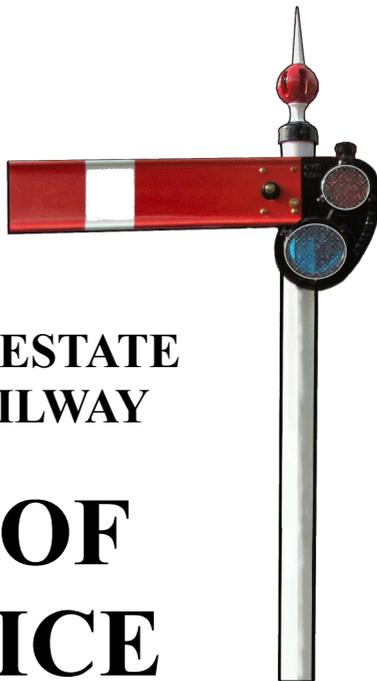




**BRISTOL SOCIETY OF MODEL &
EXPERIMENTAL ENGINEERS**



**ASHTON COURT ESTATE
MINIATURE RAILWAY**

CODE OF PRACTICE

**FOR THE GUIDANCE OF
DUTY MANAGERS
LOCOMOTIVE & TRACTION ENGINE
DRIVERS
AND
OPERATING STAFF**

Issue 6 March 2016

This handbook is divided into sections:

- Section 1 Guidance for **Duty Managers**
- Section 2 Guidance for **Operating Staff**
- Section 3 Guidance for **Locomotive Drivers**
- Section 4 Guidance for **Traction Engine Drivers**
- Section 5 Guidance for **Visiting Drivers**
- Section 6 **Safety notices at the railway**

Many rules are the same to all sections. To avoid duplication only relevant regulations for each particular category are shown. It is therefore imperative that Duty Managers, Operating Staff Drivers and anyone who helps at the railway, reads and understands ALL sections in this booklet.

MANAGEMENT OF OPERATIONS

For each running session there shall be a person in charge (the Duty Manager) who has the ultimate responsibility and authority to ensure that all procedures in the Society handbook and this Code of Practice are followed.

SAFETY POLICY

The Safety Policy of Bristol Society of Model & Experimental Engineers is laid out in the Society Handbook, Section 8.0.

This policy covers every aspect of safe practice within the society and must be vigorously upheld.

ASHTON COURT ESTATE MINIATURE RAILWAY CODE OF PRACTICE Issue 6 March 2016

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ACCIDENT REPORTING PROCEDURE

Every member of the society is responsible for safety at the railway and the site as a whole. Everyone shall be vigilant, reporting any potential hazard, no matter how small, IMMEDIATELY to the Duty Manager or a member of the Railway Operating Team.

The Duty Manager shall be advised at once of any accident and be assisted to ensure that any injuries receive prompt attention. Basic First Aid equipment is available at the station, club hut and the new workshop for the personal use of club members and on request by the public.

Members shall make it clear that while basic first aid items can be issued its use is solely at the risk of the member of the public making the request.

The emergency services shall be called for any serious injuries. A telephone is available in the club hut.

If an ambulance is called, the post code BS8 3PX should be given and a member detailed to meet the ambulance at the lodge gate and direct it to the railway.

To help with the completion of a formal accident report, statements from witnesses and photographic evidence shall be obtained quickly and accurately. When taking statements, obtain the names and addresses of witnesses.

All accidents shall be recorded in the Accident Book in the Blue Accident File. Where members of the public are involved and in the case of a serious incident an Accident Report Form shall also be completed. The Railway Manager and/or Safety Officer will carry out any necessary further investigations.

**NO ADMISSION OF LIABILITY OR PROMISE OF PAYMENT
SHALL BE MADE AT ANY STAGE.**

SECTION I

GUIDANCE FOR DUTY MANAGERS

SAFETY DUTIES

1. 1 The Duty Manager is responsible for all site activities including traction engines and must ensure he is conversant with all relevant current safety procedures in relation to the railway and site. He must take all reasonable steps to ensure the safety of everyone visiting or helping at railway.
1. 2 Before opening the railway ensure all tracks are visually inspected for hazards etc. throughout their length. On completion the Running Register shall be signed by the person who carried out the inspection.
1. 3 Keep a continuous overall view of operations, to ensure all activities are carried out in accordance with current safety procedures and the Safety Policy of the society. To ensure such procedures are overseen, Duty Managers must not drive locomotives when the railway is open to the public.
1. 4 Obstructions must be removed from the station entrance before opening the roller shutter doors and allowing passengers onto the platforms.
1. 5 Ensure drivers are conversant with safety procedures, are qualified for the locomotive/traction engine they are driving and if required, have a current boiler certificate for their engine.
1. 6 The names of drivers and the time on and off must be entered in the Running Register for the day. It is the responsibility of the Duty Manager to ensure each driver has been recorded in the Running Register.
1. 7 No work or maintenance may be undertaken that could endanger anyone at the site on Public Running days.
1. 8 When traction engines are operating, ensure locomotive drivers are aware and vigilant, and the necessary precautions are taken consistent with the safe joint operation of the railway and traction engines.

SECTION I

GUIDANCE FOR DUTY MANAGERS

GENERAL DUTIES

- I. 9 No one is allowed within the central operating area of the station without an official badge. Such badges will be issued only to those who are staffing the railway, driving, or at the request of the Duty Manager.

Visitors badges will be issued to visitors and children of members. There must be no confusion between operating staff and the public.

- I. 10 After water etc. has been turned on, all manhole covers around the site must be replaced to eliminate tripping hazards.
- I. 11 Ensure there is adequate supervision at the Steaming Bays, Station Area, Traverser and Ticket Office.
- I. 12 Ensure blowers, coal, steam oil, wood, water, ashboxes and matches are available at steaming bays.
- I. 13 Ensure water, coal and oil are available at the station and used ticket containers are in position.
- I. 14 Check all signs, including the advertising sign, barriers and signalling equipment are in position and working correctly.
- I. 15 Open/Close the railway at the advertised times. (unless weather conditions or passenger numbers dictate otherwise.)
- I. 16 Ensure visiting drivers are competent to carry out passenger carrying duties. If there is any doubt a competent driver of the society should be assigned to ride with them (without any passengers) to test their ability. All visiting steam locomotives and traction engines must have their boiler certificates inspected to ensure they are current. (See section 5 guidance for visiting drivers)

SECTION I

GUIDANCE FOR DUTY MANAGERS

GENERAL DUTIES CONTINUED

- I. 17 Tickets and cash float to be made available for the ticket office. Ensure ticket sales sheets are ready and after closing all monies are collected and the relevant forms are completed.
- I. 18 Only competent members and no person under sixteen years of age are to be allowed to staff the ticket office.
- I. 19 Persons staffing the signal box and operating the traverser/swinging beam during public running must be competent and conversant with their operation.
- I. 20 Ensure members assigned to duties are relieved as required. Appoint other members to take over their duties.
- I. 21 Any hazards or faults with equipment, must be entered in the Faults and Hazards book.
- I. 22 Ensure that no persons under the age of sixteen years of age drives locomotives of any type when the railway is open for public passenger carrying.
- I. 23 Ground level trains of three carriages or more, and raised track trains of four carriages or more, shall carry a guard on the last seat of the rearmost carriage. The guard shall be equipped with a whistle, stopping the train in an emergency by long blasts of the whistle.
- I. 24 Only braked raised-track carriages are to be coupled to locomotives. On no account are they to be marshalled within a rake of un-braked carriages.
- I. 25 When closing the railway ensure adequate staff remain to clear away equipment, and when leaving that alarms/locks are set and the site is left clean and tidy.

SECTION 2

GUIDANCE FOR OPERATING STAFF

SAFETY OF PASSENGERS

2. 1 Everyone helping at the railway during passenger carrying must be familiar with current safety procedures.
2. 2 Public must not enter the station area while preparations are taking place. The outer shutter and exit gate are to be kept closed until the railway is officially opened.
2. 3 Passengers who wish to ride on the railway carrying babies, shall be warned the baby could be injured in a derailment and that they do so entirely at their own risk.
2. 4 When boarding our carriages adult passengers must be encouraged to have one foot on the ground, step one leg right over the carriage to the ground, sit down and then place their feet on the footboards. The reverse procedure must be followed when alighting.
2. 5 Traction engine passengers are carried at the discretion of the driver.
2. 6 Passengers queuing for traction engine rides must wait on the station side of the fence.
2. 7 ALL passengers must be seated facing the direction of travel. Staff must ensure children in particular obey this rule.
2. 8 Passengers must be warned to refrain from standing or leaning while the train is in motion, to keep their arms and legs within the width of the carriage and feet resting on the footboards.
2. 9 The loading of passenger trains must be supervised by an adult member. Where possible trains should be loaded evenly, spreading the load between carriages.
2. 10 The public must not cross railway tracks, except at a designated crossing, or enter steaming bays unless invited by a Society member. In which case they shall sign the visitors book and be asked to wear a visitors badge.

SECTION 2

GUIDANCE FOR OPERATING STAFF

OPERATING RULES

2. 11 The swinging beam on the raised track shall not be opened when trains are running without the express permission of the Duty Manager. Station staff and the signalman are to be informed before the beam is opened and trains held within the station area until the beam is closed and locked.
2. 12 Level crossing gates must normally remain closed during passenger carrying. Station staff and the signalman are to be informed of any large movements across the tracks at any point.
2. 13 The train's load (number of passengers carried) will be at the discretion of the driver.
2. 14 Station staff working the ground level railway shall ensure the passenger barrier arm is down while there is any train movement on that track within the station.
2. 15 Operational and station staff shall ensure that passengers wait until the train stops before dismounting and that raised track passengers do not alight onto the central reservation of the station platform.
2. 16 Members of the public must be prevented from crossing the tracks and playing or picnicking within the central areas.
2. 17 Transport regulations state no one is to drive a mechanically propelled vehicle, i.e. traction engine, petrol driven lawn mower, etc. within a public place, unless they hold a current motor vehicle driving licence and are covered by the minimum insurance requirements. (The Estate is a Public Park).

SECTION 3

GUIDANCE FOR LOCOMOTIVE DRIVERS

GENERAL RULES

3. 1 No locomotive shall be steamed without a current boiler certificate, unless undergoing an official boiler test.
3. 2 A locomotive in steam must not be left unattended. When on stand-by the locomotive must be set in mid gear, the regulator fully closed and any brakes on the locomotive or tender applied.
3. 3 To avoid hold ups on the main line, before commencing passenger hauling, ensure the engine/tender is filled with water and coal. Ensure injectors and hand pumps are working and the safety valves release at the pressure stated on the current boiler certificate. The pressure gauge must be clearly legible and the water gauge blow down cock give a free flow of water when opened.
3. 4 When coupling to a train, it is the driver's responsibility to ensure that the couplings are secure throughout the train and the braking system is working efficiently.
3. 5 When open to the public, trains and uncoupled locomotives with or without passengers, must not exceed a walking pace when travelling through or moving within the station.
3. 6 Vehicular access to the steaming bays is for loading/unloading only. Motor vehicles must not be left parked adjacent to steaming bays, or ground level crossings.
3. 7 Any defects must be reported to the Duty Manager and entered into the Faults and Hazards book.
3. 8 No repairs are to be undertaken on the running line, or within the station area without the permission of the Duty Manager.

SECTION 3

GUIDANCE FOR LOCOMOTIVE DRIVERS

GENERAL RULES CONTINUED

3. 9 Please give timely notice to operating staff when you wish to go on shed, or need to stop passenger carrying due to any problems.
3. 10 It is the responsibility of all drivers to familiarise themselves with the system of signals used on the railway. It is imperative that drivers understand the meaning of the signal lights and signal arm codes. See Signalling Handbook.
3. 11 A locomotive shall only go to the main line with the permission of the Duty Manager or a member of the operating team.
3. 12 No mains powered equipment, or mains extension leads are permitted within the steaming bays during engine preparation on passenger carrying days.
3. 13 Drivers must keep emissions to a minimum particularly within the station area and a means of limiting the emission of sparks shall be fitted. Consider passenger comfort at all times.
3. 14 Locomotives must not be tested on the main line during public running. The duty manager may instruct a driver to remove a locomotive from the main line if its performance is not adequate to cope with traffic conditions.
3. 15 During passenger carrying all drivers must be over 16 years of age, hold authorisation for their locomotive and be conversant with the Code of Practice.
3. 16 Trains or locomotives must not move within or depart from the station, without permission from station staff.
3. 17 The number of passengers carried on a train is at the discretion of the driver.

SECTION 3

GUIDANCE FOR LOCOMOTIVE DRIVERS

GENERAL RULES CONTINUED

3. 18 Steam locomotives in service must only take coal, water, or lubrication at designated points.
3. 19 Petrol or LPG locomotives must not take on fuel when on a main line, or carrying passengers.
3. 20 There is a speed limit of eight mph, (unless otherwise stated). Spacing from a preceding train should be sufficient for an emergency stop.
3. 21 Signalling by mechanical/electrical means or by an authorised member must be obeyed, even if the reason is not apparent.
3. 22 Please keep a look out for obstructions on the track: Walkers, Children and Animals.
3. 23 In the event of a derailment when no injury has occurred, the carriage may be replaced upon the track and the circuit completed. If the same carriage derails again inform the Duty Manager. When stopped on the main line due to a derailment or breakdown, following traffic must be warned of the obstruction.
3. 24 Drivers must be particularly vigilant when traction engines are operating. They should blow the whistle when overtaking from behind.
3. 25 To avoid passengers trying to alight when the train enters the station after the first circuit, the driver of a train intending to cover a double circuit or more must inform station staff and the passengers on the train.

SECTION 3

GUIDANCE FOR LOCOMOTIVE DRIVERS

GENERAL RULES CONTINUED

- 3.26 A braking system is required which is adequate for the loaded train weight, normal speed of running, gradients and operating methods. This system needs to be capable of bringing the train to a stop in normal and emergency conditions, in a safe distance. To meet this requirement, BSMEE has fitted its ground level carriages with a continuous automatic vacuum braking system. This system is designed to be operated by the driver of the locomotive or in an emergency by the guard (if carried) or be applied automatically in the event of a division of the train. When the brakes have been applied, they should remain on in order to hold the vehicle(s) for an adequate length of time until the internal vacuum is released.

The equipment required to be fitted to locomotives to operate the vacuum braking system on the BSMEE Ground Level rolling stock is as follows:- A device to maintain a vacuum of 12" Hg (Inches of Mercury), a valve to destroy the vacuum in order to operate the train brakes, a vacuum limiting valve to regulate the vacuum and a vacuum gauge.

Lightweight trains may be operated with a non automatic brake of adequate power. Where small locomotives are used, it is necessary to provide a braked 'driving truck', rather than rely on the locomotive brakes.

If locomotives are using one of the various propulsion systems involving a chain, gear or hydraulic drive, the transmission system cannot be relied upon to provide an adequate train braking system.

SECTION 4

GUIDANCE FOR TRACTION ENGINE DRIVERS

GENERAL RULES

4. 1 No traction engine shall be steamed without a current boiler certificate, unless undergoing an official boiler test.
4. 2 A traction engine in steam must not be left unattended. When on standby the engine must be set in mid gear, the regulator fully closed and any brakes applied.
4. 3 Traction engines may only pass through the swinging beam with the permission and under control of the Duty Manager. Station staff and the signalman are to be informed before the beam is opened and trains held within the station area until the beam is closed and locked.
4. 4 Traction engine drivers must be responsible for the safety of their passengers at all times, bearing in mind that they are operating within the unfenced area of the raised track. Drivers are responsible for ensuring their passenger vehicle(s) are fit for purpose.
4. 5 Traction engine drivers must be conversant with the route which is travelled in an anti-clockwise direction when viewed from above. Before operation commences the traction engine driver shall inspect the full route and ensure conditions are suitable for the engine and passenger carriage in use. He (she) shall check the appropriate signs are in place and gate secured as necessary.
4. 6 Transport regulations state that no one is to drive a mechanically propelled vehicle, i.e. Traction engine, unless they hold a current motor vehicle driving licence and are covered by the minimum insurance requirements. (The Estate is a Public Park)
4. 7 Vehicular Access to the steaming bays is for loading/unloading only. Motor vehicles must not be left parked adjacent to steaming bays, or ground level crossings.

SECTION 5

GUIDANCE FOR VISITING DRIVERS

5. 1 Visiting drivers (Non Members) are welcome to use their locomotives or traction engines on public passenger days, if they conform to the following:
5. 2 A current boiler certificate for their steam locomotive or traction engine must be produced and all coal fired locomotives are to be fitted with a means of limiting spark emissions.
5. 3 Visiting drivers shall sign the visitors book and must hold a valid insurance certificate.
5. 4 A visiting driver must either hold a certificate of driving competence from a recognised society, or satisfy the Duty Manager, or a delegated member that they are competent to undertake such duties. see 1.16
5. 5 Before going to the main line or running track the visiting driver must sign and complete the locomotive running register.
5. 6 Visiting drivers must read, or have read, the Code of Practice, the Signalling Handbook (if driving a locomotive), understand the relevant procedures, and their meaning, before going to the main line or track.
5. 7 Rolling stock brought by visitors must conform to normal BSMEE safety standards and be maintained in good order.
5. 8 Traction engine drivers must be fully familiar with the traction engine track and its working.

SECTION 6

SAFETY NOTICES AT THE RAILWAY

Notices displayed at each end of the 7¼” gauge track viaduct

DO NOT WALK
ACROSS THIS BRIDGE
WHILE THE RAILWAY IS
IN OPERATION

Notices displayed around the railway:

DO NOT CROSS
THE TRACK

BEWARE OF
TRAINS
LOOK
LEFT

Notices at steaming bays:

MEMBERS ONLY

MEMBERS ONLY
IN COMPOUND

NO ENTRY

LOCOMOTIVE DRIVERS
(PUBLIC RUNNING)
MUST BE AN
EXPERIENCED DRIVER
OVER 18 YEARS
OF AGE AND SIGNED IN
THE RUNNING DAY BOOK

ONLY
ADULT MEMBERS AND
SUPERVISED CHILDREN
ALLOWED IN THIS AREA

SECTION 6

SAFETY NOTICES AT THE RAILWAY

The following notices are displayed within the station area

PASSENGERS SAFETY

WHILE THE TRAIN IS MOVING PASSENGERS MUST FACE
THE DIRECTION OF TRAVEL
AND REFRAIN FROM STANDING OR LEANING AND
MUST KEEP THEIR ARMS AND LEGS WITHIN THE
WIDTH OF THE VEHICLE

PASSENGERS ARE ADVISED
THAT LOCOMOTIVES EMIT SOOT,
SPARKS AND OIL. WE THEREFORE
CANNOT BE HELD RESPONSIBLE FOR
SOILED CLOTHING

DO NOT CROSS
THE TRACK

PLEASE ENSURE
CHILDREN IN YOUR
CARE DO NOT STRAY
NEAR THE
RAILWAY LINES

WHILST ON THIS SITE
CHILDREN
MUST AT ALL TIMES
BE SUPERVISED BY
AN ADULT

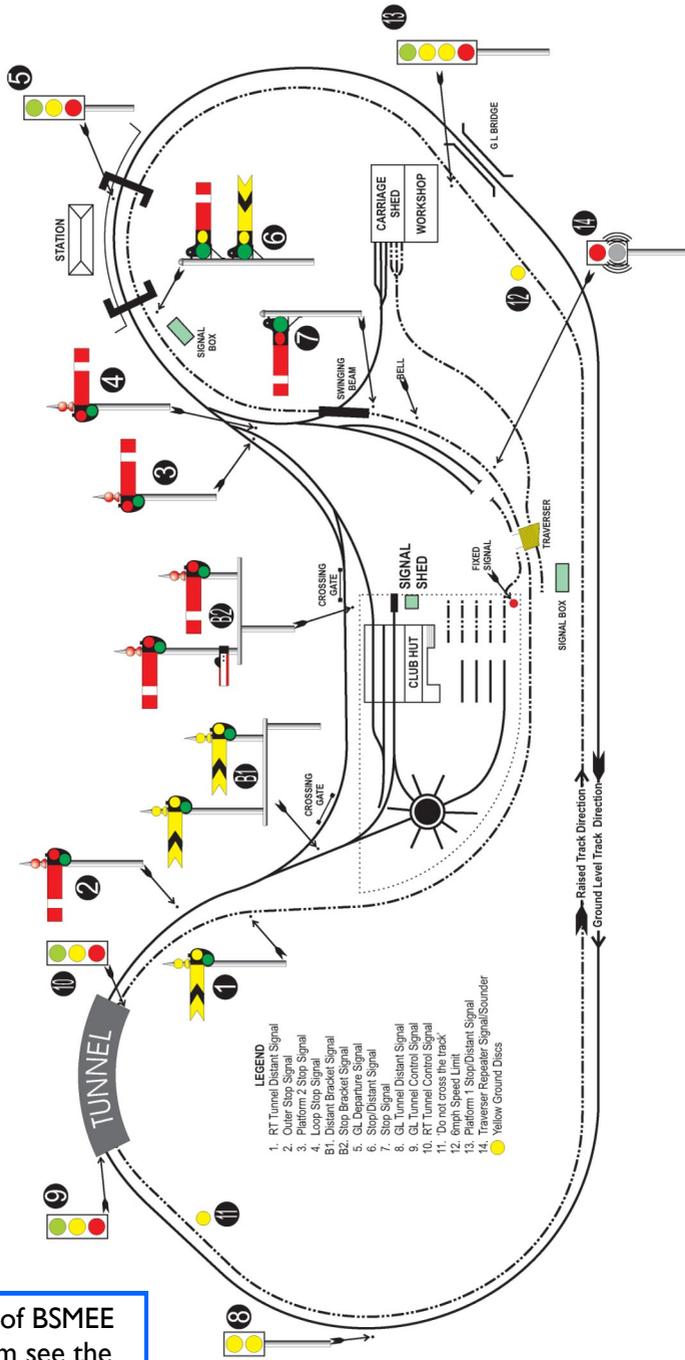
WARNING
STEAM LOCOMOTIVES ARE
HOT ENSURE CHILDREN DO
NOT TOUCH ANY PART OF THE
ENGINES

DRIVERS
STOP HERE
TO UNLOAD

ASHTON COURT MINIATURE RAILWAY LOCATION OF SIGNALS & SIGNS

For full details of BSMEE signalling system see the Signalling Handbook

Signals are stored in the Signal Shed
Except 6 (which is stored in the Station)
and 5, 9, 10, 13 & 14 (which are fixed in position)



IN THEIR GUIDANCE ON SAFE PRACTICE FOR PASSENGER
CARRYING MINIATURE RAILWAYS (HSG216)
THE HEALTH AND SAFETY EXECUTIVE STRONGLY RECOMMEND
THAT ALL PUBLICPASSENGER CARRYING MINIATURE RAILWAYS
HAVE A 'CODE OF PRACTICE'.

This booklet contains the
Bristol Society of Model & Experimental Engineers
Code of Practice for the operation of
Ashton Court Estate Miniature Railway.

Though this booklet gives operating regulations
designed to avoid known hazards, unforeseen dangers can
occur. It is therefore the responsibility of everyone to look out
for hazards or anything that could directly or indirectly cause
injury to passengers, visitors,
or anyone working on or visiting the site.

**It is suggested that all members keep this booklet to
hand and use it as a reference when carrying out any
duties at the railway.**

NO PERSON SHALL HELP IN ANY WAY WITH STAFFING,
OPERATING, OR DRIVING LOCOMOTIVES UNLESS THEY
ARE FAMILIAR WITH THE RULES CONTAINED WITHIN
THESE PAGES.

