GGLS Signal System

Designed by Steve Vitkovits

GGLS has incorporated an automatic signal system as part of its track design. The track is broken up into "blocks" or sections that are managed by signals that give an indication of activity or lack of, in the block(s) about to be entered. The signal heads have three indicators, green, yellow, and red. Green indicates that the next block being entered is clear. Yellow indicates that the SECOND block ahead is occupied, and red indicates that the block about to be entered is occupied. If a signal head is marked "P", or "permissive" it is acceptable to enter the block on a "red" indication, provided the engineer stops and then proceeds with caution. If a signal head is marked "A" or "absolute" the engineer MUST NOT enter the block until the signal clears the "red" indication.

Signal Bridge

In addition, there are three "diverge" points on the track that are easily identified by the presence of a signal bridge. A diverge point allows an engineer to transfer from one track to another. A choice is made, at the approach, by pressing a button next to the track (Fig.1),

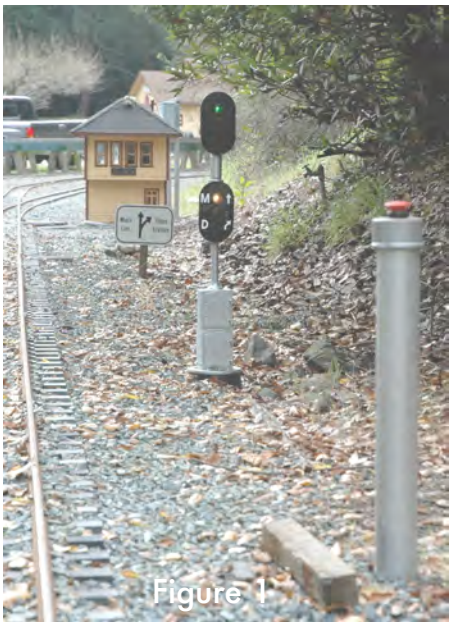

Figure 1

that will change the position of the switch points. Located on the signal bridge are the usual signal heads with three indicators. However, these indicators have a different meaning assigned to them. The upper indi-

cator is labeled as "M" or Main, and the lower indicator is labeled "D" or Diverge, with an arrow (Fig. 2). If the upper indication is illuminated, this will advise that the the switch is lined for the Main. If the lower indication is illuminated this will advise that the switch is lined for Diverge. The center indication will display yellow if the switch points are not fully set for a given direction. This will allow the engineer to stop and inspect before proceeding and avoid a derailment. As a safety feature, the "crossover" track has been isolated as a separate "protection" block. If this crossover block is occupied, the switch machine is deactivated. This will prevent anyone from throwing the switch while a train is crossing over, causing a derailment. As such, if a train is already beginning to cross, ***in error***, the train must back up out of the block to reset the switch to the chosen direction.

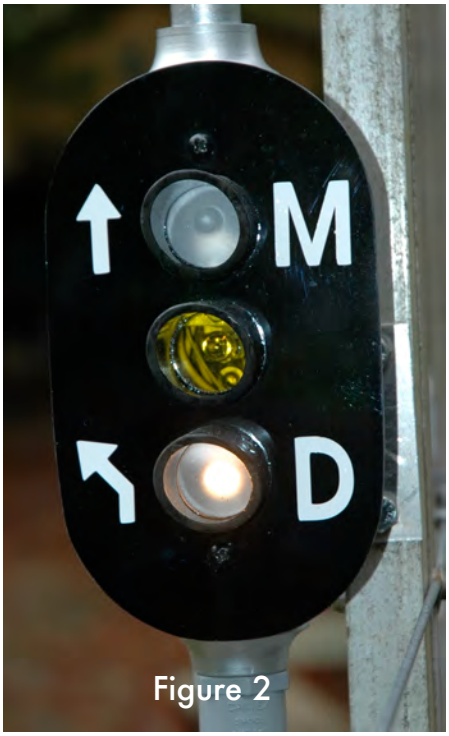

Figure 2

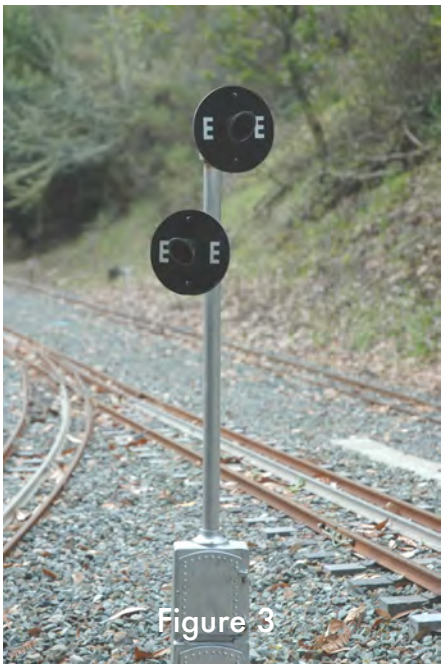

Figure 3

Merge Points

There are several points on the track that are classified as "merge points". These are identified by two tracks coming together as one. Located here are signal stands with one indicator each for both tracks (Fig. 3). A red indication for either track shows the presence of an approaching train on the other track. This red is classified as "E" or Emergency, and **will be obeyed at all times**. This means that the engineer **must** stop and observe all approaching traffic, otherwise a collision is imminent.

Adherence to these rules and policies make for a safe operating environment. Any malfunctions noticed while on the track should be reported to the safety committee.

Credits:

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Bridge Construction:	*Bill Smith*

Observe, Decide, and Proceed, with Caution