Department of Defense Lock Program

Program Information

March 2012

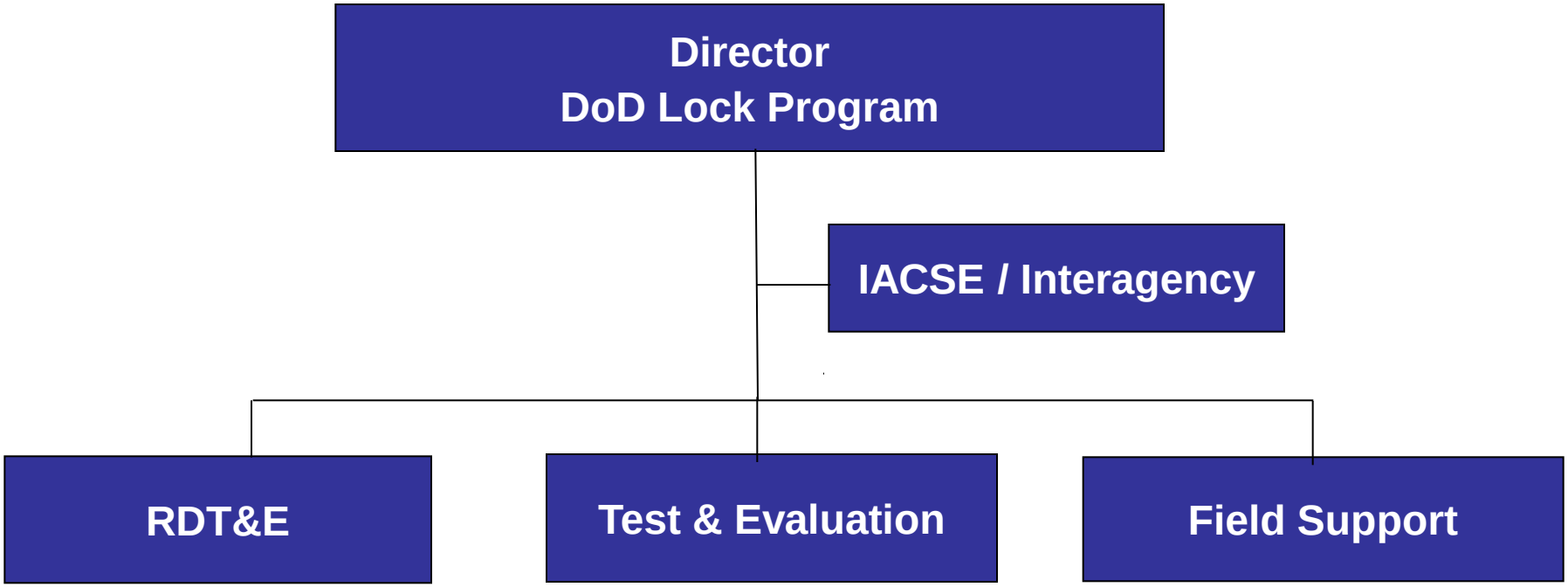
Program Background

- 2012: DODM 5200.01, Volume 3, identifies the DoD Lock Program as Technical Authority
- 1995: NFESC Assumes Role as Program Director
- 1984: NCEL Designated as Technical Manager
- 1984: DoD Lock Program reassigned to Navy
- 1979: US Army assigned as lead agency for DoD Lock Program
- 1976: DoD Directive 3224.3 assigns responsibility for physical security to services

Program Mission

The mission of the Department of Defense (DoD) Locks, Safes, Vaults, Seals, and Containers Program (DoD Lock Program) is providing management, operation, and logistics support functions for physical security equipment. This development, procurement, and integration support assures that Arms, Ammunition, & Explosives (AA&E) and National Security Information (NSI) are protected in accordance with DoD and component agency physical security storage requirements.

Program Structure



Sponsors

- Commander Naval Installations Command (CNIC)
- Naval Facilities Engineering Command (NAVFAC)
- DoD Physical Security Equipment Action Group (PSEAG)
- United States Army
- Defense Logistics Agency (DLA)
- Central Intelligence Agency (CIA)
- Director of National Intelligence (DNI)
- General Services Administration (GSA)

RDT&E Projects

- Internal Locking Device
- Storage Magazines
- Shipboard Security Systems
- Advanced Container Security Device (ACSD)
- Weapons Tracking Seal

The Next Generation of High Security Locking Systems

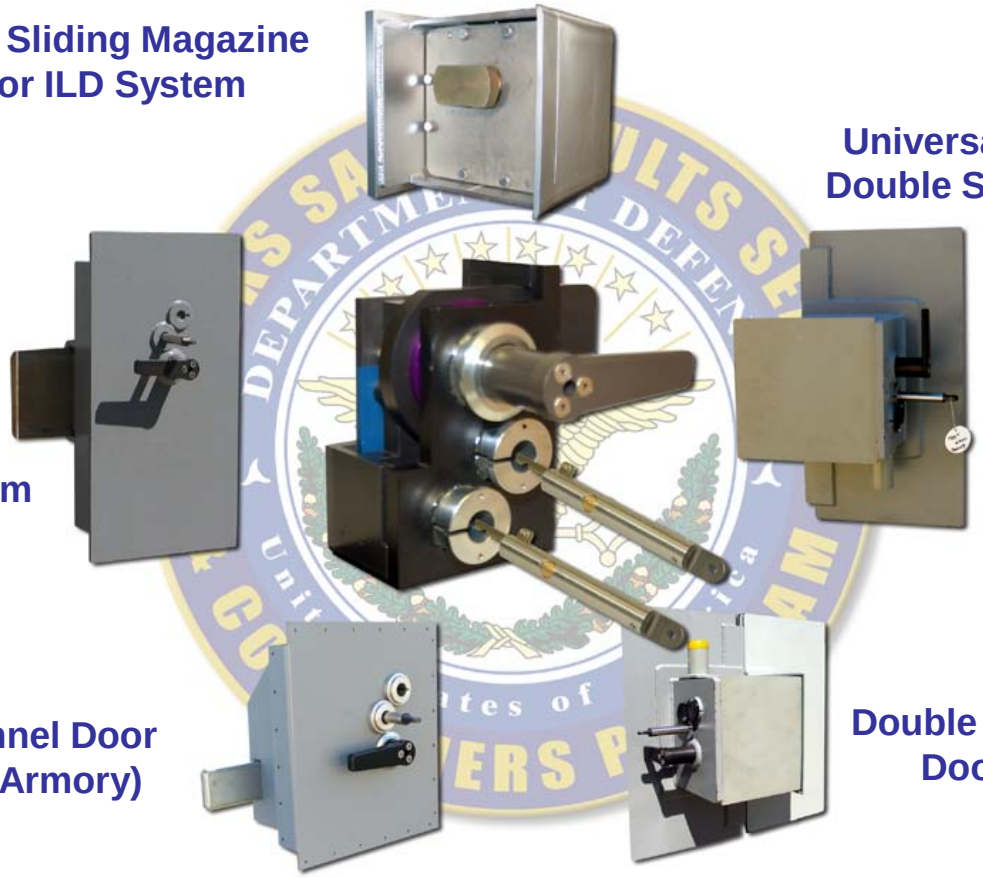
Existing 833 Padlock and NAPEC 0957 Hasp

Completed ILD Swinging Door Installation

ILD Advantages

- Significantly increases attack resistance over all other approved high security locking systems.
- Easily installed as part of new construction or retrofit on existing magazines.
- Significantly improves key operation and reduces key breakage problems.
- Operates reliably in all weather / environmental conditions.
- Significantly reduces opening and securing times.
- Teflon anodized operating parts and body to maximize product life, and eliminate periodic lubrication.

ILD Applications



Single Sliding Magazine Door ILD System

Universal Mount ILD System for Double Swinging Magazine Doors (Blast Doors)

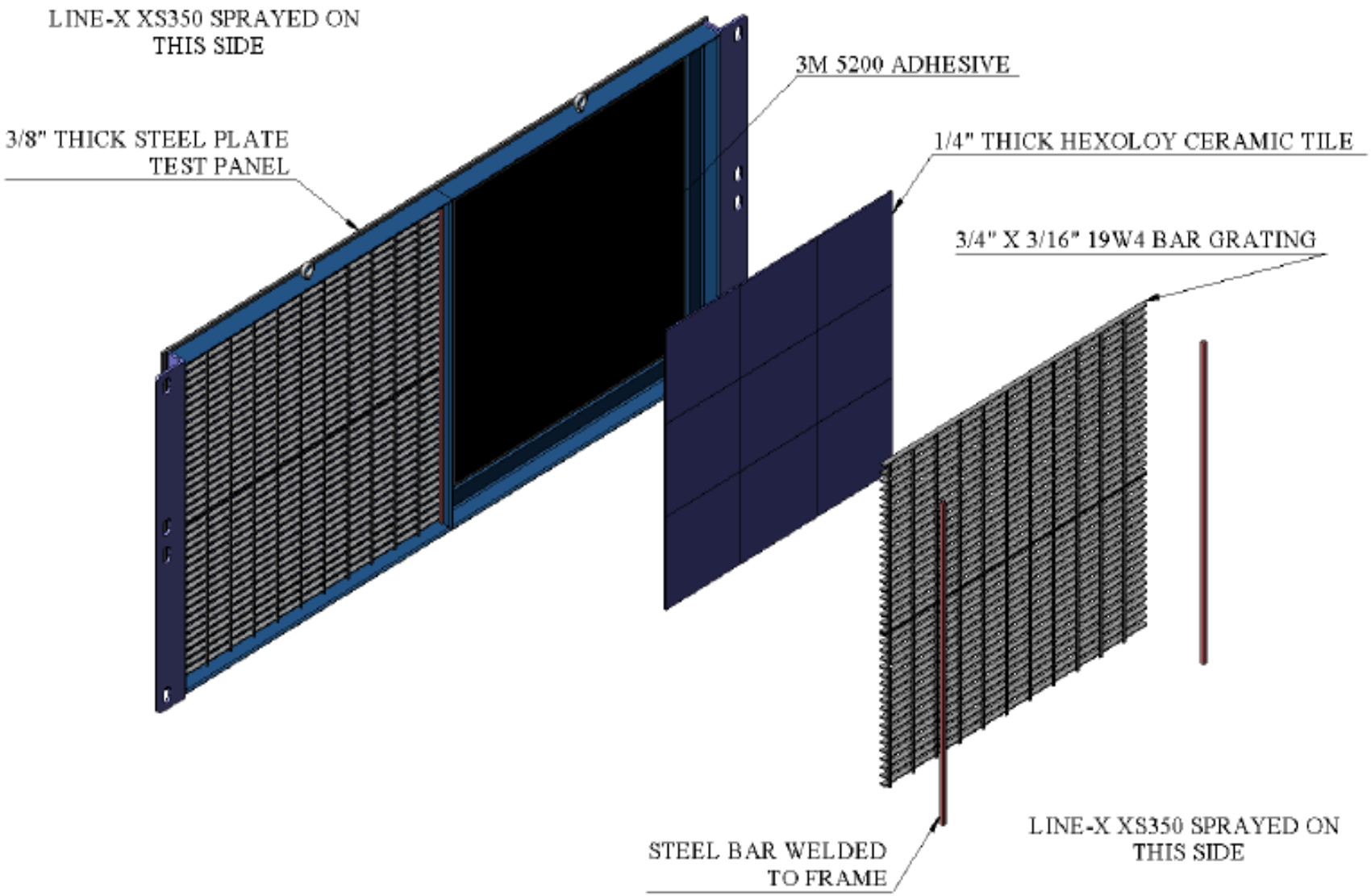
Double Swinging Magazine Door ILD System

Single Personnel Door ILD System (Armory)

Double Sliding Magazine Door ILD System

Physical Security of Weapon Storage Magazines

The typical magazine door is constructed of 3/8” plate steel



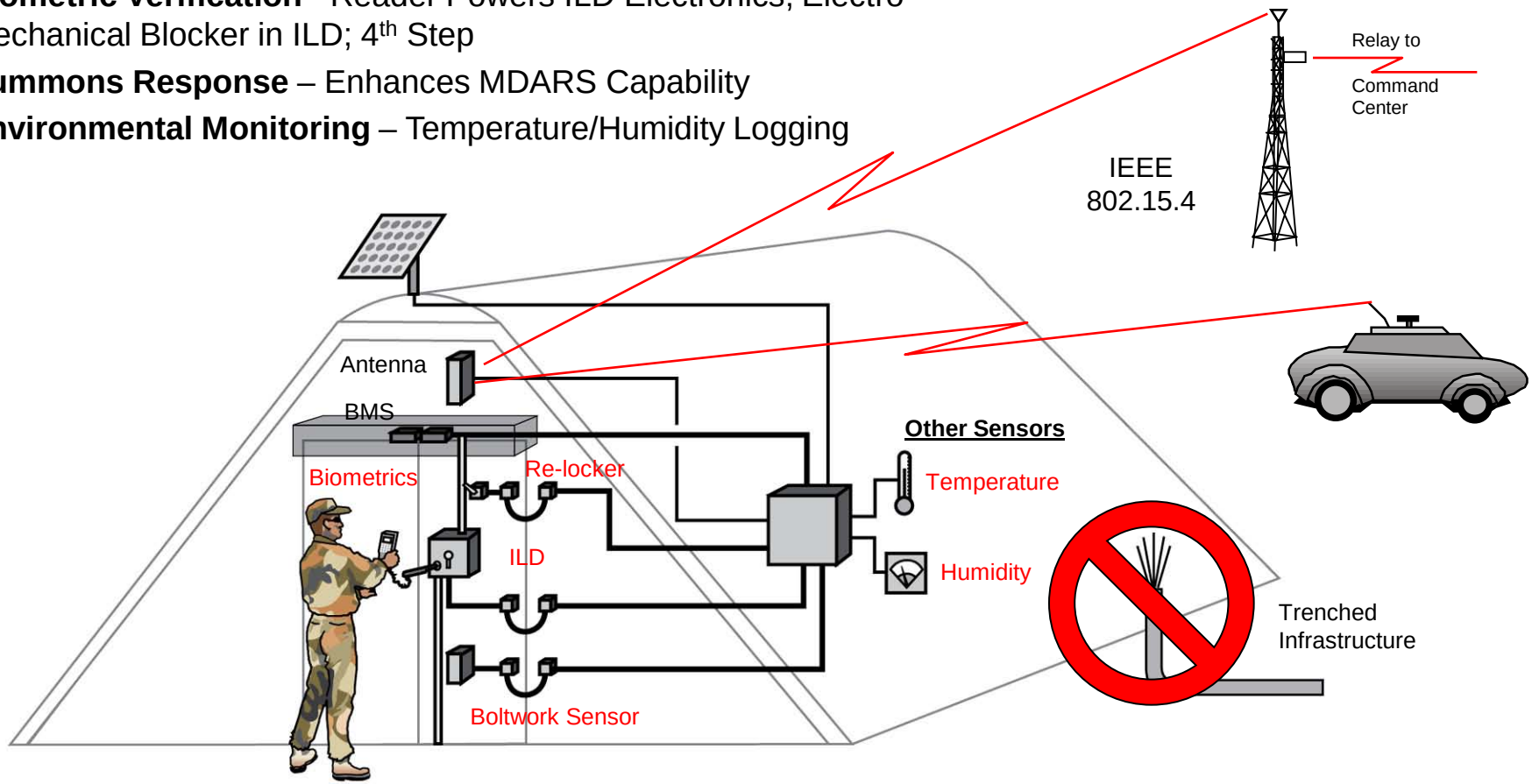
MTP-07-1 TEST PANEL

Physical Security of Weapon Storage Magazines

Stops 1200 grain LSC

Smart Magazine

- **Lock / Boltwork / Door Sensors** - Sequential Operation
- **Electro-Mechanical Re-locker** - 1-Hour Delay; 2-Way Comms
- **Biometric Verification** - Reader Powers ILD Electronics; Electro-Mechanical Blocker in ILD; 4th Step
- **Summons Response** – Enhances MDARS Capability
- **Environmental Monitoring** – Temperature/Humidity Logging



Shipboard Security Systems

Mounting system testing

Capability

Develop GSA Approved shipboard security solutions, Federal specifications, and policy requirements to mitigate current security vulnerabilities aboard ship.

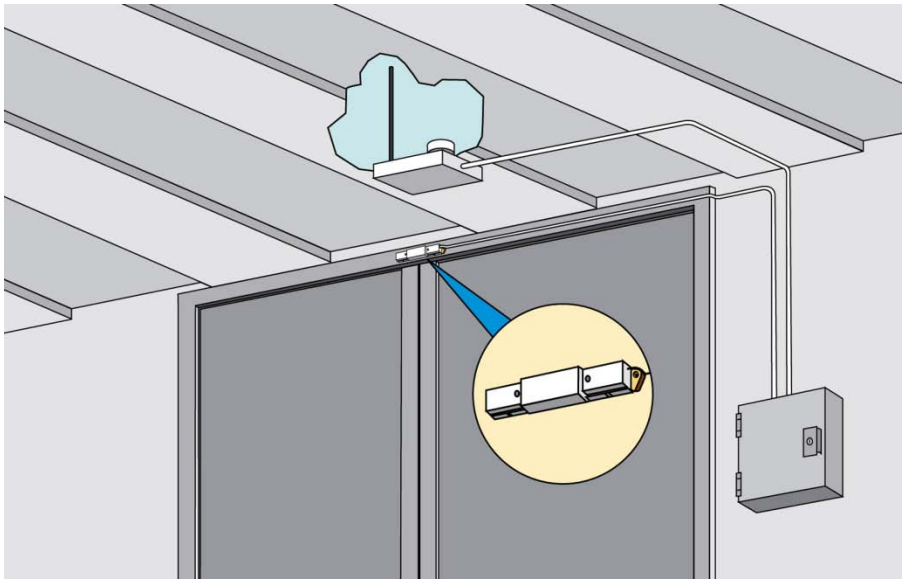
Service Requirements:

- Chief of Naval Operations (N09N2). Security requirements equivalent to GSA class 6 security containers.
- KPPs: Security containers that meet storage, shock, vibration, and mounting requirements.

Transition Sponsor: GSA, NAVSEA PMS 500

Policy Requirement Sponsor: CNO, OUSD(I)

Advanced Container Security Device (ACSD)



Capability

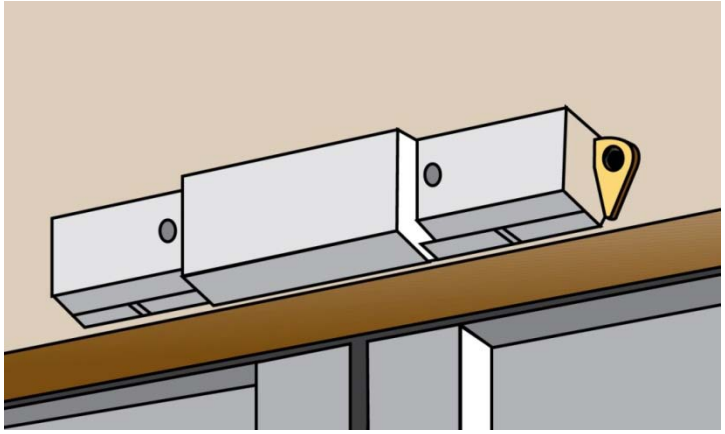
- The ACSD is being developed to address DHS requirements for cargo transport. A scaled down version will meet DoD physical security and anti-tamper requirements of cargo and ordnance transport and storage.

Service Requirements:

- War Zones – Stolen AA&E Containers

Transition Sponsor: CNIC/NWS Earle

CSD / ACSD



Railcar IDS:

- **Mobile IDS in Boxcars**
  - Interior Volumetric Sensor
  - Doors & Side/Roof Breach
  - Low Nuisance Alarm
  - Battery Operated
- **Wireless Communications**
  - IEEE 802.15.4
  - Low Power, Robust, Secure
- **Customs & Border Protection (CBP) and DHS S&T**
  - Inter-Modal Container Security
  - Conveyance Security Device (CSD)
    - Door Opening – Electronic Seal
  - Advanced Container Security Device (ACSD)
    - Door Plus Breach
  - Magazine/Rail Car (MaRC) Communications Module (aka MATTS)

Field Support Structure

FIELD SUPPORT
Team Leader

FIELD SUPPORT

- HOTLINE
- WEBSITE
- DATABASE
- CRITICAL PARTS
- TRAINING
- IVR SYSTEM

PUBLICATIONS / CRITERIA

- SECURITY FACTS!
- TECH DATA SHEETS
- SEAL USERS' GUIDE
- GUIDANCE MANUALS
- DIRECTIVES
- SPECIFICATIONS

FIELD INVESTIGATIONS

- X-09 COMBO MOTOR
- X-09 GEAR FAILURE
- S&G 8077 EVALUATION
- MEDECO "BUMPING"
- ILD TOLERANCE
- PERSONNEL DOORS

TECH TRANSFER

- IACSE SEALS
- SEALS SYMPOSIUM
- FPED
- ASIS
- ASTM
- MANUFACTURERS

SUSTAINMENT / TESTING

- FF-L-2740 LOCKS
- HIGH SECURITY PADLOCKS
- INTERNAL LOCKING DEVICE (ILD)
- GSA CONTAINERS
- STORAGE MAGAZINES
- DOD LOCKING DEVICES
- TOOL TECHNOLOGY

Technical Support Hotline

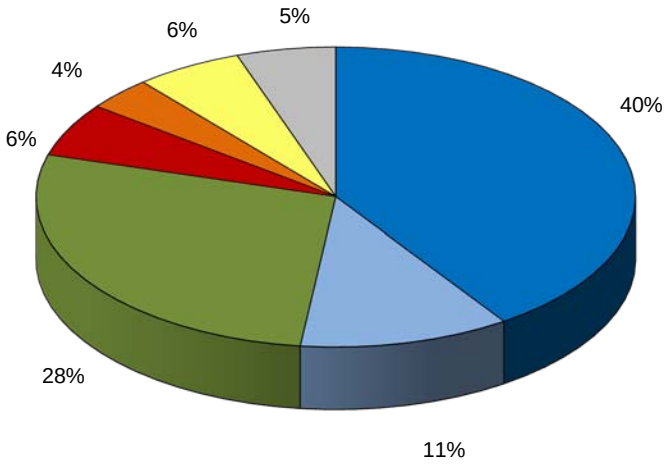
- 350+ support requests per month
- Toll-Free / DSN
- E-mail Support
- Customer Surveys
- Security Hardware Selection
- Directives & Guidance
- Parts Requests & Procurement
- Troubleshooting
- Training

DoD Lock Program Website

- 17,500+ Visitors per Month
- Technical Support
- 22,667 Downloads
- One-Stop Tool

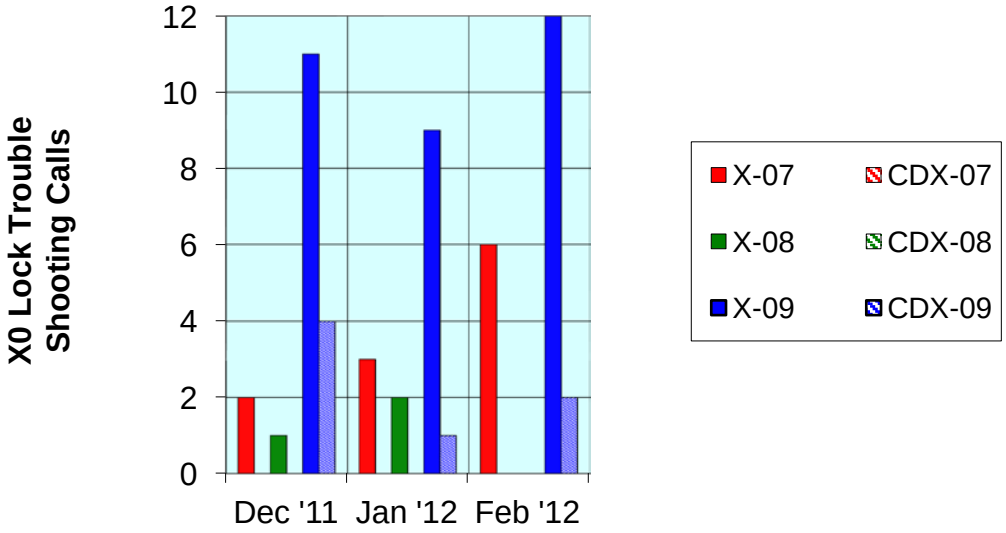
Field Support Database

- Document Hotline Requests
- Track Open and Closed Cases
- Analyze Failure Trends
- Produce Monthly Reports



	Physical Security Equipment Procurement Support
	Security Hardware Use and Selection
	Security Directives and Guidance
	Trouble-Shooting Combination Locks
	Part Requests for X-07/8/9 and CDX-07/8/9 Locks
	Provide Technical Instruction
	Other Request Topics

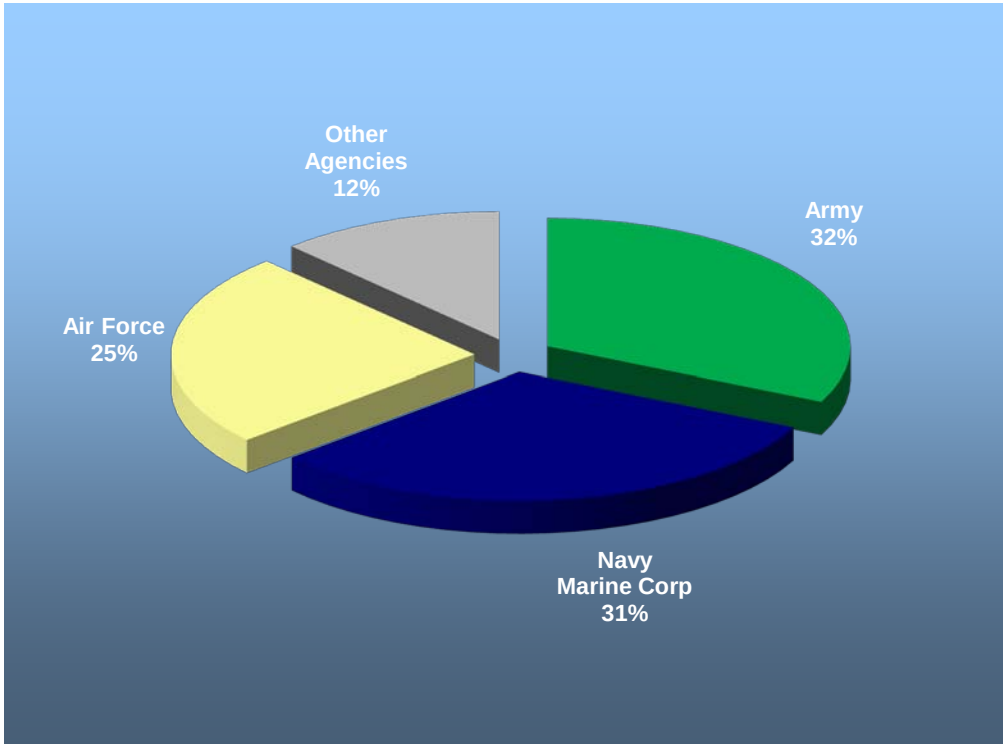
Examples of Trend Analysis



- **Problem (X-09)**
  - X-09 Failure to Open
- **Action**
  - Stopped Production
  - Investigation
- **Cause**
  - X-09 Combo Motors
    - Epoxy Not Curing Properly
- **Results**
  - Changed Epoxy
  - Changed QA Procedures

- **Problem (CDX-09)**
  - Inadvertent Opening
- **Action**
  - Immediate Site Visit
  - Investigation
- **Cause**
  - CDX-09 Combo Motor Gear
    - #1 Gear Tooth Breakage
- **Results**
  - Redesign Gear Tooth
  - Tested/Approved OCT 2006

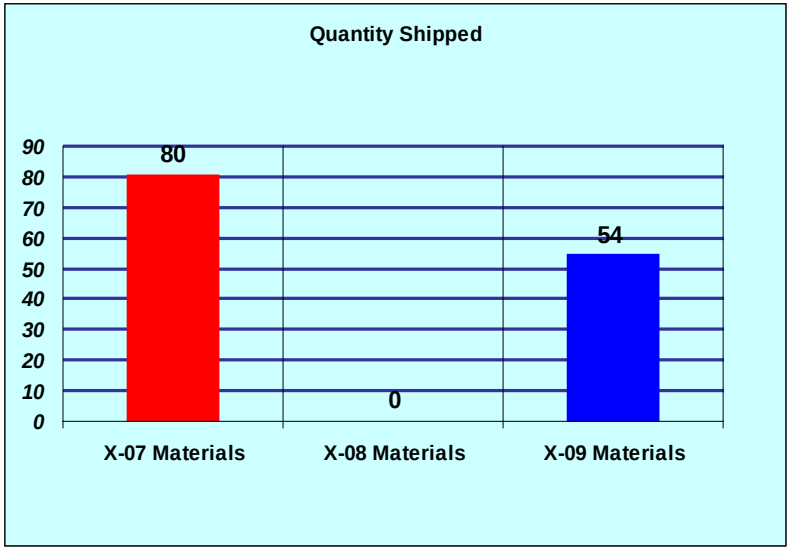
Customer Support



	Army
	Navy / Marine Corp
	Air Force
	Other Agencies

Equipment Parts Support

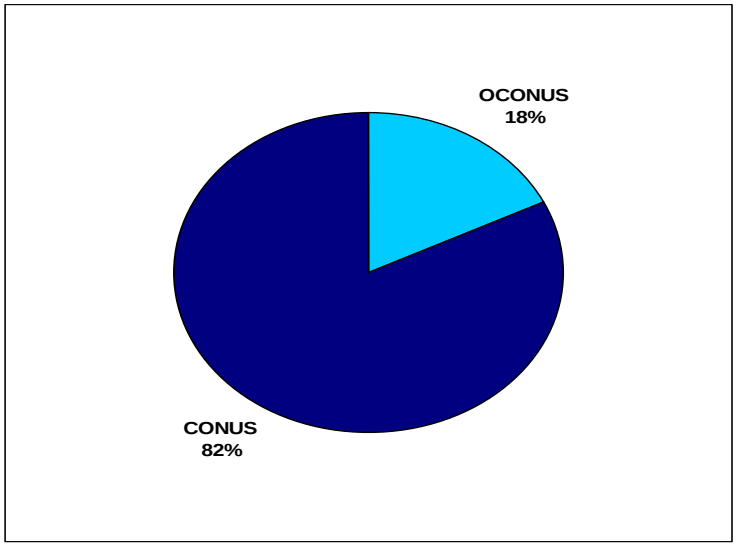
Inventory



637 Parts Shipped FYTD

- Warranty Items
- Critical Spares
- DSCP Parts Support
- Container Manufacturer Support

Areas Supported



Parts Shipped Immediately

- OCONUS Shipments
  - 1 Week
- CONUS Shipments
  - 1-2 Day Delivery Time

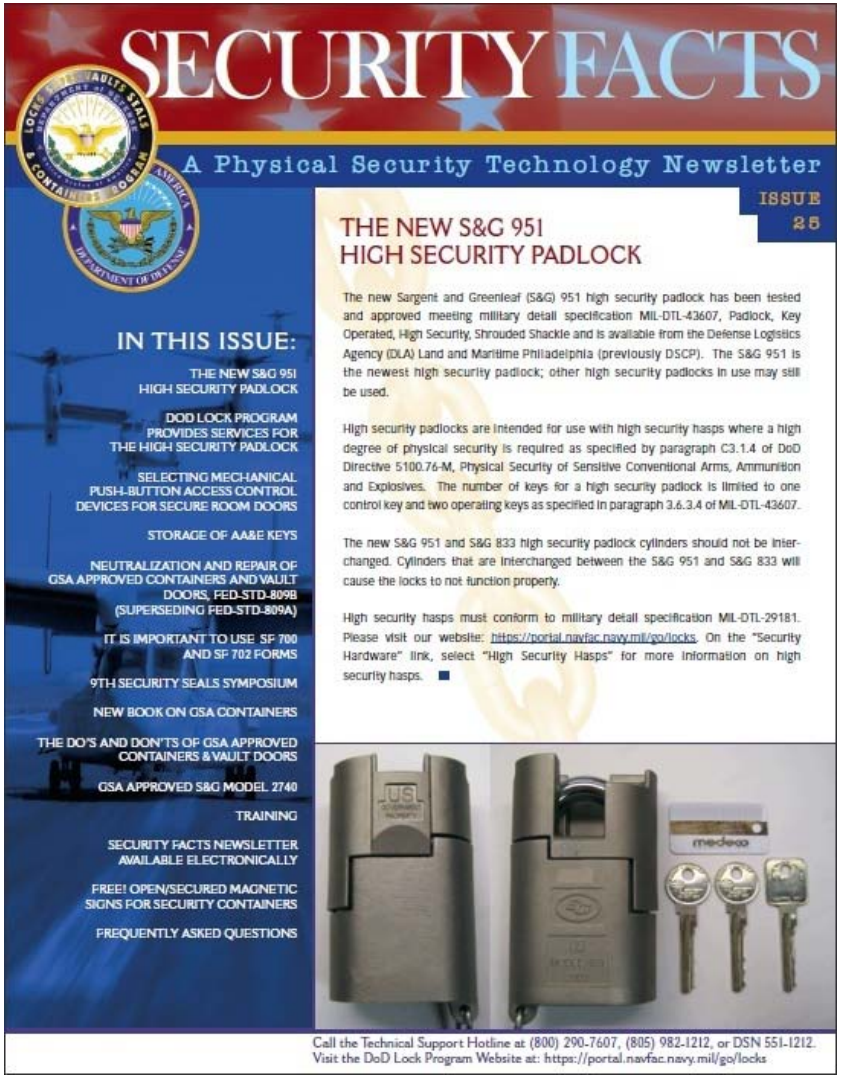
Field Support Training

- DoD Lock Program Overview
- FF-L-2740 Lock Retrofit Program
- Technical Information
- Administration
- Procurement
- Container Opening and Repairing
- Installation, Operation, and Troubleshooting
  - Kaba Mas X-07
  - Kaba Mas X-08
  - Kaba Mas X-09
  - S&G Model 2740

- On-Site Training
- CONUS Training
- OCONUS (Asia, Europe, Hawaii)

“Security Facts” Newsletter

- **Quarterly Publication**
- **Developed by FSB**
- **18,000+ Subscriptions**
- **Articles Include:**
  - Government Directives
  - Manufacturer Products
  - Equipment Trouble-Shooting
  - Security Industry Conferences
  - Critical Issues
  - Current Events



SECURITY FACTS

A Physical Security Technology Newsletter

ISSUE 25

IN THIS ISSUE:

THE NEW S&G 951 HIGH SECURITY PADLOCK

DOD LOCK PROGRAM PROVIDES SERVICES FOR THE HIGH SECURITY PADLOCK

SELECTING MECHANICAL PUSH-BUTTON ACCESS CONTROL DEVICES FOR SECURE ROOM DOORS

STORAGE OF AA&E KEYS

NEUTRALIZATION AND REPAIR OF GSA APPROVED CONTAINERS AND VAULT DOORS, FED-STD-809B (SUPERSEDING FED-STD-809A)

IT IS IMPORTANT TO USE SF 700 AND SF 702 FORMS

9TH SECURITY SEALS SYMPOSIUM

NEW BOOK ON GSA CONTAINERS

THE DO'S AND DON'TS OF GSA APPROVED CONTAINERS & VAULT DOORS

GSA APPROVED S&G MODEL 2740

TRAINING

SECURITY FACTS NEWSLETTER AVAILABLE ELECTRONICALLY

FREE! OPEN/SECURED MAGNETIC SIGNS FOR SECURITY CONTAINERS

FREQUENTLY ASKED QUESTIONS

THE NEW S&G 951 HIGH SECURITY PADLOCK

The new Sargent and Greenleaf (S&G) 951 high security padlock has been tested and approved meeting military detail specification MIL-DTL-43607, Padlock, Key Operated, High Security, Shrouded Shackle and is available from the Defense Logistics Agency (DLA) Land and Maritime Philadelphia (previously DSCP). The S&G 951 is the newest high security padlock; other high security padlocks in use may still be used.

High security padlocks are intended for use with high security hasps where a high degree of physical security is required as specified by paragraph C3.1.4 of DoD Directive 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition and Explosives. The number of keys for a high security padlock is limited to one control key and two operating keys as specified in paragraph 3.6.3.4 of MIL-DTL-43607.

The new S&G 951 and S&G 833 high security padlock cylinders should not be interchanged. Cylinders that are interchanged between the S&G 951 and S&G 833 will cause the locks to not function properly.

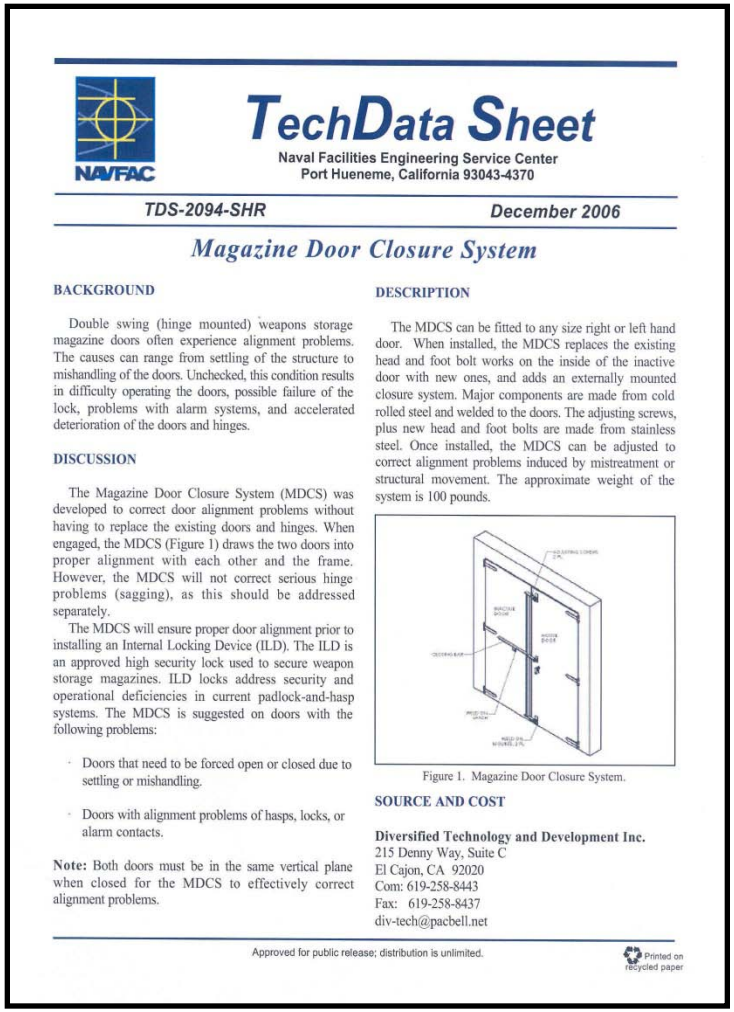
High security hasps must conform to military detail specification MIL-DTL-29181. Please visit our website: https://portal.navfac.navy.mil/go/locks. On the "Security Hardware" link, select "High Security Hasps" for more information on high security hasps.

Call the Technical Support Hotline at (800) 290-7607, (805) 982-1212, or DSN 551-1212.
Visit the DoD Lock Program Website at: https://portal.navfac.navy.mil/go/locks

Technical Data Sheets

Provides Detailed Security Information on:

- **Equipment**
- **Products**
- **Programs**
- **Training**
- **Services**



NAVFAC

TechData Sheet

Naval Facilities Engineering Service Center
Port Hueneme, California 93043-4370

TDS-2094-SHR December 2006

Magazine Door Closure System

BACKGROUND

Double swing (hinge mounted) weapons storage magazine doors often experience alignment problems. The causes can range from settling of the structure to mishandling of the doors. Unchecked, this condition results in difficulty operating the doors, possible failure of the lock, problems with alarm systems, and accelerated deterioration of the doors and hinges.

DISCUSSION

The Magazine Door Closure System (MDCS) was developed to correct door alignment problems without having to replace the existing doors and hinges. When engaged, the MDCS (Figure 1) draws the two doors into proper alignment with each other and the frame. However, the MDCS will not correct serious hinge problems (sagging), as this should be addressed separately.

The MDCS will ensure proper door alignment prior to installing an Internal Locking Device (ILD). The ILD is an approved high security lock used to secure weapon storage magazines. ILD locks address security and operational deficiencies in current padlock-and-hasp systems. The MDCS is suggested on doors with the following problems:

- Doors that need to be forced open or closed due to settling or mishandling.
- Doors with alignment problems of hasps, locks, or alarm contacts.

Note: Both doors must be in the same vertical plane when closed for the MDCS to effectively correct alignment problems.

DESCRIPTION

The MDCS can be fitted to any size right or left hand door. When installed, the MDCS replaces the existing head and foot bolt works on the inside of the inactive door with new ones, and adds an externally mounted closure system. Major components are made from cold rolled steel and welded to the doors. The adjusting screws, plus new head and foot bolts are made from stainless steel. Once installed, the MDCS can be adjusted to correct alignment problems induced by mistreatment or structural movement. The approximate weight of the system is 100 pounds.

Figure 1. Magazine Door Closure System.

SOURCE AND COST

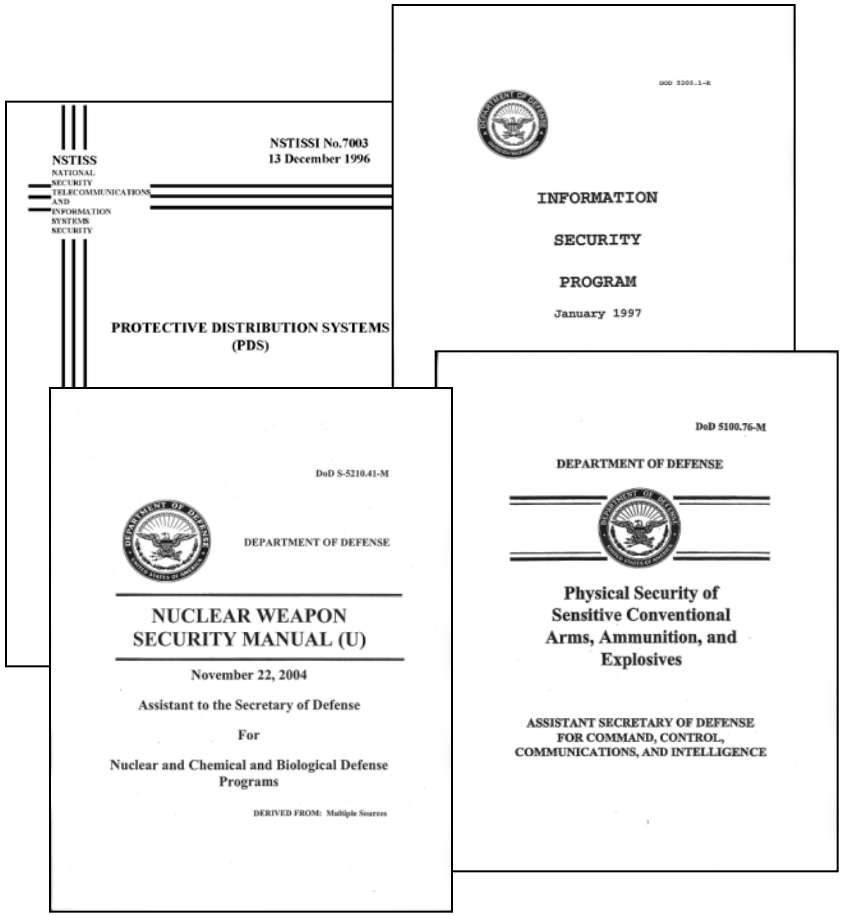
Diversified Technology and Development Inc.
215 Denny Way, Suite C
El Cajon, CA 92020
Com: 619-258-8443
Fax: 619-258-8437
div-tech@pacbell.net

Approved for public release; distribution is unlimited.

Printed on recycled paper

Guidance Documents

Directives / Specifications



NSTISS
NATIONAL SECURITY TELECOMMUNICATIONS AND INFORMATION SYSTEMS SECURITY

NSTISSI No.7003
13 December 1996

PROTECTIVE DISTRIBUTION SYSTEMS (PDS)

DoD 5200.1-R

INFORMATION SECURITY PROGRAM

January 1997

DoD S-5210.41-M

DEPARTMENT OF DEFENSE

NUCLEAR WEAPON SECURITY MANUAL (U)

November 22, 2004

Assistant to the Secretary of Defense

For

Nuclear and Chemical and Biological Defense Programs

DERIVED FROM: Multiple Sources

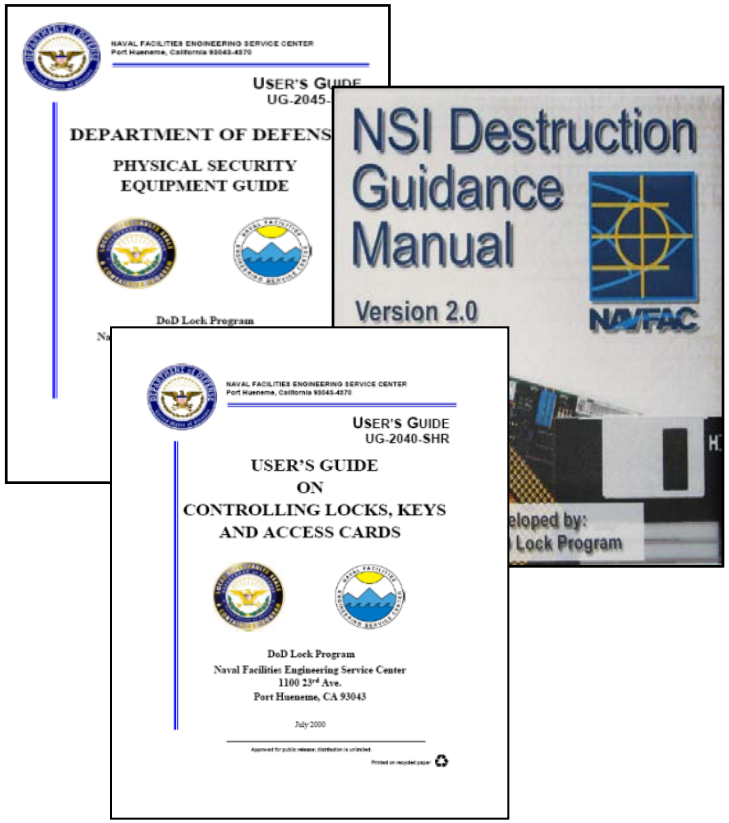
DoD 5100.76-M

DEPARTMENT OF DEFENSE

Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives

ASSISTANT SECRETARY OF DEFENSE FOR COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE

User Guide Updates



NAVAL FACILITIES ENGINEERING SERVICE CENTER
Port Hueneme, California 93043-4370

USER'S GUIDE
UG-2045-

DEPARTMENT OF DEFENS

PHYSICAL SECURITY EQUIPMENT GUIDE

DoD Lock Program

NSI Destruction Guidance Manual

Version 2.0

NAVFAC

eloped by:
Lock Program

NAVAL FACILITIES ENGINEERING SERVICE CENTER
Port Hueneme, California 93043-4370

USER'S GUIDE
UG-2040-SHR

USER'S GUIDE ON CONTROLLING LOCKS, KEYS AND ACCESS CARDS

DoD Lock Program
Naval Facilities Engineering Service Center
1100 23rd Ave.
Port Hueneme, CA 93043

July 2000

Approved for public release; distribution is unlimited.

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Field Investigations

- X-09 Combo Motor Failures
- X-09 Gear Failures
- Medeco “Bumping” Evaluation
- S&G 8077 Vulnerability Assessment
- ILD Tolerance Study
- Personnel Doors

Technology Transfer: InterAgency Committee for Security Equipment

- Charter
- Process
  - Identify requirements for security equipment
  - Develop and maintain Federal performance specifications
  - Identify training requirements for service technicians
  - Review and approve commercial training curriculums
  - Identify and address failures in GSA approved equipment
  - Communicate / interact directly with manufacturers and training organizations (Off-site)
- DoD Lock Program Involvement
  - Chairman IACSE SEALS Subcommittee
  - Team Participation at meeting and on working groups
- Interagency Interaction
  - Benefits / Access
- Influence

Technology Transfer (cont.)

- Seals Symposiums
- Forced Protection Equipment Demonstration (FPED)
- American Society for Industrial Security (ASIS)
- ASTM International
- International Cargo Security Counsel (ICSC)
- Manufacturers Site Visits
- Working Groups (NSA, CIA, etc.)

Security Community Presence

Sustainment Efforts

FF-L-2740 Combination Locks

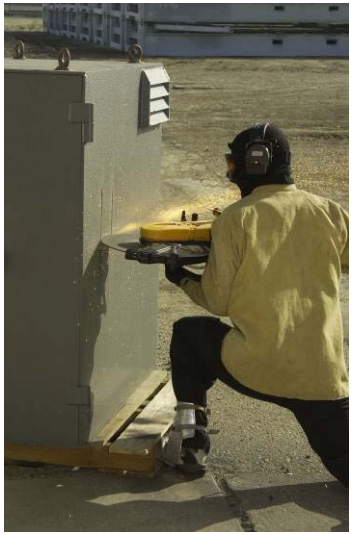
Internal Locking Device

GSA Approved Containers

Other Locking Devices and Systems

Testing & Evaluation

- The premier Testing Facility
- Test security equipment (locks, safes, vaults, & vault doors) submitted to the General Services Administration (GSA), by commercial vendors, for validation against published Federal specifications.
- All GSA approved security equipment is tested and approved through this program.



Testing & Evaluation

- Conduct regular / reoccurring quality assurance (QA) testing of all GSA approved equipment.
- Maintain drawings, specification, and library samples of all GSA approved equipment.
- Respond to all reported operational / security deficiencies in GSA approved equipment.

Security Seals Testing Laboratory

Background

Over 200 security seals were available from DLA at the start of this project, however, none were tested by DoD to a federal specification. Selection was based upon performance testing completed by the manufacturers, or by testing laboratories selected and supported by user agencies on a case by case basis. Federal Specification FF-S-2738 was revised 30 March 1999 to require governmental testing. The Defense Transportation Regulation 4500.9-R Part II Cargo Movement requires that seals used on conveyances transporting AA&E be tested and approved by the DoD Lock Program. The Physical Security Equipment Action Group (PSEAG) has provided funding to establish a Security Seals Testing Laboratory within the DoD Lock Program.

Accomplishments to Date

- Purchased Test Equipment
  - Tensile Test Machine
  - Cold Box
- Fabricated Test Equipment
  - Various Fixture
  - Impact tester

Testing & Evaluation

- Participate on the IACSE Subcommittee.
- Provide Test support to other government agencies:
  - Services
    - Army
    - Navy
    - Air Force
    - Marine Corps
  - State Department
  - FBI
  - CIA
  - Homeland Security
  - DLA

Customer Feedback

- “This program is without question the **anchor of security** for thousands of security managers.” … Joint Cruise Missile Defense
- “The services that are provided through the FSP/DoD Newsletter, Web site, and technical publications is **beyond reproach**. If they can not solve the problem, they certainly have the resources to plug you into other avenues to solve the problem. This service is **invaluable** to the normal customer.”… NAS Patuxent River
- “Everything was handled extremely quickly and I received the requested items in less than two business days. Your team is doing a great job **helping the "war fighters**". Again a **Bravo-Zulu** to all.” …. SPAWARSYSCEN