

**SOUTH CENTRAL RAILWAY  
HEADQUARTERS SAFETY ORGANISATION  
BI-MONTHLY SAFETY BULLETIN – MARCH & APRIL 2020**

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**DETAILS OF ACCIDENTS AND UNUSUALS THAT TOOK PLACE  
DURING MARCH & APRIL 2020**

- 1. Brief of the Accident** (Derailment): On 01.03.2020 at about 19.30 hrs. at PAU of NED division, Dy.SS/PAU instructed to on duty shunter about stabling of Loco No. 12089 + 70480 WDG-4 UBL from plat form No. 4 to stabling line No.1 towards PBN end. Accordingly on duty shunter taken charge of Loco and after taken off shunt signal No.62, started shunting movement. After passing hand operated point No. 29, he heard unusual sound from under gear at CMS crossing, immediately stopped loco and noticed that one leading pair of wheel of Loco No. 12089 was in derailed condition.

**Cause of the accident:** The leading pair of wheel of leading trolley of leading loco No. 12089 got derailed after passing CMs crossing due to absence of Guard rail at RH side.

**Responsibility:**

**Primary:** SSE/P.Way/Construction/PAU

**Matters brought to light:**

  1. Construction department should ensure all parameters regarding track before giving track fit certificate to operating department.
  2. On duty outdoor SM should monitor shunting movement at NI portion without fail.
  3. Proper lighting facility to be provided at major yards.
  4. The information regarding the unusual shall be immediately delivered to all concerned.
  
- 2. Brief of the Accident** (Derailment): On 14.03.2020 at about 02.15 hrs. at PRPI station of SC division, while clearing Train No. Blue Arrow – 48 stabled rake, both LP & Pointsman not ensured the removal of wooden wedges due to which brake van B ZI ECR 86100861215 trailing trolley leading wheel got derailed. It was noticed that rake was stabled in main line on 13.03.2020 at 19.00 hrs.

**Cause of the accident:** LP & Pointsman did not ensure the removal of wooden wedges

**Responsibility:**

  1. Sri. Ashram meena LP/BPA
  2. Sri. Pramod kumar Pointsman/PRPI
  
- 3. Brief of the Accident** (Fire on train): On 14.03.2020 at about 10.30 hrs. at MLY station siding No.2 of SC division, the train No. coaching empty rake arrived to MLY station siding No - 2 at 06.40 hrs on 11.03.2020. The Coach No. 05213/C WGSCN was booked to BPL for MLR repair. It was towards the KZJ end. On 14.03.2020 at 10.30 hrs on duty head constable at MLY informed that coach No. 05213/C WGSCN towards KZJ end was on fire. On duty Dy.SS informed to section controller and fire station. The fire engines arrived at 10.50 hrs and fire was extinguished at 11.20 hrs.

**Cause of the accident** miscreant act

**Responsibility:.**

**Primary:**miscreants.

**Secondary:**

1. Sri. S.K. Srinivas, Khalasi Helper/C&W/SC for not checking the locked condition of the doors of the coach.
  2. Sri. Shaik Osman, Head constable/RPF for not informing to the concerned about the unlocked condition of the coach and not preventing the miscreant activity.
4. **Brief of the accident** (Derailment): On 19.03.2020 between LPI-HFZ stations of SC division, Train No.47141 (LPI-HYB) MMTS while on run, rear coach (MC 401027) rear trolley inside wheel derailed at Km 164/24 at 17.32 hrs. This derailment occurred on Secunderabad & Wadi double line electrified controlled section. There is no casualty/injuries to any person.
- Cause of the accident:** due to defect in rolling stock i.e. wheel disc broken, appears to have occurred under the moving train caused the derailment. As per the ACMT/LGDS's report, the breakage of wheel disc may be attributed to fatigue crack initiated and propagated at web location.
- Responsibility:** None was held responsible by the committee since the derailment occurred due to material failure. Since the CMT's report indicates that the root cause lies in the metallurgy i.e. imperfect train structure which appears to have developed at the manufacturing stage itself.
- GM's remarks:** Wheel Tapping during the under gear examination might detect the onset of cracks in the wheel body. Trained fitters can make out unusual sounds. Training of all technicians involved in under gear examination in EMU/MEMU Car sheds be done for wheel tapping. Supervisors should also do during their checks in. In fact it should be a part of the examination when EMU rakes touch the home shed and are placed on the pit line. Necessary instruction for the same be issued.
5. **Brief of the Accident** (Derailment): On 23.03.2020 at about 14.50 hrs. at BABR yard of HYB division, while moving HBT empty rake from siding to ist loop line, from engine 9<sup>th</sup> wagon ( No.SC 70090360650 BOBYN) rear trolley (JCL end) and 10<sup>th</sup> wagon ( No.SC 70090260493 BOBYNE) fron trolley (SHNR end) derailed.
- Cause of the accident:** Partial unloading of ballast
- Responsibility:** RVNL
6. **Brief of the accident** (Derailment): On 24.03.2020 at 23.30 hrs at RU of GTL division, While Train no. KKU-NMG DN Goods train rolling into Road No. 9 of RU from MAS end one NMG wagon 4<sup>th</sup> from Train Engine derailed.
- Cause of the Accident:** due to application of brakes, front portion might have slowed down , due to falling gradient, rear portion got bunched up resulted in derailment..
- Responsibility:**
- Primary: NIL**
- Secondary: Nil**
- Blameworthy:** Sri. T.S. Balashanmugham LP/Goods/JTJ/MAS
7. **Brief of the accident** (Derailment): On 01.04.2020 at 23.30 hrs at Nekkonda Private siding of SC division, Train no. BCN/E rake in FCI siding/NKD on line No.3. , While giving placement, one wagon, 11th from rear, rear trolley derailed on plain track, No obstruction to through traffic.
- Cause of the Accident:** Excess twist in the track. Track maintained by siding authorities.
- Responsibility:** FCI private siding authorities.

8. **Brief of the accident** (Derailment): On 21.04.2020 at 05.45 hrs at Renigunta station of GTL division, At RU yard, while T. No. CHJD BOXNHL entering into road no. 8, four wagons 19th, 20th, 22nd and 23rd wagons from TE derailed near point no. 25A. No obstruction to through traffic.

**Cause of the Accident:** Consignment loaded has shifted from its original position and have resulted in sudden derailment.

**Responsibility:**

**Primary:** Nil

**Secondary:** Nil

**Blameworthy:** The supervisors who have attended the derailment spot not shown any active part in taking Joint Observation Report together. Further, during course of inquiry, it has come to notice that the supervisors are hesitating in supervising and hiding the reasons of derailment. At the accident site supervisors should be proactive and transparent, such that exact cause of derailment may be known and in future such cases may be avoided. Hence, proper guide lines shall be issued in this regard.

9. **Brief of the accident** (Derailment): On 22.04.2020 at 23.50 hrs at JPTN Yard of SC division, while AC LE No. 27740 performing shunting from Road No.2 to Road No.4, Loco front truck front trolley 4 wheels derailed at point No. 107. LP moved his loco without either verbal or written instructions from shunting staff after placement of BCN rake from Goods loop at JPTN yard towards RRPM. No obstruction to through traffic.

**Cause of the Accident:** LP without either verbal or written instructions from shunting staff drawn his loco ahead on to the open trap point No.107DS without ensuring the point position.

**Responsibility:**

**Primary:**

1. Sri. B.Vasu, LP/GOODS/BZA/SC

2. Sri. MD. Muzammil, Sr.ALP/BZA/SC

**Secondary:** Sri. M. Srikar, Guard/KZJ/SC

10. **Brief of the accident** (SPAD): On 29.04.2020 at Reddigudem station of GNT division, LP of AC Couple LE while approaching DN Home signal S-20 of REM station failed to stop and passed it at ON and stopped after passing 400Mts approximately.

**Cause of the Accident:** Late applications of Loco brakes by LP & ALP since crew were in exhausted condition.

**Responsibility:**

**Primary:**

3. Sri. J.L. Narayana, LP/GOODS/GNT

4. Sri. K. Karthik Kasyap, ALP/GNT

**Secondary:** Nil

**Blameworthy:**

1. Sri. S. Srinivasa Rao, nominated Loco inspector for not counselling the loco pilot to avoid SPAD.

2. Sri. P. Minor babu, on duty PRC/GNT for not arranging relief crew and over working

3. Sri. AVL Narasimha Rao, CHC on duty Dy.Controller(Goods) for not planning relief when addition movements are involved.

During the bi-monthly safety audit inspection of RJY & KDM stations and RJY - BZA section of Vijayawada division on 19.02.2020 & 20.02.2020 the following irregularities are noticed.

### **1.0 Irregularities noticed in the working of Operating Department:**

#### **RJY station**

#### **SOUTH CABIN**

It was reported that time taken for calling on initiation is 120 Sec. and calling on cancellation is 240 Sec. But as per new circuit design (and Amendment slip No. 16 to G&SR) calling on initiation time should be 60 seconds with Auto Route release and 120 seconds for emergency calling on cancellation. Calling on circuit needs to be modified.

#### **North Cabin:**

- Panel – Date of Installation is 14.11.2003: Top Sheet is overdue for replacement from 14.11.2013
- Joint Inspection Register for Points and Crossings:
  - a. Schedule for joint inspection was not given for the calendar year.
  - b. Joint Inspection for the 1<sup>st</sup> quarter during 2020 was not carried out as on date of inspection.
  - c. For the 4<sup>th</sup> quarter in the year 2019, the joint inspection was done on 02.12.2019. It was noticed that a lot of time was taken for attending the deficiencies. 4<sup>th</sup> quarter deficiencies were attended upto 01.02.2020.
- Joint Inspection Register for Track Circuits  
Joint Inspection for the 1<sup>st</sup> half year during 2020 was not carried out as on date of inspection.
- Joint Inspection Register for OHE and S&T Bonds:
  - a. Joint Inspection for the 1<sup>st</sup> half during the year 2020, was done on 12.02.2020. Six deficiencies noticed were not attended as on date of Safety Audit.
  - b. Joint Inspection for the 2<sup>nd</sup> half during the year 2019 was carried out on 12.09.2019 and the remark passed was 'All Points U Bonds for Tongue Rail and Stock Rail to be provided'. Though SSE/P.Way/RJY was advised by SSE/Signals/RJY to make holes to fix U Bonds, the same was not taken up. This should be expedited.
- Station Working Rules:
  - No.B.27 (BG) was issued on 20.06.2017 and was brought into force 24.06.2017
  - Gradients were not shown on the Panel Board.
  - Safety Point alarm was fixed, to be included in SWR
- All Route Cancellation, Calling on Initiation and Cancellation and Axle Counter Resetting Registers are very new and have no entries. Previous records are not available. It is reported that the new registers were recently opened for GM's inspection and old registers were taken away by S&T staff. Old registers shall also be kept available for scrutiny along with the new Registers for certain period.
- On 30.08.2019 PLCT WAS issued for 12738 exp but no entry in the S&T failure register.
- on 19.11.20, FRM and BRM block was given. In the Caution order portion of the T.465 issued for BRM, it was mentioned that FRM is working in the section maintain safe distance. There is no authority or caution order for FRM

- Procedure given in the Para No. 8.7, 8.8 and 8.9 of BWMD not being followed by Station Masters during failure of Block instrument and obtaining line clear through other means of communications
- Procedure (pilot in memo and pilot out memo) given in the Para No. 7(despatch) and 10(reception) of S.R. 15.06 are not being followed. Some stations are using shunt signals to receive a train from wrong line during the block which is not as per the procedure.

#### **Kadiyam Station:**

- S&T Failure Register
- On 17.02.20, from 14.40 hrs to 15.00hrs LC Gate failure occurred. During the period 3 coaching trains were dealt without following Non-Interlock working during the LX indication failure.
- Joint Inspection Register for OHE and S&T Bonds
  - Summary of deficiencies is not maintained
  - Joint Inspection for the 1<sup>st</sup> half was not carried as on date of Audit.
- Joint Inspection Register for Points and Crossings
  - Joint Inspection for the 1<sup>st</sup> quarterly was not carried as on date of Audit.
- On 18.08.19, as per TC/18/22 CSM + DGS block was given. T/465 was issued for one machine but there is no relevant caution order for the other machine.
- Calling on initiation time is reduced to 60 seconds. But on arrival the route has to be cancelled. The time delay for Calling on Cancellation is still 240 seconds The circuit is not modified to suit the amended version, i.e., with auto route release on arrival and 120 seconds time delay for emergency cancellation.
- Vide note under paragraph no. 6.5 (B) of SWR, CRS/SCC approval has been obtained for non detection of points in overlap zone for Calling on signals. But the approval no. is not written. However, the same is not shown in SWRD.

#### **2.0 Irregularities noticed in the working of Engineering Department:**

##### **RJY Yard:**

- Road No.1 rail flange fully corroded.
- Point No.24B SRJ to SEJ is only one rail length instead of 3 rail length. Point & SEJ particulars board not provided.

##### **Important Steel Girder Bridge No.248A(Road cum Rail) at KM 572/35 between RJY-KVR stations:**

- 1<sup>st</sup> & 2<sup>nd</sup> spans of arch bridge, track is in 6<sup>0</sup> curve. Most of the ERCs are dropping frequently, rail screws are inserted for holding the ERCs.
- Clear cushion is 200mm on arch bridge proper.
- Advised to study for provision of check rail in 6<sup>0</sup> curve to minimize the lateral wear of outer rail. Lateral & vertical wear on outer rail is 2mm & more than 50% GMT is passed. Rails to be renewed and sleepers are damaged & hence sleepers also to be renewed.
- SEJ No. R/26(575 GB9); no reference pillars, no SEJ particulars board i.e date of laid, SEJ No., date of de-stressing done etc.,

- Galvanized painting work to girders work is in progress. Cross girders & lacings are painted without scratching the old paint/corrosion.
- Missing guard rail screw spikes to be recouped.
- Alignment to be attended at SEJ at KM 574/GB 40.
- Wide gap at fish plate joint at KM 573/4B 25.
- Road No.4 at KM 573/GB 2-3- SEJ gaps are jammed/uneven. SEJ at KM 572/GB36-37(last span) wide gap. It is advised to provide 'H' beam steel channel sleepers
- wherever ordinary steel channel sleepers are available especially in Group A, B & D routes.
- Re-railing ramps on both ends with wooden sleepers, need to be replaced with standard RDSO drawing with PSC sleepers.
- RJY-KVR stations(Slow line) at KM 576/35-570/29 PSR of 60KMPH for coaching trains is in force due to sharp curve on approaches of second Godavari bridge i.e 5<sup>o</sup> curved track, 60kg rail. Lateral wear of outer rail is 3mm. it is advised to increase the SE and provide wider gauge PSC sleepers with TFR to minimize the lateral wear and relax the PSR. Similarly, at KM 572/13-19 also ERCs are dropping frequently due to ineffective fittings like ERCs, GR pads.
- Improved SEJ (with 2 gaps) at KM 571/45 – Total gaps are uneven. SEJ of LWR 4A at KM 571/7- Total gaps are jammed. Need to be attended.
- Rail head ballast on slow line at KM 571/3-41(Point N26B & ahead portion) to be cleared.
- KVR station at LC No.392, road no.1 track running rail non gauge face exposed. Road vehicle hit the running rail and get damaged. Insta patch to be done and road surface needs attention. Track on road portion is in curve, track pumping on inner rail side of RJY end. Approach PSC sleepers GR pads are crushed/missing. Groove has formed in rail seat.
- KVR-Point No.N28A (1in16,60kg rail) ballast deficiency on lead portion. CMS crossing joint gaps are wide. Crossing heel blocks with 2 hole type provided instead of 3 hole type (RT 5694/5695).

### **3.0 Irregularities noticed in the working of S&T Department;;**

#### **RJY station**

- Point No.54A LH is Housing for one sleeper length only, needs to be improved.
- Point No. 50 LH Housing is for one sleeper length only. RH tongue rail chipped off for 5mm after 30 CM from tip. To be reconditioned.
- Point No. 51 RH Housing is for two sleepers length only.
- A cabin(south) Point NO. 23B LH tongue rail has been knife edged, reconditioning/attention required.

#### **RJY/NORTH CABIN - Signal failures:**

There are total 48 failures from April 2019 to January 20, out of which 26 failures pertain to Axle Counter and 14 to SSDAC. Failures pertaining to "Axle Counter and SSDAC are on very much higher side. Each failure to be critically analysed and action plan to be prepared

to reduce the failures. **Redundancy should be provided, to reduce the failures of SSDAC. The facility of auto change over arrangement of media diversity on Quad and OFC cables should also be ensured, if not provided.**

#### **4.0 Irregularities noticed in the working of Electrical (TRD) Department:**

##### **RJY OHE Depot :**

- Checked the foot patrolling register and found maximum remarks are of rusted bonds and are attended in time by painting or replaced. Foot patrolling section of the Technicians are changed for every six months.
- Checked the Contact wire diameter register and found at one location is below 10 mm i.e., at loc: 558/27 is 9.34 mm near NDD/SP, this location should be kept under observation.
- Special drives issued by Hqs are being implemented. Division should put all efforts to complete the shortfall maintenance schedule

##### **RJY Traction Sub-Station.**

- CB-213 feeding towards NDD/SP (including Godavari bridge) are more when compared with CB-214. Analysis to be made to reduce CB trippings. Feeder CB trippings (Total) are same when compared to last year. CB-213: 61/61 (19-20/18-19) and CB-214: 21/28.
- TSS is provided with 5 nos. of 10 kg & 1 no of 25 kgs capacity Dry type Fire extinguishers. Last refilling done on 28.01.2020 and First Aid box was last refilled on 28.01.2020.
- Measured the DC voltage with Charger in ON and OFF condition and found 114.5 Volts and 114.0 volts respectively
- Battery set provided at TSS is of M/s Microtek make commissioned on 18.02.2020, lug dated 10/2019.

#### **5.0 Irregularities noticed in the working of Mechanical Department:**

##### **C & W activities**

There are 22 spring breakage cases noticed in coaching trains in Rolling in/out examination during 2019-2020. The depot is using a gadget to attend these spring breakage case and within 25 minutes these are being attended. A trolley is always ready with all the tools and instrument required for attending the spring breakage and it is moved immediately whenever there is spring breakage.

42 hanger pin drop cases were noticed in 2019-2020 during RIE in various coaching trains. A list may be furnished. All the coaching depots are advised to give adequate attention to avoid such cases

In C&W store room some of the BP Air hose coupling were found without End cap

##### **ART:**

Additional spare power pack and control is to be procured for ART

Additional bracket is to be fitted for CBC operating lever on either side of the BCN wagon in ART formation to have additional security for the Operating lever.

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**ATTENTION .....**

**STATION MASTERS**

**5.04. Signal cabins.—**

(1) The Station Master shall make himself thoroughly acquainted with the duties of the staff employed in the signal cabins, if any, at his station and shall satisfy himself that they perform their duties correctly, and in order to maintain an effective supervision over the said staff, frequently visit the signal cabins.

(2) The Station Master shall ensure that the prescribed equipment is readily available in signal cabins and maintained in good working order.

(3) Signal cabins shall be kept neat and clean and no unauthorised person shall be permitted to enter such cabins.

**ATTENTION .....**

**LOCO PILOTS /LOCO PILOT(SHTG)/ ASISTANT LOCO PILOTS/GUARDS**

S.R.514.

4. Carriages containing passengers shall not be moved for shunting purposes without the personal orders of the Station Master and also the Guard of the train concerned, who will jointly be responsible for taking all precautions, to warn passengers and to prevent accidents either to the passengers in the carriages or to those attempting to get into or out of them under the impression that the train is being started. The Guard shall have the vacuum brake connected up and ensure that the shunting is performed safely.

5. In case shunt movements are governed by Shunt signal/Starter signal, which detect the facing points, the Shunt/Starter shall be taken 'off' and in all other cases, the facing points shall be clamped/cotter bolted and padlocked.

**ATTENTION ..... Engineering**

**S.R.15.17.2**

In the case of permanent causeways that are flooded and the velocity of current is insignificant, trains may be permitted to pass when the depth of water above rail level does not exceed the following values, provided in each case the PWI has satisfied himself by walking over and probing that the permanent way is intact and in a fit condition:

Gauge	Passenger and Mixed trains	Goods trains.
BG	300 mm (12 inches)	450 mm (18 inches)
MG	230 mm ( 9 inches)	300 mm (12 inches)