

**27 CFR 181.193: QUANTITY AND STORAGE RESTRICTIONS
(Also 181.188)**

Alternate magazine construction standards for storage of electric blasting caps with other explosive materials are prescribed.

ATF Rul. 77-24

[Status of ruling: Active]

The Bureau of Alcohol, Tobacco and Firearms has been requested to authorize the storage of electric blasting caps in a separate compartment of a type two portable magazine.

Under the provisions of 18 U.S.C. 842(j), it shall be unlawful for any person to store any explosive material in a manner not in conformity with regulations promulgated by the Secretary. In promulgating such regulations, the Secretary shall take into consideration the class, type, and quantity of explosive materials to be stored, as well as the standards of safety and security recognized in the explosives industry.

Regulations in 27 CFR 181.193 restrict the storage of blasting caps with other explosive materials. Section 181.181(b) provides that alternate storage magazines may be authorized for the storage of explosive materials when it is shown that such alternate magazines are or will be constructed in a manner substantially equivalent to the standards of construction contained in the applicable regulations.

The Bureau recognizes that the transportation and the storage of explosive materials in the same vehicle along with electric blasting caps is often desired. The Institute of Makers of Explosives has established a recommended standard for such transport in their Safety Library Publication No. 22, dated November 5, 1971 and revised July 1976 [and further revised January 1985]. This standard prescribes the minimum construction criteria for (a) a container securely attached (1) above the cab of a vehicle (see Figure 1, Exhibit A), or (2) attached to the vehicle frame under the cargo compartment (see Figure 2, Exhibit A), or (b) a built-in compartment in the cargo space of the vehicle (see Exhibit B). In addition to motorized vehicles, consideration was also given for the use of similar criteria on portable wheeled trailers being used as magazines under section 181.188(a) of the regulations (see Exhibit E).

In order to insure standards of safety and security in the storage of explosive materials while allowing the industry a proper latitude in the construction of magazines, it is *held* that vehicles used for transporting and for storing explosive materials that are constructed in conformity with the standards listed below, and in compliance with all other safety and security provisions contained in Part 181, i.e., effectively immobilized when unattended, will meet the requirements of ATF regulations. Even though constructed on the same vehicle, each compartment will be considered as a separate magazine. The two magazines on the vehicle will, however, be considered as one magazine when applying the American Table of Distances.

Construction Standards for Storage of Electric Blasting Caps (Non Mass-Detonating)

- a. The container or compartment must provide for total enclosure of the electric blasting caps.
- b. The partition between the explosives storage compartment and the electric blasting cap compartment must be of laminate construction consisting of A/C grade or better exterior plywood, gypsum wall board [sheetrock] and low carbon steel plates. In order of arrangement, the laminate must conform to the following, with minimum thickness of each lamination as indicated: 1/2 inch plywood, 1/2 inch gypsum wall board [sheetrock] or 1/4 inch asbestos board, 1/8 inch low carbon steel, and 1/4 inch plywood, with the 1/4 inch plywood facing the explosives storage compartment. See Exhibit C for details of laminate construction. The door to the electric blasting cap compartment must be of metal construction or solid wood covered with metal, the outside walls and top must be of the same construction as the rest of the vehicle or trailer. If high explosives, or bullet sensitive explosive materials are stored in the vehicle, then the storage compartment of the vehicle must be constructed so as to be bullet-resistant.
- c. As an alternative to the construction requirements shown in paragraph b, a container for use only as illustrated in Exhibit A may be used when constructed as follows:
 1. The top, lid or door, and the sides and bottom of each container must be of laminate construction consisting of A/C grade or better exterior plywood, solid hardwood, asbestos board and sheet metal. In order of arrangement, the laminate must consist of the following with the minimum thickness of each lamination as indicated: 1/4-inch plywood, 1-inch solid hardwood, 1/2-inch plywood, 1/4-inch asbestos board and 22-gauge sheet metal constructed inside to outside in that order. See Exhibit D for details of laminate construction.
 2. The hardwood must be fastened together with wood screws, the 1/2-inch plywood must be fastened to the hardwood with wood screws, the inner 1/4-inch plywood must be fastened to the hardwood with adhesive and the 22-gauge sheet metal must be attached to the exterior of the container with screws.
- d. The laminate composite material must be securely bound together by waterproof adhesive or other equally effective means.
- e. The steel plates at the joints of laminations must be secured by continuous fillet welds.
- f. All interior surfaces of the container or compartment must be constructed so as to prevent contact of contents with any sparking metal.
- g. There must be direct access to the container or into a compartment from outside the vehicle.

- h. Each container or compartment must have a snug fitting continuous piano-type hinged lid or door equipped with a locking device/devices.
- i. Without permitting direct access to contents under normal conditions, the locking or hinging mechanisms must permit at least one edge of the lid or door to rise or move outward at least 1/2-inch when subjected to internal pressure.
- j. The exterior of the container or compartment must be weather-resistant.

Signed: June 3, 1977

[**Editor's Note:** 27 CFR Part 181 is now 27 CFR Part 555.]