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. <<u>https://youtu.be/krhyvrhrxv4</u>> 47 minutes

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

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

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 <<u>Opsig.org</u>> 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. <<u>https://www.opsig.org/Virtual/2020</u>>

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

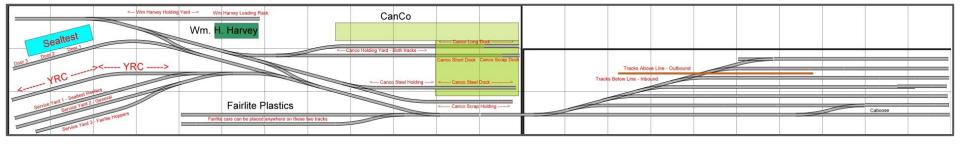
1 small convenience PC for remote access to JMRI

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



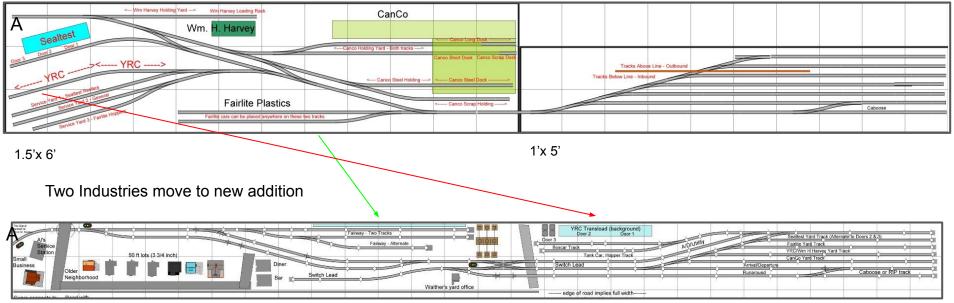


Story for another day 12" x 15' extension added - 2023





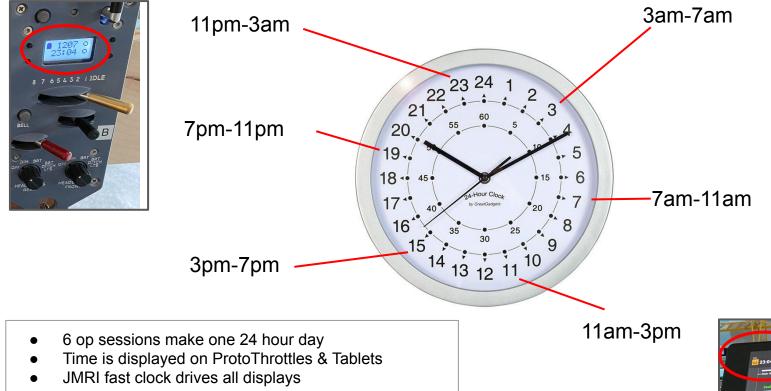
Fairlite and YRC Transload Move



1'x 15'

Staged trains move from drawers to layout

One hour Op Session = 4 "Fast" Hours





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

Opsig.org > Past Meetups > August 30, 2020

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	с
								Random Selection	

Partial page image

Overview of Car Card flow

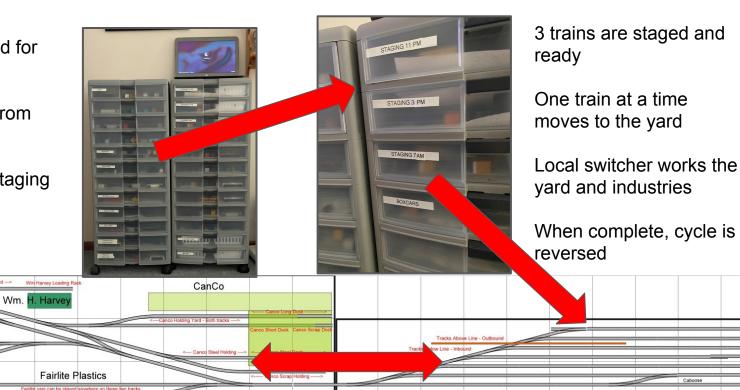
Car cards are pulled for three trains...

Cars are selected from storage drawers...

...and placed in 3 staging Drawers

-- YRC -----

<--- Wm Harvey Holding Yard --->



Caboose

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...

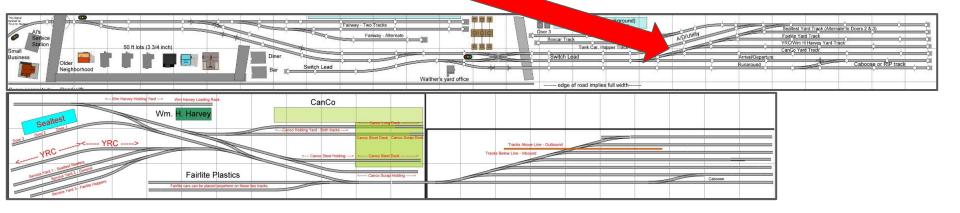
...and placed on new staging yard tracks



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



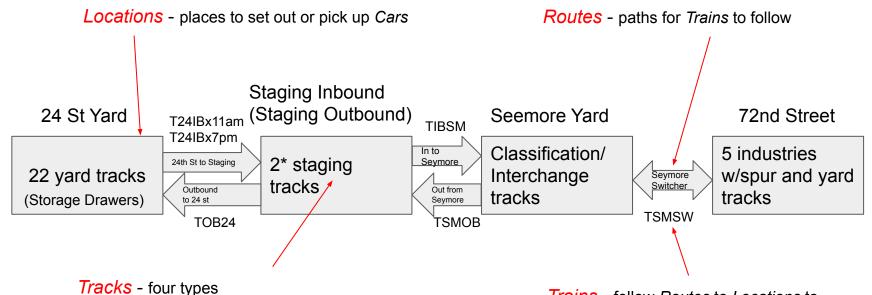
OpsPro Overview

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



Yard, Staging, Classification/Interchange, and Spurs

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

OpsPro Terminology - Location

	Edit Location																	- 0	×
	Tools Window Help																		
	Name									Th	is location	is serv	riced by train	ns trav	eling				
		72nd Street									No	rth		Sou	th	🗷 East	6	West	
	Division		[-											Add				
	Select the rolling sto	ck serviced by this l	ocatio																
	AutoRack	Boxcar-40HiCube	~	Boxcar-Ca	nForkLi	t 🗹	Boxcar	-CanManu	ial 🖪	Boxcar-F	ood 🗵 🗹	Boxcar	-Fruit 🗵	Boxc	ar-PkgMtl 🕑	Boxcar-Std	Boxc	ar-StdNW	-
	Caboose	CoilCanstock	V	CoilCovGo	n	2	CoilHo	od		CoilOpen	Gon 🛛 🗹 🕻	CovHop	2Bay	CovH	opAirSld 🛛 🗹	CovHopCarbon	CovH	lopChem	
Cars allowed at	CovHopCornPr	CovHopFood	Ľ	CovHopMa	lt	V	CovHo	pNrChm		CovHopP	lstc 🛛 🗹 (CovHop	Salt 🕨	CovH	opSugar 🗹	FlatBulkHead	FlatC	trBeam	-
	FlatDprCtr	✓ FlatStd	V	GonScrap			GonSt	ł	Þ	HopBigR	ed 🗹 I	nterMo	dWell	Reefe	rDairy 🔽	ReeferFruit	Reefe	rProd	
this location	Z TankADM	TankChem	r	TankCornS	yrp	V	TankFo	ood		TankFuel		FankHo	tSauce 🛛	Tankl	Kodak 🗹	TankLPG	🗹 Tank	Omaya	-
	✓ TankSoy	<mark>⊯ TankSuga</mark> r	¥	TankVegOi	I					Electric		Engine		Diese	1 💷	Gas Turbine	🗆 Stear	n	-
	Tracks at this locatio	n				® Sj	purs 〇	Yards 🔾 (Classifi	cation/Inte	rchange 〇	Stagin	g only						
	Spur Name	Length	Used	Reserved	Moves	Cars	Locos	Pick up	s Set o	outs So	chedule	Load	Restrictions	Hold	Pool	Alternate Track	Order	Edit	T
	Arbor Systems at YRC	0	0	0	2	C)	0	0	0 Arbor N	laOH		SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit	
	Auto Distributio at YRC	0	0	0	0	C)	0	0	0 AutoRa	cks		SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit	
	Bakery Whse at YRC	0	0	0	55	C)	0	0	0 Bakery	Supplies		SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit	=
	Brake And Cyl at YRC	0	0	0	12	C)	0	0	0 Carbon	Load		SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit	
	CanCo Long Dock	140	133	0	146	2	2	0	0	0 Clean to	o Can	A 2	SO 3 PU 3	V		CanCo Holdi	Normal	Edit	1 -
Tracka at	CanCo Scrap Dock	74	57	0	49	1	1	0	0	0 Scrap I	Vetal	A 1	SO 3 PU 3	V		CanCo Scrap	Normal	Edit	
Tracks at	CanCo Short Dock	70	0	0	70	C)	0	0	0 Pkg and	d Can	A 5	SO 3 PU 3	V		CanCo Holdi	Normal	Edit	
his location	Canco Steel Dock	120	0	0	232	C)	0	0	0 Steel S	chedule	A 4	SO 3 PU 3	V		CanCo Steel	Normal	Edit	
	Chicago Lumber at YR	0	0	0	17	C)	0	0	0 Lumber	Flats		SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit	
	01-060		0		0	0			0	0 0			CO A DU A		VDO Tassaland	Consiste Mand O	Manna al	F-304	1 🗉
	Comment									Add	Spur Track								
																			-
	•								H										•
		Delete Location							Ar	ld I ocatior					[Save Location	1		

OpsPro Terminology - Tracks

• • •	Edit Spur Track						
Cars allowed	Name			Length	This	spur is serviced by trains	traveling
on this track		rbor Systems at YRC		0]	East	⊮ West
	Select the rolling sto	ck serviced by this spur					
	🗌 AutoRack	Boxcar-40HiCube	Boxcar-CanForkLift	Boxcar-CanManual	Boxcar-Food	Boxcar-Fruit	Boxcar-PkgMtl
	Boxcar-Std	Boxcar-StdNW	CoilCanstock	CoilCovGon	CoilHood	CoilOpenGon	CovHop2Bay
	CovHopAirSld	CovHopCarbon	CovHopChem	CovHopCornPr		CovHopMalt	CovHopNrChm
		CovHopSalt	CovHopSugar	FlatBulkHead	FlatCtrBeam	FlatDprCtr	FlatStd
	GonScrap	GonStd	HopBigRed	InterModWell	ReeferDairy	ReeferFruit	ReeferProd
	TankADM	TankChem	TankCornSyrp	TankFood	TankFuel	TankHotSauce	TankKodak
	TankLPG	TankOmaya	TankSoy	Tank Sugar	TankVegOil		
				Clear all Select All			
oad and load	Road Option			Load Optio	n		
estrictions ——		Track accepts	a all reada	Load Optio		ack accepts all loads	
	۲		sairroaus			ack accepts all loads	
	Select trains or route	es for car set outs			12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
			O Any 🖲 Train	s O Routes O Exclude Trains	○ Exclude Routes		
	1			▼ Add	Delete Auto		
Train				STR1500-YRC Only			
	Select trains or route	es for car pick ups					
Restrictions			O Any 🖲 Train	s O Routes O Exclude Trains	○ Exclude Routes		
				✓ Add	Delete Auto		
				STR1500-YRC Only			
	Optional Schedule						
Optional Schedule		Arbor NaOH	-	E	dit		
	Comment						
Schedule							

OpsPro Terminology - Routes

Nan	ne								- if	Co	mment								
	Reverse Sw	itcher									st	tart <mark>at 72</mark>							
ID	Location	Train D	ire	Move	s Ranc	lom	Pick	u	Set o	u	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

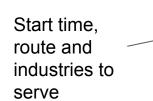
A train following this route will:

1. Service 72nd Street Industries

3.

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

OpsPro Terminology - Trains



Cars allowed / on this train

🗮 Edit Train		\$ ²			а		:
Tools Window Help	p						
Name			Descriptio	n			
	SCC0700 Can Job			Ser	vices Long, Short and Scra	ap Docks	
Departure Time (hh:	mm)		Route				
	07 💌	00 -	Rever	se Switcher 💌		Edit	
This train services the	he following locations						
72nd Street							
Seymore Yard							
Seymore Yard							
☑ 72nd Street							
Select car types serv	viced by this train						
AutoRack	Boxcar-40HiCube	Boxcar-CanForkLift	Boxcar-CanManual	Boxcar-Food	Boxcar-Fruit	Boxcar-PkgMtl	Boxcar-Std
Boxcar-StdNW	Caboose	CoilCanstock	CoilCovGon	CoilHood	CoilOpenGon	CovHop2Bay	CovHopAirSld
CovHopCarbon	CovHopChem	CovHopCornPr		CovHopMalt	CovHopNrChm	CovHopPIstc	CovHopSalt
CovHopSugar	FlatBulkHead	☐ FlatCtrBeam	FlatDprCtr	FlatStd	GonScrap	GonStd	HopBigRed
InterModWell	ReeferDairy	ReeferFruit	ReeferProd	TankADM	TankChem	TankCorn Syrp	TankFood
☑ TankFuel	TankHotSauce	TankKodak	TankLPG	TankOmaya	TankSoy	TankSugar	TankVegOil
			Clear all S	elect All			
Select locomotive ty	pes serviced by this train						
Electric	Engine	🗆 Diesel 📃 🖸	Gas Turbine 🔲 S	team 🔲 Ste	am-light 🛛 S	team-heavy	Steam-pass
Steam-mixed	Switcher						
Optional locomotive	requirements						
Locos	0	•	Model		~	Road	-
Optional last car in t	rain requirements						
۵ ه	None		⊖ Ca	boose	Road		
Comment							
							Text Color
							Set
	Delete Train	Rese	t Train	Add	Train	S	ave 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	Туре	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 O.D	HanPiaDad	40	E	PieDed	24th St Vard (CH01)				Cat	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

🖼 Edit Car	- 0
Window Help	
Road UP 💌	Edit
Road Number 354614	Clear
Type Boxcar-CanForkLift ▼ □ Passenger □ Caboose □ FRED □ U	Edit
Length	Edit
Location and Track 72nd Street CanCo	Holding Yard 🔽 🗆 Auto
Optional Weight Ounces 1.3 Tons 104	Calculate 🕑 Auto
Color Brown 👻	Edit
Load CleanMT 💌	Edit
Kernel	Edit
Built	
Owner	Edit
Comment	
Delete	Add Car Save

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 Tra	ain Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Job can be adde 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 0800 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0800 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0 30 AM Xfer	TXCS06 AM Xfer	TXCC0830 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC07 0 Can Job	SCC0 00 van Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	AM weeper	A A Swe per	AM Sweeper	AM Sweeper	AM Sweeper		
	SWM1100 - AM Sweeper	SWI 100 - AN Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. H. rvey	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	
	MST140 ST Yard Job	Y /H0800-AM V m Harvey	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0800-AM Wm Harvey	
	TXST143 loeCreamXfer	WH0630-AM (fer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST150 -loeCreamJob	SWH0700-WMH arvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC switch Only	YRC	YRC Switch Only	YRC	YRC Switch Only	YRC	
	STR1:00-YRC Only	MTL1400 Mid RC 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-YFC Only		STR1500-YRC Only		STR1500-YRC Only	
11:00 PM	PM Sweepe	PM Sweper	PM Sweeper	PM Sweeper	PM Sweeper	CanCo Scrap	
	Evening Sweeter	Evening Sveeper	Evening Sweeper	Evening Sweeper	Evening Sweeper	YCG-Canco Gons Only	
						TXCS0630-AM Xfer	
		V				SCC0700 Can Job	
3:00 AM	Mixe reight	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 loeCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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					
	Evening Pickup A	Moves train from Seymore C					
	Evening Pickup B	Moves cars from West Stagi	ng Outbound 1 to 24th Stre	et Yard storage drawers			

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	TXCC0830 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	YWH0800-AM Wm Harvey	
	TXST1430 loeCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 lceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	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 loeCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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 afte	er any transfer from Staging	to Seymore			
	Evening Pickup A	Moves train from Seymore C					
	Evening Pickup B	Moves cars from West Stagi	ng Outbound 1 to 24th Stree	et Yard storage drawers			

First - detail for one job

Some jobs list 3 trains, why?

Let's look at the detail.

Weekly Tr	ain Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Job can be adde as needed.
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
-	YCC 0600 AM Yard Job	YCSC 00 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
	TXCC0830 AM Xfer	TX S0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
	SCC0700 Can Job	CC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	in a supel	AM Sweeper	AM Sweeper	AM Sweeper	AM Sweeper		
TI.OU AN	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
				10 IV			
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 loeCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0830-AM Xfer WMH	
	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	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 loeCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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 afte	er any transfer from Staging	to Seymore			
	Evening Pickup A	Moves train from Seymore C	Outbound to West Staging O	utbound 1			
	Evening Pickup B	Moves cars from West Stagi	ng Outbound 1 to 24th Stree	et Yard storage drawers			
Notes:							
	covers Canco Short doc	k and Capitant dears 2 or	4.0				

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.

24 st to staging - cans and scrap onl	- 1 -	January 30, 2023, 10:50 Alk
OpsProTestTrains		
Manifest for train (YCC0500-AM Yard	Job) 24 st to stagin	g - cans and scrap only
Valid 1/30/2023 10:50		

22-03-07 If gons overwhelm build, uncheck GonScrap and use dedicated YCG train for gons

Scheduled work at 24th St Yard, departure time 05:00

		[] Pi	ck up		1	[] Set out					
Road	Number	Type	Color	Load	Road	Number Type	Color Load				
		Box	04		1	Во	x04				
FBOX	504801	Boxcar	Yellow	E							
		Box	05		1	Bo	x05				
WP	38517	Boxcar	Brown	E							
MP	366838	Boxcar	Brown	E							
		Box	06			Во	x05				
WP	38510	Boxcar	Brown	E	16						
UP	5222	Boxcar	Yellow	E							
		Box	07			Во	x07				
UP	499234	Boxcar	Yellow	E							

Train departs 24th St Yard Westbound with 0 loads, δ empties, 348 feet, 176 tons

Scheduled work at Staging Yard, arrival time 05:04

[[] Set out					
Road Number Type	Color Load	Road	Number	Туре	Color	Load	
Can	co-YCC0600			Canco-Y	CC0800		
		FBOX	504801	Boxcar	Yellow	Е	
		THP	38517	Boxcar	Brown	E	
		MIP	355838	Boxcar	Brown	E	
		TOP	38510	Boxcar	Brown	E	
		UP	5222	Boxcar	Yellow	E	
		UP	499234	Boxcar	Yellow	E	

OpsPro staging to Seemore Yard

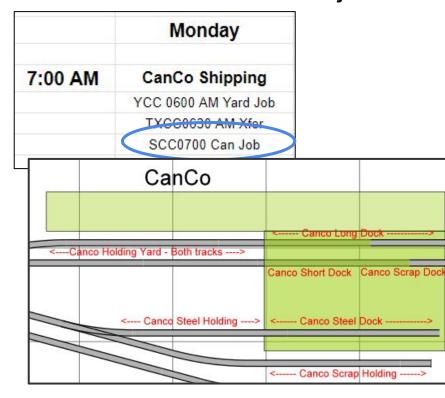
	Monday
7:00 AM	CanCo Shipping
	YCC 0600 AM Yard Job
	TXCC0630 AM Xfer
	SCC0700 Can Job

Loads car with appropriate load for destination

Stagin	ig to Seyn	10/e			- 1 - January 30, 2023, 10:				
OpsPr	oTestTr	ains							
Manif	est for	train (TX)	CC0530-AM	Xfer) Stag	ing to	Seymore			
Valid	1/30/2	023 10:59							
200 10	02012	22 1023	n 1921 in	2	10 0.02				
Sched	uled wo:	rk at Stag: [] Pie		departure	time Ub	:30	[]]]	t out	
Road	Number		Color	Law	Road	Number		Color Load	
		Canco-Y	CC0600				Canco-3	7CC0500	
WP	38517	Boxcar	Brow	CleanMT	~				
UP	499234	Boxcar	Yellov	o CleanMT					
WP	38510	Boxcar	Brown	CleanMT					
P.	366838	Boxcar	Brown	CleanMT					
UP	5222	Boxcar	Yellov	CleanMT					
FBOX	504801	Boxcar	Yell.	CleanMT					
	999 <mark>7</mark> 992909 9720199	s staging : rk at Seyme [] Pie	ore Yard,	\smile		9996 - 200 7 9 69	[] 34	feet, 529 tons	
Dead	Number		Color	Tand	Dead	Number	1.0 5.000	Color Load	
Road	- los en anteres a	ymore Inboy			Road	- los en colores		ound-YCC0500	
		ymore mbo.	and recove		UP		Boxcar	Brown CleanMT	
					UP		Boxcar	Yell w CleanMT	
					WP		Boxcar	Brown CleanMT	
					MP	1000000000	Boxcar	Brown CleanMT	
					UP		Boxcar	Yellov CleanMT	
					FBOX	Sector Sector	Boxcar	Yellow CleanMT	
Train	termin.	ates in Sey	ymore Yard	L					



OpsPro builds manifest for switch job



Services Long, Short and Scrap Docks	
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January 30, 2023, 11:04 Al

OpsProTestTrainz

Manifest for train (SCCO700 Can Job) Services Long, Short and Scrap Docks Valid 1/30/2023 11:04

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

	[] Pic]	c up				[] Set	out	
Road	Number Type	Color	Load	Road	Number	Туре	Color	Load
	CanCo Scraj	p Dock	10000000	2007		CanCo Scra	p Dock	
MP	540782 GonScrap	Brown	ScrapMetal	CNM	340200	GonScrap	Black	E
	CanCo Scrap	Holding	Contraction of the second			CanCo Scrap	Holding	1000
CNW	340200 GonScrap	Black	E					
	Canco Stee	l Dock				Canco Stee	1 Dock	
CSXT	504011 CoilCansto	k Blue	E					
BSO	480804 CoilCansto	k Blue	E					

- 1 -

Train departs 72nd Street Eastbound with 1 loads, 2 empties, 175 feet, 146 tons

Scheduled work at Seymore Yard, arrival time 07:04

		[] Pi-	ck up		[] Set out						
Road	Number	Type	Color	Load	Road	Number	Туре	Color	Load		
Seymore Outbound				Seymore Outbound							
					MP	540782	GonScrap	Brown	ScrapMeta		
					CSXT	504011	CoilCanstock	Blue	E		
					BS0	480804	CoilCanstock	Blue	E		
	Se	ymore Inbo	and-YCC0500)		Se	ymore Inbound	-YCCOBO	0		
WP	38517	Boxcar	Brown	CleanMT	- 6-				2		
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 δ loads, 0 empties, 348 feet, 529 tons

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

	[] Pi	ck up			[] Set o	ut				
Road	Number Type	Color Log	id Road	Number	Туре	Color	Load			
	CanCo Holding Yard			CanCo Holding Yard						
			TOP	38517	Boxcar	Brown	CleanMT			
			MIP	355838	Boxcar	Brown	CleanMT			
			FBOX	504801	Boxcar	Yellow	CleanMT			
CanCo Long Dock			100	CanCo Long Dock						
			UP	499234	Boxcar	Yellow	CleanMT			
			UP	38510	Boxcar	Brown	CleanMT			
CanCo Short Dock					CanCo Short 1	Dock				
			UP	6222	Boxcar	Yellow	CleanMT			

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 Tr	ain Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Job can be adde as needed.
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
-	YCC 0800 AM Yard Job	YCSC 00 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	YCC 0600 AM Yard Job	YCS0600 AM Yard Job	
•	TXCC0630 AM Xfer	TX S0630 AM Xfer	TXCC0830 AM Y	TXCS0630 AM Xfer	TXCC0630 AM Xfer	TXCS0630 AM Xfer	
\mathbf{i}	SCC0700 Can Job	CC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	SCC0700 Can Job	
11:00 AM	Part Carooper	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 Harve	MST1400 ST Yard Job	YWH0600-AM Wm Harvey	MST1400 ST Yard Job	YWH0800-AM Wm Harvey	
	TXST1430 loeCreamXfer	TXWH0630-AM Xfer WMH	Tax T1420 Jos Con wrer	TXWH0630-AM Xfer WMH	TXST1430 lceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	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 On	YCG-Canco Gons Only	EFL2200-Eve Fairlite Only	Noon Yard Job - ST	EFL2200-Eve Fairlite Only	
	TXST1430 loeCreamXfer	TXX2230-Eve Xfer	1050830-AM	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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 afte					
	Evening Pickup A	Moves train from Seymore O	the second s				
	Evening Pickup B	Moves cars from West Stagin	ng Outbound 1 to 24th Stree	et Yard storage drawers			
Notes:							

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

ID	Name	Comme	nt			Action		St	atus Rui	n	Edit	Delete
6	AM Sweeper	Canco, Sealtest, Wm H Ha	rvey			6c1 Build Train SWM110	0-A	M OK	Rur	1	Edit	Delete
12	CanCo Scrap Job	24St to CanCo				12c1 Build Train YCG-Ca	anco	o G	Rur	1	Edit	Delete
7	CanCo Shipping Job	Clean empties for outgoing	cans			7c1 Build Train YCC0600)-Al	и ок	Rur	1	Edit	Delete
11	CanCo Steel Job	24St to Canco				11c1 Build Train YCS060	0-A	M OK	Rur	1	Edit	Delete
10	Fairlite Job	24St to Fairlite	1	dit Automa							dit	Delete
13	Mixed Freight Job	24St to CanCo and Sealtes	1.0	ls Win	dow	Help					dit	Delete
2	Pickup Job	Retun cars from Seymore (Nan	ne							Cdit	Delete
5	PM Sweeper	Canco, Sealtest, Wm H Ha				CanCo Shipping Job					dit	Delete
8	Sealtest Reefer Job	Reefers only to Service Tra	ID			Action	1		Train		dit	Delete
3	WmHarvey Job	24 St to Staging to Seymor	7c1	>	Build	Train	-	YCC0600	-AM Yard J	•	dit	Delete
4	YRC job	2h St to Staging to Seymor	7c2		Wait	for Train to Terminate	-	YCC0600	-AM Yard J	•	dit	Delete
9	YRC Switch Only	YRC Switch only	7c3		Build	Train	-	TXCC063	0-AM Xfer	•	dit	Delete
			7c4		Wait	for Train to Terminate	-	TXCC063	0-AM Xfer	-		
			7c5		Build	Train	-	SCC0700	Can Job	-		
Se	everal Actions to	are available to	7c6		Wait	for Train to Terminate	-	SCC0700	Can Job	-		
bu	ild complex Auto	omations	7c7		Halt		-			-		

e-Manifest Look Mom, No Paper!

e-Manifest

YouTube JMRI Operations with No Paper -Steve Todd

<<u>https://youtu.be/krhyvrhrxv4</u>>

o - Engine Driver	Panels -	Roster	- Ope	erations	▼ Ta	bles -	Preferences	→ Help →
Name SFL2300-Fairlite Switch -	Description Fairlite Switcher	Lead Engine	Departs 72nd Street	Time 23:00	Status Partial 14/40 cars	Current 72nd Street	Terminates 72nd Street	Route Reverse Switcher
	Q		0		l]		

Web - Engine Driver

SFL2300-Fairlite Switch (Fairlite Switcher) Conductor

73% 🔳 1:03

72nd Street Next Location: Seymore Yard Scheduled work at 72nd Street, departure time 23:00 Train departs 72nd Street East with 0 loads, 5 empties, 301 feet, 149 tons

Pick up

a

 NCLX 46510 CovHopPlsto Orange E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ACFX 59355 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 GACX 15217 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ELTX 116 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ToCX 88288 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ToCX 88288 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ToCX 88288 CovHopPlstc Gray E from Fairlite Plastics destination Seymore Yard, Seymore Outbound
 ACFX 99660 CovHopPlstc Tan PlstcPellets to Fairlite Plastics destination 72nd Street, Fairlite Plastics
 ALAX 36809 CovHopPlstc Red PlstcPellets to Fairlite Plastics destination 72nd Street, Fairlite Plastics

BOIX 57554 CovHopPistc Gray PistcPellets to Fairlite Plastics destination 72nd Street, Fairlite Plastics

GACX 50132 CovHopPistc Gray PistcPellets to Fairlite Plastics destination 72nd Street, Fairlite Plastics

Move to Seymore Yai

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		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	2		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

FBAY CON HOP AARLO R.R./No. GACX 47906 DESC. BLUE AIRSLIDE FREIGHT WAYBILL 3 CONSIGNER SAMIES NE ADDRESS ROUTING. VIA SHIPPER MORTON SALT ST. PAUL MN ADDRESS LADING

OpsPro Manages Storage

One Drawer = 1150 ft yard track (approx 22 cars)



Surrender control to OpsPro

Stage to 24th St

- 1 -

August 1, 2022, 11:27 AM

OpsProTestTrains

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 trad	:k 1		Outbound track 1
UTP 4	499030	Boxcar	Orange	E	
ABOX 3	52075	Boxcar	Yellow	E	
TBOX d	561307	Boxcar	PINK	E	
CEFX	77189	CovHopPlstc	Gray	E	
DOWX &	55122	CovHopPlstc	Gray	E	
KCIX 3	574	CovHopPlstc	Blue	E	
SHPX &	50415	CovHopPlstc	Black	E	
ACFX 9	99660	CovHopPlstc	Tan	E	
OCPX &	52505	CovHopPlstc	Gray	E	
AMCX 1	107912	CovHopPlstc	Gray	E	

Train departs Staging West Westbound with 10 cars, 522 feet, 303 tons

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

Box05	Box05
	UP 499030 Boxcar Orange E
Box05	Box06
	ABOX 52075 Boxcar Yellow E
Box07	Box07
	TBOX 661307 Boxcar PINK E
CHOL	CHOL
1.11.144	CEFX 77189 CovHopPistc Gray E
CH02	CH02
	DOWX 66122 CovHopPistc Gray E
CH03	CH03
	KCIX 574 CovHopPistc Blue E
	SHPX 50415 CovHopPistc Black E
CH04	CH04
	ACFX 99550 CovHopPistc Tan E
	OCPX 52505 CovHopPistc Gray E
CH05	CH05
	AMCX 107912 CovHopPistc Gray E

OpsPro Manages Car Storage

Number Road	Type	Len	Load	Kernel	Location	Destination	Train N	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
403804 NS 405426 BNSF 406166 NS 419321 BN	Boxcar-CanForkLift CovHopFood Boxcar-PkgMtl CovHop2Bav	50 38 53 38	E E E	C Location O Destination	24th St Yard (Box01) 24th St Yard (CH04) 24th St Yard (Box05) 24th St Yard (CH05)	ion ○ Train ○ Moves ○ Built ○ Own	ner © Wait	9 2 1 5	Set Set Set Set	

Sealtest's Reefers



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

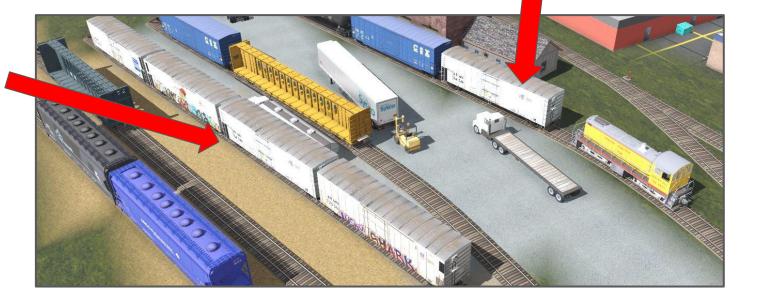
Weekly Tra	ain Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Jobs can be added as needed.
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:00 AM	CanCo Shipping	CanCo Steel	CanCo Shipping	CanCo Steel	Canco Shipping	CanCo Steel	
	YCC 0800 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	
	TXCC0830 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 Sweepe	SWM1100 - AM Sweepe	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper	SWM1100 - AM Sweeper		
3:00 PM	Sealtest Reefers	Wm. H. Harvey	Sealtest Reefers	Wm. H. Harvey	sealtest Reelers	Wm. H. Harvey	
	MST1400 ST Yard Job	YVH0600-AM Vm Harvey	MST1400 ST Yard Job	YV H0600-AM Wm Harvey	MST1400 ST Yard Job	YWH 600-AM Wm Harvey	
	TXST1430 IceCrean Man	TXWH0630-AM Xfer will	TXST1430 IceCreate Man	TXWH0630-AM Xfe, WMH	TXST1430 IceCreamXfer	TXV 40630-AM Xfer WMH	
	SST1500-IceCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	COT4500.JosCrottelius	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 loeCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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 afte					
	Evening Pickup A	Moves train from Seymore O					
	Evening Pickup B	Moves cars from West Stagin					
Notes:							

OpsPro and Standing Order



Chilled Empty loading at Sealtest Door 1

This track is LIFO -Last In First Out



Standing order work-around

Number	Road	Туре	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	Туре	Len	Load	Kernel	Location	Destination	Train	Moves	Set	Edit
111347	ARMN	Reefer <mark>Prod</mark>	72	ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		34	Set	Edit
111350	ARMN	ReeferProd	72	2 ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		33	Set	Edit
111383	ARMN	ReeferProd	72	2 ChilledMT		72nd Street (Service Yard 1)	->72nd Street (Sealtest Door 1)		32	Set	Edit

Transload Track Pools

Transload & Off Spot



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 Tr	ain Schedule	as of January 28, 2023		Weekday Jobs may be run or cancelled as needed.		Saturday Jobs only run as needed.	Sunday Job can be adde 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 0800 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	
	TXCC0830 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	YWH0800-AM Wm Harvey	
	TXST1430 lceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	TXST1430 IceCreamXfer	TXWH0630-AM Xfer WMH	
	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	SST1500-loeCreamJob	SWH0700-WMHarvey Job	
7:00 PM	YRC Switch Only	YRC	TRC Switch Only	YRC	KRC Switch Only	YRC	
	STR1500-YRC Only	MTL1400 Mid YRC Only	STR1500-YRC Cily	MTL1400 Mid YRC Only	STR 1500-YRC Chly	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 loeCreamXfer	TXX2230-Eve Xfer	TXCS0630-AM Xfer	TXX2230-Eve Xfer	TXST1430 loeCreamXfer	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	er any transfer from Staging	to Seymore			
	Evening Pickup A	Moves train from Seymore C	outbound to West Staging O	utbound 1			
			outbound to West Staging O	utbound 1			

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
IS23 Brake And Cyl at YRC	U	U	U	12	U	U	U	ι	Carbon Load	H	SUTPUT	M	YRC Transload	Service Yard 2	Normai	Εαιτ
4s25 Chicago Lumber at YRC	0	0	0	17	0	0	0	C) Lumber Flats	H	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
4s18 CtyOfOmaha at YRC	0	0	0	0	0	0	0	(Road Sand	H	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
4s17 Intermtn Hdwd at YRC	0	0	0	0	0	0	0	(Hardwood Sched	Н	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
4s19 KCI Recycle at YRC	0	0	0	2	0	0	0	(KCI Recycle	Н	SO 1 PU 1	r	YRC Transload	Service Yard 2	Normal	Edit
Is27 MUD Omaha at YRC	0	0	0	2	0	0	0	0	MUD Supplies	Н	SO 1 PU 1	r	YRC Transload	Service Yard 2	Normal	Edit
4s28 NFM Whse at YRC	23	0	0	2	0	0	0	(NFM Consumer	H	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
4s29 OPPD at YRC	61	0	0	11	0	0	0	(OPPD Supplies	H	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
4s20 PrinceAgri at YRC	114	114	0	6	2	0	0	(Bulk Soy Products	H	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit
s21 Volcanic Foods at YRC	0	0	0	3	0	0	0	() Hot stuff	н	SO 1 PU 1	V	YRC Transload	Service Yard 2	Normal	Edit

Bakery Whse Custom Loads and Schedule

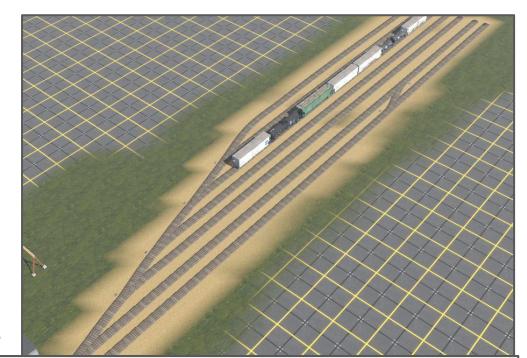
Туре	Rand		Delivery	Road	Receive	Sh	ip	Destination		Name Status of	
CovHopAirSld		-	•	-	PowderedSugr	-	E	-	24th St Yard	•	CtyOfOmaha at YRC
CovHopFood		-	•	-	Cornstarch	-	E	-	24th St Yard	-	KCI Recycle at YRC
CovHopFood		-	•	-	RyeFlour	-	E	-	24th St Yard	-	PrinceAgri at YRC
Boxcar-Food		-	•	-	PowderedSugr	-	E	-	24th St Yard	-	Volcanic Foods at YRC Arbor Systems at YRC
CovHopFood		-	•	-	WheatFlour	-	E	-	24th St Yard	-	Brake And Cyl at YRC
CovHopSalt		-	•	-	Salt	-	E	-	24th St Yard	-	Auto Distributio at YRC
CovHopFood		-	•	-	SemolinaFlr	-	E	-	24th St Yard	-	Chicago Lumber at YRC Bakery Whse at YRC
CovHopSugar		-	•	-	Sugar	-	E	-	24th St Yard	-	MUD Omaina at YRC
CovHopFood		-	•	-	WhiteFlour	-	E	-	24th St Yard	-	NFM Whse at YRC
CovHopFood		-	•	-	CitrusFiber	•	E	•	24th St Yard	•	OPPD at YRC Totals:

Name Status of YRC S	OLIT Maximum	Minimum	Length
Intermtn Hdwd at YRC	255	0	Congai
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 Omaina 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	<mark>1</mark> 64	0	0	73	0	0	0	0		SO 1 PU 3		Seymore Inbou
Seymore Inbound-YCS0600	175	<mark>11</mark> 8	0	132	2	0	0	0	A 5	SO 1 PU 4		Seymore Inbou
Seymore Outbound	<mark>650</mark>	432	0	395	7	0	0	0		SO 7 PU 1		

Vary the Loading Times

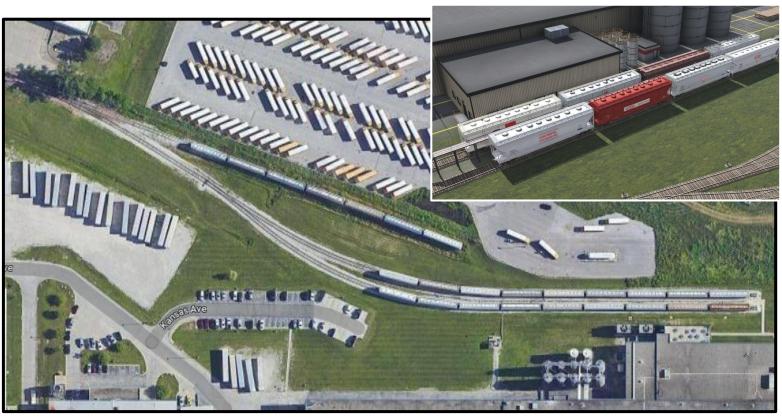
Back to Custom Loads and Schedules

Plastic Pellets for Airlite

Two tracks for unloading

One track for storage

Switched twice a week

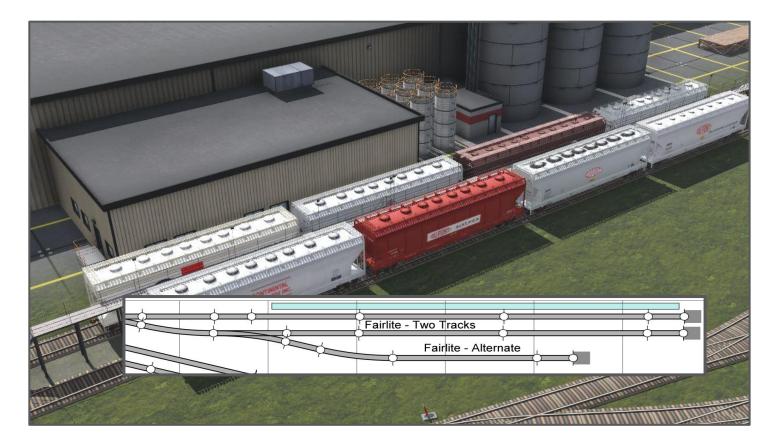


Airlite becomes Fairlite

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



Туре	Rand	Delivery	Road	Receive		Ship		Destination		Track	Pick up	Hits	Wait	
CovHopPlstc		-	-	PlstcPellets	-	Е	-	24th St Yard	•		-	5	0	5
CovHopPIstc		-	-	PlstcPellets	-	Е	-	24th St Yard	-	-	-	6	1	
CovHopPIstc		-	-	PlstcPellets	•	Е	-	24th St Yard	-	-	-	6	0	
CovHopPlstc		-	-	PlstcPellets	-	Е	-	24th St Yard	-	-	-	6	2	
CovHopPIstc		-	-	PistcPellets	-	E	-	24th St Yard	•	-	-	6	1	
CovHopPlstc	-	-	-	PistcPellets	•	Е	-	24th St Yard	•	-	-	7	0	
CovHopPIstc		-	-	PistcPellets	-	E	-	24th St Yard	•	-	-	8	3	
CovHopPlstc		-	-	PlstcPellets	-	Е	-	24th St Yard	•	-	-	6	1	
CovHopPlstc	-	-	-	PistcPellets	-	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