

IN RE INVESTIGATION OF AN ACCIDENT WHICH  
OCCURRED ON THE GREAT NORTHERN RAILWAY  
AT HAVRE, MONT., ON SEPTEMBER 1, 1917.

October 16, 1917.

On September 1, 1917 there was a rear-end collision between a passenger train and a freight train on the Great Northern Railway at Havre, Mont., which resulted in the death of one person and the injury of two persons. After investigation the Chief of the Division of Safety reports as follows:

This part of the Great Northern Railway is a single-track line, and between Pacific Junction and Havre, a distance of 4.1 miles, train movements are governed by a staff block system, one staff instrument being located at Pacific Junction, the western end block, and the other instrument at Havre. Bulletin No. 433, issued September 1, 1908, governing the operation of the staff system, provides that all movements through the block will be absolute, that no train or engine will be allowed to pass into the block without the possession of a staff, and the staff in possession of the engineman is authority for the movement of a train through the block. In case the staff apparatus becomes out of order, trains will be moved under instructions of the dispatcher, a special form of block clearance is provided, authorizing trains to move through the block. It is intended that the clearance be signed by the operator and conductor and "made complete" by the dispatcher, one copy being delivered to the conductor, one to the engineman, and one retained by the operator. It then becomes in effect a permissive block clearance.

Eastbound passenger train No. 2, en route from Seattle, Wash., to Chicago, Ill., consisted of one steel mail car, one wooden baggage car, one steel underframe coach, one steel coach, one wooden dining car, two wooden sleeping cars, and one wooden observation car, in the order named, hauled by locomotive 1458, and was in charge of Conductor Coolen and Engineman Larson. It left Cut Bank, Mont., at 11:45 p.m., August 31st, 50 minutes late, passed Pacific Junction, 4.1 miles west of Havre, at 1:46 a. m., on September 1st, 2 hours and 28 minutes late, and at 4:53 a.m., collided with the rear end of extra 1142 at the west end of the freight yards at Havre, while running at a speed of 15 or 20 miles an hour.

Eastbound freight train 1142 consisted of one locomotive, one car of scrap iron, one empty and 37 loaded oil cars, and three cabooses, in the order named, hauled by locomotive 1142, and was in charge of Conductor Smith and Engineman Neuman. It left Great Falls, Mont., at 3:00 p.m., on August 31, left Pacific Junction at 4:13 p.m., on September 1st, and was heading into the freight yards at Havre when train No. 2 collided with it.

The three cabooses were demolished, and 7 tank cars and the front end of locomotive 1459 were considerably damaged. The wreckage caught fire, and three cabooses and the contents of three tank cars were destroyed. The persons killed and injured were asleep in the head caboose when the collision occurred. At the time of the accident the weather was clear.

Approaching the point of accident from the west the track is tangent for 5,462 feet, followed by a 2-degree curve to the left for 995 feet, then tangent for about 750 feet to the point of collision. The grade varies from .10 per cent. to 20 per cent. descending for eastbound trains, and was level for a distance of 2,200 feet west from the point of accident. The track in the vicinity of the accident was on a fill varying from 2 to 10 feet. Aside from the curve mentioned, there is nothing to obstruct the view of engineers approaching Havre from the west.

Operator Hockett, on duty at Pacific Junction, stated that the dispatcher at Great Falls telephoned to him several times before the arrival of extra 1142, asking if that train had arrived, and when it did arrive the dispatcher said that under the 16-hour law the time of the crew would be up at 4:45 a. m., and asked if that train could pass Pacific Junction without stopping. Operator Hockett said that he asked Dispatcher Lund at Havre for a staff number for extra 1142 and when he received it the dispatcher told him to let train No. 2 follow extra 1142 on a block clearance card, but did not instruct him to notify the crew of train No. 2 that there was a train ahead of them. About that time Engineman Neuman of extra 1142 came into the office and was told that train No. 2 would follow his train to Havre. Operator Hockett said that he opened the switch for extra 1142 and the train left there at 4:13 a.m. The switch

was some little distance from the office and when the operator returned to the office he heard extra 1142 whistle for Havre and just as he got into the office he heard train No. 2 whistle for Pacific Junction. He stated that he then asked the dispatcher at Havre for a block clearance for train No. 2, received it and gave it to the crew of that train, and the train left there at about 4:45 a. m., this being the only instructions the crew received, and they were not told that there was a train ahead of them in the block. He stated that probably two or three times a week more than one train is allowed in the block between Pacific Junction and Havre at the same time, and occasionally there were two passenger trains in that block at the same time. He said it was a common practice for trains to flag each other going through this block. He stated that he had never seen Bulletin No. 453 and was never examined as to his knowledge of its contents but was familiar with the method of handling trains between Pacific Junction and Havre.

Dispatcher Lund, on duty at Havre, stated that on account the crew of extra 1142 having been on duty nearly 16 hours, he instructed Operator Hockett to give the train staff to that train, give train No. 2 a block clearance card and let it follow extra 1142 to Havre, his purpose being to get the crew of extra 1142 to Havre before they had been on duty 16 hours, and also not to delay train No. 2. He knew this practice was in violation of the staff block rules, but said it had been the practice in order to prevent a tie-up under the 16-hour law. He stated further that he thought the operator at Pacific Junction would give the train staff to the conductor of Extra 1142 and advise him that No. 2 was following close, and also advise the crew on train No. 2 when giving them the block clearance that Extra 1142 was ahead of them in the block. He stated that if he had known that the conductor of Extra 1142 and the enginemen of No. 2 would receive no advice as to the positions of the trains, he would have either tied up the extra at Pacific Junction or stopped No. 2 there.

Engineman Neuman of Extra 1142 stated that when his train reached Pacific Junction it came to a stop with the engine opposite the telegraph office, the operator took the staff out of the staff machine and gave it to him, and said for him to use No. 3 track at Havre. The train left there after receiving a highball, and when it reached the west entrance to the Havre yards he reduced its speed to about 2 or 3 miles an hour, found that track No. 3 was occupied, and told the brakemen to "grab" any track he could find that was clear. The brakemen ran

ahead to find a clear track and train No. 2 collided with his train after his train had come almost to a stop.

Conductor Smith of extra 1142 stated that his train arrived at Pacific Junction at about 4:30 a. m., and left there about 4:31 a. m. When the train reached Havre its speed was reduced to about 2-1/2 miles an hour, the head brakeman opened the switch at the west end of the yard and the train was moving into the yard at a speed of 2 or 3 miles an hour when it was struck by train No. 2. He stated that under the rules it is necessary for the enginemen to have the staff at the time it enters the block between Pacific Junction and Havre, and in case the staff is lost the crew must be given a block clearance card. He stated that the responsibility for getting the staff and entering the block rests upon the enginemen and the conductor is responsible only for the protection of the rear end of his train while in that block. When his train reached Havre the flagman started back to flag when he heard the whistle of train No. 2, this being the first intimation he had that there was another train in the block. He said that sometimes two trains are permitted in this block by authority of the dispatcher and in such cases he would take the proper steps to protect his train by flag, but it was not customary for freight trains entering the yards at Havre to be protected by flag. He stated that he did not receive any instructions when his train passed Pacific Junction.

Rear Brakeman Stokes of extra 1142 stated that when his train reached the yards at Havre he heard the whistle on train No. 2, grabbed the lanterns and rushed back to flag that train, and saw it approaching at a high rate of speed. He said he did not have any torpedoes with him.

Conductor Campbell, who was riding in the head end of extra 1142, stated that it was his understanding that the block between Pacific Junction and Havre was an absolute block and when the enginemen received the train staff the crew was relieved of the duty of protecting the rear of their train, and if a train follows that train into the block with a block clearance card, the crew of the following train is responsible for preventing their train running into the leading train. He further stated that it was not customary for crews to protect the rear of their trains when entering Havre from the west.

Enginemen Larson of train No. 2 stated that his train passed Pacific Junction at 4:46 a. m. He stated that

he was familiar with the rules which allow but one train at a time in the block and in case the staff apparatus gets out of order trains will be moved under instructions from the dispatcher. He said that engineers were supposed to have the staff before entering the block but he did not have one when his train entered it but was given a block clearance card to Havre instead. The clearance card indicated to him that the staff apparatus was out of order and he did not stop to inquire if such was the case. His understanding of the clearance card was that it gave him the same rights as the staff in the block, and he did not know there was a train in the block ahead of him when he passed Pacific Junction. Approaching Havre the speed of his train was about 40 miles an hour and he was ready to sound the whistle for that town when he saw the tail lights of extra 1142 about 9 or 10 car lengths away, and the flagman of that train running toward him. He shut off steam, applied the air brakes in emergency and reduced speed to about 15 miles an hour when the collision occurred at about 4:53 a. m.

Fireman Dillon of train No. 2 stated that when his train reached Pacific Junction the engineer received a block clearance card and they did not know there was a train ahead of them in the block until he saw extra 1142 at Havre about 10 or 11 car lengths ahead, at which time he called to the engineer and the latter applied the air brakes in emergency. He thought the speed of his train was about 15 miles an hour at the time of the collision.

Conductor Coolen of train No. 2 corroborated the statements made by Engineer Larson and said he did not know there was a train ahead of him in the block, and that it is not customary to run more than one train in that block at the same time.

Chief Dispatcher Dolea, on duty at Havre, stated that freight trains usually take about ten minutes in going from Pacific Junction to the west entrance of Havre yards and ordinarily take five or ten minutes more to get into the clear. He stated that trains are permitted to flag each other in this block upon authority of the dispatcher and considered this practice no more dangerous on this section of track than at other points, and such movements were necessary if they were to run their trains. He admitted that in making such movements they were not complying with the train staff rules, but stated that the dispatcher had authority to permit these movements, and if

properly flagged they were safe. He said that so far as he knew it has always been the practice for trains to flag any place, if the flagging is done properly, regardless of any train orders, bulletins, rules, or other instruction, and said, "There is nothing that I know of that will take preference over flagging." He stated that trains may flag from open telegraph offices if instructed to do so by the dispatcher, such practice being a custom but is not authorized by rule.

Superintendent Woodcock, located at Havre, stated that the train staff in the possession of the engineman is authority for the movement of that train through the block, that the block is absolute, and dispatchers are not authorized to deviate from the rules to make other movements in the block when it is occupied.

This accident was caused by Dispatcher Lund permitting train No. 2 to enter the block between Pacific Junction and Havre when that block was occupied by extra 1142.

Bulletin No. 453 governing the operation of the staff system at this place specifically provides that no other train shall be allowed to enter this block when it is occupied by another train, and Dispatcher Lund failed to comply with these rules when he instructed Operator Hockett to let train No. 2 enter the block when it was already occupied by extra 1142.

Operator Hockett is at fault for not informing the conductor of extra 1142 that train No. 2 would follow his train in the block. He was also at fault for not furnishing the conductor of train No. 2 with a copy of the clearance card given the engineman of that train and not advising the crew that extra 1142 was in the block.

Rule No. 99 of the operating rules of the Great Northern Railway provides that when a train stops or is delayed by any circumstances under which it may be overtaken by another train, the flagman must go back immediately with stop signals a sufficient distance to insure full protection. He is held responsible for the protection of the rear end of the train in whatever manner the circumstances require, and the fact that the train is running does not relieve him from using all necessary precautions to guard against a following train colliding with his train, especially when it is running at a low rate of speed. Bulletin No. 453 provides that "The use of the absolute staff does not relieve crews from the necessity of protecting the rear of train."

When the speed of extra 1142 was reduced and it came almost to a stop preparatory to entering the yards at Havre, the flagmen of that train should have gone back immediately to protect the rear of that train, as required by the rules, and had he done so it is probable that he would have gotten back far enough to have flagged train No. 2 in time to have averted the collision. Conductor Smith is at fault for not making sure that the flagman was performing his duties in a satisfactory manner.

Engineman Larson of train No. 2 received a block clearance card at Pacific Junction and failed to comply with the printed instructions on the face of the card reading: "Look out for trains ahead and following."

This investigation showed that none of the employees involved in this accident knew of the existence of Bulletin No. 453, which contained the only printed instructions governing the operation of the train staff system at this place, until after the accident, and the records do not indicate that any of the employees have ever been examined concerning it. It was also disclosed by this investigation that these rules were disregarded on the day of the accident and on many other occasions, thus practically nullifying the absolute feature of the staff system. Such a universal disregard of rules that are established for the safe operation of trains could hardly exist without the operating officials being aware of it, and in any event it is their duty to know that employees are familiar with the rules and observe them. Until steps are taken to insure a full compliance with these rules, serious accidents are likely to occur.

The records show that the engineer and fireman of extra 1142 went on duty at 12:45 p. m., August 31st, and at the time of the accident they had been on duty 16 hours and 8 minutes. The other members of this crew had been on duty 15 hours and 38 minutes at the time of the accident.

Dispatcher Lund was employed as dispatcher in 1910, and on September 6, 1916, he was taken out of service and reduced to operator for failing to deliver a meet order to one of the trains involved. He was re-employed as dispatcher January 9, 1917, and resigned on September 1, 1917.

J. C. T.