

TOC sector reports and responses

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Prepared by	S Beevor	Date of Version	16/03/2010
Checked by	P Shah	Final Version	1.2

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40674 Defective warning horns in snowy weather

Further to a previous report (40078), additional concern has been raised regarding warning horns on class 158 and 170 trains in Scotland becoming defective during snowy conditions.

The reporter has highlighted that these horns become congested with snow during flurries and staff cannot sound them when needed. According to the reporter this is as a result of the sleeve used to cover the horns becoming ineffective when trains drive into flurries and also possibly because of their poor positioning. They are concerned that it only takes a small amount of snowy weather to render the warning horn defective.

Normal procedure is for a driver to alert the signaller that their horn has become defective and subsequently trains must travel at 20mph which, the reporter states, is not ideal when the next destination is many miles away. The reporter believes that a defective horn could lead to difficulties warning track workers of an approaching train.

As a short-term measure, the reporter suggests that a heavier sleeve be used to cover the warning horn. Longer-term, the reporter would like the warning horn to be repositioned, to prevent it becoming blocked with snow.

Could First ScotRail look into this issue and take these suggestions on board?

Response from First ScotRail

First ScotRail have investigated this particular problem which is currently mitigated by fitting a sleeve over the horn to prevent snow ingress. Our engineers have reviewed options considering whether the horn could be re-located but this would involve intrusive modifications.

The option favoured would be to fit trace heating which involves a low voltage supply to the horn box and this could be retrofitted to existing train horns. A feasibility study will be carried out on each unit type, over the coming months and a cost benefit analysis will be carried out.

October 2009 Update

We have undertaken a review of horn failures due to freezing weather.

In the event of a partial/complete horn failure safety is not compromised as the criteria for continuing to operate a train in service is given in the *Rule Book* and SOM303 provides adequate mitigation for continuing to work in service with a defective horn.

The number of instances, consequential delays and cancellations were reviewed and it was determined that the level of incidents that would be saved would not justify the costs for modifying the units.

The existing sock arrangement is considered adequate as it does provide protection from the elements and driving snow while not diminishing the sound level of the horns.

Based on the cost benefits analysis and the safety mitigation that is in place as per the *Rule Book* and SOM303 it has been recommended that a fleet campaign change is not undertaken at this time.

Instead this modification should be applied during the future overhaul of the horns undertaken at C6.

40759 Various concerns about subcontractor practices

A reporter has expressed concern regarding various safety issues across Southeastern stations.

The primary concern is that one COSS has been supervising two platforms – with workers across both of them. The reporter goes on to list other examples of unsafe working practices being carried out such as:

- workers taking scaffolding down from under a footbridge with no protection (should a T3 have been taken here?);
- a method statement affirming that the COSS should keep everybody on the inner side of the yellow line, away from the platform edge, however scaffolding towers are being put up on the other side of the line close to the platform edge; and
- the COSS being asked to undertake other duties, leaving workers unsupervised on scaffolding towers.

The reporter believes that independent monitoring and unannounced checks of these station refurbishment projects are no longer being undertaken by someone impartial. There is a concern that a lack of independent auditing at such sites could increase the likelihood of lapses in safety, which could generate the potential for incidents or accidents.

For the subcontractor:

Would the subcontractor look at the possibility of re-assessing the worksites across the south east, to ensure that there is a COSS for each work group, method statements are being adhered to, and that the work is being conducted in the safest possible manner?

For Southeastern:

The reporter suggests cross-checking of the subcontractor's method statements, together with unannounced site visits to ensure proper procedure is being followed.

Response from Southeastern

Southeastern would like to thank the reporter for raising these concerns.

Southeastern decided to use this information positively and called for a meeting between the facility manager, contract manager and a senior manager from the subcontractor. The primary purpose of this meeting was to discuss the planning and monitoring of contractor work.

As a result a range of recommendations and actions were agreed to address the concerns raised by the reporter. They included:

- All work shall be carried out as per the approved method statement by competent persons.
- A robust programme of monitoring by the contract manager is implemented.
- Southeastern will implement a schedule of monitoring of works.
- All findings to be included for discussion in the joint monthly performance review meetings.

Southeastern consider that these recommendations will ensure that all contractors work in accordance with the safe systems of work agreed and do not introduce any level of risk.

40795 Back-to-back radio use in depots causes braking delay

The use of back-to-back radios for propelling vehicles into a dead end road at Laira depot at Plymouth concerns one reporter. This is a common concern at the depot and has been raised through internal channels.

Drivers and shunters communicate during vehicle movements using a method that involves a shunter holding down a button on the radio to emit a beeping sound; when the beeping stops, the driver must apply the brakes. For the reporter, there are question marks over both the reliability of the signal, and the time delay between the beeping stopping and the train braking. When the beeping stops, the set can move as much as half a vehicle's length before the driver applies the brakes.

This method of working was introduced after HST class 43 power cars were refurbished. The sliding windows were sealed up, and the sliding doors were replaced with ones that opened outwards instead. After the refurbishment, drivers were no longer able to retain a line of sight with the shunter by leaning out of the window. This effectively imported a new safety risk which was meant to be controlled for by the use of the back-to-back radios. But the reporter believes there is a better method for controlling the risk of the train being accidentally propelled into the stop blocks.

A door safety bar has been developed for the cab, risk assessed, and is currently used by maintenance staff. The reporter views this as a safer method of working because it allows drivers to maintain line of sight with shunters. The bar clamps across door openings and prevents anyone from falling out.

The reporter and his colleagues have been unable to obtain any clarification on why this already tested device cannot be adopted at the depot. Could First Great Western please clarify the following:

- In practice, a set can travel considerable distance before the driver applies the brakes when the beeping stops. Has this particular aspect been included in any risk assessment?
- Propelling vehicles whilst maintaining line of sight is preferred from a safety point of view by drivers and shunters. Could the current method of working be reviewed with this in mind?
- Could some explanation be provided as to why the safety bars can't be used at the depot when they are used on the maintenance side?

Response from First Great Western

First Great Western (FGW) is currently reviewing operating procedures at all engineering depots.

The review will establish the adequacy of systems for:

- the safe control movements (depot operating instructions) through task based risk assessments;

- depot protection systems; and
- management of interfaces.

A pilot review and risk assessments at St Philips Marsh have been completed. This depot was chosen for the pilot as it is representative of most operational scenarios at FGW depots.

The review included H&S reps from drivers and shunters teams, depot team leaders, depot technicians and operations competence managers.

This work is now being rolled out to all other FGW engineering depots as well as other stabling locations. It is intended to complete all risk assessments and implement amended depot operating instructions by early 2010. This project will review the current method of working at Laira and other potentially relevant engineering depots with the reporter's comments in mind.

The function of the tone is to act as a 'confidence tone' and thus to (a) ensure the a shunting movement is brought to a stop if the radio connection (indicated by the tone), is lost e.g. should the person controlling the movement release the button for any reason such as dropping the radio, and (b), while the tone is received it confirms that the last verbal instruction continues to apply.

The tone is not used to control the movement, rather the shunter should give verbal instructions to the driver when controlling the movement e.g. move forward, slow down, stop. The verbal instruction removes any delay between the tone not sounding and the driver realising they must stop the train. The lack of a tone being transmitted must not be used as the normal method for stopping trains.

Shunting controlled by back-to-back radios continues be considered the safest method of work for controlling these movements

If the reporter wishes to seek further clarity regarding the use of radios and the radio confidence tone they should contact their local competence manager.

40858 Narrow aisles on refurbished 158 units

A reporter is concerned about the narrow aisles on the refurbished 158 units being operated by East Midlands Trains. The reporter comments that this refurbishment includes fitting new seats. The new seat bases are wider and the backs higher than the original fittings and has resulted in narrower aisles throughout the train on these units. Staff have to walk sideways down the aisles, especially when carrying revenue equipment and the reporter believes this is putting extra pressure on joints such as hips, knees and ankles.

The reporter would like to know if a full risk assessment has been carried out on the refurbishment of the 158 units, particularly in relation to the size of the seats and aisle space.

Response from East Midlands Trains

The class 158 vehicle interior layouts are being altered to increase the passenger capacity as required by a commitment to the Department for Transport in the franchise agreement.

The provision of a new seat in a unit requires it to meet latest *Group Standards* for crashworthiness, etc. which necessitates using an approved seat with components such as movable arm rests and high backs.

The seat fixings need to pick up the existing fixing rail in the unit floor. There are a limited number of approved seat suppliers for units and Grammer were selected.

A risk assessment was undertaken on the new seat layout with regard to the passenger loading, seating capacity, evacuation, aisle width, security and crashworthiness.

The minimum aisle width occurs between the armrest and is 396mm, elsewhere the nominal width is increased to 496mm. A comparison review was conducted against assessment of the class 220 DEMU vehicles which has a central aisle nominal dimension of 400mm. The 220 units have been in service for over 6 years with this seat layout without any known issues.

40851 State of car park at Bolton station

The general state of the car park at Bolton station, and a pile of tyres that appear to have been dumped, concern a visitor to the station. The tyres in particular are an eyesore, and could attract more fly-tipping, potentially posing a fire hazard in close proximity to the running line. There is some loose wood there as well, and the untidiness may create the wrong impression for passengers using the station. It may even encourage anti-social behaviour.

It is suggested that the problem be 'nipped in the bud' and the car park be subjected to a good tidy up.

Please comment.

Response from Northern Rail

When the report was received, the tyres and wood which had been fly tipped in the car park had already been reported to our facilities maintenance contractor to arrange removal. Unfortunately they did not accord any priority to this and so they were chased up when the report was received, and the offending items were cleared on 19 October 2009.

40867 Shunting with passengers

A reporter has witnessed an event which they suspect contravenes the *Rule Book* and is seeking clarification. The reporter boarded a train at a station in Shropshire, which was due to travel in a northerly direction. It was discovered that the train had a fault and all passengers were detrained and asked to board a train at another platform. However, the reporter was aware that trains from this platform only travel south. Once all passengers were on board the train carried out a signalled shunt, which involved exiting the station, crossing over on a different line and heading back into the station on a different line so the train could carry on its journey northwards.

The reporter states that they have always been under the impression that no shunts are supposed to take place with passengers on board, no matter what train is involved and what type of shunting manoeuvre it is. Could RSSB clarify whether the manoeuvre described complies with the *Rule Book*?

Response from RSSB

There is no prohibition on carrying out shunting movements of loaded passenger vehicles, which can be necessary, for example, when one portion of a locomotive-hauled passenger train is attached to another, although there are at the present time very few cases where this still occurs regularly.

What the reporter probably has in mind is the general signalling regulation 9.2 which deals with the movement of any loaded passenger vehicle over facing points. This is only allowed if:

- the facing points concerned are locked by a facing point lock, and also by track circuits or locking bars; or
- the points have been secured for the movement (this means that they have been clipped and scotched).

The only exception to these requirements is when the signaller has made sure himself that the points are fitting correctly (which means he must be able to see the actual points concerned himself), a signal is cleared for the movement, and the driver has been instructed to make the movement at no more than five mph.

Only Network Rail would be able to comment on such details as the provision or otherwise at a particular location of facing point locks, track circuits or signals, or indeed whether a signaller can in practice observe the points concerned. Of course to do so, it would be necessary to identify the station and directions of travel concerned, which may pose some difficulties in regard to preserving anonymity. Unfortunately, it would not be possible to give the reporter any reassurance that what was observed was a correct method of working without the location being identified.