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Chesapeake Bay & Western Model Railroad Club 110-F Dare Road Grafton, VA 23692

Dear CB&W Probationary Member,

Welcome to the Chesapeake Bay Railroaders and the Chesapeake Bay and Western Railroad Club. We hope that you will find membership rewarding, fulfilling and fun. Please read this to see what your membership entails.

First, you will have a probationary period of 90 days. At the end of this period, your name will be brought up for a membership vote. Current members are asked about your participation, interest and other such items. A club officer will need to sign off on your completion of the new member checklist, which will be provided to you shortly after your application is processed. To ensure a positive vote, please try to attend as many operating or work sessions as you can. This way you can meet members and begin to learn the layout, show off your skills and be able to identify what you are interested in learning more about.

If you plan to operate at club events, you will need to purchase a radio and headset. These are typically sold in pairs, so it might be possible to work with another member and share the costs, or have a spare radio. When purchasing the headset, be sure it is compatible with your radio. Check the jack carefully on your radio, as there are a variety of headsets available. The CB&W club operating system is Digitrax. There are several throttles available that will work well with our system. Another option is to download the app to your cell phone. We suggest you contact a member to inquire about the app and how to best utilize this option.

Prior to the business meeting when you are eligible for a vote into membership, you should be sure a member of the Board has signed off and approved your successful completion for training on the proper operation of the layout and inners workings of the club building. As a full member, it is imperative you fully understand and have a working knowledge of all the necessary steps to turn on/off, operate and care for the layout. The process for entering and leaving the building must also be understood as well. Next, once a member you will need to pay your initiation fees, which is equal to two months dues (\$50), plus the current month's dues (\$25) and the fee (\$2) for your key.

Should you wish to participate in sanctioned club events, such as operating sessions and Open Houses, you will need to have your locomotives and rolling stock inspected. You will be provided with the inspection guidelines, as well as the CB&W Member Handbook early in your probationary period. These procedures ensure your cars and locomotives conform to the operating standards established by the club. The standards are spelled out in the CB&W Members Handbook. Each item will need to pass both a static and dynamic test.

Should you decide prior to being voted in that the CB&W Railroad Club is not for you, or your schedule will not accommodate, please notify the Vice President to withdraw your application.

CB&W Vice-President Chairman – Membership Committee

CLUB ACTIVITIES

Membership in the Chesapeake Bay Railroaders is usually open and prospective members are encouraged to apply. The club is incorporated in the Commonwealth of Virginia and operates as a non-profit 501(c)(3) organization. It derives its income from monthly member dues (\$25 per month) donations and income from railroad flea markets held in conjunction with the CB&W Open House.

The club meets every Thursday night at 7:30pm (business meeting on the first Thursday of the month). Normally, Thursday nights are reserved for railroad operation. Major layout construction, maintenance, etc., are normally done on Tuesday nights or other times convenient for the workers involved.

Members are issued clubhouse keys upon acceptance and are free to work on or operate the layout at any time, provided they have been qualified in the details of its operation.

Members train equipment on the layout during club operating sessions must have passed inspection as outlined in club by-laws. (Reason for change is requirement for metal wheels is a club standard and not an NMRA standard)

The club is not only a place for work but a place for members to meet and discuss all facets of prototype and model railroading. Inexperienced model railroaders have the opportunity for learning the "tricks of the trade" from more experienced members.

The club's recent expansion allows slide and video shows and clinics on various aspects of model railroading.

The club holds a free Open House several times during the year to allow the public to enjoy the railroad. A railroad flea market is usually held at the same.

CLUB HISTORY

The Chesapeake Bay Railroaders began in July 1973 with the first layout built in the Graton Hobby Center. In 1975, members dismantled the layout and moved-to a farmhouse at 246 Railway Road, Grafton. Then in April of 1983 the club rented the east half of the present building and began construction of the present layout. In February 1995, the club rented the west half of the building and initiated plans for expansion of the layout. Members live in York County, Hampton, Newport News, James City County, Williamsburg, Gloucester, Mathews County, Portsmouth, Norfolk and Virginia Beach.

CB&W Layout Description

Scale: HO (1/87th scale)

Power Control: Cab control, central dispatch, remote DC throttles and Digitrax DCC system

Mainline Min. Radius: 42 in

Max Grade: 2%

Motive Power: Wide variety of steam and all eras of diesel power

Layout Size: 3-levels in a 2400 sq. ft. building Mainline Length: 1,004.5 ft (28.7 HO Miles)

Total Track on both Main Lines: 2,037 Linear Feet

Track Statistics

Courtesy of Ralph & Everett Digges (COA May 2016)

The first test started at the MILE 0 marker at Langley. We found the following distances in-scale miles:

Mile 0 to end of yard lead is .9 miles

Mile 0 to the end of Croaker is 1.4 Miles

Mile 0 to Thornburg is 2.1 Miles

Mile 0 to Rapidan is 2.5 miles

Mile 0 to Columbia Furnace switch (west End) 3.0 miles

Mile 0 to Shenandoah is 4.1 miles

Mile 0 to Tunnel switch is 6.3 miles

Mile 0 to Helper is 7.2 miles

Mile 0 to Mingo is 11 miles

Mile 0 to Nitro is 12.9 miles

Mile 0 to 14.2 miles

(NOTE: This is not the complete loop)

From the red ball to mile 0 which runs through the turnaround in the helix is 14.5 miles. This creates a total loop of 28.7 miles, or a one way trip of the layout of 14.35 scale miles. One scale mile is 70 feet long. At this, the main line would be 1004.5 feet.

Double track main from Main 0 to Rapidan is 4.1 miles 287 feet.

Single track from Rapidan to Shenandoah would be 1.6 miles 112 feet.

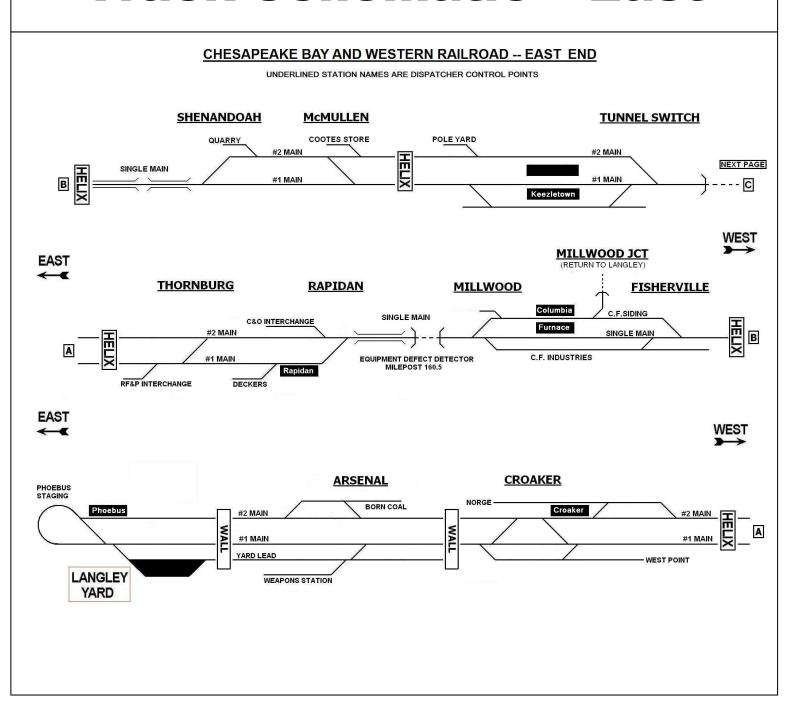
Double track from Shenandoah to Tunnel switch would be 2.2 miles or 154 feet Single track from Tunnel switch to Helper is .9 miles or 63 feet

Double track from Helper to red ball would be 490 feet

Total track on the main line both lines equals 2037 lin. Feet

(Statistics were provided by using a "Model Train Speedometer Car" made by Computer Products for Education, Kingston, PA)

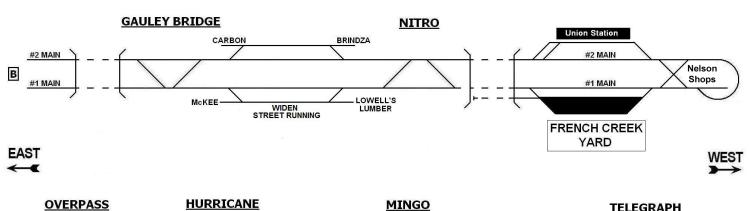
Track Schematic - East

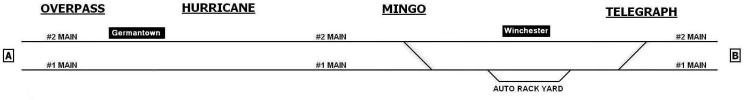


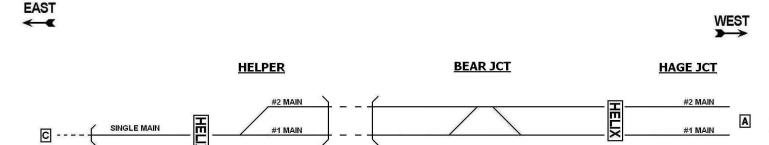
Track Schematic - West

CHESAPEAKE BAY AND WESTERN RAILROAD -- WEST END

UNDERLINED STATION NAMES ARE DISPATCHER CONTROL POINTS

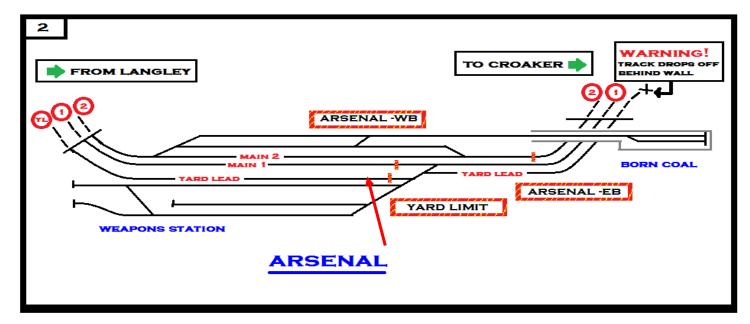


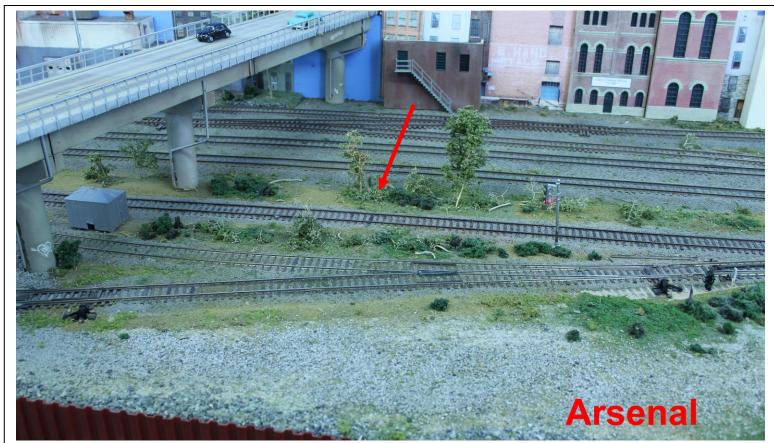


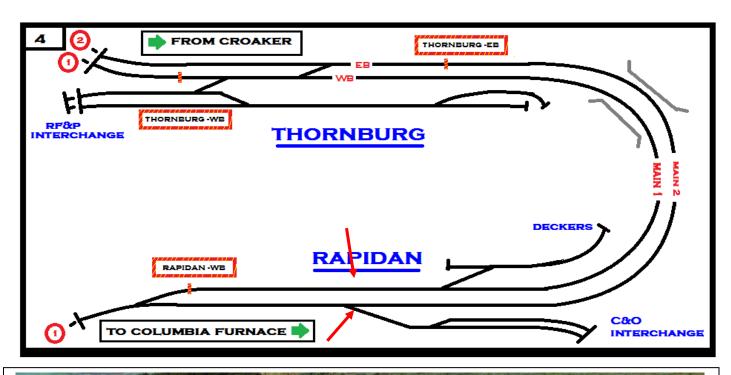


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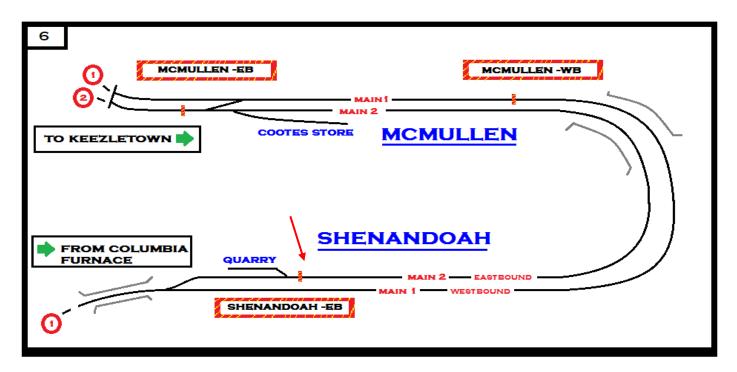
Layout "Choke" Points

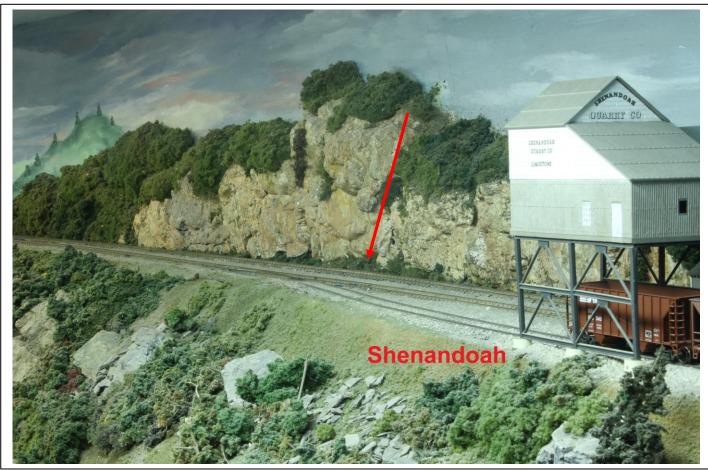


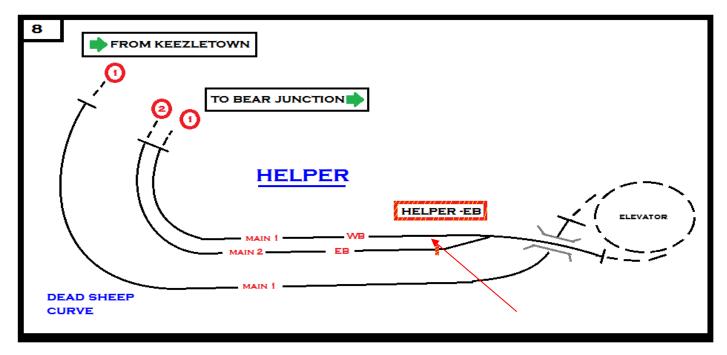


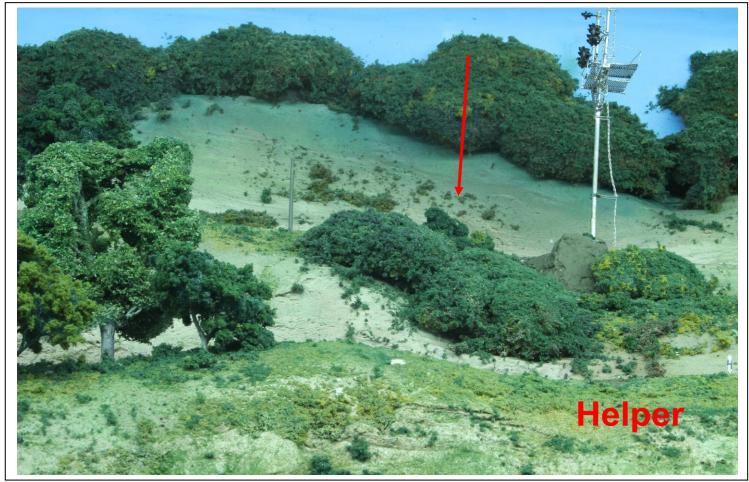


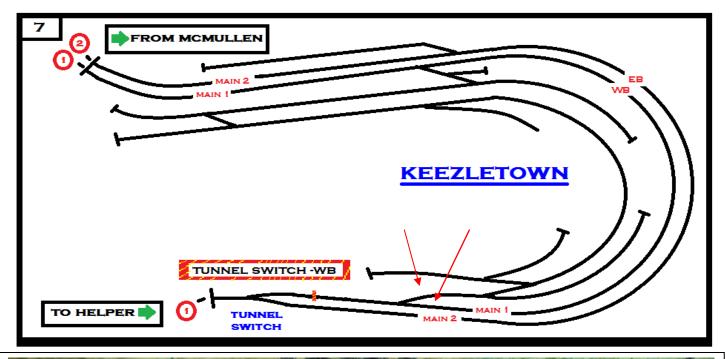








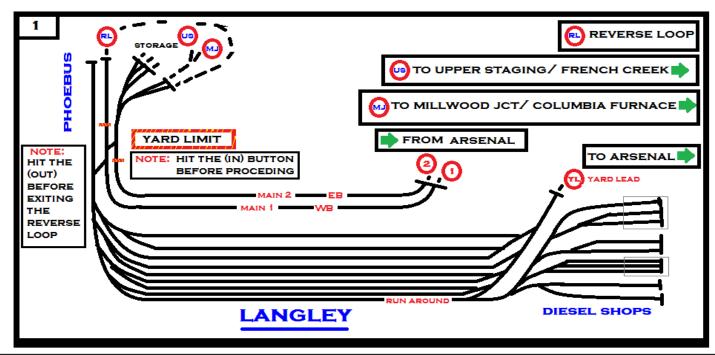


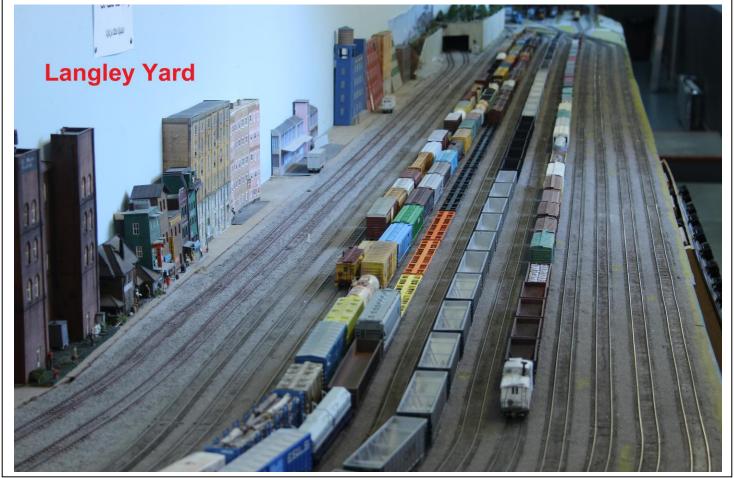


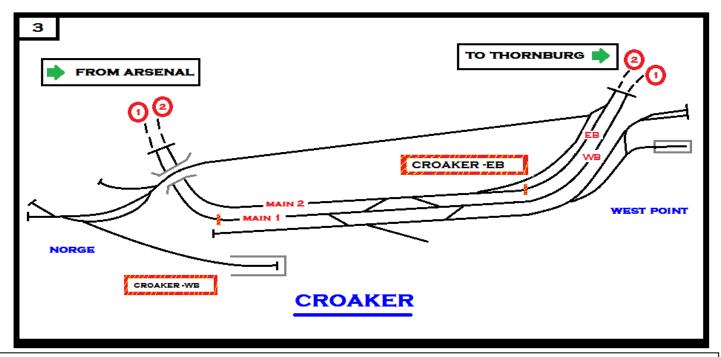


CB&W Layout

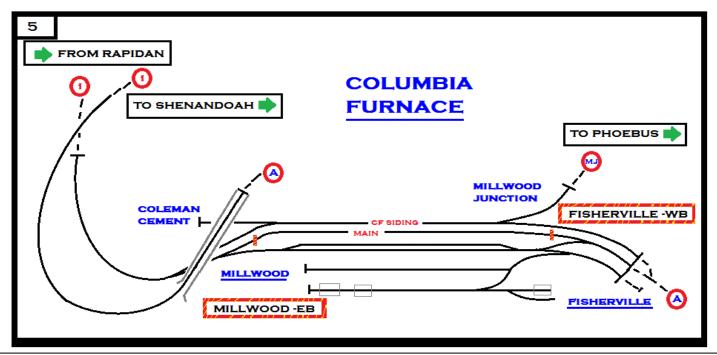
(Langley Yard to Nelson Shops)

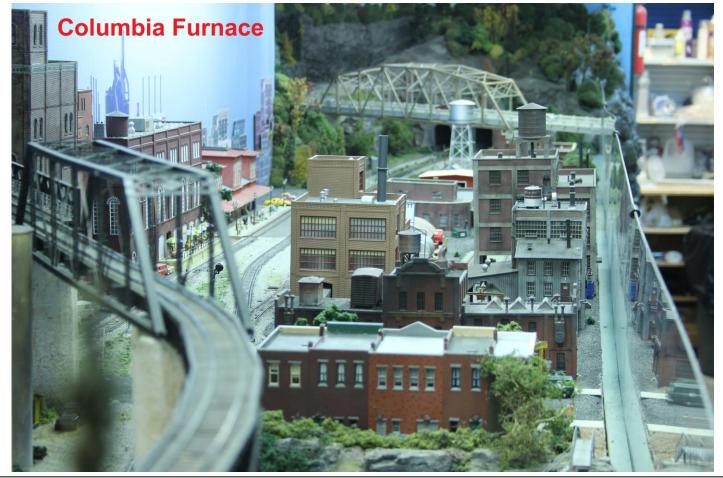


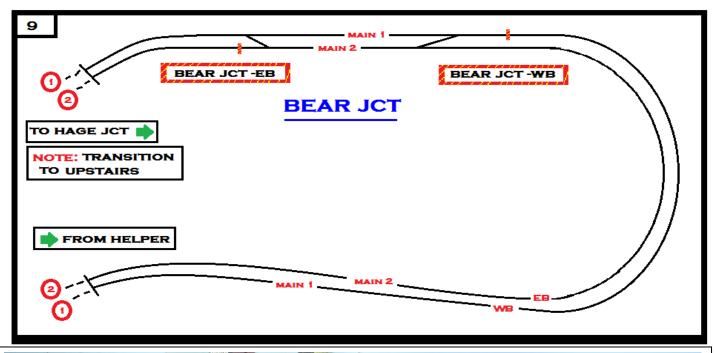




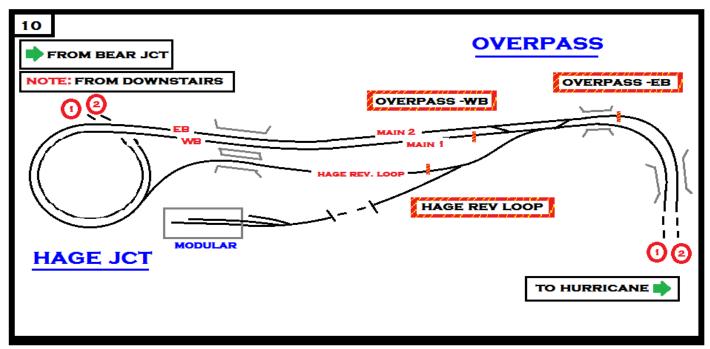


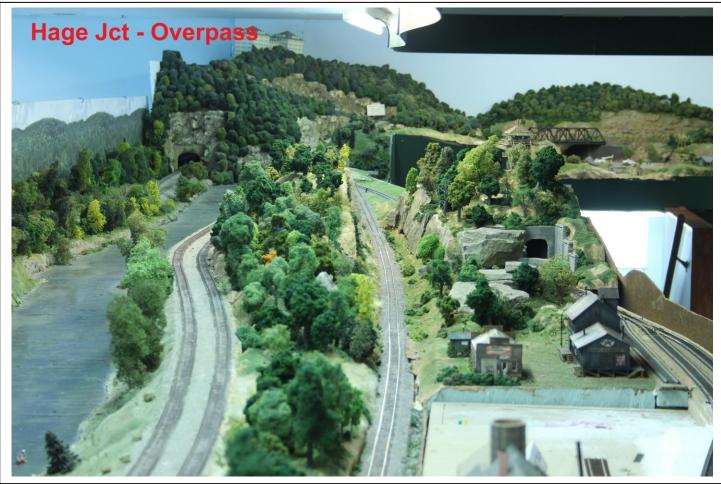


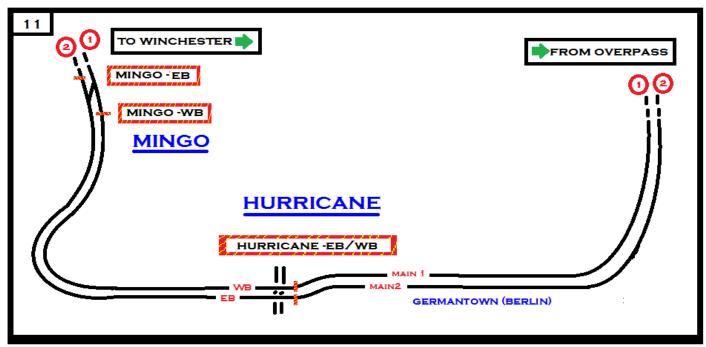




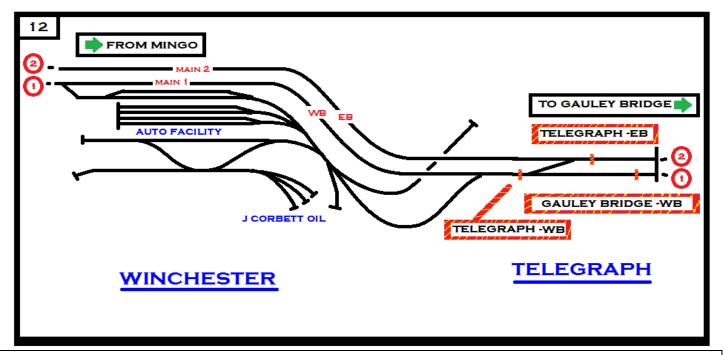




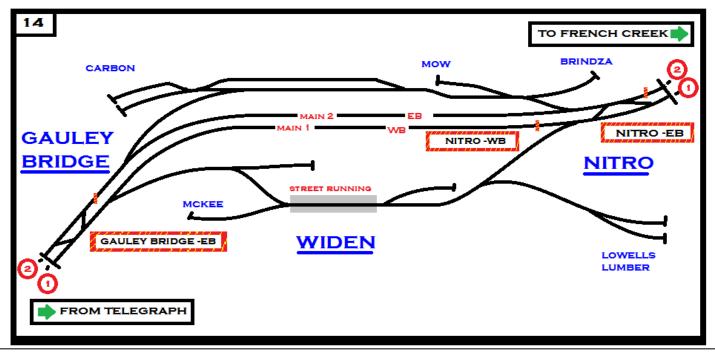




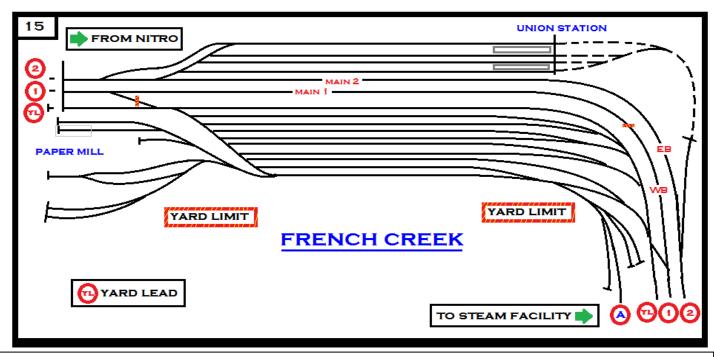


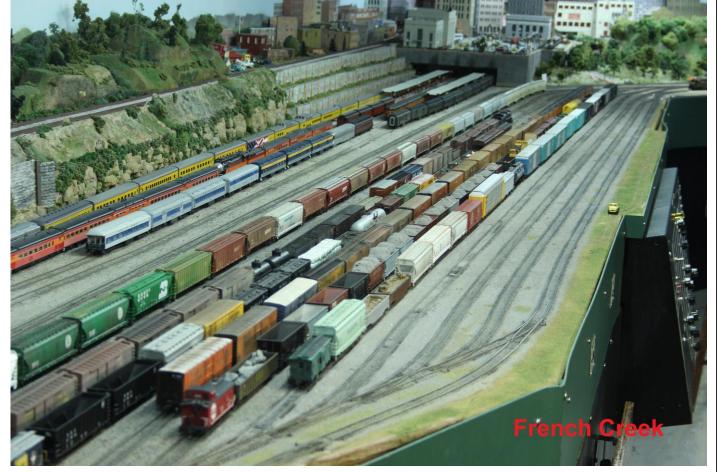


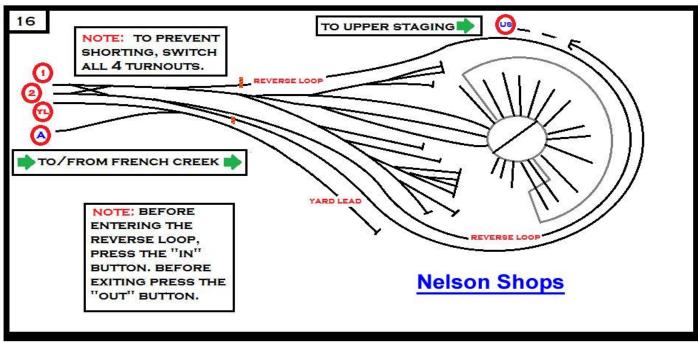


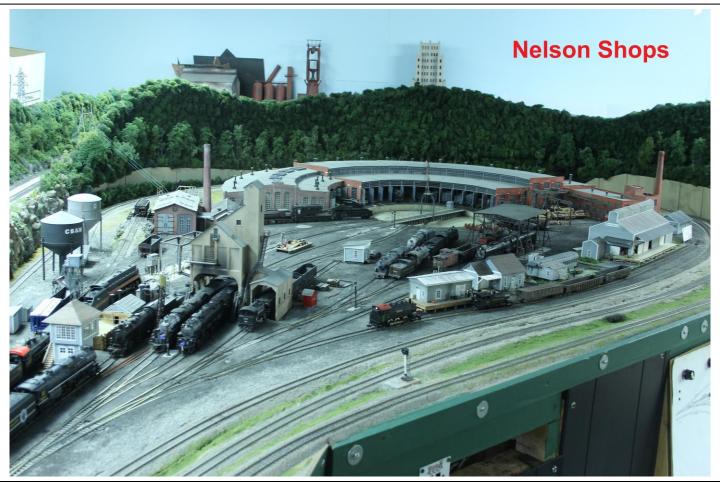












Signal Aspect And Indications Rules

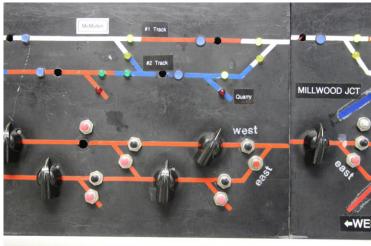
(current as of 1 June 2014)

Aspect	Name	Indication
	Clear	Proceed to the next signal
	Approach	Proceed to the next signal prepared to stop.
	Stop	Stop
	Medium Clear	Medium speed through turnouts , and crossover then proceed to the next signal.

	Medium Approach	Medium speed through turnouts , and crossover then proceed to the next signal prepared to stop
	Approach Slow	Proceed to the next signal at slow speed prepared to stop
Flading	Slow Approach	Slow speed through turnouts, and crossover then proceed to the next signal prepared to stop
	Restricting	Proceed at restricted speed.

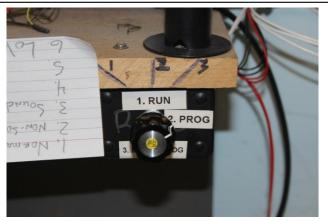
Inside the Club - Photos





Dispatcher's Camera Panel

Dispatcher Control Switches







DCC Programming Station

Club Lights & Layout Switches







CB&W Probationary Training

The club will train new members on all the aspects of the club, as outlined below. The sponsor will sign off the new member's checklist once they are confident in the level of knowledge. If an individual's advocate cannot complete an assigned task (initialing), either a Board member, committee chairperson, or any club member may sign off on a task in the advocate's absence. Should this happen, the trainee will inform their sponsor of this occurrence. The trainee should understand the backer can be absent to operate trains. The trainee is encouraged to be at the club as their schedules permit to operate trains. Finally, once the checklist is signed off, it must be reviewed and signed by a member of the Board before the trainee's being eligible for a full-membership vote.

TASK	START DATE	INITIAL	REMARKS
1. CL	UB COMMITTEES		
1.1 Explain the role of each of the club committees:			
Operations, Standards, Track, Electrical/DCC/LCC, House,			
Webmaster, Scenery, Open House, Public Affairs,			
501(c)(3)			
1.1.1. (Optional) Introduce the member to at least one			
committee chairperson.			
2. MEMBER	RORIENTATION - I	HOUSE	
2.1 Doors (x 2) – demonstrate locks on both deadbolt			
and handle. Handle unlocks automatically from inside.			
2.2 Interior light switches: Turn on/off entry door			
switches, dispatch door interior lights, and layout lights.			
Exterior lights on motion sensor.			
2.3 Locate the thermostat, note temperature set points			
for summer/winter. Confirm AC/Heat is on and set			
before locking up. Turn on/off club fans.			
2.4 Garbage cans – emptying is every member's			
responsibility. No food in trash cans. Know location of			
garbage bags. Show key location for dumpster/shed.			
2.5 Refrigerator - No overnight storage of food or drinks.			
No alcohol if you are not in the building.			
2.6 Locate the following items: cleaning supplies, broom,			
dustpan, vacuum, and ladders.			
2.7 Fire extinguishers: understand their operation and			
know all club locations x 8.			
2.8 Procedure for a fire or medical emergency in the			
building:			
 Stop all trains. 			
 Call dispatch if run session/ open house. 			
 Exit the building calmly and quickly unless 			
providing first aid.			
Call 911.			
3. LAYOUT OPERATION			
3.1 Startup sequence:			
 Lights near front door (either) 			
 2x light switch outside dispatch 			
 11x layout light panel + LCC/Track Power 			
 Dispatch - DCC switch & lights 			

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JIPMENT NEEDED)	
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		~
		NG ON THE LAYOUT

5.5.2 Upper level: Hage Junction Loop. Show correct			
switch alignment at loop and Overpass crossover.			
NOTE : Steep grade >2% on Hage branch line.			
5.6 Local switching operations, i.e. Arsenal, Croaker, etc.			
Demonstrate operation of local panels.			
5.6.1 Return all switches to normal/closed position			
before proceeding when switching.			
5.7 Trouble Reports: Show the location of blank forms			
(next to whiteboard) and inbox (in dispatch). Fill out all			
fields and describe nature of problem as thoroughly as			
possible.			
6. YA	ARD OPERTIONS		
6.1 Setting the power switches at both yards.			
6.2 Show hidden area between French Creek and			
Langley Yard; entrance at Steam Facility loop, Upper &			
Lower Staging, Elevator, exit to Langley Return Loop.			
6.2.1 Track 2 of Upper and Lower Staging (counting			
from outside in) must remain clear.			
6.3 Identify the yard leads for Langley and French Creek.			
6.4 French Creek Union Station Platform selection &			
mainline access switches.			
7. HIDD	DEN TRACK ACCES	SS	
7.1 Show access points for derailments:			
7.1.1 Upper & Lower Staging – Auto rack facility –			
Steam Facility (raised platform).			
7.1.2 Under the mountain by Gauley Bridge and			
underneath the ski lodge.			
7.1.3 Anywhere along the double track at Telegraph			
(the 10' ladder may be needed).			
7.1.4 Single track between Columbia Furnace and			
Shenandoah (the "Coffin").			
7.1.5 Under the stairs from Langley Yard or			
approaching Croaker.			
7.1.6 Under Union Station and French Creek City			
7.1.7 The helixes (x2)			
8. CAR STANDARDS			
8.1 Cars must be inspected before running at an open			
house. Show list of certified inspectors.			
8.2 Weight: Minimum 1 oz, plus ½ oz. for each inch of			
car length (NMRA standard).			
8.2.1 Alternate: Dynamic Test - run in forward and			
reverse from Langley to Columbia Furnace and back			
without derailment. Up to 5 cars per test.			
8.3 Couplers: Kadee compatible			
8.3.1 exceptions: non-US or integrated sets (i.e. the			
Acela).			
8.4 Metal wheels on all rolling stock, in gauge per NMRA			
standards.			
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8.5 Understand the rules and responsibilities as they			
apply to using both club and member locomotives and			
rolling stock.			
8.6 Outline rules for storage of rolling stock underneath			
the layout.			
9.	COMPUTERS		
9.1 Startup/shutdown. Show location of power strips.			
Turn off strips before locking up building.			
9.2 Contact Bob Grandle (lgrandle@msn.com) to set up			
accounts on each computer for decoder programming.			
9.3 Demonstrate basic operations of JMRI Decoder Pro.			
Show switch positions for running, non-sound		· ·	
programming, and sound programming on each			
programming track.			
9.3.1 Renumber a decoder with a short or long			
address.			
9.4 (Optional) If member owns, or expects to own,			
LokSound decoders, demonstrate basic use of Lok			
Programmer.			
9.5 Do not change settings on the dispatch computer			
without help from Electrical/DCC/LCC committee.			
10. THR	OTTLE OPERATIO	NS	
10.1 DO NOT PUSH THE POWER BUTTON ON YOUR			
THROTTLE. Doing so could shut down the entire layout.			
10.2 When using a WiFi throttle, put your cellphone in			
"aircraft" mode.			
10.3 (Optional) If a smartphone will be used as a			
throttle:			
10.3.1 Server login information (in dispatch)			
10.3.2 Acquiring a locomotive address			
10.3.3 Consisting multiple locomotives			
10.4 Release locomotive addresses when done running.			
11. MISCELLANEOUS			
11.1 Club phone number (757) 898-0717			
Web: <u>cbw-mrc.com</u> . Any member may answer the			
phone if it rings.			
11.2 Club dues - due-by date, mailbox location, balance			
list location, label envelopes (name, date + purpose).			
11.3 Member roster - contact information			
CHECK	LIST COMPLETIO	N	
	DATE		PRINT NAME & SIGNATURE
A board member must verify competition of this			
checklist prior to full membership vote.			
and a manufacturing votes	1		