protection label** describes how much protection the container will provide against a specific threat. For example, it might read:

This is a U. S. Government Security Container, Class 2 Cabinet, Which, Under the Tests Defined in Federal Specification AA-F-357C, Affords Protection For:

20 MAN-MINUTES AGAINST SURREPTITIOUS ENTRY

5 MAN-MINUTES AGAINST FORCED ENTRY

1 HOUR AGAINST FIRE LOSS OF CONTENTS

20 MAN-HOURS AGAINST MANIPULATION OF THE LOCK

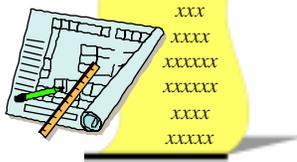
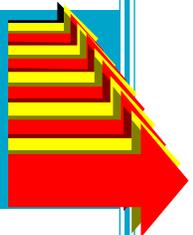
20 MAN-HOURS AGAINST RADIOLOGICAL ATTACK

The information on the certification label should be recorded on the container record form (GSA Optional Form 89, Air Force AFTO Form 36, or Navy Form 5510/21). 

Turn the page to find GSA Optional Form 89 - Maintenance  
Record for Security Containers/Vault Doors



Also available on the GSA web site: [www.gsa.gov/forms/pdf\\_files/of89.pdf](http://www.gsa.gov/forms/pdf_files/of89.pdf)



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## Warranty Procedures on X-07 and CD-X07 Locks

### Repair or Replace?

The DoD Lock Program no longer replaces failed X-07 locks. To resolve problems on locks still covered by the warranty (less than 2 years old), such as dial hubs that spin on spindles, broken or bent retainer rings for hub assemblies, or "O" rings for hub assemblies, contact the **Hotline** to acquire parts. Refer to the drawings that came with the lock or ask the **Hotline** consultant for assistance. When necessary, parts will be shipped by Federal Express, next day air.

**The following information is required to process a warranty:**

- Statement of the problem.
- Date of lock manufacture (found on the box or date stamped inside the lock).
- Date of lock installation.
- Lock serial number (found on the computer chip on the back cover).

**Items not covered under the X-07 and CD-X07 warranties:**

- Flex cables damaged during installation.
- Spindles or tubes cut too short.
- Any modification to the lock.
- Motor gear damage due to improper cam installation.
- Bent pins in the 11-pin male connector.
- Broken 11-pin connector on the electronic card.
- Bent or broken 2-pin connector on electronic card.

**NOTE:**

If you have questions on any items not covered under warranty, please contact the **Hotline**. If you return a lock to the manufacturer for a problem that is not covered by a warranty, the manufacturer may charge an inspection fee of \$45.00, in addition to the cost of labor, parts, and shipping. 

**The Technical Support Hotline  
Always at your Service!**

(805) 982-1212 or DSN: 551-1212





# Store this Form in the Security Container or on the Vault Door!

MAINTENANCE RECORD FOR SECURITY CONTAINERS/VAULT DOORS					
NOTE: Store this form in the security container or on the vault door.					
TYPE <input type="checkbox"/> SECURITY CONTAINER <input type="checkbox"/> VAULT DOOR		SERIAL NUMBER (Containers: Located on the side of the control drawer, Vault Doors and Map and Plan Containers: Located on the inside face of the door.)			
MANUFACTURER		GSA CLASS <input type="checkbox"/> ONE <input type="checkbox"/> TWO <input type="checkbox"/> THREE <input type="checkbox"/> FOUR <input type="checkbox"/> FIVE <input type="checkbox"/> SIX <input type="checkbox"/> SEVEN			
OPERATING PROBLEM	TYPE OF MAINTENANCE	DATE REPAIRED/ INSPECTED	TECHNICIAN		ORGANIZATION NAME
			NAME	ACTIVITY	
SIGNATURE OF RESPONSIBLE OFFICIAL			NAME OF RESPONSIBLE OFFICIAL		DATE SIGNED
AUTHORIZED FOR LOCAL REPRODUCTION			OPTIONAL FORM 89 (9-98)		
OPERATING PROBLEM	TYPE OF MAINTENANCE	DATE REPAIRED/ INSPECTED	TECHNICIAN		ORGANIZATION NAME
			NAME	ACTIVITY	
SIGNATURE OF RESPONSIBLE OFFICIAL			NAME OF RESPONSIBLE OFFICIAL		DATE SIGNED
			OPTIONAL FORM 89 (9-98) BACK		



*\*Note: Air Force AFTP Form 36 or Navy Form 5510/21 may also be used.*



# WANTED

**CONTRIBUTIONS WELCOME!**

**SEE YOURSELF IN PRINT AND RECEIVE A DOD LOCK PROGRAM T-SHIRT!**

We'll do the writing, just tell us the facts. Take a minute and fill in this form. Fold and mail. We'll do the rest. Look for your story in an upcoming issue!

Topic: \_\_\_\_\_

Key contacts: \_\_\_\_\_ Phone # \_\_\_\_\_  
                  \_\_\_\_\_ Phone # \_\_\_\_\_  
                  \_\_\_\_\_ Phone # \_\_\_\_\_

Who: \_\_\_\_\_

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What: \_\_\_\_\_

Why: \_\_\_\_\_

