From Car Cards to OperationsPro™

The Transition

v8.12 - 2023-08-04

About This Presentation

This is an Overview - Not a Tutorial.

Advice for your exploration -

    OpsPro is complex. Don't expect perfection on the first try.

    A lot of what you have heard may be wrong or a misconception.

    OpsPro documentation is for reference, not a tutorial. View the videos and other resources.

    Take advantage of support on "jmriusers" at Groups.IO

    Start simple, Get something basic working, make changes, repeat until you're happy.

Resources

Read the info at JMRI.ORG - Operations Pro. Don't worry if you're confused. It's reference material, not a tutorial. You will return to this many times.

<https://youtu.be/RBF0V6DEu98> Watch *Introduction to JMRI Ops for a Small Layout* by Robert J. Thomas - *55 minutes*

Watch Steve Todd's presentation on YouTube *JMRI Operations with No Paper* - One of the best, basic, getting started videos I have seen. <https://youtu.be/krhyvrhrxv4> *47 minutes*

David H has several very good OpsPro Tutorials on his YouTube Channel. https://www.youtube.com/@dhtrainz4798 *90+ minutes*

Read David Haynes' "worked example". Examples of car movements and build reports. <https://rcairgallery.com/stuff/Using-JMRI-Operations-A-Worked-Example.pdf>

Read Brian Clark's article "Using JMRI Operations" in the October 2020 Dispatcher's office. Yes, you'll need to be an OpSig member. If you're not, go to <Opsig.org> and join. It's only it's only $10/year for the electronic membership and you'll have access to the entire library of the Dispatcher's office. If $10 is too much, you should switch to collecting bottle caps.

Links to the August 30, 2020 video and PDF describing my operations on my switching layout can be found on the OpSig.org "past meetups" page. <https://www.opsig.org/Virtual/2020>

Hardware and Software

NCE command station with 1 ProCab

Raspberry Pi 4 for JMRI

3 PSX circuit breakers

2 ProtoThrottles

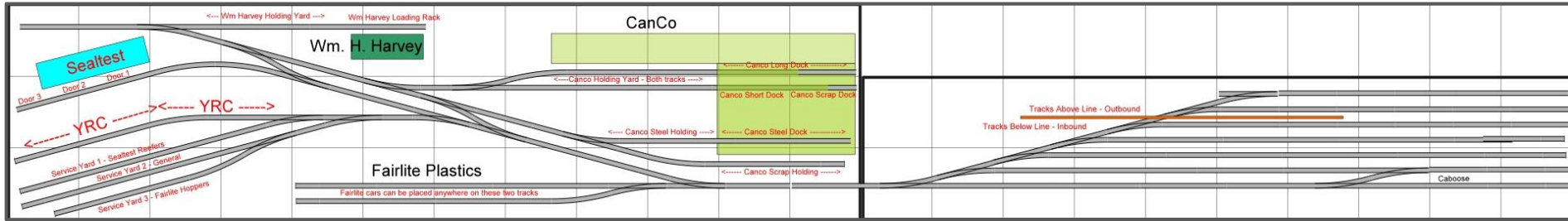4 Amazon Fire Tablets for control panels and manifests

1 small convenience PC for remote access to JMRI

Based on Union Pacific "Seymour" - 72nd & F

Geography and Sizes modified to fit a shelf.

Industries "inspired" by prototype.

Slowly changing to "Seemore."

The Physical Switching Layout - 2012 + 2019

Original intent - Ops with grandkids

       Learn about DCC, JMRI, and other newer techniques
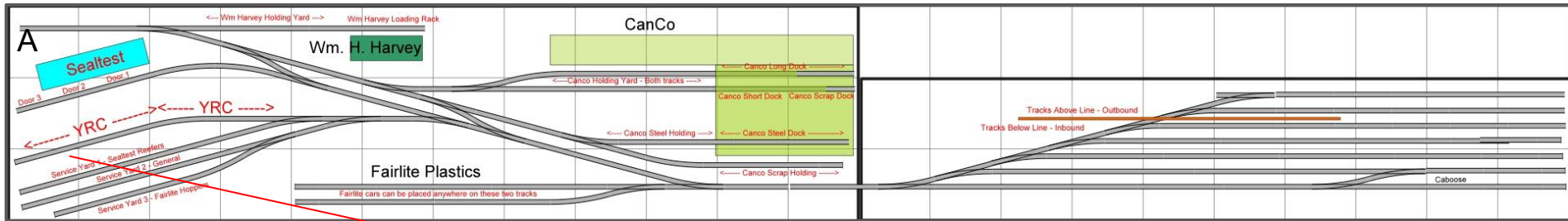
Current intent: More of the same

Story for another day
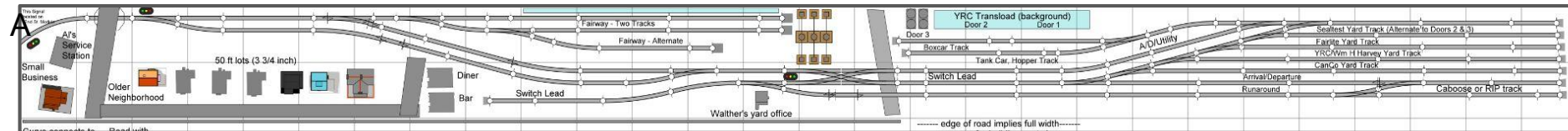# 12" x 15' extension added - 2023

Fairlite and YRC Transload Move

A

Sealtest
Door 1
Door 2
Door 3
YRC
Service Yard 1 - Sealtest Reefers
Service Yard 2 - General
Service Yard 3 - Fairlite Hoppers

<-- Wm Harvey Holding Yard -->
Wm Harvey Loading Rack
Wm. H. Harvey

<--Canco Holding Yard - Both tracks-->

CanCo
<-------- Canco Long Dock --------->
Canco Short Dock | Canco Scrap Dock
<---- Canco Steel Holding ----> <----- Canco Steel Dock ---->

Fairlite Plastics
Fairlite cars can be placed anywhere on these two tracks
<------ Canco Scrap Holding ------>

Tracks Above Line - Outbound
Tracks Below Line - Inbound

Caboose

1.5'x 6'

1'x 5'

Two Industries move to new addition

Staged trains move from drawers to layout
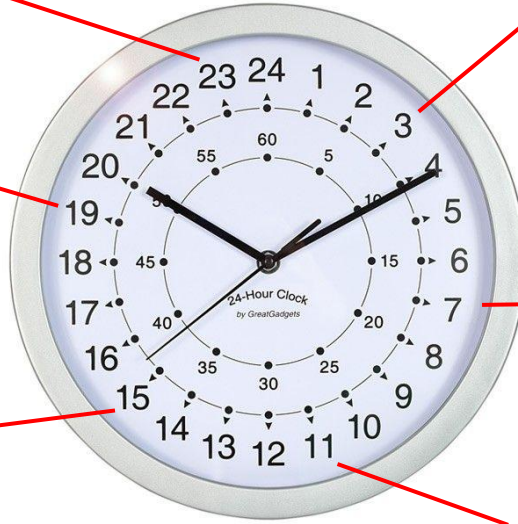
1'x 15'

One hour Op Session = 4 "Fast" Hours
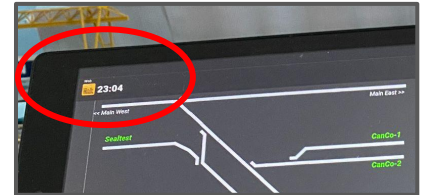

3am-7am

11pm-3am

7pm-11pm

7am-11am

3pm-7pm

11am-3pm

- 6 op sessions make one 24 hour day
- Time is displayed on ProtoThrottles & Tablets
- JMRI fast clock drives all displays

Lesson #1 - It's all in your head

Car Cards - *only define cars, loads and destinations*

   All other processes are defined in your own paperwork, or are in your head.

OpsPro - *Much more must be pre-defined.*
        Trains, Routes, Locations, Tracks, Cars, etc.

   This requires more work up front, but can mean less between session staging, setup, and maintenance.

Car cards vs OpsPro - restaging the layout

Car Cards -
   Walk the layout
   Flip Waybills
   Hunt for missing Cars and Cards

"Self Healing" - only when both car
and card are misplaced together

Trains -
   Find your instructions, relocate
   trains and rolling stock to their
   next "start" spot.

OpsPro -
   Build/Print the manifests.

Trains -
   Run trains to new starting locations.

Car out of place -
   Ops Pro list has correct location

Missing Car -
   Hunt for the missing car or
   Add "missing car" bulletin to manifests.

How did my layout work with Car Cards?

You have to start somewhere - here's a bit of context

This will be quick - more info at

Car Cards and SpreadSheet

Spreadsheet determines number of Car Cards to pull from storage for the op session

New number generated on each refresh

Car Type	Mon 7AM	Tue 7AM	Wed 7AM	Thu 7AM	Fri 7AM	Sat 7AM	Sun 7AM	Rule
Number of MT boxcars for CanCo	3	3	4	2	2	4	3	Random Selection of 2-4, excess over three? move to night shift
Number of Steel Cars for CanCo	3	4	4	4	2	4	4	Random selection of 2-4, excess over 3 goes to night shift
Total	6	7	8	6	4	8	7	excess over 12 move to night shift
Several columns are calculated, just change an empty cell to force a recalcualtion								
Car Type	Mon 3PM	Tue 3PM	Wed 3PM	Thu 3PM	Fri 3PM	Sat 3PM	Sun 3PM	Rule
Number of MT reefers for Sealtest	4	2	5	5	3	5	1	Random selection of 1-5, excess over 3 goes to night shift c
								Random Selection

Partial page image

Overview of Car Card flow

Car cards are pulled for three trains...

Cars are selected from storage drawers...

...and placed in 3 staging Drawers

3 trains are staged and ready

One train at a time moves to the yard

Local switcher works the yard and industries

When complete, cycle is reversed

How did this change with OpsPro?

OpsPro takes care of the mechanics
freeing the operator to think about trains, not cards

Overview of Car flow with Addition

Manifests are generated for up to 3 trains...
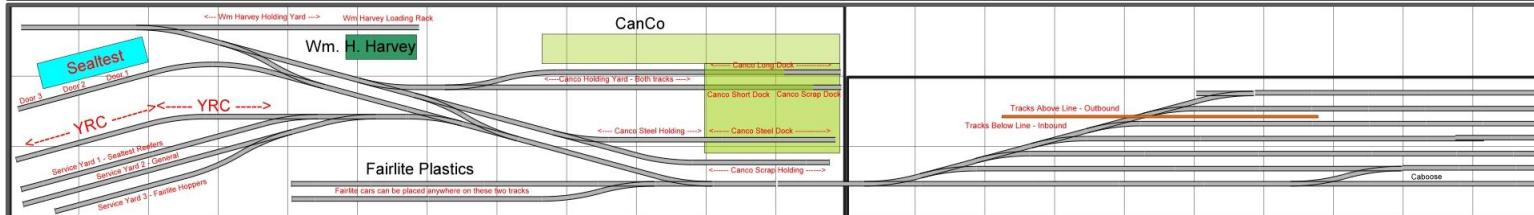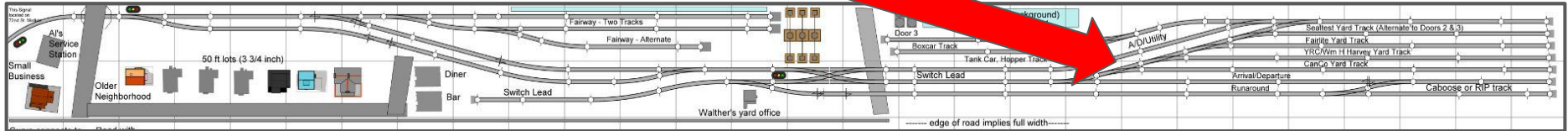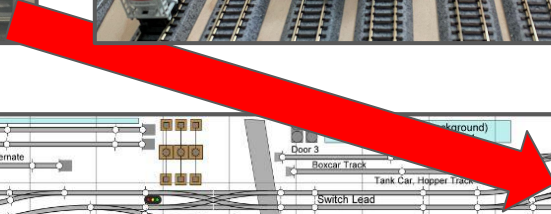
Cars are selected from storage drawers...

...and placed on new staging yard tracks

Up to 3 trains are staged and ready

Local trains and switcher work the yard and industries

When complete, cycle is reversed

OpsPro doesn't need a connection to the layout.

Duplicate version of my physical layout built in Trainz Simulator.

All development was done in the simulator before I changed anything on the physical layout.

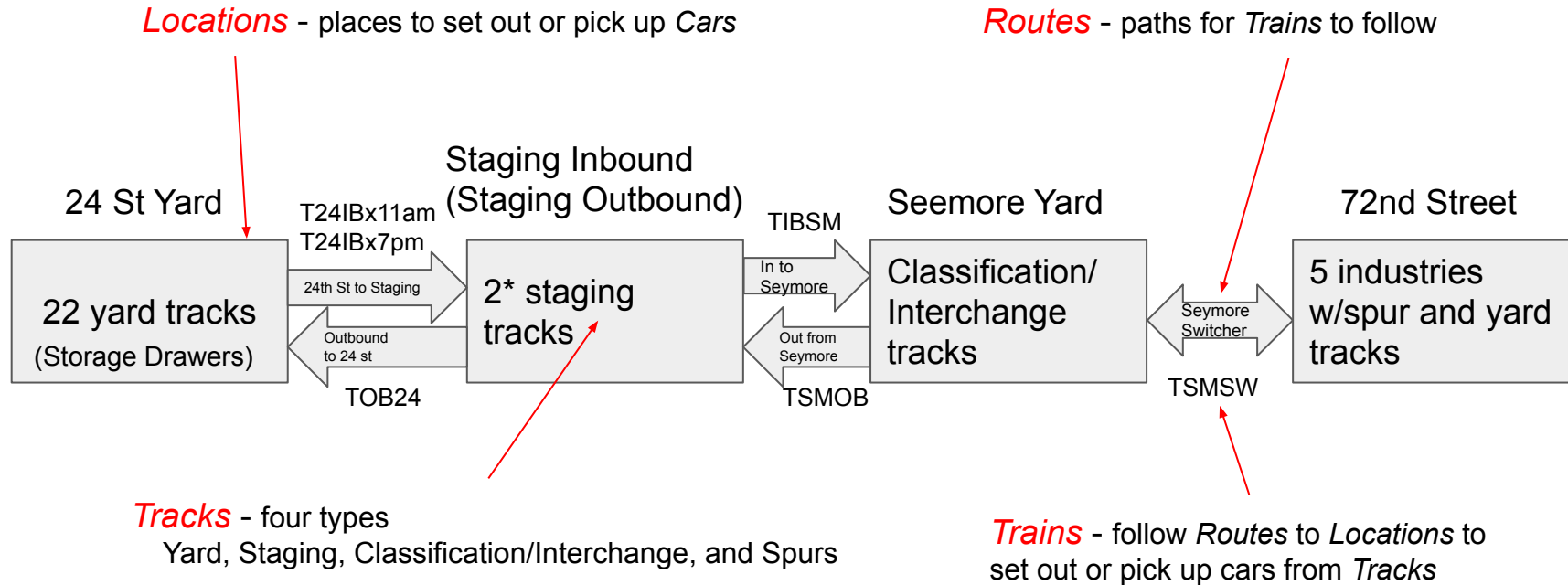David H has very good OpsPro Tutorials on his YouTube Channel.

https://www.youtube.com/@dhtrainz4798

OpsPro Overview

Extremely Brief, Lots of Details Skipped

Dan Boudreau Wrote the Program.

You're just filling out a lot of forms.

OpsPro Terminology - just for background

Locations - places to set out or pick up *Cars*

Routes - paths for *Trains* to follow

Staging Inbound
(Staging Outbound)

24 St Yard

T24IBx11am
T24IBx7pm

24th St to Staging

| 22 yard tracks
(Storage Drawers) |

Outbound
to 24 st

TOB24

2* staging
tracks

TIBSM

In to
Seymore

Out from
Seymore

TSMOB

Seemore Yard

Classification/
Interchange
tracks

Seymore
Switcher

TSMSW

72nd Street

5 industries
w/spur and yard
tracks

Tracks - four types
Yard, Staging, Classification/Interchange, and Spurs

Trains - follow *Routes* to *Locations* to
set out or pick up cars from *Tracks*

OpsPro Terminology - Location

Cars allowed at this location

Tracks at this location

OpsPro Terminology - Tracks

Cars allowed on this track
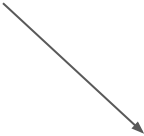
Road and load restrictions

Train Restrictions

Optional Schedule

OpsPro Terminology - Routes

Edit Route

Tools Window Help

Name

Reverse Switcher

Comment

start at 72

ID	Location	Train Dire...	Moves	Random	Pick u...	Set ou...	Wait	Max Le...	Grade	X	Y	Comm...	Up	Down	Delete
8r1	72nd Street	East ▼	20	Off ▼	yes ▼	yes ▼	0	700	0.0	0	0	Add	Up	D...	Del...
8r2	Seymore Yard	East ▼	20	Off ▼	yes ▼	yes ▼	0	700	0.0	0	0	Add	Up	D...	Del...
8r3	Seymore Yard	West ▼	20	Off ▼	yes ▼	yes ▼	0	700	0.0	0	0	Add	Up	D...	Del...
8r4	72nd Street	West ▼	20	Off ▼	yes ▼	yes ▼	0	700	0.0	0	0	Add	Up	D...	Del...

A train following this route will:

1. Service 72nd Street Industries
2. Move to Seemore Yard - drop off empties
3.   - pick up new loads for 72nd St
4. Move to 72nd Street, deliver new loads

OpsPro Terminology - Trains

Start time, route and industries to serve

Cars allowed on this train

OpsPro needs to know about your cars

Nothing difficult here - the docs are pretty clear.
It's a list of your cars and their locations.

Car number must be unique.

Select	Number	Road	Type	Len	Load	Kernel	Location	Destination	Train	Moves	Set	Edit
☐	5	W&OV	Boxcar-PkgMtl	50	E		24th St Yard (Box04)			1	Set	Edit
☐	106	OL&B	HopBigRed	42	E	BigRed*	24th St Yard (CH01)			2	Set	Edit
☐	116	ELTX	CovHopPlstc	57	PlstcPellets		Seymore Yard (Seymore Inbound - ...	->72nd Street (Fairlite Plastics)		8	Set	Edit
☐	141	LSIX	TankSugar	40	E		24th St Yard (Tank02)			1	Set	Edit
☐	144	HOCX	TankFood	32	UsedCookOil		Seymore Yard (Seymore Outbound)	->24th St Yard		6	Set	Edit
☐	151	OL&B	HopBigRed	42	E	BigRed	24th St Yard (CH01)			2	Set	Edit

Typical Car Record

Approx. 450 Cars entered into OpsPro

Data entry 60-90 minutes/day for about a week

Optional Import from a spreadsheet

A few notes on names

Characters following a "-" don't display on a manifest or switchlist.

In general - changing the name of an item will ripple through the entire system.

Very recognizable names can be used for development, more formal names can be used later.

All Display as "Boxcar" -

Boxcar-Fruit
Boxcar-Nuts
Boxcar-Pallets
Boxcar-ForkLiftCans
Boxcar-ManualCans

Back to:

How Did This Change With OpsPro?

The New Weekly Schedule with OpsPro

Six Jobs per 24 fast hours, as before

Smaller print list "trains" that make up one Job

Yellow highlighter and magnetic arrow tracks progress.

If I operated daily, I would need to reprint the sheet about once a month.

Weekly Train Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:
Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

The New Weekly Schedule with OpsPro

Six Jobs per 24 fast hours, as before

Smaller print list "trains" that make up one Job

Yellow highlighter and magnetic arrow tracks progress.

If I operated daily, I would need to reprint the sheet about once a month.

Weekly Train Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:
Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

First - detail for one job

Some jobs list 3 trains, why?

Let's look at the detail.

Weekly Train Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS 0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:

Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

Canco needs clean empties for shipping cans

These three trains can run individually or as a group, using Automation

The Canco Shipping Job sequence runs 3 times a week, at 7 am.

1 - Pull the cars from storage to staging

2 - Add Loads to cars,
    Move from Staging to Seemore

3 - Run the switch job

CanCo Shipping
YCC 0600 AM Yard Job
TXCC0630 AM Xfer
SCC0700 Can Job

OpsPro storage to staging

Keeps track of stored car locations

Builds "manifest" for pulling cars

Multiple trains can be staged, as before.

OpsPro staging to Seemore Yard

	Monday
	CanCo Shipping
7:00 AM	YCC 0600 AM Yard Job
	TXCC0630 AM Xfer
	SCC0700 Can Job

Loads car with
appropriate load
for destination

OpsProTestTrains

Manifest for train (TXCC0630-AM Xfer) Staging to Seymore
Valid 1/30/2023 10:59

Scheduled work at Staging Yard, departure time 06:30

[ ] Pick up					[ ] Set out				
Road	Number	Type	Color	Load	Road	Number	Type	Color	Load
		Canco-YCC0600					Canco-YCC0600		
WP	38517	Boxcar	Brown	CleanMT					
UP	499234	Boxcar	Yellow	CleanMT					
WP	38510	Boxcar	Brown	CleanMT					
MP	366838	Boxcar	Brown	CleanMT					
UP	6222	Boxcar	Yellow	CleanMT					
FBOX	504801	Boxcar	Yellow	CleanMT					

Train departs Staging Yard Eastbound with 6 loads, 0 empties, 348 feet, 529 tons

Scheduled work at Seymore Yard, arrival time 06:34

[ ] Pick up					[ ] Set out				
Road	Number	Type	Color	Load	Road	Number	Type	Color	Load
		Seymore Inbound-YCC0600					Seymore Inbound-YCC0600		
					WP	38517	Boxcar	Brown	CleanMT
					UP	499234	Boxcar	Yellow	CleanMT
					WP	38510	Boxcar	Brown	CleanMT
					MP	366838	Boxcar	Brown	CleanMT
					UP	6222	Boxcar	Yellow	CleanMT
					FBOX	504801	Boxcar	Yellow	CleanMT

Train terminates in Seymore Yard

CanCo in Trainz

Roof removed for clarity,
Covered area outlined in yellow

CanCo

<----- Canco Long Dock ----------->

<----Canco Holding Yard - Both tracks ---->

Canco Short Dock   Canco Scrap Dock

<---- Canco Steel Holding ---->   <----- Canco Steel Dock ----------->

<------ Canco Scrap Holding ------>

OpsPro
builds manifest for switch job

	Monday
7:00 AM	**CanCo Shipping**
	YCC 0600 AM Yard Job
	TYCC0630 AM Xfer
	SCC0700 Can Job
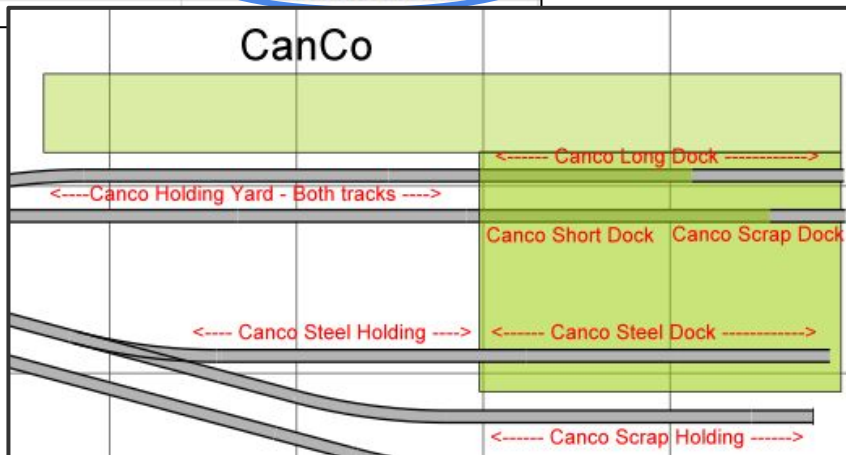
OpsProTestTrains

Manifest for train (SCC0700 Can Job) Services Long, Short and Scrap Docks
Valid 1/30/2023 11:04

Scheduled work at 72nd Street, departure time 07:00

		[ ] Pick up					[ ] Set out		
Road	Number	Type	Color	Load	Road	Number	Type	Color	Load
		CanCo Scrap Dock					CanCo Scrap Dock		
MP	640782	GonScrap	Brown	ScrapMetal	CNW	340200	GonScrap	Black	E
		CanCo Scrap Holding					CanCo Scrap Holding		
CNW	340200	GonScrap	Black	E					
		Canco Steel Dock					Canco Steel Dock		
CSXT	504011	CoilCanstock	Blue	E					
B&O	480804	CoilCanstock	Blue	E					

Train departs 72nd Street Eastbound with 1 loads, 2 empties, 175 feet, 145 tons

Scheduled work at Seymore Yard, arrival time 07:04

		[ ] Pick up					[ ] Set out		
Road	Number	Type	Color	Load	Road	Number	Type	Color	Load
		Seymore Outbound					Seymore Outbound		
					MP	640782	GonScrap	Brown	ScrapMeta
					CSXT	504011	CoilCanstock	Blue	E
					B&O	480804	CoilCanstock	Blue	E
		Seymore Inbound-YCC0500					Seymore Inbound-YCC0500		
WP	38517	Boxcar	Brown	CleanMT					
MP	366838	Boxcar	Brown	CleanMT					
FBOX	504801	Boxcar	Yellow	CleanMT					
UP	499234	Boxcar	Yellow	CleanMT					
WP	38510	Boxcar	Brown	CleanMT					
UP	6222	Boxcar	Yellow	CleanMT					

Train departs Seymore Yard Westbound with 6 loads, 0 empties, 348 feet, 529 tons

Scheduled work at 72nd Street, arrival time 07:35

		[ ] Pick up					[ ] Set out		
Road	Number	Type	Color	Load	Road	Number	Type	Color	Load
		CanCo Holding Yard					CanCo Holding Yard		
					WP	38517	Boxcar	Brown	CleanMT
					MP	366838	Boxcar	Brown	CleanMT
					FBOX	504801	Boxcar	Yellow	CleanMT
		CanCo Long Dock					CanCo Long Dock		
					UP	499234	Boxcar	Yellow	CleanMT
					WP	38510	Boxcar	Brown	CleanMT
		CanCo Short Dock					CanCo Short Dock		
					UP	6222	Boxcar	Yellow	CleanMT

Train terminates in 72nd Street

Again - Why 3 trains?   Options

I can stage a few trains to be run later, as I did with car cards*.

Or I can run the full job…

…using an Automation to combine the three trains.

*with new extension, cars are staged on the layout instead of drawers.

Weekly Train Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:
Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

Automation - automatically running jobs

The same three jobs, without a lot of button pressing
.

1 - Pull the cars from storage to staging

2 - Load the cars, move from staging to Seemore Yard

3 - Run the switch job that does the work

CanCo Shipping
YCC 0600 AM Yard Job
TXCC0630 AM Xfer
SCC0700 Can Job

Lesson - use Automations to combine trains

Several Actions to are available to build complex Automations

e-Manifest
Look Mom, No Paper!

e-Manifest

YouTube *JMRI Operations with No Paper* -
                                          Steve Todd

<https://youtu.be/krhyvrhrxv4>
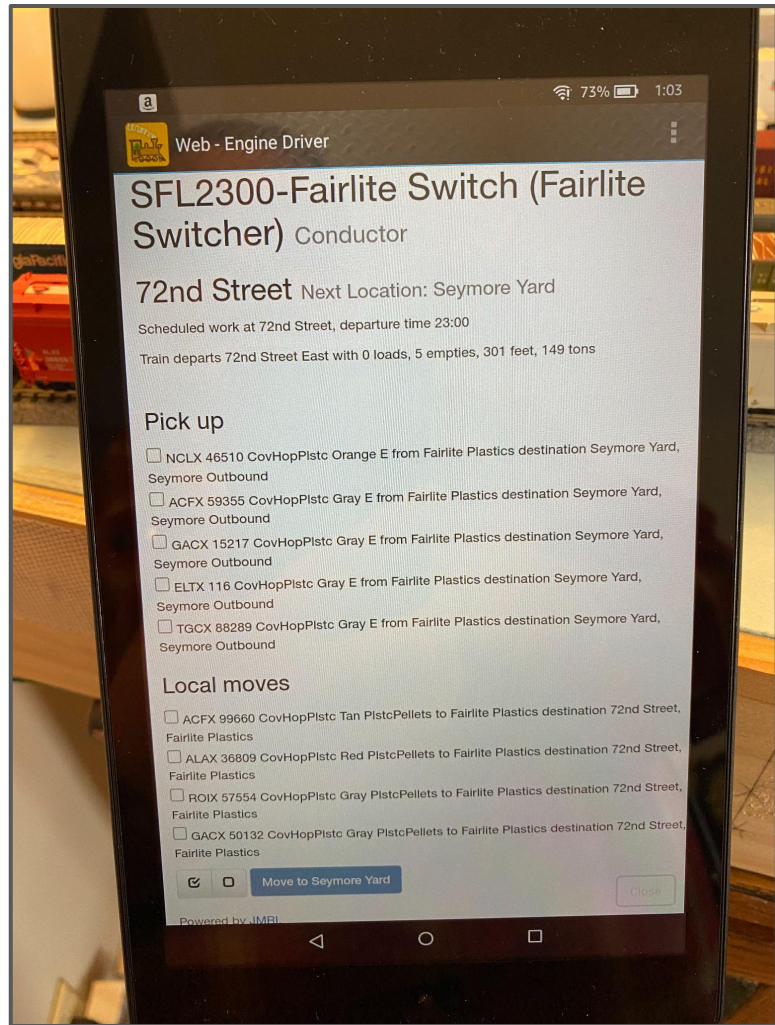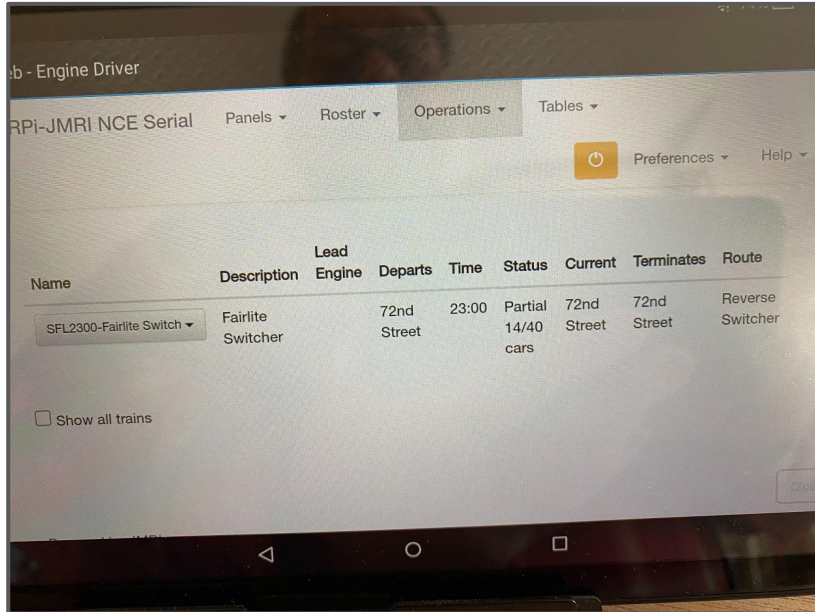
e-Manifest -

Amazon Basics - tablet stand

Tools -

Rerailer

Flashlights w/ uncoupling picks

N-scale reporting marks are easy to read when well lit.

Picks are used micro-brushes with heads removed or barbecue skewers.

Flashlights are typically 5 for $10 on Amazon.

Custom Loads

Moving beyond E and L

CanCo Spurs, Custom Loads, Schedules

Spur Name	Len...	Used	Reser...	Moves	Cars	Locos	Pick ...	S...	Schedule	Load	Restrictions	Hold	Pool	Alternate Track
CanCo Long Dock	140	0	0	122	0	0	0	0	Clean to Can	A 2 H	SO 3 PU 3	☑		CanCo Holdi...
CanCo Scrap Dock	74	57	0	42	1	0	0	0	Scrap Metal	A 1 H	SO 3 PU 3	☑		CanCo Scrap...
CanCo Short Dock	70	0	0	58	0	0	0	0	Pkg and Can	A 5 H	SO 3 PU 3	☑		CanCo Holdi...
Canco Steel Dock	120	0	0	198	0	0	0	0	Steel Schedule	A 4 H	SO 3 PU 3	☑		CanCo Steel ...

Type	Rand...		Delivery		Road		Receive		Ship		Destination		Track	
Boxcar-PkgMtl		▼		▼		▼	Pallets	▼	E	▼	24th St Yard	▼		▼
Boxcar-CanForkLift		▼		▼		▼	CleanMT	▼	Bever...	▼	24th St Yard	▼		▼
Boxcar-PkgMtl		▼		▼		▼	PlstcWrap	▼	E	▼	24th St Yard	▼		▼
Boxcar-CanForkLift		▼		▼		▼	CleanMT	▼	Bever...	▼	24th St Yard	▼		▼
Boxcar-PkgMtl		▼		▼		▼	CrdbdSheet	▼	E	▼	24th St Yard	▼		▼
Boxcar-CanForkLift		▼		▼		▼	CleanMT	▼	Bever...	▼	24th St Yard	▼		▼
Boxcar-PkgMtl		▼		▼		▼	Pallets	▼	E	▼	24th St Yard	▼		▼
Boxcar-PkgMtl		▼		▼		▼	CrdbdSheet	▼	E	▼	24th St Yard	▼		▼
Boxcar-PkgMtl		▼		▼		▼	PlstcWrap	▼	E	▼	24th St Yard	▼		▼
Boxcar-CanForkLift		▼		▼		▼	CleanMT	▼	Bever...	▼	24th St Yard	▼		▼

Moving Back to Storage

Loads & Empties Leave the Layout

Storage Car Cards

Cars returned to storage drawer

Card returned to card storage boxes

Waybills stayed with the same car card
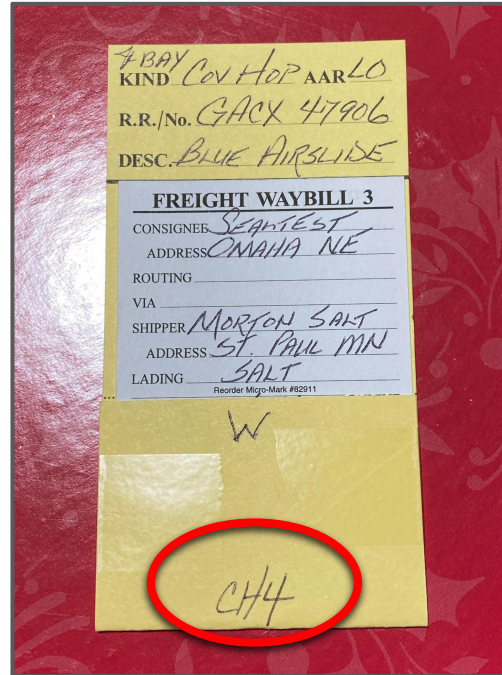
OpsPro Manages Storage

One Drawer = 1150 ft yard track

(approx 22 cars)

Surrender control to OpsPro

OpsProTestTrainz

Manifest for train (Evening Pickup B) Stage to 24th St
Valid 8/01/2022 11:27

Scheduled work at Staging West, departure time 23:50

Outbound track 1				Outbound track 1
UP	499030	Boxcar	Orange E	
ABOX	52075	Boxcar	Yellow E	
TBOX	661307	Boxcar	PINK E	
CEFX	77189	CovHopPlstc	Gray E	
DOWX	66122	CovHopPlstc	Gray E	
KCIX	574	CovHopPlstc	Blue E	
SHPX	60416	CovHopPlstc	Black E	
ACFX	99660	CovHopPlstc	Tan E	
OCPX	62505	CovHopPlstc	Gray E	
AMCX	107912	CovHopPlstc	Gray E	

Train departs Staging West Westbound with 10 cars, 622 feet, 303 tons

Scheduled work at 24th St Yard, arrival time 23:54

Box05				Box05		
				UP	499030 Boxcar	Orange E
Box06				Box06		
				ABOX	52075 Boxcar	Yellow E
Box07				Box07		
				TBOX	661307 Boxcar	PINK E
CH01				CH01		
				CEFX	77189 CovHopPlstc	Gray E
CH02				CH02		
				DOWX	66122 CovHopPlstc	Gray E
CH03				CH03		
				KCIX	574 CovHopPlstc	Blue E
				SHPX	60416 CovHopPlstc	Black E
CH04				CH04		
				ACFX	99660 CovHopPlstc	Tan E
				OCPX	62505 CovHopPlstc	Gray E
CH05				CH05		
				AMCX	107912 CovHopPlstc	Gray E

Train terminates in 24th St Yard

OpsPro Manages Car Storage

Select	Number	Road	Type	Len	Load	Kernel	Location	Destination	Train	Moves	Set	Edit
☐	328000	SP	CoilCovGon	50	E		24th St Yard (Coil01)			12	Set	Edit
☐	340200	CNW	GonScrap	53	E		24th St Yard (ScrapWell01)			9	Set	Edit
☐	343384	RBOX	Boxcar-CanManual	53	E		24th St Yard (Box07)			8	Set	Edit
☐	354614	UP	Boxcar-CanForkLift	68	CleanMT		72nd Street (CanCo Holding Yard)	->72nd Street (CanCo Long Dock)		5	Set	Edit
☐	354723	UP	Boxcar-CanForkLift	68	E		Seymore Yard (Seymore Inbound-...			4	Set	Edit
☐	354792	UP	Boxcar-CanForkLift	68	CleanMT		Seymore Yard (Seymore Inbound-...	->72nd Street (CanCo Long Dock)		4	Set	Edit
☐	357182	MP	Boxcar-CanManual	53	E		24th St Yard (Box04)			11	Set	Edit
☐	357198	MP	Boxcar-CanForkLift	53	E		24th St Yard (Box05)			10	Set	Edit
☐	357200	MP	Boxcar-CanManual	53	E		24th St Yard (Box03)			9	Set	Edit
☐	366761	MP	Boxcar-CanManual	53	E		24th St Yard (Box06)			7	Set	Edit
☐	366838	MP	Boxcar-CanManual	53	E		24th St Yard (Box05)			7	Set	Edit
☐	367523	ASRX	CovHopSugar	53	E		24th St Yard (CH04)			7	Set	Edit
☐	369048	UP	Boxcar-CanForkLift	50	E		24th St Yard (Box02)			9	Set	Edit
☐	376771	PRR	CoilCovGon	50	E		24th St Yard (Coil01)			7	Set	Edit
☐	382400	NOKL	CoilHood	50	E		24th St Yard (Coil01)			9	Set	Edit
☐	388531	CN	CovHopSalt	53	Salt		72nd Street (Service Yard 2)	->72nd Street (Bakery Whse at YRC)		3	Set	Edit
☐	400016	NS	Boxcar-PkgMtl	53	E		24th St Yard (Box06)			21	Set	Edit
☐	401232	CN	Boxcar-Fruit	53	E		24th St Yard (Box02)			0	Set	Edit
☐	403804	NS	Boxcar-CanForkLift	50	E		24th St Yard (Box01)			9	Set	Edit
☐	405426	BNSF	CovHopFood	38	E		24th St Yard (CH04)			2	Set	Edit
☐	406166	NS	Boxcar-PkgMtl	53	E		24th St Yard (Box05)			1	Set	Edit
☐	419321	BN	CovHop2Bay	38	E		24th St Yard (CH05)			5	Set	Edit

Sort by

◉ Number ○ Road ○ Type ○ Load ○ Color ○ Kernel ○ Location ○ Destination ○ FD ○ RWE ○ RWL ○ Division ○ Train ○ Moves ○ Built ○ Owner ○ Wait ○ Pick up ○ Last

400 cars   Add...   Find [   ]   Save

Sealtest's Reefers

Sealtest in Trainz

Chilled Empty loading at Sealtest Door 1

Four Chilled Empties Waiting on Utility Yard Track 1

Options

Percentage of custom loads generated by staging

500

Alternate Track

Service Yard 1

Save

☑ **Hold cars with custom loads when spurs are full**

Ice Cream, One Reefer at a Time

Reefers are delivered to Sealtest and the utility track on Monday, Wednesday, and Friday

The Sweepers exchange loaded reefers for chilled empties at 11am and 11pm

Utility track overflow is held back at Seemore Yard

Sweepers can be added on weekends during busy times of year

Weekly Train Schedule	as of January 28, 2023			Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:

Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

OpsPro and Standing Order

Standing Order

Chilled Empty loading at Sealtest Door 1

This track is LIFO - Last In First Out

Standing order work-around

Number	Road	Type	Len	Load	Kernel	Location	Destination	Train	Moves	Set	Edit
111347	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		32	Set	Edit
111350	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		32	Set	Edit
111383	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		32	Set	Edit

Change the "Move Count"

Number	Road	Type	Len	Load	Kernel	Location	Destination	Train	Moves	Set	Edit
111347	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		34	Set	Edit
111350	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		33	Set	Edit
111383	ARMN	ReeferProd	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		32	Set	Edit

Transload Track Pools

Transload & Off Spot

Transload Track
(5 cars)
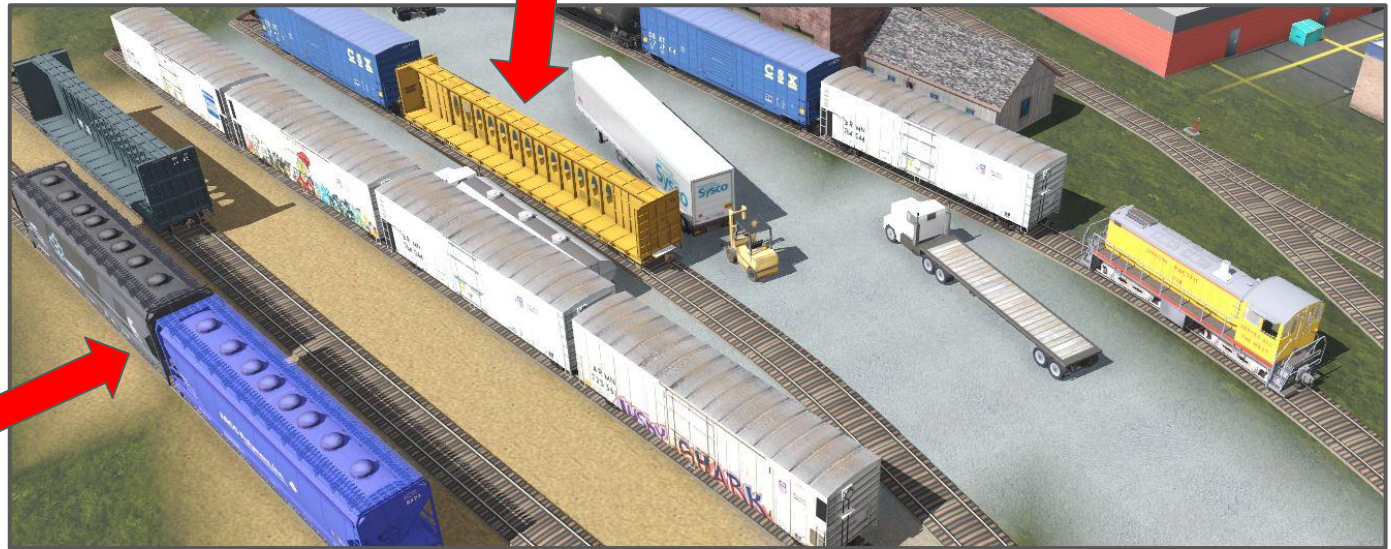
Transload Off Spot
(10 cars)

YRC - The Transload Facility

YRC facility is switched daily at 7pm

Full Service on Tuesday, Thursday, and Saturday

Utility track overflow is held back at Seemore Yard

Weekly Train Schedule	as of January 28, 2023			Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	
	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-IceCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Only	MTL1400 Mid YRC Only	
		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer		TXX1430-Mid Day Xfer	
		STR1500-YRC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
						SCC0700 Can Job	
3:00 AM	Mixed Freight	Fairlite	CanCo Scrap	Fairlite	Mixed Freight	Fairlite	
	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 IceCreamXfer	TXX2230-Eve Xfer	
	Evening Sweeper	SFL2300-Fairlite Switch	SCC0700 Can Job	SFL2300-Fairlite Switch	Evening Sweeper	SFL2300-Fairlite Switch	
	Pickup Job	This Job runs as needed after any transfer from Staging to Seymore					
	Evening Pickup A	Moves train from Seymore Outbound to West Staging Outbound 1					
	Evening Pickup B	Moves cars from West Staging Outbound 1 to 24th Street Yard storage drawers					

Notes:

Mixed Freight covers Canco Short dock and Sealtest doors 2 and 3

Tracks Pooled for a Single Spur Transload Facility

Customers Sharing the YRC Spur

ID	Spur Name	Len...	Used	Reser...	Moves	Cars	Locos	Pick ...	S...	Schedule	Load	Restrictions	Hold	Pool ▲	Alternate Track	Order	Edit
4s23	Brake And Cyl at YRC	0	0	0	12	0	0	0	0	Carbon Load	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s25	Chicago Lumber at YRC	0	0	0	17	0	0	0	0	Lumber Flats	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s18	CtyOfOmaha at YRC	0	0	0	0	0	0	0	0	Road Sand	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s17	Intermtn Hdwd at YRC	0	0	0	0	0	0	0	0	Hardwood Sched...	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s19	KCI Recycle at YRC	0	0	0	2	0	0	0	0	KCI Recycle	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s27	MUD Omaha at YRC	0	0	0	2	0	0	0	0	MUD Supplies	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s28	NFM Whse at YRC	23	0	0	2	0	0	0	0	NFM Consumer ...	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s29	OPPD at YRC	61	0	0	11	0	0	0	0	OPPD Supplies	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s20	PrinceAgri at YRC	114	114	0	6	2	0	0	0	Bulk Soy Products	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit
4s21	Volcanic Foods at YRC	0	0	0	3	0	0	0	0	Hot stuff	H	SO 1 PU 1	☑	YRC Transload	Service Yard 2	Normal	Edit

Bakery Whse Custom Loads and Schedule

Type	Rand...	Delivery	Road	Receive	Ship	Destination
CovHopAirSld	▼	▼	▼	PowderedSugr ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	Cornstarch ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	RyeFlour ▼	E ▼	24th St Yard ▼
Boxcar-Food	▼	▼	▼	PowderedSugr ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	WheatFlour ▼	E ▼	24th St Yard ▼
CovHopSalt	▼	▼	▼	Salt ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	SemolinaFlr ▼	E ▼	24th St Yard ▼
CovHopSugar	▼	▼	▼	Sugar ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	WhiteFlour ▼	E ▼	24th St Yard ▼
CovHopFood	▼	▼	▼	CitrusFiber ▼	E ▼	24th St Yard ▼

Tracks in pool YRC Transload

Status of YRC Spur

Name	Maximum	Minimum	Length
Intermtn Hdwd at YRC	255	0	0
CtyOfOmaha at YRC	255	0	0
KCI Recycle at YRC	255	0	0
PrinceAgri at YRC	255	0	114
Volcanic Foods at YRC	255	0	0
Arbor Systems at YRC	255	0	0
Brake And Cyl at YRC	255	0	0
Auto Distributio at YRC	255	0	0
Chicago Lumber at YRC	255	0	0
Bakery Whse at YRC	255	0	57
MUD Omaha at YRC	255	0	0
NFM Whse at YRC	255	0	23
OPPD at YRC	255	0	61
Totals:		0	255

Seemore Yard Tracks

Yard

Physical Tracks
- Outbound - 3 tracks
- Classification - 2 tracks
- Inbound - 1 track
- Runaround - 1 track
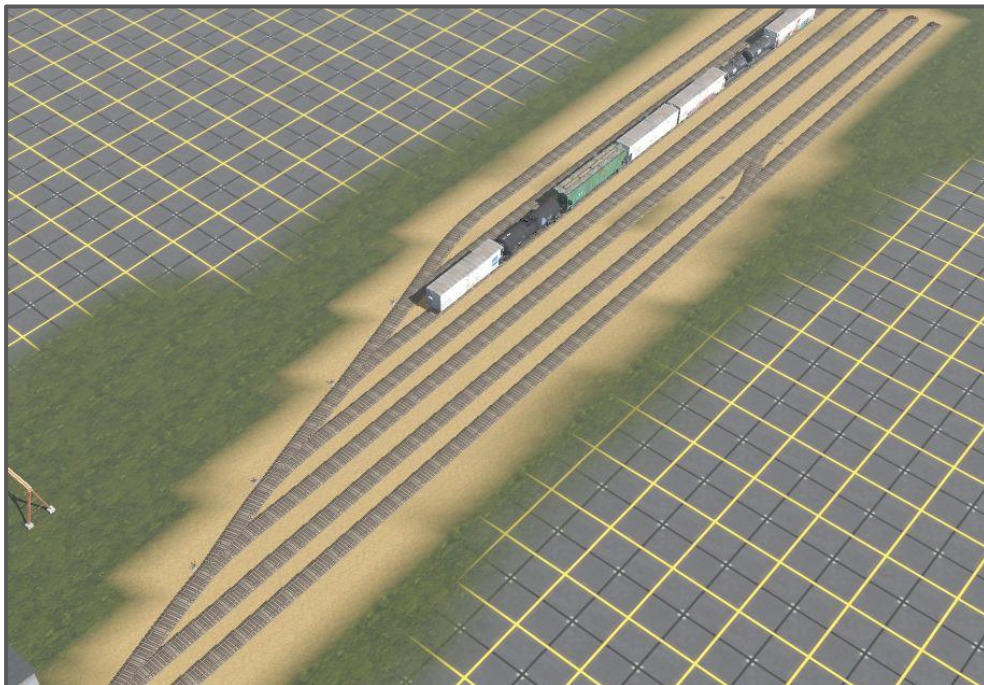
OpsPro Track Definitions

Lesson -
Operator may
use tracks as
necessary.

| Classification/Interchange Na...	Len...	Used	Reser...	Moves	Cars	Locos	Pick ...	S...	Load	Restrictions	Rout...	Pool
Seymore Inbound - TXX2230	368	61	0	46	1	0	0	0	A 1	SO 1 PU 1	☐	Seymore Inbou...
Seymore Inbound-TXX1430	472	0	0	175	0	0	0	0		SO 2 PU 4	☐	Seymore Inbou...
Seymore Inbound-WH0600	210	140	0	24	2	0	0	0		SO 1 PU 3	☐	Seymore Inbou...
Seymore Inbound-YCC0600	164	0	0	73	0	0	0	0		SO 1 PU 3	☐	Seymore Inbou...
Seymore Inbound-YCS0600	175	118	0	132	2	0	0	0	A 5	SO 1 PU 4	☐	Seymore Inbou...
Seymore Outbound	650	432	0	395	7	0	0	0		SO 7 PU 1	☐	

Vary the Loading Times

Back to Custom Loads and Schedules

Plastic Pellets for Airlite

Two tracks for unloading

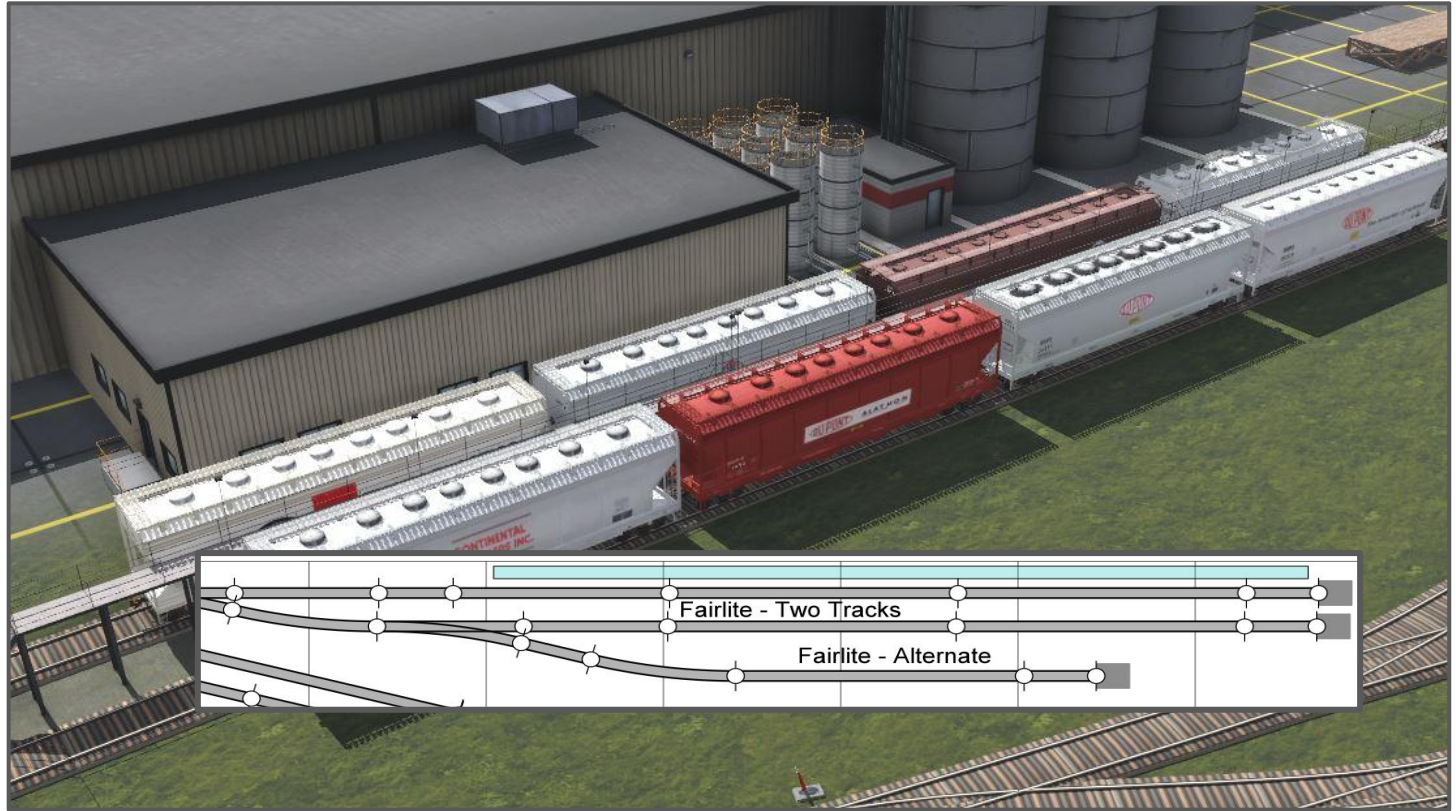One track for storage

Switched twice a week
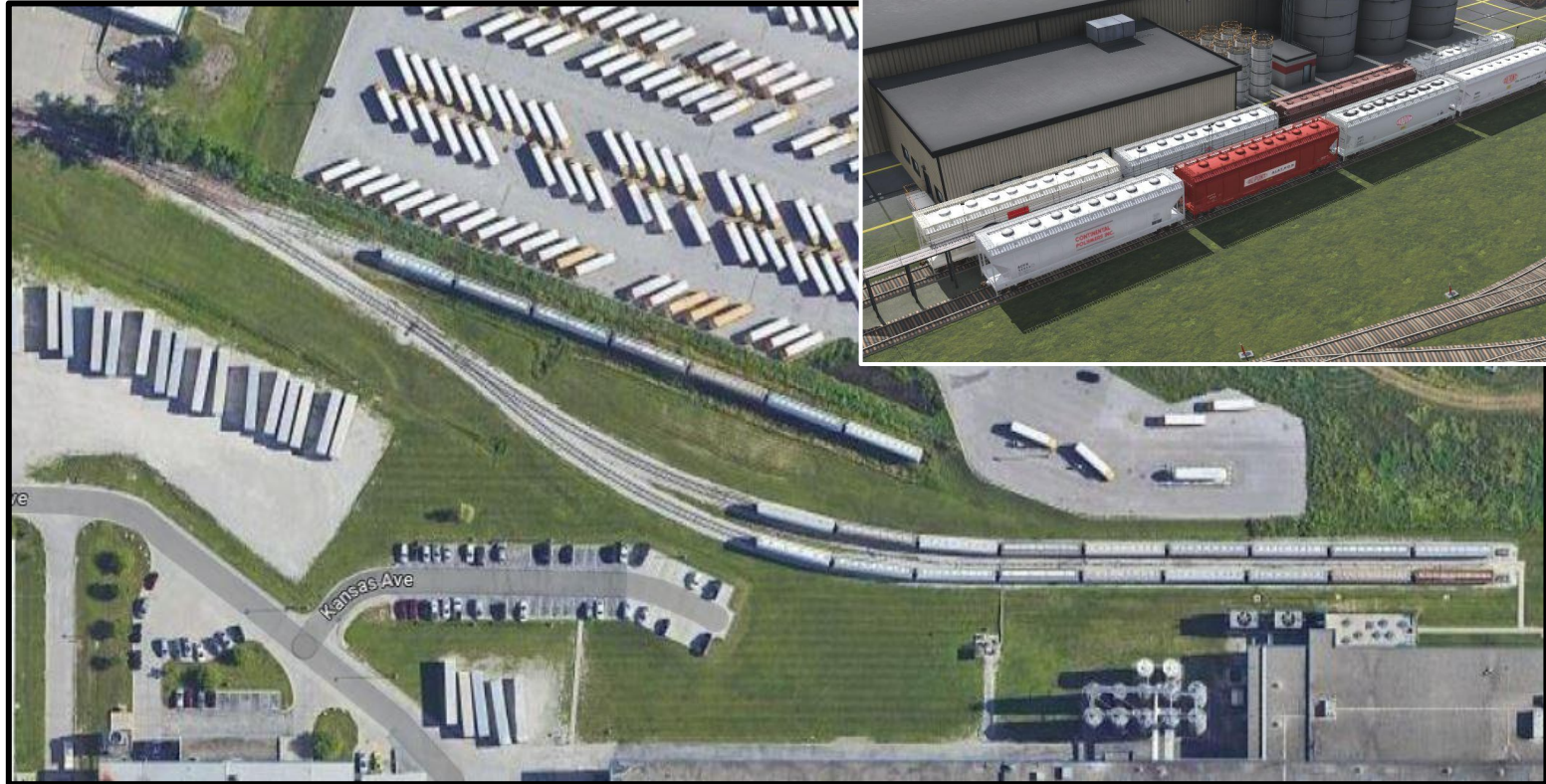
Airlite becomes Fairlite

Plastic Pellets for Fairlite

It would be boring if they all were switched out at the same time.

Covered hoppers take from 1 to 4 sessions to unload

"Wait" Time Controls Dwell

Type	Rand...	Delivery	Road	Receive	Ship	Destination	Track	Pick up	Hits	Wait
CovHopPlstc				**PlstcPellets**	E	24th St Yard			5	0
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	1
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	0
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	2
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	1
CovHopPlstc				**PlstcPellets**	E	24th St Yard			7	0
CovHopPlstc				**PlstcPellets**	E	24th St Yard			8	3
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	1
CovHopPlstc				**PlstcPellets**	E	24th St Yard			6	0

Summary

Significant upfront thought, planning, and testing was necessary, but the results are worth the effort.

Data entry for Cars - time consuming, but not overwhelming.

Paperless option with tablets is preferred.

Cleaner fascia without the car card boxes.

Pleasing variation in sessions.

"Restaging" is fast, continuous ops by design.

Questions - Discussion
Or Just a Feeling of Relief That It's Finally Over

Repeat of Advice from the beginning:

OpsPro is complex. Don't expect perfection on the first try.

OpsPro documentation is for reference, not a tutorial. View the videos and other resources.

Take advantage of support on "jmriusers" at Groups.IO

Start simple, Get something basic working, make changes, repeat until you're happy.

End 8/4/23