THE HISTORY OF THE
MILITARY HIGH SECURITY PADLOCKS

1. In 1968, the Office of the Provost Marshal General was tasked to identify a suitable security padlock for the protection of arms, ammunition and explosives. After an unsuccessful market research in the United States, they chose the English Ingersoll Padlock. Several thousands of these padlocks were imported and today some are still in use as low security devices, they are no longer approved for high security applications. It has been reported that some users still have the Ingersoll and other items in use as High Security Padlocks, because they are not aware of the current approved items.

2. By the end of 1969, a franchise arrangement was consummated by the Ingersoll Lock Company and the Miracle Lock Company to manufacture the high security padlock using the Ingersoll cylinder. This arrangement lasted a year until (due to a reported non-payment of the account) the Ingersoll Company refused to supply the lock cylinders to the Miracle Lock Company. The Miracle Lock Company then procured a padlock cylinder from the Ava Lock Company of Finland.

3. In the summer of 1971, due to poor quality control, the Defense Industrial Supply Center (DISC) terminated their contract with the Miracle Lock Company. Meanwhile Sargent and Greenleaf Lock Company of Rochester, New York, had been developing several prototypes of a high security padlock that used a new high security cylinder from Medeco Lock Corp. of Salem, Virginia. Sargent and Greenleaf Company also made franchise arrangements with the Ingersoll Lock Company, and in 1972 the present day High Security Padlocks, Model 831, were in production. These were supplied to the Government from 1972 through 1976. The last contract, DLA-500-76-C-1159, was awarded in December 1975. To the best of

our knowledge, this last contract with Sargent and Greenleaf produced the following quantities of body castings with "1976"" stamped on the side:

CASTING MARK	QUANTITY
PFI	11,700
N6	3,300
H (Hitchner)	43,300
	58,300

These locks were tested by the Natick Research and Development Command in 1975 and passed forced entry test requirement of more than seven minutes. If these same locks were tested by the Intelligence Material Development Support Office (IMDSO) in 1982, using the current state-of-the-art technology, they would only qualify for about two minutes against forced entry.

4. From 1977 through 1981, there were no bid samples of the High Security Padlocks that passed the test conducted by the Intelligence Material Development Support Office. The samples did not meet the performance specifications of the High Security Padlock, MIL-P-437607D or MIL-P-43607E. In October 1979, the responsibility for the lock standards was transferred from Natick to the Counter Surveillance / Counter Intrusion Laboratory of the Mobility Equipment Research and Development Command (MERADCOM). A revised specification for the Padlock, Key Operated, High Security, Shrouded Shackle, MIL-P-43607E, was published 30 June 1980. A contract for locks designated in accordance with the new specifications was awarded 2 November 1981 to Hi-Shear Corporation, Torrance, CA. First Article production samples were submitted for testing on 17 December 1981. To allow for the contractor to produce first articles that could successfully pass the forced entry test, the time was "relaxed" from seven to five minutes. As of October 1982, the supply states on the High Security Padlocks was zero on hand, more than 24,000 on

backorders and 62,000 due from Hi-Shear. The first production items were shipped in November 1982, and the schedule calls for completion of the contract by July 1983. The projected get well date is April 1983.

5. To prevent future producibility problems, and to improve the quality control of production items, there will be two actions. First, the Mobility Equipment Research and Development Command (MERADCOM) will revise the performance specifications of the Medium Security Padlock, MIL-P-43951 and the High Security Padlock, MIL-P-43607E, on the basis of the recent Sargent and Greenleaf and the Hi-Shear procurements. An example of the changes that are needed the specification should have the Intelligence Materiel Development Support Office (IMDSO) periodically test production samples to confirm quality. The current procedures only have the local Defense Contract Administration Support Agency (DCASA) inspectors checking the quality of all of the items delivered after the First Article Test. This advanced inspection has never been called for before in the DISC procurements. Revision of the specifications are appropriate in case it becomes necessary to make Security Equipment (PM-PSE) will fund Physical Security Task DL-05 (Locks, Safes, and Containers), for a two year program to develop a design specification for a "Multi Purpose Padlock" that may replace the existing performance specification.

6. To meet the Department of Defense needs of enhanced locking devices, and acquisition program will be initiated to obtain a family of High Security Locking Devices. It is expected that the program could start as soon as the Letter of Agreement (LOA) for the High Security Locking Device (HSLD) is approved and funding can be adjusted. A draft of the LOA was reviewed at a Joint Service meeting in 17 – 18 November 1982 and will be staffed by the Military Police School.