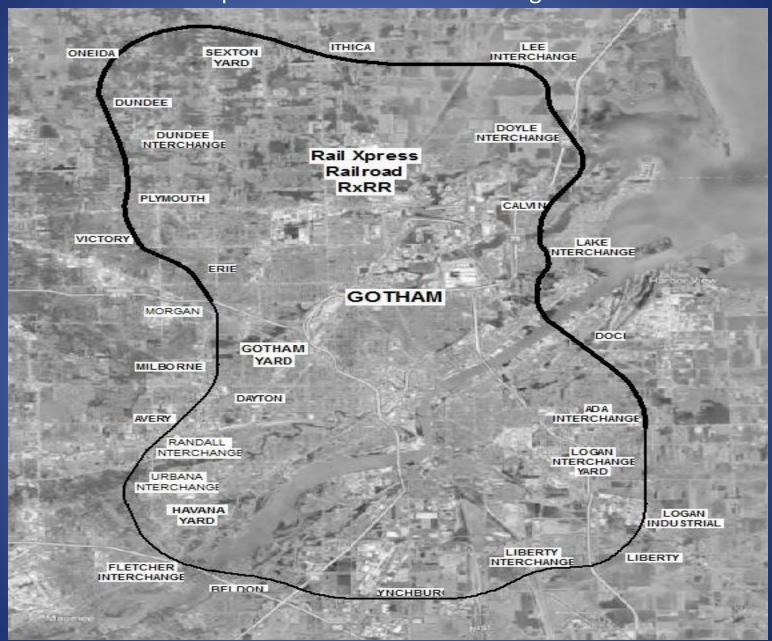


Rail Xpress Railroad RxRR

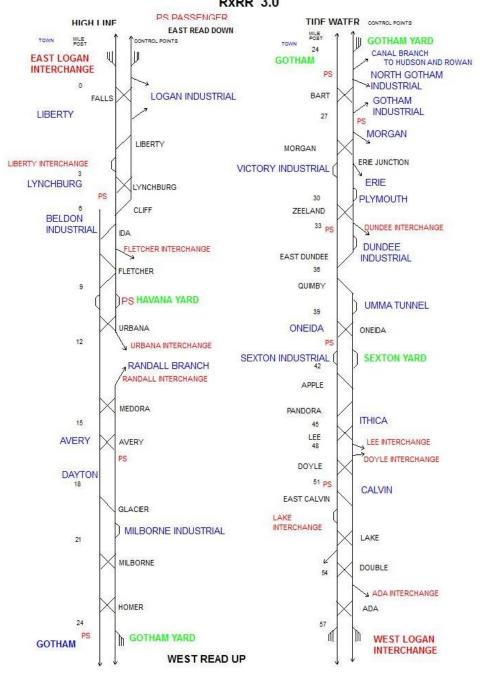
Ops Orientated Layout

By Dan Hinel

Aerial Map of Gotham and surrounding cities



RxRR 3.0



RxRR 3.0 Overview

CTC controlled double track beltline switching railroad built for operations (Approximately 250 ops sessions to date)

Utilizes C/mri system for train detection and signaling

Modern graphic CTC panel using Microsoft Visual Basic

Card Forwarding System is Card Orders

(each industrial spot is assigned specific car type)

Over 600 car spots

NCE Wireless System

Intercom Phone System used for Communication

Trains run in sequence (See Dispatcher Train Log)

RxRR 3.0 Overview

Typical Crew

Dispatcher

Gotham Yard Master

Sexton/Havana Yard Master

Eight Single or Two person Road Crews

Layout:

2700 sq. ft. room

Double Track Main line 830 ft. with 75 ft. branch line

Total track length 3705 ft. and 325 turnouts

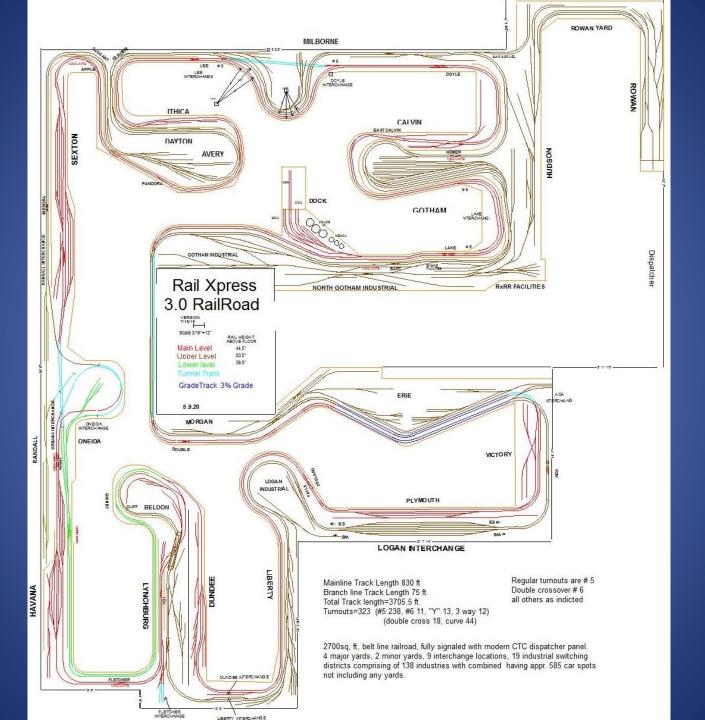
Two levels but one deck (6 " difference)

One level switching area the other run through

Fully Detected (168 blocks)

Fully Signaled (over 200 signal heads or 540 LED)

30 Control Points





4 types of Trains

Yard Transfers: Originates out of Logan (10 cars) or Gotham (22 cars)

(12) Pick up or set out at various interchanges and minor yards

Local (Turns): Pick up and set out at 596 car spots serving 138 industries

(20) 22 switching districts Average 8 cars per train

Unit Trains: Pick up & Set out at various industries and interchanges

Coal, Aggravated, Petroleum Products and Chemicals,

and Grain (1 for 1)

Passenger: (Doodlebug) Multiple passenger stops

(1)

(4)



DISPATCHER TRAIN LOG SHEET #1

5/20/2020

			D	ISPATCHER		
		-		DATE		
TR #	NAME	DEPART	DIR	ARRIVE	CREW	TIME
G2	NORTH GOTHAM INDUSTRIAL	GOTHAM	Е	GOTHAM		
S1	ITHICA-CALVIN TURN	SEXTON	E	SEXTON		
H1	BELDON	HAVANA	W	HAVANA		
103	GOTHAM- DUNDEE INTERCHANGE- SEXTON-LOGAN	GOTHAM	Е	LOGAN TK 3		
201	LOGAN-HAVANA-RANDALL INTERCHANGE- GOTHAM	LOGAN TK 1	Е	GOTHAM		
E1	AGG JOB	GOTHAM	W	GOTHAM		
G3	RxRR FACILITY	GOTHAM	É	GOTHAM		
S2	LIBERTY TURN	SEXTON	Е	SEXTON		
G9	PLYMOUTH DUNDEE TURN	GOTHAM	E	GOTHAM	•	
G4	GOTHAM INDUSTRIAL	GOTHAM	E	GOTHAM		
E2	COAL JOB	W. UMMA TUNNEL	W	E. UMMA TUNNEL		
107	GOTHAM- RANDALL INTERCHANGE HAVANA- LOGAN	GOTHAM	W	LOGAN TK 7		
208	LOGAN- SEXTON-DUNDEE INTERCHANGE-GOTHAM	LOGAN TK 8	w	GOTHAM		
G5	DAYTON AVERY TURN	GOTHAM	W	GOTHAM		
H2	LYNCHBURG	HAVANA	W	HAVANA		
S3	LOGAN INDUSTRIAL	SEXTON	E	SEXTON		
G12	ROWAN	ROWAN		ROWAN		
102	GOTHAM-DUNDEE INTERCHANGE-	GOTHAM	Е	LOGAN TK 2		
203	SEXTON LOGAN LOGAN-HAVANA-RANDALL INTERCHANGE-GOTHAM	LOGAN TK 3	Е	GOTHAM		

CAR ORDERS A CAR FORWARDING SYSTEM WITHOUT THE USE OF REPORTING MARKS

Presented By

Dan Hinel

Some Talking points First

- The crew on the ground is not interested in where a car came from or where it is going.
- They are only interested is what they have to do with it.
- This method is meant to focus on that part of operations.
- The Car Card system has a card for each car, the Car Order system has a card for each customer delivery spot.
- Car Order system has no documentation for any rolling stock. (+/- cars no problem)

HIGHLIGHTS

- CAR ORDER FORM
- HOW IT WORKS
- YARD TRANSFER
- WAY FREIGHT (TURNS)
- UNIT TRAINS (MILK RUNS)
- ADVANTAGES

QUICK SURVEY

- HAVE USED CAR FORWARDING?
 - Switch lists
 - 4 sided cards/pockets
 - "Just drop 8 cars here"
 - Some other system
- OPERATE IN HO OR SMALLER?
- WEAR GLASSES?
- WEATHERED CARS?
- LESS THAN BRIGHT LIGHTING?
- DISLIKE COMPLICATED PAPERWORK?
- WANT TO START OPS BUT TOO COMPLIOCATED TO START
- EASY OP SESSON SET UP

г	I A	В	-	cT	DI	E	F	G	Н	1	J	K	L	M	N	0	P	Q	R	5	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF		AG	АН
r								Ĭ		0			2						-				DI	RAN	LIBI	FLETT		D	URBANA	ON						
1		# OF CAR	MILBOKN	AVERT DATION	AUGUS PARTON	BANDA!	103	ROOM	NORTH GOTHAM INC	GOTHAM INDUSTRIAL	ROWAN	NOSON	PLYMOUDTH DUNDER	MORGAN VICTORY	SEXTON INDUSTRIAL	ITHICA CALVIN	LIBERTY	LOGAN INDUSTRIAL	HAVANA INDUSTRIAL	BELDON	LYNCHBURG	ADA INTERCHANGE	DUNDEE INTERCHANG	RANDALL INTERCHANGE	LIBERTY INTERCHANGE	FLETCHER INTERCHANGE	LAKE INTERCHANGE	OYLE INTERCHANGE	ANA INTERCHANGE	ONIEDA INTERCHANGE	UMMA TUNNEL	ONIEDA MINE	DOCK	TOTAL CAR SPOTS		
2	BOX																																			
3	40	6	6	5	4	5	2	1	3	4		2	6	8	4	5	1	1	3	2	4														60	6
4	40' HC	6	7	3	1	2	5	1	2	2	11	6	5	2	1	3	7	7	1		2									1					61	6
5	50	10	8	5	6	11	9	1	5	3	9	5	4	4	7	6	9	5	4	2	3											-			98	10
6			6			1		1		2			1	2			2																		9	-3
7	ALL DOOR		4	1				1		3																									5	-1
8	INSULATE	1	3		1	4		1	2	1	3									2												-			14	-1
9							4																									-				
	TANK																													-					2.5	
11	10K	22		2		4	1		2	2	1	2	2		2	3	4		1	1	2								+-				+	10	25	-3
12	FOOD	11			1		4	1	3		1			2				1	1		1								₩						11	4
13	CHEM 20K	52		4	2		5	2	2	4	4	- 6	- 8		1	2		4	2	1	1									+					47	5
14	PETRO		1	4		4	4	2												2															8	0
15						-		-																					₩	-					-	
10	FLAT	9	-					1				2	2	1							1														9	0
27	CABOOSE	- 1				-		3																									-		1	0
18	FLAT CABOOSE GONS REG COIL HOPPERS				-			-				-	-		-						-													+		
20	REG	29		-	4			3	Н	3		4	4		- 2	- 1	3			-	2								1						24	3
20	COIL	14		+	-										_ 2		3			1												+			11	3
22	HOPPERS							-	-										-		-								-		-		40	+	-	
22 23 24	FOOD	19		-		1	4	3	2					- 2	-			1	5	1	1								+	+-		-	+-	+	14	
2.5	CHEMICAL	49	- 3	-		-	9	3	2	4	3	7	4		3	4	1	- 2	1	1	- 2					-			+-			+			45	
25	P PELLETS	4			+		+		2				2																-	+					4	(
26	GENERIC			+		4-	+																								-	-	1	4		
20	GENERIC																						1 4	4	3	-	1	1	1	5				4	24	
10	UNIT TRAINS								-																					4	SU	BTO	TAL		470	
0.0	UNIT TRAINS																								-			-	-					-		
10	PETRO	10			1					-											-							1	-		4	4	1	2	8	
29	CRUDE	8	- 2						-																	-		10			4		44	2	8	
A	CHEMICAL TANK	14						+														3				1 2	2	1	2	1	7			1	14	1
2	18+ COAL	34	-					1					2						3				1			1	3		1		1	3	6	6	34	-
3 4 5	AGG		14				-							4								5				1	1							5	32	
=	GRAIN	24	2	4		-	-	-			1			2	2	3			3							-		1						3	30	
6			-	-	-	1																		-			10		1			BTC	TAL		126	
6	OTAL CAPE	-	46	30	24	26	1	18	25	28	33	34	40	27	24	27	30	21					4	1 4	1 3	3 5	9 /	4	6	5 1	5 1	3	6 2	8	596	
11	OTAL CARS	608																	TOT	ALC	AR S	POT	2												596	

CAR ORDER FORM

THE CAR ORDER SIDE

TOWN A
CAR ORDER

40' BOX
TO BE SETOUT AT

TOWN A
FEED MILL

SIDING #1 SPOT # 2

WHEN CAR HAS BEEN SETOUT
PLACE THIS CARD IN BOX
LABELED
"SETOUT"
TURN(HOLD)

This card is assigned to this town or yard

Type of car

Car destination

(siding/spot number)

The paper shuffle

THE CAR ORDER SIDE

TOWN A
CAR ORDER

40' BOX
TO BE SETOUT AT

TOWN A
FEED MILL

SIDING #1 SPOT # 2

WHEN CAR HAS BEEN SETOUT
PLACE THIS CARD IN BOX
LABELED
"SETOUT"
TURN(HOLD)

This card is assigned to this town or yard

Type of car

Car destination

(siding/spot number)

The paper shuffle

THE COMPLETE FORM

TOWN A CAR ORDER

40' BOX TO BE SETOUT AT

TOWN A
FEED MILL

SIDING # 1 SPOT #2

WHEN CAR HAS BEEN SETOUT PLACE
THIS CARD IN BOX LABELED
"SETOUT"
TURN (HOLD)

TOWN A PICKUP ORDER

40' BOX TO BE PICKEDUP AT TOWN A

FEED MILL

SIDING # 1
SPOT #2
ROAD CREW TO SETOUT CAR
OUT ON EASTBOUND TRACK

WHEN CAR HAS BEEN SETOUT TURN
THIS CARD AND PLACE IN

UNFILLED



Yard Transfers

TRAIN 206



LOGAN - SEXTON- GOTHAM

MUST CONTACT DISPATCHER BEFORE LEAVING ANY YARD

LEAVE LOGAN WESTBOUND (LEFT) FROM

TRACK # 6

Proceed Per Signal Indication
Takes Siding at APPLE onto Sexton Yard Lead

LAKE INTERCHANGE

(West of Lake) Pick up 4 cars
Proceed Westbound

LEE INTERCHANGE

(East of Lee) Pick up 4 cars From Track 2
Proceed Westbound

SEXTON YARD

ARRIVE TRACK # 1
SEE REVERSE SIDE FOR INSTRUCTIONS

DUNDEE INTERCHANGE

(West Dundee) Pick up 4 cars

Takes SIDING at BART onto Gotham Yard Lead
DISPATCHER WILL CONTACT GOTHAM YARD
MASTER WHO WILL FORWARD INSTRUCTIONS

TAKE MOTIVE POWER TO ENGINE FACILITY

SEXTON YARD INSTRUCTIONS

ARRIVE TRACK # 1
CHECK YARD BOARD FOR
UNFILLED CAR ORDERS
FILL CAR ORDERS BASED UPON TRAIN
NUMBER AND SWITCHING DISCTRICT
PRIORITY

SETOUT ON TRACKS 2 OR 3
ANY CARS THAT CAN FILL CAR ORDERS

PLACE THESE CARDS IN FILLED ORDER BOX.

FROM TRACK 5 PICKUP ANY WESTBOUND CARS

DO NOT EXCEED 18 CARS IN YOUR TRAIN

Sexton Yard



TRAIN 206

LOGAN - SEXTON- GOTHAM

MUST CONTACT DISPATCHER BEFORE **LEAVING ANY YARD**

LEAVE LOGAN WESTBOUND (LEFT) FROM TRACK # 6

Proceed Per Signal Indication Takes Siding at APPLE onto Sexton Yard Lead

LAKE INTERCHANGE

(West of Lake) Pick up 4 cars **Proceed Westbound**

LEE INTERCHANGE

(East of Lee) Pick up 4 cars From Track 2 **Proceed Westbound**

SEXTON YARD

ARRIVE TRACK #1 SEE REVERSE SIDE FOR INSTRUCTIONS

DUNDEE INTERCHANGE

(West Dundee) Pick up 4 cars

Takes SIDING at BART onto Gotham Yard Lead **DISPATCHER WILL CONTACT GOTHAM YARD** MASTER WHO WILL FORWARD INSTRUCTIONS

TAKE MOTIVE POWER TO ENGINE FACILITY



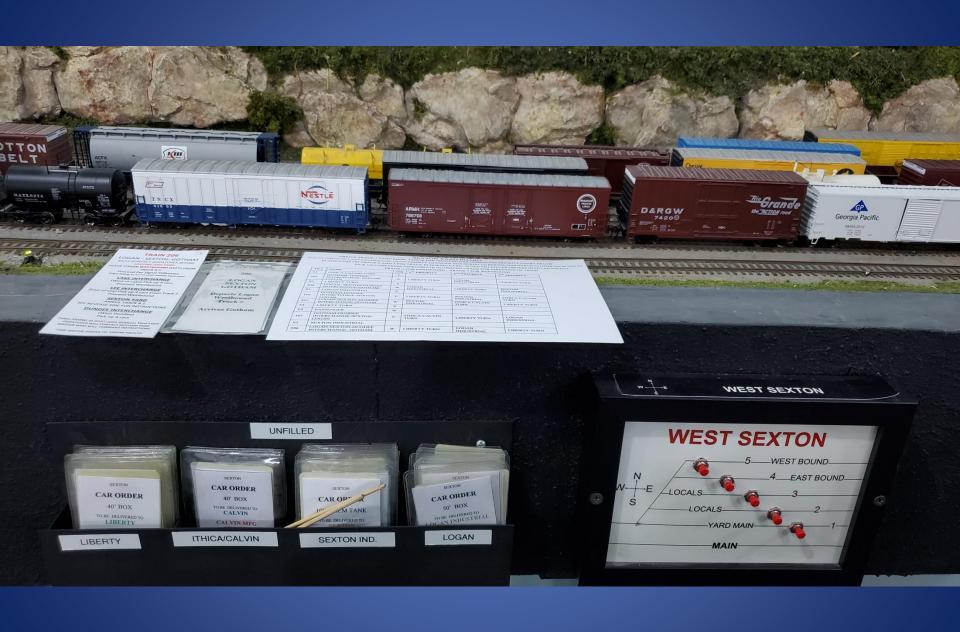
SEXTON YARD BOARD

ARRIVE TRACK 1 YARD MAIN CHECK FOR UNFILLED CAR ORDERS PER PE RED NUMBER OF CARS NEEDED FOR TRAIN LIBERTY (7) LOGAN INDUSTRIAL (6) SEXTO PLACE CARS ON TRACK 2 AND 3 PER TRACK BLOCKING CARD. PLACE FILLED CARD.

PICK UP CARS FROM APPROPRIATE OUTBOUND TRACK FOR DIRE

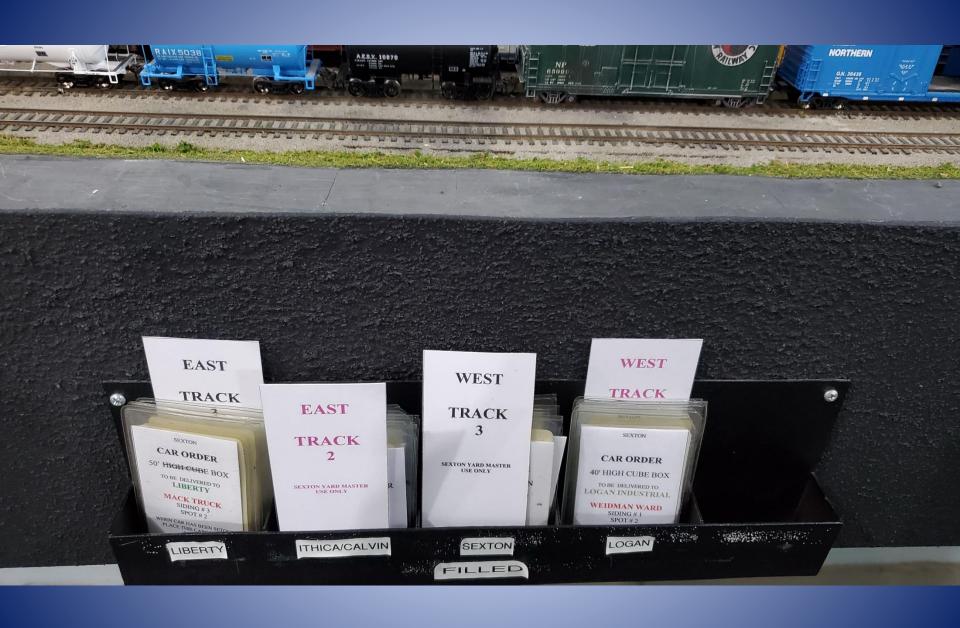
TRACK A FOR FASTROUND TRACK 5 FOR

TR#	NAME	DIR	1 ST PRIORITY	2 ND PRIORITY	3R	
S1	ITHICA-CALVIN TURN	Е			1	
103	GOTHAM- DUNDEE INTERCHANGE- SEXTON- LOGAN	Е	LIBERTY TURN	LOGAN INDUSTRIAL	L	
S2	LIBERTY TURN	Е			1	
208	LOGAN- SEXTON-DUNDEE INTERCHANGE-GOTHAM	w	LOGAN INDUSTRIAL	LIBERTY TURN		
S3	LOGAN INDUSTRIAL	E				
102	GOTHAM-DUNDEE INTERCHANGE-SEXTON LOGAN	Е	LIBERTY TURN	SEXTON INDUSTRIAL		
207	LOGAN-SEXTON-DUNDEE INTERCHANGE-GOTHAM	W	SEXTON INDUSTRIAL	ITHICA CALVIN TURN		
S4	LIBERTY TURN	E				
E4	PASSENGER	w				
101	GOTHAM-DUNDEE INTERCHANGE-SEXTON- LOGAN	Е	ITHICA CALVIN TURN	LIBERTY TURN		
S5	SEXTON INDUSTRIAL					
206	LOGAN-SEXTON-DUNDEE INTERCHANGE- GOTHAM	w	LIBERTY TURN	LOGAN INDUSTRIAL		











Gotham Yard









STORAGE TRACKS

- 11 HUDSON/ROWAN YARD TX
- 10 RANDALL TURN
- 9 PLYMOUTH-DUNDEE TURN
- 8 MORGAN VICTORY TURN
- 7 ERIE TURN
- 6 MILBORNE TURN
- 5 DAYTON AVERY TURN
- 4 GOTHAM INDUSTRIAL
- 3 RXRR FACILITY
- 2 NORTH GOTHAM INDUSTRIAL
- 1 NORTH GOTHAM INDUSTRIAL

UNIT TRAIN TRANSFERS EMPTY COAL HOPPERS AND GRAIN HOPPERS TRACK 10.5

GOTHAM YARD LIMITS

WEST- HOMER CROSSING EAST- BART CROSSING



ALL TRAIN ARRIVALS/DEPARTURES MUST GET AUTHORIZATION FROM GOTHAM YARD MASTER AND DISPATCHER

ARRIVAL YARD TRANSFER TRAINS

PLACE ON TRACKS 1 and 2

FILL CAR ORDER REQUESTS FOR LOCALS OUT OF GOTHAM (TRACKS 11-10-9-8-7-6-5-4-3) PLACE REMAING CARS ON OUTBOUND TRACK

DEPARTURE YARD TRANSFER TRAINS
PLACE ON TRACKS 1 and 2

NOTIFY DISPATCHER THAT TRAIN IS READY TO DEPART. ONCE AUTHERIZATED ORDER CREW TO PROCEED PER SIGNAL INDICATION

YARD TRANSFERS (Car Max)
LOCAL TRAINS (See Notes)

UPON RETURN PLACE CARS ON OUTBOUND TRACK 1 AND 2 FLIP PICKUP ORDERS & PLACE IN UNFILLED CAR ORDERS BOX

NOTE: ALWAYS FILL CAR REQUESTS FOR NEXT LOCAL TO DEPART

ALL TRACKS UNDER YARD MASTER AUTHORITY

TRAIN #	NAME	A/D DIR	#		NOTES	T K	T K	TK	T K
G2	NORTH GOTHAM INDUSTRIAL	DEB	8	1	WORKS WITHIN GOTHAM YARD LIMITS SMALL SWITCHER				
103	GOTHAM SEXTON LOGAN	DEB							
201	LOGAN HAVANA GOTHAM	AEB				-	-	-	
G3	RxRR FACILITY	DEB	6		WORKS WITHIN GOTHAM YARD LIMITS SMALL SWITCHER				
107	GOTHAM HAVANA LOGAN	DWB							
208	LOGAN SEXTON GOTHAM	AWB							
G9	PLYMOUTH-DUNDEE TURN	DEB	1	0					
G4	GOTHAM INDUSTRIAL	DEB	8	3	WORKS WITHIN GOTHAM YARD LIMITS SMALL SWITCHER				
102	GOTHAM SEXTON LOGAN	DEB	1						
203	LOGAN HAVANA GOTHAM	AEB	1				1	1	1
G5	DAYTON AVERY TURN	DWB	1	8			-	1	1
G12	ROWAN		1	8	GOTHAM TO ROWAN YAR TRANSFER	D			
G6	MILBORNE TURN	DWB	1	8	SMALL SWITCHER				
E2	COAL JOB	AWB DWB			SETOUT/PICKUP BAY HOPPERS WEST DRILL TRACK				
G7	ERIE TURN	DEB		8				1	
106	GOTHAM HAVANA LOGAN	DWB							
207	LOGAN SEXTON GOTHAM	AWB							
G8	MORGAN VICTORY TURN	DEB		8			1	1	
E4	PASSENGER	DWE	3				1	1	
202	LOGAN HAVANA GOTHAM	AEB					1	1	
101	GOTHAM SEXTON LOGAN	DEB	3				1		
G9	PLYMOUTH-DUNDEE TURN	DEF	3	10					
G10	RANDALL TURN	DW	В	8					
G11	HUDSON			7	GOTHAM TO HUDSON TRANSFER	YAF	(D)		
108	GOTHAM HAVANA LOGAN	_		1		-		-	1
206	LOGAN SEXTON GOTHAM	AW	В	1					



LOCAL TURNS

SEXTON LOCAL FRT

S1 ITHICA/CALVIN TURN

SERVING TOWNS OF: ITHICA CALVIN

MUST CONTACT DISPATCHER

BEFORE LEAVING SEXTON YARD AND FOR

TRACK AND TIME

Pick up Engine and Caboose from
Engine Facility.

DO NOT GO BEYOUND YARD LIMITS
See reverse side for
Train Makeup Instructions

Train order – leave SEXTON EASTBOUND (RIGHT)

Proceed per Signal Indication

Yard Limits at APPLE Takes Siding at APPLE

ITHICA/CALVIN

Contact dispatcher for T&T

See reverse side for

Switching Instructions

Continue Eastbound to Calvin switch
trailing point industries .Return
Westbound to SEXTON Siding at Doyle
Take Siding at Apple on to
Sexton Yard Lead

SEXTON YARD

See reverse side for Returning Yard Instructions SEXTON

TRAIN MAKEUP INSTRUCTIONS

Make up your train as follows From SEXTON YARD BOARD pickup CAR ORDERS from FILLED CAR ORDER box for cars going to industries in the towns served. Using CAR ORDERS to determine what type and number of cars needed. Make up train from cars on tracks 2 & 3. DO NOT EXCEED CARS IN YOUR TRAIN

SWITCHING DISTRICT INSTRUCTIONS

Pickup cars per PICKUP ORDERS
Setout cars per CAR ORDERS
FLIP CARDS IN HOLD BOX
MOVE TO PICKUP BOX
MOVE CARDS IN SETOUT BOX TO
HOLD BOX

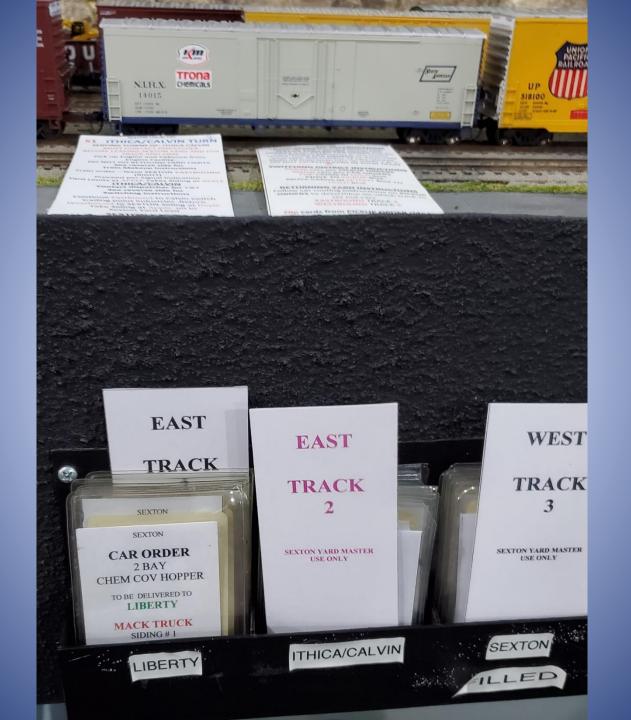
RETURNING YARD INSTRUCTIONS

ORDERS to determine on which track to set out cars

.EASTBOUND TRACK 4
WESTBOUND TRACK 5

Flip cards from PICKUP ORDER side to CAR ORDERS side and Place into UNFILLED CAR ORDER BOX

SEXTON















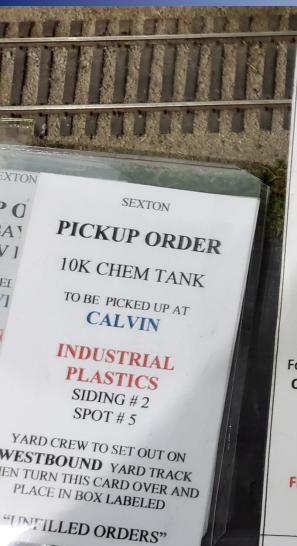
Hold cards are flipped and placed into Pickup and Setout cards placed into hold section







Setout cars on outbound tracks



SEXTON

TRAIN MAKEUP INSTRUCTIONS

Make up your train as follows From SEXTON YARD BOARD pickup CAR ORDERS from FILLED CAR ORDER box for cars going to industries in the towns served. Using CAR ORDERS to determine what type and number of cars needed. Make up train from cars on tracks 2 & 3. DO NOT EXCEED CARS IN YOUR TRAIN

SWITCHING DISTRICT INSTRUCTIONS

Pickup cars per PICKUP ORDERS
Setout cars per CAR ORDERS
FLIP CARDS IN HOLD BOX
MOVE TO PICKUP BOX
MOVE CARDS IN SETOUT BOX TO
HOLD BOX

RETURNING YARD INSTRUCTIONS

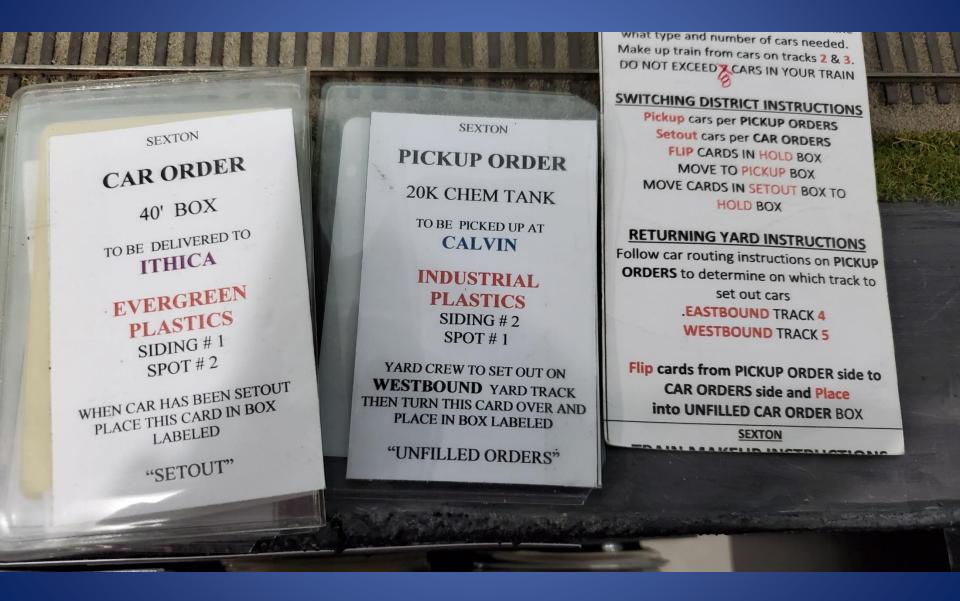
Follow car routing instructions on PICKUP
ORDERS to determine on which track to
set out cars

.EASTBOUND TRACK 4
WESTBOUND TRACK 5

Flip cards from PICKUP ORDER side to CAR ORDERS side and Place into UNFILLED CAR ORDER BOX



Flip cards and place into Unfilled box





YOU PRESCRIPTION Switch list

	SWITCH	1 1150
	SET	OUT
CAR TYPE	CAR#	LOCATION
		*
		K UP
CAR TYPE	CAR#	LOCATION

ADVANTAGES

SELF CORRECTING

- If a car is in the wrong place the crew can either leave it or pick it up-their decision does not affect any other operations.
- Find a car with no "PICKUP ORDER" pick it up and route it out on a through freight
- Find a "PICKUP ORDER" with no car turn the form over to "CAR ORDERS" and place in car order pocket.
- It's so simple even a

ADJUSTING CAR FLEET

- Want to add a car to your CAR FLEET?
- Just put it on the layout, no need to make out new car cards or change your computer program
- Want to take a car out of service-just take it off
- This works well in clubs where members bring in or take home equipment.

ADJUSTING INDUSTRIES

- Want to add a new spur and Industry?
- Put it on the layout, figure the number of car spots and car type for each spot
- Make out new Car Orders
- Want to remove or change an Industry?
- Tear up the old Car Orders.

PROVIDES FOR CONTINUOUS OPERATIONS

- Since the paperwork is done when a car is setout or picked up it is immediately ready for the next train
- Since through freights do not need any waybills or paperwork they are ready for the next run as soon as they get to a staging yard or the end of their run

YOU DON'T NEED TO READ CAR NUMBERS!

National Conventions

RxRR 1.0 Great Lakes Express 2007 Detroit, MI

(Grand Rapids)

RxRR 2.0 Peachtree Express 2013 Atlanta, Ga (Griffin)

RxRR 3.0 Highball to Indy 2016 Indianapolis, IN (Westfield)

More Information

- groups.io carordersmrr@groups.io
 - "Apply" for membership
 - Discussions, Assistance, Files
 - Examples Coal, passenger ops
- NMRA Magazine
 - March 2012 (Hank Tenwolde)
- 2012 NMRA National Convention Clinics
- http://rxrr.webs.com (RxRR Web Site)
- OPSIG The Dispatcher's Office
 - Jan 2015 (Earl Hackett)