

INTERSTATE COMMERCE COMMISSION

WASHINGTON

REPORT OF THE DIRECTOR

BUREAU OF SAFETY

ACCIDENT ON THE
LEHIGH VALLEY RAILROAD

SMITHBORO, N. Y.

MARCH 10, 1940

INVESTIGATION NO. 2418

SUMMARY

Inv-2418

Railroad: Lehigh Valley
Date: March 10, 1940
Location: Smithboro, N. Y.
Kind of accident: Rear-end collision
Trains involved: Freight : Passenger
Train numbers: Extra 305 : 282
Engine numbers: 305-1139-2066 : 2064
Consist: 57 cars and : 12 cars
caboose
Speed: Standing : 35-60 m. p. h.
Operation: Timetable, train orders, and
manual block system
Track: Single; 2°30' right curve; level
Weather: Clear
Time: 2:25 p. m.
Casualties: 2 killed and 2 injured
Cause: Failure to provide adequate flag
protection for freight train and
failure to operate passenger train
in accordance with requirements of
permissive card in manual-block
territory

Inv-2418

May 8, 1940.

To the Commission:

On March 10, 1940, there was a rear-end collision between a freight train and a passenger train on the Lehigh Valley Railroad near Smithboro, N. Y., which resulted in the death of two employees and the injury of one passenger and one employee.

Location and Method of Operation

This accident occurred on that part of the Buffalo Division designated as the Auburn Branch which extends between Sayre, Pa., and Fair Haven, N. Y., a distance of 115.7 miles. This is a single-track line over which trains are operated by timetable, train orders, and a manual block system. The accident occurred at a point 2.14 miles west of Smithboro. Approaching this point from the west there are, in succession, a tangent 2,274 feet in length, a $0^{\circ}30'$ curve to the right 407 feet in length, a tangent 1,485 feet long, and a compound curve to the right 1,853 feet in length, the maximum curvature of which was 3° ; the accident occurred on the compound curve at a point 850 feet east of its western end where the curvature is $2^{\circ}30'$. The grade for east-bound trains is, successively, level a distance of 1.53 miles, 0.65 percent descending a distance of 2,125 feet, and level a distance of 106 feet to the point of accident and 594 feet beyond, 0.39 percent ascending a distance of 3,150 feet, level a distance of 350 feet, and 0.437 percent descending a considerable distance beyond.

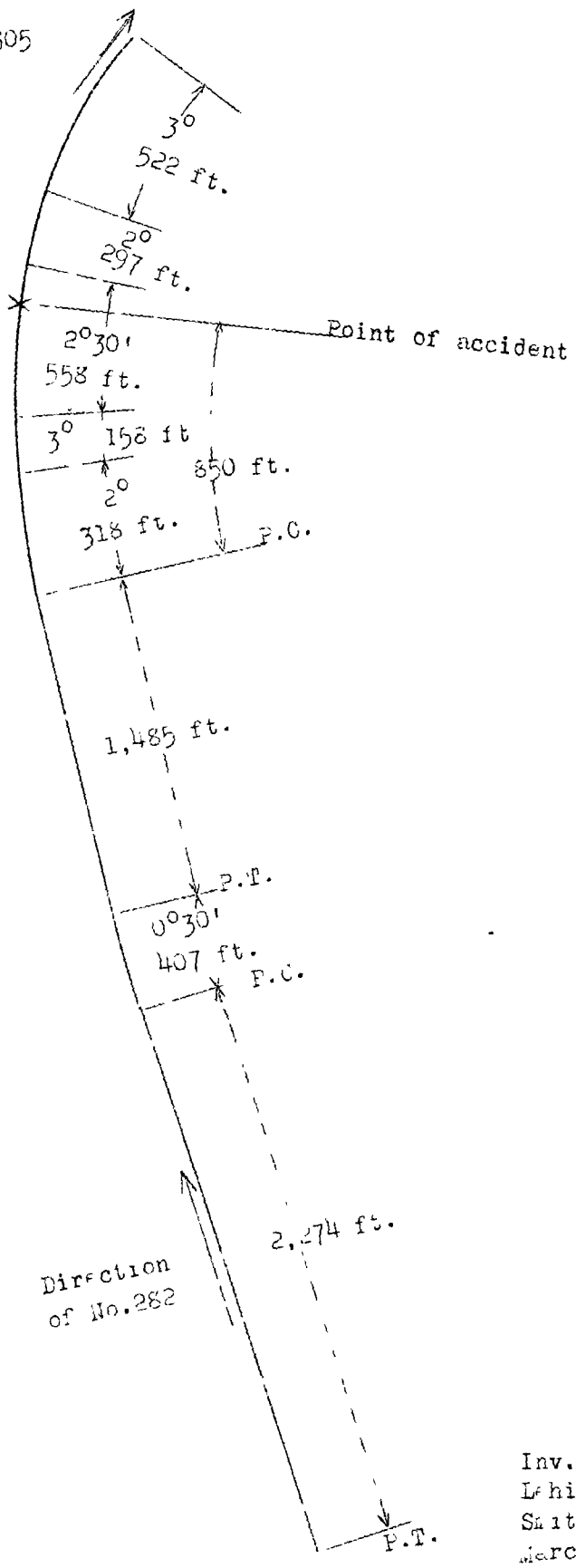
Operating rules involved read in part as follows:

99. When a train stops or is delayed, under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals and proceed rapidly to a distance sufficient to insure full protection, where he must remain until called in, or if an approaching train is within sight or hearing, until it has stopped.

On reaching the required distance or on the approach of a train before that distance is reached he will display stop signals, and, in addition, place two torpedoes on the rail and when necessary display a lighted fusee.

* * *

Extra 305



o	Sevre, Pa.	
		9.0 mi.
o	Smithboro, N.Y.	
		2.1 mi.
X	Point of accident	
		2.0 mi.
o	Tioga Center	
		5.5 mi.
o	Cwego	
		97.1 mi.
o	Fair Haven, N.Y.	

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220. Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

* * *

317. * * *

To permit a train to follow a train other than a passenger train into a block, the signalman must give "17 for ___" to the next block station in advance. The signalman receiving this signal, if there is no passenger train in the block, must reply "5. of ___ 13 for ___." The approaching train will then be admitted to the block with permissive card Form C.

The following instruction is printed at the bottom of permissive card Form C; Enginemen receiving this card will proceed as indicated.

At the time of the accident the block involved extended between Owego and Sayre, a distance of 18.6 miles.

The maximum authorized speed for passenger trains is 50 miles per hour, and for other trains and light engines, 40 miles per hour. A speed board which establishes a maximum speed of 35 miles per hour for east-bound trains is located west of the compound curve on which the accident occurred.

The weather was clear at the time of the accident, which occurred at 2:25 p. m.

Description

Extra 2056, a west-bound freight train, with Conductor Quinn and Enginemen Tuthill and Carr in charge, consisted of engine 2056, of the 4-6-2 type, engine 1139, of the 4-6-0 type, 55 loaded and 2 empty cars, and a caboose. At Sayre, 9 miles east of Smithboro, the crew received train order No. 11, Form 19, which read as follows:

Eng 2056 run Extra Sayre to Owego
No 282 Eng 2064 meet Extra 2056 We
at Owego

This train departed from Sayre at 12:01 p. m., according to the train sheet, and became stalled about 1-1/2 miles west of Smithboro at 12:48 p. m., according to the statement of the conductor, because engine 2056 became disabled. The conductor then received by telephone information that engine 305 would be sent to pull his train back to Sayre, and he received train order No. 14, Form 31, which read as follows:

Order No. 11 is annulled.

Extra 305, a west-bound light engine, was in charge of Yard Foreman Drugan and Engineman Conkling. The crew received train order No. 13, Form 19, which read as follows:

Eng 305 run extra Sayre to one and one half miles west of Smithboro and return to Sayre with right over No 282 Eng 2064 No 282 gets this at Owego

This order was made complete at 1:18 p. m. Clearance card Form A and permissive card Form C also were received; the latter read as follows:

Proceed, expecting to find a train in the block between this station and Extra 2056 ahead.

The underscored words were printed; the other words were written in longhand. Extra 305 left Sayre at 1:22 p. m., according to the train sheet, passed Smithboro at 1:45 p. m., and on reaching the rear end of Extra 2056, it was coupled to the caboose of that train. The train then moved eastward a distance of about 21 car lengths and became stalled; while it was awaiting the arrival of No. 282 for assistance, it was struck by that train.

No. 282, an east-bound passenger train, with Conductor Deming and Engineman Considine in charge, consisted of engine 2064, of the 4-6-2 type, nine milk cars, one combination passenger and baggage car, and two milk cars, in the order named. All the cars were of steel-underframe construction. At Owego, 9.6 miles west of Smithboro, the crew received train order No. 14, Form 19, previously quoted. This order was made complete at 1:28 p. m. The crew also received clearance card Form A and permissive card Form C; the latter read as follows:

Proceed, expecting to find a train in the block between this station and 1-1/2 miles west of Smithboro to Sayre Extra 305 East

The underscored words were printed; the other words were written in longhand. No. 282 departed from Owego, the last open office, at 2:16 p. m., according to the train sheet, 1 hour 47 minutes late, and, while moving at a speed variously estimated to have been between 35 and 60 miles per hour, collided with the rear end of Extra 305 East.

Engine 2064, of No. 282, telescoped engine 2056, of Extra 305, a short distance and both engines turned over on their sides south of the track. The tender of engine 2064 remained coupled to the engine. The first five cars of No. 282 were derailed and stopped in various positions on each side of the track and across it; the first three cars were demolished. The front truck of the sixth car was derailed. Engine 1139, of Extra 305, stopped at a slight angle to engine 2056 and south of it, with the tender cistern of engine 2056 crushed between the two engines and the tender frame standing on its end. Tender 1153, which was coupled to engine 1139, stopped practically at right angles to the track but remained upright and coupled to engine 1139. The rear car of Extra 305 was derailed but remained upright. The three engines and their tenders were demolished.

The employees killed were the engineman and the fireman of No. 282, and the employee injured was the fireman of engine 1139 of Extra 305.

Summary of Evidence

Engineman Tuthill, of the first engine of Extra 2056, stated that owing to a broken link-pin on his engine, his train became stalled at a point a little more than 2 miles west of Smithboro about 12:40 p. m. The front brakeman went to the rear of the train and notified the conductor; returning to the engine about 2:15 p. m., he notified the engineman that train order No. 11 was annulled and that an engine would be sent to pull the train back to Sayre. The front brakeman then walked westward to protect his train. After the arrival of engine 305 the train was moved eastward a distance of 18 or 20 car lengths and then it became stalled. Engineman Tuthill stated that he was standing at the right side of the pilot of his engine when he saw a train approaching which at first he thought was on the Eric Railroad, which parallels the Lehigh Valley Railroad on the north. He saw the front brakeman near a private road crossing, located about 1,800 feet west of his train, flag the approaching train, and he, himself, waved his arms in an attempt to stop it, but the train with the engine working steam continued to approach at a speed of 45 or 50 miles per hour; he did not know whether the brakes were applied prior to the accident, and he did not hear a whistle signal sounded at any time.

He thought the accident occurred about 15 minutes after the front brakeman had started out to protect the train. The weather was clear and he thought the visibility was clear a distance of 2 miles. Engineman Tuthill said that if he had been the engineman on No. 282 and had received a permissive card reading the same as the card received by the crew of No. 282 at Owego, he would have operated at full speed until reaching a point 2-1/2 miles west of Smithboro and then would have proceeded to Sayre with caution.

Fireman Bond, of the first engine of Extra 2056, stated that he saw the front brakeman at a point about 1/2 mile west of his own train flagging No. 282, which was working steam and moving at a speed of about 45 miles per hour; he did not know whether the brakes were applied prior to the accident. He and several other members of the crew attempted to flag the approaching train, but they received no acknowledgment of their signals. The fireman stated that his engine was equipped with flagging equipment, including torpedoes. He said that he is qualified as an engineman and that if he had been the engineman on No. 282 he would have operated the train in the manner described by Engineman Tuthill.

Engineman Carr, of the second engine of Extra 2056, stated that when he saw No. 282 it was about 75 or 80 car lengths distant and moving at an estimated speed of 45 or 50 miles per hour; the brakes were not applied prior to the accident and he did not hear a whistle signal sounded at any time. He expressed the same opinion as Engineman Tuthill and Fireman Bond with respect to the requirements of the permissive card received by No. 282 at Owego.

The statement of Fireman Failey, of the second engine of Extra 2056, added nothing of importance.

Front Brakeman Butts, of Extra 2056, stated that it was about 1 p. m. when he reached the rear end of his train to inform the conductor that the first engine was disabled; after the conductor communicated with the dispatcher he returned to the first engine and informed the engineman of the movement to be made. He then proceeded westward to flag and was about 1/2 mile west of his train when he saw No. 282 approaching about 1 mile distant; he began to flag No. 282 but received no response. He threw a stone at the engine as it passed but failed to attract the engineman's attention. He could see the engineman's arm but did not see the fireman. The train was moving at a speed of at least 50 miles per hour; the engine was working steam, and there was no indication that the air brakes were applied. He had heard a whistle signal sounded when No. 282

was in the vicinity of Tioga Center, 4.1 miles west of Smithboro, but he did not hear a whistle signal for the road crossing west of the point of accident. He did not have any torpedoes with him when he went out to flag and he did not look for any on the engine. He thought that the permissive card received by No. 282 at Owego required that train to be operated with caution from Owego to Sayre.

Conductor Quinn, of Extra 2056, stated that when his train became disabled he informed the dispatcher at Sayre by means of his portable telephone that his train was stalled approximately 1-1/2 miles west of Smithboro. The dispatcher informed him that an engine would be sent to pull the train back to Sayre, and annulled train order No. 11. After engine 305 arrived and the crew of that engine had taken charge of the train, he walked westward to see if his own engine crews were ready to start. The train was moved 21 car lengths and became stalled; then it was decided to wait until No. 282 arrived and to have it push Extra 305 over the grade, and he advised his engine crews to that effect. He was standing near engine 2056 when he saw No. 282 approach around the curve, he was unable to estimate its speed, although he realized that it was not preparing to stop. He thought that the front brakeman, who had a red flag with him, left the east end of his train about 1:35 p. m. and had been out flagging a sufficient time to walk 1/2 mile. Conductor Quinn stated at first that the permissive card received by the crew of No. 282 at Owego required that the train be operated with caution from Owego to Sayre but later stated that it would be authorized to maintain schedule speed from Owego to a point 1-1/2 miles west of Smithboro.

Brakeman Maronette, of Extra 2056, stated that after his train became stalled he walked toward the rear of his train to search for the broken link-pin, which he found about 10 car lengths east of the caboose. The threads were broken off and the nut was missing. When he returned to the engines after the train had become stalled the second time he intended to go out to flag, but saw Front Brakeman Butts proceeding westward around the curve. He was sitting in the cab of engine 2056 when he heard someone call out that No. 282 was approaching. He left the engine immediately and started across the Erie tracks; he looked westward and saw the front brakeman about 1,800 feet distant swinging his flag and he thought he saw the front brakeman throw something at the engine of No. 282. He estimated that the speed of No. 282 was 35 or 40 miles per hour at the time of the accident, at which time the engine was working steam and the brakes were not applied.

Engineman Conkling, of Extra 305, stated that his engine was coupled to the caboose of Extra 2056 at 1:53 p. m. His engine pulled the train about 21 car lengths when it became stalled; he took slack twice but was unable to move the train. He said that train order No. 13 authorized him to run ahead of No. 282 from a point 1-1/2 miles west of Smithboro to Sayre. In compliance with the permissive card Form C received at Sayre he operated his engine so that he could stop within the range of his vision. It was his understanding that in compliance with a permissive card Form C No. 282 should have been operated under proper control from Owego to Sayre.

Yard Foreman Drugan, of Extra 305, stated that immediately before the accident he was talking with some of the members of the engine crews. He saw Brakeman Butts flag No. 282, which he estimated to be moving at a speed of between 50 and 60 miles per hour, and there was no reduction in speed prior to the accident. He concurred with Engineman Conkling in regard to right conferred upon Extra 305 by order No. 13 and the manner in which No. 282 should have been operated in compliance with the permissive card Form C.

The statements of the other members of the crew of engine 305 brought out nothing additional of importance.

Road Foreman of Engines Martin stated that he was on engine 305 from Sayre; after it had been coupled to the caboose of Extra 2056 and an attempt had been made to start the train, he walked westward to within 150 feet of the two engines when he heard a train approaching. Judging by the sound of the exhaust he estimated that its speed was between 45 and 50 miles per hour. He had known the engineman of No. 282 for years and considered him a careful and reliable engineman; he thought that something must have happened to the engineman prior to the accident. He said that order No. 13 gave Extra 305 authority to run ahead of No. 282 from a point 1-1/2 miles west of Smithboro to Sayre, also, that if he had been the engineman on No. 282 he would have operated the train prepared to stop within the range of his vision.

Conductor Deming, of No. 282, stated that an air-brake test was made at Auburn, the initial terminal, 70.3 miles west of Smithboro. The train consisted of only four cars on leaving Auburn; the other cars were picked up at five points en route, and the only air-brake test en route was made at the third point, Freeville, 43.7 miles west of Smithboro, where four cars were picked up. One car was picked up at each of two points between Freeville and Smithboro, and the train was separated at Owego. He did not know the condition of the brakes on these cars, but stated that no difficulty was experienced with the

brakes en route. At Freeville train order No. 11 was received, and at Owego train order No. 14 was received, together with permissive card Form C and clearance card Form A and a message, which read, "Run carefully through Tioga Narrows account soft banks." The operator at Owego told him that engine 305 was pulling the train of Extra 2056 back to Sayre and he imparted this information to the engineman; train order No. 13 was not delivered to the crew of No. 282. He mentioned the permissive card when he handed the order, cards, and message to the engineman; the engineman answered that he understood, and he appeared to be normal in every respect. The train departed and as it passed through Tioga Narrows the speed was reduced, but after it left that point and up to the point of accident the speed was about 45 miles per hour; he did not feel an application of the air brakes prior to the accident. Engineman Considine usually reduced the speed to comply with the 35-mile-per-hour speed-board located west of the compound curve on which the accident occurred, but Conductor Deming did not observe any reduction of speed on the day of the accident. About 2 minutes after his train stopped he saw the flagman of Extra 305 walking eastward at a point about 10 telegraph poles to the rear of his train. Conductor Deming stated that he had known Engineman Considine since 1906 and had worked with him most of the time; he considered him a very careful engineman and had not heard him complain of ill health. He thought the blocking of his train was improper under the circumstances that existed in this instance; however, he interpreted the permissive card Form C received at Owego to mean that No. 282 could operate at maximum authorized speed from Owego to a point 1-1/2 miles west of Smithboro and then at a rate of 40 miles per hour, the maximum authorized speed for Extra 305, from the latter point to Sayre.

Front Brakeman Jetty, of No. 282, who is qualified as a conductor, stated that an inspector tested the air brakes at Auburn, but no test was made of the air brakes on the cars picked up en route. When cars are picked up en route, if the air brakes on the rear end release, it indicates that the brake-pipe pressure is continuous throughout the length of the train. At Auburn Engineman Considine appeared to be in normal condition, and Brakeman Jetty did not observe anything unusual when he rode on the engine a short distance en route. While the cars were being picked up at stations en route, the engineman obeyed signals promptly. After passing Tioga Narrows the train moved at a speed of 46 or 47 miles per hour until the time of the accident. About 7 minutes after the accident, he saw the flagman of Extra 305 returning, about 10 car lengths to the rear of No. 282. He thought the permissive card permitted maximum authorized speed for his train from Owego to a point 1-1/2 miles west of Smithboro and then a speed at which the train could be stopped within the range of vision.

Baggageman Twoomey, of No. 202, who was in the tenth car, stated that it is not the practice to test the air brakes every time a car is picked up. After the train left Tioga Narrows he did not feel an application of the air brakes, and he estimated that the speed was 45 miles per hour at the time of the accident. He did not hear the whistle sounded after the train left Owego. He concurred with Brakeman Jetty in regard to the authority conferred by the permissive card received at Owego.

Flagman Donovan, of No. 282, who is qualified as a conductor, stated that air-brake tests were made at Auburn and at Freeville. It is not the practice to test the brakes each time a car is picked up and he did not know whether it was a requirement of the railroad. After the train left Owego the only point where he felt an air-brake application made was at Tioga Narrows. He was in the tenth car and estimated that the speed was between 40 and 50 miles per hour at the time of the accident. He did not observe anything irregular on the trip from Owego to the point of accident. After the accident he went back to flag and met the flagman of Extra 305, who had a flag in his hand, approximately 8 or 10 telegraph poles to the rear of his train. Flagman Donovan concurred with Brakeman Jetty and Baggageman Twoomey in regard to the authority conferred by the permissive card received at Owego.

Agent Cleveland, at Owego, stated that he received from the dispatcher at Sayre train order No. 13, Form 31, addressed to the operator and C&E No. 282, as previously quoted, which was made complete to him at 1:18 p. m., and immediately afterward he received train order No. 14, Form 19, addressed to the operator and C&E No. 282, also as previously quoted, which was made complete at 1:23 p. m. Some time later he received train order No. 15, Form 19, addressed only to the operator, as follows:

That part of order 13 reading eng 305 run extra Sayre to 1-1/2 miles west of Smithboro is annulled.

This order was made complete at 2:12 p. m., and also he received instructions from the dispatcher to issue a clearance card together with a permissive card reading in substance: "1-1/2 miles west of Smithboro to Sayre Extra 305 East." No. 282 arrived at Owego at 1:36 p. m. and Conductor Deming was in the office at the time he received the complete on order No. 15. Agent Cleveland delivered the cards and order No. 14 to the conductor and he thought the conductor saw order No. 15. He talked to the conductor about Extra 305 becoming disabled and engine 305 being sent to pull that train back to Sayre. Before

receiving order No. 15 the dispatcher had told him that he intended to annul order No. 13 addressed to the operator and No. 282, and he thought that order No. 15 annulled order No. 13, although in another statement he said that order No. 13 was annulled only in part and that the part of the order which read "return to Sayre with right over No. 282 engine 2064. No. 282 gets this at Owego," was still in effect. He stated that the dispatcher did not instruct him not to deliver train order No. 13, and he himself did not raise the question; however, in a later statement he said that when the dispatcher instructed him to issue the permissive card, the dispatcher informed him it was not necessary for No. 282 to have order No. 13. It is customary for the dispatcher to instruct the operator in regard to what orders are to be indicated on the clearance card, but the dispatcher did not instruct him relative to this matter on the day of the accident. Agent Cleveland stated that he was not familiar with the term, "That part of," appearing in order No. 15 and had never handled an order of that kind. He did not think that the word "point" was included in the information to be placed on the permissive card, and the words "this station" had never been crossed out on the card, and he did not think that it would have read more clearly, and he could not recall of an instance where a permissive card had been issued under conditions similar to the conditions existing at the time the card was issued to No. 282. His interpretation of the permissive card involved was that the engineman of No. 282 was authorized to proceed at a speed of 50 miles per hour from Owego to a point about 1-1/2 miles west of Smithboro and then proceed with train under control; however, previous to this instance he had never seen a permissive card that specified one condition for a part of a block and another condition for the remainder of the block.

Dispatcher Boyle, at Sayre, stated that at 1:55 p. m. he was informed by Conductor Quinn that engine 305 had arrived and that the train was ready to leave for Sayre. He then issued order No. 15, which he addressed to the operator at Owego, annulling part of order No. 13 in order that No. 282 would not stop at a point where there was no means of communication. He said it would have been simpler to annul this order in its entirety and it was his intention to do so. He told the operator that he did not wish to delay No. 282 and that Extra 305 was on its way east, and he instructed the operator to "card Extra 305 from a point 1-1/2 miles west of Smithboro to Sayre," that is, issue a permissive card to No. 282. He thought the permissive card was sufficient protection, even though No. 282 did not have order No. 13 while Extra 305 East did have that order, which gave it right over No. 282 from a point 1-1/2 miles west of Smithboro to Sayre and which was equivalent to a run-ahead order between these points. He said that No. 282 was re-

quired to run with caution, expecting to find the train ahead. Under the rules a passenger train is permitted to follow a freight train in the block.

According to information furnished by the carrier, Engineman Considine would have been 70 years of age on November 17, 1940.

Discussion

According to the evidence, Extra 2056 West became stalled at a point about 2 miles west of Smithboro because of a broken union link-pin on engine 2056; its running order, which was combined with an order to meet No. 282 at Owego, was annulled. Engine 305 was sent from Sayre to pull the train of Extra 2056 back to Sayre and the crew of this engine was given a running order from Sayre to a point 1-1/2 miles west of Smithboro and return to Sayre, with right over No. 282. After engine 305 was coupled to the rear of the disabled train, the conductor reported to the dispatcher that the train was ready to depart; Extra 305 moved eastward about 20 car lengths and stalled. This train then waited for No. 282 to help it over the grade located just east of the point where the accident occurred. Extra 305 had been waiting almost 25 minutes when the accident occurred.

According to the front brakeman, he flagged No. 282 from a point about 1/2 mile to the rear of his train. From this point he could see No. 282 approaching a mile distant. As the train approached he gave stop signals with a red flag and he threw a rock at the engine as it passed him but there was no indication on the part of the engine crew that his signals were seen. The flagging rule required that torpedoes be placed on the rail but the brakeman did not place any on the rail and he failed to take torpedoes with him when he went out to protect his train. The evidence indicated that the brakeman started out to flag about 15 minutes before the accident occurred; from this it appears that he should have been able to go considerably more than a half mile to the rear of his train within the time at his disposal. If he had placed torpedoes on the rail, probably the engine crew would have heard the explosion of the torpedoes and would have taken action to stop the train.

A brake application on No. 282 was felt at a point about 2 miles west of the point of accident but throughout the last 2 miles traversed by No. 282 no member of the train crew heard the engine whistle sounded or felt an application of the brakes. There was no reduction of speed as the train approached the rear of Extra 305. No one saw the fireman; the front brakeman of Extra 305 saw only the arm of the engineman as the engine

passed. At Owego about 10 minutes before the accident occurred the engineman appeared normal. The visual conditions were good. These facts indicate that possibly the engineman became incapacitated at some point within the 2 miles immediately west of the point of accident. It is not known why no action was taken by either the engineman or the fireman as both were killed in the accident.

En route No. 282 picked up cars at five points between Auburn and Owego but an air-brake test was made at only one of these points. The train was last separated at Owego, where the last stop was made prior to the accident; however, the surviving members of the crew stated that they felt an application of the brakes and observed a reduction in the speed of their train at a point slightly more than 2 miles west of the point of accident.

Under the manual-block rules of this railroad, after delivery of a permissive card Form C to a passenger train it may be admitted to a block occupied by a preceding freight train. Several minutes before No. 282 received a permissive card, Extra 305 had reported that it was ready to start eastward. Using his own expression, the operator at Owego prepared the permissive card according to information received from the dispatcher. The wording of the permissive card, "Proceed, expecting to find a train in the block between this station and 1-1/2 miles west of Smithboro to Sayre Extra 305 East," is not a clear and concise instruction and it was not interpreted uniformly by all employees interrogated; some of them thought that the permissive card gave No. 282 in effect a clear block from Owego to a point 1-1/2 miles west of Smithboro and a permissive block from a point 1-1/2 miles west of Smithboro to Sayre; other employees interpreted the permissive card to mean that the train should have been operated throughout the full length of the block according to a permissive indication; all the surviving members of the crew of No. 282 thought the first portion of the block involved was clear. No. 282 was operated at maximum authorized speed, which was the method of operation under a clear block; this indicates that the engine crew thought the first portion of the block was clear. There was no provision in the rules for temporarily dividing a block into two portions and the permissive card was not designed for that purpose; the evidence indicated that it was not customary to divide a block temporarily. Extra 305 West was given a permissive card bearing instructions for it to proceed, expecting to find a train in the block. Before this train left Sayre, it was known that Extra 2056 was disabled at a point approximately 1-1/2 miles west of Smithboro; nevertheless, the permissive card required Extra 305 to run prepared to stop short of train ahead at any point between Sayre

and 1-1/2 miles west of Smithboro, and no reason is apparent why the permissive card given to No. 282 should not have been handled in a similar manner.

There was some misunderstanding concerning the information furnished in regard to the location of Extra 2056 after its first engine failed. The conductor, using a portable telephone from the vicinity of the caboose, reported to the dispatcher that his train was standing 1-1/2 miles west of Smithboro; that point was the approximate location of the caboose. It appears that the fact the front end was slightly more than 2 miles west of Smithboro was not considered when issuing instructions to other trains concerned; however, the crew of No. 282 apparently did not give the exact location of Extra 305 much consideration as the train was moving at a speed of about 45 or 50 miles per hour at a point about 2.1 miles west of Smithboro.

Train order No. 13, which was addressed to the operator and No. 282 at Owego and which in effect gave Extra 305 East authority to run ahead of No. 282 from a point 1-1/2 miles west of Smithboro to Sayre, was not delivered to No. 282. The operator at Owego had received an order addressed to him annulling part of that order, so that he would know there was no west-bound train in the block and so that he would be authorized to release No. 282 with a permissive card. The dispatcher instructed the operator that a permissive card was sufficient protection for the movement of No. 282 and that it was unnecessary for this train to have order No. 13. Regardless of the rule which provides that an order is in effect until it is fulfilled, superseded, or annulled, the dispatcher and the operator permitted No. 282 to leave Owego without delivering to the crew of that train a copy of order No. 13. The dispatcher said that it was his intention to annul this order in its entirety to the operator at Owego. Even though the dispatcher instructed the operator to release No. 282 without order No. 13, the operator had not received an annulment, so far as No. 282 was concerned. As the matter was handled there was a lap of authority of Extra 305 and No. 282 from a point 1-1/2 miles west of Smithboro to Sayre. It is possible that if the crew of No. 282 had received order No. 13, some member would have taken action to reduce the speed approaching the point where the accident occurred.

This investigation disclosed laxity in the enforcement and observance of the flagging rule, the rules pertaining to the delivery of train orders, and the manual-block rules, which should be promptly corrected.

Conclusion

This accident was caused by failure to provide adequate flag protection for the freight train and by failure to operate the passenger train in manual-block territory in accordance with the requirements of a permissive card.

Respectfully submitted,

S. N. MILLS,

Director.