

**CSO**

**Sub: Action plan to avoid SPAD cases in Konkan Railway**

**Ref : CRB's Letter D.O.No.L.102.LG.5.Safety/Accident-31 dated 28-04-22**

In view of increasing SPAD cases over Zonal Railways, following action plan and guidelines are issued to achieve the goal of Zero SPAD in Konkan Railway.

**I. Counselling & Monitoring of Crew**

- a) Ambush checks of running staff by Loco Inspectors to check the following:
  - i. Calling out of the signals loudly and clearly by LP and ALP.
  - ii. While passing the signal at Yellow, the ALP is holding the RS Valve, to operate to stop before the next signal in case it is ON.
  - iii. Use of mobile while on run.
- b) Specific monitoring of crew regarding train control on Yellow Signal.
- c) Specific monitoring on train control in gradients so as to stop before Red Signal.
- d) Specific monitoring on Braking Techniques of LP for different types of load.
- e) RHS Locations, Intermediate Signal locations, vulnerable signal locations where only one of the crew member can sight the signal and specific location of starter signal for particular line during departure from stations will be specifically checked and observed during footplate.
- f) Detailed and intensive inspection of Crew lobbies at Officers level to be completed in one week time.
- g) Counselling of all Loco Inspectors at Officers level to be completed in two weeks time.
- h) Detailed counselling of all LPs/Shunters/ALPs to be completed in one month time.

**Foot plate inspections planned during the drive:**

HQ Officers: At least one footplate per fortnight specifically based on above action plan.

Regional Officers: Minimum 2 footplates per week specifically based on above action plan.

CLIs: 5 footplates per week per CLI.

The drive will be planned as and when required or advised by Railway Board. Database will be maintained at regional & HQ level to bring out specific weak areas on which improvement should be done.

## **II. Regulation & Monitoring of Crew Road Learning (LRD)**

- a) During LRD one trip out of mandatory trips to be specifically done with CLI in night. CLI will personally certify the LRD fitness which will be countersigned by Regional officer after verifying the knowledge of crew.
- b) Every LP will undergo at least one surprise test & every ALP at least two surprise tests per month during Sign Off in which knowledge of specific section in between two locations i.e. the signal locations, signal numbers, peculiarity of rail road in the section will be tested. Poor performances will be identified & worked upon for improvement with specific action.

### **Checks at Officers' level:**

HQ Officers: Check one lobby every fortnight for LRD related sample check.

Regional Officers: Check movements of at least 8 LP/ALP per fortnight per region specifically regarding above LRD points as above.

## **III. Assistant Loco Pilot knowledge upgradation**

Specific working knowledge check of ALPs recruited via any source in last five years. Identify poor performances, list them & make them undergo one week practical training. CLI to certify after satisfactory training and verification to be done at officer level. To be completed in one month.

## **IV. Identification of specific locations where specific action is required to avoid SPAD**

- 1) Identification of locations of Signals where there are chances of misjudgement. Specific counselling regarding alertness at these locations during monitoring.
- 2) Identification of locations where only one crew member can sight the signal due to section topography or locomotive constraint. Specific counselling regarding alertness at these locations.
- 3) Identification of locations of signals are provided on high gradient and RHS.

## **V. Awareness/ Motivational campaign:**

Conducting Safety Meetings/ Seminars, Safety Camp in lobbies and Training Centre by Officers, supervisors and interaction with running staff. At least Two such safety camp/meetings/family meeting per Region shall be organised during every Safety drive.

### **General**

- Emergency caution orders to be issued to both LP and ALP of the train.
- Number of BMBS wagons is to be mentioned in BPC.
- Sigma boards to be provided at the stop signals to indicate the approach of stop signals.
- Mobile jammers may be provided in bed room/dining hall/kitchen of running room to avoid using mobile phones infringing the rest.

- As far as possible, first stop signal is to be taken off on steep gradients.
- Permanent speed restrictions (Engineering/OHE) may also be included in caution order notice.
- List of Stop Signal with Mast number may be supplied to the crew.
- Signals visibility which are being obstructed due to OHE Masts need to be identified and relocated.
- Minimum 10 minutes time for TOC is to be given.
- After passing Distant Signal in Double Yellow, MP/notches to be brought to zero and the speed is to be brought to below 60 kmph, if the next Inner Distant Signal is showing one Yellow aspect.
- Train is to be controlled before two masts with crawling speed and to be stopped at the Signal if the Signal shows Danger aspect and the ALP should not hesitate to open the emergency/RS flap valve to stop the train if the same is not followed.

### **Lobby Incharge/Running room Incharge**

- Booklet covering Signals, Yard layout, Gradient, Cross-overs etc. Which also contains list of critical Signals is distributed to all running staff for improving knowledge of Crew.
- List of signals located at Right hand side is circulated among staff and rigorous counselling done.
- Meditation room in each major running room be made functional.
- Case study of each SPAD case to be distributed to Loco inspectors for counselling of crew.
- Video to avoid SPAD cases to be circulated amongst all crew.
- In all lobbies, Bell is provided to take Oath by staff of 'No SPAD' while doing Signing on in lobby.
- Good work done by LIs to be monitored and every year LIs to be awarded for good work done.
- Ambush checks to ensure that LPs/ALPs are not using mobile phones on running duty on regular basis by all Regions.
- Provision of walkie -talkie for Crews on all train.
- Few LP/ALP are having poor knowledge of type of Signals and specific rules for passing signal at danger. Such type of LP/ALP to be identified and adequate training to be given.
- Few LP/ALP are booked in the section just one day of the expiry of LRD. This is not correct LP/ALP should be booked regularly in all sections for getting effective LRD of the section and not becoming overdue for LRD.
- LPs/ALPs grievances with respect to leave and other issues to be looked into positively.
- Retro reflective plate to be provided at all OHE masts for identifying actual distance of the signal.
- Stress management courses are to be conducted regularly.
- Excess duty hours booking of LP/ALP to be avoided.
- Quick response with feedback on deficiencies pointed out by crew and verification of the process at officer's level on a regular basis.
- Appreciation for good work by the Crew will boost the confidence of crew. Good work to be brought through PCDO and displayed in lobby for morale boosting of Crew.
- Clear visibility of sectional gradients and display of critical gradient locations at the crew lobby.

- Few PPT slides may be uploaded in CMS as tips for prevention to SPAD so that LPs can see while signing on.
- Counselling of LIs also to be done by Officers. Knowledge of ALP/ LP to be checked by officers and to Counsel them.
- No Crew should be booked without proper LRD.
- Gradation of loco pilot (A,B,C) to be done rigorously and as per existing norms. Only 'A' category loco pilots with qualified aptitude test should be booked on high speed trains like Rajdhani/Duranto etc.
- LPs/ALPs identified in SPAD/PF overshooting cases should be kept away from line duty, till such time he is found to be suitable for line working & Psycho test cleared again and in case he is booked, intensive monitoring to be done.

### **Officers/CLIs**

- LIs should conduct ambush checking of CUG/Personal mobile phone randomly. A report to be sent to Sr.RME/RME.
- Counselling should touch emotional chord and LIs should develop trust of LPs/Motorman that his LI is a helping person and not against him.
- All the crews are Counselling regarding RHS Signals, Signals at curvature, down gradient.
- Foot plating as well as Counselling done by LIs after actual monitoring in trains.
- Verification of BPC issue at wagon depots to remove any error in calculation of Brake power percentage.
- At least 1/3<sup>rd</sup> of monitoring by LIs should be at night.
- Nominated LI should listen to the personal problems faced by crew. Welfare inspectors of Personnel department to be earmarked to visit fortnightly each lobby to address establishment related grievances.
- Ensure validity of LR of crew and the quality of monitoring.
- Complete familiarization of crew and LIs with all new designs of locomotives. Particularly for diesel converted crew.
- All Crew are counselled for Calling Out signal aspects loudly with gesture & of caution order imposed & of the next halt.
- LI should counsel their nominated crew to not write anything while on run. LPG should write logbook/ unusual report after stopping of train and mail/express driver should write only at destination.
- LIs should counsel their nominated Crew for not wasting time on WhatsApp chats while taking rest in Running room. LP/ALP should keep their mobile switched off.
- Few signals' locations are such that the visibility is affected and aspect of signal is obstructed by opposite direction train. Hence, LPs/ALPs should be counselled about these typical locations.
- Large number SPAD occur at low speed. This indicates loss of concentration due to mobile ringing, family problem, next duty plan, watching more attentively for passing trains etc. LPs/ALPs should be counselled that all these problems should be addressed only after finishing their duty and only concentrate on their respective signals during run.
- SPM Analysis to be done regularly.
- After passing Yellow Signal, LP/ALPs should be counselled not to engage any activity and only concentrate on signal aspect ahead and to call out signal aspects loudly. Do not assume the next signal is taken off.



- All the ALPS are given practical demonstration of how to Operate Emergency Brake valve
- Psychological issues are to be identified of the nominated Crew. This is to be identified by the LI and its record to be maintained.

### **Loco Pilots/Assistant Loco Pilots/Loco Pilot (Shunting)**

1. Take proper rest at home and Out station.
2. Do not carry the personal problems while coming for duty and while on duty.
3. Have proper food while coming for duty.
4. Report at lobby at correct Sign On time to avoid last minute hurry.
5. Switch off your CUG and personal mobiles while on duty.
6. Do not consume alcohol/sedative drugs before coming and while on duty as prescribed.
7. Go through the Circulars/Shed orders/Safety circulars in the lobby before proceeding for duty.
8. Go through the Caution orders and check for its correctness.
9. Carry the safety items such as detonators/tri-colour torch/flag/EFT etc, update them regularly and keep them in working condition.
10. Keep the technical knowledge updated so that any minor problems in loco/train can be attended.
11. Have proper LRD in the section. Bring it to the notice of Crew controller at least 15 days before its expiry.
12. LP/ALP having poor knowledge in road leaning and 'C' category Loco pilots should draw the yard layout and be familiar with the signals.
13. Carry spare spectacles.
14. Reach the take-over point before arrival of the train.
15. Ensure number/percentage of BMBS wagons mentioned in BPC and run the train at prescribed speed.
16. Check the related authorities pertaining to the train before starting the train.
17. Check the loco repair book for any booking and bring it to the notice of PRC/TLC.
18. Check the validity of BPC and conduct Brake continuity test wherever prescribed.
19. Start the train after getting Signal pertaining to your train and after exchanging Alright Signal with Train manager.
20. Avoid over speeding and over confidence.
21. Before starting the LE, loco brake power shall be ensured as per extant guidelines.
22. Conduct Brake feel test and Brake power test wherever as prescribed.
23. If the Signal is not visible due to any reason, treat it as it is showing its most restrictive aspect.
24. Do not give any attention to the foot-plating officials especially after passing one Yellow Signal and concentrate on stopping the train at next Signal if it is danger.
25. Do not write anything while approaching Signals.
26. Do not use mobile phones in running room while availing rest.
27. Aware that the signal visibility distance is different during day and night.
28. Four-point Agenda of counselling of ALPs.
  - Calling out signal with gesture till the train stops.
  - Keep watch on LPs action.
  - MP/Notch should be on zero.
  - Practical demo and training of operation of RS flap valve to ALPs.

29. Do not engage in casual talk and do not divert your attention. Drive train with full concentration during run.
30. Call out the signal loudly to each other indicating the Station name, Signal name and its aspect. Point your finger towards the Signal.
31. Observe the Signal and continue to call out till you pass/stop before it.
32. ALPs should be vigilant and should keep his hand on emergency/RS flap valve after passing a signal in One Yellow.
33. ALPs not to hesitate to operate emergency/RS flap valve if he feels that the loco pilot is not active/train cannot be stopped before Red Signal and operate it so as to stop the train before the Danger Signal with brakes applied.
34. Few rakes are having tendencies to give a push up from load side at the time of stopping (BLC. BTPN etc.). Hence, such trains should be stopped before adequate distance from the signal and train should be restarted again with crawling speed and stopped at appropriate location.
35. While passing signal at Yellow LPs/ALPS should be ready to stop the train at any point of time as aspect of next signal aspect might be Red. Observe the signal until passing them.
36. If any Signal visibility is obstructed by passing train or train stabled at adjacent line, then proceed very cautiously so that train can be stopped at any moment.
37. Avoid cyclic (repeated) braking to control the train.
38. Stop the train only with pneumatic brakes. Do not use Rheostatic/dynamic braking.
39. Do not divert your attention after passing a Signal in Single Yellow and also approaching Red Signal.
40. Proper functioning of RS valve is to be checked at the time of taking over charge of the Loco by both LPs and ALPs. All LPs are advised to check the brake application and release before starting the train.
41. LP/ALP should not start packing his belongings before reaching the terminal station/relieving point.
42. Do not isolate VCD/ Alerter unless it is defective and bring the same to notice of PRC.
43. Be stress free. Practice yoga/meditation and keep healthy mind.



(Deepak Tripathi)  
CME