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13 February 2020

Mr Andrew Hall Deputy Chief Inspector of Rail Accidents Cullen House Berkshire Copse Rd Aldershot Hampshire GU11 2HP

Dear Andrew,

RAIB Report: Runaway of a road-rail vehicle at Bradford Interchange on 8 June 2018

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 14 March 2019.

The annex to this letter provides details in respect of the recommendations. The status of recommendation 1 is **'implementation on going'**; and the status of recommendations 2 and 3 is **'implemented'**.

We will publish this response on the ORR website on 14 February 2020.

Yours sincerely,

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Oliver Stewart

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

Initial consideration by ORR

1. All 3 recommendations were addressed to ORR when the report was published on 14 March 2019.

2. After considering the recommendations ORR passed recommendation 1 to Network Rail and recommendations 2 & 3 to Readypower asking them to consider and where appropriate act upon them and advise ORR of its conclusions. The consideration given to each recommendation is included below.

3. ORR also brought recommendation 1 to the attention of Network Rail M&EE group, other UK infrastructure owners (TfL, HS1, HRA, Northern Ireland Railways) and Neil Halliday at RSSB as it was concluded that that there are equally important lessons for them. ORR did not ask these organisations to provide a reply. All three recommendation were brought to the attention of the Rail Plant Association.

4. This annex identifies the correspondence with end implementers on which ORR's decision has been based.

Recommendation 1

The intent of this recommendation is for machine operators to maintain sufficient levels of competence.

Network Rail should review current standards and guidance related to managing the competence of machine operators working on its infrastructure and, taking into account guidance from the M&EE group's codes of practice, provide a clear framework for the competence management of machine operators (paragraph 122). The review should encompass the following elements:

- i. Initial training
- ii. Monitoring systems to check staff compliance
- iii. Ongoing machine experience
- iv. Continuous development
- v. Knowledge re-assessment
- vi. Response to involvement in incidents

ORR decision

5. Network Rail have a plan in place to review the standard and Code of Practice in relation to plant operator competence. Following Network Rail's initial response, we have since been notified that the work is expected to be completed at the end of June 2020.

6. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

• taken the recommendation into consideration; and

• is taking action to implement it by 30 June 2020.

Status: Implementation ongoing. ORR will advise RAIB when actions to address this recommendation have been completed.

Information in support of ORR decision

7. On 17 July 2019 Network Rail provided the following initial response:

Action Plan

- 1. STE/Technical Authority Plant team with support from Network Rail Training to review and update Plant Specific Competence Standard CTM025 to define how these will be applied to specific OTP Operator competence regimes.
- 2. M&EE Networking Group in consultation with Network Rail to update their Code of Practice relating to OTP Operator Competence

The above action plan will achieve the following:

Revised competence standard that clearly defines the route to competence, competence training and award and the process for ongoing review and assessment of OTP Operator competence.

The recommendation will be closed once publication of revised competence standards has taken place and briefing to all internal and external training providers and Plant Supply chain. Target date of December 2019.and external training providers and Plant Supply chain.

Completion Date: 28/02/2020 to allow for closure to be submitted.

Recommendation 2

The intent of this recommendation is for Readypower to implement suitable arrangements for ensuring that staff undertake safety critical operations in an acceptable manner.

Readypower should review and improve its existing arrangements for the management of staff that are engaged in safety critical activities involving road-rail vehicles, including machine operators and those involved in the maintenance and inspection (paragraphs 121a.ii and 121b.ii). This should consider the arrangements for ensuring that staff are sufficiently competent, including, among other elements, recruitment, experience, continuous development and knowledge reassessment. It should also establish adequate monitoring systems to check that staff are correctly applying the operating, inspection and maintenance procedures.

Note: this recommendation may also apply to other plant operators.

ORR decision

8. Readypower have reviewed the arrangements they have in place for staff carrying out safety critical activities relating to RRVs. A number of changes have been made to recruitment, staff development and competence assessment.

9. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Readypower has:

- taken the recommendation into consideration; and
- has taken action to implement it

Status: Implemented.

Information in support of ORR decision

10. We met with Readypower in July 2019 and they submitted a response in October. Readypower provided the following updated initial response dated 4 December 2019 after our feedback on the version of the document submitted in October:

Readypower has undertaken a complete and detailed review of its arrangements for managing staff (fitters and OTP operators). In recruitment, we allowed a manager to vouch for the operator having worked with him in the past, noting he was a competent machine operator. At that time, our documented procedure, HR-P-01, stated we must carry out a check of operators' abilities by asking them to demonstrate their operational skills. This did not take place, and although our documented procedure and process were both above and beyond the regular checks operators get in the industry (it was recognised that workers holding Sentinel cards in the industry would just get a 'card check' before recruiting), our procedure didn't include manager referrals as an avenue to recruit.

On sites, the machine operator, who described the correct on-tracking process in his interviews with us and RAIB, had developed a habit of on-tracking incorrectly and in such a manner that could cause a potential run away.

Actions taken:

• We believe that the National competence scheme, Sentinel, shouldn't be relied upon as the only workforce competence check. We have amended our documented procedure to ensure at least one of two options are conducted:

 A Readypower manager to vouch for a new machine operator.
The operator comes to our depot and demonstrates to a trainer their ability to on/off track an RRV safely using the correct process that prevents a risk of freewheeling.

• Both recruitment checks are above the industry norm, whereby Sentinel cards are the only competence check offered by some companies. Our

updated procedure ensures at least one of the 2 items detailed above are conducted at recruitment.

- To help with our monitoring improvements, we promoted our training manager, Adam Lovewell, to Head of Training. With support from his new trainer, part of his new duties includes undertaking weekly checks of 'logbook pre-use inspections'. We now have a substantial database of those activities and it has prompted a '3 strikes and out' process for machine operators. We've already addressed several machine operators who were completing their logbooks incorrectly. These machine operators were contacted in writing to explain our findings incorrectly recording his pre-use logbook checks, and we took his competence down.
- Our Heads of Operations and Head of Training have planned regular meetings to evaluate ongoing machine operator competences in line with needs. This has allowed us to focus our training, reduce 'skill fade' and improve performance. To ensure fitters are captured, monitoring takes place and is recorded on fitter activities. Including random sampling of their completed work.
- Our mentoring process has also improved. Prior to the incident, we carried out mentoring by sending the machine operator out with other experienced machine operators or by providing low risk shifts to help them build confidence. Since the incident, Our Head of Training has made further improvements by actioning senior operational managers in mentoring machine operators on live sites.
- On site monitoring was previously done by safety advisors or managers visiting sites. This allowed us to sample around 5 sites per weekend. This is massively improved. We have appointed a new Head of POS, Callum Horn, who has updated our POS site documentation and introduced a 'POS Representative's site monitoring diary' which must be completed by every POS Rep for every shift. Specific criteria have been added to record on-off tracking activities. This change alone means we now have over 50 monitoring records per week which we can review and take meaningful KPI data from.
- We'd like to note that we were privileged last month to be asked by Network Rail to present at their Westwood Auditorium in Coventry, September 2019. We took the opportunity to discuss how we undertake POS duties, and made a point of discussing the improvements made and lessons learnt since the incident.
- We have invested in our Compliance department. A new recruited safety advisor is now helping us have greater safety presence on sites and in our depots. The site safety inspection forms have been revised to focus on monitoring machine operators and plant activities. We've also introduced

more themed safety tours in our depots where employees from all departments are invited to contribute to the tour.

- To further enhance our plant maintenance, we promoted Daryl Sim to Head of Engineering and backfilled his position with a new engineering manager. It's a committed change allowing Daryl to focus on enhancing engineering compliance without operational distractions. This was encouraged by comments made by RAIB in that they believed Readypower would benefit from a senior person focused on Engineering Compliance. He is supported by a very experienced fitter, Peter Morris, who was appointed as our qualified RPA Assessor. Peter manages fitter competence for us and played a major part in assisting RAIB during their investigation.
- Following the initial investigation, it was noted though our fitters were aware of the correct brake adjustment process, some did not follow the process correctly on this machine. This triggered the reassessment program detailed above. Unlike Sentinel training/assessment material, the RPA Assessment is an 82-page portfolio handwritten by the fitter over a period of several days with our qualified Assessor.
- Our improved fitter monitoring regime have become a well embedded process. Daryl and Peter's fitter monitoring activities which are recorded and checked for trends, have proved to be a valuable aid.
 - This highlighted one of our time-served experienced fitters had completed and passed an examination on an attachment. It was discovered this examination had been performed badly. After an investigation the fitter underwent disciplinary action. Though he left the company during the process, it sent out a strong message that fitters not conducting their duties properly will be dealt with severely.
 - To date we have over 150 fitter monitoring events recorded and can advise this is has had a positive impact on our maintenance culture. At present these events are unannounced events. Our proposal is to improve this further by having calendar planned monitoring events each individual fitter starting January 2020.
- To provide ongoing development for our maintenance team, our more experienced fitters have resat their LOLER Examiner course with an industry recognised training company, 'Loadpin Ltd'. The CITB Apprenticeship team at Stafford College also nominated 2 of our apprentices for 'Apprentice of the Year 2019'. Both have enrolled for their final 3rd year. We also enrolled a new trainee fitter on a 3-year apprenticeship starting in October 2019.

Recommendation 3

The intent is for Readypower's road-rail vehicles to be maintained adequately.

Readypower should review and improve its processes for providing staff that are engaged in the maintenance and inspection of road-rail vehicles with clear and accurate instructions, and training on how to maintain all variants of vehicles. This process should include arrangements for ensuring that Readypower maintenance checklists are clearly linked to OEM instructions and staff are made aware of, and suitably trained in, revisions made to the OEM instructions

ORR decision

11. Readypower have reviewed the arrangements they have in place for staff carrying out maintenance and inspection of RRVs and taken steps to improve the competence of fitters and making sure they have the most up to date information.

12. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Readypower has:

- taken the recommendation into consideration; and
- has taken action to implement it

Status: Implemented.

Information in support of ORR decision

13. Readypower provided the following updated initial response dated 4 December 2019:

It was noted by RAIB during the investigation that the maintenance plans for the Genie MEWPs were numerous and due to variations of upgrades via different manufacturers, difficult to navigate. We had tried to fit these numerous maintenance plans into one form. Unintentionally, the instructions for some activities were therefore open to misinterpretation.

Actions taken:

- Prior to the incident, all inspection forms were undergoing a review and change because it was noted that some needed clarity. The review of the Genie Z60 was completed days after the incident and a new form implemented.
- The appointment of Daryl Sim as Head of Engineering has helped improve maintenance plans reviews. This activity is now led by Daryl accompanied by the Group Compliance Director, Darren Matthews and RPA Assessor, Peter Morris. Two maintenance plan reviews have been conducted since the incident and we have almost completed a third which will enhance the inspection forms further by being fleet number specific and not just make/model specific. This will remove the risk of having machines upgraded in future by different manufacturers. The planned completion date for this review is 31st January 2020.

- We have invested in software technologies to improve the fitter inspection regime even further. At present, we are 2-3 months in with implementation of a system for plant hire called MCS. We're currently working with MCS to build an extension so the system can be utilised by the maintenance teams as a tool for recording inspections. Our aim is to ensure no inspection activity can be overlooked or missed, and no plant can be booked on hire if it has not been inspected and signed off as fit for purpose.
- We have embedded a risk-based approach to training of fitters to ensure training provided is proportionate to the risk. Weekly toolbox talks (TBTs) with a Q&A section specific to the engineering or maintenance regimes are now established. All fitters engaged in TBTs must write an answer to each question to demonstrate their understanding before signing and dating it for our records. We carried this out in 2018 when AJH Engineering (OTP builder and publisher of the maintenance plan for the direct rail wheel brake system) released their direct rail wheel brake manual. The update was quickly drafted after it was recognised by the RAIB their maintenance plan brake adjusting instruction was incorrect. The RAIB witnessed us carrying out this TBT exercise with our fitters and voiced their approval.
 - Therefore, frequent / routine safety info is cascaded using documented briefings and toolbox talks.
 - However, where additional risk is identified, training events may be used which will be proportionate to the risk. For example:
 - To help ensure LOLER & PUWER are met, we currently have a program running with an external provider to refresh fitters in their statutory examination duties.
 - Also, where we now utilise 2 yards as maintenance facilities, we have appointed two fitters as supervisors, put them through an external SMSTS (supervisors) course with CITS, and they now help ensure daily monitoring and supervision is undertaken.
- It was also identified by the RAIB that manufacturers and converters who publish maintenance plans do not notify their customers of any changes (Learning point 4 ii) advises modifiers of maintenance plans to notify plant owners of the changes). This in part led to us not having the latest copy of the Genie Z60 maintenance plan. To rectify this, our maintenance plan review process requires us to write to each manual publisher to ask for their latest copy. This is recorded, and any changes will prompt a TBT as detailed above. The changes will then lead to updates of inspection forms for each machine, before the new forms are issued to fitters in a controlled manner.
- To help us engage with our maintenance teams more frequently as part of their ongoing development, we have been delivering general TBTs on a weekly basis and now have a substantial portfolio of evidence for fitters to show continual improvements in their competence.