

Rugby Model Engineering Society Ltd

Safety Management Manual

APPENDIX 1: Safety Concern Register

A record of Safety Concern forms will be kept here and the original copies filed behind this page.

Ref No	Subject	Originator	Date Open	Status
97/001	Passenger carriages on 7¼" Gauge System	D R Dixon		Closed
97/002	Duties of Level Crossing Keepers	R Newbold		Closed
00/003	"Homemade" Circular Saw Bench	D R Dixon		Closed
00/004	Passenger carriages on 7¼" Gauge System	D R Dixon		Closed
00/005	7¼" Gauge System Pointsman -Flags	D R Dixon		Closed
00/006	7¼" Gauge System Cutting Bridges	T Mays		Closed
00/007	Block paving area	T Mays		Closed
00/008	Duties of Guards	T Mays		Closed
00/009	Restricting visitor access	T Mays		Closed
03/010	Restricting visitor access	D R Dixon		Closed
03/011	Manhole cover	D R Dixon		Closed
01/2016	Station Control – Conflict of duties	R M Berry	01/01/16	Closed
02/2016	New Build Guard's Coach – Seat Height	E J Parrott	20/02/16	Closed
03/2016	New Build Guard's Coach - Access	H L Parrott	14/02/16	Closed
04/2016	Signal Positioning	J Startin	27/03/16	Closed
05/2016	Signal Treadle Switches	J Startin	27/03/16	Closed
06/2016	Clubhouse toilet Hot Water Supply	R M Berry	29/03/16	Closed
07/2016	Passenger Stock Couplings	E J Parrott	27/06/16	Closed
08/2016	Passenger Train Operations and General Station Area Safety	R M Berry	18/12/16	Closed
01/2018	Flagging at Rear of Trains	G R Bicknell	20/05/2018	Closed
02/2018	Lone Working by Drivers	D R Dixon	26/10/2018	Closed
03/2018	Train Braking and Guard Facilities on Raised Track System	D R Dixon	26/10/2018	Monitor
04/2018	Double Heading on Raised Track System	D R Dixon	26/10/2018	Closed
05/2018	Anti-Tipping Facilities on Passenger Carriages	D R Dixon	26/10/2018	Closed
01/2019	Prevention of runaway stock affecting running lines	R M Berry	29/04/2019	Closed
01/2020	Application of COVID regulations	E J Parrott	09/04/2020	Closed

Rugby Model Engineering Society Ltd <h2 style="text-align: center; margin: 0;">SAFETY CONCERN</h2>	Ref. No: <h3 style="text-align: center; margin: 0;">01/2020</h3> <p style="text-align: right; font-size: small;">(Safety Officer to Allocate)</p>
Equipment/Operation Affected: Lawn mowers and lone working	
Perceived Problem: (Continue overleaf if required) During the Covid-19 pandemic we are all told to STAY AT HOME! The committee is asking for volunteers to break the Government imposed rules and go to the club and cut the grass, fearing it will become "unmanageable" if left, totally at odds with the Government advice to save lives. I am concerned members will be tempted to attend the club on their own and attempt to cut the grass and risk accident. We have powerful equipment and challenging terrain, there is a risk of the ride on mower being overturned and trapping or injuring someone. There is a risk someone will be tempted to use the tractor and could cause some very serious injury to themselves or an innocent party. There is a risk of fire from petrol fuel. If a person is on site on their own they are at risk of injury or death from all of the above, to themselves or other persons, placing cases in the hands of the NHS which it does not require right now. The government advice is very clear, stay at home, do not go out!	
Originator's Suggestions for Improvement: (Continue overleaf if required) Stay at home, sod the grass, we'll deal with it when we're allowed to.	
Originator Edward Parrott	Date 09/04/2020
Committee's Response: (Continue overleaf if required) The request for volunteers was to keep the site in a manageable state and in keeping with Government guidelines of social distancing of no less than 2 meters apart from each other with a minimum of 2 and no more than 3 people on site while any mowing work is carried out to ensure no lone working takes place. The site is locked off from the public and the activity is classed as work that cannot be done from home. It could also be classed as a form of exercise. If, and when it becomes necessary to carry out this work, a rota would be set up to ensure people numbers are adhered to. Advice was also sought from a local policeman who confirmed that if the guidance was followed it would be reasonable to carry out, the same as people are encouraged to look after allotments etc. Continued on next page.	
Signed Howard Brewer, Secretary	Date 14/04/2020

Received, logged & acknowledged	Date: 09/04/2020	RMB Safety Officer
Passed to Committee	Date: 11/04/2020	RMB Safety Officer
Committee Response Received	Date: 14/04/2020	RMB Safety Officer
Originator Advised	Date: 15/04/2020	RMB Safety Officer

Originator's Continuation:

Committee Continuation:

Our lease from the Council also states in Clause 4 that we have to do the following: -

1. To cut the grass growing on the Premises whenever necessary.
2. To keep the ground or other open areas clean and tidy.

We have also sought clarification and confirmation from the Council / Landlords on 14/04/20 that we can keep the grass in a manageable state to protect their/our asset as long as social distancing rules are followed.

We as a club have set guidelines on who can use mowing equipment and only those who are trained and who confirm that they are competent can operate the machines.

The primary reason for wanting to keep on top of the site is that we are a charity but have no government financial support during this lockdown and we rely on our Public Running income to survive so we need to be best prepared for when restrictions are lifted.

It was noted that the person who submitted this concern was himself not abiding by the STAY AT HOME advice and was working on a locomotive at the club on the 10th April the day after this concern was raised. If the originator wants other people to stay at home, then he needs to set a leading example.

Rugby Model Engineering Society Ltd SAFETY CONCERN	Ref. No: <u>01/2019</u> <small>(Safety Officer to Allocate)</small>
Equipment/Operation Affected:	
Locomotives and rolling stock – operations in sidings adjoining the main line (7¼" Ground Level track).	
Perceived Problem: (Continue overleaf if required)	
<p>This Safety Concern should be read and considered in the light of the accident which occurred in the ground level station during a Members' Running day in April 2019 and the subsequent Safety Bulletin 01/2019.</p> <p>The Committee's decision to amend the Operations Manual to prohibit operation of the controls of a "live" locomotive unless a qualified driver is on board that locomotive (or its securely attached driving vehicle) should go a long way towards reducing the risk of runaway locomotives. However, there is an extreme risk to the safety of trains operating on the main line and persons downline of the exit point posed by ANY vehicle making an uncontrolled exit from a siding.</p> <p>Consideration should be given to providing a means of positively preventing any uncontrolled stock from reaching the main line.</p>	
Originator's Suggestions for Improvement: (Continue overleaf if required)	
The main line could be protected by the fitting of trap ("catch") points prior to the exit points to the main line. Such trap points would be operated by the local Signaller in conjunction with the siding exit signal such that the trap point will prevent incursion of any runaway vehicle onto the main line. Controlled train or vehicle movements should be brought to a stand at the exit signal before the Signaller sets the trap points and clears the exit signal.	
Originator Robin Berry (Safety Officer)	Date 29/04/2019
Committee's Response: (Continue overleaf if required)	
This was discussed at the meeting (07/06/2019) but it was deemed that there is insufficient space to safely fit a catch point without causing more issues. The siding points are very close together, very close to the main line and the loco's would still be heading towards safety critical areas. It was felt by the committee that the action already taken by the recent rule change in ensuring that drivers are seated at the controls before a loco can be moved under its own power will vastly decrease the possibility of this type of incident from happening again.	
Signed H C Brewer	Date 10 June 2019

Received, logged & acknowledged	Date: 29/04/2019	RMB Safety Officer
Passed to Committee	Date: 29/04/2019	RMB Safety Officer
Committee Response Received	Date: 10/06/2019	RMB Safety Officer
Originator Advised	Date: 10/06/2019	RMB Safety Officer

Originator's Continuation:

Committee Continuation:

SAFETY CONCERN

Ref. No:

05/2018

(Safety Officer to Allocate)

Equipment/Operation Affected:

Anti-tipping facilities on passenger carriages on both Ground level and Raised track systems

Perceived Problem:

(Continue overleaf if required)

Guidance documents were issued by the Southern Federation of Model Engineers which provide information on the suggested methods which should be implemented on both Ground level and Raised track systems to mitigate against passenger carriages being tipped whilst in service. (Copies attached)

On the Raised track system at Rainsbrook Valley Railway (RVR), anti-tipping facilities are provided at the station area, but the rest of the track has no provision, and there is no provision mounted on the passenger carriages to mitigate against the carriage being over balanced. This situation is further compounded by the fact that the centre carriage in each three car trainset is not self sufficient in terms of bogies.

On the Ground level track system at RVR, there are no specific anti-tipping provisions.

Originator's Suggestions for Improvement:

(Continue overleaf if required)

A detailed Risk Assessment needs to be carried out for each of the RVR track systems, to determine the effectiveness of the current anti-tipping provisions to ensure that carriages are restrained from causing passengers to be injured should the carriage be tipped either whilst stationary or whilst in motion.

Originator David Dixon**Date** 26/10/2018**Committee's Response:**

(Continue overleaf if required)

On the raised track the articulated carriage sets are inherently more stable (see also comments on 03/2018) and only require anti-tip precautions where passengers are entraining/detraining in the station area.

On the ground level the imposed speed limits have reduced the possibility of tipping to an acceptable level. This was implemented as part of the recommendations of Safety Investigation Report 01/2017. Calculations demonstrated by our Safety Officer concerning speed vs. centre of gravity were used to set the speed limits and these were accepted by HSE, who followed up on the implementation of the recommendations of the report.

Signed H C Brewer**Date** 6 November 2018

Received, logged & acknowledged	Date: 26/10/2018	RMB Safety Officer
Passed to Committee	Date: 26/10/2018	RMB Safety Officer
Committee Response Received	Date: 06/11/2018	RMB Safety Officer
Originator Advised	Date: 17/12/2018	RMB Safety Officer

Originator's Continuation:

Committee Continuation:

SAFETY CONCERN**04/2018**

(Safety Officer to Allocate)

Equipment/Operation Affected:

Double heading on Raised track system.

Perceived Problem:

(Continue overleaf if required)

On the 20th April 2014 an incident occurred on the raised track system when the second locomotive on a double headed train derailed, and the driver was thrown from the train. Each locomotive was driven by their own driver. No physical injuries were sustained by any of the passengers.

Several issues were raised following the incident in e-mails, but as far as I am aware no Incident Report was ever produced. The consensus of opinion was that the incident was caused by a design fault in the driving truck. These were removed from service, but none of the other issues raised were acted upon, including whether there were any safety issues associated with dual heading with separate drivers.

At the time of the incident the main justification given for double heading was to increase the passenger carrying capacity. It was stated that reverting back to single locomotive system may happen when the track length is increased, but there was no guarantee that this will happen. (Continues >>>>>>)

Originator's Suggestions for Improvement:

(Continue overleaf if required)

See overleaf

Originator David Dixon**Date** 26/10/2018**Committee's Response:**

(Continue overleaf if required)

The committee feel that the practice of double heading is perfectly safe with two drivers. As was said, the incident was caused by a fault on the driving truck and lessons have been learned. Drivers sign as to their competency and fitness for the duty which in this case includes double heading.

From April 2014 up to the present day the practice has been repeated many times without incident and has become the normal mode of operation for the drivers concerned.

Signed H C Brewer (secretary)**Date** 16 December 2018

Received, logged & acknowledged	Date: 26/10/2018	RMB Safety Officer
Passed to Committee	Date: 26/10/2018	RMB Safety Officer
Committee Response Received	Date: 17/12/2018	RMB Safety Officer
Originator Advised	Date: 17/12/2018	RMB Safety Officer

Originator's Continuation:

Trains operating on the raised track system at public running events are still being operated with two locomotives powering the trainset. The two locomotives are always of the same generic type.

In at least one case, both locomotives are under the control of one driver, but this is not always the case.

SUGGESTED IMPROVEMENTS:

A detailed Risk Assessment should be carried to address whether the practice of double heading a raised track train with separate drivers should be retained or replaced with a system where both locomotives are under the control of one driver.

If the outcome is that the separate driver system is to be retained, then clear instructions must exist to make sure both drivers know what action each is required to implement in all foreseeable circumstances whilst driving the train. These must be recorded by the event Organiser and signed by both drivers and the guard before the start of the event so all parties are clear on their responsibilities. If the guard is changed during the event, the process should be repeated with the Organiser, drivers and the new guard.

Committee Continuation:

SAFETY CONCERN

Ref. No:

03/2018

(Safety Officer to Allocate)

Equipment/Operation Affected:

Train braking provision and guard facilities on Raised track system.

Perceived Problem:

(Continue overleaf if required)

The guard on the trains operated on the ground level system is provided with a vacuum gauge in order to be able to monitor the integrity of the braking system together with a lever which enables the guard to apply the train brakes independent of the driver. Each carriage is equipped with dedicated bogies, so that each carriage is self sufficient and will remain upright on the rails should it become separated from the other carriages or the locomotive/driving truck. The braking system operates on all of the bogies on all of the carriages which are used in the trainset. This ensures that if for any reason the carriages become separated the section the train attached to the locomotive "should" be brought to a halt, and the detached section will be independently brought to a halt. The guard is also provided with a dedicated seating position separate from passengers, which ensures the guard is not obstructed in carrying out their duties by passengers.

The situation on the raised track system is totally different. Braking is limited to that available on the locomotive(s) and/or the driving truck, or in the case where the driver is using the first carriage as a driving truck, the brake system on the first bogie of that carriage. (Continues >>>>>>)

Originator's Suggestions for Improvement:

(Continue overleaf if required)

See overleaf.

Originator David Dixon**Date** 26/10/2018**Committee's Response:**

(Continue overleaf if required)

Current practice is to run only a single train on the raised track and this will continue until the track is extended. In line with our project to extend the raised track is the provisioning of further carriage stock. Ahead of any extension to the line being commissioned the form and design of new rolling stock will be assessed. Decisions will be made at this time as to what form the new stock will take and what braking provisions are provided.

To answer points raised over:

2. The articulated stock used is more stable as a 3 car set than individual coupled carriages. The sets are securely retained with a catch and locking pin preventing separation. There is no chance of accidental separation as the seats need to be lifted to gain access to these. Continued>>> |

Signed H C Brewer (secretary)**Date** 6 November 2018

Received, logged & acknowledged	Date: 26/10/2018	RMB Safety Officer
Passed to Committee	Date: 26/10/2018	RMB Safety Officer
Committee Response Received	Date: 06/11/2018	RMB Safety Officer
Originator Advised	Date: 17/12/2018	RMB Safety Officer

Originator's Continuation:

Generally, at public running events, the train is made up of two off 3 carriages trainsets. The centre carriage of each trainset is not provided with dedicated bogies, instead it shares the bogies with the first and third carriages. The front carriage of each trainset is equipped with a brake which operates on the front bogie, but when the front carriage is being used by passengers, the brakes are disabled to prevent unauthorised use. The guard is expected to fit onto the rear most carriage with passengers, which restricts the guard's ability to control the passengers on the train and detrain in an emergency situation.

SUGGESTIONS FOR IMPROVEMENT:

A detailed Risk Assessment should be carried out with respect to the following:-

1. The feasibility achieving an integrating braking system within the passenger carriages so that a system similar to the ground level system can be achieved. One option being to have a battery powered vacuum pump system located in the driving truck and piped through the carriages.
2. The implications of the passenger carriages sharing bogies, and if retained in this configuration the mitigation measures to be implemented to prevent the carriages within a 3 carriage set becoming separated.
3. The provision of dedicated guard's facilities separate from passengers and equipped with access to the train braking system.
4. The design of the coupling pins - there needs to be clarity and consistency on the diameter of the coupling pins and of the locking facilities for the pins.

Committee Continuation:

3. We do not agree this is necessary, as we go further than many societies in having a guard! (see also Safety Concern 2018/02 response)

4. Please refer to our operating manual where the pins to be used are specified. |

SAFETY CONCERN**02/2018**

(Safety Officer to Allocate)

Equipment/Operation Affected:

Lone working by drivers on locomotives on both Ground level and Raised track systems

Perceived Problem:

(Continue overleaf if required)

When steam locomotives are being used on the mainline, on preserved railways or on narrow gauge railways, there is always, as a minimum, a driver and a fireman on the footplate. Consequently, if any problem occurs whereby either member of the footplate crew becomes incapacitated, the other person is able to bring the train safely to a stand. However, on electric or diesel powered locomotives/power cars the driver is on his own. In order to mitigate this lone working situation, the driver is required to operate the "dead mans handle". If the driver fails to correctly operate the "dead mans handle" within a predetermined time period, the train being automatically brought safely to a stand.

The railway locomotives used at the Rainsbrook Valley Railway (RVR) are all driven by one person, and there is no means of mitigation which would automatically react in the event of the driver becoming incapacitated whilst driving.

(Continues >>>>>>>)

Originator's Suggestions for Improvement:

(Continue overleaf if required)

See overleaf.

Originator David Dixon**Date** 26/10/2018**Committee's Response:**

(Continue overleaf if required)

We require a Driver to sign a declaration of both competence and fitness to perform the duty (as we do for all duties at a public running or children's party). Should the organiser of the event feel that any person is not fit for duty then they have the authority to stop that person from performing that duty.

With regard to the method we employ in running the trains, we follow standard practice for our scale of miniature railway. In fact we go further than most as we have a guard (many railways do not bother with guards). In the event of an incident or 'runaway' the guard has an emergency brake at his disposal and a radio to warn the organiser and any train ahead of him.

Continued >>>

Signed H C Brewer (secretary)**Date** 6 November 2018

Received, logged & acknowledged	Date: 26/10/2018	RMB Safety Officer
Passed to Committee	Date: 26/10/2018	RMB Safety Officer
Committee Response Received	Date: 06/11/2018	RMB Safety Officer
Originator Advised	Date: 17/12/2018	RMB Safety Officer

Originator's Continuation:

Guards on the ground level system are provided with a brake lever which were designed to be able to bring the train to a stop. However, the guard would not necessarily be aware that the driver had become incapacitated until it was too late. The only action available to the guard is to apply the train brakes, but the effectiveness of this system is reduced if the locomotive is still being powered. This situation is more noticeable when a large steam locomotive is being used (e.g. a Shay). It is also impacted by the number of carriages in use and the number of passengers being carried. A simple test should be conducted with a Shay pulling 4 carriages, each loaded with the maximum allowable number of adult passengers. With the train being powered uphill (e.g. after the second crossing) the guard should attempt to stop the train using his/her brake lever. This should demonstrate the limitations of the guard's braking provision.

The raised track system has other factors which compound the problem. Guards do not have any braking provision (See Safety Concern 03/2018).

SUGGESTIONS FOR IMPROVEMENT: A detailed Risk Assessment should be conducted to identify the implications applicable to each system in the event that a driver becomes incapacitated whilst driving a train. The Risk Assessment must define the mitigation measures which need to be implemented to prevent members of the public being injured and/or equipment being damaged as a result of such an occurrence.

The Risk Assessment should also take into account the implications of the age of the drivers who drive trains at RVR public running events and children's parties, bearing in mind that with old age the likelihood that the driver may become incapacitated increases.

Committee Continuation:

We do not see age as a factor in this, as incapacity could happen at any age and unfortunately frequently does. We have also taken action on several occasions in the past to stop a person driving at public events should competence or mobility become a problem.

Rugby Model Engineering Society Ltd

SAFETY CONCERN

Ref. No:

01/2018

(Safety Officer to Allocate)

Equipment/Operation Affected:

Flagging at Rear of Train When Stopped at Red Signal

Perceived Problem:

(Continue overleaf if required)

Royal Scot stopped at Signal RKLL 8 at Red on Ground Level track. I was Guard on the subsequent train and went through on a prior clear signal. Guard on Royal Scot did not get out to flag danger at the rear of the train. Driver of my train, Robin Berry (loco "Iron Mighty") had to brake sharply.

Originator's Suggestions for Improvement:

(Continue overleaf if required)

Training or re-training of Guard on Royal Scot.

Originator **Graham Bicknell**

Date **20/05/2018**

Committee's Response:

(Continue overleaf if required)

.Preceding signal should have been at Red and therefore Guard of Scot should not need to protect train. Possible signal fault has led to this incident.

Signed H C Brewer (Secretary)

Date **03/08/2018**

Received, logged & acknowledged	Date: 06/08/2018	RMB Safety Officer
Passed to Committee	Date: 20/05/2018	RMB Safety Officer
Committee Response Received	Date: 06/08/2018	RMB Safety Officer
Originator Advised	Date: 17/12/2018	RMB Safety Officer

Originator's Continuation:

Committee Continuation:

SAFETY CONCERN**08/2016**

(Safety Officer to Allocate)

Equipment/Operation Affected:

Passenger Train Operations and General Station Area Safety

Perceived Problem:

(Continue overleaf if required)

1. During the public running event on 18.12.2016 a passenger train in service was observed arriving at the station with an adult female passenger facing rearwards in contravention to the requirements of OM Volume 2 Section 2.9.4. The carriage was a standard RVR sit-astride type on which all passengers are required to face forwards.
2. Whilst welcoming the involvement of younger Members in the operations, it must be remembered that their enthusiasm generally outweighs their sense of risk! During the same event I observed several near misses involving the young members on the station and at the old carriage shed. On the station, it was mostly youthful rushing about and an apparent lack of recognition of moving trains. On returning my train to the old carriage shed I found both young members operating the traverser unsupervised (though not without a degree of competence!)

Originator's Suggestions for Improvement:

(Continue overleaf if required)

1. A timely reminder to all Guards and Station Controllers of the need to be familiar with, and ensure compliance with, Section 2.9.4 of the Rule Book prior to train departure in order to ensure the minimum risk to passenger safety.
2. A notice to all members and an addition to OM Vol 1 Section 1.2 to highlight the high risk to young Members who are not adequately supervised during operations.

Originator R M Berry**Date** 18 December 2016**Committee's Response:**

(Continue overleaf if required)

This safety concern was discussed at the 18 January 2017 meeting of the committee and the originators suggestions were accepted. The following actions were agreed:

- 1 – Holly Parrott will be asked to emphasise section 2.9.4 when undertaking guards training or re-training. The next scheduled training session is 2 April 2017 and therefore in advance of the next public running session.
- 2 – A notice will be sent out to all members once OM Vol 1 section 1.2 has been updated.

Signed *Howard Brewer***Date** 20 January 2017

Received, logged & acknowledged	Date: 18 Dec 2016	RMB Safety Officer
Passed to Committee	Date: 19 Dec 2016	RMB Safety Officer
Committee Response Received	Date: 21 Jan 2017	RMB Safety Officer
Originator Advised	Date: 21 Jan 2017	RMB Safety Officer

Originator's Continuation:

Committee Continuation:

Rugby Model Engineering Society Ltd SAFETY CONCERN	Ref. No: 07/2016 <small>(Safety Officer to Allocate)</small>
Equipment/Operation Affected: Couplings on 7.25" stock	
Perceived Problem: <small>(Continue overleaf if required)</small> Discovered dangerous couplings on last public running day (photo attached to email). The coupling I found was a fixed link with two holes. This type of coupling is totally unsuitable for use with rolling stock with centre buffer / couplers. The fixed centres of the link are keeping the buffer apart from each other by about 2", totally preventing them from doing their job – they might as well not be there. In the case of a heavy shunt caused by collision from front or rear, or in the case of heavy braking in the forward part of the train, the buffers are unable to do their job, the coupling will take the load. Because of this, you are in a situation where you have 3 links and 4 pivots in a chain, comprised of the two buffer coupling units and their connecting pin, plus the coupling link and 2 pins. Try pushing 3 links on a table and see what happens. The links which push to the side and will not move in a straight line. We have opened up the possibility of carriages being pushed sideways and derailed. This situation can also present itself when trains are propelled, especially over curves, such as into the carriage sheds. Con't >>	
Originator's Suggestions for Improvement: <small>(Continue overleaf if required)</small> Dispose of dangerous links. Obtain more slotted links of single links of chain as per the original couplings.	
Originator E J Parrott	Date 27/6/2016
Committee's Response: <small>(Continue overleaf if required)</small> This error had already been spotted and action taken directly with the project leader for the new carriage stock. As a result of this, remedial action was put in place immediately and the errant links removed and replaced with short pattern links that ensure the "buffer" faces meet when coupled. The error had occurred due to a lack of knowledge on how these couplings worked and the fault was easily and quickly remedied.	
Safety Officer Comment: Closure Recommended.	
Signed Howard Brewer (for RMES Committee)	Date 9 July 2016

Received, logged & acknowledged	Date: 27/06/2016	Safety Officer RB
Passed to Committee	Date: 27/06/2016	Safety Officer RB
Committee Response Received	Date: 09/07/2016	Safety Officer RB
Originator Advised	Date: 12/07/2016	Safety Officer RB

Originator's Continuation:

Couplings for centre buffer/coupling units of the type we use should always allow the buffer faces to come into contact. They should be slotted links which allow movement. Buffer faces should be kept to a minimum separation distance when in normal use, faces must be allowed to contact under braking or propelling situations. That is why all our old coupling links are slotted bars, or made from single links of chain. If you're not going to use the correct type of couplings, then you might as well get rid of the buffers, as they're doing nothing.

Committee Continuation:



Rugby Model Engineering Society Ltd

SAFETY CONCERN

Ref. No:

06/2016

(Safety Officer to Allocate)

Equipment/Operation Affected:

Clubhouse toilet hot water supply

Perceived Problem:

(Continue overleaf if required)

At times of light use the temperature of the hot water can be very high. There is a risk of scalding.

Originator's Suggestions for Improvement:

(Continue overleaf if required)

1. Investigate whether the water heater(s) can be adjusted to limit the outlet temperature which would remove the risk.
2. Place CAUTION notices adjacent to toilet wash basins to warn of risk. This would only lower the risk for those able to read the notice, unaccompanied minors often use the facility and the notices may not be effective for these and other high risk groups.

Originator **R M Berry, Safety Officer**

Date **29 March 2016**

Committee's Response:

(Continue overleaf if required)

1 – The thermostat has been adjusted downward to reduce the water temperature (and save us electricity!).

2 – The temperature of the water will be monitored over the next two weeks to ensure the problem no longer exists.

Signed **H C Brewer (Secretary)**

Date **9 April 2016**

Received, logged & acknowledged	Date: 29 March 2016	Safety Officer RB
Passed to Committee	Date: 29 March 2016	Safety Officer RB
Committee Response Received	Date: 13 April 2016	Safety Officer RB
Originator Advised	Date: 13 April 2016	Safety Officer RB (Closed)

Originator's Continuation:

Committee Continuation:

Rugby Model Engineering Society Ltd

SAFETY CONCERN

Ref. No:

05/2016

(Safety Officer to Allocate)

Equipment/Operation Affected:

Signal Treadle switches

Perceived Problem:

(Continue overleaf if required)

Hinge pins can work loose releasing the blade making the switch inoperative.

Reported verbally to Howard at the time and this was a while ago when the signalling was being overhauled. May well have been fixed.

Originator's Suggestions for Improvement:

(Continue overleaf if required)

Provide positive retention for the pin.

Originator **John Startin.**

Date **27/3/16**

Committee's Response:

(Continue overleaf if required)

All line treadle switches have now been changed to tilt switches using a different design. Therefore the hinge pin problem should no longer occur.

Signed **H C Brewer (Secretary)**

Date **9 April 2016**

Received, logged & acknowledged	Date: 27 March 2016	Safety Officer RB
Passed to Committee	Date: 29 March 2016	Safety Officer RB
Committee Response Received	Date: 13 April 2016	Safety Officer RB
Originator Advised	Date: 13 April 2016	Safety Officer RB (Closure recommended)

Originator's Continuation:

Committee Continuation:

SAFETY CONCERN

Ref. No:

04/2016

(Safety Officer to Allocate)

Equipment/Operation Affected:

Signal positioning

Perceived Problem:

(Continue overleaf if required)

Signals are placed by S&T at their discretion. Some not to me in the best places.

My particular concern is the section through the cutting under the bridge. The operation here was intermittent it becoming common practice to observe the train ahead come through and past where the lines converge. The following train would then proceed. Signals cannot be optional at the driver's discretion.

Also some drivers when I have guarded have proceeded without the guards giving the all clear. The guard is I believe, as in the best railway practice, in charge of the train. The guard alone can properly see the passengers are ready

Originator's Suggestions for Improvement:

(Continue overleaf if required)

Suggest signal positions/treadles are agreed with representatives of the drivers and the guards. Signal position shall be such that the guard of a single carriage train can easily see the train is protected on entering the section.

Originator John Startin.**Date** 27/3/16**Committee's Response:**

(Continue overleaf if required)

1 – The committee disagree that the signals are in the wrong places. Since the full signalling was applied to the un-extended track two signals have been re-positioned for better sighting the second of these (RKLL4) was changed over this winter.

2 – The cutting signal (RKLL5) is in the correct place and the committee agree it is not 'optional'. If problems occur with this signal (as this is a restricted 'line of sight' area) token working is introduced. Therefore, in this instance no train should be in the cutting without the token being held by the driver (or Guard). If the guard see's this rule being broken it is his duty to halt the train.

3 – Again in this instance the guard should stop the train by using his brake valve if he is not ready for the train to proceed.

Signed H C Brewer (Secretary)**Date** 9 April 2016

Received, logged & acknowledged	Date: 27 March 2016	Safety Officer RB
Passed to Committee	Date: 29 March 2016	Safety Officer RB
Committee Response Received	Date: 13 April 2016	Safety Officer RB
Originator Advised	Date: 13 April 2016	Safety Officer RB (Closure Recommended)

Originator's Continuation:

Committee Continuation:

Rugby Model Engineering Society Ltd

SAFETY CONCERN

Ref. No:

03/2016

(Safety Officer to Allocate)

Equipment/Operation Affected:

Prototype Guards coach with raised seat

Perceived Problem:

(Continue overleaf if required)

Height restriction on ground track through bridges.

At current height, guards face fouling their heads against the bridge holes

With a back rest, this prevents the flexing of the back and will cause the spine to flex at the neck- resulting in whiplash, potential breaking of spine, concussion, brain damage or dislocation of skull from spine. Variation depends on the point of impact and speed.

Removal of back rest will result in impact knocking guard from seat, if the guard gets their legs caught up in the carriage, they will be dragging head on the floor, back injury/breakage and the head trauma mentioned above. If the guard is free of the carriage with impact, the driver may not be aware and continue, the guard injuries will include: injuries from impact as outlined above, the injuries sustained from landing onto the track and if unconscious, not being able to summon for help and potentially being stuck by the next train.

Originator's Suggestions for Improvement:

(Continue overleaf if required)

Lower the seat, remove section in front of seat to allow guards to slide into their seat.

Originator **Holly L Parrott**

Date **14-02-2016**

Committee's Response:

(Continue overleaf if required)

The design as referenced by this safety concern will not go ahead. An alternative design as presented by our Chairman will be used for guard's carriages. The alternative design was agreed by the meeting on 24 February 2016 and will remove all of the concerns raised by 02/2016 and 03/2016

Signed **Howard Brewer (Secretary)**

Date **24 February 2016**

Received, logged & acknowledged	Date: 18 Feb 2016	Safety Officer
Passed to Committee	Date: 18 Feb 2016	Safety Officer
Committee Response Received	Date: 28 Feb 2016	Safety Officer
Originator Advised	Date: 28 Feb 2016	Safety Officer

Originator's Continuation:

In the event of an incident, guards are required to alight from the carriage at any point on the track to take charge of the situation. With the new design and the mobility of some of our guards, this added height will make alighting difficult, especially getting off during running, or at terminus to help people alight the carriage. There is a great risk of either kicking the head of the passenger in front of you or toppling over, landing on top of them. After several times of getting in and out during a running, the danger increases with fatigue. In a serious incident, or during a lapse in concentration from the guard there is also a greater risk due to the distraction.

Committee Continuation:

SAFETY CONCERN

Ref. No:

02/2016

(Safety Officer to Allocate)

Equipment/Operation Affected:

Prototype Guards Carriage

Perceived Problem:

(Continue overleaf if required)

Raised seat for Guard is too high. Likelihood of Guard striking head on over-bridge. Drawings have shown that a 5'9" tall Guard (me) will have 2" clearance or less when passing under the bridges. We have several members who are taller than me, as the height increases then this clearance figure reduces. Likelihood of a strike is very high, result of it will be severe head injury possibly resulting in death.

Raised backrest for Guard is too high. Solid plywood backrest is far taller than required. By having a tall solid backrest, if this vehicle is marshalled in the middle of a train, the Guard will have severely restricted viewing of a number of passengers in the seat in front. Any child up to the age of about 5 would be able to sit against this backrest and would not be seen by the Guard of the train. They could even sit round sideways and stand up before they were seen by an observant Guard. Additionally, given the raised seat and the danger that presents as already pointed (con't)

Originator's Suggestions for Improvement:

(Continue overleaf if required)

Remove the raised seat. Reduce the seat height back down to that of the rest of the coach. This will give a clearance of around 8" to a 5'9" Guard. Likelihood of striking head is very much reduced.

Remove the tall fixed backrest. Replace with a drop in backrest as per the 100 Series coach so it can be removed in the event of the carriage being marshalled in the middle of a train (con't)

Originator Edward J Parrott**Date** 14-02-2016**Committee's Response:**

(Continue overleaf if required)

The design as referenced by this safety concern will not go ahead. An alternative design as presented by our Chairman will be used for guard's carriages. The alternative design was agreed by the meeting on 24 February 2016 and will remove all of the concerns raised by 02/2016 and 03/2016.

Signed Howard Brewer (Secretary)**Date** 24 February 2016

Received, logged & acknowledged	Date: 14 Feb 2016	Safety Officer
Passed to Committee	Date: 14 Feb 2016	Safety Officer
Committee Response Received	Date: 28 Feb 2016	Safety Officer
Originator Advised	Date: 28 Feb 2016	Safety Officer

Originator's Continuation:

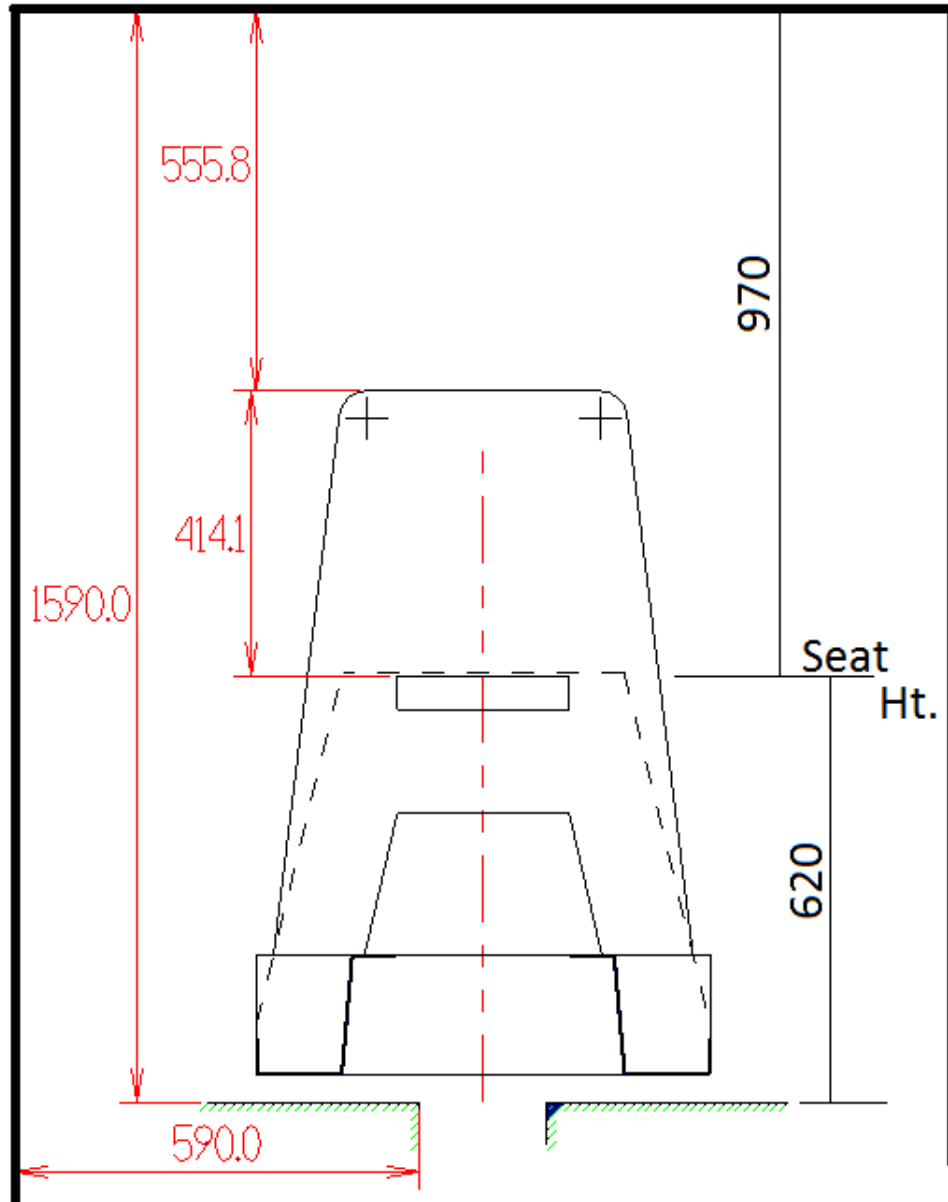
out, the likelihood of injury by bridge strike is further increased as the tall backrest would serve to pin the unfortunate Guard in his position.

Improvement con't :

when train requirements force the use of more than one fixed set of coaches, or reduce the height so it matches the front and standard end plates. We can't afford the space to have dedicated coaches that can only be used by certain people on certain trains in certain positions.

Committee Continuation:

Bridge Deck



SAFETY CONCERN

Ref. No: -

1/2016

(Safety Officer to Allocate)

Equipment/Operation Affected: -

Station Control – Guard and Driver duties during unloading of passengers.

Perceived Problem: -

(Continue overleaf if required)

Based on observations while acting as Station Gate Controller on 20th Dec 2015.

During busy periods as witnessed at the Ground Level Station on this occasion there is a marked natural tendency to rush things to keep trains moving and minimise the queueing. This resulted in a conflict of several duties resulting in a number of high risk situations being observed.

The following are some examples: -

1. Guards get involved in trying to drum up trade for their trains and cause crowd control issues in the queue. There is a marked preference among passengers for the steam trains and on many occasions guards were going down the queue and calling people forward for the non-steam trains. This resulted in several bad tempered events at the front (Cont....)

Originator's Suggestions for improvement: -

Most of the issues raised here are already covered by existing instructions but perhaps some more pointed guidance may be necessary to overcome the human tendency to want to rush all the time when it is busy. Queue control should be left to the Gate Controller and train crews should accept that is better to depart with a half load occasionally than risk a riot in the queue! Allocation of a person to help in getting passengers off the station might improve Guard / Driver co-ordination.

Originator: R. Berry**Date: 21 Dec 2016****Committee's Response: -**

(Continue overleaf if required)

This was discussed by the meeting and the points raised are covered as follows:

- 1 - Guards must not call people forward in the queue. Their responsibility is with the train and the passengers on it. This is to be made clear in the 'Guards Duties' instructions. If any calling forward in the queue is to be done this will need to be by the station gate person.
- 2 - Guards are to be reminded of their duties on unloading and the "Guards Duties" will be re-visited on this point. If resource will allow a further person on the unloading end to direct people to the exit etc. may also alleviate this situation.
- 3 - Drivers must not move the train at any time without permission of the guard. This is to be revisited in the "Drivers Duties" instructions.

Signed Howard Brewer, Secretary**Date 25 Jan 2016**

Received, logged & acknowledged	Date: 21/12/2016	Safety Officer
Passed to Committee	Date: 21/12/2016	RB
Committee Response Received	Date: 25/01/2016	RB
Originator Advised	Date: 25/01/2016	RB

Originator's Continuation:

of the queue making it difficult to maintain control.

2. Guards are frequently distracted by passengers asking questions/taking photos/etc during unloading and this reduces their effectiveness in controlling other passengers leaving the platform. I had to intervene several times to stop young children running along the adjacent tracks which could have resulted in slips, trips and injury.
3. Co-ordination between drivers and guards is not always as good as it should be. On one occasion the guard was distracted by a group of passengers, the driver started moving forward without clearance from the guard while a very young child escaped its adult and started to climb into the guard's seat at the rear of the train.

Committee Continuation:

Nil further.