

# Coopersburg Area Society of Model Engineers (CASME)

## Rules of the Road

Rev #	Date:	Author:	Change Description
2	4/8/14	Graf/Long	General update, add computer start-up/shut-down, standards clarification. REVISION 2 Release
3	9/4/2018	Jim Swain	New rental track procedures added section 6 revised
4	12/29/18	Long	update, Layout startup / shut down procedure

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## INTRODUCTION

The '***RULES of the ROAD***' have been developed to provide specific procedures for persons wishing to operating model trains on the club layout, as well as provide general guidelines regarding conduct of all members while in the club room. By following these rules, our layout should operate more efficiently and provide every member with a positive club experience.

The Rules of the Road Committee is responsible for updating this document on a periodic basis. The current electronic revision master and revision history are maintained by the CASME secretary.

## **Chapter 1 RULES of the ROAD**

### **1. When working on the layout, the person working is responsible for the following at the end of the work session:**

- 1.1. Clean up the work area so that work material and work scrap do not lay on track or effect the track clearances needed to operate trains.
- 1.2. If track is being worked on (example: ballast or painting) leave a dated note of the works in progress at the layout sign-in sheet.
  - 1.2.1. In addition, clearly mark the area being worked on directly on the layout.
  - 1.2.2. After work is completed, clean the track thoroughly.

### **2. Prior to operating any equipment on the club layout to insure for safe and reliable sessions...**

- 2.1. Inspect all tracks for obstacles that may hinder or damage rolling stock and electronic equipment. (IE: Tools, Screws, Rail, Track Nails, Cork, Wood, Dirt, Wire, Scenery, Ballast, Manual Turnouts, Buckled or Wavy Track).
- 2.2. Clean all tracks with bright boy or cleaning pads PRIOR to operating any trains. Keep tracks clean by means of track cleaner cars during operations.
- 2.3. Insure all Locomotives and Rolling Stock wheels are clean .
- 2.4. On the white board - record the 'address number' of all locomotives or consist '**lead locomotives**' to be placed on the layout. Remove numbers from the board when locomotives are no longer on the layout.
- 2.5. It is strongly recommended that the computer be turned on to align all turnouts to the normal state and to activate the signals (See Chapter 5).
- 2.6. All equipment must be placed on the rails via the yard tracks.

### **3. All club and member equipment must be operated in a prototypical manner:**

- 3.1. Observe block signals and obey displayed aspects.
- 3.2. **Stay with you train.** Be vigilant of other trains to avoid collisions and emergency stops.
- 3.3. Inspect and realign turnouts and crossovers to closed (normal) position.
- 3.4. Activate sound equipment with prototypical frequency and level.
- 3.5. Operate conventional right-hand track direction at the appropriate scale speeds.
- 3.6. Only one train per helix track section:
  - 3.6.1. Mainline: one train going up and one coming down.

- 3.6.2. To and From Staging: one coming up and one going down
- 3.7. End-of-Train device is required during shows or operating sessions: (IE: Caboose, Red Flag, Flashing LED, Observation Car.)

#### **4. Equipment Operation**

- 4.1. Non-club owned equipment remaining on the layout can be operated by other members.
- 4.2. It is strongly recommended that all non-club equipment be removed from the layout after the operating session, except the equipment located in the storage track area.
- 4.3. Equipment to be operated during a Scheduled Open House or during a scheduled Operating session must conform to NMRA and club standards, guidelines and specifications. The standards committee must perform inspections by the advanced request of the member-owner.

## **Chapter 2   General Rules**

1. A senior member, who has a probationary candidate or visitor present, must assume full responsibility and continuously monitor their activity to ensure proper orientation and safety.
2. Senior members have layout priority for operating trains, but should display common courtesy to other members and guests participating or awaiting usage.
3. Any club or member equipment damage must be reported to the owner and a club officer before the next club meeting. The person(s) directly involved shall execute this procedure as well as anyone who witnesses any incident of abuse or damage.
  - 3.1. Damaged items should be placed in a conspicuous place (inspection work bench if practical) with a note attached indicating your name and the club officer notified.
4. Defective equipment (Bad Order) shall be placed in a designated location for repair (inspection workbench).
  - 4.1. Club equipment repair is the responsibility of the rolling stock committee.
  - 4.2. Personal equipment repair is the responsibility of the Owner.
5. All member-owned equipment remaining in the clubroom or anywhere on the club layout is the sole responsibility of that member. Therefore, the CASME club, officers and members shall **NOT be liable** for anything left unattended.
6. Storage Track Rental
  - 6.1. Tracks covered by this Rule.
    - 6.1.1. As of July 2018, there are thirteen (13) storage tracks on the lowest level of the CASME layout.
      - 6.1.1.1. Three (3) tracks are reserved for storage of trains used for operating sessions during scheduled operating sessions.
      - 6.1.1.2. Ten (10) tracks are available for rental by individual members.
  - 6.2. Eligibility
    - 6.2.1. Any CASME members in good standing may rent tracks.
      - 6.2.1.1. For the purpose of these rules a “member in good standing” is defined as a member who is current with all financial obligations to the club at the time of the storage track selection.
      - 6.2.1.2. Friends of CASME are not eligible to rent a storage track.
    - 6.2.2. CASME members interested in renting a storage track must email the Secretary indicating their interest in a track during the month prior to the track allocation in order to be eligible to rent a track in the upcoming rental period.
  - 6.3. Allocation Process

- 6.3.1. Selection of rental tracks takes place during the January and July CASME business meetings.
  - 6.3.1.1. Members interested in renting tracks must email the Secretary in December or June accordingly.
- 6.3.2. Storage tracks will be allocated based on the following lottery system:
  - 6.3.2.1. Tracks are offered to non-current track holders first via a random lottery of all eligible members who have requested to be in the lottery.
    - 6.3.2.1.1. An example of an acceptable random lottery system would be to draw names from a hat.
  - 6.3.2.2. Tracks are immediately picked by the lottery winners, or a designee present at the meeting, in the order that their names are drawn.
  - 6.3.2.3. If storage tracks are still available after this initial lottery is complete, then eligible members who currently have a storage track may enter a second lottery for any remaining tracks.
  - 6.3.2.4. If there are still tracks available, then a final lottery may be held for members to rent a second track. Or the President may offer open tracks for additional storage of equipment for club operating sessions.
  - 6.3.2.5. All storage tracks are reallocated every six months, by repeating 6.2.4.1 thru 6.2.4.3.
- 6.4. Track Rental Terms
  - 6.4.1. Tracks are rented for six (6) months at a time.
  - 6.4.2. Rental rate is \$12.00 for the six months.
  - 6.4.3. Rental periods are from February thru July and August thru January.
  - 6.4.4. Rent must be paid to the CASME Treasurer in January and July.
  - 6.4.5. All equipment on a storage track is the sole responsibility of that track's lottery winner. All club members are expected to treat any equipment with respect.
  - 6.4.6. Owner permission is required to operate stored equipment by any other member.
  - 6.4.7. Equipment left on a storage track after it has been allocated to a different member, will be removed by members of the Standards Committee at the beginning of the new rental period.

## **Chapter 3 Operating Sessions**

1. Organized *Operations Sessions* must be announced during the business meeting prior to the planned date.
2. The *Operations Committee* presides over that operating session and shall schedule and dispatch all trains and crews. Specific information pertaining to an operations session will be available in advance from the *Operations Committee*.
3. All unrelated activities (layout work, train running etc.) must cease until the conclusion of the session.

## **Chapter 4      Rolling Stock Specifications**

1. NMRA standards are applicable to all locomotives and rolling stock as follows:
  - 1.1. Proportional weight based on rolling stock.
  - 1.2. The club Standards Committee will establish weight exceptions per Table 1.
  - 1.3. Freight Cars will be "Rolling-Grade" tested and use Table 1 for weight values.
  - 1.4. Passenger, Lighted Caboose, Well, Flat and Spine Cars are "Draw-Pull-Bar" tested and excluded from Table 1
  - 1.5. All members are encouraged to mark their equipment with their assigned color.

**Table 1 Minimum Car Weights**

<u>Length (ft)</u>	<u>Weight (oz)</u>	<u>Length (ft)</u>	<u>Weight (oz)</u>	<u>Length (ft)</u>	<u>Weight (oz)</u>
30	2.1	50	3.5	70	4.8
35	2.4	55	3.8	75	5.2
40	2.8	60	4.2	80	5.5
45	3.1	65	4.5	85	5.9

2. Metal wheels are required. (Requirement to be effective on 9/1/2014)
  - 2.1. Wheels must hold gauge and operate freely— during static bench test and normal operation
  - 2.2. A resistance device for block detection on a Caboose, Observation or other end-of-train car. (Requirement to be effective 9/1/2014)
3. All rolling stock must be equipped with Kadee® or compatible knuckle couplers.
  - 3.1. Must meet scale dimensions and operate freely with no appreciable sag or slack.
  - 3.2. No XF2 (Horn Hook). couplers are permitted.
4. All powered stock must have DCC compliant decoders.
  - 4.1. Compatible decoders must be verified at the discretion of Electrical Committee.
  - 4.2. CV29 programmed to disable analog mode.
  - 4.3. New or replaced decoders must be tested and CV data saved on the PC programmer.



5. All equipment that is intended to be used for formal Operations and Open Houses shall be inspected prior to placement on the layout
  - 5.1. Rolling stock is to be re-inspected if found operational defective or if a change effecting the performance is made. (Examples: changing wheel sets, coupler mountings, new DCC decoder)

## **Chapter 5 Computers & Electronic**

On the wall in the back corner of the layout room there are 3 outlet boxes with electrical switches. There are also 4 electrical cords attached to 3 additional boxes.

1. Plug each electrical cord into the outlet labeled for that cord.
2. Turn on the electric switch for that outlet box.

When finished with the layout

1. Turn off the electric switch for each outlet box
2. Remove the electrical cord from the outlet.

Use of the Computers is **highly recommended** but is not required to operate the layout. However, the SIGNALS and turnout routing will only work with the computers running. For proper layout operation the 'Layout Control' computers must be used.

When operating the layout without using the computers, after the layout is on, use a throttle and select turnout 900 then send a 'C' closed command.

Follow the procedures below to start up the layout control computers

## Dispatch Center – Start up procedures

**Perform these procedures in the exact order they are shown.**

Plug in TWO power cords adjacent to the work bench. (Labeled A and B)  
Turn on BOTH switches in metal junction box.

**At this point the Layout should be plugged in & turned on!**

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### **INSIDE the Dispatchers Center**

Turn on the laptop computer - (station #2)

Using the TV remote control – turn on both large 50” TV screens (power light turns blue)

Press outlet POWER button labeled switch #2 - located between the large screens

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Do not continue to the next step until “Windows” is running on the laptop.

Allow each work station to fully load & complete the display process  
PRIOR to starting the next work station.

Station #2

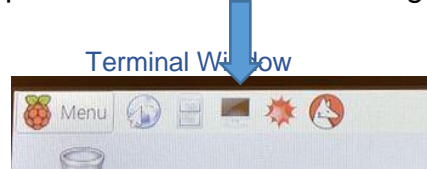
Station #1

Station #3

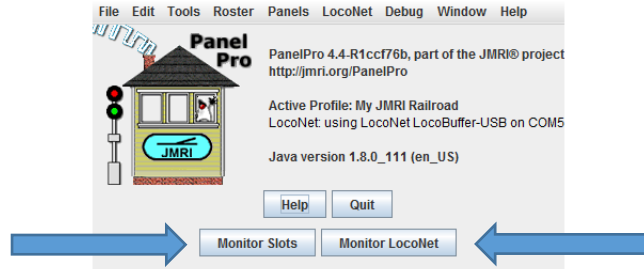
Station #4

**STATION #1** (the SERVER Raspberry Pi)

Open a terminal window & type in *lower case* the following `spp` and hit <enter>



WAIT for Panel Pro to load then click on 'MONITER SLOTS' & 'MONITER LOCONET'



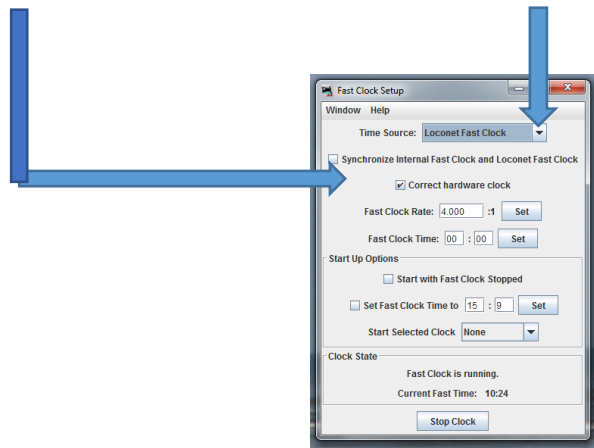
Do not continue to the next step until JMRI is running on station #2

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**Station #3 & Station #4**

Open the 'terminal window' then type in *lower case* spp and hit <enter>

Select 'Loconet Fast Clock' on all stations then minimize – the fast clock window



Next, Maximize the viewing window of the track layout screen.



**Station #4**

Click on the red '**X**' to align all  
The icon will go GREEN



the layout turnouts.  
when complete.

For ***Open House Shows***, also do the following,

**Station #2**

On the IBM Think Pad; select LOCONET USER on log in screen  
click the JMRI 'PANEL PRO' icon located on the start bar lo-

cated on the bottom of the windows screen.



Next, Click the 'Load default throttle layout' button.

