



U.S. Department
of Transportation

**Federal Railroad
Administration**

Memorandum

Date: February 3, 2004

Reply to Attn of: OP-04-20

Subject: **Part 218.37 - Flag Protection**

- Circumstances Permitting Relief of Rear-End Flag Protection
- One Train Following Another at Restricted Speed
- Use of Radio Communication between Trains to Afford Relief of Rear-End Flag Protection in Non-Signaled Territory

Original Signed By:

From: Edward W. Pritchard
Director, Office of Safety Assurance and Compliance

To: Regional Administrators

The attached letter to C.E. Dettmann of the AAR explains and clarifies FRA's position on several issues relating to Part 218.37, Flag Protection. It is intended to provide specific interpretive guidance to the field concerning these issues. As always, inspectors should continue to consider the specific circumstances of each situation in applying this guidance.

Attachment

Mr. C. E. Dettmann
Executive Vice President Safety and Operations
Association of American Railroads
50 F Street, N.W.
Washington, D.C. 20001-1564

July 20, 1999

Dear Mr. Dettmann:

It has recently come to the Federal Railroad Administration's (FRA) attention that several railroads are conducting operations that may be in violation of Title 49, Code of Federal Regulations (49 CFR), Part 218.37, Flag protection. In essence, there are operating rules and procedures currently in effect that would allow one train to follow another train into the same limits at restricted speed without the preceding train having to provide rear-end flag protection. Although there are slight variations in these operating rules and procedures from road to road, FRA feels that there are common safety issues regarding flagging that should be clarified to the industry as a whole.

As stated in the regulation, flag protection against following trains on the same track is not required if at least one of the five conditions, as specified in Part 218.37 (a)(2), pertains:

- (i) The rear of the train is protected by at least two block signals;
- (ii) The rear of the train is protected by an absolute block;
- (iii) The rear of the train is within interlocking limits;
- (iv) A train order specifies that flag protection is not required¹;
- (v) A railroad operates only one train at any given time².

¹As stated in the original preamble to Part 218.37, the use of train orders for relief of flag protection does not eliminate the need for the rear-end protection, it merely shifts the responsibility for providing the protection from the train crew to the train dispatcher. Once a "no flagging" order has been issued, the dispatcher must ensure that no other following movement is permitted to operate in a manner which may result in a rear-end collision (see 42 FR 5062, January 27, 1977).

²This accommodation is intended for short line railroads that operate only one train at any given time over their entire railroad (see 42 FR 38362, July 28, 1977).

Also, flag protection is not required in yard limits except in case of failure to clear the time of a designated class train in non-signalized territory, as prescribed in Part 218.35(b)(1). Further, flag protection to the front against opposing movements, as prescribed in Part 218.37(a)(1)(iv), would be necessary only if a railroad's operating rules required it.

Consequently, a railroad whose operating rules and methodologies are such that they fall wholly within parameters provided in Parts 218.35(b)(1) and 218.37(a)(2), and who do not otherwise have an operating rule requiring flag protection to the front against opposing movements, would be relieved of the flagging requirements of Part 218.37. Adjacent track protection and flag protection imposed by railroad operating rules for conditions other than those specifically prescribed in Parts 218.35 and 218.37, are additional requirements and are therefore outside the scope of this regulation.

In addition, FRA takes no exception in situations where joint work and time limits, joint track and time limits, or yard limits exist, as these are circumstances that are also outside the scope of the Federal rear-end flagging regulation. In joint work and time and joint track and time limits, the limits are relatively short, all crews know the limits are jointly occupied, and all movements are made at restricted speed. In yard limits, the limits are well-defined, crews are aware that they very likely will encounter other trains on a consistent basis, and except in signalized territory when governed by block signal indications more favorable than "approach", all movements must be at restricted speed. These conditions are not necessarily so for trains following other trains into occupied limits many miles in length, whose crews may not even be aware that the following trains share their limits.

In signalized territory, Part 218.37(a)(2)(i) provides that a train may enter, at restricted speed, a block that may be occupied by a preceding train, predicated on the requirement of at least two block signals to the rear. This is based on the rationale that the presence of both signals will provide reliable train separation and ensure that a following train movement will be operating under restrictive conditions prepared to stop short of a train ahead (see 42 FR 5063, January 27, 1977).

However, in non-signalized territory, the current practice of allowing one train to follow another train in the same direction into the same limits at restricted speed, is in literal noncompliance with 49 CFR, Part 218.37, and contravenes the purpose of the regulation. Although the preceding train may not reverse direction, and the following train is operating at restricted speed, there is no provision in the regulation for relief of rear-end flag protection by the preceding train under these circumstances.

In addition to the regulatory noncompliance, FRA has several safety concerns involving this practice:

- The preceding train may not necessarily be aware that it is being followed by another train. This may create the illusion by the preceding crew that they have exclusive occupancy of the limits. While they may not reverse direction, FRA has investigated accidents caused by unauthorized reverse movements.

- While the following train is required to move at restricted speed, it may not have any knowledge of the preceding train's specific location, and due to the extended limits, a tendency may exist to exceed restricted speed if, for instance, the following train is relying on a radio transmission that is overheard indicating that the preceding train is several miles ahead, or visibility on tangent track is good, etc. FRA's train accident files contain many instances of accidents caused by failure to operate at restricted speed.

While FRA appreciates the industry's belief in the theoretical certainty that restricted speed operation, if observed, will prevent a collision, as mentioned above, our files contain many reports documenting serious accidents resulting from failure to comply with restricted speed. The concerns FRA has in this type of operation are based on a long history of rail accident investigations. We do not desire to restrict the ability of your member railroads from operating in the most efficient manner possible, consistent with Federal and railroad operating and safety rules. In this instance, our concern is based upon regulatory requirements and the need for compliance, as well as a desire for consistency among all railroads with similar operations:

FRA is aware that a practice currently exists on some railroads which essentially allows the use of radio communications to provide relief from rear-end flag protection against following trains on the same track in non-signaled territory. As we understand it, two or more trains may be authorized to proceed in the same direction, within the same limits, providing certain requirements are met. FRA takes no exception to this practice provided that a railroad has operating rules placed permanently in effect which meet the following conditions:

- (1) a preceding train must have entirely passed an exact point as provided for in the railroad's operating rules pertaining to train movement authority, i.e., a physical location clearly identifiable to a locomotive engineer or other person operating a train;
- (2) when a preceding train notifies a following train by radio that it has entirely passed such an exact, clearly identifiable point, which information must be recorded in writing by the following train before being acted upon in accordance with the applicable provisions of Part 220.61, the following train is then authorized to that point; this information may only be relayed by the train dispatcher;
- (3) a following train must be restricted on its movement authority that it may not pass or run ahead of a preceding train, which must be identified by engine number³;

³Current practice on some railroads is to include language in the movement authorities that requires the following train to "protect" against the preceding train, or for both trains to "protect" against each other. The term "protect" as used in traditional railroad parlance has always had a rather precise meaning, i.e., flag protection. Because the term intimates providing flag protection in accordance with Part 218.37, and since it is the proper establishment and observance of an absolute block that actually keeps the trains separated, FRA discourages the use of the term "protect" in order to avoid misunderstanding.

(4) if radio communication fails, the following train shall make no movement beyond the exact, clearly identifiable point which was last confirmed.

As previously stated, flag protection against following trains on the same track is not required if the rear of the train is protected by an absolute block. Since the regulation does not prescribe how an absolute block may be established, FRA would not take exception to an absolute block established in the manner prescribed above provided the railroad has in effect operating rules which meet the conditions stated.

FRA respects the partnership that it has forged with the regulated community. In keeping with this partnership, FRA expect there will be full compliance with the present flagging rule's requirement of specific actions regarding protection of trains as delineated in Part 218.37, excluding, of course, situations that are specifically excepted or permitted as discussed herein.

Please share this information with member roads in your organization. If there is need for further clarification, please feel free to contact Dennis Yachechak of my staff, 202-493-6260.

Signed by Edward R. English, Director, Office of Safety Assurance and Compliance

cc: American Short Line and Regional Railroad Association
American Public Transit Association