

## **SOUTH CENTRAL RAILWAY**

**No. Safety.157/Special Bulletin/2-15**

**Date: 06.12.2015**

### **SPECIAL BULLETIN – 2**

Attention “**OPERATING & SIGNAL DEPARTMENT OFFICIALS**”

On 6<sup>th</sup> October 2015, at 15.35 hours Train No. 18101 Muri Express derailed at Hiranagar (HRNR) station of Ferozpur Division in Northern Railway derailed on cross over point. Cause of the accident was due to shortcut method adopted by the S&T Officials during S&T Equipment failure which could have been prevented had the safety norms were correctly followed by the ESM, JE/Signals and Dy.SS.

#### **DESCRIPTION OF THE SITE OF ACCIDENT**

Hiranagar station is located between Pathankot – Jammu Tawi section on double line, electrified section of Firozpur Division. The station has four running lines (UP Main, UP Loop, DN Main and DN Loop) connected by cross over point. The system of working is Absolute Block System and the signals & points are operated from the central panel by the SM.

#### **BRIEF DESCRIPTION OF THE ACCIDENT**

- Muri Express left CHNR station at 15.28 hours on 06.10.2015.
- Train is having scheduled stop at HRNR station, hence, signaled for reception on to UP Loop line which is a platform line.
- After the passage of the loco and 14 coaches over cross over point No.42 (mainline to loop line), 15<sup>th</sup> coach taken two routes and derailed along with other two coaches.

#### **PREAMBLE**

##### **Signal & Telecommunication Defects and human failure**

- On the day of the accident, 42T failed in the early morning hours at 03.55. Failure memo was prepared by the SM but the same was not acknowledged by the ESM. However, the information about the failure was known to the ESM & JE/Signals who have accepted that they knew about the failure. They have come to station to rectify the defect.
- Failure was rectified as per the memo at 05.45 hours.
- But, it was evident from datalogger that the defect got rectified by bypassing track repeater relay of 42b from inside the Relay Room at 06.19 hours and not at 05.45 hours.

- During the failure duration, 4 Express trains were received on Calling-On signal and there are proper entries found in the register related to the reception.
- However, after the arrival of the train on Calling-On signal, the route was released by using Full Route Release Button (EUUYN) instead of Sub-Route Release Button (EUYN).
- At 11.56 hours, the 42BT made proper from the Relay Room and 2 trains were dealt on proper signals.
- At 14.10 hours, again the 42BT failed; the track repeater relay of 42BT got bypassed from inside the Relay Room at 14.24 hours. Two trains were dealt in this condition and route was again released by using EUUYN instead of EUYN.
- The derailed Muri Express is the third train after bypassing the track.
- It was also noticed from datalogger that 13 times the route got released by using EUUYN between 03.55 hours to 16.00 hours.
- No entries were made in the Route Release Register.
- The veeder counter of EUUYN did not register next higher number when route got released. **Last veeder counter number was on 03.6.2015 which is four months before the day of derailment** and the reason for that was that the veeder counter is defective since 4 months.
- JE/Signals had deposed that he was present at the station from 06.00 hours to 12.45 hours and again at 15.30 hours which gives evidence that he was well aware of bypassing the relay.
- At the time of derailment, it was evident from datalogger that emergency route release button was used for releasing the route of Signal No.1 at 15.09 hours and thereafter Point No.42 was operated from 'R' to 'N' at 15.35.26 hours and again from 'N' to 'R' at 15.35.37 hours.

## **FINDINGS**

- Point No.42T was bypassed as was evident from the datalogger. Relay had been made through manually from inside the Relay Room twice on the day of derailment.
- The veeder counter entry related to route releasing was last made on 03.6.2015 and the functioning of the counter was not ensured by the Officials for such a long period and this has been accepted by the ESM and JE/Signals.

- The crossover Point No.42 was operated during the movement of the train by using individual point operation after releasing the Signal No.1 using emergency route release button without ensuring whether the train has cleared the route which is in violation of SWR Para 8.3.
- SM failed to ensure that while handing over the Relay Room key to the S&T Official, an entry is necessary to be made in the register. He also failed to take cognizance of conflicting indication i.e., track 42T turning red even during movement of train which is again in violation of SWR.
- Section TI failed to counsel the SMs and also for hiding facts not only during preparation of Joint Observation Note but also before the Accident Enquiry Committee.
- SSE/Signals is also responsible since the JE/Signals and ESM flouted the safety norms seriously.

#### **Deficiencies noticed in preparation of Joint Observation Note**

- Statements of ‘all-concerned’ was not taken except the ASM on duty.
- Counter readings were not recorded.
- No mention of datalogger.
- Other than TI and SSE/Signals, other signatories do not possess adequate knowledge of panel and their conclusion was simply based on hearsay.
- Several important facts like time of accident, KM, detail of casualties (if any) are missing. Also, damages of P.Way and rolling stock are not mentioned.

#### **STAFF RESPONSIBLE**

**Primary:** JE/Signals, ESM and SM/HRNR.

**Secondary:** TI, SSE/Signals and ASM on duty in the early hours.

**Blameworthy:** SSE/P.Way, SSE/C&W and CLI for deficiencies in Joint Observations Note. JE/P.Way for not attending the deficiencies noticed during Joint Inspection of Points and Crossings inspection.

#### **Lessons to be learnt**

- Dy.SS and S&T Official shall ensure that entry is invariably made whenever S&T Official wants to enter in to Relay Room whether for maintenance purpose or for rectifying the failure duly recording the clear reasons.

- **Ensure that Route Cancellation related veeder counters are functioning correctly or else failure notice is brought to the notice of S&T Official by the Dy.SS.**
- **Under any circumstances, resorting for shortcut method in the form of bypassing any relay is to be discouraged and staff found adopting shortcut methods should be taken up under D&AR by the concerned Department/s.**

**CHIEF SAFETY OFFICER**  
**HEADQUARTERS SAFETY ORGANISATION**