

GOVERNMENT OF INDIA MINISTRY OF TOURISM AND CIVIL AVIATION (COMMISSION OF RAILWAY SAFETY)

RAILWAY ACCIDENT INVESTIGATION REPORT

ON .

collision of 7 Up Tinsukia Mail with Down Borhat Shunding Goods Train at Km. 511/15-512/1 in Bordubi Toad Station Yard on Mariani-Tinsukia Single Line M.G. section of Tinsukia (Transportation) Division of

Northeast Fronticr Railway

1st March, 1981

SUMMARY

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Date	••	••	••	1-3-1981.
Time	••	••	••	10.30 hours.
Railway	••	••	••	N.F.
Gauge	••	••	••	Metre Gauge (1000 mm).
Location	••	••	•,•	Km. 511/15-512/1 in Bordubi Road Station Yard on Mariani-
Nature of accid	lent	••	••	Tinsukia Section of Tinsukia (Transportation) Division. Collision
Trains involved	1	••	••	 7 Up Tinsukia Mail. (2) Down Borhat Shunting Goods.
Speed	••	••	••	(1)15 Km/h. (2) 2 Km/h.
System of oper	ation		••	Absolute Block System.
Number of trac	≎k	••	••	One
Gradient	••	••	••	Level.
Alignment	••	••	••	Straight.
• Weather	••	••	••	Clear.
Visibility -	••	•• *	••	Good under daylight conditions.
Cost of damage	≥ S	•,•	••	Rs. 22,000/—
Casualty	••	••	••	Killed2Grievous injury3Simple injury9
Relief arrange attention	ments a	ind Med	ical	Satisfactory.
Cause			••	Unauthorised movement of Down Borhat Shunting Goods train by the crew beyond Down Starter in the 'On' position which fouled the path of 7 Up Tinsukia Mail which was entering on valid line clear and lowering of Up Home signal.
Persons held re	sponsible		••	Driver and 2 Firemen of Down Borhat Shunting Goods.
Note : Im	portant a	nd crucia	l para	is have been italacised.
Important	-		-	(1) Railway Board to take notice of Goods trains being run with- out adequate brakepower on N.F. Railway (Para 9.1 a).
			Ć	2) Railway Board to take notice of improper extension of POH dates of coaching stock by N.F. Railway (Para 9.1 b).
	•		((3) Railway Board to take notice of the issue of false brakepower certificate by staff of N.F. Railway under pressure (Para 9.1 c).
			((4) Railway Board to take notice of the peculiar condition existing on the N.F. Railway and assist them by giving suitable relaxa- tions and dispensations, at the same time ensuring safety of travelling public (Para 9.1 d).
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84-M/J(N)498M	of T&CA_	-1		
0.4-14010/141440048		-		

Abbreviations used in this Report

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N.F. Railw	ay	••	• •	Northeast Frontier Railway.
CTSS	•••	•••	••	Chief Traffic Safety Superintendent.
DS(T)	••	••	••	Divisional Superintendent (Transportation).
IRP	••	••	• •	Inspector Railway Police.
OĊ, GRP	••	••	••	Officer in charge, Government Railway Police
SLR	· • •	••	••	Second, Luggage & Brake.
Km.	••	••	••	Kilometre.
ARME		••	••	Accident Relief Medical Equipment.
SP		••	••	Superintendent of Police.
GM		••		General Manager.
СМО	• •	•••	.:	Chief Medical Officer.
Dy. SRP		• • •		Deputy Superintendent of Railway Police.
TELCO			••	Tata Engineering and Locomotive Co.
CLW	••	••	•••	Chittaranjan Locomotive Works.
SM	••		••	Station Master.
ASM ,	••	••	••	Assistant Station Master.

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GOVERNMENT OF INDIA MINISTRY OF TOURISM & CIVIL AVIATION ^{(COMMISSION OF RAILWAY SAFETY).}

From

K. Ganapati, Commissioner Railway Safety, Eastern Circle, 14, Strand Road, (12th floor), CALCUTTA-700 00!.

То

The Secretary to the Government of India, Ministry of Tourism & Civil Aviation, Sardar Patel Bhavan, Parliament Street, NEW DELHI. (*Through*: The Chief Commissioner of Railway Safety, 16-A, Ashok Marg, LUCKNOW-226 001.

Sir,

In accordance with Rule 4 of the Statutory Investigation into the Railway Accidents Rules 1973, I forward herewith the Report of my enquiry into the collision of 7 Up Tinsukia Mail with Down Borhat Shunting Goods at Km. 511/15-512/1 in Bordubi Road Station Yard on Mariani-Tinsukia Single Line M.G. Section of Tinsukia (Transportation) Division of N.F. Railway at 10.30 hours on 1-3-1981.

1.2 Inspection and Inquiry

(a) I inspected the site of the accident on 9-3-1981.

(b) A Press Notification was issued inviting members of the public having knowledge relating to the accident to tender evidence at the enquiry which I commenced at Bordubi Road Station on 9-3-1981 or communicate to me by post at the Calcutta address. Civil and Police authorities were duly notified. Enquiry was continued at Tinsukia Station on 10-3-1981 and concluded on the same date. I conducted a Statutory enquiry at Simlagarh Station on the 2nd, 3rd and 4th March, in connection with collision of M 205 UP Howrah-Burdwan EMU Local, with a loaded truck at manned level crossing No. 17/C on the Eastern Railway, and therefore it was reasonably not possible to hold the present enquiry earlier.

(c) The following officials were present at the enquiry :---

Railway Officials

1. Shri S.R. Sarkar, CTSS, Maligaon (on 10th only).

2. Shri B. Deb, DS (T), Tinsukia.

Non-Railway Officials

1. Shri B.N. Das, Executive Magistrate, Tinsukia.

2. Shri D. Saikia, IRP, Tinsukia,

3. Shri K.C. Bora, OC, GRP, Tinsukia.

(d) The evidence of 27 witnesses (4 of them non-railway) was recorded in the enquiry. In addition proforma and oral evidence were recorded from Railway officials as necessary. Relevant Railway documents were also perused.

(e) In this report, the terms 'right', 'left', 'leading', 'trailing', 'front' and 'rear' where used, are in reference to the direction of movement of 7 Up Tinsukia Mail.

1.3 The Accident

(a) On 1-3-1981, at about 10.30 hours, while 7 Up Tinsukia Mail was entering into Bordubi Road Station on valid line clear, and lowering of relevant signals, the train collided with Engine No YG locomotive No. 3533 tender foremost of Down Borhat Shunting Goods which had earlier arrived at Bordubi Road Station at 10.15 hours and which had crossed the Down Starter signal in the On position without authority, or permission of the guard of the train. As a result of the collision the two locomotives suffered minor damages. However, the train engine of Down Borhat Shunting Goods penetrated into the side of SLR 4416 (1st coach of 7 Up mail) and completely sheared the left side second class portion for a distance of about 9 m., camaging the seats, stanchions and pillars badly. Both as a result of the impact, and due to the driver of the Borhat Shunting Goods train reversing the engine in the meantime, further damage was averted and the Down Borhat Shunting Goods train rolled back sparing the other coaches. The first collision occurred at a point where the track centre was 7 ft. 1 inch. The 7 Up engine travelled a distance of 105 m. from the first point of collision before coming to a stop. There was however no derailment or train parting.

(b) The weather was clear and the visibility was good under daylight conditions. The speed of Tinsukia Mail at the time of collision has been estimated at 15 Km/h while the speed of Down Borhat Shunting Goods train at 2 Km/h.

(c) After the accident the crew of Down Borhat Shunting Goods train (Driver and two Firemen) fled away from the site of the accident. However, their statements were recorded by the Railway officials and the police later in the day. All of them attended the enquiry, and answered all the questions put to them.

1.4 Casualties.

As a result of the accident, two passengers were killed, three passengers sustained grievous injury and other sustained simple injury.

II. RELIEF MEASURES

2.1 (a) The first information report to the Control about the accident was given by the ASM, Bordubi Road at about 10.35 hours. Thereafter all concerned were advised and arrangements were made for dispatch of medical van and relief trains.

(b) No First aid was given at the site of the accident by any railway siaff. Twelve injured passengers were sent by trucks and taxi to the nearest Deohal Tea Estate Hospital at a distance of 5 Km. by local police and public within 20 minutes, where necessary medical aid was given to them. Thereafter 11 injured passengers were shifted to the Assam Medical College Hospital, Dibrugarh, 60 Kms. away and admitted therein by 17.00 hours on the same date. One military personnel was shifted to the Military Hospital at Dinjan and admitted therein at 16.30 hours. Pain relieving drugs were administered to all the injured passengers at the Tea Estate Hospital but no morphia was given. No surgery was also resorted to in the Tea Estate Hospital. The ARME Van from Tinsukia ordered at 10.36 hours, left the station at 10.55 hours and reached the site at 11.35 hours by which time all the injured passengers had been removed to the Tea Estate Hospital.

(c) The Railway Administration made ex-gratia payment of Rs. 750/— to each person who sustained grievous injury and Rs. 250/— to each person who sustained simple injury. No ex-gratia payment was made to the next of kin of dead passengers due to difficulties regarding identification of their relationship with the dead passengers.

(d) Both the dead bodies were handed over to the GRP at Bordubi Town at 11.45 hours for further disposal.

(e) There were public complaints regarding loss/theft of personal property of the injured persons as also snatching of gold chains.

(f) The uninjured passengers were dispersed by regular train services after restoration at 16.00 hours.

2.2 Restoration and Interruption to traffic

(a) The ARME Van from Tinsukia ordered at 10.36 hours, reached the site at 11.35 hours. There was no derailment.

(b) The DS and other Divisional Officials of Tinsukia Division reached the site by ARME Van. The IRP, Tinsukia reached the site at 12.25 hours. The Dy. Commissioner, SP, Dibrugarh and Additional SP, Tinsukia reached the site at 15.30 hours. Shri Keshab Ch. Gogoi, Finance Minister of Assam State reached the site at 16.00 hours. The GM visited the injured passengers in Dibrugarh Hospital at 10.30 hours on 2-3-1981 and visited the site of accident at 16.00 hours on 2-3-1981. The CTSS and CMO visited the injured passengers in Dibrugarh Hospital at 10.30 hours on 2-3-1981. The SRP, Pandu and Dy. SRP, Lumding visited the site at 13.30 hours on 2-3-1981.

(c) Police clearance was given at 15.45 hours on the date of accident.

(d) Through running was restored at 16.00 hours on the date of accident.

(e) No trains were cancelled or diverted due to the accident, however, three trains suffered considerable detention. The ill-fated 7 Up Tinsukia Mail left Bordubi Road Station after detaching the damaged SLR at 16.10 hours.

III. THE TRAINS

3.1 The ill-fated 7 Up Tinsukia Mail was hauled by YP locomotive No. 2624 belonging to Tinsukia Shed. The loco was manufactured in 1965 by TELCO. The loco was fitted with a headlight and speedometer in working condition but there was no speed recorder. The loco was running engine foremost. The length of the loco was 62'-7", its weight 99 tonnes and braking for 32 tonnes. The locomotive was provided with vacuum brake and hand brake in working order. The loco underwent POH on 20-1-1981 after which it had carned 3860 Kms. The last trip inspection was done at Mariani on 1-3-1981.

3.2. The trailing load of 7 Up Tinsukia Mail consisted of 11 coaches all anti-telescopic. The length of the train was 209 m., its weight 317 tonnes and the braking force 263 tonnes. The train was fully vacuum-braked and 2 cylinders were provided per coach. Out of 22 cylinders, 21 cylinders were active giving 95.4 % brakepower.

3.3 The Down Borhat Shunting Goods was hauled by YG locomotive No. 3533 belonging to Tinsukia Shed. The locomotive was manufactured in the year 1970 in CLW. The locomotive was provided with a headlight but no speedometer. The loco was running tender foremost. The length of the locomotive was 62 ft. 7 in., its weight 101 tonnes and the braking force 24 tonnes. The engine was provided with steam brake and the tender with vacuum and hand brake. *The hand brake was however not working*. The loco underwent POH on 24-3-76 after which it carned 1,17,450 Kms. The last trip inspection was done at Tinsukia on 1-3-1981.

3.4 The trailing load of the Down Borhat Shunting Goods consisted of 12 wagons. The length of the train was 99 m., its weight 235 tonnes and its braking force 41 tonnes. The train was fully vacuum braked. After the accident it was seen that out of 16 cylinders which should have been present only 13 were available; out of which 7 cylinders were active giving a brakepower of 44%. The brakepower certificate issued by the TXR, Tinsukia for the train showed 13 cylinders were active out of a total of 18 cylinders giving ?2.2% brake-power; a clear case of issue of false Brakepower certificate.

3.5 Damages

(a) Damage to Engine No. YP 2624 to 7 UP Tinsukia Mail.

Left side engine buffer beam plate bent. Left side wind deflector badly damaged. Left side lubricator choke valve body with elbow broken. Left side running foot-board near branch steam pipe elbow joint badly damaged.

(b) Damage to Engine No. YG 3533 of Down Borhat Shunting Goods.

Right side tender hand rail broken and dropped. Right side buffer tender beam plate and tender foot step bent. Right side tender water tank and coal bunker partly damaged.

(c) Damage to SLR 4416—1st coach of 7 Up Tinsukia Mail.

Left side second class portion side wall completely sheared off from sole bar to roof $(9 \text{ m} \times 2.8 \text{ m})$ and dropped down. All seat benches stanchion pillars and strengthening angle iron broken and displaced. Both main doors of second class portion displaced and damaged. Coupling end left side of end wall partly bent inward. Negative group, wiring completely damaged. Three numbers fans, 3 nos lights, 1 no. Globe, 1 side lamp fitting and 1 tail lamp fitting completely damaged.

3.6 Cost of Damage

Carriage &	Wagons		Rs. 21,000/
Loco			Rs. 1,000/
Total	••	••	Rs. 22,000/—

IV. LOCAL CONDITIONS

4.1 The Section and the Site.

(a) The collision occurred at Km. 511/15-512/1 in Bordubi Road Station Yard on Mariani-Tinsukia Single Line M.G. Section of Tinsukia (Transportation) Division of N.F. Railway in the civil district of Dibrugarh in Assam State. The railway alignment at the site of accident is straight and runs from east to west. The gradient is level. The height of bank is about 1.5 m. The country is plain open. The ruling gradient of the section is 1 in 150 and the maximum permissible axle load 12.7 tonnes. (b) The permanent way consists of 60 lb rail, 12 m. long welded in panels of 3 on Sal wood sleepers to M+7 density. Adequate stone ballast has been provided.

(c) There was no monsoon patrolling in force, but security patrolling by 2 gangmen from 22.00 hours to 6.00 hours was in force. There was no rainfall from 20-2-81 to 26-2-81. However, there was a rainfall of 1.52 mm. on 27-2-1981, 2.54 mm. on 28-2-1981 and 5.84 mm. on 1-3-1981.

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4.2 Signalling

Bordubi Road station is a 'B' Class Station having two running lines with Standard J Interlocking equipped with multi aspect upper quadrant signalling. The interlocked gears are operated directly from a 40 lever double wire frame in a central cabin. The running lines are provided with track circuit. Isolation has not been provided between running lines. Running lines are isolated from siding lines by trap points and also provided with point indicators. Trap points are provided with single hand plunger key lock. The control keys of the siding points are interlocked in the lever frame. Distance, common Home and Starter signals have been provided for Up and Down direction for reception and dispatch of trains. Reception Signals are provided with reversers. Reception lines are track circuited between fouling marks. Starters are interlocked mechanically with the block instruments. SM has got his full control over lowering the reception signals which is achieved by means of SM's mechanical key control box located in his office. The control box consists of 5 locks of which 2 locks are for holding the route keys and 2 locks are for holding the direction control keys and one lock has been kept spares. The interlocking arrangements between the route keys and direction control keys are such that when the particular line is correctly set, locked and detected (by separate detector lever) the route key will come out from the interlock frame in the cabin. The key such released from (the miniature lever in the frame) is inserted in the SM's control box and turned which will enable the SM to extract the direction control key either for Up reception or for Down reception. This reception control key (direction control key) thus released is taken to the interlocked lever frame for releasing either the Up Home signal or the Down Home signal lever. The facing points are provided with mechanical facing point lock. SM's control apparatus (SM's slot) for putting back of lowered signals in an emergency has not been provided.

(b) There is a 'B' Class non-interlocked level crossing gate with lifting type drop barrier situated at a distance of 15 m. from the Up facing point No. 11. Telephone connection has been provided between the gate and the station. For the reception or dispatch of trains, the gateman after closing and locking the gate is required to exchange Private Numbers with the SM and also exchange hand signals with the cabinman.

4.3 Kilometrages.

Saraighat Bridge	0.00 Km.
Gauhati	10.54 "
Lumding	191.13 "
Mariani	368.34 ,,
Duliajan	508.58 ,,
Site of Accident	<i>511/15-512/1</i>
Bordubi Road	512.32 Km.
Tinsukia	523.37 "

There are 15 telegraph posts in a kilometre located to the left of the track.

4.4 Headquarters, System of Working and Train Speeds.

(a) The Control office is situated at Tinsukia Goods Station and one Controller is in charge of the section from Furkating to Tinsukia. Trains are worked on the Absolute Block System by Single Line Block Instrument of Neal's Tablet type. The headquarters of the Division (Transportation) is at Tinsukia.

(b) The maximum permissible speed on the section is 65 Km/h. There is no permanent speed restriction in the vicinity of the site of the accident. There was also no temporary speed restriction in force at the site of accident, on that day.

on V. SUMMARY OF EVIDENCE

5.1 (a) SMT. NIRODA BALA DAS. (Witness No. 2) wife of Shri Hari Mohan Das, porter, Borduby Road Station stated that at about 10.20 hours then she was coming out of her house with her cow, she saw a goods train with 3 men standing on its engine. The Goods train was moving towards Duliajan end when the brake van of the train passed her she did not find the Guard in the brakevan. She returned to her quarter when she heared a big sound of collision. She again came out and saw the accident.

(b) Answering question she stated—

She was sure, she saw 3 men in the engine. After her seeing the engine, the train did not stop before the accident. Her house is just opposite the place and it is possible to see from her quarter. At the time of actual collision she was inside the house. She came to know about the collision due to the sound. She cannot identify any of the 3 men who were on the engine. The train was going at a slow speed towards Duliajan.

5.2 (a) SHRINRAYAN CHANDRA MANDAL (Witness No. 5) Driver of 7 Up stated that while approaching the Distant signal of Bordubi Road Station he noticed that the aspect of the signal was normal. He tharefore controlled the speed of the train. Home signal was 45°, the level crossing gate was found closed and the gateman was standing with hand signal. On passing the facing point he noticed Borhat Shunting Goods was moving towards him from line No. 1. He applied the vacuum brake but in the mean time Borhat Shunting Goods engine dashed against his engine on the left side. Subsequently the engine of Borhat Shunting Goods train dashed against the front SLR. Then Borhat Shunting Goods train was seen moving backwards after the accident.

(b) Answering questions he stated—

(i) He came on duty at 5.45 hours at Mariani, left Mariani at 6.35 hours. He had full rest of 20 hours at outstation. The speedometer of his loco was working but there was no speed recorder. He produced the Brakepower Certificate of his engine which showed 21 cylinders were active out of 22 cylinders and vacuum of 46 cm in engine and 44 cm in brakevan.

(ii) He passed the Vision Test, with glass A1 category on 7-2-1980. No medical examination was done on 7-2-1981 due to loco strike. At this stage DMO, Dibrugarh roughly checked his eye-sight and declared him o.k.

(iii) The Gateman did not show red flag to him. The speed of his train was about 15 Km/h. When he saw the obstruction he applied the vacuum brake gradually, since he felt that the train will derail if the vacuum brake was applied suddenly. The Goods train engine was moving forward at the time of collision. He did not notice the crew of Down Borhat Shunting Goods train. After the collision when he went to the Goods engine there was no one in it.

 $(i\nu)$ At this stage Shri Brajalal Dey, Gateman, Bordubi Road was confronted with the Driver. While the Driver stated that the Gateman was standing on the right side with folded flages, the Gateman gave a demonstration of what he was doing. The Gateman was gesticulating with a red flag in each hand.

(v) The weather was clear and the visibility was good under daylight conditions. The Distant signal was 'ON'. The speed of the train at the Home signal was 30 Km/h and at the level crossing 15 Km/h.

5.3 (a) SHRI SASHIDHAR PHUKAN (Witness No. 6) Fireman Grade 'B' of 7 up more or less corroborated the statement of the Driver of the train (witness No. 5).

(b) Answering questions he stated—

Before the collision he saw two men from the Down Goods train jump out on the station side which is to the right of the Goods train. After the collision he did not go near the Goods train. After the collision the Goods train moved back but there was no one in the Goods train engine.

5.4 (a) SHRI DWARIKA PRASAD (Witness No. 7) Fireman Grade 'C' of 7 Up more or less corroborated the statement of the Driver of the train (witness No. 5).

(b) Answering questions he stated—

Since he was on the left side he had not seen the gateman. At the time of collision the Down Goods train was moving towards his train at a very slow speed. He did not know who were the crew on the Down Goods train. His Driver applied the vacuum brake slowly on seeing the obstruction.

5.5(a) SHRI SUDHIR KUMAR DEB (Witness No. 8) Guard of 7 Up stated that he felt a very heavy jerk and his train came to a stop while entering the loop of Bordubi Road Station. He reached the site of accident and noticed that injured passengers were being sent to Hospital in a truck by the public.

(b) Answering question he stated-

(i) The accident happened at 10.30 hours. Speed of the train at the time of accident was 15 Km/h. Only one fire extinguisher was provided in the guard's brake.

(ii) He met the Driver of the Down Goods train at the station and asked him how the accident happened. The Goods train Driver did not reply.

(iii) He did not give first aid to anyone as the public had already shifted the injured passengers to the Tea Estate Hospital.

5.6 (a) SHRI DASARATH DAS (Witness No. 10) TTE, Tinsukia stated that his train stopped with a heavy jerk while approaching Bordubi Road Station. He reached the site of accident and noted the damages.

(b) Answering questions he stated—

The injured people were sent to hospital within 15 minutes by 2 trucks and one taxi and therefore no first aid was given at site. He met the gateman at the leval crossing who stated that the Gateman showed red signals but the Driver of both trains did not stop. He then met the Driver of 7 Up who told him that Down Goods train collided with his train. He then went to the Down Goods engine but did not see anyone. The public who had collected were asking for the where abouts of the crew of the Down Goods train but there was no indication that the mob would beat the Driver of Down Goods train.

5.7 (a) SHRI SUNIL KUMAR BOSE (Witness No. 17) SM on duty at Bordubi Road Station stated that as decided by Control 7 Up was to cross Down Borhat Shunting Goods at his station and two wagons were to be attached to Down Borhat Shunting Goods train from his station. To facilitate shunting Down Borhat Shunting Goods train was received on Line No. 1. Down Borhat Shunting Goods train arrived at 10.15 hours. Complete arrival certificate of the Goods train was obtained from the Guard. Paper Line Clear for 7 Up Tinsukia Mail was obtained from Charali and arrangements were made to pass 7 Up over line No. 2 (Loop line) and signal was taken off for reception of 7 Up. Paper Line Clear along with OP/T 27 for 7 Up Mail were handed over to on-duty Pointsman Shri Haran Chandra Paul with instructions to deliver the same to the Driver of 7 Up Mail. Meanwhile Cabinman Shri Ramji Ram who was on the signal Cabin and Pointsman Shri Haran Chandra Paul who was in between Line Nos. 1 & 2 started shouting that the Down Borhat Goods train had started to move by itself towards Duliajan. He came out on the Platform and shouted and gesticulated to stop the Down Borhat Shunting Goods. Subsequently he saw 7 Up Mail enter the Station and dash against the Down Borhat Shunting Goods train.

(b) Answering questions he stated-

(i) He was an eye-witness to the Collision. He cannot however say whether Down Goods train was moving or stationary at the time of collision.

(ii) No shunting is permissible after permission to approach is given. If shunting is to be done he will inform the Guard, Driver, Pointsman, Cabinman verbally about the shunting to be done. There is no practice to issue written memo to Driver and Guard for performing shunting. If Starter signal is to be passed he will hand over the Shunting Matal Badge to the Driver. The Guard will supervise shunting and the Pointsman and Cabinman are responsible for setting of points. In this case the Guard came to his room and obtained the details about the shunting to be done. The Guard was informed that shunting was to be done after departure of 7 Up. He did not inform the Porter or Pointsman or Cabinman regarding shunting to be done. He did rot meet the Driver of Down Shunting Goods. The Metal shunting Badge was in the Block Instrument.

(iii) As he came out of the room the Guard also came out with him. He saw the Guard last in the verandah opposite the ASM's room.

(iv) Regarding the procedure for closing the level crossing gate at Duliajan end, he will inform the Gateman on telephone about reception of trains. The Gateman closes the gate, locks it, and gives him a private number in assurance there of. The Gateman also exchanges signal with the Cabinman. The Cabinman also exchanges signals with the Gateman before lowering of signals to the Cabinman. The Cabinman gave him a private number 55. He actually saw the Cabinman exchanging signals with the Gateman before Home signal was taken off for 7 Up. The Cabinman was waving a green flag. He did not actually see the Gateman had exchanged signals. At this time the Guard of Goods train was in the ASM's room. He did not see the Driver or Firemen of the Down Goods. The Cabinman was in the Cabin exchanging signal with the Gateman. Pointsman Shri Haran Chandra Paul was in between line Nos. 1 & 2 with P.L.C. and OP/I 27. One Porter Shri Banarasi Majhi was cleaning lamps in the ASM's room. Another Porter Shri C.R. Das was allowed to go home to take his meal. There were no other railway servant in the area.

(v) There was no authority for the Driver of Down Borhat Shunting Goods train to cross the Starter signal. The Guard of the train did not show any signal to him. The Metal Shunting Badge was not also handed over to the Driver. The Driver was not informed about any shunting movement. No Pointsman was deputed to supervise the shunting. There was no possibility of any rallway servant showing a green flag for the Down Goods train from about the position of brakevan of the train. If the crew of the Shunting train stated that they saw a green signalit was a lie.

(vi) He had satisfied himself by personal inspection that the line was clear and free from obstruction before Home signal for 7 Up was taken off. The line was obstructed after lowering of Home signal for 7 Up due to unauthorised movement of Down Shunting Goods which disregarded the Starter signal and did not have authority of the Guard to start the train.

5.8 (a) SHRI RAMJI RAM (Witness No. 18) Cabinman, Bordubi Road Station stated that as per instruction of the SM he lowered the Up Home signal for 7 Up after observing due procedure. The Home signal was taken off to 45°. The Distant signal was pulled but there was no indication in the signal. In the meantime he noticed Borhat Shunting Goods moving towards Duliajan without any authority. He shouted and attracted the attention of the SM who also made every attempt to stop the train. He showed danger . signal to the moving train but the train ignored the signal and collided with 7 Up Mail.

(b) Answering questions he stated—

SM has told him that shunting was to be done after the passage of 7 Up but the details of shunting were not told to him. At the time he exchanged signals with the Gateman for 7 Up reception, the SM was opposite his office. The Guard of the Down Goods Train was with SM. Shri Haran Chandra Paul had gone with OP/T 27 and PLC. Porter Shri Banarasi Majhi was in the station. He did not know where the other Porter was. He did not see the crew of Down Shunting Goods train. At the time of collision the Down Goods train was slowly moving towards Duliajan side. There was no one at that time showing green flag from the platform which could have been seen by the crew of the Goods train. Nobody was peeping out of the Down Goods train. The weather was clear and the visibility was good.

5.9 (a) SHRI HARAN CHANDRA PAUL (Witness No 19) Pointsman of Bordubi Road Station stated that the SM had handed over the PLC and OP/T 27 to be handed over to the Driver of 7 Up which was approaching the station on line No 2. At this stage he saw the Borhat Shunting Goods start moving towards Duliajan and he shouted to attract the attention of SM etc. He also saw the Cabinman shouted at the same time, showing danger signal. The Driver of Down Borhat Shunting Goods train did not pay any attention and continued its journey towards Duliajan end and dashed against 7 Up Mail. He also saw Down Borhat Shunting Goods train come back towards the station after the accident.

(b) Answering questions he stated—

The weather was clear and the visibility was good. Down Goods train was moving slowly at the time of collision. He did not see the crew of Down Goods train. He did not show any signal to 7 Up as the train was to stop at the station because of Paper Line Clear.

5.10 (a) SHRI BRAJA LAL DEY (Witness No. 20) Gateman of Bordubi Road Station stated that he closed the gate and issued private number in favour of 7 Up which was to be received on line No. 2. He closed the gate and exchanged signals with the Cabin. While 7 Up was approaching, Borhat Shunting Goods train also started moving towards Duliajan. He then exhibited danger signal with a red flag in each hand, but neither the Driver of 7 Up nor the Borhat Shunting Goods train saw the danger signal and stopped. Finally collision took place.

(b) Answering questions he stated-

He is required to exchange signals with the Cabinman after closing the gate and not with the SM. There was no time to place detonators on the line as the Mail was already sighted.

5.11 (a) SHRI KAMALESWAR ROY (Witness No. 24) Guard of Down Borhat Shunting Goods stated that his train reached Bordubi Road at 10.15 hours. He signed the 'In Report Book'. The SM informed him about the crossing of 7 Up and the shunting to be done thereafter. After sometime he saw Pointsman Shri Haran Chandra Paul was shouting to stop the Borhat Shunting Goods train which was moving towards Duliajan side. At about 10.30 hours 7 Up Mail dashed against the engine of Down Borhat Shunting Goods.

(b) Answering questions he stated—

The weather was clear and the visibility was good under daylight conditions. The Down Shunting Goods was moving forward at the time of accident. He was with the SM opposite the ASM's room. The Cabinman was in the Cabin and shouting. Pointsman Shri Haran Chandra Paul was on the outside and was also shouting. He did not see any other Porter on the platform.

5.12 (a) SHRI JADU GOPAL DUTTA (Witness No. 25) Driver of Down Borhat Shunting Goods stated that he availed 30 hours rest before starting duty at 8.00 hours. His train reached Bordubi Road Station at 10.15 hours. He stopped his train just near the station nameboard in a secured position. The lever was put in mid-gear and the cylinder cock was open. The vacuum and hand brake were closed. He instructed both the Firemen to take charge of the engine and went to the field for answering call of nature He heard the sound of movement of the train and noticed that his train was moving towards Duliajan end. In the meantime 7 Up Mail came and dashed with the engine of his train. After the accident he did not go to the engine but returned to the station.

(b) Answering questions he stated—

(i) When asked why in a statement recorded by railway on 1-3-1981 he accepted that he was on engine at the time of accident, he merely stated he did not remember what statement was given by him. At this stage Shri B.K. Sinha, TI, Tinsukia was confronted. The TI stated that the statement of the Driver was recorded in the Goods office at 11.30 hours on the date of accident. The Driver was not nervous. The Driver gave the statement voluntarily. According to the statement of the Driver, he admitted having passed the Down Starter without authority. The statement was recorded in English and signed by the Driver in English. The Driver accepted his signature on the original statement.

(ii) Shri D. Saikia, IRP, Tinsukia stated that on the date of accident he questioned the Driver at about 12.30 hours. The Driver replied that some Pointsman showed green signal to him in rear and he moved his train forward even though Starter signal was not lowered. The Driver further admitted that he received no signal from the guard. The Driver was asked to point out who showed the green signal, but could not do so. The Driver was arrested at 16.00 hours on the same day. The Driver stated that he does not remember that he had seen the IRP, Tinsukia nor answered any question put to him.

(iii) At this stage Shri K.C. Bora OC, GRP, Tinsukia stated that he recorded the statement of Shri Jadu Gopal Dutta at 15.00 hours in the Booking Office of the station. According to the statement given by the Driver, the Driver admitted that a pointsman showed green signal from the rear. The Driver then crossed the Statter signal in the 'On' position. When the Driver reached the point he found that the point was not set for him. Then he made attempt to back the train. In the meantime 7 Up collided. Before the collision both the Firemen jumped out from the engine. The Driver further confirmed that he was on the engine at the time of the accident. The Driver stated that he does not remember what statement was given by him to the OC, GRP, Tinsukia.

(iv) At this stage, the two Firemen were confronted. Both of them stated that the Driver was on the engine at the time of accident and that the Driver had crossed the Starter signal in the 'On' position. The Driver merely stated that he was not on the engine as he had gone to answer a call of nature.

(v) When asked whether there was any witness to his leaving the engine and going to latrine he replied 'no'.

5.13 (a) SHRI B. D. MALI (Witness No. 26) Firemen 'B' Grade stated that his Goods train was standing near the nameboard of Duliajan end. He noticed that proceed signal was given from the brakevan side. He relayed the information to the Driver who also noticed the signal and started the train towards Duliajan side. When the train reached the facing point he found 7 Up was approaching and told the Driver to control the train. Immediately the Driver controlled the train and started pushing back when 7 Up Mail collided with his engine. After the collision he jumped out and ran away in fear.

(b) Answering questions he stated—

(i) He cannot identify the Pointsman who gave the signal to him. His Driver crossed the Starter signal in the 'On' aspect. No Shunting Jamadar or Guard authorised the movement of his train. Both Firemen jumped out before the collision. The Driver did not jump out but ran away after the accident. The Driver was not under the influence of liquor.

(ii) He drew the attention of the Driver that he was passing the Starter signal in the 'On' position but the Driver tried to back his train but before he could back, collision took place.

5.14 (a) SHRI NEPAL MALAKAR (Witness No. 27) Fireman 'C' Grade of Down Borhat Shunting Goods train stated that some Pointsman exhibited proceed signal from cabin for his train to proceed to Duliajan side. On getting the signal the Driver started the train and passed the Down Starter and reached near the facing point. When 7 Up was seen approaching, efforts were made to push back the train but in the meantime the collision took place.

(b) Answering questions he stated—

(i) One Pointsman showed proceed signal from the cabin. At this stage shri Nepal Malakar identified Shri Ramji Ram as the person who showed green flag while standing on line No. 2 Shri Ramji Ram stated that he was the Cabinman and was in the cabin at that time.

(ii) He jumped out after the accident. The other Fireman also jumped out along with him. The Driver was on the engine reversing the gear. The Driver jumped out after the accident and ran away. He also ran away out of fear.

(*iii*) He actually saw the Driver cross the Starter signal in the 'On' position. He told the Driver about this but the Driver did not reply. The Driver was reversing the gear but in the meantime collision took place.

VI. TESTS AND OBSERVATIONS

6.1 By the time I reached the site of accident on 9-3-1981, through communication was already restored. With the help of sketches, photographs, clues and measurements preserved by the Railway, I was able to reconstruct the scene adequately to establish the cause of the accident. Shri J. Bhattacharjet, Dy. CRS (S&T) conducted tests on the signalling installations at Bordubi Road and Tinsukia Stations the results, of which are given elsewhere in this report.

VII. DISCUSSION

7.1 *Time of the accident*

- The time of the accident given by the Guard of the ill-fated 7 Up as 10.30 hours is accepted.

7.2 Speed of the train at the time of the accident

The speed of the train at the time of accident at 15 Km/h as given by the Driver of 7 Up Mail is accepted.

7.3 Cause of accident

(a) There is conclusive evidence that the 7 Up was being received on valid line clear and lowering of Up Home signal. There is clear evidence of SM (witness No. 17), Cabinman (witness No. 18), Pointsman (witness No. 19), two Firemen of Down Borhat Shunting Goods (witness No. 26 & 27), Guard of Down Borhat Shunting Goods train (witness No. 24) and Gateman (witness No. 20) to the effect that the Borhat Shunting Goods train moved unauthorisedly beyond Down Starter signal in the 'On' position and fouled the path of 7 Up.

(b) Therefore it is concluded that the collision was caused due to the unauthorised movement of Down Borhat Shunting Goods train by the train crew beyond the Down Starter signal of the Station in the 'On' position, which fouled the path of 7 Up Tinsukia Mail which was entering the station on valid line clear and lowering of Up Home signal.

7.4. The untenable defence of the Driver of Down Borhat Shunting Goods train

By way of defence, the Driver of Down Borhat Shunting Goods train (witness No. 25) stated that he left the engine for answering a call of nature—after entrusting the same to the two Firemen and that he was not in the engine at the time of the accident. I have carefully considered the above ples of the Driver in the context of other evidence available and reached the conclusion that the plea of the Driver is untenable due to the following reasons —

(a) In the first statement of the Driver recorded by Shri B.K. Sinha, TI, Tinsukia at 11.30 hours on the date of accident, the Driver accepted crossing the Down Starter signal without authority. Relevant extracts from his statement is reproduced below :--

".....Then I started the train and passed Down Starter for line No. 1 upto near the crossing body of Up facing point (first) without any authority. While I could notice that Up Home signal was taken off, I tried to back the train but meanwhile 7 Up Tinsukia Mail came and dashed with the engine on my side (engine was tender foremost). I have started about 10 minutes after my arrival at the station. BFD Shunting Goods in at 10.15 hours. Accident occurred at 10.30 hours.

Sd/—Jadu Gopal Dutta Driver (C) BFD Stg. Goods. 1-3-1981."

In the CRS enquiry the Driver stated that he does not remember what he told the TI on the date of the accident.

(b) Shri D. Saikia, IRP, Tinsukia stated that on the date of accident he questioned the Driver at the station at about 12.30 hours. The Driver admitted to the IRP that some Pointsman showed green signal in rear and he moved his train forward even though Starter signal was not lowered. He further admitted that he received no signal from the Guard. He was asked to point out the Pointsman who showed the green signal. The Driver could not identify the Pointsman who showed the green signal.

In the enquiry the Driver when questioned regarding the above, merely stated that he does not remember giving any statement to the IRP.

(c) Shri K.C. Bora, OC, GRP, Tinsukia recorded the statement of the Driver at 15.00 hours in the Booking Office of the station on the date of accident In his statement the Driver admitted that a Pointsman showed a green signal in rear. The Driver started and crossed the Starter signal in the 'On' position. When the Driver reached the point he found that the point was not set for him. Then he made attempts to back the train. In the meantime 7 Up came and collided. Both the Firemen jumped out from the engine before the collision while he continued to remain on the engine at the time of the accident. When asked in the enquiry about the above admission the Driver merely stated that he does not remember what statement was given by him to the OC, GRP.

(d) Sarvashri B.D. Mali and Nepal Malakar Firemen of the Down Borhat Shunting Goods train both stated that the Driver was in the engine and was responsible for the movement of the engine beyond the Down Starter signal in the 'On' position. They were also confronted with the Driver. The Driver merely stated that he was not in the engine.

(c) Shrimati Niroda Bala (Das witness No. 2.) stated that she saw three men in the engine after which the engine did not stop before the accident.

7.5 Was the movement of Down Borhat Shunting Goods train authorised ?

(a) The SM had deposed that no instructions were given for shunting before the arrival of 7 Up.

- (b) No shunting badge was handed over to the Driver as authority to cross the Down Starter.
- (c) No Porter/Pointsman was deputed to supervise the shunting.
- (d) The Guard of the Goods train did not authorise or supervise the shunting.
- (e) The Cabinman clearly stated that there was to be no shunting.

7.6 Did any Porter show green signal to the Down Borhat Shunting Goods train from the rear?

I have carefully considered the claim of the train crew that 'proceed signal' was given by a Porter from the rear of the goods train, in the light of evidence available, and conclude that the statement of the train crew is untenable and false due to the following reasons :—

(a) SM's evidence.

- (b) Cabinman's evidence.
- (c) Porter Shri Haran Chandra Paul's evidence.
- (d) Evidence of Guard of the Goods train.

(e) Shri B.D. Mali, Fireman (witness No. 26) could not identify the Porter who showed the signal.

(f) Shri Nepal Malakar, 2nd Fireman (witness No. 27) identified the Cabinman as the person who showed the green signal from the cabin. The evidence of SM, Pointsman and Cabinman indicated that Shri Ramji Ram, Cabinman was in the cabin at that time and that there was no other railway servants to show green signal to the train.

7.7 How the accident happened ?

It is possible that the train crew saw the exchange of signals between the Cabinman and level crossing Gateman prior to lowering of Home signal for 7 Up and mistook it as a signal for their train to start, but here again the Driver had no shunting badge or any authority to cross the Down Starter. The Diriver was also not informed about the shunting. Since on the date of accident the Driver admitted to the Ti of the Railway, IRP and OC, GRP about his having crossed the Down Starter signal in the 'On' aspect, his subsequent retraction in the CRS enquiry on 10-3-1981 only makes him ludicrous.

VIII CONCLUSION

8.1 On careful consideration of the factual, material and circumstantial evidence, I have reached the conclusion that the collision of 7 Up Tinsukia Mail with Down Borhat Shunting Goods train at Km. 511/15-512/1 at Bordubi Road Station Yard at 10.30 hours on 1-3-1981 was caused due to the unauthorised movement of the Down Borhat Shunting Goods train by the train crew beyond the Down Starter signal of the station in the 'On' position. The goods train fouled the path of 7 Up Tinsukia Mail which was entering the station on valid line clear and lowering of Up Home signal.

8.2 RESPONSIBILITY

(a) Shri Jadu Gopal Dutta, Driver, Shri B.D. Mali, First Fireman and Shri Nepal Malakar, 2nd Fireman of Down Borhat Shunting Goods train are held individually and collectively responsible for the accident. They violated GRs 76, 79 and 122 and SRs 79 (2) & 43 (1). Both the Firemen admitted in evidence that they were responsible to inform the Driver about the green signal from rear and therefore both of them are held responsible.

(b) The Driver of 7 Up cannot be held responsible for the accident. However he was not very vigilant. He did not even notice the red danger signal shown by the Gateman. The Driver of 7 Up could have at least reduced the severity of the accident if not altogether averted it, had he applied the emergency brake in one stroke. Instead, he admitted having applied the vacuum brake slowly which was confirmed by both the Fireman of 7 Up. The Driver explained that the brakes were applied slowly to prevent possible derailment of the Mail train even though it was moving at 15 Km/h. The statement of the mail Driver and the fact that he travelled a distance of 105 m. after collision before coming to a stop makes him only ridiculous and exposed his poor knowledge of enginemanship. The Railway may deal with him as deemed fit.

8.3. Service Records

(a) Shri Jadu Gopal Dutta born on 26-7-1927 was appointed as a Khalasi on 29-7-1943 and worked as SPA from 3-1-1944. He worked as Second Fireman from 1-4-1955 to 8-11-1961 and as First Fireman from 9-11-1961 to 3-10-1966. He was posted as a Shunter on 4-10-1966. He was promoted as Driver 'C' Grade on 14-7-1976. He was reverted back to Shunter on 10-12-1976 due to reduction in establishment. He was repromoted as Driver 'C' Grade from 1-1-1980. He was reverted from SPA to Loco Khalasi for 6 months on 16-2-1951 due to fusing of load plug of pump boiler. He was again reverted to Loco Khalasi from 1-10-1954 for damaging pump. He was censured on 5-1-1960 for not turning up to duty. His increment was stopped for 6 months with permanent effect on 11-7-1961 for refusing a train. His increment was stopped for 6 months (cumulative) on 4-7-1961 for refusal of work. His increment was stopped for months(Cumulative) on 11-7-1961 for not found for train duty. He was censured on 27-4-1962 for late turning up. His increment was stopped for 3 months (non-cumulative) on 16-11-1969 for not turning up on duty. He was censured on 30-11-1967 for excess coal consumption. There was no award in his service sheet.

(b) Shri B.D. Mali born on 27-12-1938 was appointed on 4-7-1958 as Box Porter. He was 'posted as Engine Cleaner on 4-7-1961. He was promoted as Second Fireman on 15-5-1964. He was promoted as First Fireman on 20-12-1977. Cost of padlock and blanket was debited to him on 27-5-1961. He was censured on 19-4-1962 for remaining absent. His increment was stopped for one year (non-cumulative) on 5-2-1965 for remaining absent. His increment was stopped for 3 months (non-cumulative) on 20-3-1971 for not turning up on duty. There was no award in his service sheet.

(c) Shri Nepal Malakar born on 1-8-1951 was appointed on 26-3-1971 as substitute Cleaner. He was posted as Engine Cleaner on 10-1-1978 and promoted as Second Fireman on 4-11-1979. There are no punishments or awards in his service sheet.

(d) Shri Narayan Chandra Mandal, Driver of 7 Up, born on 31-3-1936 was appointed as Loco Khalasi on 5-9-1954. He was promoted as SPA on 13-9-1956, as Second Fireman on 2-10-1957, as First Fireman on 7-10-1964 and as Shunter on 21-9-1970. He was posted as Driver 'B' Grade on 29-12-1975 against the Schedule Caste Quota. He was promoted as Driver Special Grade on 29-7-1978 His increment was stopped for 6 months (non-cumulative) on 5-3-1960 for late turning up. His increment was again stopped for 6 months (non-cumulative) on 19-12-1960 for not found for train duty. He was censured on 3-3-1972 for excessive coal consumption. He was censured on 29-7-1972 for derailment case at Mariani. There were no awards in his service sheet.

8.4 Relief arrangements and medical attention

I am satisfied with the relief arrangements and medical attention given.

IX. RBMARKS AND RECOMMENDATIONS

9.1 Pertaining to Mechanical Department

(a) Working of Goods trains without adequate brakepower.

Evidence collected during the enquiry showed that goods trains are allowed to start from originating station even though the brakepower is very much below the minimum prescribed limit of 85%. It was freely admitted during the enquiry that goods trains are allowed to start from originating station with brakepower of 70%. When the brakepower is below 70% goods trains and allowed to start with a restriction of speed. While no clear written authority for the above deviation could be produced in the enquiry, it was admitted

freely that in view of the peculiar condition prevailing in the State of Assam recourse has been taken to the above deviation. It was also admitted that the Railway Administration and senior officials are fully aware of this situation which has been done in the interest of traffic. In the absence of the full background information and material I am unable to have proper appreciation of the situation. Nevertheless, the procedure adopted in the absence of regular circular instructions issued under the signature of the competent official of the Raiiway Administration is not only irregular but also likely to be misunderstood and abused by the staff at lower levels in order to cover up their own in efficiency and slackness. It is further felt that the Railway officials are unnecessarily exposed to the risk of police arrest in the event of passengers being killed or grievously injured in a collision where weak brakepower figures as the main or contributory cause. Urgent attention of Railway Board is drawn to the above, with a view to set right the matter on a proper footing.

(b) Improper extension of POH dates of coaching stock

Based on a telegram issued by the CME of the N.F. Railway to the DMEs by name, the return date of overdue POH coaching stock has been extended. The IRCA Conference Rules, Part IV already prescribes the procedure for use of overdue POH coaches, and normally there should be no occasion to deviate from the Conference Rules. In any case a telegram which prescribes neither the method of inspection nor the agency of inspection nor the period of extension of return date at a time, nor the documentation to be maintained in this connection is hardly the proper method of extending the return dates of overdue POH coaching stock from the point of view of safety or administrative control. The staff when questioned did not give proper replies as to the method adopted by them in carrying out the orders of the Head-office. Some correspondence also make a reference in this connection to verbal instruction given by the CME which appeared to be different from the instructions conveyed by telegram. After going through the records available in this connection, I have no alternative but to conclude that the entire question has been dealt with ina haphazard and per functory manner which may jeopardise. the safety of travelling public. The Railway Board may interfere and if the conditions in Assam warrant special dispensation from IRCA Rules, suitable guidelines should be given to the railway as to how the overdue POH stock can be continued in service without jeopar-dising the safety of travelling public.

(c) Issue of false brakepower certificates.

The brakepower certificate issued by TXR, Tinsukia for the Down Borhat Shunting Goods involved in the accident, showed 18 vacuum cylinders fitted, out of which 13 were active, giving a brakepower of 72.2%. The brakepower of the train checked by the DME after the accident showed only 13 cylinders out of which 7 were active and the remaining were inactive giving a brakepower of 44%. I am unable to accept the view that the TXR Tinsukia could not correctly count the total number of cylinders on the train. Evidently the TXR was giving a false brakepower certificate. When questioned he also made some reference to the instructions given by the CME and other officials. Although he could not produce copies of the letters he was able to give some reference to telegrams from CME which could not however clarify the situation. In the light of what is stated in paras 6.1 and 6.2 above it is not unreasonable to infer that pressure has been brought by the Administration by verbal orders on the staff concerned to disregard and dilute the instructions laid down in the Conference Rules and Board's letters. The staff at lower levels being helpless comply with these irregular to orders the extent possible. The danger of issuing such irregular instructions lies in the fact that staff also take cover under such irregular orders to hide their own inefficiency and slackness. I am also unable to accept the view that such irregularities are isolated instances and that such irregularities could occur without the active connivance of the Railway Administration and its officers. The Railway Board may take notice and do the needful.

(d) Railway Board to take urgent action

That conditions are not normal in Assam is known to everyone. It is therefore possible that the Railway Administration may not be able to comply with the normal rules in Assam under the special conditions obtaining there. Deviations and dispensations from Conference Rules and other normal circular instructions applicable elsewhere may be necessary and/ or justified under conditions arevailing in Assam. However instead of issuing proper regular orders authorising deviations with the approval of the Railway Board, after taking suitable safety precautions regarding safety of passengers, the Railway Administration has chosen to issue irregular and perfunctory orders both the telegram and verbal without prescribing the manner in which deviations and dispensations are to be actually carried out. In doing so, the Railway Administration has not probably realised that the various railway officials are exposed to the risk of police arrest in the event of a collision where weak brakepower becomes the main or contributory cause of the accident apart from the fact that the staff may use this as a cover for their own slackness. It would appear that the health of the mechanical department of the N.F. Railway is not all too good at the moment. The case is therefore brought to the notice of the Railway Board for immediate and urgent appropriate action as deemed fit, before the situation gets out of hand. Note

Items 9.1(a) to (d) were also incorporated in the Preliminary Report as 'Immediate Recommendations'.

(e) There was no speed recorder in the engine of 7 Up Mail. The Railway may fix responsibility.

(f) There was only one fire extinguisher in the Guard's brake of 7 Up Mail instead of two as per rules,

(g) Hand brake of YG loco No. 3533 of Borhat Shunting Goods was not working which also in a small way contributed to the cause of the accident. Responsibility for the same may be fixed.

9.2 Pertaining to Operating Department

(a) I was happy to see that the Railway had taken prompt action to record the statement of the Driver of Down Borhat Shunting Goods on the date of accident soon after the occurrence. This has facilitated to a great extent the Enquiry Officer in arriving at correct conclusions.

Bordubi Road Station

(b) One Class IV staff is overdue vision test.

(c) One Class IV staff is overdue Refresher course.

(d) Competency certificate of 2 ASMs could not be produced.

(e) First Aid Box was found unclean. Box was last inspected by AMO in 1978. Many medicines were not available in the box.

Tinsukia Station

(f) OP/T 27 form was not available with the ASM. OP/T 27 was being issued on OP/T 80 form. This may lead to confusion and accident.

(g) Caution Order was not being issued in OP/T 80 form but in plain memo paper.

(h) Assurance Register was not signed by one ASM.

(i) Six Class III and 27 Class IV staff are overdue vision test.

(i) One ASM, 3 Cabinmen and 2 Gatemen are overdue Refresher Course.

(k) Competency Certificate for all ASMs, 5 Points men and 3 Cabinmen were not available.

(1) There was no record of inspection of Station by SS.

(m) There was no first aid box at the station. It is not surprising that the Guard and TTEs did not take any interest in giving first aid as revealed in this accident.

9.3 Pertaining to Signal Department

Bordubi Road Station .

(a) There was no Advanced Starter/Shunting Limit Board provided at this station to demarcate the station section.

(b) Station section and block section limits are not mentioned in the SWR.

(c) At Duliajan end 'B' Class level crossing is situated at about 15 m. from the topmost facing point. Down Reception Signal are lowered without closing the 'B' Class level crossing gate which is within signal overlap.

(d) Automatic replacement of reception and last stop signal not provided.

(e) There was no SM's electric control on reception and despatch signals to put back signals in case of emergency.

(f) Track circuit cables are not periodically tested. Cable Register is also not maintained.

(g) There is no record for overhauling of relays.

(h) Track circuit test record in cabins are not maintained in terms of para 911 of SEM.

Tinsukia Station

(i) Eight polar neutral relays in use should be replaced early.

(i) Eleven relays are overdue overhauling.

(k) Automatic replacement of reception and last stop signal is not provided.

(1) One slot one Signal/Starter system has not been implemented:

(m) East Cabin can give slot to West Cabin for reception of a train without closing the 'A' Class level crossing infringing GR 38 as the level crossing falls within the station section.

(n) Similar discrepancy was noticed at the west end for Mariani Line and Dibrugarh line.

(o) The condition of outside signalling gear is deplorable. Gears are rusted, corroded and worn out badly. Lock bars 55 W, 6W 68 W are not flushing with the rail and show more than 2" gap in mid position. Rod operation is sluggish as points 11 East, 25 East, 59 West, 69 West are out of square. Most of the crank compensators lock bar clips are worn out and require immediate replacement. The rod runs are 4 to 8" below rail level due to lifting of tracks on cinder without simultaneous lifting of rods by S&T department. To avoidunsafe working points were found padlocked for reception of trains. Failures of point operation are not entered into the failure Register. Immediate action is necessary for rectification of signalling gear.

(p) Electrical detectors are neither locked nor sealed.

(q) Periodical cable testing is not done and no records are maintained.

(r) SM's Control on reception and despatch signals have not been provided.

Yours faithfully

Sd-

(K. GANAPATI) Commissioner of Railway Safety, Eastern Circle, Calcutta

Rules relevant to the accident

"GR-43"--Shunting--(a) The Outer, Home and the last Stop signal of a station, shall not be taken 'Off' for shunting purposes.

(b) At stations where Advanced Starters are provided. Starters shall be taken 'Off' for shunting purposes except, where the inter locking interferes with this practice, in which case hand signals shall be used where Shunting signals are not provided.

SR. 43/1—On the single line, if, for shunting purposes, a Driver is required to pass a last stop signal at "ON" Form OPT/275 or a Metal badge, where such is provided, shall be given to the Driver.

SR. 43/2—Metal badge—At some stations the Neale's Tablet Instruments have been provided with metal labels, with the words "Authority to pass up or down Starter signals at "ON" during shunting" engraved on it. The label is normally kept in a holder fitted to the block instruments and when the lebel is removed from the holder the words "Section Blocked" on a red background are displayed."

"GR. 76—Driver to obey signals and to be vigilant and cautious—(a) The Driver shall pay immediate attention to and obey every signal whether the cause of the signal being shown is known to him or not.

(b) He shall not, however, trust entirely to signals but always be vigilant and cautious."

"GR. 79—Duties of Driver when Starter or Advanced starter is "On" or defective—The Driver of a train shall not pass a Starter or Advanced Starter that refers to him when it is "On" or defective, unless he is authorise to do so by a written permission from the Station Master and in the case of a Starter, he also receives a proceed signal from a duly authorised member of the station staff posted at the signal.

SR. 79/1—If the Driver is required to pass a last stop signal which is defective, Form OPT/27 must be issued by the Station Master of the station where the signal is defective in accordance with SR. 56/1; a hand signal will be exhibited for a Starter signal (even if it be the last stop signal) by a Pointsman or other authorised railway servant but no hand signal for an Advanced Starter signal need be exhibited.

SR. 79/2—If it is required to pass a Starter signal or an Advanced Starter signal which is at danger in the course of shunting operation Form OPT/275 or a metal badge if in use shall be issued.

SR. 79/3—When Starters and Advanced Starters are both defective hand signal need be displayed at the Starter signal only."

"GR. 122—Driver and Fireman to keep a good look-out—Every Driver shall keep a good look-out while the train is in motion, and every Fireman shall also do so when he is not necessarily otherwise engaged."

RAILWAY BOARD'S COMMENTS ON VARIOUS PARAS OF THE REPORT

Para 9.1:

(a) Due to prolonged agitation in Assam on the 'foreigners' issue, the workshops', sicklines, sheds etc. on the N.F. Railway could not function efficiently for quite some time, leading to the shortfall in production and non-availability of stores for maintaining the rolling stock. The difficult position with regard to supply of components required for maintenance of wagon fleet necessitated running of Goods trains with brakepower lower than the prescribed limits. Accordingly, instructions were issued to start trains with brake power not below 70% with a speed restriction of 30 KMPH. Such a step was taken only after making a detailed check of the brake power calculations and ensuring that safety of trains was not jeopardised. No instructions were issued permitting goods trains to start when the brake power was below 70%.

With the return of near normalcy in the State, the availability of components has started improving and the Railway has been running trains with brake power between 80 and 85%, since January, 1981.

(b) In the instructions issued by the CME regarding extension of POH dates of the rolling stock, it was specifically indicated that the DMEs should arrange inspection of each coach and extend the dates only if the coaches are found firto run. The basis for extension of the service of coaches beyond their return dates and ensuring their fitness for service has been clearly laid down in IRCA Rule Nos. 2.2.4, 2.5, 2.5.1, 2.5.2, and 2.5.3. These clear provisions have to be automatically followed and there was no question of any ambiguity or lack of guidance in this regard. No departure from the procedure laid down by IRCA rules was envisaged or authorised at any stage.

Detailed instructions were also issued specifying that a clear assurance should be sent by the DMEs^{*} indicating that necessary examinations had been carried out before permitting every overdue schedule coach to run under these circumstances. Thus there were no violations of essential safety regulations. However, suitable instructions are being issued by the Railway Board to all the railways.

(c) It would not be correct to assume that pressure had been brought by the administration by verbal orders to the staff concerned to disregard and dilute the instructions laid down in the Conference Rules and Board's orders. The evidence given by the Supervisor after the accident appears to be an attempt on his part to explain away his non-compliance with the instructions issued to get himself exonerated to the extent feasible. The matter has already been taken up by the Railway Board with the railway concerned and further action will be taken on receipt of railway's report.

(d) The conditions in Assam are back to near normalcy. The matter has however been referred to N.F. Railway by Railway Board and Suitable action will be taken on the basis of the railway's report.

(e) to (g) Necessary action has been taken or is being taken by the Railway in compliance with CRS's observations. This position has been noted by CCRS.

Para 9.2 (a) to (m) : Action as necessary has already been taken by the Railway to implement the observations made by the Commissioner of Railway Safety. This position has been noted by CCRS.

Para 9.3 :

(a) advanced Starter/Shunting Limit Board are not necessarily required to demarcate the station section. The limit upto which shunting is permitted, as per rules, has been indicated in the Station Working Rules.

(b) Accepted. The Railway Administration has been advised to do the needful. Instructions have also been issued to all the Railways.

(c) In view of the position explained by the railway administration, no further action is required.

Para 9.3(d)

The Railway has confirmed that the reception signals are automatically replaced on occupation of berthing track provided for passenger lines at this station.

Para 9.3(e)

The signals are operated from a cabin, which is very near to the ASM's office. The signals cannot be lowered without his permission. He is in a position to get the signals put back to on position as and when required. The arrangement is considered satisfactory.

: (c) & (f) to (1) & (o) to (r) : In view of two position explained by the railway administration, no further action is required.

Para 9.3(m)

It has been confirmed by the Railway that the minimum overlap required, is available.

Para 9.3(n)

The prescribed overlap is available from the shunt signals for lines Nos. 4, 5 & 6. The Railway has applied for CRS's sanction to reckon the overlap from the shunt signal in terms of GR-38(ii).

(c) & (f) to (l) & (o) to (r) : In view of the position explained by the railway administration, no further action is required.

PR1, 253 500-1984 (DSK IV)

Price : Inland-Rs. 11.00; Foreign-£ 1.29 or 3 \$ 96 Cents.

1985

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PRINTED BY THE MANAOSA COVERNMENT OF INDIA PRESS CHIMLA FOR THE CONTROLLER OF PUBLICATIONS CIVIL LINES DELHI