



Second Person

Knowledge Checklist

(Generic Version)

Version 1

June, 2011

IMPORTANT NOTICE

This booklet is one of a series of generic training and assessment templates developed by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as guides for heritage railway operators seeking to develop or upgrade their local training and assessment resources.

This booklet and others in the series are not intended to be training resources in their own right but rather to be suitably customised, embellished and adapted by railway operators to match the specific context of their own railway, e.g. types of locomotives, rollingstock and associated equipment, the track layout and infrastructure, the local standard procedures and rules, the safety management and safeworking systems, the railway organisational structure, and the roles and functions of personnel in the railway, etc.

Railway operators seeking to use this booklet and others in the series should initially refer to the ***ATHRA Customisation Guidelines Booklet*** which provides important information on how the generic templates should be used.

Disclaimer

The information contained herein is made available by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as part of a set of ***generic training and assessment templates*** for use by individual heritage railway operators.

It is intended that heritage railway operators will be able to create their own local training resources by suitably modifying, embellishing and customising the generic templates to meet their own requirements.

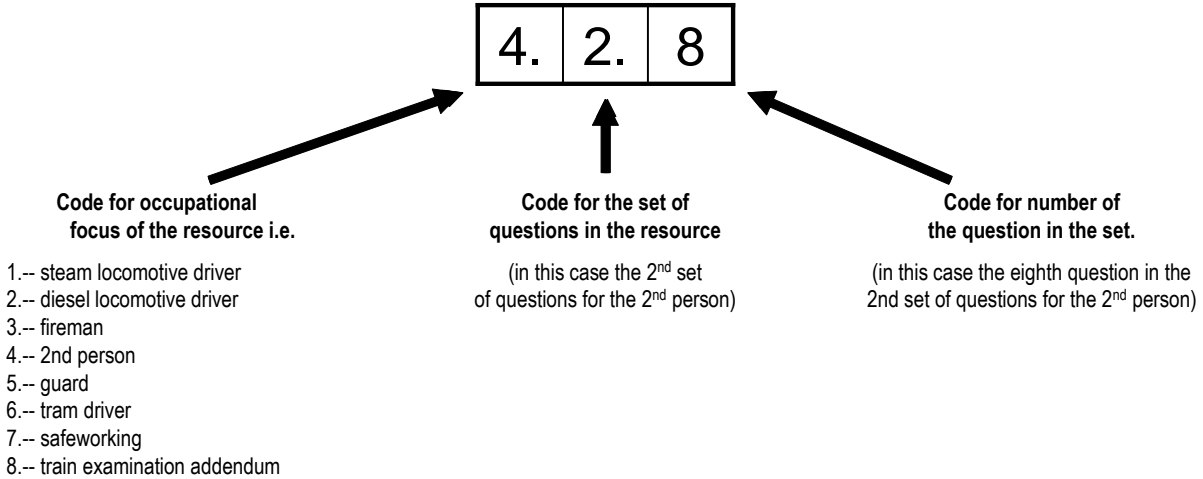
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NOTES

CODING SCHEME FOR THE ATHRA RESOURCES

The coding scheme for the ATHRA Resources is as follows:



CUSTOMISATION OF QUESTIONS IN THE 'KNOWLEDGE CHECKLIST'

As explained in the ATHRA Customisation Guidelines, this *Knowledge Checklist* is a generic document designed to be customized and adapted, if necessary, by local heritage railways to match their own railway configuration, equipment, procedures, safety management systems, etc. Questions in the booklet and related sample responses in the *Mentor's Q&A Booklet* may be modified by updating the content of the existing templates to incorporate appropriate information about the railway's own operating system, equipment, road, procedures, safety management system, etc. This may involve appropriate alteration to existing questions or the insertion of additional suitable questions.

To aid in the addition of questions, if needed, a blank row has been provided at the end of each set of questions in the generic checklist. The following is a step-by-step process to incorporate any additional questions:

1. Using the mouse, select the blank row
2. In the 'TABLE' drop down menu at the top of the document select 'Insert'
3. Click on 'Insert rows below'
4. Repeat as many times as necessary until you have sufficient rows for the additional questions (including the original blank row in the generic document)
5. Insert the text for each of the additional questions
6. Insert the codes of the additional questions as per the coding scheme for the ATHRA training and assessment resources
7. Make sure there are matching questions and sample responses in the *Mentor's Q&A Booklet* with the same code

Question Set 4.1 Role and responsibilities of a second person on a diesel locomotive

- Q4.1.1 What are the **key tasks** performed by a second person on a diesel locomotive?
- Q4.1.2 What is the **relationship** between the second person and the driver?.....
- Q4.1.3 Is the second person responsible for **observing** fixed signals, point stand indicators, check points, trackside signs and level crossings?.....
- Q4.1.4 Is the second person responsible for **fault finding** on the locomotive?
- Q4.1.5 Who **directs** the second person’s work on the locomotive?.....
- Q4.1.6 Describe the processes involved in interpreting and applying **‘authority’** to move a train’?.....
- Q4.1.7 Describe the **key safeworking rules** that apply to you as a second person?.....
- Q4.1.8 What are the **potential consequences** of not following safeworking rules and other regulations applicable to the second person’s role on your railway?.....
- Q4.1.9 What are the second person’s **initial duties** after signing on?.....
- Q4.1.10 What is the location and purpose of instruction plates outlining headways and limits of authority.....
- Q4.1.11 For your railway, describe the yard limits, commencement of yard limits and end of yard limits associated with train running
- Q4.1.12 What **action** must you take if you find a defect during a shift as a second person on a diesel locomotive?
- Q4.1.13 What **action** must you take if you are involved in a safety incident during a shift as a second person on a diesel locomotive?.....
- Q4.1.14 What **action** must you in the case of a limit of authority overrun during a shift as a second person on a diesel locomotive?.....
- Q4.1.15 What are the second person’s duties during **stabling operations**?
- Q4.1.16 Where can you obtain a **copy** of the duties of a second person, the safeworking rules applicable to second person and other key reference documents a second person needs on your railway?.....
- Q4.1.17 Give three examples of **hazards** that exist when working as a second person on a diesel locomotive.
- Q4.1.18 What personal protective equipment (PPE) must be used by second persons when carrying out their duties and functions?.....

- Q4.1.19 Give two examples of **risk management strategies** to control hazards when working as a second person on a diesel locomotive.
- Q4.1.20 What are the procedures for **handing over** a diesel locomotive to a replacement crew?
- Q4.1.21 *Blank for additional question*

Question Set 4.2 Conducting pre-operational checks on a diesel locomotive

- Q4.2.1 What are the **principal components** of the diesel locomotive(s) on which you will be working? What is the purpose of each?
- Q4.2.2 What are the **initial tasks** completed by the second person when commencing a shift?
- Q4.2.3 What are the principal parts of a **Westinghouse Brake System** and what is their purpose? (Where it is used on the locomotives and rollingstock of the railway concerned)
- Q4.2.4 What are the principal parts of a **Vacuum Brake System** and what is their purpose? (Where it is used on the locomotives and rollingstock of the railway concerned)
- Q4.2.5 Describe the **visual inspection and pre-operational checks** you must conduct in conjunction with the driver for the locomotives on which you will be working.
- Q4.2.6 What action should be taken by the driver and second person if **defects or deficiencies** are identified during checks or during operations?
- Q4.2.7 What is involved in switching on the **batteries and control circuits**?
- Q4.2.8 What are the procedures for pumping up **fuel** with the priming pump?
- Q4.2.9 What are the procedures for **starting** the diesel engine on the locomotive?
- Q4.2.10 When might it be necessary for the engine to be **pre-heated** when starting the engine on a diesel locomotive?
- Q4.2.11 What should the driver do if indicators or other checks show performance of the locomotive is **outside of specifications**?
- Q4.2.12 *Blank for additional question*

Question Set 4.3 Assisting the driver during a train journey

- Q4.3.1 What is the **role** of the second person during a train journey?
- Q4.3.2 What action should the second person take concerning **fuel, coolant and other fluids**?
- Q4.3.3 What is the role of a second person concerning **fixed signals, point stand indicators, check points, trackside signs and level crossings**?
- Q4.3.4 Why is it important for the second person to remain **vigilant** at all times during a train journey?
- Q4.3.5 What is the role of a second person concerning **speed limits** along a train's route?.....
- Q4.3.6 Describe the precautions and procedures a second person should follow when **approaching and stopping** at stations along a train's route?
- Q4.3.7 What is the second person's role during a **locomotive run around** at a terminus or siding?
- Q4.3.8 What are five examples of **abnormal situations** that may occur during a train journey and what is the role of the second person in responding to these abnormal situations?
- Q4.3.9 Describe the method of safe working on your railway and what actions you as second person need to take in relation to the authority to enter a section.....
- Q4.3.10 *Blank for additional question*.....

Question Set 4.4 Cleaning and checking the locomotive after operations

- Q4.4.1 How do you secure the locomotive prior to **post-operational cleaning and checking**?
- Q4.4.2 Why is it important to remove all **grime and grease** and to **clean** the locomotive's paintwork and brassware?.....
- Q4.4.3 Describe the **post-operational checks** you must conduct for a diesel locomotive after service.
- Q4.4.4 What should you do if you find a **defect or other problem** during a post-operational check of a locomotive after service?.....
- Q4.4.5 What post operational **lubrication and greasing tasks** need to be completed as part of stabling activities?
- Q4.4.6 What action should you take concerning the **fluid levels** when stabling a locomotive?
- Q4.4.7 What **other tasks** might a second person undertake when securing of a steam locomotive after service?

- Q4.4.8 How should the locomotive and associated equipment be left **after service**?
- Q4.4.9 What **paperwork** must be completed after cleaning and shutting down a diesel locomotive after service?
- Q4.4.10 *Blank for additional question*.....

RECORD OF THE KNOWLEDGE ASSESSMENT

Name of Rail Operator

Date assessment completed

Name of candidate

Signature of candidate

Name of the person conducting the assessment.....

Signature of the person conducting the assessment.....

Number of questions satisfactorily answered
(as per the ticked boxes on checklist)

COMMENTS OF THE PERSON CONDUCTING THE ASSESSMENT