



U.S. Department of Justice

Bureau of Alcohol, Tobacco,
Firearms and Explosives

Office of the Director

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18 U.S.C. 842(j): STORAGE OF EXPLOSIVES
27 CFR 555.22: ALTERNATE METHODS OR PROCEDURES
27 CFR 555.207: CONSTRUCTION OF TYPE 1 MAGAZINES
27 CFR 555.208: CONSTRUCTION OF TYPE 2 MAGAZINES
27 CFR 555.209: CONSTRUCTION OF TYPE 3 MAGAZINES
27 CFR 555.210: CONSTRUCTION OF TYPE 4 MAGAZINES
27 CFR 555.211: CONSTRUCTION OF TYPE 5 MAGAZINES

ATF authorizes an alternate method or procedure from the provisions of 27 CFR Part 555, Subpart K, requiring the storage of explosives in magazines with doors equipped with the requisite locks. Specifically, ATF authorizes explosives licensees and permittees to secure explosives magazines with hidden-shackle "hockey puck" locks, recessed padlocks, and padlocks with boron alloy shackles, provided all of the requirements stated in this ruling have been met.

ATF Ruling 2011-3

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) has received requests from members of the explosives industry for permission to secure explosives magazines with certain alternate locks or locking methods.

Recent advances in locking technologies have provided the explosives industry with more options for securing their explosives storage magazines. Currently, explosives industry members secure their explosives magazines primarily with padlocks fastened in separate hasps and staples and protected with ¼-inch thick steel hoods. However, the commercial availability of steel hoods is limited to a small number of distributors, and non-commercial fabrication can be costly.

As a more cost effective alternative, explosives industry members have asked ATF to approve hidden-shackle locks, commonly known as "hockey puck" or "puck" locks to secure their explosives storage magazines. Several companies manufacture hidden-shackle puck locks and protective steel hasps that are distributed by local hardware and construction retail outlets throughout the United States. Hidden-shackle puck locks are generally based on the same design, in which the lock shackles are completely enclosed within the steel lock body, thereby protecting the shackle from cutting or sawing action. The lock cylinders and other internal mechanisms within the hidden-shackle puck locks are designed similarly to those in traditional padlocks. The locks are commonly sold with

steel hasps that are affixed with steel staples and with steel shrouds that protect the locks and staples from prying or lever action. Most steel hasps are installed with $\frac{3}{8}$ -inch thick carriage bolts.

Explosives industry members have also asked ATF to approve magazines such as job site boxes, typically used at construction worksites and other industrial locations, as type 4 magazines for the storage of low explosives. Several companies manufacture job site boxes that are available from local hardware and construction retail outlets throughout the United States. Generally, job site boxes are based on a design that accepts padlocks housed into recessed openings that prevent the sawing, levering, or prying action on the locks, staples, or hasps. The boxes are typically constructed of 12 or 16 gauge steel and affixed with top-opening doors (lids) that lock when two internal metal latches are secured by two recessed padlocks. The padlocks are inserted shackle first into an opening of a shape and size that fully accepts the lock, and the lock shackles are secured to metal u-bolt staples. The padlocks and u-bolts cannot be removed without gaining access to the magazine interior. The padlock base and keyway are the only visible portions of the padlocks. Job site boxes are not manufactured with $\frac{1}{4}$ -inch steel hoods to protect the padlocks, though the magazine body acts as a protective steel hood for the recessed padlocks.

Additionally, explosives industry members have asked ATF to approve padlocks that contain boron alloy steel shackles in lieu of case-hardened shackles. The manufacture of case-hardened shackles involves hardening the surface of low carbon steel by infusing carbon into the steel's surface mainly through flame or induction hardening. Case-hardening is usually conducted after the steel shackle has been formed into its final shape and its center remains tough and malleable. Boron has been found as a useful alloy to improve the hardness of steel. Manufacturing boron alloy shackles involves hardening the entire shackle by heat-treating medium carbon steel thereby creating a consistent hardness throughout the steel. Common testing methods used in the manufacturing industry to test the strength of different materials reveal that boron alloy steel is stronger than case-hardened steel.

Under Federal law, Title 18, United States Code, section 842(j), all persons must store explosive materials in compliance with regulations issued by the Attorney General. The Attorney General has delegated the authority to administer and enforce the Federal explosives laws to the Director, ATF. The regulations promulgated by ATF to implement the provisions of the Federal explosives laws are codified at Title 27, Code of Federal Regulations (CFR), Part 555.

The regulations at 27 CFR 555.207, 555.208, 555.210, and 555.211 address the locking requirements for types 1, 2, 4, and 5 explosives magazines, providing generally that each door is to be equipped with (i) two mortise locks; (ii) two padlocks fastened in separate hasps and staples; (iii) a combination of a mortise lock and a padlock; (iv) a mortise lock that requires two keys to open; or (v) a three-point lock. Padlocks must have at least five tumblers and a case-hardened shackle of at least $\frac{3}{8}$ -inch diameter. Padlocks must be protected with not less than $\frac{1}{4}$ -inch steel hoods constructed so as to prevent sawing or lever

action on the locks, hasps, and staples. The regulation at 27 CFR 555.209 addresses the locking requirements for type 3 explosives magazines, providing that doors are to be equipped with one steel padlock (which need not be protected by a steel hood) having at least five tumblers and a case-hardened shackle of at least $\frac{3}{8}$ -inch diameter.

Licensees and permittees may seek approval from ATF to use an alternate method or procedure in lieu of a method or procedure specifically prescribed in the regulations. Federal regulations at 27 CFR 555.22 provide that the Director of ATF may approve an alternate method or procedure, subject to stated conditions, when he finds that: (1) good cause is shown for the use of the alternate method or procedure; (2) the alternate method or procedure is substantially equivalent to, within the purpose of, and consistent with the effect intended by, the specifically prescribed method or procedure; and (3) it will not be contrary to any provision of law and will not result in an increase in cost to the Government or hinder the effective administration of 27 CFR Part 555.

Historically, the most prevalent method of unauthorized entry into explosives magazines has been through attacks against the locking mechanisms – specifically against the lock shackles. Hidden shackle “hockey puck” locks, recessed padlocks, and padlocks with boron alloy shackles provide shackle protection equivalent to traditional case-hardened padlocks and $\frac{1}{4}$ -inch steel hoods. Allowing storage of explosives in magazines secured with these types of locks will also reduce costs for explosives licensees and permittees and give them greater flexibility to secure their explosives. For these reasons, ATF finds that, provided certain conditions are met, there is good cause for licensees and permittees to store explosives in magazines with doors equipped with hidden shackle “hockey puck” locks, recessed padlocks, and padlocks with boron alloy shackles. ATF further finds that the conditions provided in this ruling for the alternate storage methods and procedures provided below, are consistent with the effect intended by, and are substantially equivalent to, the methods and procedures prescribed in Part 555, Subpart K. Further, the alternate methods or procedures authorized by this ruling are not contrary to any provision of law, will not increase costs to ATF, and will not hinder the effective administration of the regulations.

Federal explosives licensees and permittees may store explosives in magazines that are secured with hidden-shackle “hockey puck” locks, whether located indoors or outdoors, provided all of the following conditions are met at all times:

1. Each magazine door must be secured with the same number of hidden-shackle puck locks as prescribed in the regulations (*e.g.* two puck locks on outdoor type 4 magazines, one puck lock on mobile type 3 and type 5 magazines).
2. The hidden shackle puck lock body must be constructed of hardened steel and contain at least a five-pin tumbler cylinder. The lock shackle must be constructed of a case-hardened steel or boron alloy and measure a minimum nominal diameter of $\frac{3}{8}$ -inch.

3. Each hidden-shackle puck lock must be protected within a solid steel hasp and shroud, or by a ¼-inch thick steel hood that prevents the prying or lever action on the puck lock.
4. The steel hasp must contain a ¼-inch thick steel shroud that surrounds the lock. Openings in the shroud required to access the lock keyway and open the magazine door must be small enough to prevent sawing, levering, or prying action on the puck lock.
5. The spaces between the steel hasps and locks, and steel shrouds and locks, must be small enough to prevent sawing, levering, or prying action on the puck lock.
6. The hasp or hood must be attached to the magazine doors by welding, or installed with at least ⅜-inch thick carriage bolts (with nuts on inside of door) so that they cannot be removed when the doors are closed and locked.

Federal explosives licensees and permittees may store explosives in magazines that are secured with recessed padlocks, whether located indoors or outdoors, provided all of the following conditions are met at all times:

1. Each magazine door (lid) must be secured with two recessed padlocks that have at least five tumblers and a case-hardened steel or boron alloy shackle of at least ⅜-inch diameter.
2. The recessed opening that houses the locks must be small enough to prevent sawing, levering, or prying action on the locks when the locks are installed.
3. The lock shackles must be securely affixed to the interior staples so the padlocks cannot be removed without gaining access to the magazine interior.

Once the licensee or permittee has complied with all conditions set forth in this ruling, no separate, individual variance approval from ATF is required, and the licensee or permittee may store explosives in magazines with doors equipped with locks other than those required by 27 CFR Part 555. Licensees and permittees are reminded of their responsibility to abide by all other provisions of 27 CFR Part 555 as prescribed.

Held, pursuant to 27 CFR 555.22, ATF authorizes an alternate method or procedure from the provisions of 27 CFR Part 555, Subpart K, requiring the storage of explosives in magazines with doors equipped with the requisite locks. Specifically, ATF authorizes explosives licensees and permittees to secure explosives magazines with hidden-shackle “hockey puck” locks, recessed padlocks, and padlocks with boron alloy shackles, provided all of the requirements stated in this ruling have been met.

Held further, if ATF finds that a licensee or permittee has failed to abide by the conditions of this ruling, or uses any procedure that hinders the effective administration of

the explosives laws or regulations, ATF may notify the licensee or permittee that the licensee or permittee is no longer authorized to utilize this alternate method or procedure.

Held further, this ruling supersedes all previous variance approvals for explosives magazines secured with hidden-shackle “hockey puck” locks or recessed padlocks.

Date approved: June 23, 2011

Kenneth E. Melson
Acting Director