

# Operating the Fall Creek Branch

A Presentation by Robert Pethoud ([pethoud@comcast.net](mailto:pethoud@comcast.net))

## Basic Types of Model Railroad Operation

- Peddler/way/local freight switching: pick up and set out cars at industries
- Yard switching: classify (sort into trains) and block (sort within a train)
- Main line maneuvers: meets and passes with multiple trains

## Work the Way Freight: Train Crew Duties for Fall Creek Branch Turn

- Make the assigned set outs and pick ups at the local industries
- Re-spot any cars which were left off spot by the previous job
- Sort the train for the return trip to Klamath Falls/Dunsmuir

## Refinements for Experienced Operators

- Add freight cars to spurs or train as desired to increase difficulty
- Keep the grade crossing clear of stationary freight cars
- Place the head and rear brakemen on the ground to do their work
- Make a safety stop before each coupling, then couple at 4 scale mph or less
- Stretch the slack before brakes are cut in
- Block the train properly before departure (see guidelines below)
- Leave all turnouts lined for the main

## Blocking (Sorting) the Train

- In general, cars should be in station order, from first set out at the head end to the last set out at the rear. However, other factors must be considered:
- Place loads ahead of empties to minimize slack action
- Loaded stock cars need to be at head end to avoid injury from slack action
- Reefers should be at head or rear end for quick set out
- Cars placarded “Dangerous” or “Explosives,” tank cars with flammable lading, and open cars with lading extending above the sides must be kept away from the engine, the caboose, and each other
- Extremely long and short cars are not to be coupled together
- If possible, a low car should be placed just ahead of the caboose to promote visibility

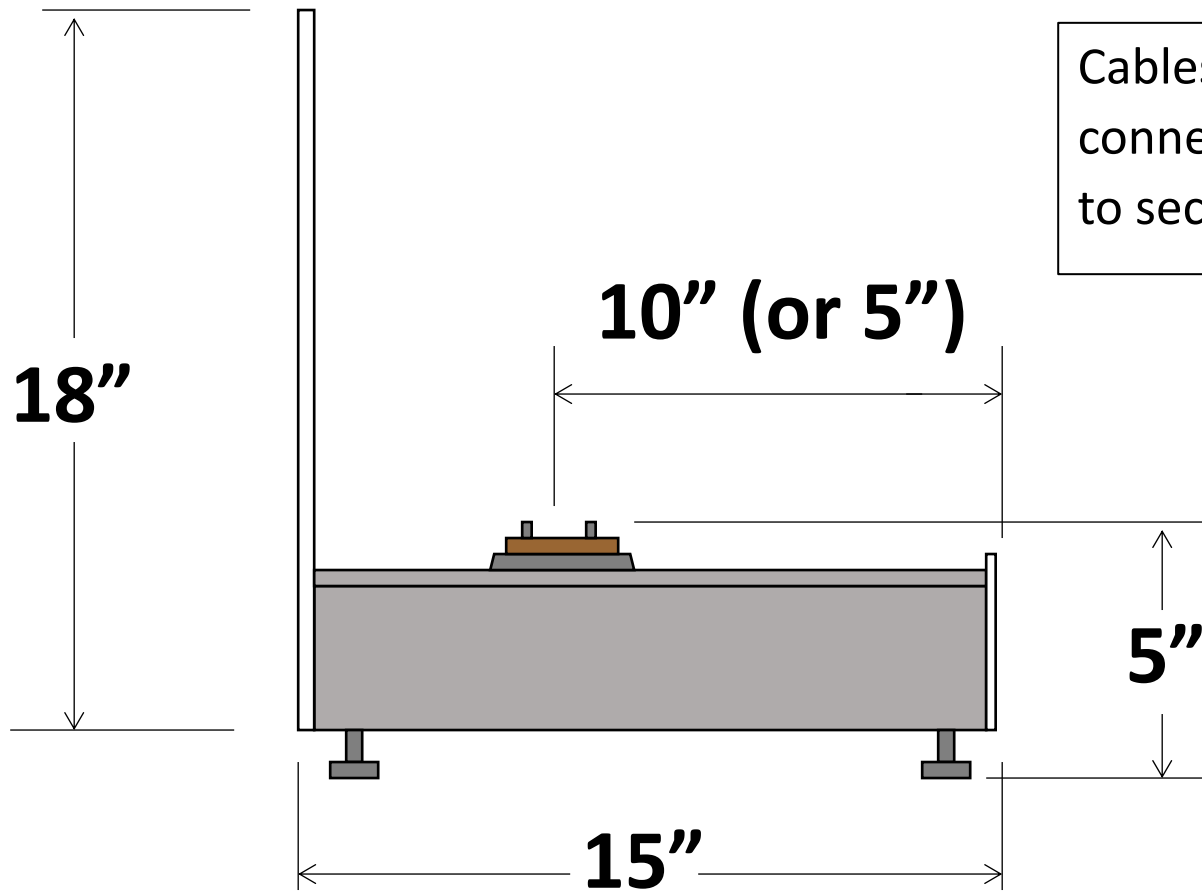
## Ringing Bell (UCOR #30)

Except where the momentary stop and start are a continuous switching movement, the engine bell must be rung when an engine is about to move, and while approaching and passing public crossings at grade, stations, and through tunnels and showsheds

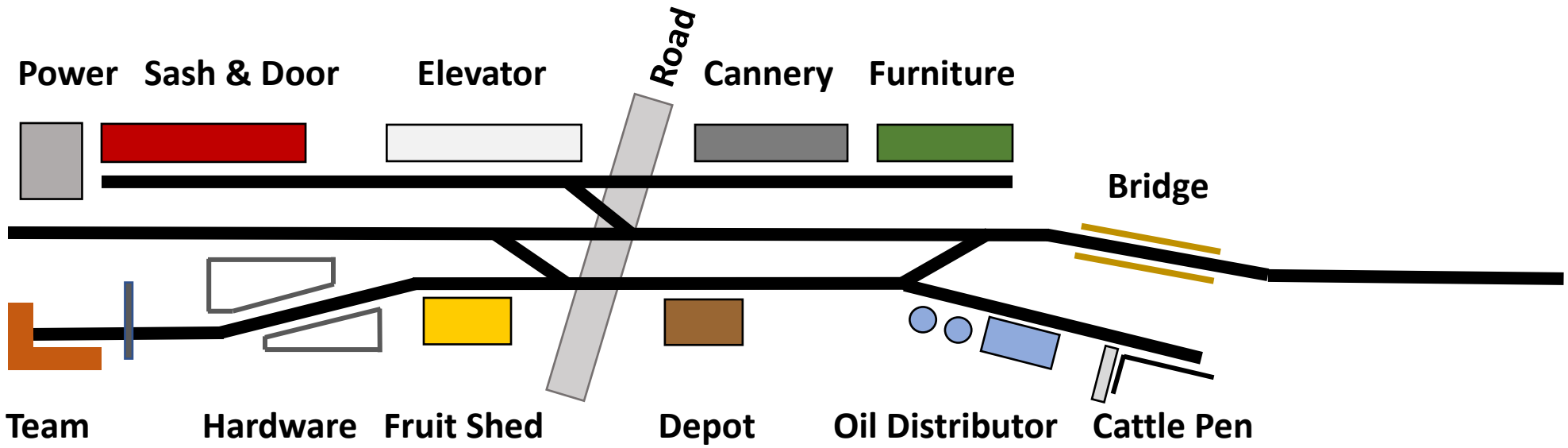
## Engine Horn (UCOR #14)

- (b) --- --- Release brakes, proceed
- (h) o o o When standing, back
- (l) --- --- o ----- Approaching public crossings at grade
- (m) ----- Approaching stations, junctions, railroad crossings at grade, drawbridges, and mail cranes

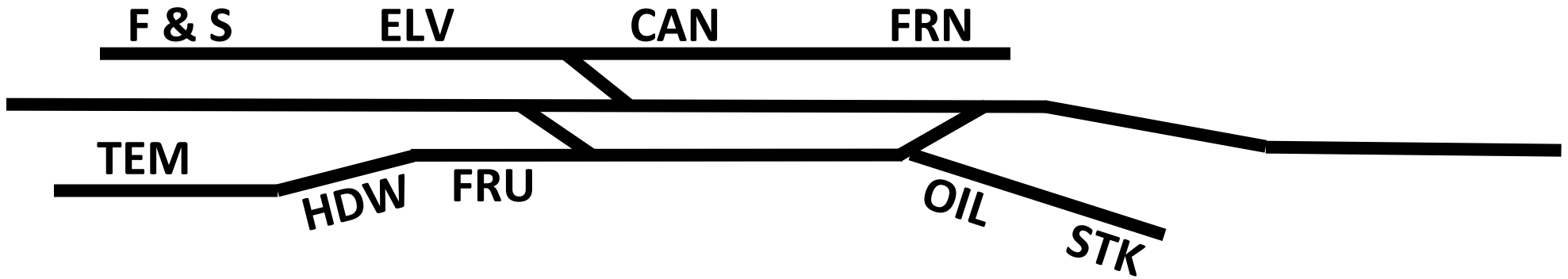
# Dimensional Standards



Cables with  $\frac{1}{4}$ " Phone Plugs and Jacks connect the power bus from section to section



**Fall Creek Track Diagram**



## Fall Creek Branch Switch List

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### Set Out

GA	<b>D&amp;RGW 27</b>	F & S	1
XM	<b>PRR 84</b>	TEM	1

### Pick Up

XM	<b>GN 46</b>	ELV	1
RS	<b>BREX 70</b>	FRU	1

### Off Spot

FM	<b>UP 89</b>	FRN	2	F & S	2
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Fall Creek is an imagined town in the Pacific Northwest, situated at the end of a branch line of a class 1 railroad. The time period is the early 1950s, as the economy is expanding after WWII. Each weekday before noon an old locomotive clatters into town dragging a motley string of freight cars for some of the many local industries. The train crew—engineer, fireman, conductor, and a few brakemen—have the enviable job of setting out the inbound cars, picking up the outbound cars, and relocating any cars which were left off spot from the previous day's work, all before blocking the train for the return trip to the main yard, many miles distant through the conifer forest.

### Design and Operation

Measuring just 15 inches by 144 inches (1 ¼ feet by 12 feet), Fall Creek Branch has less than half the area of a standard 4' by 8' sheet of plywood, yet is designed to offer challenging and prototypical operation. The six turnouts (track switches) create a small yard featuring a runaround track and four spurs, which serve a total of nine different industries.

Each day's job is described by a switch list, a document which tells which cars in the train need to be set out and where they need to be spotted, which cars already sitting at industries need to be picked up and where they are to be found, and where to place any off-spot cars from previous days. After all that is accomplished, the crew must sort the cars in the train into proper order for the return trip along the branch. To set up the next day's work, all that is required is to back the train to the end of the layout. We have a sequence of 12 daily switch lists, with each day's work setting up the next day's tasks, and with list number 12 setting up the work for list number 1. Fall Creek's train crews have real job security—there is always more switching to be done!

### Goal

My goal for Fall Creek was to display a portable model railroad which looks good and is fun to operate. In particular, I wanted to demonstrate that a complete and endlessly entertaining layout does not have to be large, contain a continuous loop of track, or feature long trains running round and round.