



# Maricopa Live Steamers Railroad Heritage Preservation Society Safety and Operating Rules

**Revised April 2022**

## **PREFACE**

The purpose of these rules is to ensure the safe enjoyment of Maricopa Live Steamers (MLS) facilities by all members, guests, and visitors. All Engineers must pass an engineer's test annually prior to operating on the MLS track divisions.

[Click on subject to view]

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## REVISION HISTORY

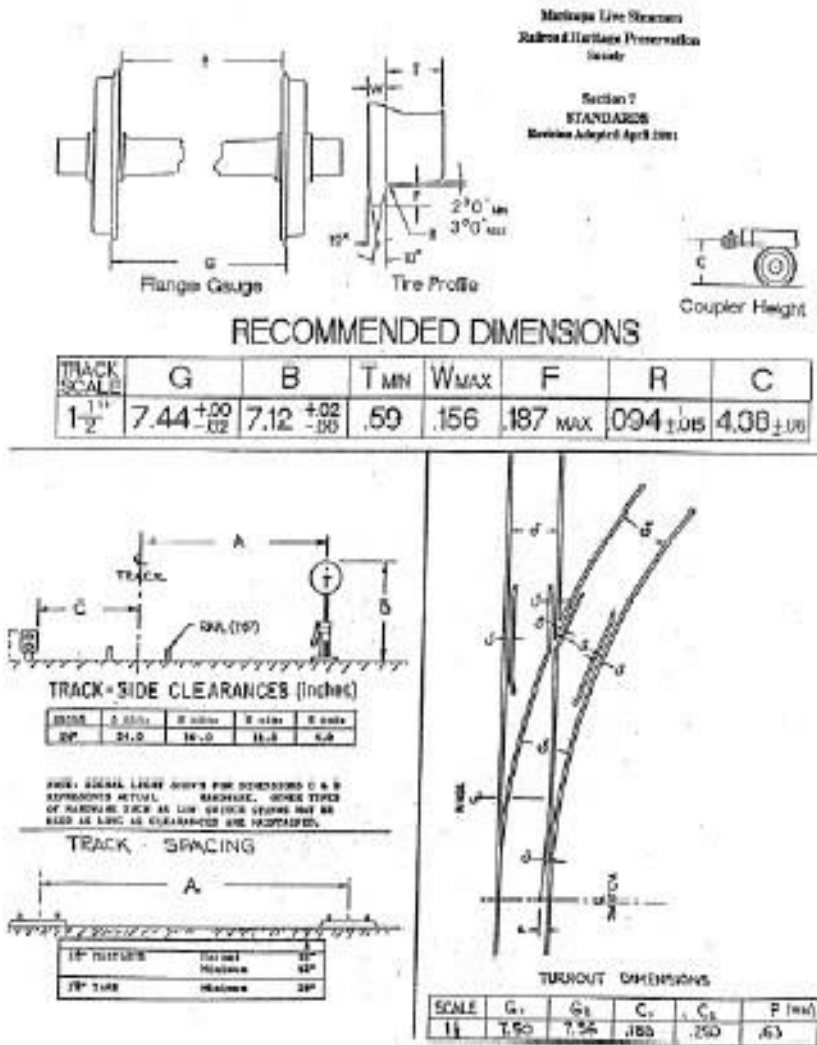
- April 2022 – Added Night Running Rules sub-section 644.4-647, (Joe S) and Remotely Operated Locomotives – new section 540, (Dakota C)
- August 2018 - Added section 7.1.5- Lock Out Tags; 8.1.5 Electrical Lock Out Tag Out; Removed 8.2 – Mick J
- August 2017 - Added section 538: two trains on the same longer spur movement -Mike L
- July 2017 - Deleted pregnant women statement from riding the public trains in section 640- Mike L
- May/April 2017 - Changed Section 6 (631) with the updated rules for passing engineer’s test prior to Public Run season per Pete P. Also added to Section 5 the criteria for pass/fail on the engineer’s test per ML. Added golf cart restriction, added Section 8 rules clarifications, added regular or lifetime member to keep equipment past the 120-day limitation.
- August 2016 - Changed Section 3 with the updated rules per Terry L.
- May 2016 - Replaced Section 3 (old signal rules) with the updated rules per Terry L. Revised section 532 for 3 mph limit through turnouts at divergent route
- January 2016- Added new sub-section 210.6, added the phrase “and by the MLS BoD” to 220.1 Added new 7.0 section and 644 -Night Running Operation.
- March 2015- Added sub-sections to 210.3 for transfer tables’ safety guidelines.
- February 2014- Deleted riding car and total passenger limit from section 634. Added section 634.5 (new guidelines for riding cars).
- August 2012- Added detailed steam boiler verification standards for MLS Meets; Section 232
- May 2012 - Consolidated all steam loco /boiler information under Section 230. Added member’s owned structures guidelines under Section 220. Deleted safety siren wording in Section 634.
- August 2011- Added Fire Ban Regulation policy and rules for steam loco under Section 231.9.
- January 2011- Added Electrical Loco charging guidelines under Section 240.
- February 2007- Added Section 1- Standards
- August 2005- Safety chains or draw bars requirement added to public riding cars.
- February 2004- Added annual engineer’s test prior to operating on the MLS track.

## **OTHER MLS APPLICABLE IMPORTANT DOCUMENTS**

- **MLS BYLAWS**
- **MLS OTHER RULES, GUIDELINES and SCHEDULES**
- **MLS NEW MEMBER HANDBOOK**
- **PASSENGER RIDING CAR INSPECTION PROCEDURE**
- **INSPECTION DATA SHEET**
- **MEMBER VIOLATION INCIDENT PROCESS**
- **IBLS WHEEL STANDARDS** [included in this document – Section 1]
- **MLS WHEEL STANDARDS AND AXLE LOADS**
- **REMOTELY OPERATED LOCOMOTIVES & CHECKLIST**

# Section 1 IBL5 WHEEL AND TURNOUT STANDARDS

Revision Adopted February 2007 (Also Refer to IBL5 Document listed on previous page)



## Section 2 GENERAL

### 205. Members, Operators, and Guests MLS Cultural Guidelines

- 205.1 No one shall operate any equipment in an unsafe manner.
- 205.2 No one shall operate equipment while under the influence of any substance adversely affecting his/her ability to safely operate that equipment.
- 205.3 No weapons are allowed on MLS property.
- 205.4 Operators/engineers are responsible for the safe operation of their equipment.
- 205.5 All members and guests are responsible to help keep MLS facilities neat and orderly. Members 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 MLS FACILITIES.**

### 210. Equipment Operating Guidelines

- 210.1 Equipment at MLS facilities shall conform to MLS standards and shall be sufficiently quiet so as to permit normal conversation immediately adjacent to such equipment.
- 210.2 Moving powered equipment shall be equipped with an audible warning device loud enough to permit safe operation.
- 210.3 Members and guests shall ensure that all MLS equipment they use is properly cared for and stored after use.
  - 210.3.1 All Transfer Tables can only be operated by MLS members or their guests. Safety signs are post on all Transfer tables to remain operators of the rules. **(ADDED 2/15), ML**
  - 210.3.2 Transfer Tables can only be operated by persons 13 years and older. They must follow the same rules as in operating trains. **NO EXCEPTIONS!!! (ADDED 2/15), ML**
- 210.4 Members are liable for any damage to MLS equipment and/or facilities caused by their negligence/abuse and are liable for all associated repair costs. Specific action shall be determined by a majority vote of those present at a legally held BoD meeting.
- 210.5 MLS owned equipment shall not be removed from the MLS facilities without prior approval of the BoD or the President.

210.6 All MLS powered equipment must **NOT** exceed 5MPH. **(ADDED 1/16, ML)**

**220. Members' Owned Container, Shed or Doghouse Guidelines**

**(Added 05/12), ML**

- 220.1 Members' structures (known as metal containers, custom built sheds, or doghouses) can only be placed on MLS site locations that are approved by the Long-Range Planning committee (LRPC) and **by the MLS BoD**. Special installations permit maybe required from the City of Phoenix. **Added 1/16), ML**
- 220.2 Structures must have 100% of the inside storage related to train items or specific park usage. It is recommended that non-related train items be stored off-site. Hand tools, small related electric tools, and park related items such as Christmas decorations, tables, and chairs are allowable. Contact any board member if you have any questions about types of storage items.
- 220.3 Only Regular Members in good standing may own a structure or rental storage space.
- 220.4 No structure sale to any other member or outside non-member can be consummated without prior approval of the MLS BoD. MLS has always the right of first refusal in any sale. If a structure is to be removed from MLS property, the owner must ensure that no damage is done to any other structures adjacent to the structure being removed. Under no circumstances will a structure being removed cross any track.
- 220.5 Owner is responsible to maintain the area around the structure and to the right of the structure to be free of all debris and weeds.
- 220.6 No additional appendages shall be added to the structure without prior approval of the L/R Planning committee (LRPC).
- 220.7 Due to Phoenix Electrical Code requirements, no electrical connections (50v or higher) are to be made to the outside or inside of a structure. No water connections are to be made to a structure unless prior approval from the L/R Planning committee. Temporary electric loco charging is allowed inside a structure for a 24-hr. period. Refer to Section 240 for more details.
- 220.8 Members purchasing a container shall have 12 months to erect a LRPC approved front and/or side facade to the container for aesthetics.
- 220.9 You must be a regular or lifetime member to keep personal equipment, i.e., locomotives or rolling stock on club property or in containers or on rental tracks for more than 120 days. **(ADDED 5/17, ML)**

## **230. Steam Locos / Boilers Rules**

**(Revised 05/12), ML**

- 231.1 Be certified as having passed an annual hydrostatic test to 50% above their normal working pressure. New steel boilers shall be tested to 100% above their normal working pressure. Steam boiler test certificates issued by other recognized live steam organizations within the past twelve (12) months shall be accepted as valid by the MLS.
- 231.2 Have two safety valves set to operate within 5 psi of each other.
- 231.3 Have the bottom of the water level gauge glass set at least ¼” above the top of the crown sheet.
- 231.4 Have the ability to immediately shut off the heat source.
- 231.5 Have at least two methods of putting water into the boiler while under pressure at least one of which must function while a moveable engine is stationary.
- 231.6 Incorporate an ash pan and a working spark arrestor if burning solid fuel.
- 231.7 Ashes from solid fuel locomotives shall not be discharged in station areas except under emergency conditions. Cleanup is the responsibility of the individual discharging the ashes.
- 231.8 Steam locomotives shall be operated to prevent anyone from being burned or having their clothing soiled by steam from cylinder cocks, blow down valves, whistles, or other steam emitters. **BLOW DOWN VALVES ARE NOT TO BE OPENED IN STATION AREAS.**
- 231.9 Steam locomotives must adhere to the Maricopa County Fire Ban Restriction policy. MLS BoD has developed the following rules to ensure compliance to the Fire Ban. Each steam loco shall have the following: **Revised (08/11), ML**
- 231.9.1 Each steam engine will carry a fire extinguisher. Fire extinguisher options are: One 5 lb. ABC, or Two - 2 ½ lb. ABC or One - 2 ½ gallon pressure water extinguisher.
- 231.9.2 A smoke stack spark arrestor. The arrestor screen mesh size will be not be larger than .125 or 1/8”. This can be checked by using a 1/8 drill or equivalent. Incorporate an ash pan and a working spark arrestor if burning solid fuel.
- 231.9.3 Each engineer is responsible to empty the ash pan in the MLS steel ash dump areas. They are located around the steaming bays. After the ash dumping, water must be applied to the ashes. **No Exceptions!!!**
- 231.9.4 A yellow sign will be mounted in the steam bays when these rules are in effect.

**(REMOVED ONLY FIRE BAN PERIOD, ML)**

232. Steam boilers belonging to MLS members will have verification of a valid hydrostatic successful inspection. A witness of the hydrostatic test card will be issued with a tag of conformance for MLS meets. **(Added 08/12), ML**

233. Steam boilers belonging to non-members that require inspection for an MLS meet will be valid only for the duration of the MLS meet. A tag of conformance will be issued for operation during the meet. No steam boiler shall be allowed to operate at an MLS meet without showing a tag of conformance. **(Added 08/12), ML**

**240. Electric Loco Charging (Commercial Power Use Only)**

**Revised (01/ 2011), ML**

241. Charging any electric loco shall follow all MLS safety guidelines.

242. Overnight charging is allowed with a maximum time limit of 24 hrs. from the time the connection is made to an electrical outlet. In certain emergency situations, an additional 24 hrs. time period will be allowed to disconnect the power extension cord. Cords are **NOT** allowed to remain on the ground. They must be coiled and stored for future use. It is highly recommended that if you cannot disconnect within the timeframe, contact an MLS member to perform this task for you.

243. Power connection cords must be UL approved and only be connected to a GFI outlet or standard outlet with a GFI breaker installed in the electrical box. Additionally, power cords must be 14 ga. for less than 50 ft. from outlet to charger and 12 ga. for 50-100 ft.

244. Under **NO** circumstances are power extension cords allowed to cross any transfer tracks within the MLS yard areas.

245. Any violations of these guidelines will be reported to the BoD for corrective action.



### Section 3 SIGNALS

310. Hand signals may be given with one arm with a hand, a flag, or a light as follows. The arm should start above shoulder height and should be swung over the track and perpendicular to it. The signaler should face the engineer unless they are moving.
- 311. PROCEED            Raised or lowered vertically.
  - 312. REDUCE SPEED    Held horizontal with short up and down motions.
  - 313. STOP                Swung at arm's length down to as low as possible. Any object waved violently on or near the track.
  - 314. WASHOUT           Swung violently at arm's length down to as low as possible and across the legs. Used to signal emergency stop.
  - 315. BACK-UP            Swung vertically in circles clockwise or counterclockwise.
320. Engine whistle signals. (o = short blast. > = long blast.)
- 321. o                    Apply brakes. Stop.
  - 322. oo                   Proceed. Answer to any signal not otherwise provided for.
  - 323. ooo                  When standing, back up.
  - 324. oooo                Call for signals.
  - 325. >>                  Release brakes and proceed.
  - 326. >>>>                Flagman, return to the train.
  - 327. >>o >              Approaching public crossing, tunnel, area of restricted visibility, or another train.
  - 328. ooooooo            (multiple short blasts) Warning to people or animals on the track. General alarm.
  - 329. >>>>>>>        (prolonged blast) Approaching a station.
330. Communicating signals given by the conductor.
- 331. oo                    When standing, proceed. When running, stop.
  - 332. ooo                   When standing, back up. When running, stop at the next station.
  - 333. oooo                  When running, reduce speed.
  - 334. ooooooo            (multiple short blasts) Emergency.
340. Color signals, lights, or flags. They may appear as hand signals, electronic signals, or fixed signals (board beside the track).
- 341. GREEN              Proceed. On the front of a locomotive, indicates another section of the same train is following.
  - 342. YELLOW            Proceed at reduced speed. Prepare to stop at the next signal.
  - 343. RED                 Stop.
  - 344. BLUE                Equipment must not be moved or coupled to. They may only be removed by the person who put it there.
  - 345. WHITE              On the front of a locomotive indicates that the train is an extra or second section.

### **350. MLS Signaling System**

351. These signal rules apply to the following subdivisions: Pottsville, Bobberg, Werner, and Far Flung. Arntchoo and Serpentine subdivisions are un-signaled. The Serpentine subdivision has special operating instructions different from the other subdivision. See rule 3.67 for reference. See special rules (Section 3.65) for Adobe City operation within yard limits under control of AJ Tower.
352. When the signal system is OFF, all subdivisions are dark territory. Proceed at a speed that will allow you to stop in half the distance to an obstruction or another train. When the signal system is ON, the below listed rules apply.
353. All stop signals on the Adobe Western RR are ABSOLUTE and must not be passed (with exceptions). See the following rules listed below for exceptions regarding signal operation on the RR.
354. When you encounter a signal with two signal heads, the top signal designates the main line and the lower signal designates the diverging main line route. The possible aspects are defined in the following rules.
355. Where there are more than two signal heads, each signal head indicates condition of each diverging route. The possible aspects are defined in the following rules for Adobe yard limit rules.
356. Maximum authorized speed on mainline is five miles per hour. Per rule 532.
357. Maximum authorized speed in yard limits is three miles per hour. Per rule 532
358. Maximum authorized speed thru turnouts is three miles per hour. Per rule 532

Aspect

Indication

Single Head

Double Head

359.



**Clear:** Proceed authorized speed.

360.



**Approach:** Proceed prepared to stop at next signal.

361.

N/A



**Diverging Approach:**  
Proceed on diverging route not exceeding authorized speed through turnout prepared to stop at next signal.

362.



**Stop:** Do not pass signal unless authorized by dispatcher (if on duty) or stationmaster (if on duty). If neither is on duty wait for a period of one minute and proceed at a speed that will allow you to stop in half the distance to an obstruction or another train.

363.



N/A

**Stop:** (Flashing Red)  
Proceed with caution when it is safe to do so.

364.



**Stop:** Do not pass signal unless authorized by dispatcher (if on duty) or stationmaster (if on duty). If neither is on duty wait for a period of one minute and proceed at a speed that will allow you to stop in half the distance to an obstruction or another train.

365. **The following rules apply within the yard limits of Adobe City.**

Aspect with multiple head signals  
(Which Way Junction)

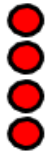
Indication



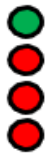
Proceed at authorized speed on route one.



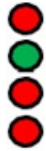
Proceed at authorized speed on route two.



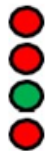
Stop: select route one, route two, route three, or route four



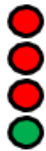
Proceed at authorized speed on route one.



Proceed at authorized speed on route two.












Proceed at authorized speed on route three.



Proceed at authorized speed on route four.

365. Station Track Select  
signal

		Stop: Select arrival track in Adobe City station
	Track #1	Stop
	Track #1	Proceed, prepared to stop at next signal on Track #1
	Track #2	Stop
	Track #2	Proceed, prepared to stop at next signal on Track #2
	Track #3	Stop
	Track #3	Proceed, prepared to stop at next signal on Track #3
	Track #4	Stop
	Track #4	Proceed, prepared to stop at next signal on Track #4

### 366. Special operating rules for Adobe Western RR

**All signs / flags / boards to be on right hand side of track, unless designated otherwise, or over track.**

Signage:

Indication

Any sign displaying the word "**STOP**" regardless of the shape of the sign.

**Stop:** Proceed when it is safe to do so at authorized speed.

Any sign displaying the word "**SLOW**" or yellow board, yellow flag, or any device of any shape painted yellow placed adjacent to the track.

**Slow:** Reduce speed to be able to stop within half the distance to the obstruction or another train. Speed not to exceed three miles per hour.

Red board, red flag, or any device of any shape painted red placed adjacent to the track. Any violent action indicating with or without flag that the train should stop.

**Stop:** Do not pass without authorization of MOW supervisor or MLS representative.

LED switch position indicator

Vertical line indicates that the turnout is lined for the straight route.

Diagonal line indicates that the turnout is lined for the diverging route.

367. There are no signals on the Serpentine line. It is a train-to-train radio-controlled railroad. All trains must use BoD designated FRS frequency at all times when on the Serpentine line.

## Section 4 TRAINS

400. **Equipment**

401. During periods of limited visibility, trains shall have a white light showing to the front and a red light showing to the rear. Steam engines shall also have the water glass and steam pressure gauge illuminated by a fixed light source. All lights shall be bright enough to permit the safe operation of the train.
402. Except in case of emergency, all maintenance and major servicing of engines/trains shall be done on sidings, in steaming bay areas, or in switch yard areas. Refueling with flammable liquids shall not be done in station areas where the public is present. (1/1/03)
403. Locomotives and other power units shall, when appropriate, be permanently coupled to the car in or on which the engineer rides. Such coupling can either be by couplers and safety chain(s) or by drawbar with locking pins. Liquid or gas fuel cars shall be similarly coupled.

410. **Equipment Safety**

411. No maintenance or repairs shall be done to MLS owned locomotives and/or rolling stock without prior approval of the Superintendent of Operations. The Superintendent of Operations or his/her designated representative(s) shall be notified as soon as is practical for the need of any such maintenance or repairs.
412. Engineers shall complete an operational/safety check of the locomotive/train before first use that day. When using an MLS locomotive, the engineer must also complete the log assigned to that locomotive.
413. Any regular member may declare a piece of club equipment unsafe and affix a "Bad Order" card to the equipment.
414. "Bad Order" equipment must be set out and the Superintendent of Operations or his/her designated representative notified as soon as practical.
415. "Bad Order" equipment may not be returned to service until released by the Superintendent of Operations or his/her designated representative.



## Section 5 TRAIN OPERATIONS

### 510. Personnel requirements

511. Engineers and dispatchers shall be certified as being capable of doing their job as determined by the Superintendents of Operations and Signals respectively.
512. Conductors and Engineers must pass an engineer's test annually prior to operating on MLS track. **Revised (1/16) ML** The criteria for pass/fail is 92% or higher. **(ADDED 4/17) ML**
513. At all MLS meets, visiting engineers shall be given written and/or oral instructions on the track and signal systems and basic safety prior to operating on the railroad. This briefing will be given at a scheduled safety meeting by a certified engineer. **Revised (1/16) ML**
514. Engineers shall not allow anyone to ride between themselves and the controls of their engine so as to restrict their ability to control the train.
515. Engineers shall be the final authority as to who may ride their train.
516. Engineers shall have radio contact with the dispatcher/stationmaster during public run times and when otherwise appropriate. During public run times, engineers shall make radio contact with the dispatcher/stationmaster before entering the mainline.
517. Engineers shall carry a working flashlight for personal safety when operating a train at night.
518. Junior engineer as defined is any member under the age of 18. Certified engineers 13 through 17 years of age may operate a train on MLS mainline track during the time that a public train is operating on that track. **Revised (1/16) ML**
519. Certified engineers under 13 years of age may not operate a train on MLS mainline track during the time that a public train is operating on that track.
520. When operating MLS equipment, a junior member under the age of 13 shall be supervised by a certified member. **Revised (1/16) ML**

### 530. Operational requirements

531. All trains shall be operated by or under the direct supervision of a certified engineer. The supervising engineer shall either be on the train and able to take control of it or close enough beside the train to give verbal instructions and otherwise assist as necessary.
532. All trains must be operated at a safe speed and NOT to exceed of 5 MPH. And be able to safely stop in an emergency. Also train speed in yard limits and thru turnouts should **NOT** exceed 3 MPH. **Revised (1/16) ML. Revised 5/16 ML**

- 533. Train crews shall use appropriate signals when operating their trains.
- 534. All mainline switches shall be left in their normal, operational position.
- 535. When a dispatcher is on duty, all trains operating in an un-signalized area must have radio contact with the dispatcher or be a second section to a train that has such radio contact.
- 536. The dispatcher on duty shall be responsible for ensuring an orderly traffic flow in the Adobe City station area, in un-signalized areas of the railroad, and over the entire railroad in general.
- 537. In the event of signal failure, dispatchers shall be prepared to maintain traffic flow over the entire railroad by radio.
- 538. With the addition of longer spurs in the yards, it is possible to have two trains sharing one spur. In this situation, the back train operator may move the front train blocking it. Then the back train operator is to return the front train to its original position. (**ADDED 7/17 by MIKE L.**)

**540. Remotely Operated Locomotives**

(Added 4/22 Dakota C)

- 540.1 In order to operate remote controlled (RC) equipment at the MLS, the equipment must first pass an RC compliance test administered by a member of the safety committee OR otherwise appointed personnel (see: RC Compliance checklist)
- 540.2 In the event of signal loss, remote control equipment must come to a complete stop in a time and distance that is reasonable and prudent.
- 540.3 The engineer of any remote-control equipment shall maintain visual contact with the end of the train that is in the direction of travel at all times.
- 540.4 The operator shall not be more than 165 feet (one mile post) from the equipment while it is in motion.
- 540.5 When operating a train, either tethered OR wireless, the operator/engineer shall disable or otherwise secure the train so that it may not move when he/she leaves the engineer's seat.
- 540.6 When on the train, the engineer shall ride behind the locomotive in the normal engineer position.
- 540.7 No one shall knowingly or intentionally interfere with the normal operation of any equipment.

## Section 6 PUBLIC TRAIN OPERATIONS

610. All trains carrying the public shall consist of only MLS and/or member equipment certified by the Superintendent of Operations or the MLS BoD. **Revised (1/16) ML**
620. Riding cars carrying the public shall: 621. Be securely coupled to the satisfaction of the safety committee.
622. Have seating installed so as to facilitate safety.
623. Have bolsters that provide 3 or 4-point suspension.
624. Have trucks that provide safe, stable operation.
625. Safety chains or drawbars are required between all riding cars in public trains. (8/05)
630. General Operational requirements, Public train runs and Public Night /Christmas light runs.
631. Trains carrying the public shall be operated only by a certified engineer with a certified conductor aboard. In addition, Stationmasters, Conductors and Engineers must attend a Safety video class prior to the opening of the annual Public Run season. After the safety video, each attendee must sign an attendance list. This list will be on file at the station. **(ADDED 4/17, PP)**
632. Maximum speed when operating public trains is five (5) MPH as determined by electronic or other means as approved by the Safety Committee.
633. Both stationmasters and train crews shall ensure that the public receives a BoD approved safety briefing before leaving the station and that they do not take anything aboard the train that may create an unsafe condition.
634. The number of public riding cars in a public train shall be limited to a maximum of seven (7). Train crews may shorten the train as deemed necessary to ensure safety. **(Revised 2/14), BW**
- 634.5 Public riding cars occupancy will not exceed six (6) seating safety and total passenger weight will not exceed 900lbs. **(Added 2/14), BW**
635. Public riding cars shall be placed behind the engine or engineer's riding car with the conductor's riding car directly behind the last public riding car. **Revised (2/04)**
636. One unoccupied caboose may be placed behind the conductor's car. **Revised (8/05)**
637. The public shall, under normal circumstances, be loaded/unloaded only at designated station areas.
638. All riders on regular public trains must be capable of walking to, boarding, and exiting riding cars under their own ability. **Revised (8/05)**
639. Individuals who do not safely fit in or on riding cars shall not be carried as public passengers.
640. Deleted July 2017- Mike L

- 641. During public runs, first aid kits shall be made available to the public in designated station areas and on the train. (8/05)
- 642. There shall be no servicing of locomotives or trains at a station that takes longer than the time required to unload and load passengers.
- 643. If the engineer is not at the controls of the locomotive, the engineer will secure the train by:
  - 643.1 Ensuring that the parking brake is set; or
  - 643.2 Turning off the gas motor and ensure the train is secured from motion using an acceptable means from keeping the train from moving; or
  - 643.3 Having another qualified engineer take control of the train until such time as the original engineer can resume control of the train.

644. **Night Running Operation**

**ADDED (1/16) ML - Revised (4/22)**

- 644.1 All trains should have a whistle, radios for engineer and conductor, and flash lights or red flag.
- 644.2 When train needs to stop, conductor needs to signal train behind them (about 40 to 50 feet behind train) and signal with a flash light until train behind them sees them before helping with train.
- 644.3 Conductor needs to keep contact with station master on VHF.
- 644.4 Steam trains need to have a fireman to assist with checking out track ahead and signals.
- 644.5 Do not run red lights. This keeps train spacing at a safe distance.
- 644.6 Limit the size of the night run trains to 5 riding cars, engineer's car, and conductor's car. If running a steam engine, you will need a propane car behind the tender.
- 644.7 Each conductor shall have a flashlight capable of making the side of the train visible for inspection and must be on at all times while train is in motion watching for riders' feet outside the perimeter of the car or riders turning around on the seat. The conductor must constantly be scanning the train for hazards to the riders' safety.
- 644.8 Each train will have electronic warning devices for conductor to notify the engineer of a hazard.
- 644.9 If a rider's feet are dragging or a rider is turning around, the conductor will immediately notify engineer to stop the train, and the conductor will politely ask the rider to follow the rules.
- 645. If fireworks go off while the train is in motion, the engineer shall stop immediately and remain stopped until fireworks stop.
  - 645.1 The riding cars shall have TWO lights under the seats to illuminate the riding platform where the riders' feet are.
  - 645.2 Riders shall not bring carry items onto trains, i.e., chair, ice chests, or items like strollers. A gondola may be provided in the consist for such items.

646 The Station Master will be responsible to see that the riders get a safety briefing either verbally or by video.  
646.1 Part of the briefing will be if the train is stopped for derailment, that all persons stay next to the train and not walk away from the train.

647 The station master or Gate attendant will make sure all riders have signed a Maricopa County Liability waiver before boarding a train

650. No engineer under the age of 18 years shall operate a public train.

660. **Conductors**

661. Must also pass the engineer’s test annually prior to working on a public train. **Revised (2/04)**

662. Shall be responsible for monitoring safe operating conditions and for notifying the engineer when unsafe conditions arise.

663. Shall have available a whistle, a radio, and, as appropriate, either a light or red flag.

664. Must also have radio contact with the dispatcher/stationmaster when working on a public train. (8/05)

665. Shall assist stationmasters with loading/unloading as needed.

670. **Stationmasters**

671. Shall be responsible for train movement in station areas, shall minimize congestion and delays there, and shall be responsible for ensuring an orderly traffic flow in the station and tower areas when a dispatcher is not on duty.

672. Shall be responsible for activity in station areas to include the safe loading/unloading of passengers and safeguarding MLS property.

673. Shall have available a whistle, a radio, and, as appropriate, either a light or red flag.

674. Shall be responsible for recording the number of public passengers each run.

## **Section 7 MLS OPERATING EQUIPMENT**

(ADDED 1/16) ML

### 7.1.5 Tag Out Rule

Before any maintenance, adjustment, repair, replacement of parts or work in general is done on any MLS equipment grouped in section 7 of the safety and operating rules, you must;

- affix a tag on the starting controls or steering wheel in plain sight. This tag will have your name on it along with any other person working with you on this equipment.
- It must remain on this piece of equipment in the control panel or on the steering wheel in plain sight until all work and testing of said equipment is done.
- No other person may remove the tag except the first name on the tag and he will have an understanding with all other workers on the tag that they will remove the tag for service.

- No other person may start, run, move, couple to, push, climb onto, release the hydraulic pressure with a control lever or opening a hose without approval of the person who is the first name on the tag and having a job briefing with each person who's named on the tag.

Any and all violations of Rule 7.1.5 will be enforced by Section 3, Subsection C of the MLS Bylaws stating " Membership temporary Suspension or Termination from all MLS activities may be imposed on any member for good and sufficient reason i.e., not adhering to the rules, codes, bylaws or other practices of the club. There will be ZERO TOLERANCE for any violation of any part of Rule 7.1.5 **(ADDED, 5/18, MJ)**

#### 7.10 Tractor

- 7.20.1 The Tractor can only be operated by qualified MLS members. To become qualified, any MLS member shall receive instructional training by a certified tractor member with at least 6 months OJT.
- 7.20.2 Before starting the tractor, all checks must be performed. These checks include:
  - a) General condition all tractor; note anything that doesn't look right, such as leaks.
  - b) Fluids such as engine oil, water, hydraulic oil, fuel, grease all pivot points.

#### 7.20 Trencher

- 7.20.3 The Trencher can only be operated by qualified MLS members. To become qualified, any MLS member shall receive instructional training by a certified trencher member with at least 6 months OJT (on the job training).
- 7.20.4 Before operating trencher all pre checks must be performed. These checks include:
  - a) General condition of trencher; note anything that does not look right. Notify condition to equipment maintenance. Do not operate if conditions are not safe.
  - b) All fluids engine oil, hydraulic oil, grease pivot points.

#### 7.30 Golf carts

As per MLS insurance company, you must be 16 years or older to operate MLS golf carts.

- 1) Golf carts can only be operated by a qualified MLS member, that have been checked out by an MLS member who has been approved to give instruction on golf carts.
- 2) Before operating golf carts, the following checks need to be done:
  - a) Check general condition (including tires) of cart note any problem, if problem is found notify equipment maintenance. Make sure cart is at full charge, charge as needed.
- 3) When you are done with using cart, please put back in storage area and put on a charger.
- 4) MLS Golf cars are **NOT** allowed to be taken outside of the MLS property fence. **(ADDED, 5/17, ML)**

#### 7.40 Lift Truck

Lift truck can be operated only by qualified MLS member. To become qualified, any MLS member shall receive instructional training by a certified lift truck trencher member with at least 6 months OJT.

- 1) Before operating the lift truck, the following checks must be performed:
  - a) Check the overall condition; including fluids engine oil, water, fuel, and hydraulic oil.
  - b) Check lift area lift cylinder and chains for damage.
  - c) If any items are not right, please inform equipment maintenance.
  - d) DO NOT EXCEED 5,000 LBS to lift.

## **Section 8 CLARIFICATION OF SPECIFIC RULES**

(ADDED 5/17, ML)

8.1 Superintendent of Safety, Vice President can establish a fire ban based upon the park conditions. Refer to Section 231.9 for more detailed restrictions.

### 8.1.5 Electrical lock out tag out

Before any work is done on any circuit of 50 volts or more you must affix a lock out tag out on the control box where power is supplied. Only one person will be allowed to affix and then remove the tag of the supply. No person may turn the power back on or energize any circuit within that tagged control box. Only the person who applied the tag may remove it. If another person works with the first person, they must affix their tag to said box and have a job briefing with the other person about what they are doing. The second and subsequent people may not energize the circuits after their work is complete and must only let the number 1 person restore power after they are positive that all persons are in the clear have had a job briefing with them and their tags have been removed.

Any and all violations of Rule 8.1.5 will be enforced by Section 3 Subsection C of the MLS Bylaws stating " Membership Temporary Suspension or Termination from all MLS activities may be imposed on any member for good and sufficient reason i.e., not adhering to the rules, codes, bylaws, or other practices of the club. There will be Zero Tolerance for any violation of any part of Rule 8.1.5 **(ADDED, 5/18, MJ)**