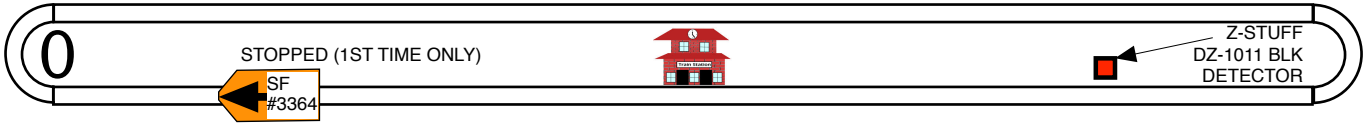
Logic Diagram For 1 Train w/1 DZ-1011 - - Plan #MP15

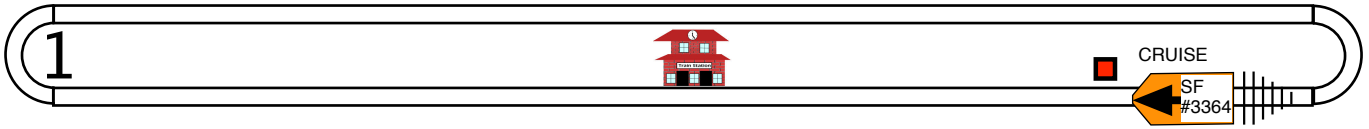
The commands are shown in the command file "mp15C-cmds-3-train", "Program E" (inputs 9 thru 10).

Initial Conditions: Train must be "parked" in locations shown in Fig. 0



<-- STARTUP:

SELECT LOCO: 3364 <-- (STARTUP)
SPD FWD: 21 (CRUISE) <--(STARTUP)

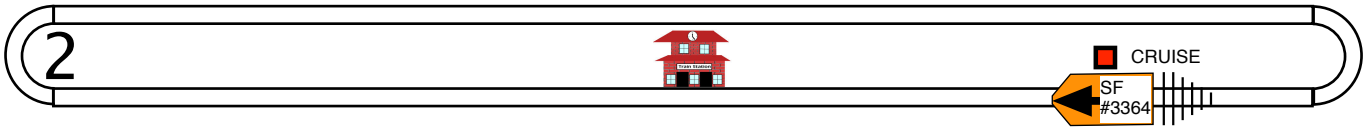


DELAY 1/4 SEC x 40

<-- WAIT INPUT #16 GND

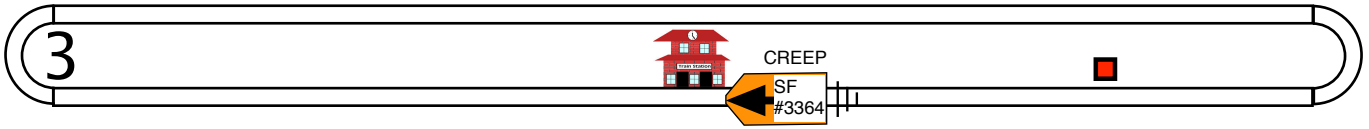
<--MAKE SURE HAND IS AWAY FROM DETECTOR

<--WAIT FOR TRAIN TO CROSS DETECTOR



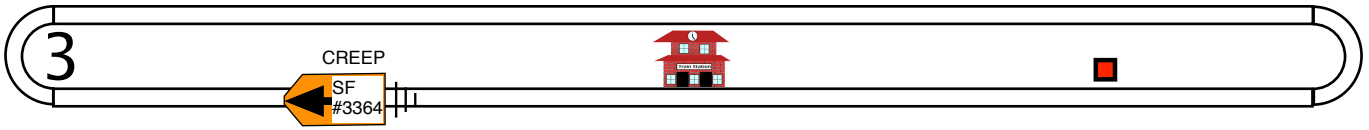
DELAY 1/4 SEC x 32

<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR



<-- SPD FWD: 8 (CREEP SLOW)

<--SLOW CREEP AFTER PAST DETECTOR



<-- WAIT INPUT #16 GND

<--WAITING FOR OPERATOR TO PUT HAND IN FRONT OF DETECTOR (TO SIMULATE A 2ND TRAIN)

NO

IS INP #1 GND?

YES

LINK TO INPUT: 9

<--KEEP REPEATING IF KNIFE SWITCH OR PUSH BUTTON IS CLOSED

Shutdown

SPD FWD: 0

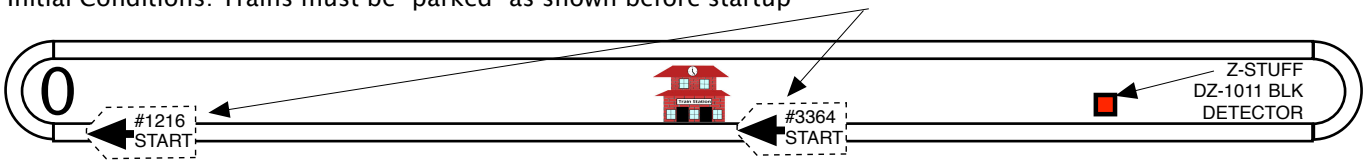
<--STOP IF KNIFE SWITCH IS OPEN

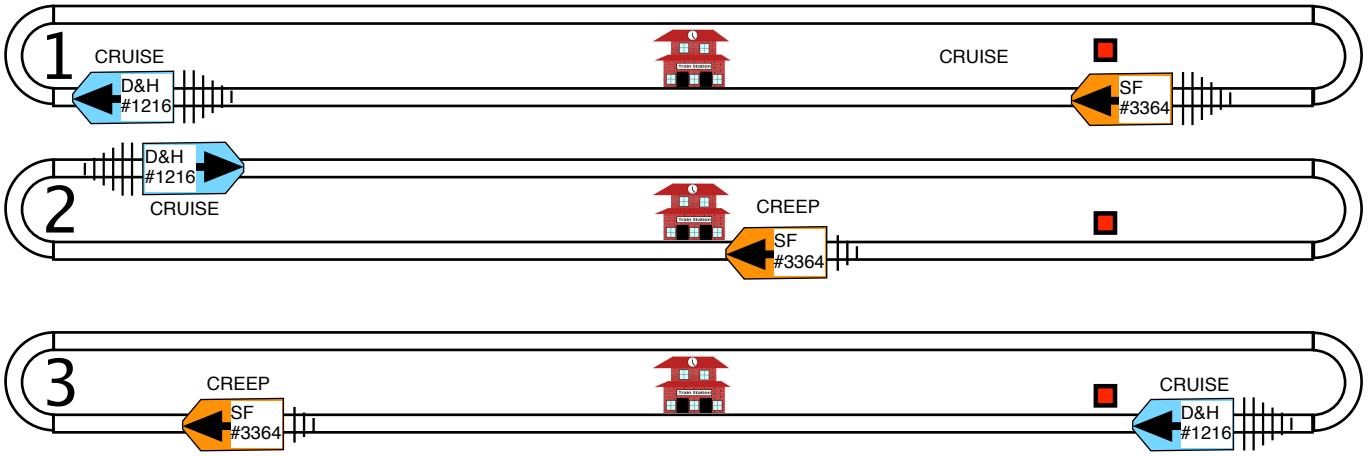
(Not implemented in commands, due to lack of space)

Logic Diagram For 2 Trains w/1 Z-Stuff DZ-1011 Detector - Plan #MP15

The commands are shown in the command file "mp15C-cmds-3-train", "Program F" (inputs 11 thru 13).

Initial Conditions: Trains must be "parked" as shown before startup





<-- SELECT LOCO: 1216
SPD FWD: 11 (CRUISE)

<--SPEED UP CREEPING TRAIN TO CRUISING SPEED

DELAY 1/4 SEC x 32

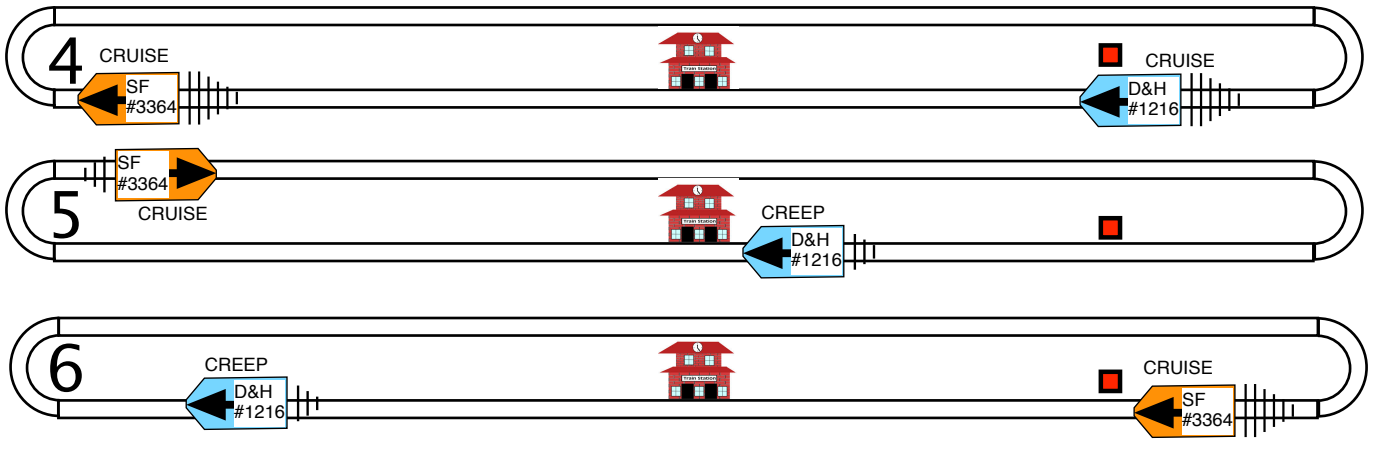
<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR

<-- SELECT LOCO: 3364
SPD FWD: 8 (CREEP S)

<--SLOW CREEP AFTER PAST DETECTOR

<-- WAIT INPUT #16 GND

<--WAIT FOR TRAIN TO CROSS DETECTOR



<-- (3364)
SPD FWD: 21 (CRUISE)

<--SPEED UP CREEPING TRAIN TO CRUISING SPEED

DELAY 1/4 SEC x 32

<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR

<-- SELECT LOCO: 1216
SPD FWD: 3 (CREEP S)

<--SLOW CREEP AFTER PAST DETECTOR

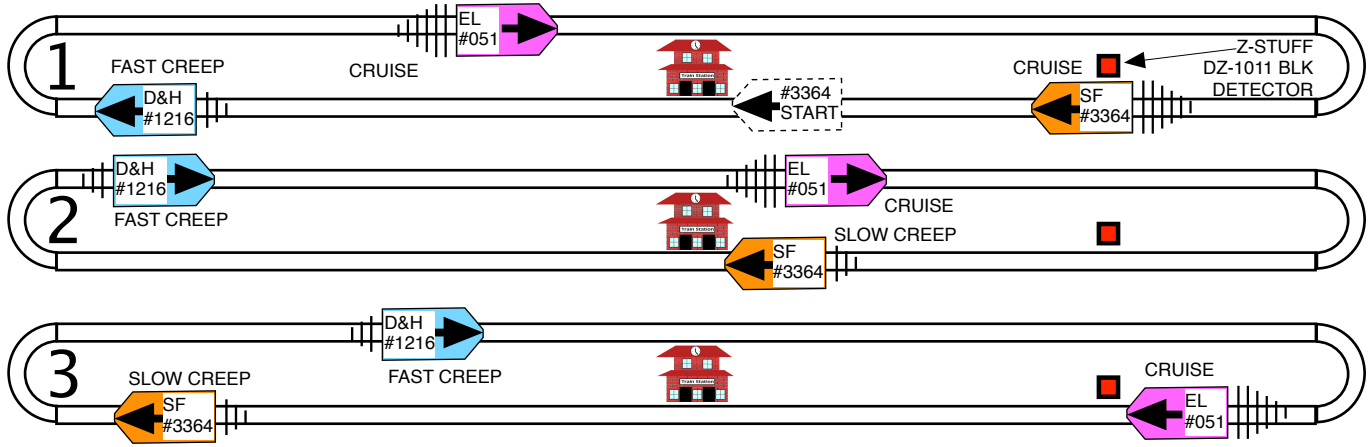
<-- WAIT INPUT #16 GND

LINK TO INPUT: 11

<--WAIT FOR TRAIN TO CROSS DETECTOR

Logic Diagram For 3 Trains w/1 Reed Sw. - Plan# MP15)

The commands are shown in the command file "mp15C-cmds-3-train", "Program H" (inputs 17 thru 25).



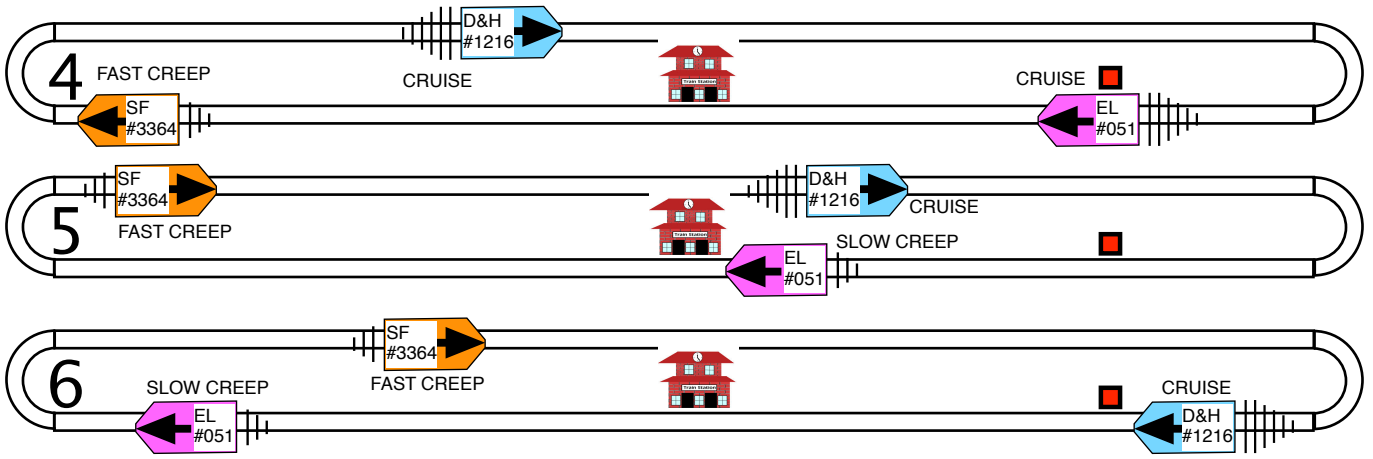
<-- SELECT LOCO: 051
SPD FWD: 17 (CRUISE)
<--SPEED UP CREEPING TRAIN TO CRUISING SPEED

<-- SELECT LOCO: 1216
SPD FWD: 4 (F CREEP)
<--SPEED UP LEAD CREEPING TRAIN

DELAY 1/4 SEC x 32
<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR

<-- SELECT LOCO: 3364
SPD FWD: 8 (S CREEP)
<--SLOW CREEP AFTER REACHING STATION

<-- WAIT INPUT #16 GND
<--WAIT FOR NEXT TRAIN TO CROSS DETECTOR



<-- (SELECT LOCO: 3364)
SPD FWD: 11 (F CREEP)
<--SPEED UP LEAD CREEPING TRAIN

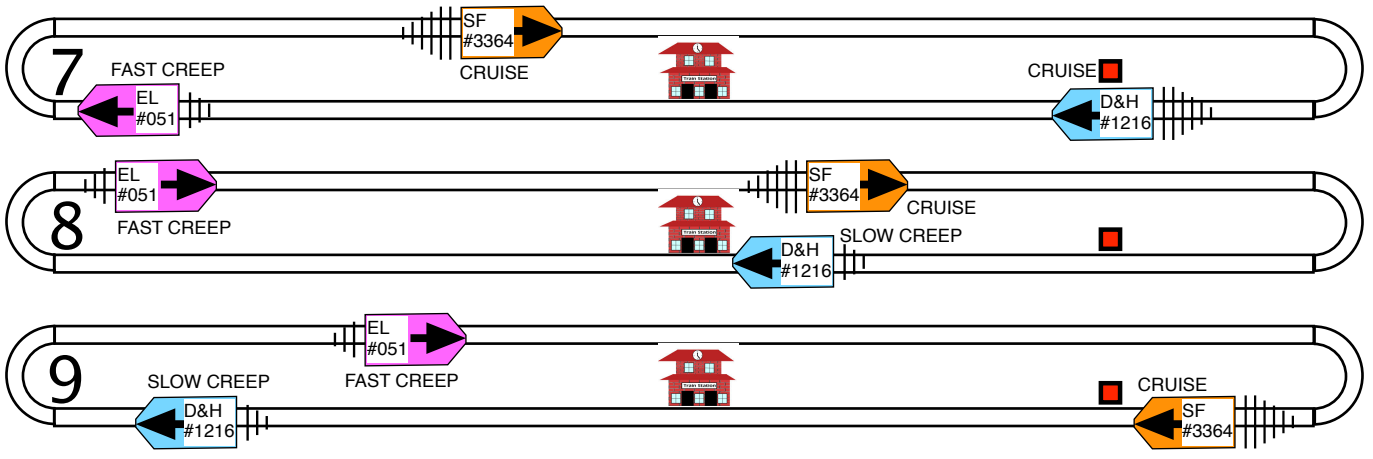
<-- SELECT LOCO: 1216
SPD FWD: 11 (CRUISE)
<--SPEED UP FRT. CREEPING TRAIN TO CRUISING SPEED

DELAY 1/4 SEC x 32
<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR

<-- SELECT LOCO: 051
SPD FWD: 5 (S CREEP)
<--SLOW CREEP AFTER REACHING STATION

.	LOCO SPEEDS		
.	051	1216	3364
CRUISE	17	11	21
SLOW CREEP	6	3	8
FAST CREEP	7	4	11

<-- WAIT INPUT #16 GND
<--WAIT FOR NEXT TRAIN TO CROSS DETECTOR



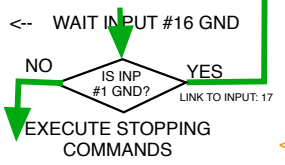
<-- (SELECT LOCO: 051)
SPD FWD: 7 (F CREEP)
<--SPEED UP REAR CREEPING TRAIN

<-- SELECT LOCO: 3364
SPD FWD: 21 (CRUISE)
<--SPEED UP FRT. CREEPING TRAIN TO CRUISING SPEED

DELAY 1/4 SEC x 32
<--WAIT 8 SEC. TILL END OF TRAIN IS PAST DETECTOR

<-- SELECT LOCO: 1216
SPD FWD: 3 (S CREEP)
<--SLOW CREEP AFTER REACHING STATION

<-- WAIT INPUT #16 GND



<--KEEP REPEATING IF KNIFE SWITCH OR PUSH BUTTON IS CLOSED

<--STOP IF KNIFE SWITCH IS OPEN

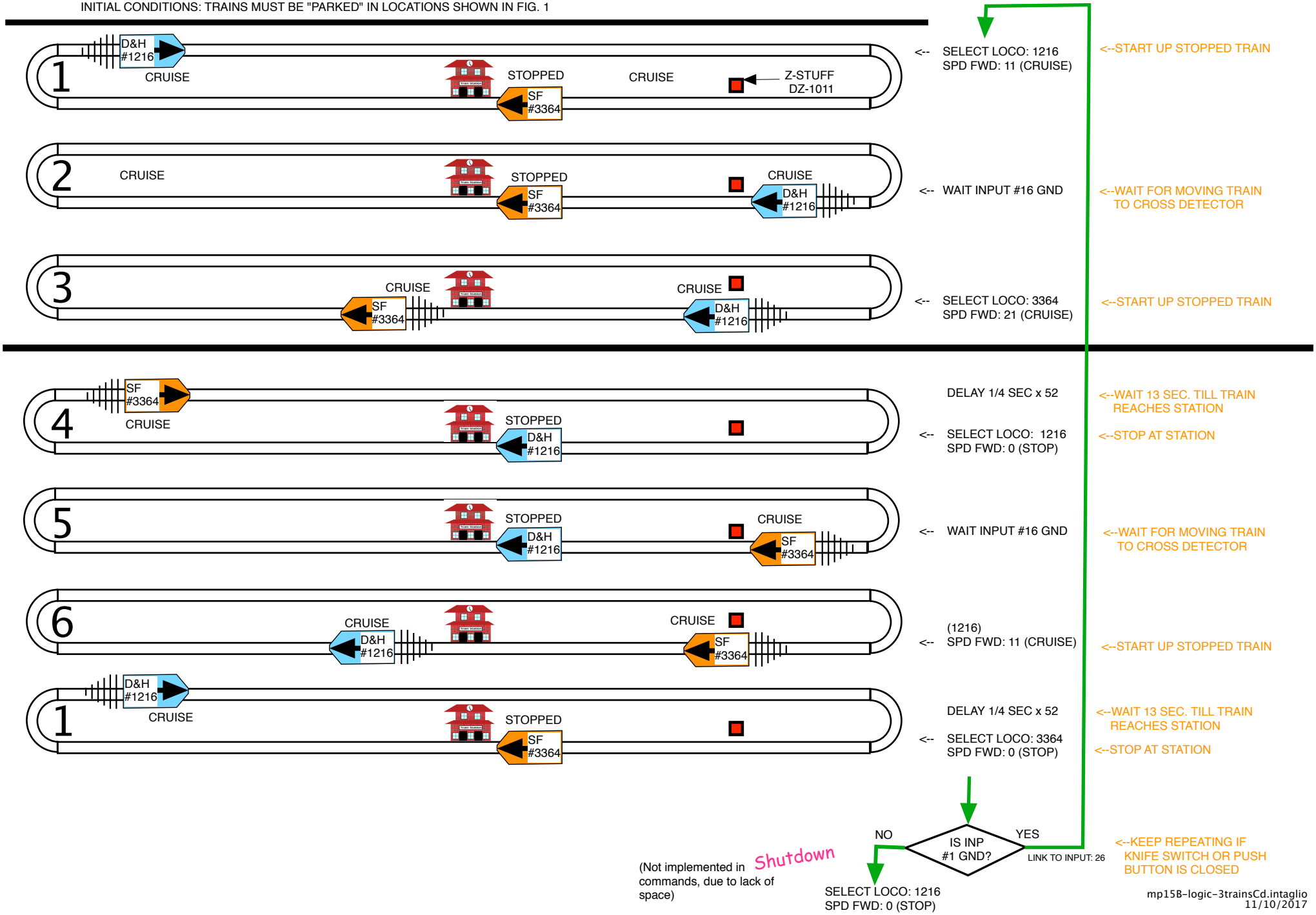
mp15B-logic-3trainsCd.intaglio
11/10/2017

Logic Diagram For 2 Trains w/1 Z-Stuff DZ-1011 Detector - Plan #MP15 (One train STOPS)

It uses the logic from **PREVIOUS** videos -- where trains completely STOP at station (as shown in previous Videos 815, 816 Demo 14, 817, & 818).

The commands are shown in the command file "mp15C-cmds-3-train", "Program J" (inputs 26 thru 30).

INITIAL CONDITIONS: TRAINS MUST BE "PARKED" IN LOCATIONS SHOWN IN FIG. 1



Logic Diagram - **Introduction** - Plan #MP15