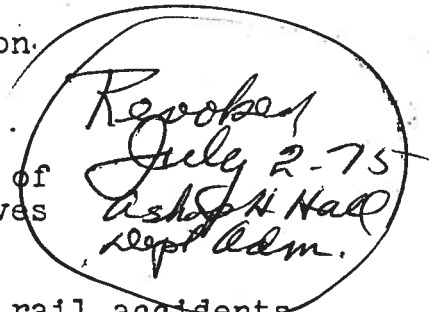


DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[FRA E.O. No. 3]

Emergency Order Regarding Use of
Cars Transporting Class A Explosives



As a result of investigations of recent rail accidents and incidents involving the transportation of Tritonal Bombs (Class A Explosives), the Federal Railroad Administration (FRA) has determined that the use of low-sparking brake shoes and adequate spark shields or increased inspection and surveillance of car selection and transportation of Class A explosives are essential to prevent further occurrences. Although the accidents involving Class A explosive bombs which occurred on the Southern Pacific Transportation Company at Roseville, California on April 28, 1973, and at Benson, Arizona on May 24, 1973, are still under investigation, on June 1, 1973, the National Transportation Safety Board (NTSB) issued its safety recommendation R-73-24. In R-73-24 the NTSB recommended that the FRA issue temporary regulations requiring "Increased inspection and surveillance of the car selection, loading and transportation of military explosives of a type involved in Tobar, Roseville, and the Benson explosions."

In addition to the action recommended by the NTSB, the FRA believes that an effort must be made to eliminate sources of excessive heat in the rail transportation of these munitions and that increased inspection is needed of those car components

which can cause such heat. One source of excessive heat is the sticking of brakes. In addition, cast iron brake shoes can produce a "sparking" condition which can cause hot metal sparks to be thrown against and ignite a wooden car body. Similarly, the application of high-friction composition brake shoes to a car equipped for the application of low-friction composition shoes may cause a fire in the brake shoe which can be transmitted to the wooden floor of a car body.

I have thoroughly reviewed this matter and conclude that the present practice of transporting Class A explosives creates an emergency situation involving a hazard of death or injury to persons affected by the use of railroad equipment in transporting the explosives. Therefore, pursuant to the authority contained in section 203 of the Federal Railroad Safety Act of 1970 (45 U.S.C. §432), I am hereby issuing the following order:

Order

In addition to the requirements of Parts 170-189 of Title 49 of the Code of Federal Regulations governing the transportation of explosives, effective 12:01 a.m., August 16, 1973, a railroad may transport Class A explosives only under the following conditions:

- (a) Each car transporting Class A explosives must be designed for and equipped with one of the following types of brake shoes. All brake shoes on the car must be of the same type and of a type for which the car is designed. All brake shoes must be in a safe and suitable condition for service, and in compliance with the wear limit set forth below according to type

Type of brake shoe	Wear limit
	Brake shoe must have a uniform thickness of more than-
Low-friction composition	- 3/8 inch
High-friction composition	- 3/8 inch
High-phosphorous	- 1/2 inch

(b) Except as provided in subdivision (c) of this order, each car transporting Class A explosives must be equipped with-

- (1) A continuous steel sub-floor; or
- (2) Metal spark shields, located on each side of the center sill, extending continuously from the center sill to the side sill, and continuously from the end sill to a point not less than one foot beyond the tread of the inside wheel of the car truck and which do not have an accumulation of oil, grease, or debris constituting a fire hazard.

(c) A car which does not meet the requirements set forth in subdivision (b) of this order may be used to transport Class A explosives under the following conditions:

- (1) The car transporting Class A explosives and each car coupled to that car in a train must be inspected as provided in clause (2) of this subdivision, by employees qualified to make the inspection, while the train is stopped at each of the following points:

- (i) Where the train and engine crews are changed;
- (ii) Immediately before traversing a 1.75 percent or more descending grade of 10 miles or more in length;
- (iii) The first point practicable after traversing a 1.75 percent or more descending grade of 10 miles or more in length, but not more than two miles after descending the grade;
- (iv) The first point practicable after the automatic air brakes have been in continuous application on a moving train for a period of 30 minutes or more; and
- (v) The first point practicable after an emergency application of the automatic air brakes.

- (2) The inspection required by clause (1) of this subdivision must be conducted to determine that-
 - (i) The air brakes are released;
 - (ii) There is no evidence of fire;
 - (iii) There is no evidence of overheating of brake shoes, wheel rims, wheel treads, or journals; and
 - (iv) The car suspension system and draft gear assembly are in a safe and suitable condition for service.

(3) With respect to an inspection made under clause (2) of this subdivision-

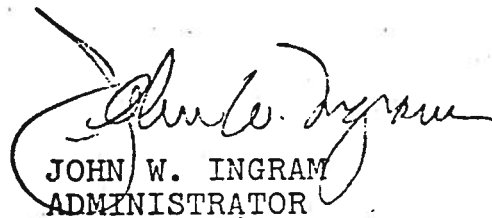
- (1) If there is evidence of sticking brakes, measures must be taken to assure that air brakes and hand brakes are fully released.
- (ii) If any evidence of overheating of any component of a car is discovered, or the suspension system or draft gear assembly of a car are found to be in an unsuitable condition for service, each defective car must be set out from the train, or the train may proceed at a speed of not more than 10 miles per hour to the nearest point where each defective car can be removed from the train. Cars set out from the train under these conditions may not be used for the transportation of Class A explosives until they have been repaired, inspected, and certified as safe and suitable for service by a responsible mechanical officer of the railroad concerned. If a car cannot be certified to be in a safe and suitable condition for service, the Class A explosives lading must be transferred to a car which meets the requirements set forth in this order before they are transported by rail.

A civil penalty of not less than \$250 nor more than \$2500 will be assessed for each violation of this order and each day of such violation will constitute a separate offense.

An opportunity for review of this order is provided in accordance with section 554 of Title 5 of the United States Code.

(Sec. 203, 84 Stat. 972, 45 U.S.C. 432; and §1.49(n) of the regulations of the Office of the Secretary of Transportation, 49 C.F.R. 1.49(n)).

Issued in Washington, D.C. on August 9, 1973.


JOHN W. INGRAM
ADMINISTRATOR