Inside THE RAIL
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Blue Signal Protection

Blue Signal Protection has been around for a long time, and while the rules regarding it have changed and become a Federal Regulation, the definition remains the same. One of the oldest rules regarding a blue signal was from Southern Pacific's Rules and Regulations from July 1882, which stated, under Rule 38, "A blue flag by day and a blue light by night, placed at the end of a car, denote that car inspectors are at work under, on, or about the car or train. The car or train thus protected must not be coupled to, or moved, until the blue signal is removed by the car inspectors…" One of the most important parts of the Blue Signal Protection rule, no matter when in time, is that only the workgroup that placed the blue flags, lights, and locks may remove them. Just remember when you see a blue flag, workers are on, under, or between the rolling equipment.

Today, Blue Signal Protection as stated in 49 CFR Part 218, Subpart B, § 218.21, "prescribes minimum requirements for the protection of railroad employees engaged in the inspection, testing, repair, and servicing of rolling equipment whose activities require them to work on, under, or between such equipment and subjects them to the danger of personal injury posed by any movement of such equipment." Blue signal means a clearly distinguishable blue flag or blue light by day and a blue light at night. When attached to the operating controls of a locomotive, it need not be lighted if the inside of the cab area of the locomotive is sufficiently lighted so as to make the blue signal clearly distinguishable.

In this edition, we look at some C³RS incident reports regarding blue signal requirements.

The Sequence of Events is Important

Blue signals must be displayed until all employees are clear of the rolling equipment. In this incident, an Engineer reported that the blue signals were removed before all employees were in the clear.

■ *At Station X, my Crew was instructed by the Local Dispatcher to take the inbound locomotive off of Train A. Mechanical Forces displayed a blue flag on Track X and applied a blue flag to the locomotive's control stand. A few minutes later, Mechanical again boarded and removed the blue flag from the control stand. They turned the blue flag off on the station platform. I notified my Conductor on the radio that I was ready in the locomotive. He told me to stretch to uncouple from the passenger cars. I was about to move the locomotive forward when my Conductor told me to stop, which I did. He walked up to the cab and told me in person that Mechanical told him that they still had Blue Signal Protection and they were calling the Local Dispatcher to give back the Blue Signal Protection. This is a very dangerous scenario. Mechanical Forces remove the visual blue flags, but they assume that they are still protected from train movement until they call on the telephone to give up the Blue Signal Protection. Transportation Employees have no way to know if the train is under Blue Signal Protection because there are no blue flags displayed and they cannot monitor a private telephone call. They can only monitor a radio broadcast. Fouling equipment thinking they have Blue Signal Protection with no blue flags displayed could lead to an injury or a fatality. The phone call to the Local Dispatcher should come first, with the removal of the blue flag from the locomotive control stand coming last. My Crew told the Mechanical Forces that what they were doing was dangerous to life, but they insisted to continue working under Blue Signal Protection with no blue flags displayed.*

C³RS Expert Analyst's Callback Summary:

The reporter, an Engineer, stated Mechanical Department Employees kept working after the blue flags were removed from the locomotives and track… The reporter stated the sequence of events was inconsistent with procedures.

For Protection, Line the Correct Switches

In this C³RS occurrence, the employee establishing protection lined the incorrect switch, and did not protect the track on which they were working.

■ *I reported for the assignment and located the train on Track X. The head end of the equipment was covering the switch to Track Y, which the train was fouling. This is a typical setup, with two trains on Track X and one on Track Y. We conducted our brake test and received permission to leave the yard. It appeared that the cab car was directly over the switch, and I had no line of sight of the switch points or operating mechanism. Upon return from our initial trip, we were informed that we were under suspicion of being the Crew that ran through the switch.*

C³RS Expert Analyst's Callback Summary:

The reporter, an Engineer, stated the Train Crew boarded the train in the middle of the train and walked to the head end through the train instead of walking to the head end outside due to bad weather conditions. The Train Crew was never outside near the Track Y switch to see that it was misaligned. The head end of the train was not completely occupying the switch and it was still operational. It was discovered later that a Mechanical Department Employee had thrown the switch with the train sitting there in an attempt to comply with the Mechanical Department's Blue Signal Protection rules…

Blue Signaled Rolling Equipment Must be Secured

In this incident, a Machinist was working on a train protected by blue signal and inadvertently allowed the train to move, creating a very dangerous scenario.

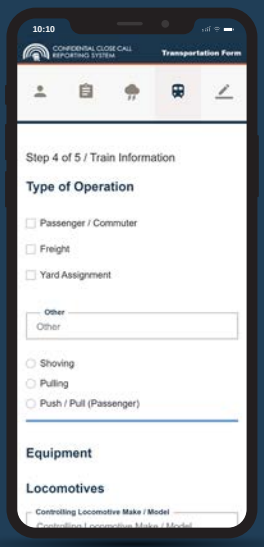
■ *I applied the brakes and released the hand brake. After I applied other Blue Signal Protection, the Machinist released the brakes and the train rolled into another train.*

C³RS Expert Analyst's Callback Summary:

The reporter, an Electrician, stated that after Blue Signal Protection was applied, the Electrician left the area. The Electrician is not sure why the Machinist released the brakes. The Electrician realized that the hand brake should not have been released. The Electrician elaborated that both employees have been retrained on their job functions. Moving forward, the Electrician stated that hand brakes would not be prematurely released.

Did You Know?

NASA C³RS has mobile friendly report forms so you can submit your report on your mobile device! Also, when you submit a C³RS report, a NASA C³RS Expert Analyst may call you to get more information or to better understand the safety issues you are sharing. It is very important that you return our call as soon as possible so that your identification (ID) strip (sent by the U.S. Mail) can be returned to you quickly.



The incoming call on your phone will not say NASA but will be from **area code 650**. Remember, the more information you include in your report, the faster the ID strip can be returned to you!

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Report Intake By Craft January through September 2024	
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Monthly Report Intake Previous 3 Months	
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