



LACKAMONEY RAILWAY OPERATIONS

MARITIME FEDERATION OF MODEL RAILROADERS
PRESENTATION & LAYOUT TOUR DURING COVID-19 LOCKDOWN
BY DOUGLAS MARGISON

SESSION FLOW

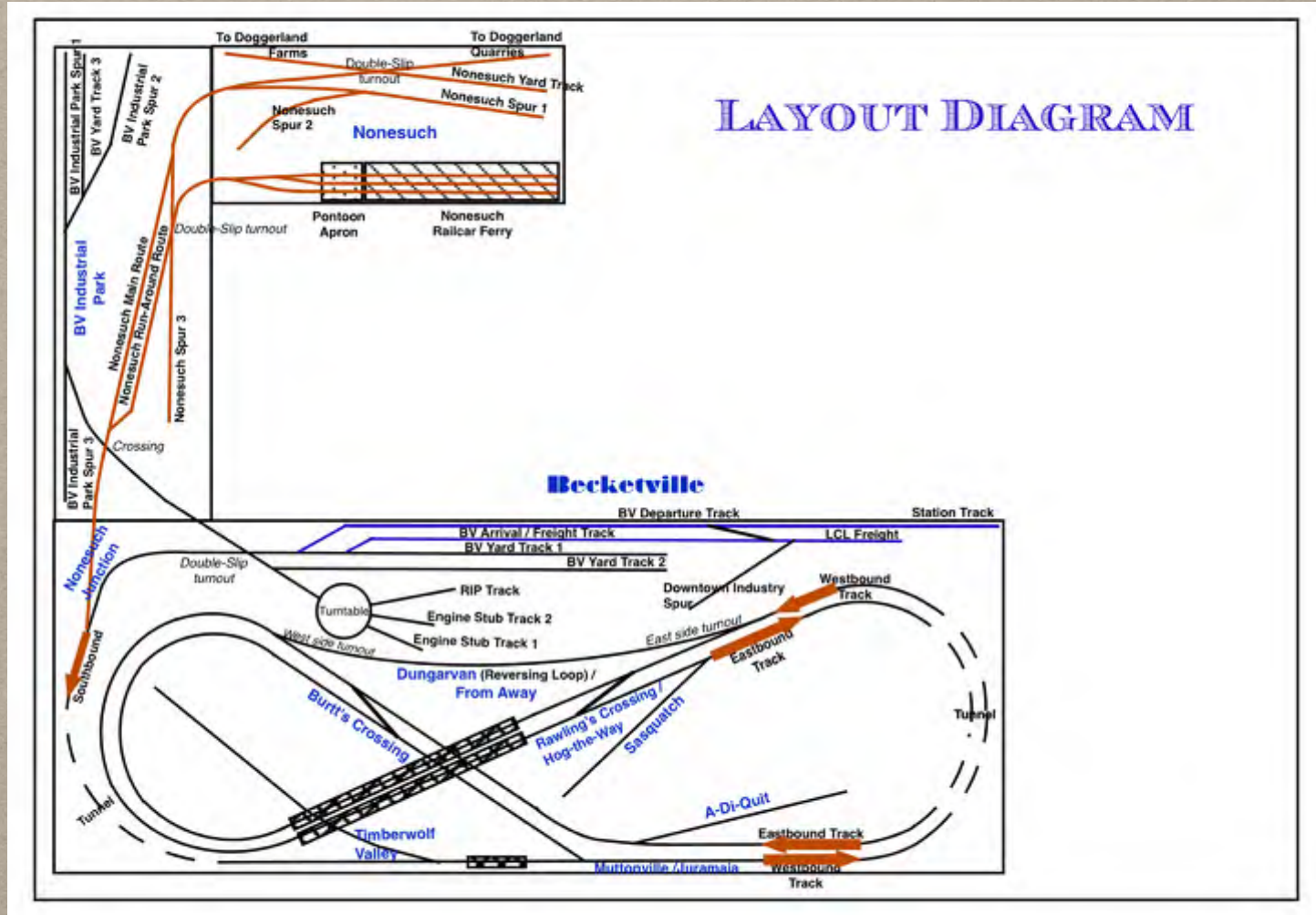
- Layout overview
- Operations and planning
- Layout walkabout

LAYOUT OVERVIEW

- HO scale imaginary railway and places → make up stories
- During working years, didn't have time to get into prototypical modelling
- 3 subdivisions
 - ✦ LMR (Lackamoney Railway)
 - ✦ Nonesuch Railway (harbour village)
 - ✦ Sasquatch Railway (logging)
- Initially wanted layout to run trains with pre-school son-daughter
 - ✦ Main Table 1989-90: double mainline Figure-8
 - ✦ Then work got in the way until retirement
 - ✦ Over time primary focus shifted to operations – moving resources and products
- "Lackamoney" name
 - ✦ Fun with names
 - ✦ LMR buys used equipment – slap on new RR name; retain original paint scheme
 - ✦ "Good enough" scenery / structures / painting / weathering

158 ft track
as of 2018

LAYOUT DIAGRAM



LAYOUT CHALLENGES

- Hard to reach centre Main Table for repairs
- Tight curves → gave up running steam locomotives → changed the modelling era from transitional
- Not able to find relatively inexpensive working HOn3 diesel locomotives → not doing narrow gauge on the dual gauge Sasquatch to A-Di-Quit run
- Reversing loop at back of Figure-8 limits trains to 5 cars + caboose
 - ✦ Reversing loop is staged town of Dungarvan
- Short "leads" generates challenge getting 2nd or 3rd car out of a siding
- 90% of turnouts are Shinohara – purchased before there was DCC → not DCC friendly
- 6-page notes on how to do things better / differently next time

DCC SYSTEM

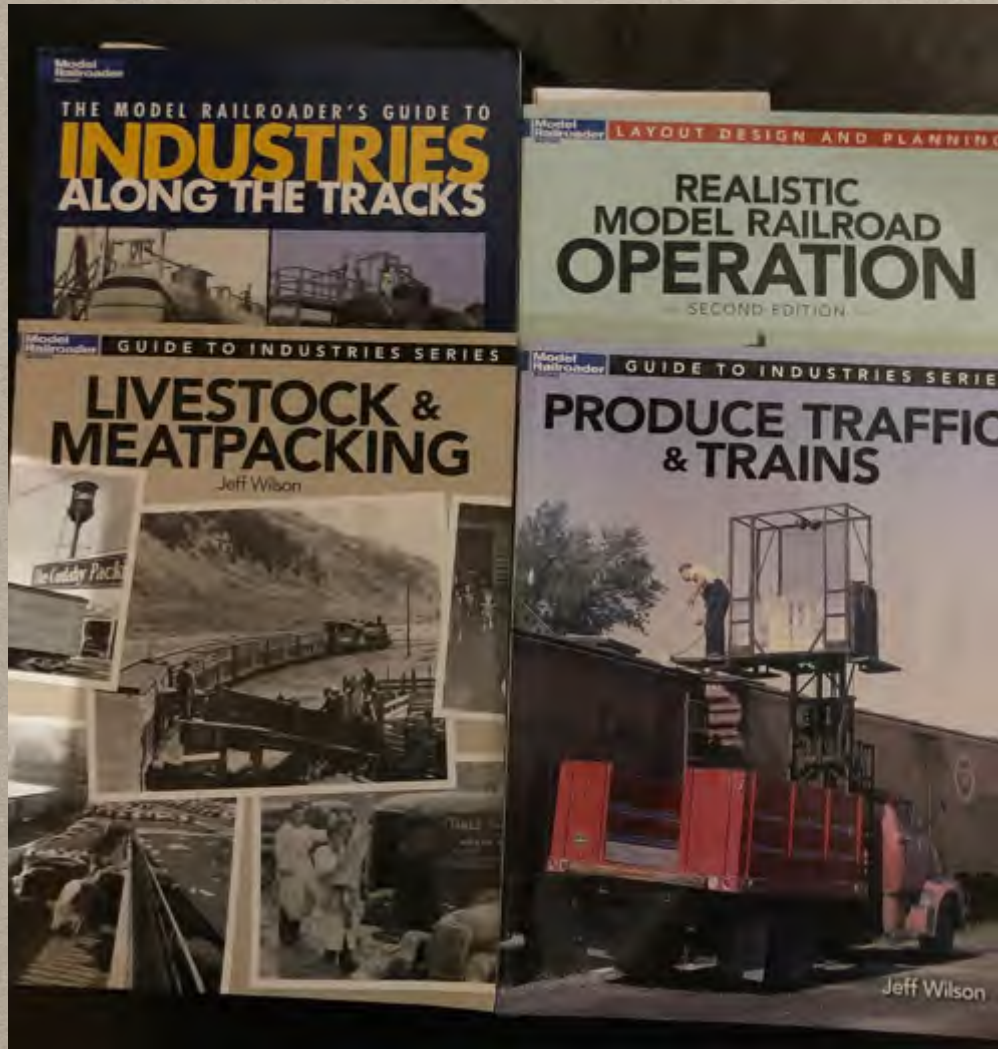
- Switched from DC in October 2017
- Digitrax DCS 100
 - ✦ Simplex and Duplex radios
 - ✦ Smartphone throttles connected through JMRI WiFi running on PC to LocoNet
- Shinohara turnouts – gapped before frog on trailing side
 - ✦ Many – had to drop track feeds from closure rails to Tam Valley Hex Frog Juicer
- Programming track is a short section of Becketville Departure Track
 - ✦ Programming through JMRI
 - ✦ Booster – DCC Specialties PowerPax – DPDT switch to add in or remove
- Reversing loop – DCC Specialties PXS-AR (tried Bachmann E-Z Command & MRC AD250)
- Turnout control Circuitron Tortoise, ye olde H&M and Rapido → switched to Berrett Hill Touch Toggles

SIGNALS

- Primarily turnout routing
 - ✦ Installation philosophy
 - ➔ Assist visiting operators in determining turnout direction from a distance
 - ➔ Can an operator read the signal? → positioning not always prototypical
 - ✦ Activation
 - ➔ Tortoise internal SPDT – some not functional
 - ➔ Berrett Hill Relay Base
 - ➔ Momentary micro switches for manual ground throws
 - ✦ Main supplier Custom Signal Systems – NJ International and Tomar hard to get
- Block detection – tunnels only
 - ✦ 3 blocks not integrated
 - ✦ NCE-BD20 connected to Atlas Signal Control Boards (SCB)
 - ✦ Wired 2 Atlas G-type searchlight signals into each SCB

OPERATIONS EVOLUTION

- Product-car forwarding approach to operations
- Researched industries – inputs / outputs →
 - ✦ Generated resource-product flowcharts →
 - ✦ Generated waybills – many now 8-cycle
 - ✦ Switchlists generated from waybills
- Waybills follow a car
 - ✦ On trains as manifests – clipped together then onto conductor's clipboard
 - ✦ In sidings and yards – Micro-Mark waybill boxes

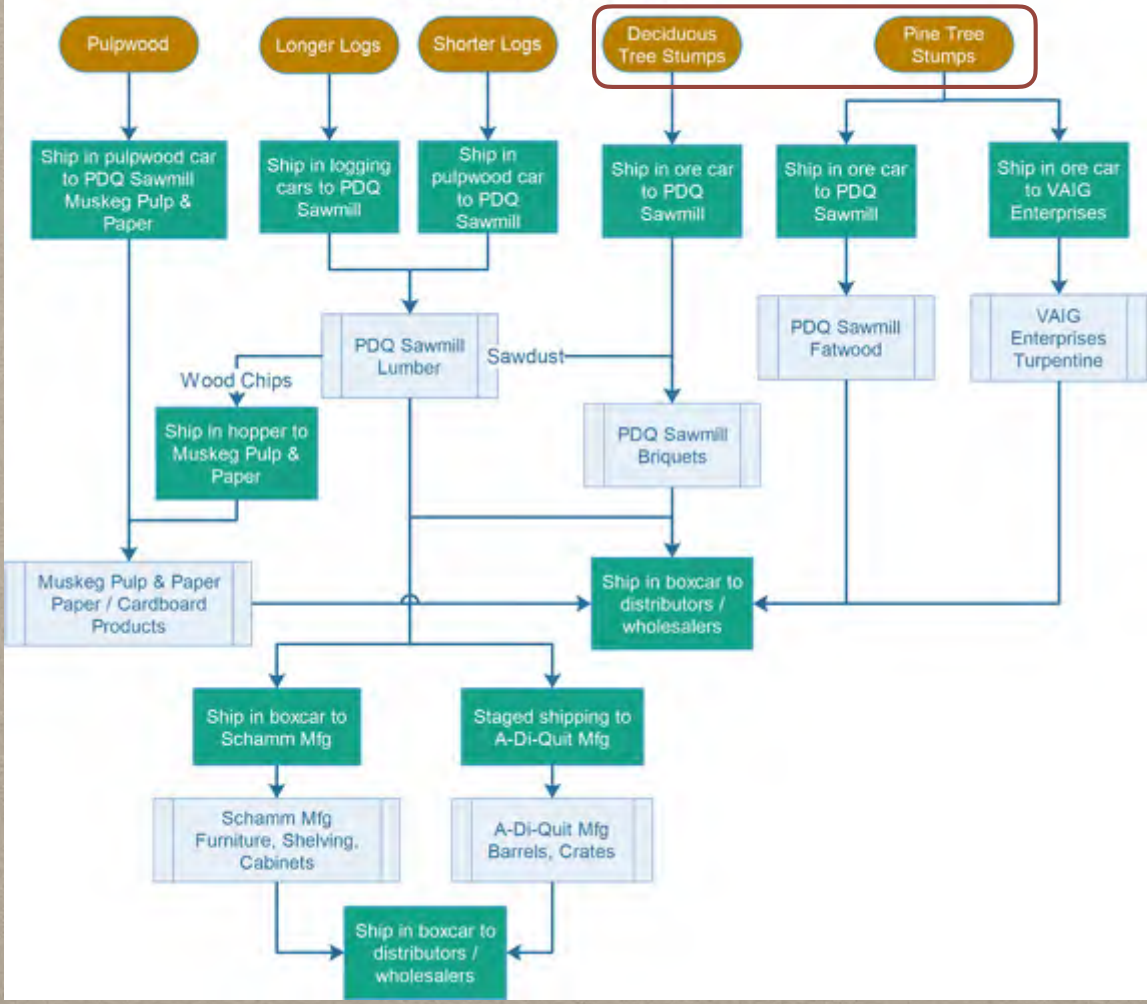


Resources

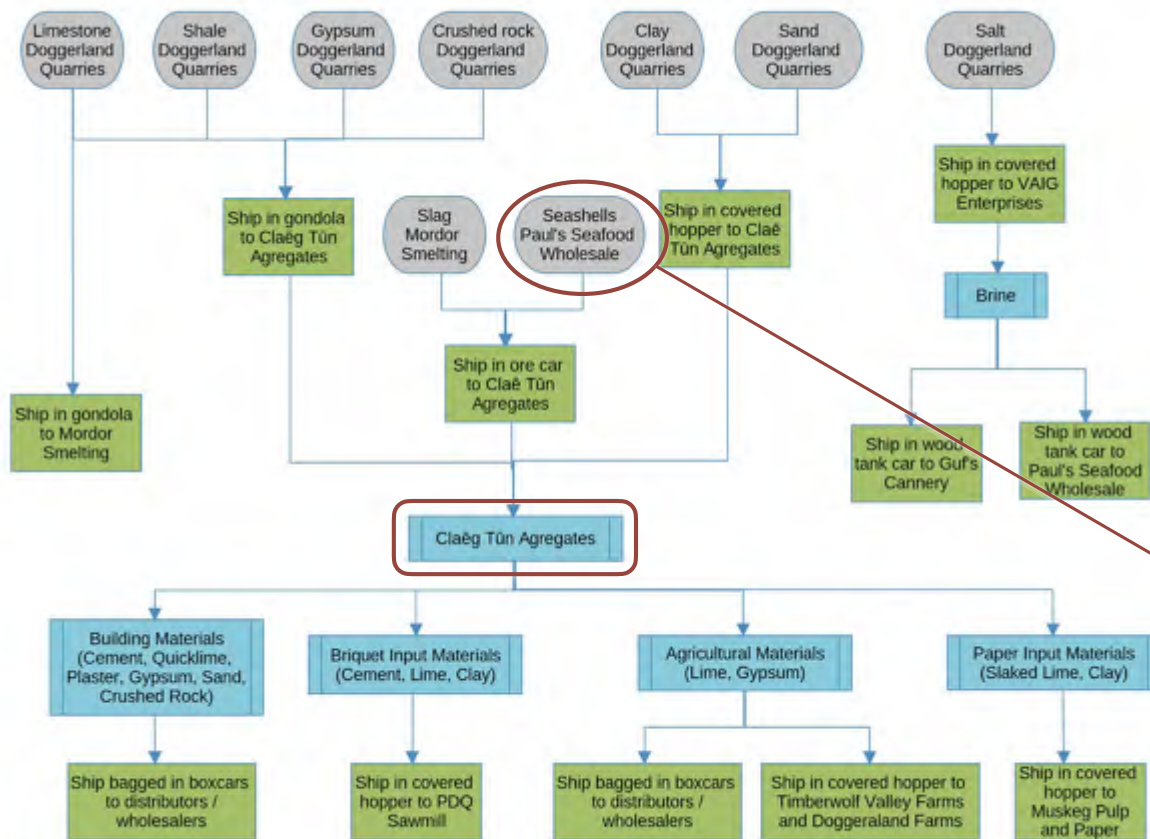
*Model Railroader's
Guide to Industry Series*

And of course Wikipedia

Shipping Wood Products

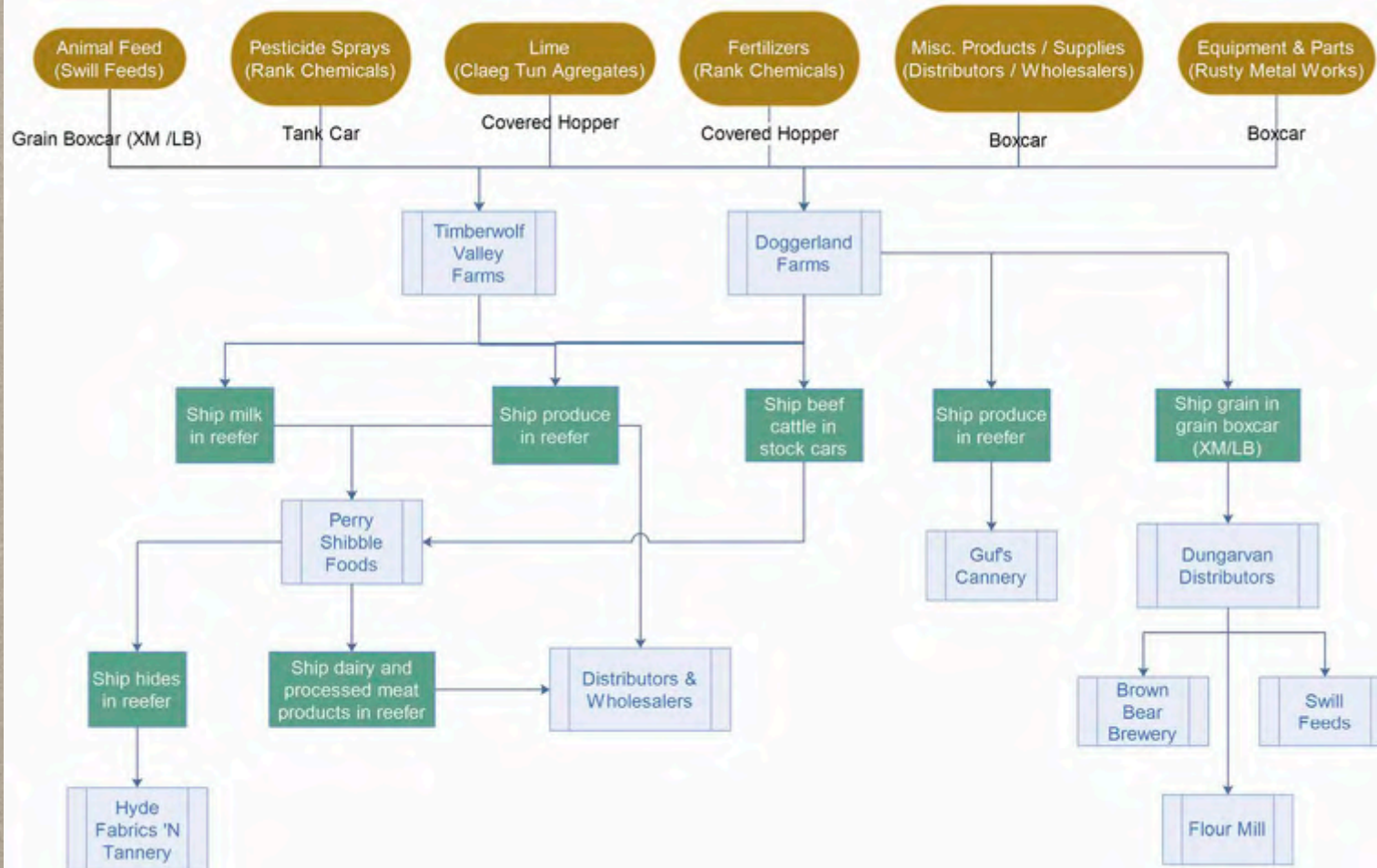


Shipping Quarry Materials



Source of lime

Shipping Agricultural Products




OPERATIONS EVOLUTION

- Switched from operations software (e.g., Ship-It) to Excel – better car flow; better control
- Train generation
 - ✦ Track number of sessions car hasn't moved → try to get out on next train
 - ✦ But priority to livestock and reefers
- Mainline train generation – additional factors
 - ✦ Random number generator for each car → match to list for send to (1) scale track or (2) repair-in-place track
 - ✦ Plan switching Timberwolf Valley for current session day and A-Di-Quit for following session day → block cars
- Yard industry waybills: sand, diesel fuel, rails, ties, wheels, machinery, supplies
- Railcar Ferry – at end of session change cars with those in storage to simulate movement of ferries
- Interchange at Nonesuch Junction – lots of traffic between LMR from town of Becketville and Nonesuch Ry from Nonesuch harbour village
- Removable loads ore cars, hoppers, gondolas and flatcars

YARDMASTER'S SWITCHLIST

- Yardmaster (YM) makes up trains →
- Puts car cards in Departure Track box for pickup by Conductor
- Verbal "Clearance Card" by YM after checking that turnouts are aligned



NONESUCH RY YARD SWITCHLIST

YARDMASTER'S SWITCHLIST

Day **2** Run

Switcher: **NS 151** EMD MP15AC DCC ID: **151**

START OF SESSION SWITCHING

Finished	Move	Reporting Mark	AAR Type	from	Yard	to
<input checked="" type="checkbox"/>	Move	SLSF 84009	LO	from	Yard	to NS2
<input checked="" type="checkbox"/>	Move	CP 241039	XM	from	Yard	to DF
<input checked="" type="checkbox"/>	Move	MILW 105428	SM	from	DF	to RCF
<input checked="" type="checkbox"/>	Move	ATSF 21889	XM / LB	from	DF	to #647

DEPARTING TRAIN NS #647 TO NONESUCH JUNCTION

Engine **NS 151** Depart Nonesuch: **10:15 AM**
 Arrive Nonesuch Junction: **10:50 AM**

Finished	Pickup	Reporting Mark	AAR Type	from	RCF
<input checked="" type="checkbox"/>	Pickup	AESX 8352	TM	from	DF
<input checked="" type="checkbox"/>	Pickup	ATSF 21889	XM / LB	from	NS3: 1
<input checked="" type="checkbox"/>	Pickup	GN 50765	XM	from	

Push above cars into Nonesuch Junction

Pickup Location Update

*Spur #3
Spot #1*

ADDITIONAL SWITCHING – NOT IN ORDER

Finished	Move	Reporting Mark	AAR Type	from	to
<input type="checkbox"/>	Move	BM 71714	HT	from	DQ to RCF
<input type="checkbox"/>	Move	MILW 95787	LO	from	DQ to RCF
<input type="checkbox"/>	Move	D&H 17386	XM	from	Yard to DQ
<input type="checkbox"/>	Move	DFPX 537	TG	from	RCF to DF
<input type="checkbox"/>	Move	BCOL 1914	TM	from	RCF to Yard
<input type="checkbox"/>	Move			from	to
<input type="checkbox"/>	Move			from	to
<input type="checkbox"/>	Move			from	to
<input type="checkbox"/>	Move			from	to

ARRIVING TRAIN NS #435 FROM NONESUCH JUNCTION

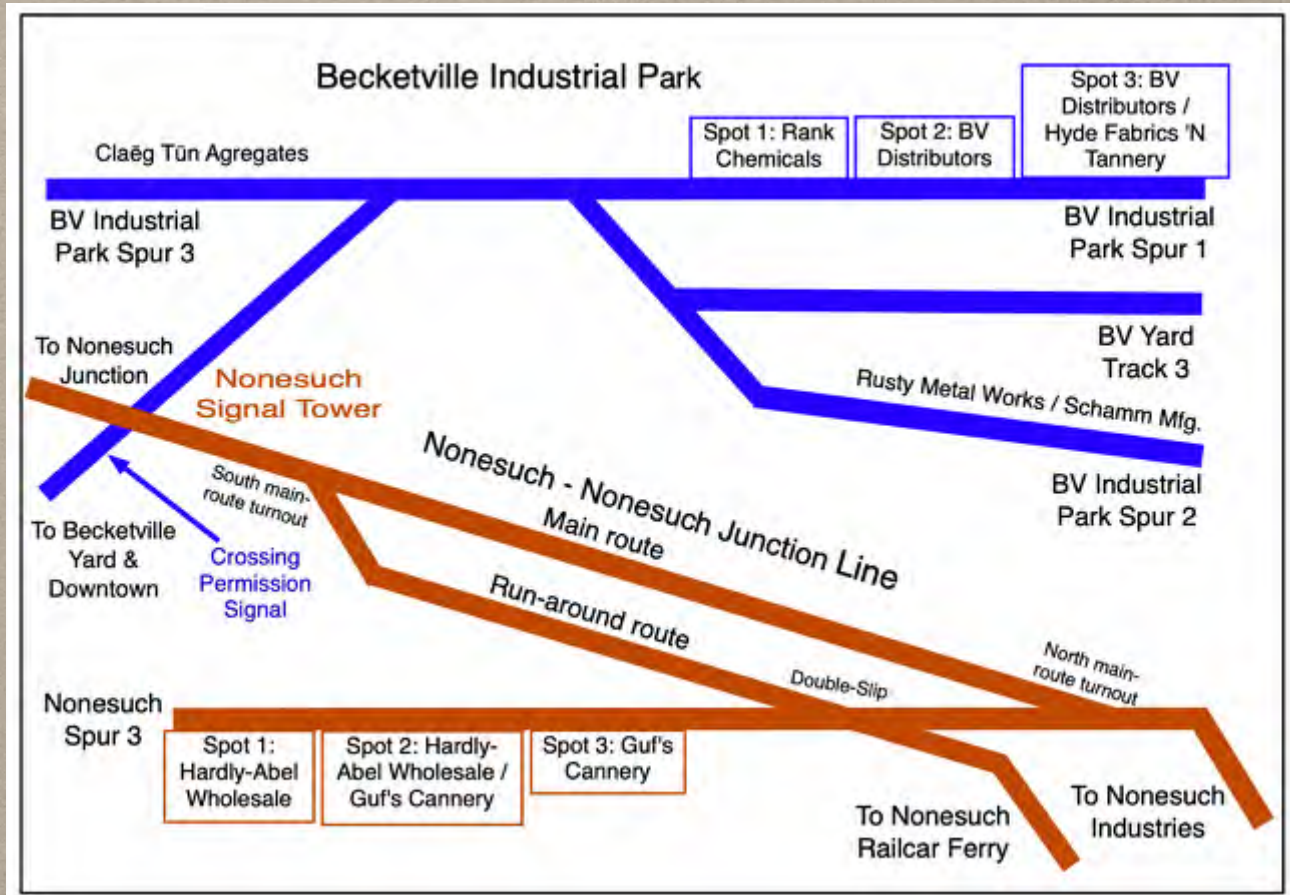
Engine **NS 151** Depart Nonesuch Junction: **1:45 PM**
 Arrive Nonesuch: **2:20 PM**

Pickup cars at Nonesuch Junction

Finished	Move	Reporting Mark	AAR Type	to
<input type="checkbox"/>	Move	HJ 73	TW	Yard EOS NS2
<input type="checkbox"/>	Move	MRRX 2509	RS, RP	NS3: 1
<input type="checkbox"/>	Move	SQ 1610	OM	NS2

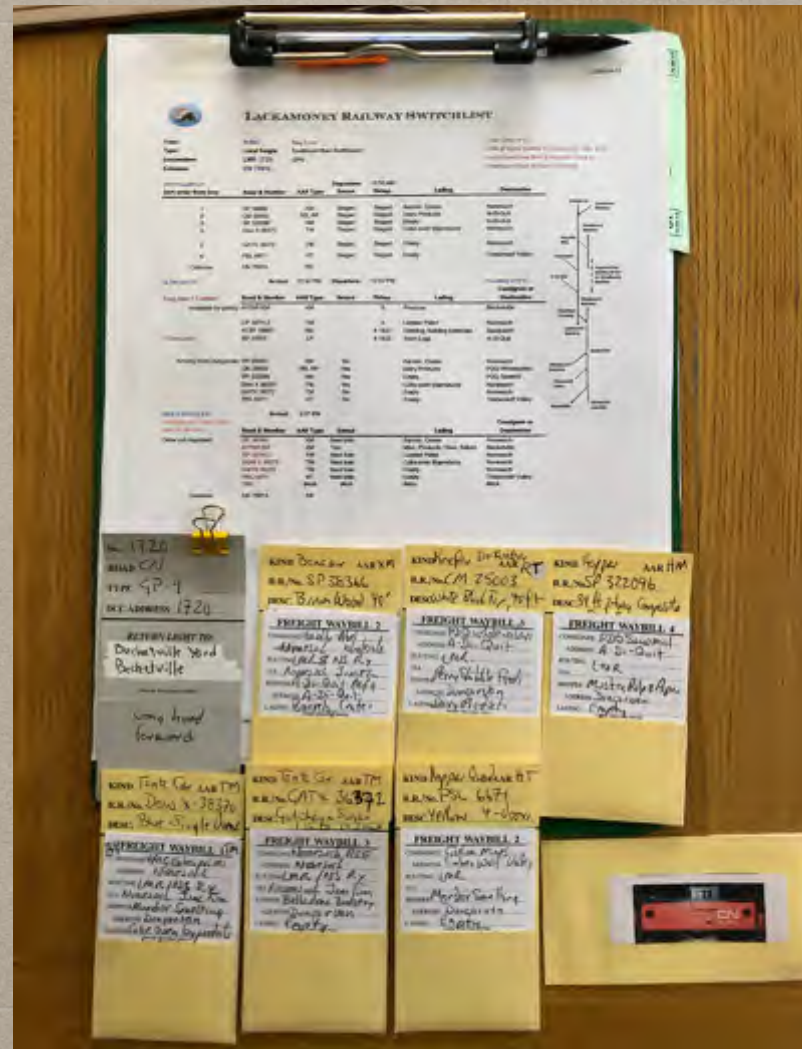
*Move to Yard first
End of Session:
Move to Spur #2*

SWITCHING MAP & TOUCH TOGGLE CONTROL PANEL



CONDUCTOR'S CLIPBOARD

- Train's switchlist
- Car cards with manifest waybills
 - ◆ Some 4-cycle waybills
 - ◆ Many 8-cycle waybills
- Exceptions:
 - ◆ Train Order(s)
 - ◆ Track Warrant(s)



CONDUCTOR'S SWITCHLIST



LACKAMONEY RAILWAY SWITCHLIST

Train: 7518 **Day 2 run**
Type: Local freight Southbound then Westbound
Locomotive: LMR 3120 MLW RS-18
Caboose: CN 78342
 Use current detection caboose for TWV switching
 Note: ✓ in 'Pickup' is a default setting -- don't change it

Track Warrant # 150
 Proceed from Rawling's Crossing to Burt's Crossing on Eastbound Track. Back up into Burt's Crossing after crossing back onto Westbound track

BECKETVILLE

Sort order from loco	Road & Number	AAR Type	Setout	Pickup	Lading	Destination
1	LMR 234	FM		✓	Empty	A-Di-Quit
2	LMR 456	XM		✓	Misc. Products	Dungarvan
3	NH 32161	XM		✓	Misc. Products: Canned Products	A-Di-Quit
4	BN 7569	LO		✓	Agricultural Materials	Timberwolf Valley
5	PRR 135427	SM		✓	Empty	Timberwolf Valley
6	GATX 9487	TM		✓	Oil; Fuel	Timberwolf Valley
7	EBAX 6008	TM		✓	Chemicals Liquid - Caustic	Dungarvan
Caboose	CN 78342	NE		✓		

Blocked for A-Di-Quit

Blocked for Timberwolf Valley

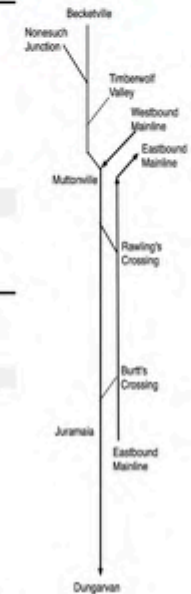
TIMBERWOLF VALLEY

Road & Number	AAR Type	Setout	Pickup	Lading	Consignee or Destination
Farm TBD	#N/A			#N/A	#N/A
Farm / Yard TBD	#N/A			#N/A	#N/A
Yard / Mine TBD	#N/A			#N/A	#N/A
Mine GM 1610-GM 2004	OM		X	Iron Ore	Dungarvan
From Becketville					
LMR 234	FM	No		Empty	A-Di-Quit
LMR 456	XM	No		Misc. Products	Dungarvan
NH 32161	XM	No		Misc. Products: Canned Products	A-Di-Quit
BN 7569	LO	Yes		Agricultural Materials	TWV Farms
PRR 135427	SM	Yes		Empty	TWV Farms
GATX 9487	TM	Yes		Oil; Fuel	TWV Yard
EBAX 6008	TM	No		Chemicals Liquid - Caustic	Dungarvan

DUNGARVAN

Normally only 5 cars. Extra spot for ore cars

Road & Number	AAR Type	Setout	Pickup	Lading	Consignee or Destination
LMR 234	FM	Staged	Staged	Empty	A-Di-Quit
LMR 456	XM	Staged	Staged	Misc. Products	Dungarvan Yard
NH 32161	XM	Staged	Staged	Misc. Products: Canned Products	A-Di-Quit
GM 1610	OM	Staged	Staged	Iron Ore	Mordor Smelting
GM 2004	OM	Staged	Staged	Iron Ore	Mordor Smelting
EBAX 6008	TM	Staged	Staged	Chemicals Liquid - Caustic	Muskeg Pulp & Paper
Caboose	CN 78342	NE			

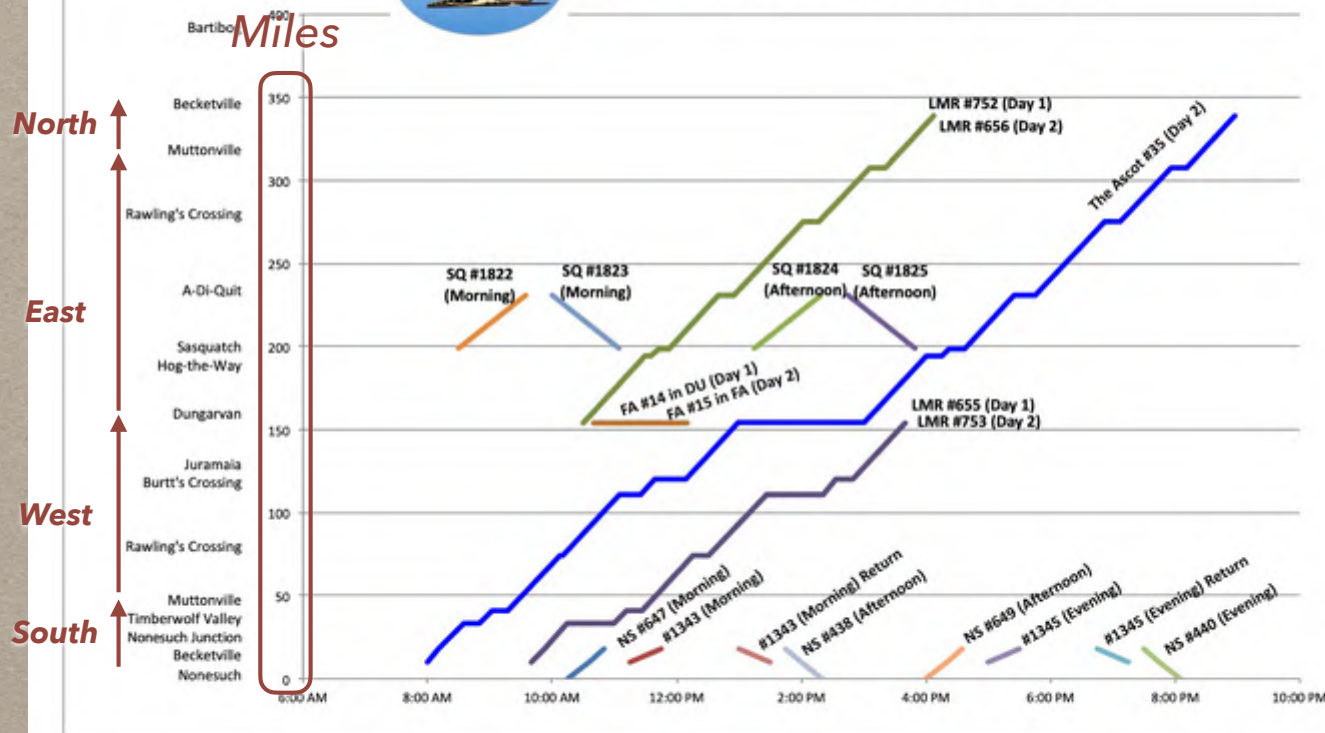


MODEL RAILROADING AS THEATRE

- Frank Ellison Model Railroader 1944
- LMR operates on 2-day cycle
- Work through script / play involving 9 trains (2 general / local freight; 6 way freight / turns; 1 passenger)
 - ✦ Same play each day – same trains, same sequencing, same stage entrance and exit locations and times
 - ➔ Exceptions: Train Orders & Track Warrants
 - ➔ Essentially TimeTable & Train Order System
 - ➔ Could use Fast Clock – timing included in script – ignored to date
 - ✦ Main actors: train number Becketville to Dungarvan (Day 1: #655; Day 2: #753) and train number Dungarvan to Becketville (Day 1: #752; Day 2: #656) changes depending on operating session
 - ✦ Minor actors: cars on 8 of 9 trains change each session – passenger train exception



Lackamoney Railway Schedule Graph



Lackamoney Ry Scale Distances-Schedules2017Dec.xlsx

Distances: HO feet converted to miles x 2.5 enhancement factor

Travel time based on 40 mph between locations

LMR Train Script

1. Becketville Switcher does SOS activities
2. The Ascot passenger train's FA2 locomotive LMR 9456 startup is F8
3. The Ascot passenger train leaves BV (8am) for TWV → MUT → RC (10am) — hold for LMR 752 Day 1 / 656 Day 2 to clear Eastbound track at RC — From Away train stopped on Westbound track at the bridges
4. SQ Morning Turn (8:30am to 11am)
5. Becketville Switcher prepares local freight 655 Day 1 / 753 Day 2
6. LMR local freight 655 Day 1 / 753 Day 2 leaves BV (9:40am) for TWV → switch
7. Becketville Switcher does switching activities
8. Nonesuch Switcher does SOS activities
9. Nonesuch Switcher prepares NS 647 → NJ setout (10:15am) → NS Switcher returns to Nonesuch to do switching activities
10. LMR local freight 752 Day 1 / 656 Day 2 leaves Dungarvan (10:30am) for A-Di-Quit — stops before turnout at SQ — wait for SQ Morning Turn to return to SQ (11am)
11. SQ Morning Turn back in SQ (11am)
12. LMR 752 Day 1 / 656 Day 2 proceeds to A-Di-Quit (12:40pm)
13. The Ascot crosses over to Eastbound track at RC → proceeds to BC → crosses over to Westbound track and backs into BC Station (11am delayed → 11:30am)
14. LMR local freight 655 Day 1 / 753 Day 2 proceeds to MUT → RC (11:15am) and waits for permission to cross over to Eastbound track
15. LMR local freight 752 Day 1 / 656 Day 2 switches at AD
16. The Ascot leaves BC Station for Juramaia
17. LMR local freight 655 Day 1 / 753 Day 2 — cross over to Eastbound track → proceed to BC and hold before crossover
18. The Ascot leaves Juramaia Station → enter Dungarvan (1pm to 3pm delayed → 1:30pm to 3pm)
19. Becketville NJ Morning Turn (11:15am to 1:30pm) → Becketville Switcher does switching activities
20. NS 438 pickup at NJ (1:45pm) → to Nonesuch → NS Switcher does switching activities
21. LMR local freight 655 Day 1 / 753 Day 2 crosses over to Westbound track at BC (1:30pm delayed) → proceed to Juramaia then into tunnel

Track Warrant & Train Order exceptions built into script

Script master gives clearance to cross over after aligning turnouts

*Layout / Stage
Walkabout*

