

# **GADSDEN - PACIFIC DIVISION**

## **TOY TRAIN OPERATING MUSEUM**

### **Riding Railroad**

### **Operational Rules and Regulations**

#### **INTRODUCTION & ORGANIZATIONAL FLOWCHART**

#### **SECTION 1: GENERAL RULES**

- 1.1 General Behavior**
- 1.2 General Passenger Rules**

#### **SECTION 2: OPERATIONAL RULES**

- 2.1 Facility and Train Operations**
- 2.2 Non-Public Train Operations**
- 2.3 Public Train Operations**
- 2.4 Loading, Transfer Table, Steaming Bays, Storage Containers**
- 2.5 Communications**

#### **SECTION 3: PERSONNEL RULES**

- 3.1 Superintendent of Operations**
- 3.2 Stationmaster**
- 3.3 Conductor**
- 3.4 Engineer**

#### **SECTION 4: EQUIPMENT RULES**

- 4.1 GPD-TTOM Owner Railroad Equipment**
- 4.2 Member Owned Equipment**
- 4.3 Boilers**

#### **APPENDICES:**

- A TERMS USED IN RULES & REGS**
- B I.B.L.S. STANDARDS**
- C BOILER TESTING**
- D ACCIDENT GUIDELINES**



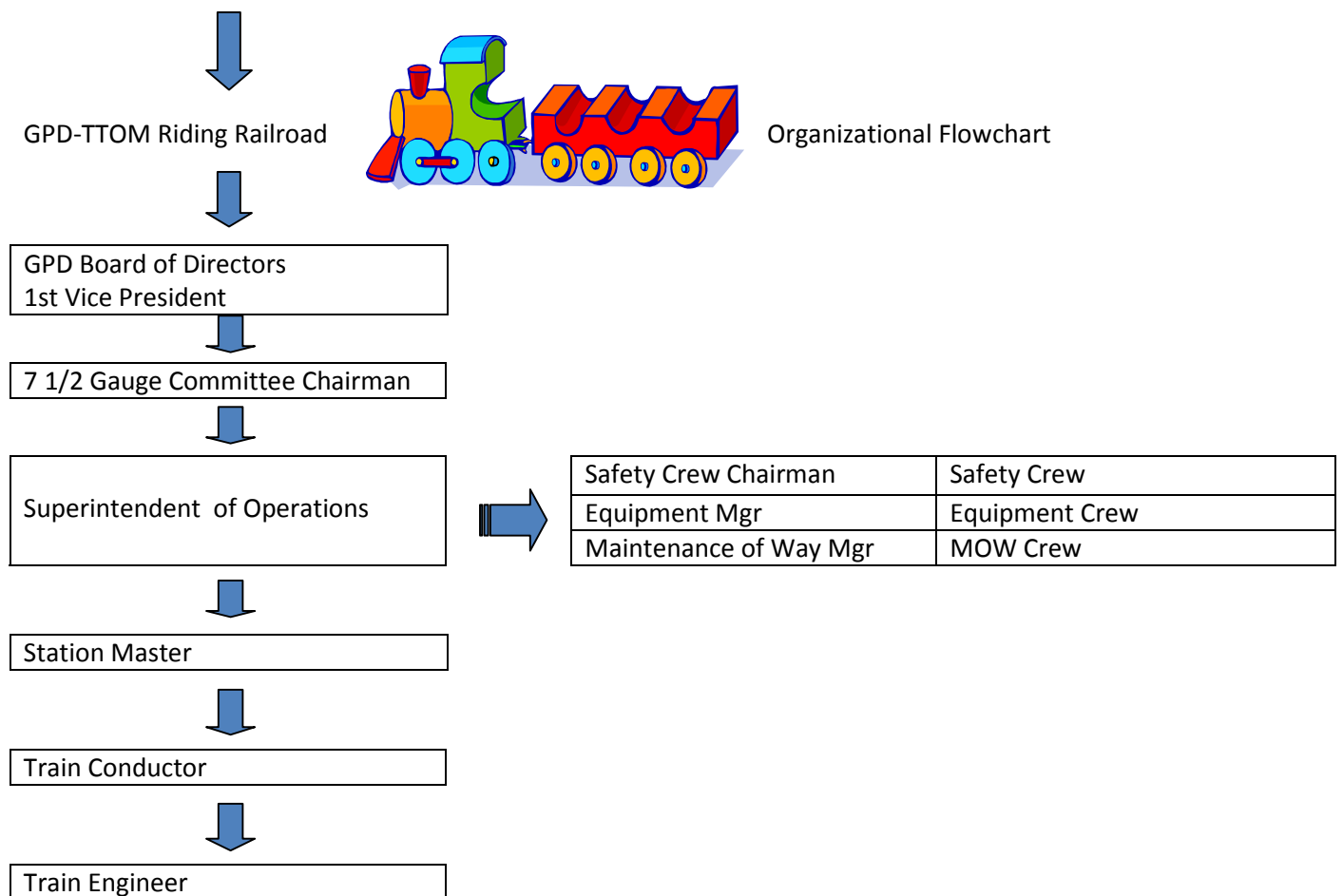
## INTRODUCTION

GPD-TTOM Riding Railroad is not a common carrier but a recreational riding and display railroad for the enjoyment of members and therefore all rules and safety measures are based upon what a prudent person would do under similar circumstances.

The purpose of the Operation Rules and Regulations is to assure fun and enjoyment of the railroad for all members, guests, and visitors through proper operations. These Operational Rules and Regulations are separate from the By-Laws of the GPD-TTOM and pertains only to the use of the 7 1/2 Gauge Layout.

It is the duty of each member of GPD-TTOM to abide by and to enforce the rules with SAFETY always in mind.

A person may be asked to remove him or herself from a train and/or the operation of trains may be stopped as needed to enforce these rules.



## **SECTION 1: GENERAL**

### **1.1 GENERAL BEHAVIOR**

**1.1.1** GPD-TTOM Riding Railroad is not a common carrier. It is a recreational riding and display railroad for the enjoyment of members and guests, therefore all rules and safety measures are based upon what a prudent person would do under similar circumstances.

**1.1.2** It is the responsibility of all members to help keep GPD-TTOM facilities neat and orderly. Members and guests are to dispose of their waste in the proper receptacles or take it with them when they leave.

**UNDER NO CIRCUMSTANCES ARE ANY OILS, FUELS, OR SOLVENTS TO BE Poured ON THE GROUND OR PLACED IN WASTE RECEPTACLES AT GPD-TTOM FACILITIES.**

**1.1.3** All Members and their Guests are to observe these rules and abide by them. Condensed copies of these rules shall be carried by all operating engineers and conductors during train operations. Visiting engineers will be provided with a copy of the condensed rules while they are operating on the GPD-TTOM Riding Railroad.

**1.1.4** Guests shall not:

**1.1.4.1** place or throw anything onto the tracks (stones, sticks, pennies, etc.)

**1.1.4.2** run on the GPD-TTOM property.

**1.1.4.3** climb or descend embankments.

**1.1.4.4** walk on bridges or into tunnels.

**1.1.4.5** climb trees, fences, structures or other trackside accessories.

**1.1.5** Locomotives and equipment brought to the Museum in vehicles shall be unloaded and loaded only at the facilities provided for such unloading and loading. All vehicles shall be removed from the loading area as soon as possible after loading or unloading.

**1.1.6** Guests are not permitted into the locomotive steaming bay area unless invited by a GPD-TTOM Member. The GPD-TTOM Member shall be responsible for the safety of the Guest at all times when the Guest is in the steaming bay area.

**1.1.7** No one shall stand nor walk on or within five (5) feet of any track, unless his duties require him to do so. It shall be the duty of any and all GPD-TTOM Members to help keep the Guests at a safe distance from the tracks. Responsible photographers and persons with recording equipment may obtain permission GPD-TTOM Members to get closer to the moving trains under certain conditions.

**1.1.8** GPD-TTOM owned equipment is intended to be used by Museum Members and guests ONLY at the GPD-TTOM facility, and shall not be removed from the facility without specific permission from the Superintendent of Operations.

This includes locomotives, cars, tools, fuel, treated or distilled water, or any other materials related to the operation of the 7-1/2" layout.

**1.1.9** No one noticeably under the influence of alcohol or drugs of any kind shall be permitted to ride on or operate any train.

**1.1.10** While trains are being operated on Museum property, animals shall not be allowed to run free.

## **1.2 GENERAL PASSENGER RULES**

**1.2.1** Warning: Steam Locomotives are very hot and emit hot water, steam, cinders and other airborne debris. Other locomotives may have gasoline engines with hot exhaust capable of causing burns if touched.

**1.2.2** Rides are not suitable for everyone. Due to the miniature nature of the 7-1/2" gauge railroad and the fact that passengers are not enclosed within the train while riding, some people may be asked to refrain from riding the train. In particular, people with physical or emotional disabilities, people with balance problems, or anyone recovering from surgery, injury, or illness should not ride the train. People who weigh more than 250 pounds, small children who cannot or will not sit still or follow directions, and pregnant women should not ride the train. A physically disabled person generally requiring mobility assistance may be permitted to ride provided they have an experienced assistant ride behind him/her and who will assist him/her on and off the train.

**1.2.3** Animals (including Service Animals) may not ride on the train.

**1.2.4** The Engineer and/or Conductor are the final authority as to who may or may not ride on their train.

**1.2.5** Passengers must have proper footwear to ride on the train.

**1.2.6** Passengers shall not:

**1.2.6.1** place or throw anything onto the tracks (stones, sticks, pennies, etc.)

**1.2.6.2** touch locomotives as they may be very hot.

**1.2.6.3** take food, open drinks, or other refreshments aboard any train, nor may any passenger or crewmember smoke while on board a train.

**1.2.6.4** reach out and touch or grab any objects while riding trains.

**1.2.6.5** board or exit the train until told to by the Stationmaster, Conductor or Engineer.

**1.2.7** Passengers must remain seated, facing forward & upright in the cars at all times. Passengers shall keep arms and legs in close to their body while riding trains. Rocking the cars is strictly prohibited.

**1.2.8** Passengers shall not use cameras, including video cameras while riding on the train unless first receiving express permission of the Engineer or Conductor.

**1.2.9** Young children, less than 5 years old, should sit in front of an adult when possible. Very small children (not yet walking) may be restricted from riding

trains. Carrying a baby or very small child aboard trains is dangerous and not permitted. The Engineer has final say as to how passengers are positioned on the train and shall also have final say as to who is allowed to ride on the train.

## **SECTION 2: OPERATIONAL RULES**

### **2.1 FACILITY AND TRAIN OPERATIONS**

- 2.1.1** This railroad is not a common carrier and is intended for the use of members and their guests as a recreational riding railroad. Rides on this railroad shall only be available to Museum Guests when approved by the Board of Directors.
- 2.1.2** All persons shall operate equipment in a safe manner.
- 2.1.3** Engines and/or trains shall only be operated by or under the direct supervision of a certified Engineer.
- 2.1.4** A first aid kit shall be readily accessible in an approved designated location at all times when trains are operated on the 7-1/2" gauge layout.
- 2.1.5** A multipurpose ABC rated fire extinguisher shall be readily accessible in an approved designated location at all times when trains are operated on the 7-1/2" gauge layout.

### **2.2 NON-PUBLIC TRAIN OPERATIONS**

- 2.2.1** Train Operations are subject to the review of the Safety Committee.
- 2.2.2** Engines shall always be operated at a safe speed. Posted speed limits are based upon ideal conditions. The Engineer shall be responsible to adjust the speed downward for adverse conditions that may be present during the time of operation.
- 2.2.3** Engines shall be run at reduced speed, and be prepared to stop, when proceeding through switches, entering a Station, and operating in Yards.
- 2.2.4** Engines backing up will do so only after giving the proper backup signal and checking to the rear for obstructions.
- 2.2.5** Trains following each other must maintain a minimum separation distance of 50 feet.
- 2.2.6** Trains shall not be stopped on grade crossings except in emergencies.
- 2.2.7** Engineers and Conductors are equally responsible for the proper alignment of switches.
- 2.2.8** Trains shall be stopped immediately whenever any hazard to train operation is detected. Except in case of emergency, all maintenance and major servicing of engines/trains shall be done on sidings, in steaming bay areas.
- 2.2.9** Trains shall carry a red light at the rear of the last car.
- 2.2.10** When visibility is limited and after sunset, all engines will have a illuminated headlight and the last car of all trains will have a red marker light.

**2.2.11 BLOW DOWN VALVES ARE NOT TO BE OPENED IN STATION AREAS.**

## **2.3 PUBLIC TRAIN OPERATIONS**

**2.3.1** Train Operations are subject to the review of the Safety Committee.

**2.3.2** Trains carrying the Public shall be operated by a certified Engineer who must be a minimum of 18 years of age.

**2.3.3** Trains carrying the Public shall have a certified Conductor riding in the rear most position of the train.

**2.3.4** A Stationmaster must be on duty during times when trains carrying the Public are operating.

**2.3.5** All passengers will be loaded and unloaded only at designated stations.

**2.3.6** Trains carrying the Public shall be made up only of Museum or Member owned engines and rolling stock approved for such us by the Superintendent of Operations.

**2.3.7** A chain or draw bar must be installed between any car on which the Engineer is riding that is separate from his locomotive. A chain or draw bar must also be installed between any fuel car or cars and the locomotive which it supplies. Safety chains will be installed and connected on all cars carrying the Public.

**2.3.8** A maximum of four depressed center straddle beam ride-on cars shall be used for trains carrying the Public. This number excludes an Engineer's car behind the engine and a Conductor's car and/or caboose at the end of the train.

**2.3.9** The depressed center straddle beam ride-on cars may have a maximum of three riders seated per car. The Conductor shall attempt to always distribute the passenger's weight evenly between the riding car's trucks. When two riders are on the car, they will be positioned at the front and the rear of the car. When one rider is on the car, they will be positioned in the center of the car.

**2.3.10** No more than 12 passengers shall be loaded onto a train carrying the Public.

**2.3.11** Maximum speed under ideal conditions for trains carrying the Public is limited to a maximum of five (5) miles per hour.

## **2.4 LOADING ZONE, TRANSFER TABLE, STEAMING BAYS, STORAGE CONTAINERS:**

**2.4.1** Locomotives and equipment will be loaded and unloaded from vehicles and trailers at the Loading Zone. All vehicles (including trailers) will be moved from the Loading Zone as soon as possible after unloading or loading.

**2.4.2** When returning a GPD-TTOM owned train to storage in a Storage Container, the engine shall be the last piece of equipment stored allowing for its use without having to move rolling stock first.

**2.4.3** Whenever possible, Engines shall be stored on the lowest storage tracks within the Storage Containers.

**2.4.4** Track clamps are to be used for any unattended trains or engines on the Transfer Table, Steaming Bays, or the sloped Transfer Track to prevent trains &

equipment from rolling away from their intended location.

## **2.5 COMMUNICATIONS:**

### **2.5.1 HAND SIGNALS:**

**2.5.1.1** Trainman should use hand signals whenever practical.

**2.5.1.2** Hand signals may be given with the hand, flag or light, as follows:

<b>"STOP"</b>	Swing at arm's length down from the shoulders across the track.
<b>"PROCEED"</b>	Raised and lowered vertically.
<b>"BACK UP"</b>	Swung vertically in circles across the track.
<b>"REDUCE SPEED"</b>	Arms held horizontally with slight motion of hand.

### **2.5.2 WHISTLE SIGNALS:**

**2.5.2.1** Engine whistle signals. o = short blast. > = long blast.

<b>o</b>	Apply brakes. Stop.
<b>oo</b>	Proceed. Answer to any signal not otherwise provided for.
<b>ooo</b>	When standing, back up.
<b>oooo</b>	Call for signals.
<b>&gt;&gt;</b>	Release brakes and proceed.
<b>&gt;&gt;&gt;&gt;</b>	Flagman return to the train.
<b>&gt;&gt;o &gt;</b>	Approaching public crossing, tunnel, area of restricted visibility, or another train.
<b>oooooooo</b>	(multiple short blasts) Warning to people or animals on the track. General alarm.
<b>&gt;&gt;&gt;&gt;&gt;&gt;</b>	(prolonged blast) Approaching a station.

### **2.5.3 RADIOS:**

**2.5.3.1** Radio operation is intended for communication between the Station Master and all trains as well as ground personnel.

## **SECTION 3: PERSONNEL RULES**

### **3.1 SUPERINTENDANT OF OPERATIONS**

**3.1.1 Qualifications:** The Superintendent of Operations shall be a Regular Member in good standing with current Engineer certification.

### **3.1.2 Responsibilities:**

- 3.1.2.1** The Superintendent of Operations has the overall responsibility for the operation and maintenance of the entire 7-1/2" gauge railroad.
- 3.1.2.2** The Superintendent of Operations shall certify and designate GPD-TTOM owned engines and rolling stock to be used for carrying the Public.
- 3.1.2.3** The Superintendent of Operations shall supervise maintenance and repairs to GPD-TTOM owned 7-1/2" gauge equipment.
- 3.1.2.4** The Superintendent of Operations has jurisdiction assigning priority over train & equipment movements in the Loading Zone, Transfer Table, Steaming Bay, & Storage Container Areas.
- 3.1.2.5** The Superintendent of Operations shall supervise maintenance and repairs to the 7-1/2" gauge layout include track, roadbed, structures, accessories and storage facilities.
- 3.1.2.6** The Superintendent of Operations shall appoint qualified individuals to serve as Stationmasters during times when trains are carrying the Public.

## **3.2 STATIONMASTER**

- 3.2.1 Qualifications:** The Stationmaster shall be a Member of GPD-TTOM in good standing who demonstrates to the Superintendent of Operations that he/she has a complete understanding of entire layout and the knowledge, judgment, and ability to supervise passengers and train operations carrying the Public.
- 3.2.2 Responsibilities:**
  - 3.2.2.1** The Stationmaster has responsibility for the Public operation of the railroad on any given day with the chief concern being the safety of visitors, guests, and members of the organization.
  - 3.2.2.2** The Stationmaster will have complete charge of the station.
  - 3.2.2.3** The Stationmaster welcomes guests and passengers to the Museum.
  - 3.2.2.4** The Stationmaster directs Museum Guests to all points of interest at the Museum.
  - 3.2.2.5** The Stationmaster supervises the loading and unloading of all passengers at the passenger station.
  - 3.2.2.6** The Stationmaster shall determine the duration of all Public train rides.
  - 3.2.2.7** The Stationmaster shall ensure that the public receives a GPD-TTOM, BOD approved, safety briefing before leaving the station.
  - 3.2.2.8** The Stationmaster verifies that passengers do not take anything aboard the train that may create an unsafe condition.
  - 3.2.2.9** The Stationmaster directs the arrival of trains by preparing waiting passengers to be safely away from the tracks before signaling permission to the incoming train.



**3.2.2.10** The Stationmaster controls the use of the turntable & related approach tracks.

### **3.3 CONDUCTOR**

**3.3.1 Qualifications:** The Conductor shall be a Member of GPD-TTOM in good standing and must be familiar with all the Engineer duties.

#### **3.3.2 Responsibilities:**

**3.3.2.1** The Conductor has overall responsibility for directing the safe operation of the train during Public operation of the railroad on any given day.

**3.3.2.2** The Conductor assists the Stationmaster with loading/unloading passengers at the station.

**3.3.2.3** The Conductor directs the departure of trains by signaling the Engineer when the train is fully boarded and passengers are ready for departure.

**3.3.2.4** The Conductor supervises passenger behavior during operation of the train. The Conductor shall signal the Engineer to stop the train if passenger behavior dictates. The Conductor shall possess a whistle, or other acceptable signaling device that can be used to alert the Engineer as needed.

**3.3.2.5** The Conductor constantly monitors train and track conditions and shall report problems in writing to the Superintendent of Operations as needed.

### **3.4 ENGINEER**

**3.4.1 Qualifications:** The Engineer shall be a Member of GPD-TTOM in good standing and must maintain current certification by testing in order to operate trains on the GPD-TTOM 7-1/2" layout. In addition, the Engineer must demonstrate that he/she has the knowledge, judgment and skill necessary to operate the locomotive that is being used.

#### **3.4.2 Responsibilities:**

**3.4.2.1** The Engineer has overall responsibility for the safe operation of the locomotive that he or she is operating.

**3.4.2.2** The Engineer shall safely handle the locomotive and the cars being used in conformance with GPD-TTOM Operational Rules and Regulations at all times.

**3.4.2.3** The Engineer must see that any GPD-TTOM equipment used by him is returned to its proper storage space at the end of his run and that any defects, damage, or maintenance issues related to that equipment are properly documented in writing on the appropriate engine log book.

**3.4.2.4** The Engineer shall notify the Superintendent of Operations of any issues requiring immediate attention in order to maintain the operational status for trains carrying the Public at the Museum.

- 3.4.3 Certification:** Certification is obtained by reading & becoming familiar with the Operational Rules and Regulations followed by passing a written test administered by the Superintendent of Operations. A passing grade of 80% is required. Such certification is valid for one calendar year and must be renewed annually.

## **SECTION 4: EQUIPMENT**

### **4.1 GPD-TTOM OWNED RAILROAD EQUIPMENT**

- 4.1.1** GPD-TTOM owned engines and/or rolling stock shall only be operated by a certified Engineer who is a Regular Member in good standing of the Museum.
- 4.1.2** Engineers operating GPD-TTOM owned engines and/or rolling stock must report, in writing, any damage or operational problems that were observed by the Engineer during his or her operation on the equipment. The report shall be made in writing on forms provided for this purpose that are maintained at the Museum. If the problem observed is serious enough to prevent the equipment from being used safely, such notification shall be immediately transmitted to the Superintendent of Operations.

### **4.2 MEMBER OWNED EQUIPMENT**

- 4.2.1** In order to preserve GPD-TTOM owned track and to assure adequate safety, wheel dimensions (gauge, back-to-back, tread width, flange depth and thickness) must conform to I.B.L.S. Standards to operate. The safety committee shall verify standards are adhered to by requesting a check of any equipment that is suspected of causing damage to track or is observed to be unstable or being involved in derailments.
- 4.2.2** Connections between engines and tenders or between engines and cars with fuel supplies shall be connected with drawbars that are equipped with lock pin type connections that cannot become accidentally uncoupled nor disconnected during derailments. Other types of connections must be equivalent in performance and be approved for use by the safety committee before being used on the layout.
- 4.2.3** Locomotives or rolling stock that leak fluids or are in obvious need of maintenance must be repaired, cleaned or removed from layout.
- 4.2.4** If required by the Safety Committee, rolling stock, regardless of ownership, which is used in conjunction with GPD-TTOM owned cars on trains carrying the Public, shall be equipped with compatible brake systems that can be operated from the locomotive by the engineer.
- 4.2.5** Locomotives shall be equipped with a whistle, horn, or sounding device for sounding locomotive signals. Such sounding device shall be powerful enough to be heard distinctly for at least 150 feet.
- 4.2.6** Trains running during periods of low visibility or after sunset shall be equipped with a marker light, or lights on the rear of the last car showing a red light to the

rear and visible for at least 150 feet.

- 4.2.7** Equipment shall be built to clear all trackside structures and accessories. Any equipment on which the engineer, conductor, or passengers ride designed to have the person's feet supported outside of the equipment shall have foot boards, bars or pegs to hold the feet of all riders in a position to clear all track side objects such as: switch stands, signals, mileposts, etc.
- 4.2.8** Cars used to haul passengers shall have fixed or adjustable seats that are designed in such a way that they will not fall off during normal use. Seats shall NOT be improvised with boards and objects laid across the sides of the car.
- 4.2.9** Car and truck bolsters shall be constructed to provide three or four point suspension for the car body. Side bearing clearance shall allow trucks to swivel freely, and provide stability for the car body with maximum load shifting. Kingpins for un-equalized trucks shall be loose enough to allow equalizing with respect to the car body.
- 4.2.10** Electric Loco Charging (Commercial Power Use Only) shall follow all GPD-TTOM safety committee guidelines.
- 4.2.11** All locomotives shall be capable of slowing and stopping the entire train within a reasonable distance or they shall be provided with braking devices.

#### **4.3 BOILERS**

- 4.3.1** All rules and regulations for Steam Locomotive boilers are under the control of the Safety Committee. Boiler testing requirements are contained in Appendix C.
- 4.3.2** Boilers must be inspected & tested at least annually to be operated on the GPD-TTOM 7-1/2" gauge layout. Boiler testing must also be performed after any repair work is performed on a boiler.
- 4.3.3** Boiler Inspection Reports must be filed with the Safety Committee.

## **APPENDICES**

### **APPENDIX-A: TERMS**

**7-1/2" GAUGE LAYOUT.** One of several toy train layouts located at the GPD-TTOM. The 7-1/2" gauge layout is located entirely outside of the Museum Building but completely within the property. It is built to replicate Standard Gauge railroads in a scale of approximately 1-1/2" = 1'-0" (1/8th scale).

**GPD-TTOM.** The acronym GPD-TTOM refers to the Gadsden Pacific Division, Toy Train Operating Museum.

**GUEST.** The term Guest refers to anyone visiting the Museum facility who is not a Member in good standing of the Museum.

**I.B.L.S. Standards.** The term I.B.L.S. Standards refers to Standards developed by the International Brotherhood of Live Steamers, of which applicable copies are contained in Appendix B of these Operational Rules & Regulations.

**MEMBER.** The term Member refers to a current Member in good standing of the GPD-TTOM.

**MUSEUM.** The term Museum refers to the GPD-TTOM facility located at 3975 N. Miller Ave., Tucson, AZ including the property & all buildings on the property.

**NON-PUBLIC.** The term Non-public refers to a Guest to the Museum who has been personally invited by Member of the Museum. The Member must take direct responsibility for the behavior, safety & well-being of this Guest to be considered Non-public. If the Member does not assume this responsibility, the Guest then reverts back to becoming a "Public" Guest and must conform to the rules governing Public Operation.

**PASSENGER.** The term Passenger refers to a Guest to the Museum who has chosen to ride a train carrying the Public on the 7-1/2" gauge layout.

**PUBLIC.** The term Public refers to a Guest to the Museum who was not personally invited by a Member of the Museum and who is responsible for their own behavior, safety & well-being.

**STATION.** An open platform with roof where passenger congregate prior to embarking onto a train carrying the Public.

**STEAMING BAYS.** Short sections of elevated rail used to support engines or rolling stock while maintenance is performed. The Public is restricted from entering the steaming bay area. Steaming bay access may be permitted to Non-public guests.

**APPENDIX-B: I.B.L.S. STANDARDS**

**APPENDIX-C: BOILER TESTING**

**APPENDIX-D: ACCIDENT GUIDELINES**