

**Oliver Stewart**  
**RAIB Recommendation Handling Manager**



29 November 2024

Mr Andy Lewis  
Deputy Chief Inspector of Rail Accidents

Dear Andy,

**RAIB Report: Derailment of a passenger train at Carmont, Aberdeenshire on 12 August 2020**

I write to provide an update<sup>1</sup> on the action taken in respect of recommendation 14 addressed to ORR in the above report, published on 10 March 2022.

The annex to this letter provides details of actions taken in response to the recommendation and the status decided by ORR. The status of recommendation 14 is **'Closed'**.

We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided has become inaccurate, in which case I will write to you again.

We will publish this response on the ORR website.

Yours sincerely,

Oliver Stewart

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<sup>1</sup> In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

## Recommendation 14

*The intent of the recommendation is to reduce the derailment risk of HST power cars caused by running into obstacles on the track.*

Owners of HST power cars should:

- a) investigate the feasibility of enhancing the strength of the bogie mounted lifeguards to a level as close to modern standards as reasonably practicable
- b) if appropriate, develop a timebound programme for carrying out modifications identified in a).

## ORR decision

1. Work to address this recommendation has been coordinated by RSSB through the Carmont Recommendations Steering Group (CSRG). Angel Trains conducted an engineering review of the original design of lifeguard fitted to HST power cars. The design has not been modified since the original build of the power cars and as the design of the HST power car pre-dates railway group standards, the lifeguard design would not have been subject to assessment against the modern requirements for lifeguards.
2. A lifeguard that meets the requirements of GM/RT2100 Issue 6.1 (Rail Vehicle Structures and Passive Safety) was designed by making minor changes to the profile of the steel blade and the repositioning of the two securing bolts on the existing lifeguard. No cost benefit analysis was considered necessary by the CRSG as the modification was minor in nature and did not involve significant cost.
3. Owners of all HST power cars operating in the UK have agreed to make the modification, with the exception of DATS Ltd. CSRG set out the commitment made by the owners of the majority of vehicles. The individual owners confirmed their approach to fitment. Separately, Rail Adventure and Locomotive Services Ltd, who provide power cars for charter services, have confirmed fitment directly to ORR. DATS is preparing a justification for not making the change based on distance run, speed of operation, number of people on board and the expected life of the vehicles. We will pass that information to RAIB once we have received it.
4. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, owners of HST power cars have:
  - taken the recommendation into consideration; and
  - have taken action to close it.

**Status: Closed.**

## Previously reported to RAIB












5. On 9 March 2023 ORR reported the following:

Work to address this recommendation is being coordinated by the RSSB Carmont Recommendations Steering Group. A revised design of lifeguard to be fitted to HST bogies has been finalised following a successful trial of a prototype fitted to a ScotRail HST. Material supply issues have caused a delay, but the programme to fit the new lifeguards to the ScotRail HST fleet is expected to be completed by June 2023. We have asked RSSB to provide time-bound plans for lifeguard fitment to HST fleets other than those operated by ScotRail, including charter operators.

RSSB is assessing the case for changes to standards and guidance on lifeguards in light of the recommendation.

## Update

6. On 20 October 2023 RSSB provided the following closure statement and supporting documents:

				
RSSB Response to Carmont Recommenc	AES2495R02 issue 3.pdf	Attestation Statement 0393-22.pdf	CR_MP2782 Issue 1B Draft.pdf	CR-C0-2305630 Guard Iron Installior
				
CR-C0-2305631 Guard Iron Assembly.	CR-C0-2305632 Guard Iron Assembly.	CR-C0-2305633 Guard Iron Bracket W	CR-C0-2305634 Guard Iron Bracket W	CR-C0-2305635 Bracket Details.pdf
				
L-A0-7681 Brackets for Disc Brake and Gu				

7. On 2 November 2023 RSSB provided the following update:

*Please find below an update on your query regarding the remaining active HST power cars and the lifeguard fitment plans.*

*I hope this answers any potential questions during your review of the Rec response previously supplied.*

### **GWR**

*Material due on 27/11/23.*

*Fitment will begin immediately and, (assuming material is delivered to time), should be complete within 3 weeks. Nominally 20/12/23.*

### **Porterbrook**

*Report a slip to the material delivery dates, now due mid-January rather than W/C 11th December.*

*Colas Rail have confirmed that they will be fitting to their power cars and will also be fitting on behalf of Network Rail, and expect to have all active power cars fitted by 29th February 2024*

*LSL are the only heritage operator to have joined our order with Tecforce, they have purchased 1 power car worth of lifeguards.*

8. On 9 April 2024 RSSB provided the following update:

*Following on from yesterday's Carmont Recommendations Steering Group (CRSG), I can update on the following HST operators/owners lifeguard installation plans.*

- *Scotrail: Fleet fitted.*
- *First Rail Holdings: Fleet fitted.*
- *GWR: Fleet fitted.*
- *Cross Country: Fleet fitted.*
- *Colas (Porterbrook): 8 of 10 fitted, remaining 2 on overhaul and will be equipped during that event.*
- *125 group: Material procured. Has stated that none of the Fleet will be in operation on the mainline unless lifeguards are fitted, no plan has been received in this regard.*

*We have no response from those listed below and have requested that ORR pursue this, which has been agreed at several CRSG with Giles.*

- *Locomotive Services Ltd*
- *DATS Ltd*
- *Rail Adventure*

*On this basis, following on from the original closure statement and supporting information, I would suggest that the stakeholders have now undertaken what is required to be able to close Recommendation 14.*

9. On 29 May 2024 RSSB provided the following update:

*I believe that CRSG has done as much as possible to engage with HST users, and I have previously requested that the ORR takes up the communication with those charter groups etc., remaining.*

*Please can you confirm that this Rec can now move to closure as the mainline operational fleets have now been equipped, or a timebound plan has been provided.*

10. On 16 April 2024 First Rail Holding provided the following response:

*All the First Rail Holding class 43's which are in operation by GWR have had the modified lifeguard installed.*

11. On 17 April 2024 Angel Trains provided the following response:

*I can confirm from Angel Trains perspective that lifeguards have been fitted to the following fleets.*

- *Scotrail HSTs*
- *XC HSTs – noting these units are now off lease*
- *GWR and First Rail Holdings HSTs – Angel Trains supplied the material for all the HSTs operating by GWR*

12. On 24 April 2024 125 Group provided the following response:

*125 Group are now in possession of 5 sets of new design lifeguards for fitment to our power cars as time and resource permits.*

13. On 25 April 2024 125 Group provided the following further response:

*Being a volunteer organisation and not wanting to tie ourselves in knots, but also wishing to be compliant, our intention is to start a rolling programme of fitment this year with any power cars likely to see mainline trips fitted ASAP - we're still working through our CET fitment programme but realistically have capacity to complete fitment during August; we have a hire committed early August for which the power cars are likely to be un-modified but any subsequent outings should be compliant (the next after is end of August).*

*Power cars likely to feature on passenger outings this year are 43089 and 43159.*

*I can keep you informed of progress as we go.*

14. On 8 August 2024 125 Group provided the following update:

*Just to keep you informed, 43089 and 43159 have both been fitted with the new lifeguards.*

*The remaining power cars in our fleet at the moment are:*

*43025*

*43044*

*43048*

*Which will be fitted prior to any trips on the mainline or as time allows – I will write back to you when we complete any further fitments.*

15. On 26 November 2024 125 Group provided the following update:

*I can now confirm 43025 is also fitted too.*

16. On 26 April 2024 Network Rail provided the following response:

*The fitment plan for the three NR class 43 power cars are;*

*43062 – fitment week 5*

*43013 – fitment week 6*

*43014 – fitment week 13 (project date that the loco will be released from its current F exam overhaul)*

17. On 3 May 2024 Locomotive Services Ltd provided the following response:

*LS Group are aware of the recommendations emerging from the Carmont RAIB report and have placed a joint order for replacement lifeguards to a new design produced by Angel Trains for fitment to their own fleet of HST power cars. To date, these have not been delivered as we believe there is an issue whereby the manufacturer is unable to construct the lifeguards to comply with the drawing. I am told that Angel are currently working through this problem and that we will receive the new lifeguards soon.*

18. On 22 November 2024 Locomotive Services Ltd provided the following update:

*LS Group is now in possession of all materials required to carry out fitment of the compliant lifeguards. Two power cars have been fitted to date and we expect that fitment to all in-traffic vehicles will be completed by the start of the 2025 operating programme.*

19. On 8 May 2024 RailAdventure provided the following response:

*RailAdventure are aware of the Carmont recommendations for Class 43 lifeguards and is planning to fit the new lifeguard design that other operators are going to, or have already, fitted. At present, we are procuring suppliers to carry out the fitment, however it is anticipated that the operational fleet of Class 43s in service for RailAdventure will be fitted with the new design within the next 12 months.*

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### ORR decision

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2. RSSB is assessing the case for changes to standards and guidance on lifeguards in light of the recommendation.
3. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, RSSB has:
  - taken the recommendation into consideration; and
  - is taking action to implement it

**Status: Open**

### Information in support of ORR decision

4. On 14 December 2022 RSSB provided the following update:  
*First article installations now completed, and design successfully revised as a result, quotation for material now received, orders to be placed Dec 22/Jan 23*
5. On 15 February 2023 RSSB provided the following update:  
*A new lifeguard, meeting the proof load requirements of GMRT2100, has been designed and trial fits have been undertaken. Material is now on order and fitting is expected to be completed on the Scotrail HST fleet by August 2023.*