

Decision No. 804

ORIGINAL

Decision No. 804

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the matter of the investigation
of the wreck occurring on June 19,
1913, on the line of the SAN FRANCISCO
NAPA AND CALISTOGA RAILWAY.

Case No. 416.

REPORT OF THE COMMISSION.

On June 19, 1913, a head end collision occurred on the line of the San Francisco Napa and Calistoga Railway Company between northbound passenger train No. 6 and southbound passenger train No. 5 at a point approximating 2.4 miles north of Vallejo, resulting in the death of ten passengers and three employees and the injury of at least twenty-five passengers and three employees.

The San Francisco Napa and Calistoga Railway Company, which will hereinafter be referred to as the Railway Company, operates a single track electric interurban railway between Vallejo and Calistoga, a distance of some 41.6 miles.

Immediately on being informed of the accident on the morning of June 19, 1913, this Commission, in accordance with its usual practice, instructed its engineering department to make an immediate investigation to ascertain the cause of the accident. The engineering department proceeded at once to make an exhaustive investigation and has presented the result of its investigation to this Commission in its report dated June 28, 1913. A copy is attached to this report and made a part thereof and the findings therein are approved and adopted as the findings of this Commission.

It will be noted that the causes of the accident, as found by the engineering department and approved by this Commission are as follows:

- (1) The failure of Conductor Richmond to secure a clearance from the dispatcher before leaving Vallejo with northbound passenger train No. 6.

(2) The failure of Motorman Hough on the same train to obtain the clearance from his conductor.

(3) Dispatcher O'Leary's violation of the rule requiring him to first restrict the superior train before moving the inferior train.

(4) The failure of the officers of the Railway Company to insist on a compliance with the rules of the company in the foregoing respects and in other respects, resulting in a general failure to comply with the rules governing the operation of its trains.

We desire to draw particular attention to the violation rule 268 reading as follows:

"When trains running in opposite directions are to be moved toward each other by train orders, the train whose rights are to be restricted must first receive the order and the complete before the order is given to the train to be moved against it or toward it."

It appears that trains No. 5 and 6 were running in opposite directions and that they were to be moved toward each other by train orders. Train No. 6 was to run north from Vallejo and train No. 5 south toward Vallejo. Train Dispatcher O'Leary decided to restrict the rights of train No. 6, so that it would pass train No. 5 at a siding south of the usual siding, and to correspondingly enlarge the rights of train No. 5.

Under Rule No. 268, it was clearly the duty of Dispatcher O'Leary to restrict the rights of train No. 6 before directing train No. 5 to pass the point of usual meeting place and continue its trip toward train No. 6. The evidence shows that Dispatcher O'Leary failed in this duty. He was shown to be inexperienced and he admitted that he had never read the rules.

The violation of this rule by O'Leary was directly responsible for the wreck, and the officials of the company must be held liable for Dispatcher O'Leary's failure in his duty.

The dispute between the conductor of train No. 6 and the train dispatcher is relatively unimportant as compared with the

failure to comply with Rule No. 268. Under the plain provision of that rule, the Dispatcher had no right to notify the conductor of the southbound train of the change in meeting place until he had notified the conductor of the northbound train and had received such conductor's acknowledgment and the order had been completed as to him. Only after such order had been given to train No. 6 and so completed had the dispatcher any right to give the order to the southbound train.

The Commission's investigations of the operation of inter-urban electric railroads in this state show that they largely have failed to operate their railroads as demanded for the safety of the traveling public. This has largely been due to the fact that the managers of such railroads are inclined to operate them as though they were ordinary street car lines, forgetting that the cars actually operated are intrurban cars maintaining a high rate of speed.

The Commission's general inspection of the operation of electric railroads carried on with its general engineering force developed the fact that while ordinarily the rules adopted by these companies are proper, yet the officials were not requiring their compliance with these rules which safety of operation requires. In order the better to handle this branch of this work, the Commission on April 10, 1913, employed Mr. Hugh Wilson as service inspector to work in conjunction with the engineering department, and since then Mr. Wilson has devoted his entire time to careful inspection and check of these utilities. He was instructed to inspect and report on all of the lines of the state, and on April 30, he began an inspection of the lines of the Central California Traction Company; on May 5, of the Oakland and Antioch; on May 11, of the San Diego and Southeastern; on May 15, of the Petaluma and Santa Rosa; on May 22, of the San Francisco Napa and Calistoga, and on May 24, of the Peninsular Railway. The inspection completed before the wreck here under consideration verified the conclusion that we have already stated, namely,

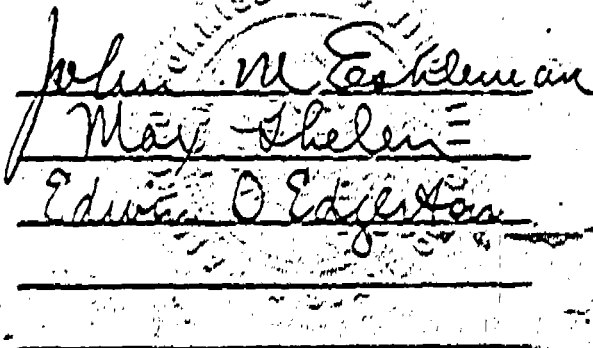
that only slight changes of rules are ordinarily necessary but much improvement is necessary in the manner in which the established rules and regulations are complied with. It appears, for instance, in the case of the wreck which we are considering, that the real cause was not the failure to adopt rules but the failure to require compliance with established rules and regulations, and the failure in such a way that this Commission cannot escape the conclusion that it is directly traceable to the officials of this company.

It is manifestly impossible for this Commission to require employees of utilities to comply in all respects with the rules adopted by such utilities unless it be given a force sufficiently large to operate ^{the} utilities of the state. Of course this cannot be done and it should not be expected, but the Commission and other public authorities can and will require the officials of these companies to see that their rules are complied with or assume the legal consequences of such failure. Regard for the public welfare, if not for the property under their control, should induce managers and owners of public utilities to see that they are safely operated. While we shall, to the extent of our ability, check the violations of the rules, still we must look to the officials of the companies to see that the rules are complied with. One of the main causes of wrecks from violations of rules, in our opinion, is the failure of officials of railroads to see that violations of rules are punished regardless of the result of such violations. The practice too common is merely to discharge or punish that employee whose violation of the rules has resulted in disaster. Violation of a rule which results in no disaster should and must be as severely dealt with as the violation which is not successful and which results in loss of property or life. We desire to impress this fact upon the public utility officials and owners and to insist that it is their duty to see that the proper rules are complied with in every respect and they should not feel that they have acquitted themselves properly when they discharge or punish the employee when disaster has been the consequence.

of his failure to comply with the rules. We can reach no other conclusion than that ~~xxx~~ many officials of railroads at present connive at and in effect sanction departure from or violation of important rules of safety in those instances when no damage results therefrom. This practice must be discontinued.

Most of these interurban lines should be protected by block signals, and our engineer has been directed to have a thorough investigation made of all these roads with a view to requiring the installation of block signals at once in the more urgent cases and gradually in all cases. If the installation of the necessary safety devices requires an increase of the rates of these utilities, such increase will be allowed. The traveling public has a right to be protected and should be willing to pay for such protection. Up to the present time, however, in this state, it cannot be said by any public utility that its failure to install proper safety devices is due to inadequate rates. No suggestion has come from any one of them that this Commission permit an increase in rates for this purpose. The Commission stands ready at all times, however, to permit rates high enough to pay a reasonable return upon the fair value of the property devoted to the public service, good wages to experienced men, and installation of such appliances as may be necessary to promote the safety of the traveling public and employes of the utilities under its jurisdiction.

Dated at San Francisco, California, this 21st day of July, 1913.

The seal of the Public Utilities Commission of California is visible in the background of the signatures. It features a circular design with the text "PUBLIC UTILITIES COMMISSION OF CALIFORNIA" around the perimeter and a central emblem.
John M. Eastman
May Shelton
Edward O. Edgerly

Commissioners.

San Francisco, Cal., June 28, 1913.

FILE ACC. NO. 214.

Railroad Commission of the State of California,
San Francisco, California.

Dear Sirs: -

On June 19, 1913, the San Francisco, Napa and Calistoga Railway Company reported to this Commission by telephone a head-on collision between northbound passenger train No. 6 and southbound passenger train No. 5 at a point approximately 2-4 miles north of Vallejo, resulting in the death of ten passengers, three employees, and in the injury, as far as can be ascertained, of twenty-five passengers and three employees. Several passengers who are not included in the above, were injured and hurriedly taken away by automobile to private residences.

After an investigation of this accident and circumstances connected therewith, I beg to submit the following report: -

This railroad is a single track electric line of the overhead catenary type, running from Vallejo to Calistoga, a distance of 41.6 miles and is operated under a Book of Rules and Regulations compiled from the Rules and Regulations of the American Street and Interurban Transportation and Traffic Association. No block signals are used.

Train orders directing the movements of trains are transmitted by telephone, and such train orders are received and entered by Conductors and Motormen on account of the railroad company maintaining no telephone operators or station men whose duties require them to receive train orders.

On June 19, 1913, northbound train No. 6 left Vallejo at 9.19 A.M., 17 minutes late due to the connecting boat from San Francisco with passengers, baggage and express, being delayed by an adverse tide. This train runs daily between Vallejo and Calistoga, 41.6 miles, and is due to leave Vallejo at 9.02 A.M. The train consisted of 2 cars; car No. 41, the motor car, and car No. 44, the trailer, and was in charge of Conductor Horace Richmond and Motorman E.C. Hough.

Southbound train No. 5 runs daily between Calistoga and Vallojo and is due to leave Calistoga at 7.42 A.M. and arrive in Vallojo at 9.35 A.M. On the day of the accident this train consisted of one car, No. 50, in charge of Conductor B.E. Patton and Motorman William Juarez.

As near as can be ascertained there were about 50 passengers on southbound train No. 5 and 40 passengers on northbound train No. 6, and at the time of the accident Conductor Richmond of northbound train No. 6 had not completed the taking of tickets. Trains Nos. 5 and 6 are due to meet at Collins, which is 5 miles north of Vallojo, at 9.18 A.M. Train No. 5 left Calistoga at 7.42 A.M., left Eapa at 8.58 A.M., two minutes late, and arrived at Collins at approximately 9.18 A.M. Conductor Patton of southbound train No. 5 upon arrival at Collins at approximately 9.18 A.M., called Dispatcher O'Leary at Eapa on the telephone for orders. Dispatcher O'Leary then called Vallojo station on the telephone and received word from the Agent there that train No. 6 was still at Vallojo loading express. Dispatcher O'Leary then telephoned to Conductor Patton of Train No. 5 at Collins, the following order, which was Order No. 3 of June 19, 1915:-

"Train 5 meet train 6 at Hatch".

This order was made complete at 9.19 A.M.

From all of the evidence it appears that Train No. 6 left Vallojo without Order No. 3 and left during the time the Dispatcher was in the act of giving southbound train No. 5 the order, which was between 9.18 and 9.19 A.M.

The three cars in this collision were five or six years old, had wooden bodies and weighed between 50 and 60 tons, with a total length over all of 52 feet, and seating capacity of 62 passengers. The motor cars were equipped with Westinghouse electric equipment and Westinghouse air brake. The motors were geared to run at a speed of 45 miles per hour and, no doubt, both trains were making that speed at the time the motorman discovered the impending collision. The speed of train No. 5 at the instant of collision was reduced to about 20 miles per hour and

that of train No. 6 was not materially reduced.

The collision occurred approximately 2.4 miles north of the Vallejo depot, or, at a point which is about 4000 feet north of the northerly limits of the City of Vallejo, and between Engineer's Stations 126 and 129, at a point where the track from the company's private right of way runs into the Vallejo-Napa County Road- (See situation plan, Exhibit "A"). The track north of the point of the accident is straight for about 1400 feet, then curves to the right, through an angle of 11 degrees 27 minutes into a tangent over one mile in length. South of the point of collision the track is on a reverse 7 deg. curve through an angle of 36 degrees leading into a tangent about 1000 feet in length. At the point of the accident there is a descending grade to the south of 0.32 per cent for about 1000 feet and at each end of this grade the track is practically level.

As stated above northbound train No. 6 left Vallejo late and both trains were traveling at a high rate of speed as is evidenced by the accompanying photographs. The body of the southbound car, No. 50, was lifted from its trucks and telescoped about half way into the forward car No. 41, of northbound train No. 6. The body of car No. 41 was practically demolished, only 4 pairs of rear seats remaining intact. All of the killed passengers and employees and most of the injured were in this car. No passengers in southbound car No. 50 were fatally injured. The trucks did not leave the rails and the cars remained upright. The overhead power transmission wires were not disturbed and the track was not damaged.

Buildings, high cedars, eucalyptus trees and also a young eucalyptus growth from 6 to 10 feet high on the west side of the right of way which is so close to trains that the branches touch the cars, obstructed the view for both northbound and southbound motormen until within a few hundred feet of the point of accident rendering this particular piece of track dangerous. These visual obstructions are shown on the situation plan, Exhibit "A". That the company realized the danger caused by these obstructions is evidenced by the fact that

the acualyptus trees next to the right of way were cut down this spring and the bushes from 6 to 10 feet high are now growth during the present year.

Dispatcher O'Leary's statement concerning the accident is that when Conductor Patten of southbound train No. 5 called him over the telephone from Collins for orders, he immediately called Vallojo Station and was advised by the Agent that Train No. 6 had not left Vallojo and was still loading express and baggage. He thereupon gave Conductor Patten Order No. 3, which was for Train 5 to meet Train 6 at Hatch. He states further that he received no call whatever from Conductor Richmond at Vallojo after he reported his train into Vallojo at 7.29 A.M.

Conductor Richmond of Train No. 6 states that about 17 minutes after his scheduled leaving time at Vallojo (9.02 A.M.) he called Dispatcher O'Leary on the telephone and received the usual verbal clearance "no orders".

Motorman Hough of Train No. 6, prior to his death at the General Hospital in Vallojo, stated that Conductor Richmond went to the telephone at Vallojo. He further stated that Richmond came out and said nothing, but just got on the rear of the car and gave two bells.

Conductor Patten of southbound Train No. 5 verified Dispatcher O'Leary's statement in so far as receiving his order to meet Train No. 6 at Hatch is concerned. He further overheard the conversation between Dispatcher O'Leary and the Agent at Vallojo. He states further that he did not hear Conductor Richmond call for orders during the time he was using the telephone.

Motorman Juarez of southbound train No. 5 remained in the cab of his motor while Conductor Patten was obtaining orders at Collins and states that he heard Conductor Patten repeat his order. He further states that approaching the point of the accident he saw Train No. 6 approaching, shut off his current and immediately applied his emergency brake, reducing his speed to about twenty miles per hour when the collision occurred.

Motorman Hough made the statement that he had reduced his speed to about 25 miles per hour at the time of the accident.

Mr. Green, a passenger on Train No. 6, was in the baggage part of the first car of Train No. 6 at Vallejo during the loading of baggage and express. He states that Conductor Richmond was under his observation during the entire time of loading baggage and from the time he began to load the baggage until the loading was completed and the train left Vallejo. He states that he is positive Conductor Richmond did not go to the telephone to obtain orders.

Mr. Silverman, a passenger on train 6, who was in a seat in the first car of Train No. 6 while the baggage was being loaded at Vallejo, states that he watched Conductor Richmond while the baggage was being loaded and did not observe him go to the telephone for orders prior to the departure of the train from Vallejo.

Officer Rafferty, who is a member of the Vallejo Police Force, stood on the wharf at Vallejo, in plain view of the train and also of the telephone booth. He states that he did not notice whether or not Conductor Richmond went to the telephone to obtain orders, although Conductor Richmond maintains that he had conversation with Officer Rafferty and Officer Rafferty saw him, Conductor Richmond, go into the telephone booth.

The cause of this collision rests either with Conductor Richmond for his failure to call Dispatcher O'Leary on the telephone prior to leaving Vallejo, or else lies with Dispatcher O'Leary for failure to give the order to Conductor Richmond for Train No. 6 to meet train No. 5 at Eata. Dispatcher O'Leary's statement contradicts the statement made by both Horace Richmond, Conductor, and E.B. Hough, motorman of the northbound train No. 6. Both assert that the Conductor of Train No. 6 did call from Vallejo for orders and that the dispatcher gave conductor Richmond "no order". This would allow train No. 6 to proceed to its scheduled meeting point with train No. 5 at Collins. The fact that Dispatcher O'Leary was in the act of trans-

mitting Order No. 3 over the telephone to Conductor Patton who was then at Collins at about the time when Train No. 5 left Vallejo would tend to the conclusion that Conductor Richmond failed to call the Dispatcher for his usual telephone clearance. Some responsibility should also be placed upon Motorman Hough of Train No. 6. If Conductor Richmond of Train No. 5 called Dispatcher O'Leary from Vallejo before leaving with Train No. 6, and, as he claims, received from the Dispatcher "no order", meaning proceed and meet train 5 as per schedule, then O'Leary is responsible. Assuming Richmond's statement to be correct, he still is guilty of violating the rules of the company in that he did not repeat the clearance to his motorman, but instead gave him two bells which is the signal to go ahead. Complying with the custom of the Company at Vallejo the motorman should have refused to start on this signal and should have insisted on receiving the verbal clearance from his conductor. Assuming that Dispatcher O'Leary's statement is correct and Conductor Richmond of Train No. 6 did not call for and left without orders, then the immediate responsibility is with Conductor Richmond and Motorman Hough.

The contributing cause of the accident is the improper methods of issuing train orders and the failure of the management of the Company to operate their railroad with proper and safe rules and with efficient and competent officers and employees. To illustrate this it is only necessary to call attention to the violation of the rules consummated in the handling of this particular meet order and also the violation of the rules which occurred in the movements of these two trains from the time each left its terminal until the collision occurred. These violations number in all, 17 direct violations, and 4 indirect violations, a part of which have a direct relation to the accident.

RULE 88- SCHEDULED MEETING POINTS.

Rule No. 88 reads "Scheduled meeting points or passing points are indicated by figures in full-faced type; the number or numbers of trains they are to meet or pass are shown in small type above the full-faced type".

To comply with this rule, in making up their time card, just above and to the right of the figures 9.18 in the schedule of trains Nos. 5 and 6, at Hatch, should be inserted a small figure showing the train which each was to meet. This provision is not carried out in the time card.

RULE 90- SIGNS AND LETTERS.

This rule provides that at all regular stops of trains there should be inserted before the figures of the schedule, the letter "S" and at all flag stops there should be inserted before the figures in the schedule the letter "F".

The schedules of trains 5 and 6 and also of all other trains in the time card are not made up in accordance with this rule as outlined in the Book of Rules.

RULE 91- DESIGNATION OF TRAINS.

This rule provides that "trains are designated by numbers and their class is indicated on the time table".

While this railroad shows schedules for passenger trains only, in their time card, they should indicate those as first-class trains. They run freight trains but do not show them in their timetable. This is not necessary, as these trains are run as extras but to technically comply with their rules they should have all of their scheduled trains shown as first-class trains in the timetable.

RULE 110. REAR END SIGNALS.

This rule reads as follows:- "The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train: by day, green flags: by night, green lights to the front and side and red lights to the rear, except when the train is clear of the main track, when green lights must be displayed to the front, side and rear".

This railroad operated both trains Nos. 5 and 6 without "rear end signals" being displayed. There is no objection to this if they had authorized the discontinuance of the practice by a bulletin. They operate an extra freight train which is usually made up of a motor and 4 or 5 cars, without having rear end signals to indicate that the

entire train is intact. It is a dangerous practice to neglect to show "rear end" signals on freight trains.

RULE 118. COMMUNICATING SIGNAL APPLIANCES.

This rule reads as follows:- "Each car on a passenger train must be connected with motor by a communicating signal appliance".

Train No. 6 on the date of this accident consisted of two cars and there was no communicating signal between the rear car and the first car. They use the old style gong with bell cord. If the conductor is in the rear car of his train he has no means of communicating signals to the motorman. He further has no emergency valve with which he can get the brakes on his train in case he desires to make a quick stop. There is no reason why the Railway Company should not supply their cars with the usual air signal appliances and the emergency valve in addition.

RULE 124. TRAIN ORDER SIGNALS.

"Semaphore signals used for train orders may be located at telephone stations. The arms have square ends and are attached to the same mast for trains in both directions".

To comply with this rule the Railway Company should maintain semaphore signals for train orders for the use of the operators handling train orders at St. Helena and Napa. Train No. 5 passed both of these stations on the date of the accident. At St. Helena it is the practice to have the Agent use a red flag to stop trains to which the dispatcher desires to give train orders. At Napa the dispatcher personally delivers the orders to the conductor. This is unsafe practice for the reason that the operator at St. Helena or the dispatcher at Napa are liable to overlook the delivery of orders. If a train order signal was used, crews of trains would be responsible for calling for the orders and there would be less danger of a failure to deliver them. There should be signals installed at these points so that whenever it is decided to deliver orders for a train the signal can be displayed in a stop position before the order is placed in charge of the operator or before the dispatcher at Napa writes out his order for the train.

RULE 203. TRAINS LEAVING INITIAL STATIONS.

Part of Rule 203 reads:- "A train must not leave its initial station on any division, or a junction, or pass from double to single track, without order or clearance, and until it is ascertained, by asking the dispatcher, whether all trains due have arrived or departed, mentioning particularly the last train due, giving the train number".

Under this rule the Company should require their Conductors leaving Calistoga or Vallejo to call up the Dispatcher and obtain necessary information to fill out their Clearance Card, Form 274. This should be made out in duplicate, copy of which the conductor should deliver to the motorman. This was not done with train No. 5, leaving Calistoga, nor with train No. 6, leaving Vallejo. Had the officers of the Company required this rule to be followed to the letter, Conductor Richmond at Vallejo would have delivered a copy of this clearance to Motorman Hough. The following out of this practice might have resulted in Motorman Hough demanding the clearance from Conductor Richmond with a result that Richmond, if he did overlook calling up the Dispatcher, would have had his attention called to the matter. The motorman of train No. 5, leaving Calistoga, likewise did not receive the regular clearance card for the reason that the conductor is not required by the officers of the company to follow out Rule 203.

RULE 207. SET SWITCHES FOR OPPOSING TRAINS.

"At meeting points between trains, either by schedule or train order, should the train that is to occupy the main track arrive first, it will be the duty of the conductor of such train to promptly set the switch for the siding, so that the train to be met can take the siding with the least possible delay".

It is a custom on this railway, not supported by written instructions or bulletin, for the first train arriving at a station where it is to meet an opposing train to take siding. This nullifies Rule 207 and makes it a dead letter. Unnecessary rules should be annulled by bulletin or should never have been placed in the Book of Rules.

RULE 215. INSTRUCTIONS IN WRITING.

"Messages or instructions respecting the movement of train or the conditions of track or bridges, must be in writing".

The officers of the Company violate this rule when they allow trains to leave terminals with a verbal clearance.

RULE 230. DELAYED TRAINS.

This rule provides that conductor of train must report to the dispatcher when ten minutes late.

Conductor of train No. 6 did not report at Vallojo when he became ten minutes late. It is evident that he was not properly instructed on this rule. It is also evident that Dispatcher O'Leary was unaware of this rule or he would have called for the conductor of train No. 6 after this train became ten minutes late.

RULE 250. TRAIN ORDERS.

Part of this rule reads: "Train orders must be brief and clear, and in the prescribed form, when applicable".

The Order No. 3 in question, which was put out to Train No. 5 at Collins road: "Train 6 will meet train 3 at Hatch". The proper prescribed form outlined in their Book of Rules for this order is as follows:- No. 6 motor _____ will meet No. 5 motor _____ at Hatch. In putting out the order in question Dispatcher O'Leary violated Rule 250 in that he did not comply with the prescribed form. An examination of the train orders in the office at Espe developed the fact that this practice has been in effect for a long time and had not been corrected by the officers of the Company.

RULE 253. DISPATCHER'S RECORD OF ORDERS.

Part of this rule follows: "Each train order must be written in full by the dispatcher, in a book or record provided for the purpose, before or at the time of giving the order to the train crews".

The dispatcher does not write his orders out in a book, but writes them out on train order blanks, filing the blank on a pin file in front of him. This cannot be construed as complying with rule 253 for the reason that filing the orders on a pin file is not sufficient record. It is quite possible for a dishonest dispatcher to change his record of orders when it is kept in this manner. Further-

more a dispatcher is liable to lose sight of orders which have not been fulfilled when they are filed in the manner described. ^{written in a book} If all orders which have not been fulfilled are before him where he can readily see them in case it is necessary to make a change in an existing order.

RULE 254. DESIGNATION OF TRAINS.

Part of this rule follows: "Scheduled trains will be designated in train orders by their numbers, as "No. 10" or "2nd No. 10" adding motor numbers".

This rule was not complied with in the handling of train order No. 3, the date in question, for the reason that the Dispatcher used train instead of number, and he likewise failed to add the motor number. This latter is important for the reason that it is the only manner in which train and motorman can properly identify opposing trains.

RULE 268. RIGHTS TO BE RESTRICTED FIRST.

"When trains running in opposite directions are to be moved toward each other by train orders, the train whose rights are to be restricted must first receive the order and the complete before the order is given to the train to be moved against it or toward it".

Dispatcher O'Leary violated this rule by not first getting the Conductor of Train No. 6 on the telephone and giving him the order which had been given to Train No. 5 before he completed the order to Train No. 5, which would allow Train No. 5 to proceed beyond Collins on the rights of Train No. 6. A violation of this rule is a procedure which has always been followed at Vallejo in handling this particular order with the full knowledge of the officers of the company. In this violation of Rule 268 lies the main cause of the accident.

RULE 275. FORM OF TRAIN ORDER BLANK.

The form of train order blank being used by this Company is not the same blank that is outlined and described in their Book of Rules. The Conductor of train No. 5 used an improper blank furnished by the Company which was not in accordance with the rules, in taking the order over the telephone at Collins. No instruction or bulletin is posted concerning the blank to explain its use.

RULE 277. FORM A. FIXING MEETING POINT FOR OPPOSING TRAINS.

This Form A, under Rule 277, is the prescribed form which Dispatcher O'Leary should have used in putting out his order. This he failed to do as explained under the violation of a previous rule.

RULE 301. DUTIES OF DISPATCHERS.

"They will issue orders in the name of the Superintendent or other designated authority for the movement of trains: see that they are transmitted and recorded in the manner prescribed in the rules: keep a record showing the time of arrival and departure of trains at specified points and such other records as may be required, and record all important incidents which occur while on duty."

Dispatcher O'Leary failed to comply with this rule in that he did not transmit and record his orders in the manner prescribed in the rule.

It is apparent from the above violations of the rules, some of which had a direct relation to the causes of the accident, that the officers of the company, either through negligence or through incompetence, were not aware of the importance of the strict observance of the rules and the effect of strict observance of the rules upon the production of the resultant safety in the operation of trains on this high speed railway. These violations of the rules, which are outlined above as occurring in the operation of these two trains, could not occur on a railroad as small as this one without the full knowledge and approval of the Superintendent of Traffic and the General Manager. These violations of the rules are general in the operation of all trains by this company.

This Commission's Service Inspector, Mr. Hugh Wilson, made an investigation as to this company's method of operation during the present month and on the morning of the accident, previous to the notification, the following letter was sent to this company:-

June 19, 1913.
Engt. Dept. File No. 107.

Mr. M. McIntyre, General Manager,
San Francisco, Napa & Calistoga Railway,
Napa, California.

Dear Sir:-

The Commission's Inspector of Service recently visited your railroad, and has reported some conditions in connection with your

operation which should be corrected to insure safety.

We wish to call your attention to Section 42 of the Public Utilities Act, which gives the Commission jurisdiction in matters which pertain to safe operation of public utilities.

Investigation was made of your rules and methods of operation. You appear to have established as your working rules the general rules adopted by the American Street and Interurban Railway Transportation and Traffic Association. These rules are good, and will insure safe operation if they are observed and if they are, in the first place, carefully applied by the railroad company using them.

The following discrepancies were noted in their application on your line: -

STANDARD TIME - You maintain no standard clocks; your clock which is maintained in the dispatcher's office at Espe is not carefully set daily, as it should be; you furthermore do not require a daily registration of the conditions of watches of motormen and conductors, as provided in Rule 80 of your Book of Rules.

VIOLATION OF RULE 250- Your dispatcher does not issue orders of proscribed form, as outlined in your book of rules. This rule is important in order that all receiving the orders may understand them alike.

VIOLATION OF RULE 253- Your train dispatcher does not keep a book record of his train orders issued. The same dispatcher should write his orders in a book provided for that purpose in the dispatcher's office, and in this book make proper record of the names of all who have received the order, the time and from what station the order was repeated.

TRAIN REGISTER- You do not maintain train registers at points where they should be maintained in order that trainmen may properly check the arrival and departure of trains which affect their rights. This is particularly apparent at Limite. A register should be maintained at this point to assure trains approaching Espe that the short turn-around from Espe to Limite has been made.

At train register points your motorman should receive a check on the proscribed form from the conductor of train which effect his rights, or else the motorman should be required to personally check the register himself.

It was noted that you adhere to the positive meeting points for trains at schedule meeting points indicated in the timetables. There is no objection to this feature of your operation, from a safety standpoint, but it would seem that you have an ideal condition on your railroad for the adoption of the principle of giving right of way to the superior direction trains. It would seem that this would result in better service in case of trouble with your telephone line. It is not considered necessary for you to change this feature of your operation. However, you must be certain that trainmen make the meeting points positive in case of wire failure and interruption of service due to trains being late.

Will you consider these matters and advise the Commission what you can do to bring about a correction?

Yours very truly,
RAILROAD COMMISSION OF CALIFORNIA.

Records of the Trainmen, Motormen and Dispatcher who were involved in the accident are as follows: -

O'Leary - Edward J., Train Dispatcher.

In service of S.F.M. & C. Railway, March 17, 1912, to Dec. 15, 1912, as conductor. Resigned to take position with Standard Portland Cement Company as Storekeeper. Returned to service as conductor January 16, 1913. Was appointed Train Dispatcher January 30, 1913, and employed as such at Present date.

Previous Employment-

1. Apr. 7, 1902- July, 1908. Yard Clerk, Wabash Railroad Company, Chicago, Ill.
2. July, 1908- Nov., 1908, Motorman Chicago City Railway Co.
3. Nov., 1908- Dec., 1911. Driver- Paris Linon Supply Co., Chicago.
4. Dec., 1911- Nov., 1912, Driver, Standard Laundry Co., Chicago.
5. Dec. 16, 1912- Jan. 16, 1913- Storekeeper for Standard Portland Cement Company, Hope, California.

Richmond, Horace Greeley- Conductor Train 6.

In service of S.F.M. & C. Ry. May 11, 1913, to present date- conductor (on extra list).

Previous Employment-

1. Nov., 1904 - March, 1907- Conductor, Los Angeles Railroad, Los Angeles, Cal.
2. In business for self- Proprietor of summer resort at Middletown, Lake County, California.

HOUGH, Eugene Casley- Motorman Train 6.

In service of S.F.M. & C. Ry. June 26, 1905, to June 19, 1913, as motorman.

Previous Employment-

1. California Street Railway- San Francisco, California.
 2. Pacific Electric, Los Angeles, California.
- Left for advancement. Date unknown.

Patten, Bert Edwin- Conductor Train 5.

In service of S.F.M. & C. Ry. March 1, 1909, to present
date- conductor.

Previous Employment-

1. June 1, 1900 - June 1, 1907 - Conductor, United Railways of San Francisco.
2. June 1, 1907 - Jan. 16, 1908 - Uncertain.
3. Jan. 16, 1908 - March 1, 1908 - Unemployed.
4. March 1, 1908 - March 1, 1909 - Attendant for insane patient, Lake County, California.

Juarez, William Joseph- Motorman Train 5.

In service of S.F.M. & C. Ry. Nov- 30, 1907, to present date-
motorman.

Previous Employment-

1. Motorman- Market St. Ry., San Francisco, California.
2. Motorman- United Railways, San Francisco, California.

Dates unknown.

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It is apparent from the above records that Dispatcher O'Leary did not have sufficient or proper experience to act in the capacity of Dispatcher. From facts brought out during the inquest and also from previous examination of him by the Commission's Inspector, it is apparent that he was not at all familiar with the rules of the Company. He admitted that he had never read the book of rules through entirely. Neither was he properly examined by his superiors as to his fitness for the position of dispatcher. This may be said to be another direct cause of the accident and for which Superintendent of Traffic Harrington and General Manager MacIntyre were responsible. On a road of 41.2 miles with so few men employed, a resident General Manager has opportunity to be familiar with and know the qualifications of each man.

It developed at the inquest upon examination of Mr. Harrington, that Richmond was required prior to being regularly used as a conductor

to act as conductor under an experienced conductor for three weeks. When he was "OK'd" by the experienced conductor he was allowed to fill the position of conductor without being thoroughly examined. It does not appear that Richmond had ever had other experience in actual handling of train orders. It is apparent then that this Company is allowing men to occupy the position of conductor who are not qualified. Richmond stated that he had had considerable experience on eastern steam railroads, but this would not excuse his officers from their failure to examine him and know that he was capable before allowing him to occupy the position.

Conclusions -

Circumstantial evidence indicates that Conductor Richmond (train 6) failed to call for his clearance before leaving Vallejo as required by custom of the Company. Motorman Hough failed to obtain a copy of this clearance or verbal confirmation of it from the conductor before starting his train. Dispatcher O'Leary violated the rules in allowing an inferior train to move before restricting the superior train. The officers of the Company were negligent in their duties in allowing single track high speed operation to be conducted without maintaining the proper observation of the rules on the part of all employees.

It is necessary to make mention of the fact that had the railroad been equipped with automatic block signals the accident would have been prevented, assuming that sufficient discipline was maintained to obtain observance of the signals.

Causes of the Accident -

Direct -

- (1) Failure of Conductor Richmond to call the Dispatcher for a clearance before leaving Vallejo with train.
- (2) Failure of Motorman Hough to obtain the clearance from his Conductor.

(3) Dispatcher O'Leary's violation of the rule requiring him to first restrict the superior train before moving the inferior train.

(4) Failure of the officers of the Company to correct the above violations of the rules which had been occurring daily and had become an established practice.

Indirect-

General violation of the rules which ultimately results in such disasters as this one.

Recommendations-

The Company should require its officers to operate the railroad under safe rules. They should examine men as to their fitness before allowing them to occupy positions that involve the handling of trains and train orders and should employ only competent men in such positions who are qualified to fill them. They should know that all rules are being observed.

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The entire credit for this investigation, the facts developed and the determination of circumstances connected therewith is due to Service Inspector, Mr. Hugh Wilson, and Assistant Engineers Richard Sechse and Arthur E. Holley.

Respectfully submitted,

W. C. Earle
Chief Engineer.

WCE/B

Enclosures.