ProTrak Basics Manual Supplement

Introduction

This supplement is intended to be used alongside Doug Seymour's ProTrak Basics Manual (PTBM). All references (Chapter, Step, Figure and Appendix) are to those in Doug's PTBM. The goal is to clarify the effects of changes made to ProTrak from version 304 to version 348 (the most used new version).

It is intended to use the PTBM as a base modified by this document. Only areas which have changes will be discussed here. Some minor screen shot changes may not be mentioned. In most entries here the specific altered text is shown in underlined italics. Entire new text is not marked.

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Table of Contents

Forward	.3
Chapter 1 – Setting Up the Railroad Tombstone Data	
Chapter 2 – Setting Up Stations Fast Clock Settings Other Stations	4
Chapter 3 - Setting Up Staging Tracks	
Chapter 4 - Setting Up A Main Yard Actonvale Yard	.6
Chapter 5 – Setting Up Trains Setting the Number of Trains	7
Two Through Traffic Trains Line-Up A Train Reporting Location	8
Chapter 6 – Setting Up Customers Customers at Actonvale	
Chapter 7 – Setting Up Freight Cars	10
	тJ

Chapter 8 – Setting Up Waybills and Car-orders	13
Waybills	.13
Car-orders	.17
Chapter 9 – First Operating Session	19
Operating Session On Paper Only	.19
Train Movements	
Route Cars at Yards & Customers	
Update the railroad for the next session	
Chapter 10 – Next Operating Sessions	27
Session 27	.27
Session 27 Analysis	
Session 28	
Session 29 Analysis	
Summary	
Chapter 11 – More Car-orders and Opr. Sessions	
Establishing a Timetable	
Revising the Timetable	
Chapter 12 – Add Castle Rock and Run Sessions	
Adjusting the Timetable	
Changing Train Departure Times	
Scheduling Using ProTrak	
String Diagram Scheduling Timetable Scheduling	
Deleting a train from the ProTrak Scheduler	
-	
Chapter 13 – Basic Passenger Train Operations	
Additional Passenger Stations	
Setting the Default Location for Passenger Cars Adding Passenger Cars	
Adding a Passenger Train	
Scheduling the Passenger Train	
Assigning Passenger Cars to the Train	
Printing Schedules and String Diagrams	
Passenger Car Waybills	.74
Passenger Ops Switchlists	
Work Notes	
Appendix K - Timetables	78
Timetable 1	.78
Timetable 1 - Revised Timetable	
Timetable 2	
Timetable 2 - Revised Timetable	.84

Forward

Page ix **Second paragraph** Change to read:

This manual has been updated to ProTrak build 348 with a release date of April 4th 2017 $^{(1)}.$

Page ixFootnote 1Change to read:

It is important that you have the correct version of ProTrak installed.

Chapter 1 – Setting Up the Railroad

Tombstone Data

Page 1-1	Step 1	The window in Figure 1-1 does not appear
		in ProTrak v348. You will go directly to the
		window shown in Figure 1-2 for Step 2

Delete the second sentence in Step 1. Delete Figure 1-1.

Page 1-1 **Step 2** Change Step 2 to read:

2. You will be presented with the first of two windows where you will record information about the railroad. Figure 1-2 shows this window.

Pages 1-4, 5 **Steps 7 & 8** Add the following paragraph after Step 8.

In the "Operate on another Railroad" window (Figures 1-4 and 1-5) there is now a third button, "Delete home railroad". Its function is self-explanatory. We will not use this button.

Chapter 2 – Setting Up Stations

Fast Clock Settings

ProTrak now uses the term "System-time Clock" in place of "Fast Clock". All PTBM references to "Fast Clock" will now be "System-time Clock", except the one in step 5.

Page 2-1	Topic heading	Change the "Fast Clock Settings" to "System-time Clock Settings"
Page 2-1	Intro & Step 1	Change the words "Fast Clock" to "System-time Clock", 2 locations
Page 2-2, 3	Figure 2-1 & 2-2	Replace Figure 2-1 with the following:

Also Figure 2-2 will look the same but with the data entered. The new "Calculate Clock Ratio" button is for use with advanced operations (continuous operations?) and will not be used here.

4
System-time Clock Settings
Duration of a Session
Duration of Operating Session 5 + hours, 0 + minutes
System-time Clock Ratio Each session represents 8 hours, for a fast-clock ratio of 1.60
<u>Cancel Test clocks</u> Calculate Clock Ratio Apply
5 6



Page 2-2 **Step 2**

Replace Step 2 with the following:

 To bring up the <u>"System-time Clock Settings"</u> window, click on "Signals" on the ProTrak toolbar, then choose <u>"System-time clock settings"</u> from the dropdown list.

Page 2-2Step 6Modify step 6.

Step 6 should refer to the <u>"System-time Clock Settings"</u> window and instead of clicking "OK" you will click the "Apply" button.

Other Stations

Page 2-11Second paragraph

The column to ignore, "Milepost" is the fourth from last and we are not currently concerned with any of the last 4 columns.

Page 2-11 **Last paragraph** Modify the second sentence as follows and add the Comment on elevation data at the end of the paragraph:

Double clicking on entry 2 will open the "Changing station: 2 of: $\underline{6}$ " window, since we just deleted the extra station.

Comment on elevation data

For both the "interval" and "at Station" ProTrak will ensure the distance, average grade and 'west' end elevation are consistent. This can result in previously entered values (especially distance) being changed. Ensure all 3 are correct before continuing.

Page 2-12, 13 Step 6

Change the words "Fast Clock" to "System-time Clock", 4 locations

Remember Fast Clock is now called System-time Clock.

Chapter 3 - Setting Up Staging Tracks

No corrections.

Chapter 4 - Setting Up A Main Yard

Actonvale Yard

Page 4-4 **Step 13** Change the second to last sentence to read:

Note that the maximum number of "blocks" <u>of</u> cars in any one track is 3.

Page 4-5Step 14Add the following to Step 14

The "Cars setoff" and "Cars classified" columns show yard operations data and their values do not affect our setup. The "Show All Push-to Data" button changes the window to show detailed operations data which again does not affect us.

Note: These columns would also be in Figure 4-1

Page 4-6 **Figure 4-4** Replace Figure 4-4 with the following:

ŧ	Yard name	City/State	SPOT	Tracks	Capacity	Cars setoff	Cars classified	Storage Yard
0	ACT Yard	Actonvale	ACT-Yd	5 tracks		0	0	
4	Interchange	Second Station	ST202y		18			

Figure 4-4

Chapter 5 – Setting Up Trains

Setting the Number of Trains

Page 5-1, 3 Figures 5-1 & 5-4 Comment

It is okay if numbers in this window do not match your data as long as the ending value for Train jobs is 2.

Two Through Traffic Trains

Page 5-6 Mislabeled Steps 10 and 11 Renumber steps

Starting with the second Paragraph that begins "We've got the two ends of..." The paragraphs should be numbered as follows:

- 10. We've got the two ends of the train's travel, but need to establish one more thing. We also need to change the yard where the cars are to be delivered and/or picked up. Click on the 2nd "Yard Blocking" (tt) data field. The center panel should now show six "Possible Train Yardsidings". The first of these should be "ACT-Yd". Double-click on this and the 2nd "Yard blocking" data field will be updated to read "ACT-Yd".
- 11. Below the "Terminal station" data field is the control for when the train runs, the "Departure at ... on" (tt) data fields. We'll leave the time in the "Departure at" portion at "1:01 AM" and the "on" portion at "Daily". (If your version does not default to these values, adjust the values to make them agree.)

For now, we'll leave the balance of the data fields unchanged ⁽²⁾. As we get further along we'll look at some of them and make some changes.

Figure 5-8 shows what your finished window should look like. (The information in the center panel may be different depending on what data field your cursor is placed in).

Line-Up

Page 5-8 **after Figure 5-9** After Figure 5-9 and the sentence 'Again, click on "OK" ' insert the following new paragraph and Figure 5-9a:

After clicking "OK" in the "Some trains do not run today" message window or if you did not have it open you may see the "Lineup is current" message window. Click "Yes" to force the new line-up.

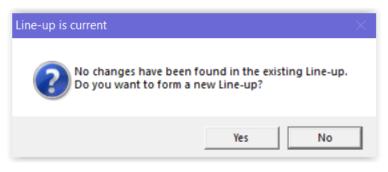


Figure 5-9a

A Train Reporting Location

Page 5-16Step 3Add new step 3d as follows:

d. The right panel disappeared. It will reappear when we click on data fields that have selection lists.

Chapter 6 – Setting Up Customers

Customers at Actonvale

Page 6-5 **Figure 6-4**

Replace Figure 6-4 with the following:

Operations Mo	de	Car Assignments for Loading
Session mode	Complete all trains, then do Daily Summary 📀	Predictive Routing of cars for prospective loading
Daily	Operate for 24 hours then do Daily Summary 🔘	Allow for non-waybilled cars to be routed towards customers
Continuous	Operate continuously C	Returning empty Appalachian and Illinois coal hoppers-
– Demurrage – – –		Apply C411, C421, C431 Service Orders to coal-loading hoppers
Customers relea	ase cars meeting demurrage time (2nd day) 📀	
Customers relea	ase cars 11:59 PM same day as placed 💦 🔿	For customers: Load cars following Car Service Rules
		Load cars found in staging, regardless of location ("Classic")
	Car Distribution (Daily Summary)	Coad cars in staging by train standing order
Time in morning	at which Car-Distribution occurs 3:00 AM	C Do not load from cars in staging (Load only from online empties)
Delending of	Assisted to Changing	Loading home road cars offline
_	Arrival In Staging tal unloading/re-loading of cars arriving in staging	Allow home road cars to be routed offline for online customers
		Specific movements for a car: "Targeted waybills"
		Allow for waybills to be "targeted" to a specific car 🛛 🔿 Yes 💿 N
Yard trimming a	and switching uring classification at "Yd" yards	
		CarID and other computers
	Cut Lists"), then manually clear when classified	CarID: This railroad uses "bar-code" readers for car identification
	n direction changes, are flipped on trimming	CarID: This railroad uses "RFID" readers for car identification
Allow trains to opt	tionally do setoffs/pickups. Or set train capacity 🗾	Remote yard control computer(s) in use
Train-consist re	eport {"Switchlist"}, Pickups & Extra cars	This computer controls DCC or signaling hardware
Print all train cons	sists in "locomotive to caboose" order	
For turn-jobs, sho	w only pickup cars for present "leg" of job 🛛 🔽	ProTrak Program Options
For road jobs, tha	t do not service customers, do not print pickups 📄	Long lists index to last opened list item
Allow setouts/picl	kups at customers regardless of train length	Automatically backup files before and after Daily Summary
Allow intra-plant p	ickup/setoffs between reporting locations	This railroad uses FRA speed classifications
		On waybill data entry, check whether customer is new industry
Routing To De	stinations in Staging	Housekeeping
Allower an excision in	ased on track-clearance (Plate)	Housekeeping, cleans up unneeded files Dust and Sweep

Figure 6-4

Page 6-5 **Step 11b**

Replace Step 11b with the following:

b. You may see a check in the box following the statement "Long lists index to last opened list item" <u>(right-hand panel of the window,</u> <u>"ProTrak Program Options" section, top item</u>]. This causes windows such as the "Customers and Loading Points" window to remain unchanged until such time as the window is closed and re-opened.

Page 6-25 **Before Step 1** Insert process heading just before step 1.

"Deleting Unneeded Customers".

Chapter 7 – Setting Up Freight Cars

Setting the Default Yard

Page 7-1First ParagraphUnder Setting the Default Yard before Step1, add 2 paragraphs as follows:

Additionally in chapter 6 we created two special customers, a weigh scale and a reporting point. These customers have spot codes ending in specific characters, "y" for the reporting point and "z" for the weigh scale. There are other special spot codes which we will not be using, at least for now. To prevent unexpected events we will turn off 3 of these in Step 5 below.

Both the default yard and the special spot code status are set in the same window.

Page 7-2 **Figure 7-1** Replace Figure 7-1 with the following:

Note: There are now options for multiple home railroads and secondary default yard, neither of which will be used.

SPOT or ZTS (Zone/Track/Spot) Code Formats			ĺ
Interchange track codes			Special spot codes
Primary receiving track (can be used for delivery)	98	•	"x", cleaning track used (• Yes C No
Primary delivery track (also can be used for receiing)	99	•	
Second receiving track	97	•	<mark>"r", car RIP track used</mark> ● Yes ○ No
Second delivery track	96	•	"", car repair shop used C Yes 💿 No
Default Destinations for empty, un-assigned cars— - Home-railroad owned cars			"z", weigh scales in use • Yes C No
An empty freight car's default destination	•		"s" is staging track
A passenger car's default destination ACT-01	•		"t" is a team track, or general use track
Optional second empty freight car default destination	1		"y" is a yard track, or set out track
Empty cars are sent to second yard WEST of		41	"L" is a lead track
Private cars Default home point for empty un-assigned private car not	valid 💌		
Car ferry on main track	ck.	C Yes	No No
Narrow Gage Subdivision			
Railroad has a narrow gage subdivision. Lading is transfered	d between cars	C Yes	s 💿 No
<u>Cancel</u> <u>Multiple Home Railroads</u>	<u>U</u> nlock		Apply

Figure 7-1

Page 7-2 **Step 3** Replace Step 3 with the following:

3. If you look at the "<u>An empty freight car's default destination</u>" data field, you may see "ACT-Yd". If "ACT-Yd" is not displayed, click on the dropdown arrow beside the data field and select "ACT-Yd" from the list. Figure 7-3 shows the window after this change.

Page 7-2 **Figure 7-3** Replace Figure 7-3 with the following:

nterchange track 🛛	codes				- Special spot	codes —	
rimary receiving track	(can be used for del	ivery)	98	-	"x", cleaning tra	ack used	
rimary delivery track	(also can be used fo	r receving)	99	•			
econd receiving trac	K		97	•	"r", car RIP trac	ck used	
econd delivery track			96	•	"r", car repair sł	hop used	C Yes 🖲 No
efault Destinatior Home-railroad own	is for empty, un-as: ned cars	signed cars]	"z", weigh scale	es in use	⊙ Yes ⊂ No
An empty freight car's	default destination	ACT-Yd	-		"s" is staging	track	
A passenger car's del	ault destination	ACT-01	•				general use tracl
Optional second empt	y freight car default de	stination		-	"y" is a yard tı "L" is a lead tı		set out track
Empty cars are sent to	second yard WEST	of	1	~		Iduk	
Private cars Default home point fo	r empty un-assigned pr	ivate car not	valid 💌]			
ar ferry on main tr							
car ferry is use to mo	ve cars between statio	ins on main tra	ck.	O Ye	s 💽 No		
	ivision						
arrow Gage Subd	المراجع المراجع والمتكر والمطارحة المراجع والمراجع	ing is transfere	d between ca	ars. 🔿 Ye	s 💽 No		
ailroad has a narrow	gage subdivision. Lad						
	gage subdivision. Lad						



Page 7-3 **Step 4**

Replace Step 4 with the following:

4. Similarly, the data field "<u>A passenger car's default location</u>" should be set to "ACT-01" if it is not already set to that. Remember that the passenger station is always track 01. (For now, we can ignore the remainder of the items in this window.)

Page 7-3 **Step 5** Replace step 5 with new steps 5 and 6 as follows:

- 5. In the upper right panel (labeled "Special spot codes") there are 8 listings. Four of these can be enabled or disabled. We want to turn off 3 of these. Click on the "No" radio button for the first three of these:
 - "x", cleaning track used
 - "r", RIP track used
 - "r", car repair shop used

The fourth ("z", weigh scales in use) should have "Yes" selected.

6. Once completing the changes your window should match Figure 7-3a. For now, we can ignore the remainder of the items in this window. Click on "Apply" to finalize the changes. The "SPOT or ZTS (Zone/Track/Spot) Code Formats" window will close and we can continue.

Page 7-3 **New Figure 7-3a** After new Step 6 Insert figure 7-3a as follows:

SPOT or ZTS (Zone/Track/Spot) Code Formats			
Interchange track codes			Special spot codes
Primary receiving track (can be used for delivery)	98 _	•	"x", cleaning track used C Yes 📀 No
Primary delivery track (also can be used for receivng)	99 -	•	
Second receiving track	97 .	•	"r", car RIP track used C Yes ⊙ No
Second delivery track	96 -	·	"Y", car repair shop used C Yes 📀 No
Default Destinations for empty, un-assigned cars — - Home-railroad owned cars —			"z", weigh scales in use 🛛 💽 Yes 🔘 No
An empty freight car's default destination ACT-Yd	•		"s" is staging track
A passenger car's default destination ACT-01	•		"t" is a team track, or general use trac
Optional second empty freight car default destination		-	"y" is a yard track, or set out track "L" is a lead track
Empty cars are sent to second yard WEST of	J	-	
Private cars Default home point for empty un-assigned private car not v Car ferry on main track	alid 🔽		
A car ferry is use to move cars between stations on main track	¢.	C Yes	No
Narrow Gage Subdivision			
Railroad has a narrow gage subdivision. Lading is transfered	between cars.	C Yes	No No
Cancel <u>M</u> ultiple Home Railroads			

Figure 7-3a

Adding Cars

Page 7-11 Figure 7-14a

The numbered arrows in are in error and should appear as shown here. Replace Figure 7-14a with the following:

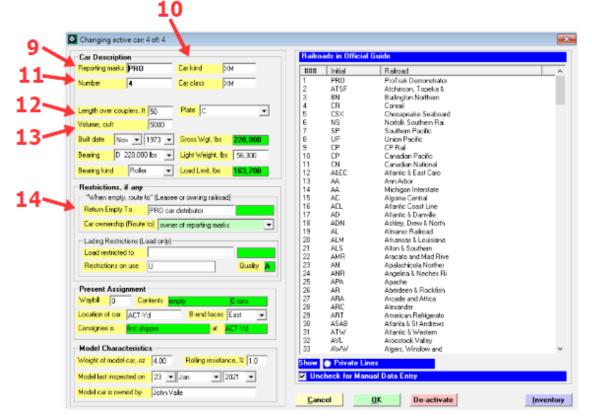


Figure 7-14a

Page 7-15 **Step 16** Add the following sentence to Step 16:

The "Return Empty To" data field could be blank or show "PRO car distributor" or "Home road via connections".

Chapter 8 – Setting Up Waybills and Car-orders

Waybills

Page 8-5 **Step 2d**

Change the first 2 sentences as follows. The button "Show waybills in use" is incorrect.

d. The button "Show ordered waybills" will show which waybills are in use in car-orders. When you click on the "*Show ordered waybills*" button, the second column will indicate show which waybills are in use by displaying 'Ordered' or 'OCS'.

Page 8-6 Step 3

Step 3 should refer to Figure 8-2. Replace the second sentence with the following:

Refer back to Fig. 8-2, if you clicked on the "Show ordered waybills" button close the window and reopen it (see Step 1 above). We'll be adjusting the shipper, the consignee, the type of car required, the load/commodity and the shipping options.

Page 8-7Figure 8-4Replace Figure 8-4 with the image below:

The only change is the line marked as "New". We will not be changing this entry. This "New" line also will appear in Figures 8-5, 8-6, 8-8, 8-9, 8-10 and any "Uniform Bill of Lading: Not Negotiable: xx of: yy" window. Only the new Figures 8-8a and 8-10 will be shown here.

		-	-		available, of: 73							
Shipper	and Con	sginee				n I 🔳	Manual Da	ata Entr	,			
Shipper	city	Fi	st Station									
	company	, [C	ountry Propane	9								
	siding nu	mber FS	T16a									
Consigne	e city	Fi	st Station		_							
	company	Te	eam track		_							
	siding nu	imber St	LO3s									
Commod	lity/Ladin	g and R	equired Car	r								
Load/Cor	mmodity	propane		STCC	29 121 11							
Ordered o	car kind	T112J										
caled we	eight	62.0	tons									
Volume:		2952	gallons									
-	g and Cha e handling	arges										
Perishable	-	-	JFMAMJJA	SOND								
Perishabk Ship only	e handling	nths	JFMAMJJA One sessio									
Perishabl Ship only Make use	e handling during mor	nths pment	One sessio	on in 2	▼ % division		New	(lea	ive un	nch	ecke	d)
Perishable Ship only Make use Charges \$	e handling during mor e of this shi \$ <mark>545.57</mark>	nths pment	One sessio	on in 2	▼ % division		New	(lea	ive un	nch	ecke	d)
Perishable Ship only Make use Charges S Routing	e handling during mor e of this shi \$ <mark>545.57</mark>	pment	One sessio	on in 2	▼ % division		New	(lea	ive un	nch	ecke	d)
Perishable Ship only Make use Charges S Charges S Routing Shippers	e handling during mor e of this shi \$ 545.57	nths pment @0	One sessio	on in 2 100	▼ [*] division		New 5	(lea	ive un	nch	ecke	d)
Perishabl Ship only Make use Charges \$ Charges \$ Routing Shippers Demurrag	e handling during more e of this shi 545.57 routing via ge free load	nths pment @0	One sessio 44 /owt @ tions 24 h	on in 2 100			New 5	(lea	ive un	nch	ecke	:d)
Perishabil Ship only Make use Charges S Routing Shippers Demurrag Continuin	e handling during more e of this shi \$ 545.57 routing vi ge free load g in transit	nths pment @[0. a connec	One sessio	on in 2 100 ours			New 5 Show onl	•		ich	ecke	:d)
Perishable Ship only Make use Charges \$ Charges \$ Continuing Continuing Car is clear	e handling during more e of this shi \$ 545.57 routing vi ge free load g in transit aned at cu	a connecting time	One sessio 44 /cwt & tions 24 h	on in 2 100 ours railroad cle			5	•		ich	ecke	

Figure 8-4

Page 8-11 **Step 10, Fig. 8-8a** Add the following to step 10 including new Figure 8-8a

A new data field labeled "Shipper is on railroad" (tt) will appear below the "Shipper siding number" data field. This allows you to restrict what cars can be loaded for this BoL by their reporting marks. We will leave this field blank. Your window should now look like Figure 8-8a.

Editor's Note: Doug mentions this on page 8-16, but we felt it important to mention it here where it will first be seen.

	nsginee –				Staging	g Siding Num	bers	
Shipper city	K	rbel, CA				SPOT	7	Reci
compar	ny Si	mpson Timbe	r Co		1	NYC01s	City New York, NY	Regi 1
siding n	umber S1	L03s 🛛	-	10	2	CHI02s	Chicago, IL	2
Shipperis on railro	ad		-	10	3 4	STL03s SEA01s	St Louis, MD Seattle, WA	3 5
Consignee city	Fi	st Station						
compar	ny Te	am track.						
siding n	number S1	L03s						
Commodity/Ladi	ng and R	equired Ca	u					
.oad/Commodity	propane		STCC	29 121 11				
)rdered car kind	T112J							
caled weight	62.0	tons						
		_						
	2952	galons						
landling and Cl	harges —	galons						
landling and Cl Perishable handling	harges — 9	galons JFMAMJJ	ASOND					
/olume: landling and Cl Perishable handling Ship only during m Make use of this st	harges — g onths			-				
landling and Cl Perishable handling Ship only during me Make use of this st	harges — g onths hipment	JFMAMJJ. One sessi	on in 2	▼ % division	.9			
Fandling and Cl Perishable handling Ship only during m Make use of this st Charges \$ 545.5 Routing	harges	JFMAMJJ One sessi 44 /cwt	on in 2		9			
Handling and Cl Perishable handling Ship only during me Make use of this sl Charges \$ 545.5 Routing Shippers routing	harges	JFMAMJJ One sessi 44 /cwt	on in 2		9			
landling and Cl Perishable handling Ship only during mu Make use of this st Charges \$ 545.5 Charges \$ 545.5	harges	JFMAMJJ. One sessi 44 Zowt	on in 2	% division	9			
landling and Cl Perishable handling hip only during mo take use of this sl Charges \$ 545.5 Couting Shippers routing	harges g onths hipment 7 @ 0. via connec ading time	JFMAMJJ. One sessi 44 Zowt	on in 2 @ 100	% division	< Show (Industry	ual Data Entry	

Figure 8-8a

Page 8-13 Step 22

Add the following sentence to the end of step 22.

Remember we will leave the "Car is cleaned at customer" unchecked.

hipper and Co	nsgine	e				Wanh	ill Freque	ancu .
Shipper city		Korbel, CA					in require	
compa	iny	Simpson Timbe	er Co	-		###		Determines have for a smith
		STL03:				0	1	Determines how frequently this shipment (waybill)
-		516058				ŏ		occurs.
Shipper is on railro	ad					0	2	If 'Every time ordered' is
Consignee city		Berwick				0		selected, shipment occurs
compa	any	North Star Eng	Lmbr			0		every session, or as per customer's car-orders.
	-	BER-10				ŏ	3	Or, if 'One session in 3'
siding	number	BEN-10				0	-	every 3rd session.
Commodity/Lad	ling and	Required Ca	ər — — — — —			0	NB	If you set rates too high
Load/Commodity		sional lumber		24 219		0		ProTrak automatically reduces frequency to
				~ ~ ~ ~ ~	-	ŏ		account for loss of
Ordered car kind	FBC					ŏ		business.
Scaled weight	63.0	tons	Liveload	0.0	oz	0	*	To recover business, use
						0		suggested rates.
	60.0					0	Bare	If shipment is 'seasonal'
Inside Length	60 ft		•			ŏ	nale	and frequency is set low.
						ŏ		shipment might occur only
						Ō		once in twenty years, or
Handling and C	harges					0		less, of operating your
Perishable handlir	na					0		railroad. ProTrak increases
	-		ACOND			0		frequency so that shipment will occur (occasionally).
Ship only during n	ionths	JFMAMJJ	ASUND			ŏ		will occur (occasionally).
Make use of this :	hipment	E very time	e ordered	-				
Charges \$ 554.	6	0.44 /cwt	@ 100 ³	% division				
004.		0.44	- 1100 ·	e arrierer				
D 1'								
Routing								
Shippers routing	via conr	lections						
Demurrage free k	ading tin	ne 24	hours		-			
					_	<		
		_	_					
Continuing in tran	ait .	0						
containing in dati	customer	. Car not sent t	o railroad clean	ing track.	-1	Unc	heck for	Manual Data Entry
Car is cleaned at								
-	_						. 1	C
-	ible ca	rs for this shi	pment			3000		Save Save an
Car is cleaned at	ible cu	rs for this shi	pment			Cance	<u> </u>	Save Save an
Car is cleaned at	sible ca	rs for this shi	pment			Cance	<u> </u>	Save Save an

Page 8-14 Figure 8-10

Replace Figure 8-10 with the following:

Figure 8-10

Car-orders

Page 8-35 Figure 8-33

Replace Figure 8-33 with the following, to only show the 9 customers we have.

No.	Firm name	City/State	Siding name	SPOT	Capacity	Occ	Car-orders	Switching train	Blk#
1	Acyonvale Station	Actonvale		ACT-01	5 PAX				1
2	Weigh scale	Actonvale	weigh scale	ACT08z	Cars: 2	0		202	22
3	Team track	Actonvale	team track	ACT-14	Cars: 2	0	7 for 8 cars	202	19
4	Twin State Fruit	Actonvale	door spot	ACT17a	Cars: 1	1	4	202	F-2
5	Twin State Fruit	Actonvale	platform loading	ACT17b	Cars: 1	0	2	202	F-5
6	ACT Yard	Actonvale		ACT-Yd	5 tracks				
7	Wilson & Sons Scrap Metal	Berwick	scrap iron /40 21	BER-11	Cars: 3	0	1 for 3 cars	202	29
8	North Star Eng. Lmbr	Berwick		BER-10	Cars: 4	0	7 for 9 cars	202	32
9	reporting point	Berwick	reporting point	BER02y	reporting point	0			

Figure 8-33

Page 8-37 Figure 8-36

Replace Figure 8-36 with the following, to correct arrows for steps 9 and 10.

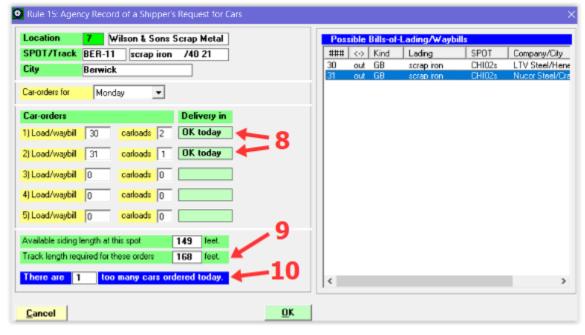


Figure 8-36

Page 8-41 **Figure 8-41**

Replace Figure 8-41 with the following, to only show the 9 customers we have.

No.	Firm name	City/State	Siding name	SPOT	Capacity	Occ	Car-orders	Switching train	Blk#
1	Acyonvale Station	Actonvale		ACT-01	5 PAX				1
2	Weigh scale	Actonvale	weigh scale	ACT08z	Cars: 2	0		202	22
3	Team track	Actonvale	team track	ACT-14	Cars: 2	0	4	202	19
4	Twin State Fruit	Actonvale	door spot	ACT17a	Cars: 1	1	none	202	F-2
5	Twin State Fruit	Actonvale	platform loading	ACT17b	Cars: 1	0	none	202	F-5
6	ACT Yard	Actonvale		ACT-Yd	5 tracks				
7	Wilson & Sons Scrap Metal	Berwick	scrap iron /40 21	BER-11	Cars: 3	0	2 for 3 cars	202	29
8	North Star Eng. Lmbr	Berwick		BER-10	Cars: 4	0	4	202	32
9	reporting point	Berwick	reporting point	BER02y	reporting point	0			

Figure 8-41

Page 8-41, 42 Step 19.

Move Step 19 to after the second paragraph on page 8-42 (begins "ProTrak has calculated...:), so that the "Car-orders: Customers and Loading Points" window is still open as you read the information in the first 2 paragraphs.

Chapter 9 – First Operating Session

Operating Session On Paper Only

Page 9-9 Figure 9-7 Figure 9-7 now appears as shown here. It now includes a line describing the unusual situation in which "No" would be selected.

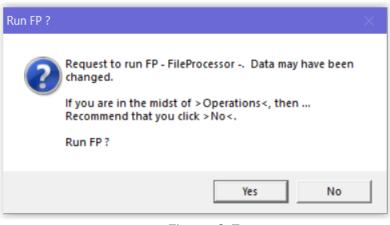


Figure 9-7

2nd Figure 9-7 Page 9-9 The second figure on the page is incorrectly labeled as Figure 9-7, relabel it "Figure 9-8

Page 9-12 Figure 9-11

Replace Figure 9-11 as follows. This corrects the step number references.

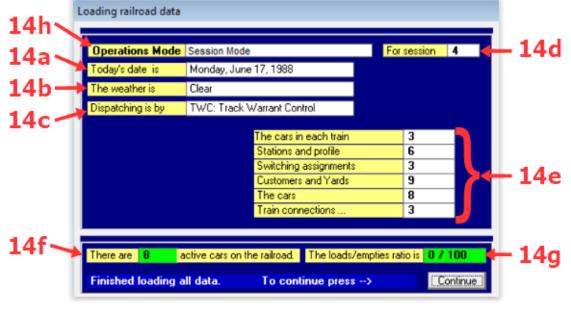


Figure 9-11

Page 9-13 **Steps 14.a. - e.** Change steps 14.a through e to the following:

- a. If you are using "computer dates" then "Today's date is" the date the Daily Summary was last run, not today's actual date ⁽⁵⁾. <u>Step 18</u> will show you how this can be changed.
- b. "The weather is" is also self-explanatory. <u>Steps 20 and 21</u> will show you how this can be changed.
- c. "Dispatching is by" describes how the trains are dispatched. <u>Steps 20</u> <u>and 22</u> will show you how this can be changed.
- d. "For session" is the session number for the current session ⁽⁶⁾. ProTrak automatically increments this number when the end-of-session process is run. We'll talk about the end-of-session process later. You can reset the session counter to any value between 1 and the value shown and we'll look at how to do that in <u>Step 19</u>.
- e. The following items that have been counted or computed by ProTrak using data you've previously entered ⁽⁷⁾:
 - i. "The cars in each train" this is a count of all cars divided by the number of trains
 - ii. "Stations and profile" this was obtained from the station data you entered in Chapter 2 (See Figure 2-11)
 - iii. <u>"Switching assignments" is related to the number of trains that</u> <u>will run during the session.</u>
 - iv. <u>"Customers and Yards"</u> this is a count of all customers, <u>which</u> <u>includes yards, reporting points, stations and special spots. We</u> <u>defined these in Chapters 4 and 6.</u>
 - v. "The cars" this was obtained from the car data you entered in Chapter 7 (See Figure 7-33) but shows only the active cars
 - vi. "Train connections" this was obtained from the train data you entered in Chapter 5.

Page 9-14 **Step 14.h.** Add new step 14.h. as follows:

 "Operations Mode" will show "Session Mode". This indicates we are using traditional operating sessions. ProTrak now allows for advanced operations in Daily and Continuous modes, both are beyond the scope of this manual. The Operations Mode is set in the ProTrak Program Options window (Files->ProTrak program Options, Housekeeping). Always leave this set to Session Mode.

- Page 9-14 **Step 15, Fig 9-12a** Replace Step 15 with new Step 15 and insert new Figure 9-12a as follows (note: Figure 9-12 will be after new Step 15 and Figure 9-12a)
 - 15. To exit the "Loading railroad data" window, click on "Continue". Depending on what changes have been made you may see the window shown in Figure 9-12a. This indicates ProTrak needs to update its car routing files and we will click on the "Yes" button.

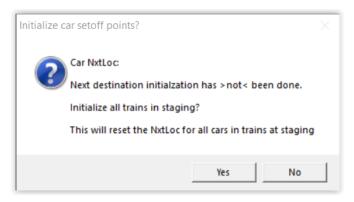


Figure 9-12a

Your ProTrak main window will now be the "ProTrak Operations on ProTrak Demonstrator" window. One of the things that you should notice is that the ProTrak toolbar has now changed. We'll refer to this new toolbar as the ProTrak Operations Toolbar and in future we'll refer to the toolbar that is displayed when we're not in operations as the ProTrak Standard Toolbar. This will hopefully minimize confusion. The second thing to notice is the display of a clock on the screen as shown in Figure 9-12. This shows the "current" time – the System-time Clock time.

Page 9-14 **Step 16**

Change the first sentence in step 16 to reference step 14 as follows:

16. We can change a number of items relating to the operating conditions on the railroad, some of which were described in <u>step 14</u>.

Page 9-17 Figure 9-17

Replace Figure 9-17 as follows. This corrects the step number references.

D Today's Operating Conditions	X
General	
Today is, using the schedule of trains for Monday	
The weather is forecasted to be Clear	→ +2
FRA track class is: 3 Maximum train speeds are 40 mp	h freight
60 mp	h passenger
Today, the Rules Examiner is Visitor3	-
Dispatching	
The method of train dispatching is TWC: Track Warrant Control	
ABS signals are in use on Middle O Yes	© No
Train crews	
Apply Hours of Service Law of 12 hours in 1988 to crews?	Yes 🕟 No
Crew sizes are: 4 💌 men on through trains 4 💌 men on sv	vitching trains
Train weight	
rain weight is scaled by train length in cars. Era average-train-length is	70 cars.
Average train length (cars) 35 👻 so each car's weight counts as	2.0 cars.
Car factor (Equated Tons) is based on an 'design' operating speed of	40 👻 mph.
Carractor (Equated Foris) is based of an design operating speed of	
Outside helper zones, if a train is too heavy: 🕥 number of cars is red	uced.
 more motive-power is 	assigned.
Switching	
At customer spurs, switching is done by turn 💽 for both trailing and fa	cina points.
C for facing points on re	
	turn only.
	turn only.
Fuel and Water	turn only.
Fuel and Water — Automatically print "out-of-fuel or water" notices	turn only.
Fuel and Water — Automatically print "out-of-fuel or water" notices	turn only.
	Apply



Page 9-17Step 21Change the first sentence in step 21 to
reference step 14b as follows:

16. The item we looked at in *step 14b* was "The weather today is".

Page 9-17	Step 22	Change the first sentence in step 22 to
		reference step 14c as follows:

16. The item we looked at in *step 14c* was "Dispatching is by".

Page 9-19 **Step 4** Add the following to the end of step 4:

The window title now includes the prefix "Print Switchlist: ..." This is because we opened the window from the Switchlist->Print a Switchlist menu option. For example, if we had opened the "Current Trains in Lineup, ..." Window from the Train Movements->Report Train Location menu option the prefix would be "Reporting Trains: ...". The significance of the prefix is that it tells you what action will occur if you double click on the line for a train. Other actions are possible using the buttons on the bottom left of the window (see step 12 below).

Page 9-19 **Figure 9-18** Replace Figure 9-18 with the following:

PRD P	PRD Print Switchlist: Current Trains in Line-up, as of: 12:01 AM									
#	Symbol	Op RR	Departs	->	Location	Status	Nxt Yard	Cars	Pick	Xtra
1	SLCH		1:01 AM	•	STL03s		ACT-Yd		2	
2	202		7:00 AM	Е	ACT-Yd		BER02y	1		
3	CHSL		9:00 AM		CHI02s		ACT-Yd			
T	rain List	Rep	ort <u>M</u> a	rk tra	in closed				<u>(</u>	<u>C</u> lose

Figure 9-18

Print Switchlist: Current Trains in Line-up, as of: 12:01 AM # Symbol Op RR Departs -> Location Status Nxt Yard Cars Pick Xtra SLCH 1:01 AM STL03s ACT-Yd Closed 1 23 202 7:00 AM Е ACT-Yd BER02y 1 CHSL 9:00 AM CHI02s ACT-Yd **Train List** Report Mark train closed <u>Close</u>

Page 9-20 Figure 9-19

Replace Figure 9-19 with the following:

Figure 9-19

Page 9-20Step 7bReplace Step 7b with the following:

b. Three buttons at the bottom of the window, "Train List" ⁽¹⁸⁾, "Report" and "Mark train closed" have been disabled.

Page 9-20 **Footnote 17** Replace Footnote 17 with the following:

¹⁷ When you look at the printed switchlist, you will see that it shows today's month and *day*. If you look back at Figure 9-14, you will see in the section marked "Operating Date" that there are two check boxes marked "Use computer Month ... Day". These are both checked. The reason for printing the real month and day is that if you have more than one copy of a switchlist, you can determine which is the most current. This may happen if you continue to run sessions as "Monday" and don't destroy older copies of the switchlist(s).

Page 9-21 **Step 8c and 8u** Add the following to the end of both Step 8c and Step 8u:

In newer versions of ProTrak the entry in the footer will be "NEW SWITCHLIST Pickup at: ..."

Page 9-21 **Step 8d** Add the following to the end of Step 8d:

In newer versions of ProTrak the entry for "Throttle" may be changed to a "Consist #" entry.

Page 9-23 **Step 9d** Add the following to the end of Step 9d:

If your switchlist has the entry for "Consist #" its value is based on assigned locomotives, which we have not done.

Page 9-23 **Step 9e** Add the following to the end of Step 9e:

The clearance # format is dd-xxx (2 digit day and 3 digit sequential number) and may not be the same as in the examples.

Page 9-23 **Step 9f** Add Point 8n to the list of points at the start.

Page 9-24 **Step 13** Replace step 13 with the following:

- 13. Here's where we can decide if the train needs to be re-reported.
 - a. As indicated in para 10, examine the cars listed in the right hand panel of Figure 9-20 to make sure they match those in your train. In our case there is one car listed.
 - b. Clicking on the "Train list" button at the bottom of the window will cause the switchlist to be printed. This switchlist can be found As Figure G-2 in Appendix G.
 - c. Additionally, you may see the message shown in Figure 9-20a. We will normally not print this list, so click "No". If you want to see the printout it is okay to click "Yes", however we will not discuss it here.
 - d. An examination of the switchlist shows the car to be a GSVR gondola consigned to Willsons. At this point we could simply click on "Close" and go back to the "Current Trains Line-up..." window, but so that you understand the process, we'll proceed as if there were cars in the train.
- Page 9-25 **Figure 9-20a** Insert the following as new Figure 9-20a:

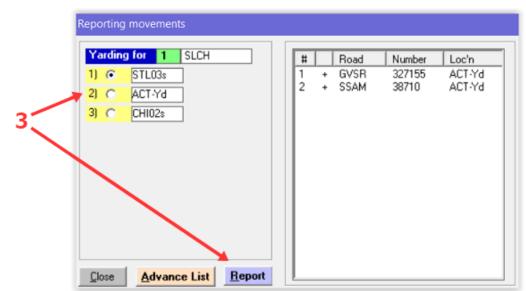


Figure 9-20a

Train Movements

Page 9-28 **Steps 1a, b & c** Replace steps 1a & b with the following:

- a. First, the "Report" button and "Train List" button have switched places – with "Report" now on the extreme left side rather than towards the middle. This signifies that we are working with Train Reporting, rather than Printing Switchlists.
- b. Since we haven't selected a train yet all of the buttons with the exception of the "Close" button are disabled. This includes the third button "Mark train closed", which we not use at this point.
- c. Also, the prefix now shows "Reporting trains: ..."



Page 9-29 **Figure 9-26** Replace Figure 9-26 with the following:

Figure 9-26

Route Cars at Yards & Customers

Page 9-33Figure 9-30Note: The window title will include the prefix
"Preview Switchlist: ..."

Page 9-33 **Footnote 28** Replace Footnote 28 with the following:

²⁸ Notice that this window looks familiar. The key to determining that this is the switchlist preview version of the "Current Train in Line-up..." window is the "Preview Switchlist: ..." prefix and that only one button appears at the bottom of the window – "Switchlist"

Page 9-36 **Figure 9-33** Replace Figure 9-33 with the following:

Yarding for 2 202 1) • ACT-Yd 2 2) • BER02y < turns

Figure 9-33 Page 26

Page 9-36 **Step 12** Change the first sentence to the following:

As you can see in Figure 9-33, there are three options –"Close", "Advance List" and "Report" ("Advance List" will preview the switchlist, in this case for 202 at ACT-Yd).

Page 9-37, 38 **Step 14** Change Step 14 to the following:

14. Let's go back and look at the "Reporting Movements" window for train 202. Double click on train 202 and the "Reporting Movements" window will re-open. As you can see, once we reported train 202, <u>the "Advance List" button at the bottom of the left hand panel of the "Reporting movements" window is now labeled "Train List"</u> and allows us to preview the switchlist for train 202 at this point in its travel. Go ahead and click on it if you want. It is similar to the one that we viewed in Figure 9-31. If you viewed the switchlist, click on "Close" to close the <u>"Preview a Switchlist"</u> window.

Page 9-38Step 15Add the following to the end of step 15:

Remember from steps 3 and 4 above (pages 9-29, 30) you will need to "Print Cutlist and Classify" when the "Classify or Hold" window appears.

Update the railroad for the next session

Page 9-42	Step 3b	Add the following to step 3b, between the
		first and second sentences:

If the "Reports to print" dropdown is not visible, ensure the "Complete update, ..." radio button in the lower portion is selected.

Page 9-42 **Step 3c** Add the following paragraph to step 3c:

A new button "Reset trains, to origin ..." opens a new window that allows you to wholly or partially undo the session and is also an advanced topic that we will not cover here.

Chapter 10 – Next Operating Sessions

Session 27

Page 10-3Step 6Add the following to the end of step 6:

If you see the "Initialize car setoff points?" window (see Figure 9-12a), click "Yes" to ensure car routing files are correct.

Page 10-4	Step 8	Change the number of the step to "7a."
ruge io r	otep o	

Page 10-4After new Step 7a.

Insert new Step 8 and Figures 10-3a through 10-3f as follows (to page 32):

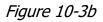
- 8. While not common ProTrak can occasionally lose track of a car's location and routing, these are called lost cars. ProTrak will 'move' lost cars to the default yard (ACT-Yd) even though they are likely not physically there, except in the case of cars just added to ProTrak which are initially treated as lost cars, despite being correctly located at the default yard. Fortunately ProTrak has a way to identify lost cars and a way to correct their location.
 - a. It is a good idea (but not required) to check for lost cars as you start a session and here is how.
 - i. On the ProTrak Operations Toolbar, click on "Yardmaster" then select "Show classified cars" from the dropdown list. This opens the "Cars Classified and Routed Today" window.
 - In the lower right click on the "Default Yard Cars" button to open the "Cars moved to the Default Yard" window (Figure 10-3a). Most, if not all of our cars will be listed since when we enter a car it will initially be placed in the default yard. To sort the list, click on the column header

No.	Initials	Number	Kind	Moved from	Default Yard	Routine	Location	Time	Day
	THB	3667	XM	ACT-Yd	ACT-Yd	EditCar	769	12:01 AM	4
2	EBAX	6008	T103	NYFS	ACT-Yd	FP:Lost	1577	12:01 AM	4
}	WC	55161	GB	ACT-Yd	ACT-Yd	EditCar	769	12:01 AM	4
	GVSR	327155	GB	ACT-Yd	ACT-Yd	EditCar	769	12:01 AM	4
,	BCIT	873075	FBC	NYFS	ACT-Yd	ListCar	368	12:01 AM	4
3	SSAM	38710	FBC	FST-Yd	ACT-Yd	ListCar	368	12:01 AM	4

Figure 10-3a

- iii. Click on the "Print list" button to print the list. You can save the printouts and compare them to new ones to look for repeated car routing problems.
- iv. None of our listed cars should be in the wrong location, but if any were we would mark the printout with their correct location.
- v. Let's clear the list so future cars moved to the default yard will be obvious. First click on any line in the window to enable the 2 "Clear" buttons (which were initially disabled. Then click on the "Clear entire list" button to clear all entries.
- vi. Close both the "Cars moved to the Default Yard" and "Cars Classified and Routed Today" windows.
- b. As noted while we do not need to correct any of our cars, ProTrak allows us to make changes. The process is presented here if you need it in the future.
 - i. On the ProTrak Operations Toolbar, click on "Exceptions" then select "Query car status" from the dropdown list. This opens the "Query car status" window (Figure 10-3b).

PRD Query car status	×
Change	
Find Car Car number (try last 3 digits) Or select from >	<u>E</u> nter ▼
	Cancel



Enter the car number in the "Car number ..." data field, in most cases only the last 3 digits will be needed to identify a unique car. For this example we will enter "004" and click on the "Enter" button and the window will change as shown in Figure 10-3c.

Query car status	×
Change	
Find Car Car number (try last 3 digits) 004	
Or select from >	Ŧ
Is this the car ? MRL 30004	5
	Cancel

Figure 10-3c

iii. Click on the "Yes" radio button to select the car, changing the window as shown in Figure 10-3d. Should multiple cars match the entered data a dropdown to choose the correct car will be displayed. If none of the cars are correct, still click on "yes" and then just click the "OK" button and restart the process with the correct car number.

Query car state	X zu					
Change						
Car Status						
Car: MRL 3000	4 UMLER #: 5					
Kind XM	Plate C Length 55 feet					
The lading is	empty					
Waybill number	0					
Shipper is	Home Shops					
Destination is	empty storage					
The car is at:	ACT Yard					
Time remaining in	loading/unloading none					
Car schedule 1)	ACT-Yd					
2)	ACT-Yd					
3)	ACT-Yd					
Another car	<u>0</u> K					

Figure 10-3d

iv. This window allows you to override ProTrak's status and routing for the car, USE WITH **CAUTION**. To make any changes click on the "Query car status" window menu bar entry "Change". This opens the drop down in Figure 10-3e.

Query car status	×
Change	
Change Location	
Change next Yard	feet
Change Destination	
Transfer load	
Complete loading	
Clean - report car cleaned	
RIP - report car ready	
Change Waybill	
Report car missing	
Bad order car	
Car Repaired	ок
Detailed Bad-order	

Figure 10-3e

- v. Generally the options that **do not** begin with the word "Change" are safe to use if you want to do what it says. For example "Complete loading" will tell ProTrak that the car is loaded and ready for pickup despite ProTrak's loading timer still having time remaining.
- vi. With care you can be reasonably safe using the "Change location" and "Change Waybill" options. Changing the waybill allows you to remove a waybill (enter zero) or assign a specific waybill to a car. The concern is having a car loaded with a commodity that does not match the new waybill or any load if the waybill is removed.
- vii. If you change either the next yard or destination, you are overriding ProTrak's routing of the car and can have unpredictable results. Changing these is not recommended.
- viii. For our example to change the current location, click on the dropdown menu option "Change Location" and the window will change as shown in Figure 10-3f. Use the "New location" dropdown to select the correct location for the car and you will be returned to the window as in Figure 10-3d but with the new location listed. We will leave "ACT-Yd" set as it is correct.

PRD Query car status	×
Change	
Car Status	
Car: MRL 30004	JMLER #: 5
Kind XM Plate C	Length 55 feet
The lading is empty	Movement History
Waybill number 0	Last 10 locations
Shipper is Home Shops	2 NYY01s
Destination is empty storag	a 1 NYY01s
The car is at: ACT Yard	0 NYY01s
Time remaining in loading/unlo	4 NYY01s
Counterful 1) ACTIVE	4 FST-Yd
Car schedule 1) ACT-Yd	4 FST-Yd
2) ACT-Yd	4 FST-Yd
3) ACT-Yd	4 FST-Yd
	4 FST-Yd
	4 FST-Yd
Change in routing New location	I ACT Yard
Close Route	<u>0</u> K

Figure 10-3f

- ix. Click the "OK" button to complete editing the car and return to the ProTrak Operations window.
- c. If you made changes, ProTrak needs to update the cars routing. We will discuss this later, but for now the steps without comment are:
 - i. On the ProTrak Operations Toolbar, click on "Yardmaster" then select "Route cars at Yards & Customers" from the dropdown list.
 - ii. A progress bar will display and when complete the "Reporting trains ..." window will open. Close the "Reporting trains ..." window.

End of Page 10-4 **End of New Step 8** This is the end of the new Step 8 displaying lost cars and correcting car location.

Page 10-5 **Step 13** Change the first words of step 13 as follows:

13. Repeat step 12 for each...

Page 10-5 **Step 17** Add the following to the end of Step17:

As in chapter 9 if you see the "Print Worklist?" window for train 202, we will click "No".

Page 10-6 **Step 20** Change Step 20 to the following:

- 20. Do the following:
 - a. Ensure the box beside the "Always operate on "Monday"" data field has been checked. If not, check the box.
 - b. Select the "Complete update, ready for..." radio button in the lower portion.
 - c. Change the reports to print to "Also print final car status".
 - d Once the changes have been completed click on "OK". When the "General Manager's Daily Summary" window is displayed click on "Close".
 - e. When the "Financial Summary" window is displayed click on "Close".

Session 27 Analysis

Page 10-8 Steps 9 to 14

Replace Steps 9, 10 and 11 with the following and delete Steps 12, 13 and 14:

 CAUTION - While there are still two invalid SPOTs (for waybills 20 and 3), we will not correct these. Unfortunately there is a glitch that occurs if you open any of the special waybills for changing. The entries for Consignee city, company and siding number will appear as follows in grey and will not be editable:

Consignee city	becomes	Foreman: Your Name
company	becomes	PRO Foreman
siding number	becomes	WRKZON

Your Name is the name your copy of ProTrak is registered to. *PRO* is the reporting marks for your railroad (PRO for the Demonstrator).

The data change will occur even if you "Cancel" changing the waybill.

Therefore if you see the "Track material waybill" warning window, click on "No" or "Cancel" only

It is possible that waybills 1 and 2 may not be affected. However do not attempt to change them unless

- You are sure you have a clean backup of your data in a safe location.
- You understand how to delete corrupted data and restore the backup.
- 10. If while using ProTrak, ProTrak identifies data in waybills 1 to 20 as being inconsistent, out of date or in error **and** gives you an option for ProTrak to correct the data, it is probably okay to allow the correction. Knowing you have a recent backup will make this choice easier.
- 11 Topic A.4. in Appendix L has information about backups, please note last sentence. Here is a good backup procedure.
 - a. Using Windows Explorer (or File Explorer) open your ProTrak system folder (where ProTrak.exe is located)
 - b. Identify your railroad data folder (PRO for the Demonstrator (see page 1-2 Step 3c))
 - c. Copy and paste (or Drag and Drop copy (not move)) the data folder to a safe location. A USB thumb drive is a good idea. Consider putting the railroad data folder in folder on the thumb drive that identifies when the data is from. For example
 - v ThumbDrive (E:)
 v ProTrak data backup
 v After session 27 2021-02-15
 > PRO

Page 10-9	Figure 10-7	Delete Figure 10-7.
Page 10-9	Step 15	Change the number of Step 15 to Step 12.

Session 28

Page 10-11 **Figure 10-8**

Replace Figure 10-8 with the following:

Zones Zone Station			All cars at Switching Zone			ick		Total number of cars at spurs 1		
EAS CAS ITJ BER ACT WST	East Staging Castle Rock JT Junction Berwick Actonvale West Staging	# 5	Road MRL	Number 30004	0	SPOT BER-10	Industry North Star Eng	Track	Way # 23	Dest'n BER-11
			st Zone	Next Zon	1	Print	1			Close

Figure 10-8

Page 10-13 Step 7

Change Step 7 to the following:

 Remember that the "Always operate on Monday" <u>and "Complete</u> <u>update,..." selections are</u> checked and the report printing selection <u>is set</u> to "Also print final car status". Click on "OK".

Page 10-13 **Step 8** Add the following to the end of Step 8:

If you do not see this window, that's okay. Go ahead and read through steps 9 to 13 for information (and come back here if you see this window in the future). Then resume with step 14.

Session 29 Analysis

Page 10-19 **Step 3a** Change Step 3a to the following:

a. The two GB cars are shown as loaded with scrap iron <u>and one has</u> <u>been</u> setout in ACT-Yd. <u>It is</u> ready to be delivered to CHI02s in the next session. <u>The other is still at BER-11 and should be picked up by</u> <u>train 202 next session</u>.

Page 10-19 **Step 3b** Change Step 3b to the following:

b. There is one empty car in the staging tracks <u>(in train CHSL) with</u> <u>destination CHI02s</u> and will be unloaded/loaded at the start of the next session. <u>In some cases like this the destination could show</u> "999-Yd" which is a generic reference to a car's home yard where the home yard is off-line.

Page 10-20 **Step 3c** Change Step 3c to the following:

c. There <u>is one car, an FBC</u> in ACT-Yd which <u>is</u> slated to be delivered to <u>a customer</u> during the next session.

Summary

Page 10-30 **Summary** Add the following to the Summary:

Remember the specific car movements for your railroad may be different, however the general movements should be similar.

Chapter 11 – More Car-orders and Opr. Sessions

Establishing a Timetable

Page 11-10 **Step 8**

Replace Step 8 with the following:

Leaving ACT-Yd heading to East Staging, train "SLCH" travels 15" (point 5) plus 225" (point 2) for a total of <u>240".</u>

Then train SLCH will travel 60" around the reverse loop (point 4) to reach the clearance point for its staging track and be ready to depart next session as train CHSL. This will be shown on our string diagram as a horizontal line at East Staging.

The total travel from ACT-Yd to staging will be 300"

Page 11-10 Step 11 Replace Step 11 with the following:

11. The distance from ACT-Yd to East Staging is <u>240</u>". Using our calculations of 60 minutes for 60", we see that it will take <u>4 hours for train SLCH to</u> <u>reach East Staging at 7:26 am. It will then transit the 60" reverse loop in</u> <u>1 hour to complete the balance of the journey, meaning it will arrive at</u> <u>the exit from East Staging at 8:26 am.</u>

Page 11-10 **Step 13**

Replace Step 13 including the train data with the following:

13. We've done "SLCH" but we need to do the same calculations for each of the other 3 through trains. <u>Remember the extra 60" reversing loop is at west staging for westbound trains and at east staging for eastbound trains.</u> Here's what I calculated:

Train "SLCH"		
Depart	West Staging	1:01 am
Arrive	Actonvale	2:26 am
Depart	Actonvale	3:26 am
Arrive	East Staging	7:26 am
Arrive	End of reverse loop	8:26 am
Train "CHSL":		
Depart	East Staging	9:00 am
Arrive	Actonvale	1:00 pm
Depart	Actonvale	2:00 pm
Arrive	West Staging	3:25 pm
Arrive	End of reverse loop	4:25 pm
Train "SENY"		
Depart	West Staging	2:30 pm
Arrive	Actonvale	3:55 pm
Depart	Actonvale	4:55 pm
Arrive	East Staging	8:55 pm
Arrive	End of reverse loop	9:55 pm
Train "NYSE"		
Depart	East Staging	4:00 am
Arrive	Actonvale	8:00 am
Depart	Actonvale	9:00 am
Arrive	West Staging	10:25 am
Arrive	End of reverse loop	11:25 am

Read Down				Troin		Read Up)
SLCH	SENY	202		Train		202	NYSE	CHSL
				Reverse	Ar		11:25	4:25
				Loop End	AI		am	pm
1:01	2:30		Dp	West	Ar		10:25	3:25
am	pm		Dp	Staging	Ai		am	pm
2:26	3:55		Ar		Dp		9:00	2:00
am	pm		AI	Actonvale	Ър		am	pm
3:26	4:55	7:00	Dp	Actonivale	Ar	12:00	8:00	1:00
am	pm	am	Dp			pm	am	pm
		8:30	Ar	Berwick	Dp	10:30		
		am		Derwick	υp	am		
				JT				
				Junction				
				Castle				
				Rock				
7:26	8:55		Ar	East	Dp		4:00	9:00
am	pm			Staging	υμ		am	am
8:26	9:55		Ar	Reverse				
am	pm			Loop End				

Page 11-11, 12 **Step 17**

Replace the timetable in step 17 with the following.

Page 11-14 After Step 24c Appendix K corrections.

The timetables and figures in Appendix K had numerous error/corrections. New figures K1 through K-8 are shown under Appendix K below.

Revising the Timetable

Note All Corrections are based on the revised Appendix K figures shown below.

Page	11-14	Step	2
------	-------	------	---

Replace Step 4 with the following:

2. Next, look at trains 202 and NYSE. These two trains are currently scheduled to meet on the single track section between <u>*Berwick*</u> and Actonvale; again this is a problem.

Page 11-14	Step 4	Replace the last sentence of Step 4 with the
		following:

I see that occurring at <u>6:30 am</u>.

Page 11-14Step 5Replace the second sentence of Step 5 with
the following:

I see that occurring at <u>5:30 am</u>.

Page 11-15 **Step 7** Replace Step 7 with the following:

7. We now need to go back and adjust the timings for trains NYSE and 202 on our timetable ⁽⁸⁾, and again plot our timetable on a string diagram. Train NYSE will depart EAS at <u>5:30 am</u>, arrive at ACT at <u>9:30 am</u>, depart ACT at <u>10:30 am</u>, arrive at WST at <u>11:55 am and finish transiting the</u> <u>reverse loop at 12:55 pm</u>. Train 202 will depart ACT at 6:00 am, arrive at BER at 7:30 am, depart BER at 9:30 am and arrive at ACT at 11:00 am.

Page 11-15 **Step 8** Replace Step 8 with the following:

8. <u>It looks like we have also avoided any problem with trains NYSE and 202</u> <u>at Actonvale. Train CHSL is now due to depart Actonvale at 11:00 am</u> <u>leaving the yard clear before train 202 is due to arrive at 11:30 am.</u>

Page 11-15 **Step 11** Replace Step 11 with the following:

11. Currently, train CHSL departs East Staging at 9:00 am, arrives at Actonvale <u>at 1:00 pm, spends 1 hour switching Actonvale then departs at</u> <u>2:00 pm arriving at West Staging at 3:25 pm and finishes transiting the</u> <u>reverse loop at 4:25 pm</u>. Similarly, train SENY departs West Staging at 2:30 pm and arrives at Actonvale at 3:55 pm. We could hold train CHSL at Actonvale until train SENY arrives. Let's change train CHSL's schedule to say that it waits to depart Actonvale at 4:30 pm and arrives at West Staging at 5:55 pm and finishes its run at 6:55 pm. Let's go back to our timetable and change those times.

Page 11-17	Step 3	Change the list of actions to the following:
Time	Train	Action
1:00 am	SLCH	print 1 st switchlist
2:30 am	SLCH	report at ACT
3:30 am	SLCH	print 2 nd switchlist
<u>5:30 am</u>	NYSE	print 1st switchlist
6:00 am	202	report at ACT before leaving
6:00 am	202	print 1 st switchlist
	and so on.	

Chapter 12 – Add Castle Rock and Run Sessions

Adjusting the Timetable

Page 12-22	Before Step 6	In the train 202 distance and travel time
		chart change the "BER exit to JT Junction"
		Travel Time to 30 min (4 th line).

Page 12-22 Step 6

Replace Step 6 with the following:

45 min.

45 min.

50 min.

50 min.

- 6. Train 202 runs from ACT Yd to Berwick, on to Castle Rock, back to Berwick and finally back to ACT Yd.
 - a) ACT Yd to BER (far end)
 - b) Local work at Berwick
 - c) BER to CAS (far end)
 - d) Local work at Castle Rock 2 hrs.
 - e) CAS to BER
 - f) Local work at Berwick
 - 45 min. q) BER to ACT Yd 45 min.

Page 12-23 Before Step 7 Appendix K corrections.

The timetables and figures in Appendix K had numerous error/corrections. New figures K1 through K-8 are shown under Appendix K below.

Note All Corrections are based on the revised Appendix K figures shown below.

- Page 12-23 Step 8 Replace Step 8 with the following:
 - 8. Once we have the "String Diagram" completed, we can see that while all trains will meet at a station train NYSE has 2 issues. First, it violates Rule 91 (see footnote 7 on page 11-15) with train SLCH at East Staging. Second, while not a violation the timing with train 202 at Berwick is very close. Two minor changes will eliminate both issues. Delaying train NYSE's departure time from East Staging until 5:45 am will meet Rule 91 with train SLCH. Then allowing train 202 to work Berwick for 1 hour will minimize the chance for conflict with the revised NYSE schedule.

Changing Train Departure Times

Page 12-23 Step 2

At the bottom of the page replace Step 2 with the following:

2. Double click on train "NYSE" and change the departure time to read 5:45 am. Click on OK to make the change permanent.

Scheduling Using ProTrak

Page 12-24**SLCH Schedule**Replace the third paragraph that begins with
"In this section we'll..." with the following:

Using ProTrak version 348 some odd behavior has been observed when scheduling on the string diagram. Therefore we will schedule using the timetable mode and look at the string diagram to identify conflicts. If you desire to try scheduling on the string diagram PTBM chapter 12 unmodified by this supplement covers the process well although schedule times may be different ⁽¹⁴⁾.

Page 12-24	SLCH Schedule	Change the "Arrive to 5:14 am.	East Staging Exit" time
Page 12-26	Step 3	-	rounded to 4 minutes." aragraph and Step 4:

ProTrak does not allow for a separate entry for the reverse loop travel time so we will include the 60" loop distance in our arrival at staging distance when verifying times.

4. The 1 hour fast clock working time at ACT-Yd is 10 minutes actual time (1 hr. / 6 fast clock ratio = 0.1667 hr. = 10 min.)

String Diagram Scheduling

Timetable Scheduling

Deleting a train from the ProTrak Scheduler

Page 12-26 to	44	Delete the entirety of the sections "String Diagram Scheduling", "Timetable Scheduling" and "Deleting a train from the ProTrak Scheduler" and Figures 12-12 through 12-26.
Page 12-26	New sections	In place of the material deleted above insert new sections "Scheduling SLCH on the Timetable" and "Scheduling the other trains" as follows (Here through page 62):

Scheduling SLCH on the Timetable

1. On the ProTrak Standard toolbar click on "Scheduling" then select "Train Time Table Schedules" from the dropdown list. A window like the one shown in Figure 12-12 will appear.

Strain schedules		×
Select Train to		
Close	Schedule directly on <u>S</u> tring diagram	<u>o</u> k

Figure 12-12

2. We need to select the train to edit. Click on the dropdown arrow beside the "Select Train to Schedule" data field and select "Symbol SLCH" from the list. A window like Figure 12-13 will appear. Only the departure from STL03s is shown in the Arrival/Departure Time list.

🕙 Train schedules								×
Train	⊢ Arri	ival/Departure Ti	mes		- 6			
Symbol SLCH	#	Station	Arrival	Departure	1	All st	ations on PRO	
Call time 1:00 AM	1	St Louis, MO		1:00 AM		#	Stations	Zone
Train yarding plan						1	East Staging Castle Rock	EAS CAS
Yard siding 1) STL03s						3	JT Junction Berwick	JTJ BEB
Yard siding 2) ACT-Yd						5	Actonvale	ACT
Yard siding 3) CHI02s						6	West Staging	WST
Yard siding 4)						L		
Yard siding 5)						L		
Yard siding 6)						L		
Yard siding 7)	-				11	L		
Yard siding 8)		Station	Arrival	Departure		L		
Yard siding 9)						L		
Yard siding 10)						L		
Instructions					5	I		
Select next station from						I		
between stations is calcu 'Yes' and then enter a d						L		
Note: Rule 5: If times ar						Show	Staging	
Cancel Schedu	ile dire	ctly on <u>S</u> tring diagrar	n		_, .			<u>0</u> K

Figure 12-13

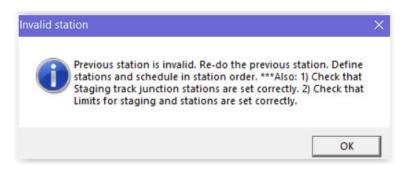
3. Next we need to build the schedule for SLCH. Double click on Actonvale in the right hand panel to enter it as our next stop. Actonvale will now appear in the editing fields under the Arrival/Departure Times list. See Figure 12-14. You will note ProTrak has entered times for arrival and departure and is asking if there is a stop at this station.

If you do not see Actonvale in the right hand panel your right hand panel is probably displaying the staging tracks. To fix this click the "All stations" radio button at the bottom of the panel and Actonvale should now show in the list.

Train schedules								•
Train	Ar	rival/Departure	e Times —					
Symbol SLC	ł 🛛	Station	Arriv	al De	parture	All s	ations on PRO	
Call time 1:00	AM 1	St Louis, MO			00 AM	#	Stations	Zone
						1	East Staging	EAS
Train yarding pl	an					2	Castle Rock	CAS
Yard siding 1) STL	D3s					3	JT Junction Berwick	JTJ BER
Yard siding 2) ACT	·Yd					5	Actonvale	ACT
Yard siding 3) CHI						6	West Staging	WST
Yard siding 4)	23							
Yard siding 5)								
Yard siding 6)								
Yard siding 7)								
Yard siding 8)		Station	Arriv	al D	eparture			
Yard siding 9)		Actonvale	1:02	AM 1	:12 AM			
Yard siding 10)		Station stop?	C Yes	C No				
- Instructions								
Select next sta	ion from onlin	e data. Travel	time betw	een stati	ons is			
between station					, select			
'Yes' and then						CLose	O Classica	
Note: Rule 5: I	r unes are sa	me, only depar	ture time is	snown.		Show	Staging	
Cancel	Schedule dir	ectly on <u>S</u> tring dia	gram					<u>0</u> K

Figure 12-14

If you see the "Invalid station" window (Figure 12-14a) and there are no apparent errors in the station list try closing and reopening the scheduling window. To do this click the "Cancel" button in the lower left corner, then click the "Close" button and reopen the schedule from the ProTrak menu bar.



4. Since the times are correct for our schedule we can click on "Station stop?" "Yes" since we will stop here for the indicated 10 minutes. The window will change to that shown in Figure 12-15. If we were to click on "Station stop?" "No" ProTrak would have entered Actonvale into the time table with only a departure time. This is useful to show the times at stations where no work is done or delay a train's departure to prevent a later conflict.

🕙 Train schedules								×
- Train	⊢ Arri	ival/Departure Ti	mes		- 1			
Symbol SLCH	#	Station	Arrival	Departure	1	All st	ations on PRO	
Call time 1:00 AM	1	St Louis, MO		1:00 AM		#	Stations	Zone
Train yarding plan Yard siding 1) STL03s Yard siding 2) ACT-Yd Yard siding 3) CHI02s Yard siding 4) Yard siding 5)						1 2 3 4 5 6	East Staging Castle Rock JT Junction Berwick Actonvale West Staging	EAS CAS JTJ BER ACT WST
Yard siding 6)	L							
Yard siding 8)		Station	Arrival	Departure				
Yard siding 9)		Actonvale	1:02 AM	1:12 AM				
Yard siding 10)		Cance	1	Save stop				
Instructions Select next station from between stations is calc 'Yes' and then enter a c Note: Rule 5: If times a	ulateo lepart	l for you. To sto ure time later tha	p/wait at sta n arrival time	tion, select		Show	Staging	
<u>C</u> ancel Schedu	ule dire	ctly on <u>S</u> tring diagrar	n					<u>0</u> K

Figure 12-15

- 5. It is important at this point to note that there are two separate "Cancel" buttons in the window one immediately below the "Station/Arrival/Departure" data fields and one at the bottom left corner of the window. These perform different functions:
 - a. The "Cancel" under the "Station/Arrival/Departure" data fields cancels the changes made to the selected station (For want of a better name we'll call this button the "Station Cancel" button).
 - b. The "Cancel" button at the bottom left of the window cancels all changes that have been made to any of the stations and/or arrival and departure times (we'll call it the "Train Cancel" button).
- 6. We can now click on the "Save Stop" button to enter Actonvale into the timetable with the 10 minute stop we want. The result is shown in Figure 12-16.

STrain schedules						×
Train	Arrival/Dep	arture Times				
Symbol SLCH	# Station	Arrival	Departure	Alls	tations on PRO	
Call time 1:00 AM	1 St Louis 2 Actonya	,	1:00 AM 1:12 AM	#	Stations East Staging	Zone EAS
Train yarding plan				2	Castle Rock	CAS
Yard siding 1) STL03s				3	JT Junction Berwick	JTJ BER
Yard siding 2) ACT-Yd				5	Actonvale	ACT
Yard siding 3) CHI02s				6	West Staging	WST
Yard siding 4)						
Yard siding 5)						
Yard siding 6)						
Yard siding 7)				·		
Yard siding 8)	Sta	ation Arrival	Departure			
Yard siding 9)						
Yard siding 10)						
Instructions						
Select next station from						
between stations is calc 'Yes' and then enter a c						
Note: Rule 5: If times a				Show	🛛 🕥 Staging	
Cancel Schedu	ule directly on <u>S</u> tri	ing diagram				<u>0</u> K

Figure 12-16

7. Now let's enter the last stop at CHI02s. At the bottom of the right hand panel click on the "Staging" radio button to display staging tracks. Then double click on CHI02s to select our destination. This will immediately enter the final stop into our timetable as shown in Figure 12-17.

🕙 Train schedules								х
Train	inA_	val/Departure Time	es					
Symbol SLCH	#	Station	Arrival	Departure	Stag	jing Siding N	lumbers	
Call time 1:00 AM	1	St Louis, MO		1:00 AM	#	SPOT	City	R
	2	Actonvale	1:02 AM	1:12 AM	1	NYC01s	New York, NY	1
Train yarding plan	3	Chicago, IL	1:13 AM		2	CHI02s	Chicago, IL	2 3
Yard siding 1) STL03s					3	STL03s SEA01s	St Louis, MO Seattle, WA	5
Yard siding 2) ACT-Yd								
Yard siding 3) CH102s								
Yard siding 4)								
Yard siding 5)								
Yard siding 6)								
Yard siding 7)		01 F	A 1 1	D				
Yard siding 8)		Station	Arrival	Departure				
Yard siding 9)		Chicago, IL	1:13 AM					
Yard siding 10)								
Instructions								
Select next station from								- 1
between stations is calc					<			>
'Yes' and then enter a Note: Rule 5: If times a					Show	🖌 🕥 All sta	tions	
<u>C</u> ancel Sched	lule direc	ctly on <u>S</u> tring diagram					<u>0</u> K	

Figure 12-17

8. While this looks good the arrival time at Chicago is not what we want. To edit this double click on the third line of the timetable in the center pane. This will bring up Chicago, IL up for editing below the Arrival/Departure Times as shown in Figure 12-18

STrain schedules							x
Train	⊢Arrival/Departure Tim	es					
Symbol SLCH	# Station	Arrival	Departure	Sta	ging Siding I	Numbers	
Call time 1:00 AM	1 St Louis, MD 2 Actonvale	1:02 AM	1:00 AM 1:12 AM	#	SPOT NYC01s	City New York, NY	<u>R</u>
Train yarding plan	3 Chicago, IL	1:13 AM		2	CHI02s	Chicago, IL	2
Yard siding 1) STL03s				3	STL03s SEA01s	St Louis, MO Seattle, WA	3
Yard siding 2) ACT-Yd					0211010	000000, 1111	ĭ
Yard siding 3) CHI02s							
Yard siding 4)							
Yard siding 5)							
Yard siding 6)							
Yard siding 7)				·			
Yard siding 8)	Station	Arrival	Departure				
Yard siding 9)	Chicago, IL	1:13 AM					
Yard siding 10)	Cancel	<u>E</u> rase					
Instructions							
Select next station from between stations is calcu							_
'Yes' and then enter a d	leparture time later than	arrival time	э.	<			>
Note: Rule 5: If times ar	re same, only departure	time is sho	wn.	Sho	w 🔘 All sta	ations	
<u>C</u> ancel Schedu	ule directly on <u>S</u> tring diagram					<u>0</u> K	

Figure 12-18

- 9. The new buttons shown in Figure 12-18 are used as follows:
 - a. "Cancel" does what the name would imply it cancels the editing process and clears the data in the Station/Arrival/Departure data fields. At this point you could select a different station to edit.
 - b. "Erase" allows you to remove the station selected completely from that train's schedule and all the stations that follow. For example, if we were to double-click on Actonvale and use the "erase" function to remove Actonvale from the schedule of train SLCH, we would not only remove Actonvale but also Chicago.
- 10. To change the arrival time to our calculated 1:16 am, click in the arrival time data field. As soon as you click in the "Arrival" data field, the buttons change to read "Cancel" and "Save" (See Figure 12-19). The "Cancel" is as previously described and the "Save" functions as the "Save stop" did in Step 6 above.

Train schedules						(×
Train	Arrival/Departure Ti	mes					
Symbol SLCH	# Station	Arrival	Departure	Sta	jing Siding I	Numbers	
Call time 1:00 AM	1 St Louis, MD 2 Actonvale	1:02 AM	1:00 AM 1:12 AM	#	SPOT NYC01s	City New York, NY	<u> </u>
Train yarding plan	3 Chicago, IL	1:13 AM		2	CHI02s	Chicago, IL	2
Yard siding 1) STL03s				3	STL03s SEA01s	St Louis, MO Seattle, WA	3
Yard siding 2) ACT-Yd				1	0EA010	00000, 111	Ĭ
Yard siding 3) CHI02s							
Yard siding 4)							
Yard siding 5)							
Yard siding 6)							
Yard siding 7)							
Yard siding 8)	Station	Arrival	Departure				
Yard siding 9)	Chicago, IL	1:13 AM					
Yard siding 10)	Cance		<u>S</u> ave				
Instructions							
Select next station from between stations is calc							_
'Yes' and then enter a d				<			>
Note: Rule 5: If times a	re same, only departure	e time is show	wn.	Show	🖌 🕥 All sta	ations	
<u>C</u> ancel Schedu	lule directly on <u>S</u> tring diagram	n				<u>0</u> K	

Figure 12-19

11. Back to the task at hand, change the time in the "Arrival" data field to 1:16 am then click on the "Save" button below the "Departure" data field. You should see the data in the "Arrival/Departure Times" window updated as shown in Figure 12-20.

💇 Train schedules									×
Train	rinA ⊣	val/Departure Time	s		1				
Symbol SLCH	#	Station	Arrival	Departure		Stagi	ng Siding N	lumbers	_
Call time 1:00 AM	1	St Louis, MO		1:00 AM		#	SPOT	City	B
	2	Actonvale	1:02 AM	1:12 AM		1	NYC01s	New York, NY	1
Train yarding plan	3	Chicago, IL	1:16 AM			2	CHI02s	Chicago, IL	2
Yard siding 1) STL03s						4	STL03s SEA01s	St Louis, MO Seattle, WA	5
Yard siding 2) ACT-Yd									
Yard siding 3) CHI02s									
Yard siding 4)									
Yard siding 5)									
Yard siding 6)									
Yard siding 7)	-								
Yard siding 8)		Station	Arrival	Departure					
Yard siding 9)									
Yard siding 10)									
Select next station from o	online	data. Travel time	between s	tations is					
between stations is calcu						<			>
'Yes' and then enter a de						<u></u>			
Note: Rule 5: If times are	e sam	e, only departure t	me is show	vn.		Show	🔘 All sta	tions	
<u>Cancel</u> Schedu	le direc	tly on <u>S</u> tring diagram						<u>0</u> K	

Figure 12-20

- 12. Note that in the case of an intermediate station like Actonvale, if you need to change both the arrival and the departure time for that station, you must change each time separately then save the change before making the change to the other time. First, you would need to double-click on the station, change the departure time in the edit window below the list of stations, click on the "Save stop" button to save the departure time change. Then back in the Arrival/Departure Times panel, double-click on the same station again, change the arrival time in the edit window then again click on the "Save" button to save the arrival time.
- 13. Once you have entered the schedule as desired, you must click on the "OK" button in the bottom right corner of the "Train schedules" window to make the changes permanent. If you change a time of arrival for example, click on the "Save" button then click on the "X" to close the window, the changes made will not be saved. This is as if you had clicked on the "Save" button but then clicked on the "Train Cancel" button. The same situation applies to the "Save stop" button for changes of departure times. Go ahead and click the "OK" button and you will be returned to the "Train schedules" window (see Figure 12-12).
- 14. Now let's look at the schedule on the string diagram. There are 2 ways to access the string diagram.
 - a. From the "Train schedules" window (see Figure 12-12) click the "Schedule directly on String diagram" button.
 - b. On the ProTrak Menu click on "Scheduling", then from the dropdown click on "Create string diagram". This opens the "Which subdivision" window (Figure 12-21) where you select the subdivision to view. As we have only one subdivision we will select it by double clicking on it.

Either method results in opening the "Creating string diagram: subdivisions in Middle" window as shown in Figure 12-22

#	Subdivision	Junction Stn	on Subdivision	Stations	Gage	1
D	Subdivisions with		Middle	6	standard	1
1						
2						
3						
1						
5						
6						
7						
3						
Э						
10						

Figure 12-21

how up to Class	All 🔻	Workin	ng on train			-			At stat	ion East	Staging	New	time 3:26 PM	
tations				PLANN	ED MOVE	MENT O	F TRAINS							
ast Staging														
astle Rock														
「Junction 「														
erwick -														
stonvale								 						
est Staging								 						
		SLCH												
N	lidnight		3		Time	of Day	6		9		N	loon		1

Figure 12-22

- 15. Let's take a look at the "Creating string diagram..." window.
 - a. Our window should show a graph of the schedule we entered for SLCH as a nearly vertical blue line.

For the purposes of the discussions here, the term "the graph" is used to refer to the area where the train schedule lines are drawn. This is the grid area to the right of the station names, below the words "PLANNED MOVEMENT OF TRAINS" and above the time of day figures at the bottom of the window. You can see vertically the graph is broken into a series of dark and light sections. The dark sections represent the distance at a station (or staging track) and the light sections represent the distance between stations. To the left of each of the dark sections is the name of the station that section represents. As you can see, not all the sections are the same height since each section's height is based upon the values that we set up in the "Distance between clearance points" data fields for each of the stations (see Chapter 2). Looking at the graph, the section for Castle Rock is higher than the section for Berwick since the distances between clearance points at the station in Berwick is 25 inches while the distance at Castle Rock is 30 inches. These sections help you establish where the mouse pointer is when you are working with the graph

- b. On the toolbar of the "Creating string diagram..." window there are six controls (only 4 are currently visible), as follows (from left to right):
 - i. The "Show up to Class" data field allows us to selectively view classes of trains ⁽¹⁷⁾. Suppose we want to eliminate conflicts for our passenger trains first then add the through freights, then the local 'turns', we can do this by assigning our passenger trains as, say Class 1, the through freights as Class 3, then all other trains as Class X. By choosing to show up to Class 1 trains, we can view just the passenger trains. On the second pass we can add the through freights, ensuring they fit in around the passenger schedule, and on the third pass, add the last of the trains.
 - ii. Next is a data field labeled "Working on train" with a dropdown arrow beside the data field. Click on the dropdown arrow and you will see a list of all currently established trains. Selecting a train here will open that train for scheduling directly on the string diagram, which we will not do. When open for editing the trains graph will be draw in magenta and have small circles at each scheduled time. If you open a train here that does not have a schedule ProTrak will immediately create a one for the train and draw the graph. The times are calculated by ProTrak using the data we entered when we established the train, when we set up the stations and when we set up the fast clock ratio. ProTrak defaults all station stops to 10 minutes.
 - iii. The "Save current train" button will only be visible if you have a train open for scheduling and allows you to save any changes you have made.
 - iv. The "Got Time" indicator, also only visible if a train is open for scheduling, indicates whether you have 'grabbed' the line representing a train's schedule to move it.
 - v. The "At station" data field is managed by ProTrak. If your mouse pointer is on the graph and is between the two horizontal lines for a station, the "At station" data field will display the name of the station. If it is on the graph but not in the area just described it will show the distance, in inches, from the most easterly ⁽¹⁸⁾ point of the railroad. In our case this is the most easterly point of East

Staging. If your mouse pointer is off the graph the "At station" data field will display the value shown when it left the graph.

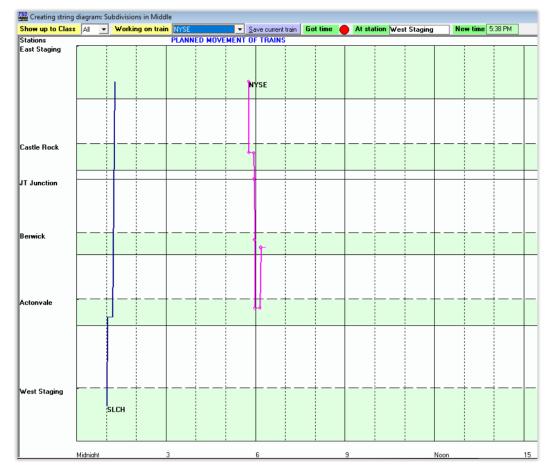
- vi. The "New time" data field is also managed by ProTrak and displays the time your mouse pointer is pointing at. If you are editing a station, this time will change as you move the lines.
- c. In the graph portion of the window, the lines representing the train you are working on are shown in magenta. Other trains are shown in blue ⁽¹⁹⁾.
- d. For now we'll ignore the controls on the bottom line of the window.
- 16. If we look at the line that ProTrak has drawn which graphically represents train SLCH's schedule we can see a number of things;
 - a. Train SLCH is scheduled to leave West Staging at 1:01 am. We can check the time by moving the mouse pointer to the end of the line in the West Staging area. The time where the mouse pointer is pointed is displayed in the data field labeled "New time" which appears at the right hand end of the top toolbar in the "Creating string diagram..." window.
 - b. Train SLCH is scheduled to arrive at Actonvale at 1:02 am. If you put your mouse pointer on the leftmost end of the line at Actonvale you should see that the "New Time" data field shows 1:02 am.
 - c. Train SLCH is scheduled to depart Actonvale at 1:12 am. Again you can confirm the shown times by placing your mouse pointer on the rightmost end of the line at Actonvale.
 - d. There is no station stop at Berwick.
 - e. There is a station stop at Castle Rock.
 - f. Train SLCH is scheduled to arrive at East Staging at 1:16 am.

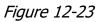
It is of note that accurately reading times is difficult due to the small difference between each minute.

Deleting a train from the ProTrak Scheduler

- 17. Other than seeing our time table graphically and checking for conflicts there is one action we can only preform on the string diagram, completely delete a trains schedule from ProTrak. You may need to remove a train from the scheduler, either because you have eliminated the train, or because you've got the schedule for an existing train all messed up and you want to start again. To show how this works we will create and then delete a schedule for train NYSE.
 - a. Click on the "Working on train" dropdown arrow and you will see a list of all currently established trains. From the list select train NYSE.

ProTrak will immediately draw a schedule for train NYSE on the graph in the window (see Figure 12-23).





- b. You will note this schedule does not match the timetable for NYSE, this is why we are not scheduling directly on the string diagram. However it is okay for this demonstration of deleting a schedule. You will also note the previously hidden toolbar controls "Save current train" and "Got time" are now visible.
- c. Click on the "Save current train" button. The NYSE graph color changes to blue and its schedule has been saved.
- d. Now let's delete the NYSE schedule. Again click on the "Working on train" dropdown arrow select train NYSE. The NYSE graph will again be shown in magenta, indicating it is open for editing.

If you want to try editing the NYSE schedule here, go ahead but don't save any changes. When you are done go to the next step regardless of what the NYSE schedule looks like. e. Press the "Delete" key on your computer keyboard and a window like the one shown in Figure 12-24 will appear.

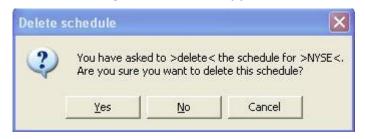


Figure 12-24

- f. Click on "Yes" and the entry for train "NYSE" will be removed **from the ProTrak scheduler only**. You will note that the train still exists in the lineup of trains so we can re-enter it into the ProTrak scheduler.
- g. In general the procedure to delete a train from the scheduler is restated here:
 - i. Open the "Creating string diagram" window (see Figure 12-22) using either Scheduling/Create string diagram from the ProTrak menu or the "Schedule directly on String diagram" button from the "Train schedules" window".
 - ii. Using the dropdown arrow beside the "Working on train" data field, select the train to delete.
 - iii. Press the "Delete" key on your computer keyboard and the "Delete schedule" window will appear (see Figure 12-24).
 - iv. Click on "Yes" and the entry for the train will be been removed from the ProTrak scheduler only.
- 18. We are done with the string diagram for now so click the "Close" button at the bottom of the window.

Scheduling the other trains

- 1. To complete our scheduling we need to create schedules for the four remaining trains. To begin open the scheduler (Scheduling / Train Time Table Schedules [Train schedules]). We will begin with train SENY since it has the same scheduling intervals as train SLCH.
- 2. Use the "Select Train to Schedule" dropdown to select train SENY. This will open train SENY for scheduling and the window will be similar to Figure 12-13 except the Train Symbol will be SENY with a 2:30 pm Call time.
- 3. Add the stop at Actonvale arriving at 2:31 pm and departing at 2:41 pm.

a. Double click on Actonvale in the right hand panel to place Actonvale in the station stop editing fields. The Train schedules window should now appear as in Figure 12-25

STrain schedules												×
Train		Arri	val/Departure	Time	s							
Symbol SENY		#	Station		Arriva		Departure		All st	ations on PRO		
Call time 2:30 Ph	м	1	Seattle, WA				2:30 PM		#	Stations East Staging		Zone [EAS
Train yarding plan									23	Castle Rock JT Junction	i	CAS
Yard siding 1) SEA01	s								4	Berwick		BER
Yard siding 2) ACT-Y	Ъ								5	Actonvale		ACT
Yard siding 3) NYC01	1s								6	West Staging	1	WST
Yard siding 4)												
Yard siding 5)												
Yard siding 6)												
Yard siding 7)				_				-11				
Yard siding 8)			Station		Arrival		Departure					
Yard siding 9)			Actonvale		2:32	РΜ	2:42 PM					
Yard siding 10)			Station stop?	0	Yes	0	No					
Instructions												
Select next statio between stations												
'Yes' and then er											_	
Note: Rule 5: If t	times are :	sam	e, only depart	ure ti	ime is :	shov	wn.		Show	Staging		
<u>C</u> ancel	Schedule	direc	tly on <u>S</u> tring diag	ram								<u>0</u> K

Figure 12-25

b. You will note the calculated times are 1 minute later than we want. To fix this will take 2 steps (see previous step 12). First click in the Departure time data field and change it to be 2:31 pm. Then click the "Save Stop" button. Your window should now look like Figure 12-25a.

Strain schedules					×
Train	☐Arrival/Departure Ti	mes			
SENY SENY	# Station	Arrival	Departure	All stations on PRO	
Call time 2:30 PM	1 Seattle, WA 2 Actonvale	2:32 PM	2:30 PM 2:41 PM	# Stations 1 East Staging	Zone EAS
Train yarding plan		2.02111		2 Castle Rock	CAS
Yard siding 1) SEA01s				3 JT Junction 4 Berwick	JTJ BER
Yard siding 2) ACT-Yd				5 Actonvale	ACT
Yard siding 3) NYC01s				6 West Staging	WST
Yard siding 4)					
Yard siding 5)					
Yard siding 6)					
Yard siding 7)					
Yard siding 8)	Station	Arrival	Departure		
Yard siding 9)					
Yard siding 10)					
Instructions					
Select next station from between stations is calcu					
'Yes' and then enter a d					
Note: Rule 5: If times ar	re same, only departure	e time is sho	wn.	Show 🕥 Staging	
Cancel Schedu	ule directly on <u>S</u> tring diagram	n			<u>0</u> K

Figure 12-25a

- c. Next to fix the arrival time, double click on Actonvale in the Arrival/Departure times panel to return it to the station stop editing fields. Then click in the Arrival time data field and change it to 2:31 pm. Save the change by clicking the "Save" button.
- 4. Enter the final arrival in east staging (NYC01s) at 2:45 pm by clicking "Show Staging" and then double clicking NYC01s in the right hand panel.
- 5. Correct this arrival time to be 2:45 pm as in step 3c above. The final schedule is shown in Figure 12-26.

🕙 Train schedu	iles								×
Train		Arrival/D	eparture Tim	es					
Symbol 9	SENY	# Statio	on	Arrival	Departure	St	aging Siding	Numbers	
Call time 2	2:30 PM	1 Seat	ile, WA		2:30 PM	#	SPOT	City	<u> </u>
		2 Actor		2:31 PM	2:41 PM	1	NYC01s	New York,	
Train yarding	g plan	3 New	York, NY	2:45 PM		2	CHI02s STL03s	Chicago, IL	
Yard siding 1)	SEA01s					4	SEA01s	St Louis, M Seattle, WA	
Yard siding 2)	ACT-Yd								
Yard siding 3)	NYC01s								
Yard siding 4)									
Yard siding 5)									
Yard siding 6)									
Yard siding 7)									
Yard siding 8)			Station	Arrival	Departure				
Yard siding 9)									
Yard siding 10)									
Instructions									
	station from o								
	tions is calcu					<			>
	nen enter a de 5: If times are					Sh	ow 💿 All s	ations	
Gunard	C-h-d-l		01.i	1					ov
Cancel	Schedul	e airectly on	<u>S</u> tring diagram						<u>o</u> K

Figure 12-26

- 6. Click "OK" to save the schedule for SENY
- 7. Trains CHSL and NYSE will have the same time intervals as follows:

East staging to ACT-Yd	240 inches	4 minutes
Stop time at ACT-Yd		10 minutes
ACT-Yd to West staging (including reversing loop)	145 inches	2 minutes (1.8 rounded up)

8. Now enter the schedules for trains CHSL and NYSE by following the procedures in steps 2 through 6 above with the intervals in step 7. Final schedules are shown in Figure 12-26a for CHSL and Figure 12-26b for NYSE. Make sure to click the "OK" button each time to save the schedule.

Train schedules		
Train	Arrival/Departure Times	
Symbol CHSL	# Station Arrival Departure All stations on PRO	
Call time 9:00 AM	1 Chicago, IL 9:00 AM # Stations 2 Actonvale 9:03 AM 9:13 AM 1 East Staging	Zor
Train yarding plan	3 St Louis, MD 9:15 AM 2 Castle Rock	CA
Yard siding 1) CHI02s	3 JT Junction 4 Berwick	JT. BE
Yard siding 2) ACT-Yd	5 Actonvale	AC
Yard siding 3) STL03s	6 West Staging	WS
Yard siding 4)		
Yard siding 5)		
Yard siding 6)		
Yard siding 7)		
Yard siding 8)	Station Arrival Departure	
Yard siding 9)		
Yard siding 10)	Station stop? 🔿 Yes 🔿 No	
between stations is cal	m online data. Travel time between stations is Iculated for you. To stop/wait at station, select a departure time later than arrival time.	
	are same, only departure time is shown. Show 🕥 Staging	
<u>C</u> ancel Sche	edule directly on <u>S</u> tring diagram	<u>0</u> K

Figure 12-26a

🕙 Train schedules									x
Train	_ Arri	val/Departure Time	s						
Symbol NYSE	#	Station	Arrival	Departure		Stagi	ng Siding I	lumbers	_
Call time 5:45 AM	1	New York, NY		5:45 AM		#	SPOT	City	B
• · · · ·	2	Actonvale	5:48 AM	5:58 AM		1	NYC01s	New York, NY	1
Train yarding plan	3	Seattle, WA	6:00 AM			23	CHI02s STL03s	Chicago, IL St Louis, MO	- 21
Yard siding 1) NYC01s						4	SEA01s	Seattle, WA	2 3 5
Yard siding 2) ACT-Yd						Ľ			
Yard siding 3) SEA01s						I 1			
Yard siding 4)						I 1			
Yard siding 5)						I 1			
Yard siding 6)						I 1			
Yard siding 7)	-				1	I 1			
Yard siding 8)		Station	Arrival	Departure		I 1			
Yard siding 9)						I 1			
Yard siding 10)						I 1			
- Instructions									
Select next station from a	online	data. Travel time	between s	tations is					
between stations is calcu						<			>
'Yes' and then enter a de						Chow		tions	
Note: Rule 5: If times ar	e sam	e, only departure t	me is snot	YN.		SHOW	🔵 All sta	uons	
<u>Cancel</u> Schedu	le direc	tly on <u>S</u> tring diagram						<u>0</u> K	

Figure 12-26b

9. Finally we will enter the schedule for train 202 using the following schedule.

Depart Actonvale			6:00 am
ACT-Yd to Berwick (far end)	90 inches	1.12 min.	6:01 am
Work at Berwick		7.5 min	6:09 am
Berwick to Castle Rock	100 inches	1.25 min	6:10 am
Work at Castle Rock		20 min	6:30 am
Castle Rock to Berwick	100 inches	1.25 min	6:31 am
Work at Berwick		7.5 min	6:39 am
Berwick to ACT-Yd	90 inches	1.12 min	6:40 am

10. The final train 202 schedule is shown in Figure 12-26c. Make sure to click the "OK" button to save the schedule.

STrain schedules								×
Train	-Arri	val/Departure Time	es					
Symbol 202	#	Station	Arrival	Departure	1	All s	ations on PRO	
Call time 6:00 AM	1	Actonvale	0.01.444	6:00 AM		#	Stations	Zone
Train yarding plan Yard siding 1) ACT-Yd Yard siding 2) CAS02y Yard siding 3) ACT-Yd Yard siding 4) Yard siding 5)	2 3 4 5	Berwick Castle Rock Berwick Actonvale	6:01 AM 6:10 AM 6:31 AM 6:40 AM	6:09 AM 6:30 AM 6:39 AM		1 2 3 4 5 6	East Staging Castle Rock JT Junction Berwick Actonvale West Staging	EAS CAS JTJ BER ACT WST
Yard siding 6)	L							
Yard siding 8)		Station	Arrival	Departure				
Yard siding 9)								
Yard siding 10)								
Instructions Select next station from o between stations is calcul 'Yes' and then enter a de Note: Rule 5: If times are	lated eparte	for you. To stop/ ure time later than	wait at stal arrival time	ion, select		Show	Staging	
Cancel Schedule	e direc	otly on <u>S</u> tring diagram						<u>0</u> K

Figure 12-26c

11. Now we can check the string diagram for any conflicts. Click the "Schedule directly on String diagram" button opening the "Creating string diagram" window shown in Figure 12-26d.

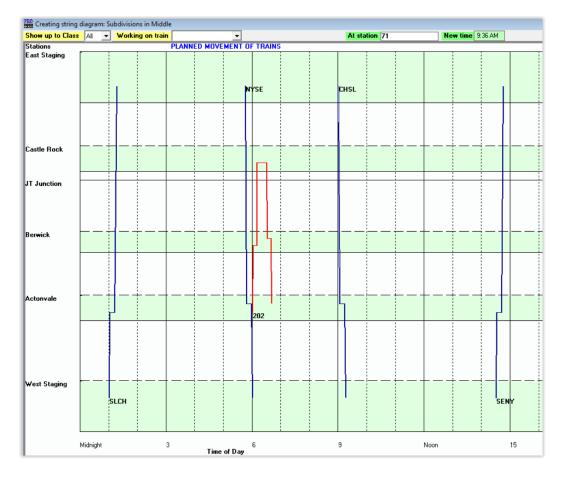


Figure 12-26d

- 12. As you can see trains NYSE and 202 are departing ACT-Yd at nearly the same time 5:58 am and 6:00 am respectively. While they are moving in different directions there could be conflict at the yard entrance. An easy solution would be to delay train 202 by 5 minutes. This would eliminate all ProTrak scheduling concerns and if you check Figure K-8 in Appendix K will not result in any conflicts on that diagram either.
- 13. To make the changes to train 202, we must first change its call time, then reenter its schedule. Close the "Creating string diagram:" window.
- 14. Open train 202 for editing (Scheduling / Establish Train jobs and yarding [Listing of train jobs]). Double click on the entry for train 202 (line 3) to open the "Changing train: 3 of: 5" window.

15. Click in the "Departure at" data field and the warning window shown in Figure 12-26e will open. This warning lets you know that we will delete our existing schedule for the train. Unfortunately, while following suggestion 1 (changing the schedule directly on the string diagram) will correctly change the departure time it will also introduce other unwanted changes and fixing those will require deleting and reentering the schedule. So, answer "Yes" here to open the "Departure Time" editing window. Set the time to 6:05 am and click "OK" to save the time, Then click "OK" to save the changes to the train and close the "Changing train..." window.

Reset the Timetable?	×
Warning: Changing the calltime here will erase the detailed Timetable schedule for this train. You can: 1) change the calltime, preserving the entire Timetable schedule at 'Create string diagram', 2) force a new Lineup by clicking 'Line-up of Trains'.	
Do you want to reset the calltime here?	
Yes No Cancel	

Figure 12-26e

16. Now open train 202 for timetable editing (Scheduling / Train Time Table Schedules [Train schedules] -> Select Train to Schedule/202) and reenter the schedule using the times from step 9 above after adjusting them to 5 minutes later. You may find the schedule has not been erased, in which case you can just edit the times.

If the schedule was not erased but you prefer reentering it over editing, you can delete the schedule as follows.

- a. Double click on the second line ⁽²⁰⁾ in the "Arrival/Departure Times" panel, Berwick in this case.
- b. Click the "Erase" button below the Station "Arrival" data field. This will remove line 2 and all following lines from the schedule.
- 17. Save the schedule changes and check the string diagram to confirm there are now no conflicts. Figure 12-26f shows the new time table and Figure 12-26g is the revised string diagram.

STrain schedules						— ×
Train	Arrival/Departure T	imes				
Symbol 202	# Station	Arrival	Departure	All	stations on PRO	
Call time 6:05 AM	1 Actonvale 2 Berwick	6:06 AM	6:05 AM 6:14 AM	#	Stations East Staging	Zone EAS
Train yarding plan	3 Castle Rock	6:15 AM	6:35 AM	2	Castle Rock	CAS
Yard siding 1) ACT-Yd	4 Berwick 5 Actonvale	6:36 AM 6:45 AM	6:44 AM	3	JT Junction Berwick	JTJ BER
Yard siding 2) CAS02y		0.40 AM		5	Actonvale	ACT
Yard siding 3) ACT-Yd				6	West Staging	WST
Yard siding 4)						
Yard siding 5)						
Yard siding 6)						
Yard siding 7)						
Yard siding 8)	Station	Arrival	Departure			
Yard siding 9)						
Yard siding 10)						
- Instructions						
Select next station from						
between stations is calc 'Yes' and then enter a c						
Note: Rule 5: If times a				Sho	w 🕥 Staging	
Cancel Sched	ule directly on <u>S</u> tring diagra	am				<u>0</u> K

Figure 12-26f

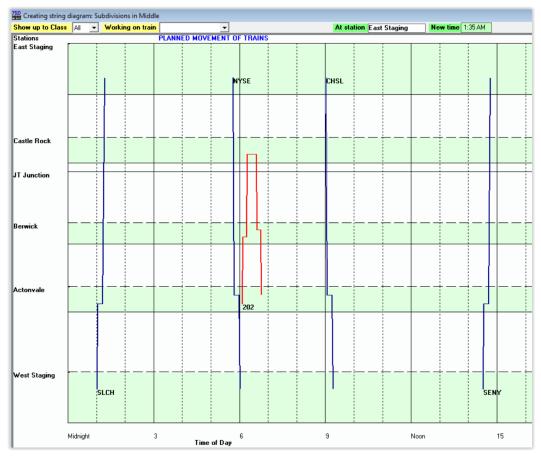


Figure 12-26g Page 61 18. Let's run some more sessions, so close any open windows.

The affected footnotes remain unchanged and are reproduced here for clarity.

¹⁷ Note that the String Diagram classes of trains here do not reflect prototype train classes.

¹⁸ If your railroad is north/south oriented, this is the most northerly point.

¹⁹ Other colors that appear on string diagrams are red for switching trains and green for passenger trains.

²⁰ Why the 2nd entry? As you will see if you try, you cannot edit the initial starting point nor the time. These two items are taken from the "Origin Station" and "Departure at" data fields shown in the "Changing train... window" (see chapter 5)

End of Page 12-26	End of New sections	This is the end of the new sections
		"Scheduling SLCH on the Timetable"
		"Deleting a train from the ProTrak
		Scheduler"
		and "Scheduling the other trains"

Chapter 13 – Basic Passenger Train Operations

Additional Passenger Stations

Page 13-2	Figure 13-1	Note: For the ACT-01 entry the "Switching train" column will show "1 platform"
Page 13-5	Figure 13-4	Note: For the three passenger station entries the "Switching train" column will show "1 platform"

Setting the Default Location for Passenger Cars

Page 13-7 Step 3 Change the last phrase in parentheses to:

(entry 34 in the list of special tracks)

Page 13-8Above Figure 13-7Change the paragraph beginning
"All of the remaining ..." as follows:

All of the remaining fields can be left unchanged. When entering the data ProTrak adds the "Coach yard home railroads" data fields and should have entered PRO as the "Owner railroad". Figure 13-7 shows what the "Changing Customer...." window should look like.

Industry name Castle Rock Coach Yard	_	Railroa	ads in O	fficial Guide	
City, State/Prov Castle Rock	-	###	Initial	Railroad	
	10	1	PRO	ProTrak Demonstrator	
Siding SPOT CAS 40 appears as CAS	-40	2	ATSF	Atchinson, Topeka &	
Track length 1000 feet Clearance Plate U	-	3	BN	Burlington Northern	
		4	CR	Conrail	
Siding radius 33 inches. Max. car length 93	feet	5	CSX	Chesapeake Seaboard	
		6	NS SP	Norfolk Southern Rai Southern Pacific	
		8	UP	Southern Pacific Union Pacific	
Siding name/commodity coach yard		9	CP	CP Bail	
		10	CP	Canadian Pacific	
Switching railroad PR0		11	CN	Canadian National	
Railroad subdivision Middle		12	A&EC	Atlantic & East Caro	
		13	AA	Ann Arbor	
Switching train no service 💌 Cars blocked at 1	-	14	AA	Michigan Interstate	
• • • • • • • • • • • •	-	15	AC	Algoma Central	
Trailing point switch, or switched in either direction	•	16	ACL	Atlantic Coast Line	
Facing point switch, switched by turn on return trip	0	17	AD	Atlantic & Danville	
racing point switch, switched by tarr of retain tip		18	ADN	Ashley, Drew & North	
Other such the training	_	19	AL	Almanor Railroad	
Other switching trains	<u>.</u>	20	ALM	Arkansas & Louisiana	
		21	ALS	Alton & Southern	
Number of cars at this SPOT 0 , or 0	feet	22	AMR	Aracata and Mad Rive	
		23	AN	Apalachicola Norther	
Currently loading/unloading in 0 hours		24	ANR	Angelina & Neches Ri	
		25	APA	Apache	
Coach yard home railroads		26	۵R	Aherdeen & Rockfish	>
Owner railroad PRO ProTrak Demonstrator	-				
Tenant railroad	•				
Tenant railroad	•		heck fo	r Manual Data Entry	
Tenant railroad	•				
	<u> </u>	Cancel			<u>0</u> K

Page 13-8 **Figure 13-7**

Replace figure 13-7 with the following:

Figure 13-7

interchange (track codes				Special spot	codes
Primary receiving	ng track (can be used for d	lelivery)	98	•	"x", cleaning tra	ack used 🕜 Yes 🍳
Primary delivery	track (also can be used)	for receving)	99	•		
Second receiving	ng track		97	•	"r", car RIP trac	c <mark>k used –</mark> C Yes 🔎
Second delivery	y track		96	•	"r", car repair st	hop used 🔿 Yes 🍳
	inations for empty, un-a ad owned cars	ssigned cars			"z", weigh scale	es in use 💽 🕥 Yes O
	ht car's default destination	ACT-Yd	•		"s" is staging	track
A passenger ca	ar's default destination	ACT-01	•		"t" is a team t	rack, or general use
Optional secon	nd empty freight car default o	destination		•	"y" is a yard ti "L" is a lead ti	rack, or set out track rack
E	sent to second yard WEST	T of	,			
Empty cars are	ton to to to the yard the to			<u> </u>		
	-			Ľ		
Private cars	-					
Private cars	-	,	ot valid	•		
Private cars		,	ot valid	•		
Private cars Default home p Car ferry on m	point for empty un-assigned	private car no		_		
Private cars Default home p Car ferry on m	point for empty un-assigned	private car no		_	'es (No	
Private cars Default home p Car ferry on m A car ferry is use	point for empty un-assigned nain track e to move cars between stat	private car no		_	'es (No	
Private cars Default home p Car ferry on m A car ferry is use Narrow Gage	point for empty un-assigned nain track e to move cars between stat Subdivision	private car no	ack.			
Private cars Default home p Car ferry on m A car ferry is use Narrow Gage	point for empty un-assigned nain track e to move cars between stat	private car no	ack.			
Private cars Default home p Car ferry on m A car ferry is use Narrow Gage	point for empty un-assigned nain track e to move cars between stat Subdivision	private car no	ack.			
Private cars Default home p Car ferry on m A car ferry is use Narrow Gage	point for empty un-assigned nain track e to move cars between stat Subdivision	private car no	ack.			

Page 13-8Figure 13-8Replace figure 13-8 with the following:

Figure 13-8

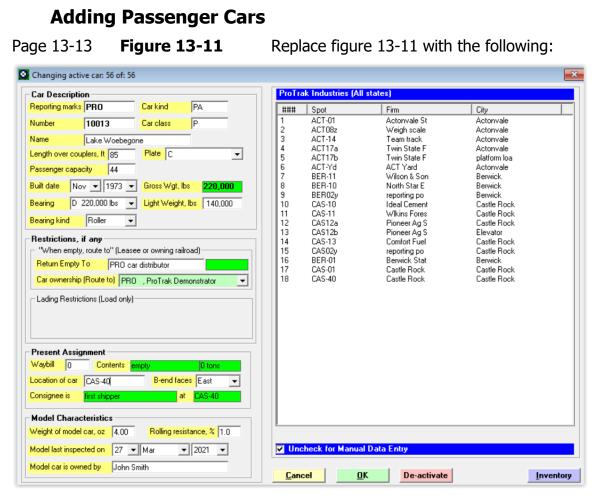


Figure 13-11

Adding a Passenger Train

Page 13-19 Step 18

Add the following sentence to the end of Step 18:

ProTrak may have removed the entry from the "Coach yard home railroads", "Owner railroad" data field, this is okay.

Scheduling the Passenger Train

Page 13-19, 2	0 Steps 1 - 6	Delete existing Step 1 through Step 6.
Page 13-20	Figure 13-18	Delete existing Figure 13-18.
Page 13-19	Step 1, 2	Insert new Steps 1 and 2 as follows:

- 1. On the ProTrak Standard Toolbar click on "Scheduling" then select "Train Time Table Schedules" from the dropdown list.
- 2. The "Train schedules" window is now displayed. Select "Symbol 100/101" from the "Select Train to Schedule" data field. Figure 13-18 shows how the window should now appear. ProTrak is now ready for us to enter the schedule for train 100/101.

Page 13-20 Figure 13-18 Insert no	ew Figure 13-18 as follows:
rage 15-20 Figure 15-16 Insert in	ew rigure 15-16 as follows.

Irain schedules					
Train	Arrival/Departure Tim	les			000
Symbol 100	# Station	Arrival	Departure	All stations on	
Call time 7:00 AM	1 Castle Rock		7:00 AM	# Stations 1 East Stag	Zone ing EAS
Frain yarding plan				2 Castle Ro 3 JT Junctio	ck CAS
ard siding 1) CAS-01] 			4 Berwick	BER
ard siding 2) STL03s]			5 Actonvale	
ard siding 3) CAS-01				6 West Stag	jing ₩S1
ard siding 4)					
ard siding 5)					
ard siding 6)	1				
ard siding 7)					
ard siding 8)	Station	Arrival	Departure		
ard siding 9)]				
ard siding 10)]				
nstructions					
	m online data. Travel time				
	Iculated for you. To stop a departure time later than				
	are same, only departure			Show 💿 Stag	ing
Cancel Sche	edule directly on String diagram	1			<u>0</u> K
	and another of our going angram				00

Figure 13-18

Page 13-21	Figure 13-19	Delete existing Figure 13-19.
Page 13-21	Step 7	Change the step number to "3" and change
		the second to last sentence as follows:

From Actonvale to West Staging takes 2 minutes (remember the train has to go around the loop).

Page 13-21	Step 8	Change the number of the step to "4".
Page 13-22	Step 9	Change the number of the step to "5".

Page 13-22	New Step 5	In the table change the "West Stg" arrival time to "7:11 am".
Page 13-22	Step 10	Change the number of the step to "6" and delete the sentence below the table that begins "We can now use the values"
Page 13-22-24	Step 11 to 13	Delete steps 11 through 13.
Page 13-22-24	Fig. 13-20, 21	Delete Figures13-20 and 13-21.

Page 13-22 New Steps & Figures Insert new Steps 7 through 9 and new Figures 13-19 through 13-21 (to page 72).

- 7. We can now enter the schedule for train 100/101. In the "Train schedules" window perform the following.
 - a. Double click on Berwick in the right panel to bring it to the "Arrival/Departure Times" editing fields (see Figure 13-19). ProTrak has assigned the arrival time we want, however we must adjust the departure time.

🛛 Train schedu	iles							_
Train		Arriv	al/Departure Tim	es				
Symbol 1	100	#	Station	Arrival	Departure	All	stations on PRO 👘	
Call time 7	7:00 AM	1	Castle Rock	1	7:00 AM	# 1	Stations East Staging	Zone EAS
Train yarding	g plan					2	Castle Rock	CAS
Yard siding 1) [CAS-01					3	JT Junction Berwick	JTJ BER
Yard siding 2)	STL03s					5	Actonvale	ACT
Yard siding 3) (CAS-01					6	West Staging	WST
Yard siding 4)								
Yard siding 5)								
Yard siding 6)								
r'ard siding 7)		·	a					
Yard siding 8)			Station	Arrival	Departure			
Yard siding 9)			Berwick	7:01 AM	7:11 AM			
Yard siding 10)			Station stop?	Yes 🔿	No			
Instructions								
Select next :			data. Travel time					
			for you. To stop/ ire time later than					
			e, only departure			Sho	w 🕥 Staging	
Cancel	Schedule	direc	tly on <u>S</u> tring diagram	1				ΩK

Figure 13-19

b. In the "Departure" data field change the time to "7:03 AM". Then click on the "Save stop" button (which becomes visible when you click in the data field) to enter the Berwick stop into the schedule. The schedule will now look like Figure 13-20 (only the upper portion of the window where data is located is shown).

Train schedules	- Arri	ival/Departure Ti	mes					×
Symbol 100	#	Station	Arrival	Departure	All st	ations on PRO		
Call time 7:00 AM	1	Castle Rock Berwick	7:01 AM	7:00 AM 7:03 AM	# 1	Stations East Staging	Zor EAS	
Train yarding plan					2	Castle Rock	CAS	
Yard siding 1) CAS-01					3 4	JT Junction Berwick	JTJ BEF	
Yard siding 2) STL03s					5	Actonvale	ACT	Т
Yard siding 3) CAS-01					6	West Staging	WS	Т
Yard siding 4)								
Yard siding 5)								
Yard siding 6)								
Yard siding 7)	-							
Yard siding 8)		Station	Arrival	Departure				
Yard siding 9)								
Yard siding 10)								

Figure 13-20

- c. Now add Actonvale with a 5 minute stop using the same procedure.
- d. At the next stop, West Staging, the train will wait until 5:30 pm before departing. This is still a normal stop, so let's enter it. First we need to select the correct location. Remember when we set up the train it went to St. Louis so we need to use that location not the model location of West Staging. In the right hand panel click on the "Show Staging" radio button, then double click on STL03s. As Figure 13-20a shows we will need to edit both the arrival and departure times.

Train schedules		
Train	Arrival/Departure Times	
Symbol 100	# Station Arrival Departure	Staging Siding Numbers
Call time 7:00 AM	1 Castle Rock 7:00 AM	# SPOT City R
	2 Berwick 7:01 AM 7:03 AM	1 NYC01s New York, NY 1
Train yarding plan	3 Actonvale 7:04 AM 7:09 AM	2 CHI02s Chicago, IL 2 3 STL03s St Louis, MO 3
Yard siding 1) CAS-01		3 STL03s St Louis, MO 3 4 SEA01s Seattle, WA 5
Yard siding 2) STL03s		
Yard siding 3) CAS-01		
Yard siding 4)		
Yard siding 5)		
Yard siding 6)		
Yard siding 7)		
Yard siding 8)	Station Arrival Departure	
Yard siding 9)	St Louis, MO 7:12 AM 7:22 AM	
Yard siding 10)	Station stop? 🔿 Yes 🔿 No	
between stations is ca 'Yes' and then enter a	online data. Travel time between stations is culated for you. To stop/wait at station, select departure time later than arrival time. are same, only departure time is shown.	< > Show All stations
<u>C</u> ancel Sche	dule directly on <u>S</u> tring diagram	<u>0</u> K

Figure 13-20a

- e. First we will change the departure time to "5:30 PM" and then click on the "Save button", the same as we did for the other stops above.
- f. Then in the "Arrival/Departure Times" panel double click on the "St Louis" entry to bring it back to the editing panel, as shown in Figure 13-20b.

Train schedules Train	Arri	val/Departure T	imae					x
Symbol 100			Arrival	Departure	Stag	ing Siding N	umbers	
Call time 7:00 AM	1 2	Castle Rock Berwick	7:01 AM	7:00 AM 7:03 AM	#	SPOT NYC01s	City New York, NY	F
Train yarding plan	3	Actonvale	7:04 AM	7:09 AM	2	CHI02s	Chicago, IL	
ard siding 1) CAS-01	4	St Louis, MO	7:12 AM	5:30 PM	 3	STL03s SEA01s	St Louis, MO Seattle, WA	į
ard siding 2) STL03s					 ·			
ard siding 3) CAS-01								
ard siding 4)								
ard siding 5)								
ard siding 6)								
'ard siding 7)	<u> </u>							
ard siding 8)		Station	Arrival	Departure				
'ard siding 9)		St Louis, MD	7:12 AM	5:30 PM				
Yard siding 10)		Cancel	<u>E</u> rase	1				

Figure 13-20b

g. Now change the arrival time to "7:11 AM" and click on the "Save" button. The result is shown in Figure 13-20c.

Train schedules						x
Train	Arrival/Departure Tim	ies				
Symbol 100	# Station	Arrival Departure	Sta	aging Siding N	lumbers	
Call time 7:00 AM	1 Castle Rock	7:00 AM	#	SPOT	City	R
Train yarding plan Yard siding 1) CAS-01 Yard siding 2) STL03s Yard siding 3) CAS-01	2 Berwick 3 Actonvale 4 St Louis, MO	7:01 AM 7:03 AM 7:04 AM 7:09 AM 7:11 AM 5:30 PM	1 2 3 4	NYCO1s CHIO2s STLO3s SEA01s	New York, NY Chicago, IL St Louis, MO Seattle, WA	1 2 3 5
Yard siding 4) Yard siding 5) Yard siding 6)						
Yard siding 7) Yard siding 8) Yard siding 9) Yard siding 10)	Station	Arrival Departure				

Figure 13-20c

h. Enter the Actonvale and Berwick stops using the data from the table in step 6 above. Remember to switch the right hand panel back to "All stations" using the radio button. The resulting schedule is shown in Figure 13-20d.

STrain schedules						×
Train	Arrival/Departure Ti	nes				
Symbol 100	# Station	Arrival	Departure	All	stations on PRO	
Call time 7:00 AM	1 Castle Rock 2 Berwick	7:01 AM	7:00 AM 7:03 AM	#	Stations East Staging	Zone [EAS
- Train yarding plan	3 Actonvale	7:04 AM	7:09 AM	2	Castle Rock	CAS
Yard siding 1) CAS-01	4 St Louis, MO 5 Actonvale	7:11 AM 5:31 PM	5:30 PM 5:36 PM	3 4	JT Junction Berwick	JTJ BER
Yard siding 2) STL03s	6 Berwick	5:37 PM	5:39 PM	5	Actonvale	ACT
Yard siding 3) CAS-01				6	West Staging	WST
Yard siding 4)						
Yard siding 5)						
Yard siding 6)						
Yard siding 7)						
Yard siding 8)	Station	Arrival	Departure			
Yard siding 9)						
Yard siding 10)						

Figure 13-20d

i. It is now time to enter the last stop at Castle Rock. This begins the same by double clicking on Castle Rock in the right hand panel, but his time ProTrak recognizes it is our termination station so it just enters the station and arrival time in the schedule, see Figure 13-20e. We can see that the time is correct, if it needed correcting we would have double clicked on the schedule entry to make the change as in step 7f above.

rain		Arrival/Departure T	imes				
Symbol 1	00	# Station	Arrival	Departure	All s	tations on PRO	
Call time 7:	:00 AM	1 Castle Rock		7:00 AM	#	Stations	Zo
		2 Berwick	7:01 AM	7:03 AM	1	East Staging	EA
rain yarding	plan —	3 Actonvale	7:04 AM	7:09 AM	2	Castle Rock	C4
ard siding 1) 🖸	AS-01	4 St Louis, MO 5 Actonvale	7:11 AM 5:31 PM	5:30 PM 5:36 PM	3	JT Junction Berwick	JT. BE
ard siding 2) S	TL 020	6 Berwick	5:37 PM	5:39 PM	5	Actonvale	AC
		7 Castle Rock	5:40 PM	5.551 M	6	West Staging	Ŵ
ard siding 3) [C	AS-01		0.10110		Ŭ		
ard siding 4)							
ard siding 5)							
rd siding 6)							
ard siding 7)							
rd siding 8)		Station	Arrival	Departure			
rd siding 9)		Castle Rock	5:40 PM				
ard siding 10)							
nstructions –							
		line data. Travel ti					
		ted for you. To sto					
		arture time later tha			Chan		
iote: nule :	o. In times are s	same, only departur	e ume is show	¥11.	Show	Staging	
Cancel	0.1.1.1	directly on String diagra	1				OK

Figure 13-20e

j. Remember that once you have made all the changes you must click on the "OK" button in the bottom right corner of the window to permanently accept all of the changes. Do this now and you will be returned to the "Select Train to schedule" version of the "Train schedules" window as in Figure 13-20f.

📴 Train schedule	es	×
Select Train t	to Schedule	
6, Symbol: 100/	/101 🚽	
<u>C</u> lose	Schedule directly on <u>S</u> tring diagram	<u>0</u> K

Figure 13-20f

8. Now let's see how the train 100/101 schedule fits with our other trains. Click on the "Schedule directly on String diagram" button to display the string diagram. The result should look like Figure 13-21.

Remember changing a schedule here can cause errors, so do not edit any schedules on the string diagram.

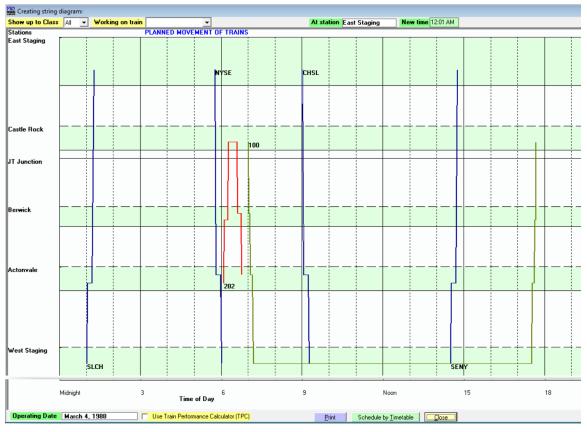


Figure 13-21

9. Train 100/101 shows up as a green line and has no conflicts. We can close the "Creating string diagram" window.

End of Page 13-22 End of New Steps & Figures

This is the end of new Steps 7 through 9 and new Figures 13-19 through 13-21.

Assigning Passenger Cars to the Train

Page 13-25Step 2Add the following sentence, steps 2a to 2d
and Figure 13-23a to the existing step 2

If your "Cars in train" list has any cars listed (including freight cars) it indicates that system files did not properly update. The following steps 2a to 2c will correct this.

- a. Click on "Close" to close the "Assigning passenger cars" window.
- b. On the ProTrak Standard toolbar, click on "Help" then select "Emergency reset" from the dropdown list to open the "Emergency Reset" window shown in Figure 13-23a.
- c. Click on the "Run FP" button in the middle left side of the window. This causes ProTrak to run the file pre-processor to correct the train files. You will see a process window and when complete both windows will close. ProTrak uses the same process when you start operations.
- d. Return to step 1 above to reopen the "Assigning passenger cars"

Emergency Reset	×
Railroad Data Folder C:\ProTrak\PR0348\ Move all railroad data to RRTOP folder	
Operations File Pre-processor (FP)	Emergency Re-set trains
Running the File Pre-processor (FP) checks	0 trains, of 6 total trains are complete
all car locations and destinations. The FP will correct car assignments to trains.	0 trains are moving, or are complete
<u>R</u> un FP	Set all trains to their terminal (last) location
Recover Backup Data	C Reset all trains to their starting location
C Recover data from before Daily Summary - BeforeDS	
C Recover data from after Daily Summary - AfterDS	
<u>R</u> ecover Data	<u>Cancel</u>
Close	

Figure 13-23a

Printing Schedules and String Diagrams

- Page 13-28 **Step 4** Add the following notes to step 4
- Note: The arrival time at St Louis shown as 7:13 AM in Figure G-32 will be 7:11 AM in our data. When printing in actual minutes and seconds the origin station departure time prints as "0:00". We are unaware of the reason or a way to correct

this. Other times appear to be correct.

Page 13-28 **Step 6** Add the following note to step 6

Note: After printing the string diagram the right hand side of the "Creating string diagram" window may be cutoff, hiding the "Close" button. Since we make no changes to schedules here you can close this window using the upper right corner system close window "x".

Passenger Service waybi	ll 47 of: 47				
Shipper and Consginee			Basic F	reight Car	Types (88)
	Pittsburgh, PA		###	Kind	Descriptive
company			1	F	Flat cars
siding number	VYY01s		2	FB FC	Bulkhead flat cars Containers/TOFC
Shipper is on railroad			4	G	Gondola
Consignee city			5	GB	G, fixed sides/bottom
company			6	н НМ	Hopper cars H, 2 hoppers
siding number	VYY01s		8	HT	H, 3 hoppers
			9 10	L LO	Special car types Covered hopper
Passenger - Car, Servic			11	R	Refrigerator cars
Ordered car kind	PS, Sleeper	-	12 13	RB RP	R, no bunkers R, mechanical
Type of passenger service	passenger 🗾 🔻		14	RS	R, with ice bunkers
			15	S	Stock cars
Passenger Routing - "Pe	ullman Line"		16 17	т Х	Tank cars Box cars
Train to be used for this way	bill	•	18	×м	X, general loading
Position in train	any position 💌		19	MW P	Maintenance of Way Passenger cars
1 Osidori in dain					r accondor caro
Routing					
Routing					
_	24 hours				
Not subject to demurrage.	24 hours	<u> </u>	<		
_		-) Specific	

Passenger Car Waybills

Figure 13-30

inppor (and Consginee					1 I 🔳	Staning	Siding Num	hore	
hipper	city	Actonvale						,		
	company	Diner Servi	се				### 1	SPOT NYC01s	City New York, N	Regio Y 1
	siding number	ACT-41	_				2	CHI02s	Chicago, IL	2
hipper is	on railroad		-				3 4	STL03s SEA01s	St Louis, MO Seattle, WA	3 5
onsignee							4	SEAUIS	Seattle, WA	5
onoignos	company			_						
		071.00	-							
	siding number	STLU3s								
asseng	er - Car, Servi	e								
rdered c		DB, Buffe	t		-					
upe of pr	assenger service	, Dassenge	,	•	_					
ype or pa	assenger service	passenge		·						
rain to be	er Routing - "f e used for this wa e train			•	•					
_	e used for this wa	ybill		•	•					
rain to be	e used for this wa	ybill		•	V					
rain to be Position in	e used for this wa	ybill		•	•					
rain to be Position in Position in Position in	e used for this wa	ybill any p	osition	T	•		<			
rain to be Position in Couting Not subjer Demurrag	e used for this wa I train ct to demurrage.	ybill any p	24 hours	•	Y		_	Industry		

Page 13-35 Figure 13-31

Replace Figure 13-31 with the following:

Figure 13-31

			P AAR	Mechani	cal Class (88)
ipper city			###	Kind	Descriptive
company			1	PA	Passenger car
siding number	STL03s		2	PB	Baggage/mail/exp
ipper is on railroad			3	PC PD	Commuter service Food/beverage
nsignee city	Actonvale		5	PS	Company service
company	Diner Service		6	PAB B×	Combine Box express
siding number			8	BE	Box express Baggage express
ording number			9	CA	Baggage combine
issenger - Car, Servi	e		10	DA DB	Dinner Buffet
dered car kind	DB, Buffet	•	12	DC	Cafe
pe of passenger service	passenger	-	13	DO MA	Cafe observation Postal
			15	MB	Mail/baggage
ssenger Routing - "F	ullman Line"		16	MBE MS	Mail/baggage/expre Mail smoker
ain to be used for this wa			18	PBO	Observation coach
			19	PAS	Coach sleeper
	any position	•	19 20	PAS PS	Coach sleeper Sleeper
	any position	•			
	any position	•			
sition in train	any position	•			
	any position	•			
	any position	•			
	any position				
	any position				
osition in train	any position	•			
	any position				
osition in train					
sition in train uting emurrage free loading tim	9 24 hours	•	20		
ition in train	e 24 hours	·	20	PS	Sleeper
on in train ing urrage free loading tim urrage free unloading tim	9 24 hours	•	20 < Show	PS	Sleeper
tion in train ting nurrage free loading tim nurrage free unloading t inuing in transit	e 24 hours		20 < Show	PS	Sleeper

Page 13-36 **Figure 13-32**

Replace Figure 13-32 with the following:

Figure 13-32

Page 13-36 **Step 14**

Add the following note to step 14.

Note: The remaining data fields should be left blank. They would be used if we had Pullman or other RR passenger cars or were concerned with financial modeling.

Passenger Ops Switchlists

Page 13-39, 40 **Step 2** Replace step 2 with the following:

2. Start "Operations" as you did for a freight train, then from the ProTrak Operations Toolbar select "Switchlist" and choose "Print a Switchlist" from the dropdown list. Single click on train 100 then click on the "Switchlist" button at the bottom of the window; alternately, you may double-click on train 100. <u>A copy of the "Conductors Passenger Service Report" (the passenger ops version of a switchlist) is included in Appendix G as Figure G-31. Currently you can see a "Switchlist Preview" that is the same format as for a freight train from the "Reporting Movements" window that is used to report the train at each location. Note, selecting a passenger train and clicking "Train List" in the "Reporting trains: Current Trains..." window will directly print the "Conductors Passenger Service Report".</u>

Page 13-40Step 3Change the third line to read"for freight trains."

Work Notes

Page 13-47 Step 2

Replace step 2 with the following:

 As noted in the preamble to this section, Work Notes currently do not print on a passenger train's "switchlist"; <u>but since Train 202 is scheduled</u> <u>to work in Castle Rock until shortly before Train 100/101 departs for</u> <u>Actonvale, we can add an alert in</u> a Work Note to Train 202's switchlist. Double click on train 202 and a window like Figure 13-42 will appear.

Page 13-49 **Steps 5 and 6** Replace steps 5 and 6 with the following:

- 5. Insert the text <u>"If delayed, ensure Main track is clear prior to 7:00 am"</u> in the "Notes: Train..." data field then click on the "Save Notes" button at the bottom right of the "Work Notes for..." window (see Figure 13-44). <u>This will open another area below the first note line. In this area enter "for the departure of Train 100" and again click on the "Save Notes" button. It was necessary to enter the note on 2 lines since ProTrak will not word wrap a long line (you need to see the entire text displayed in the data field).</u>
- 6. The note we entered has now been saved and will be printed on the switchlist for Train 202 at Castle Rock. <u>Again</u>, another area has opened below the note we just entered. This allows us, if required, to add <u>additional notes</u>. We might need to add another note if, for instance, we had to restrict where the locomotives could go (similar to what we described in the preamble). We won't add any more notes at this time.

Appendix K - Timetables

Note: The following changes replace Appendix K in its entirety.

Timetable 1

Page K-1Figure K-1Replace Figure K-1 with the following.

Note: Corrected to properly account for the staging reverse loops.

Timetable 1

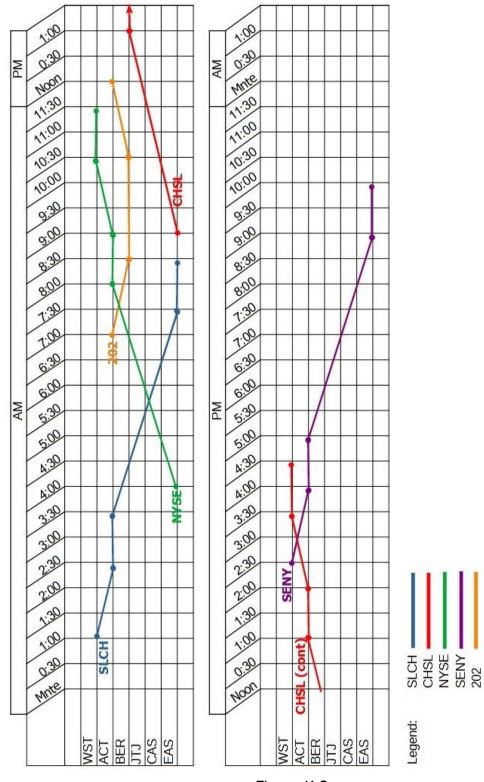
R	Read Down		Train				Read Up		
SLCH	SENY	202		Irdin		202	NYSE	CHSL	
				Reverse	Ar		11:25	4:25	
				Loop End	AI		am	pm	
1:01	2:30		Dn	West	Ar		10:25	3:25	
am	pm		Dp	Staging	AI		am	pm	
2:26	3:55		Ar		Dp		9:00	2:00	
am	pm		AI	Actonvale	Ър		am	pm	
3:26	4:55	7:00	Dp	Actonvale	Ar	12:00	8:00	1:00	
am	pm	am	Dp		AI	pm	am	pm	
		8:30	Ar	Berwick	Dp	10:30			
		am	AI	DEIWICK	υp	am			
				JT					
				Junction					
				Castle					
				Rock					
7:26	8:55		Ar	East	Dp		4:00	9:00	
am	pm		AI	Staging	Ър		am	am	
8:26	9:55		Ar	Reverse					
am	pm		AI	Loop End					

Figure K-1

Page K-2 Figure K-2

Replace Figure K-2 with the image from the following page (page 79).

Note: The string lines for several trains have been adjusted to the correct arrival and departure times and staging reverse loops.



Timetable 1 – String Diagram

Figure K-2

Timetable 1 - Revised Timetable

Page K-3 **Figure K-3** Replace Figure K-3 with the following.

Note: Corrected to properly account for the staging reverse loops.

Timetable 1 - Revised Timetable

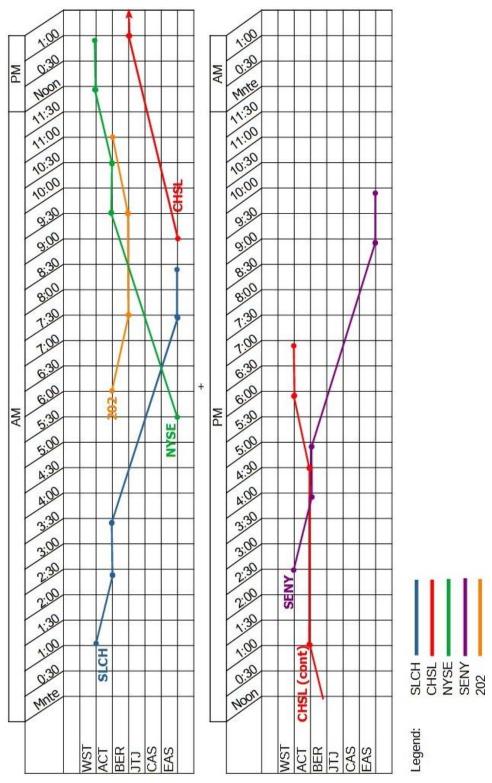
R	ead Dow	/n		Train			Read Up)
SLCH	SENY	202		IIalii		202	NYSE	CHSL
				Reverse			12:55	6:55
				Loop			pm	pm
1:01	2:30		Dn	West	Ar		11:55	5:55
am	pm		Dp	Staging	AI		am	pm
2:26	3:55		Ar		Dn		10:30	4:30
am	pm		AI	Actonvale	Dp		am	pm
3:26	4:55	6:00	Dn	ACIOITVAIE	Ar	11:00	9:30	1:00
am	pm	am	Dp		AI	pm	am	pm
		7:30	Ar	Berwick	Dp	9:30		
		am	AI	DEIWICK	υр	am		
				JT				
				Junction				
				Castle				
				Rock				
7:26	8:55		Ar	East	Dn		5:30	9:00
am	pm		AI	Staging	Dp		am	am
8:26	9:55			Reverse				
am	pm			Loop				

Figure K-3

Page K-4 Figure K-4

Replace Figure K-4 with the image from the following page (page 81).

Note: The string lines for several trains have been adjusted to the correct arrival and departure times.



Timetable 1 Revised – String Diagram



Timetable 2

Page K-5Figure K-5Replace Figure K-5 with the following.

Note: Corrected for train 202 distances and revised Timetable 1 times.

Timetable 2

R	Read Down			Train		Read Up			
SLCH	SENY	202		IIdiii		202	NYSE	CHSL	
				Reverse	Ar		9:43	1:13	
				Loop End			am	pm	
1:01	2:30		Dp	West	Ar		9:13	12:43	
am	pm		υp	Staging			am	pm	
1:44	3:13		Ar		Dp		8:30	12:00	
am	pm			Actonvale	υр		am	pm	
2:44	4:13	6:00	Dp	ACIOIIVAIE	Ar	12:40	7:30	11:00	
am	pm	am	υp		τ.	pm	am	am	
		6:45	Ar		Dp	11:55			
		am	AI	Berwick	μ	am			
		7:30	Dp	DEIWICK	Ar	11:10			
		am	Dp		A	am			
				JT					
				Junction					
		8:20	Ar	Castle	Dn	10:20			
		am	AI	Rock	Dp	am			
4:44	6:13		Ar	East	Dn		5:30	9:00	
am	pm		AI	Staging	Dp		am	am	
5:14	6:43		Ar	Reverse					
am	pm		AI	Loop End					

Figure K-5

Page K-6 Figure K-6

Replace Figure K-6 with the image from the following page (page 83).

Note: The string lines for several trains have been adjusted to the correct arrival and departure times.

Timetable 2

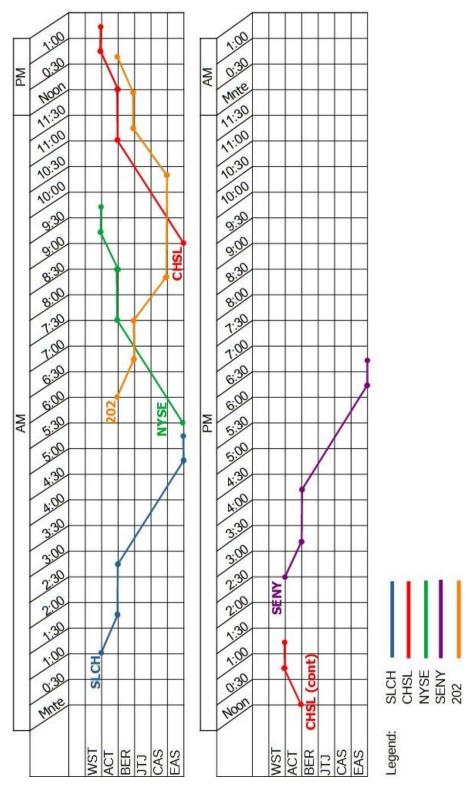


Figure K-6

Timetable 2 - Revised Timetable

Page K-7 **Figure K-7** Replace Figure K-7 with the following.

Note: Corrected for train 202 distances and revised Timetable 1 times.

Timetable 2 - Revised Timetable

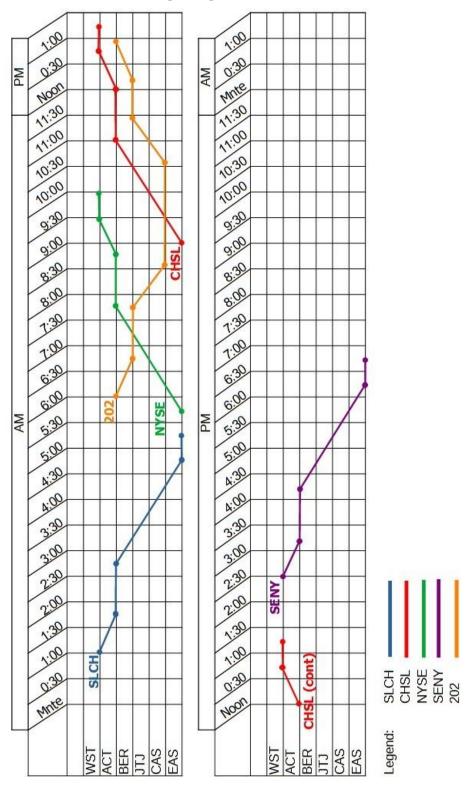
R	Read Down			Train		Read Up			
SLCH	SENY	202		IIdiii		202	NYSE	CHSL	
				Reverse	Ar		9:58	1:13	
				Loop End			am	pm	
1:01	2:30		Dp	West	Ar		9:28	12:43	
am	pm		υp	Staging	A		am	pm	
1:44	3:13		Ar		Dp		8:45	12:00	
am	pm		AI	Actonvale	υр		am	pm	
2:44	4:13	6:00	Dp	ACLOIIVAIE	Ar	12:55	7:45	11:00	
am	pm	am	υp		A	pm	am	am	
		6:45	Ar		Dp	12:10			
		am	AI	Berwick	υp	pm			
		7:45	Dp	DEIWICK	Ar	11:25			
		am	Dp			am			
				JT					
				Junction					
		8:35	Ar	Castle	Dp	10:35			
		am	AI	Rock	υр	am			
4:44	6:13		Ar	East	Dn		5:45	9:00	
am	pm		AI	Staging	Dp		am	am	
5:14	6:43		Ar	Reverse					
am	pm		AI	Loop End					

Figure K-7

Page K-8 Figure K-8

Replace Figure K-8 with the image from the following page (page 85).

Note: The string lines for several trains have been adjusted to the correct arrival and departure times.



Timetable 2 Revised – String Diagram

