

UTC Scenario Hints and Walkthroughs

Introduction

The following applies to all UTC scenarios:

- A derailment will terminate the scenario.
- A collision will terminate the scenario.
- Speeding is always penalized. Some scenarios penalize speeding more heavily than others under certain special circumstances.
- At the start of each scenario, you will be provided with a pop-up screen to select either DCC or Cabin Control. If you press **Esc** and close the window without choosing a control mode, the scenario will default to DCC mode.
- To display the instruction clipboard you are provided with at the start of the each scenario, simply press the 'k' key. Press **Esc** or click on the red dot in the top right hand corner of the clipboard window to close it.

In the top left hand corner of the screen, there is the *Objective Window*. This window displays helpful hint icons to guide you through scenario as well as informative and warning text messages. The icons used in the UTC Scenarios are listed in the table below:

Icon	Description
	<i>Pause</i> – Warning to either prepare to stop or to wait until the line ahead is clear.
	<i>Stop</i> – Indicates you should stop the train very soon. This icon will be displayed when you are going slow and can stop in time. Also used when you are stopped at a station and shouldn't proceed.
	<i>Go Ahead/Proceed</i> – Generic Go Ahead/Proceed icon. Despite this, keep an eye on the signals as they may not be green, despite this icon.
	<i>Go Back</i> – Indicates to slowly back the train. Rarely used.
	<i>Couple/Decouple</i> – Indicates you are to perform a coupling or decoupling operation.
	<i>Objective/Scenario Complete</i> – Displayed when a major objective is completed or the scenario has been finished successfully.
	<i>Danger/Alert</i> - If this icon appears, you probably have done something bad. Usually displayed when you pass a red signal, speed under certain circumstances or couple too fast.
	<i>Info</i> – Displayed when an informative message/hint is being presented in the <i>Objective Window</i> .
	<i>Turn</i> – Turn the loco around. Only displayed in certain circumstances when a loco has been stopped on a turntable.
	<i>Temporary Speed Restriction</i> – Used to indicate a temporary speed limit that is to be observed.
	<i>Lunch Break</i> – Lunch break in progress. You can relax when this icon is being displayed.

Generally speaking, the icon descriptions provided above are correct, however if an icon is used for another specific purpose, this will be explicitly mentioned in the walkthrough sections below as required.

Scenario #1 – Banks Heath

Bank's Heath is the easiest of the UTC scenarios as it is a simple passenger commuter run. All the user needs to do is drive through the route obeying signals and stopping at all stations. The script handles all junctions automatically and no shunting is required.

Hints, Special Instructions and Warnings

- Passing a red signal is unacceptable and doing so will cause the scenario to be terminated. As this scenario is based in the UK, signals are on the left hand side of the track.
- Traveling backwards down the route will also cause the scenario to be terminated. As you go through each station, the area behind the station will become a restricted area that you cannot reverse into.
- When going through the cycle of a station stop, the *Objective Window* displays several icons to guide you through the process. As well as that, you have the guard's whistle and bell to let you know what is going on. The station stop sequence is as follows:
 - Before you reach the station, the *Pause* icon will be displayed warning you to slow down and prepare to stop at the next station ahead.
 - Stop the train just before the signal at the end of the platform. If the signal is beyond the end of the platform, take your loco beyond the end of the platform and stop just before it.
 - Once stopped, the *Pause* icon is replaced with the *Stop* icon while the passengers board or exit the train. Do not move the train when the *Stop* icon is being displayed as doing so is dangerous for passenger safety and will be penalized harshly.
 - Shortly, the guard blows his whistle to give a final warning to passengers and the *Pause* icon is displayed. Not long after that, the guard rings the bell to indicate it is now safe to move the train again and *Go-Ahead/Proceed* icon is displayed.
 - However, the signal may not be clear, so even though the train is ready, you may have to wait until the signal turns green before you can proceed.
- When stopping at a station, you have a margin of error (40-60 feet), but you can't go past the signal. If the signal is beyond the end of the platform, you should stop just before it, even if this means the loco and first carriage aren't accessible from the platform.
- Clearance from the guard and clearance from the signal are two different things. The guard's clearance (indicated by a bell sound after the whistle) indicates all passengers have safely boarded/left the train. The signals are synchronized to the timetable and indicate the state of the track section ahead. It is the guard's job to ensure passenger safety, not ensure the line ahead is clear.

Points & Scoring

The scoring in this scenario is mostly based on how well you stick to the timetable. Each station stop results in an addition/deduction to the score, depending on whether you are late, early or on-time. In addition to that, points are added for each successful passing with other trains. The only penalties are for speeding and late arrival at a station.

Scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
On-time arrival at intermediate station:	+200
On-time arrival at final station:	+300
First HST passing:	+200
Second HST passing:	+100
Late station arrival:	-seconds late
Speeding:	-1 (for each second speeding)
Moved train while stopped at station:	-400
Overrun station:	-300

Note that:

- Station arrival is considered to be on time if the train is within 30 seconds of the scheduled arrival time. That is, if the train is either 30 seconds early or 30 seconds late, it is considered to be on time.
- If the train is early, the on-time arrival points (200 or 300, depending on the station) will be added and the user will have to wait for the timetabled signal to clear before they can proceed.
- If the train is late, no points for the station arrival will be awarded at all. Instead, a deduction that equals the amount of seconds late is applied.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 6mph more than the current speed limit, so you can safely travel several mph over the speed limit.
- Moving the train while stopped at a station is very dangerous to passenger safety, so you are harshly penalized for doing so.
- It is unlikely that you will overrun a station as you will most likely pass the red signal and terminate the scenario before an overrun can actually occur.
- You can speed to arrive early at a station, but as you are penalized for speeding, have to wait for the signal and there is no bonus for early arrival, there is little point in doing so.

Walkthrough

The scenario starts out with an external view of Banks Heath station where your train (a British Rail Class 37 and four Mk II carriages) is waiting for departure while an Intercity 125 HST (High Speed Train) is rolling into the other platform. Before anything starts, you must select either Cabin or DCC mode from the pop-up window. If you press **Esc** to close the window without selecting, the scenario defaults to DCC mode. The scenario walkthrough is as follows:

- Once the HST arrives, you are placed in the cab of your train and the instruction clipboard with the timetable along with basic instructions is displayed.
- After that, the guard will wait for all passengers to be safely aboard and give you clearance via the cabin bell. However, the signal may not be green yet, so you will have to wait. (Remember, the guard looks out for the passengers, not the line ahead!)
- Once the signal has turned green (you might have to wait a minute or two), you can now safely take the train out of the station. Now that you are started, be aware of the speed limits.
- The first stop is Sutton Bridge, which is just after the first stone viaduct you will encounter shortly after leaving Banks Heath. As you come closer to the viaduct, the pause icon will be displayed warning you to start slowing down and prepare to stop. See the *Hints, Special Instructions and Warnings* section above for a full station stop walkthrough.
- Stop the train just before the signal at the end of the platform.
- Once the guard's clearance is given through the cabin bell and the signal has changed to green, take the train on through to the next station. However, be aware that the line gets busier from here on, so keep an eye on the signals.
- Drive out of the station and follow the track through the cutting in the hill. After that, the track starts to split up into a triple track mainline where your train will be going down the center track.
- Be careful now as you will soon encounter a yellow signal (remember that UK signals are on the left hand side of the track), however it is still safe to go on, just be prepared to stop soon so an express train can pass you (i.e. half the speed limit). Expect a slow freight train to pass on the track to your right sometime soon.
- Stop the train before the red signal that is near the end of this triple track section. You will be warned through the *Stop* icon. Keep in mind that because of the yellow signal before, you shouldn't be going too fast.
- Here, you will wait for a few minutes for the HST to pass by. Once the HST has passed, you will still have to wait a while for the signal to turn to yellow and clear you for the line ahead.
- When the signal is finally yellow, you can proceed on to Hammond station which is only a short distance ahead. Don't worry about this passing affecting your timetable as it is part of the scenario and is factored into the arrival times.
- Stop at Hammond station and as before, wait for the guard's clearance and the signal to turn green. When clear, take the train on to the next station stop, Tin Oats.
- Stop at Tinoats station and as before, wait for the guard's clearance and the signal to turn green. When clear, take the train on to the next stop, Bright Water station.
- Bright Water station is located just after the stone viaduct. On the way to Bright Water, a long passenger train will pass you on the track to your right.
- Stop at Bright Water station, wait for guard's clearance and the signal to turn green. When clear, take the train on to the next station stop, Warradale, which is located down the straight section of track after the sharp curve you go through to exit Bright Water station.

- When stopping at Warradale, the platform is short and a level crossing is next to the rear end of it, so stop your train near the signal that is located a carriage length or so beyond the platform. This means the loco and the first carriage won't be on the platform, but this is ok as we want the train to be clear of the level crossing.
- Stop at Warradale station and as before, wait for the guard's clearance and the signal to turn green. When clear, take the train on to the next and final station stop, Teneriffe.
- Shortly after leaving Warradale, the single track starts to fork. This is the approach to Teneriffe where you will have to stop and wait for another train to pass through.
- As you enter the junctions, you will be diverted to the left most track and encounter a yellow signal. As a red signal is not to far off, start slowing down the moment you see the yellow signal. The *Stop* icon will be displayed as a warning.
- The red signal will stop you just before a junction. Once stopped, a HST will quickly pass by and the signal will turn to green so you can proceed.
- Follow the track across the junctions into the right-most platform at Teneriffe, stopping the train towards the end of the terminus.
- Once stopped, the scenario will be ended as you have successfully completed all stations stops and objectives.

Scenario #2 – East Coast Sunlander

Like Banks Heath, East Coast Sunlander is also a rather easy scenario as it involves a simple end-to-end passenger run. However, this scenario is further complicated by the use of the Automatic Train Protection System (ATPS). The script handles all junctions automatically and no shunting is required.

Hints, Special Instructions and Warnings

- Passing a red signal is unacceptable and doing so will cause the scenario to be terminated. As this scenario is based in Australia, signals are on the left hand side of the track.
- The ATPS continuously monitors the speed of your loco and applies the emergency brakes if needed. If you exceed the speed limit by 10kph, the ATPS will sound an alarm and display a message in the *Objective Window* to warn you of your speeding. If you exceed the speed limit by 16kph, an alarm is sounded and the ATPS seizes control of the train and applies the emergency brakes then returns control of the train back to you once it has come to a stop.
- The ATPS also informs you through a buzzer sound when the train enters a new speed limit section of track and updates the digital speed limit display in the *Objective Window*. There are a total of 14 speed zones you will go through.
- If the speed limit is faster than the previous one, the ATPS informs you as the last carriage reaches the new speed zone entry point. However, if the new speed limit is slower, you are informed the moment your loco reaches the new zone, so the ATPS speed limit can differ slight to the usual regular Trainz speed limit display when transitioning between speed limit zones.

- There are only two station stops. The first stop is at Warnertown and to stop there, go through the usual slow down, stop and start process as used in the *Banks Heath* scenario described above. The final stop at Paisley has precise carriage location requirements and is discussed in the walkthrough below.

Points & Scoring

The scoring in this scenario is not only based on how you keep to a timetable, but you are given points for each new speed zone you enter (total of 14) and the ATPS penalizes you heavily for speeding violations.

Scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
Entered a new monitored speed zone:	+100
On-time arrival at Warnertown:	+200
Freight train passing:	+200
Stopped train correctly at Paisley:	+200
On-time arrival at Paisley:	+300
Late station arrival:	-seconds late
Missed platform at Paisley:	-50
Speeding:	-1 (for each second speeding)
Exceeded speed limit by 10kph:	-50
Exceeded speed limit by 16kph:	-300
Moved train while stopped at station:	-400
Overrun station:	-300

Note that:

- Station arrival is considered to be on time if the train is within 30 seconds of the scheduled arrival time. That is, if the train is either 30 seconds early or 30 seconds late, than it is considered to be on time.
- If the train is early, the on-time arrival points (200 or 300, depending on which station) will be added.
- If the train is late, no points for the station arrival will be awarded at all. Instead, a deduction that equals the amount of seconds late is applied. This applies to both station stops.
- Each speed zone you enter under ATPS monitoring gives you 100 points (there are a total of 14).
- When stopping at Paisley, the train is to be stopped such that the front two carriages are beyond the platform. Every time you stop the train at Paisley and the carriages are not lined up with the platform correctly, the guard will inform you by radio and 50 points will be deducted.
- If the train exceeds the speed limit by 10kph and the ATPS sounds a warning, 50 points will be deducted for each time this happens. When exceeding the speed limit by 16kph and the emergency brakes are applied, you will be penalized even more harshly with a 300 point deduction.

- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 10kph more than the current speed limit, so you can safely travel several kph over the speed limit. This penalty is applied in addition to the ATPS speed alarm penalties.
- Moving the train while stopped at a station is very dangerous to passenger safety, so you are harshly penalized for doing so.

Walkthrough

The scenario starts out with a view looking down a platform with a driver (your player character) standing nearby waiting for the train to arrive and take over. Before this can start however, you must select DCC or Cabin Control mode from the pop-up window. After around one minute, the train will start approaching the station. The scenario walkthrough is:

- Wait for train to come into the station and stop near where your character is.
- Once stopped, you will be transferred over to the cab, however you are not ready to take control yet as the *Pause* icon is still being displayed.
- As soon as you are in the cab, the driver you took over from will wish you well and then the instruction clipboard will be displayed. Once the clipboard is closed, the *Go Ahead/Proceed* icon will be displayed and you can now start driving the train.
- Start the train, keeping a careful watch on your speed. You won't need to change any junctions as the entire route is managed for you. Just keep following the route.
- The first station you will pass is Bremer. You do not need to stop there, just pass through. Another passenger train will pass you around here. Drive through Bremer and follow the route over the bridge.
- When warned with *Pause* icon, start to slow down and prepare to stop the train near the end of the platform at Warnertown. Once stopped, wait for the guard's clearance to proceed when the *Go-Ahead/Proceed* icon is displayed.
- Even though you have the guard's clearance to proceed, you can't really start moving on as the signal just up ahead is red. So either move up to the signal and wait or wait where you are.
- In a few minutes, a long freight train will come out of the tunnel ahead and pass by. Wait for it to pass through and the signal to turn green.
- Go on through the tunnel and across the bridge. Be careful on approach to the next station near the big mill as although you don't have to stop there, the speed limits do drop.
- Pass through the station and follow the track up through the steep curved gradient, observing speed limits as you approach Paisley.
- You will be warned with the *Pause* icon as you go through the curve towards Paisley and as the train enters the station, the *Stop* icon is displayed, however don't stop the train the moment this icon is displayed
- Stop the train at Paisley such that the front two carriages (baggage and power – they are not passenger carriages) are beyond the end of the platform and the front of the third carriage is inline with the end of the platform.

- If you miss the stop, the guard will tell you to move the train and 50 points will be deducted each time this happens.
- Once stopped at the right location, the scenario is over.

Scenario #3 – Robe River Iron

Robe River Iron is a freight scenario that involves what appears to be a long and simple return trip to a mine. However things are trickier than they may initially appear as a switching sequence and a track maintenance zone must be dealt with as part of the mine trip. All junctions are handled automatically.

Hints, Special Instructions & Warnings

- Although this scenario is based in Australia, the private iron ore railroads of Western Australia follow North American practice, so signals are on the right side of the track and speed is measured in mph.
- The switching sequence at the mine can be tricky, so it is documented in extra detail here. Be sure to follow instructions carefully.
- The mine is a long way off, so don't be surprised when you are driving through the desert for 10 minutes or more. But don't despair, the mine is at the end of the line and you will have adequate warning.
- The return trip may take a little longer as you are going up a gradient with a fully loaded train.

Points & Scoring

The scoring in this scenario is mainly based completion of objectives. As this scenario is not timetable dependent like the previous two are, there are no late penalties. The only way to lose points is to speed or couple-up roughly.

Scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
Initial passing:	+200
Arrival at Mesa mine:	+500
First track maintenance zone pass-through:	+300
Run-around and lunch break:	+300
Second track maintenance zone pass-through:	+300
Arrival back at passing loop:	+500
Coupled at speed greater than 5mph:	-50
Speeding in track maintenance zone:	-50
Speeding:	-1 (for each second speeding)

Note that:

- Coupling up at speed results in a 50 point penalty, but there is only one couple-up involved in this scenario.

- If the train exceeds the speed limit at all during the track maintenance zone, 50 points are deducted for each time this happens.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 6mph more than the current speed limit, so you can safely travel several mph over the speed limit. This deduction doesn't apply when the train is in the maintenance zone.

Walkthrough

The scenario starts out with you in the cab of an ore train waiting in a passing loop. Before anything can happen however, you must select DCC or Cabin Control mode from the pop-up window. Once selected, the instruction sheet pops up and once you have closed it, the scenario can begin:

- Wait in the siding where your train is for several minutes. Soon, a loaded ore train will approach and as the train approaches the junction, the driver will blast his horn and a brief friendly chat over the radio occurs.
- The train coming through has 40 fully loaded ore cars and is going up a gradient, so it will take several minutes to clear the junction. Once it eventually does, the junction is changed and the signal in front of your loco turns to green, so you can start your trip down to the mine. The *Objective Window* icon will change from *Pause* to *Go-Ahead/Proceed* when this happens.
- Follow the track all the way to the Mesa mine. This should take 10-15 minutes. When your train eventually reaches a small concrete bridge over a creek, this means the mine isn't too far off.
- Soon after the creek, you will pass through a junction. If you haven't slowed down yet, you should do so now.
- Not far after the junction, a radio message from the supervisor of the track crew ahead will inform you of track maintenance that is in progress and instruct you to keep to the special temporary speed limit.
- The *Objective Window* will display the *Temporary Speed Restriction* icon indicating the new temporary speed limit and you are to stick to this speed limit until your train is clear of the maintenance zone.
- Note that speeding in this zone will get an angry response from the supervisor and a speeding penalty of 50 points.
- As your train is long, it will take a while before your train has fully exited the maintenance zone. When this eventually happens, your locos will nearly be at the mine and the supervisor will radio you when you are clear and the *Go-Ahead/Proceed* icon replaces the *Temporary Speed Restriction* icon.

Train Run-around Sequence:

- Now that you are out of the maintenance zone, you can keep to the usual speed limits. Drive through the mine and slowly glide into the siding after the mine.



- As you enter the siding, the *Pause* icon will be displayed to warn you to stop prepare to stop.



- When the *Stop* icon appears, slow down and stop the train right near the sign at the end of the siding.



- Once you have stopped, the *Couple/Decouple* icon is displayed, so decouple the locos from the ore cars.



- Once decoupled, the *Go-Ahead/Proceed* icon is displayed telling you to go on.



- Slowly take the locos through the junctions until the *Stop* icon is displayed and stop the locos once they are clear of the junction.



- When the locos have been stopped after the junction, the *Pause* icon will be displayed while you are shifted over to the cab of the rear loco and have a brief conversation with a fellow work mate. Note that at this stage, the logical direction of the train is reversed. In addition to that, the controls are locked, so you can't drive the locos away when the conversation is in progress.



- Once the conversation is over, the *Go-Ahead/Proceed* icon appears as the junction has since been changed for you to go on.



- Take the locos back down the siding parallel to the one where you just dropped off the ore cars (forward in the loco consist - remember, you switched cabs and the rear loco is not the front loco!).
- Keep going up the siding until you pass the junction at the other end (near the mine). Don't stop exactly when *Stop* icon appears, keep going until you have fully passed the junction and then stop.



- Again, this stop triggers the junction to change, so wait until the *Go Back* icon is displayed (should be as soon as you stop and the junction is changed).



- As you back the locos into the siding, the *Pause* icon will be displayed warning you to slow down for the couple-up.



- As you get closer to the ore cars, the *Couple/Decouple* icon will be displayed. Remember you shouldn't couple at a speed greater than 5mph.



- Once coupled up with the ore cars, the *Go-Ahead/Proceed* icon will be displayed, so take the train forward onto the lunch stop (buildings near the mine - marked with a sign).



- As you approach the lunch stop, the *Stop* icon is displayed. Once stopped, the script displays the *Lunch Break* icon takes over for the lunch break where you will have a friendly conversation with the replacement crew before handing the locos over to them.
- The scenario will now switch you over to an external elevated view of the mine where you will watch the train slowly go up to the mine and then ore will start getting dumped into the cars. The scenario is in control here, so please be patient.
- Shortly after the first two cars start getting ore dumped in them, the screen fades out for the rest of your lunch break.
- Very quickly, the screen fades back in with you in the cab of what is now a fully loaded ore train ready to take back up to the passing loop where you started from.
- After a brief conversation with a workmate, you can start the train. As it is now fully loaded and going up a gradient, it will take a while for it to start moving.
- Like on the way down, you must pass through the track maintenance zone again. As before, the supervisor radios you as you enter the zone and as you leave it. The same penalties for speeding here apply and give you the same angry response.
- Once clear of the maintenance zone, drive the train all the way back to the passing loop where you first started at.
- When approaching the passing loop, keep on going past the waiting train and shortly, the scenario will end as you take the train through the siding.

Scenario #4 - Biriburra Yards

In the Biriburra Yards scenario, you are to drop off several wagons at different locations around the yard and then pickup some other wagons for a short journey. Relatively precise placement of wagons in the yards is required and changing junctions will be up to you for the shunting portion of the scenario.

Hints, Special Instructions & Warnings

- Signals don't have much of a role in this scenario and signal violations are not enforced. In the yard, you will notice that the dwarf signals may be red, even though you have to go down a siding to pick some wagons up.
- The yard is sloped, so decoupled wagons may roll, depending on whether you are in DCC or Cabin Control mode.
 - If you are in DCC mode, the hand brakes are automatically applied on all wagons not in the loco consist. This means they will roll a little once uncoupled, but will stop within several meters when the brakes take effect.
 - Cabin Control mode isn't as forgiving as there is not automatic braking on uncoupled wagons. Instead, you must first apply the airbrakes lightly and then set them to lapping mode. Next, decouple the wagons from the train and drive the loco away with its brakes still applied slightly. Now the wagons won't drive away as their breaks are on.
- Changing the junctions in the yard is left to you and although there are no bonuses for minimizing junction changes in this scenario, try to avoid the temptation to simply drive over a junction that isn't set correctly.
- Some junctions around the yard may be locked. They have been specifically locked so you don't drive off out of the yard when you are supposed to be shunting, so don't try and move over them as you may find yourself stuck and unable to finish the scenario.

Points & Scoring

The scoring in this scenario is objective based and the only penalties are for speeding and fast couple-ups.

Scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
Completed initial shunting task:	+600
Turned loco around on turntable:	+200
Picked up haul-away wagons:	+200
Arrived with train at Tilnowle:	+400
Coupled at speed greater than 8kph:	-50
Speeding:	-1 (for each second speeding)

Note that:

- There is the possibility for quite a few coupling operations to take place, so the penalties for coupling too fast can add up if you make a habit of rough shunting.
- You will be given progress messages in the bottom left hand corner of the screen when shunting so you will know when you have actually finished the shunting section.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 10kph more than the current speed limit, so you can safely travel several kph over the speed limit.

Walkthrough

The scenario starts out with an external view of the freight train you are to shunt. Before anything can happen however, you must select DCC or Cabin Control mode from the pop window. Once selected, the instruction sheet pops up and once you have closed it, you get the go-ahead from the dispatcher and the scenario can begin:

- Uncouple the two gondolas and your loco from the rear four wagons and drive forward through to the concrete bridge and stop once the rear gondola passed the junction just before the bridge.
- Change the junction just before the concrete bridge and back your train onto the other line and through to the private siding. The junction into the private siding is already set and you don't need to worry about it.
- Back the train down through the private siding and stop at the first blue shed.
- Once stopped, uncouple the two gondolas and haul the loco away from them. This will be your first drop off and as the gondolas are in place, you can leave them there and continue on with your shunting.
- Return back to the siding where you started from via the junction near the concrete bridge and couple your loco up with the remaining 4 wagons.
- Pull out of the siding so you can access the sidings leading to the large shed to the left of the train.
- Back the train into the large shed such that the two large vans at the rear of your train are inside the shed. Once stopped, decouple them from your train and haul out of the shed siding.
- The next and final drop-off is in the siding that terminates at the large shed, so back the flat wagons into the siding and uncouple them. Be carefully not to go too fast and hit the buffer stop as this can cause a derailment.
- Once the flat wagons are in place and decoupled, drive the loco out of the siding. By now, you will be informed that all drop-offs are complete and it is time to move onto the next part of the scenario.
- Find your way to the turntable and turn the locomotive around. You need to do this so the loco is facing the right way for the train you will haul away later.
- You can get to the turntable through any un-occupied siding in the entire yard, as long as you don't interfere with the wagons you dropped off previously.
- As you approach the turntable, the *Pause* icon will appear to warn you to slow down. Once stopped on the turntable, the *Turn* icon will be displayed, so turn it around a full 180 degrees.
- Once turned around, drive the loco out of the turntable back on the siding you entered the turntable on, heading towards the yard. As you leave the turntable, a *Go-Ahead/Proceed* icon will be displayed.
- Drive the loco through the yard, following the junctions as set and couple up with the long haul-away consist. As you approach the wagons the *Pause* icon will be displayed to warn you to slow down, followed by the *Couple/Decouple* icon as you get closer to the wagons.
- Once coupled up, the *Go-Ahead/Proceed* icon will be displayed as the line is clear and the junctions have been set for your journey to Tilnowle station. All junctions

have been set, so start out by driving the train out of the siding, exiting the yard and into the tunnel.

- After you exit the tunnel, keep following the track. It will take approximately 5 minutes to get to Tilnowle, but you will be warned in advanced by the *Pause* icon so you will know when to start slowing down.
- As you come into Tilnowle, you will see the Indian Pacific waiting there. Stop the train just before the crossovers as the *Stop* icon appears. The scenario is now over, so it time to head off to the Tilnowle pub for a brew or two.

Scenario #5 - Blue Sky Steel

For the Blue Sky Steel scenario, you are to attend to several switching duties around the steel mill as ordered by the dispatcher. This includes two return trips to from the blast furnace to the slagheap and back and the delivery of foundry and boxcars to their respective destinations.

Hints, Special Instructions and Warnings

- The sidings in the blast furnace are very short with just enough room for three cars each. So when dropping off or picking up slag tipper cars from the blast furnace sidings, be very careful not to go too fast as it is very easy to derail at the end of the sidings because you can't stop in time.
- As your switching is within the confines of the mill, you won't need to worry about signals.
- The only time you need to be careful with regard to other trains and signals is when the coal train passes through a track you will need to cross over to deliver the foundry cars. Just patiently wait for the coal train to pass through and junctions to change.
- Several junctions are changed automatically for you. When and where this will happen is mentioned in the walkthrough below.

Points & Scoring

The scoring in this scenario is objective based with no timetable and the only penalties are for speeding and fast couple-ups.

Scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
Completed 1st slag heap trip:	+300
Foundry cars drop-off:	+200
Completed 2nd slag heap trip:	+300
Box cars dropped off for pickup:	+200
Coupled at speed greater than 8kph:	-50
Speeding:	-1 (for each second speeding)

Note that:

- Quite a few coupling operations to take place, so the penalty for coupling too fast can add up if you make a habit of rough shunting.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 6mph more than the current speed limit, so you can safely travel several mph over the speed limit.

Walkthrough

The scenario starts out with an external view of the switching loco you will be using for your switching duties. Before anything can happen however, you must select DCC or Cabin Control mode from the pop window. Once selected, the instruction sheet pops up and once you have closed it, the scenario can begin:

- Await your first orders from dispatcher and then you are ready to go. Until you have received the orders fully, the *Pause* icon will be displayed and you won't be able to move the loco until the dispatcher has finished.
- Once the dispatcher has given you your orders, the *Go-Ahead/Proceed* icon will be displayed and you are now ready to start your first job which is a return trip to the slag heap.
- Back the loco slowly and very carefully into the blast furnace and pickup the three loaded slag tipper cars. Remember to be very careful in the blast furnace sidings, as it is very easy to go too fast and end up derailing over the end of the siding.
- Once coupled up with the three slag cars, pull out of the siding and reverse into the adjacent blast furnace siding to pick the other three slag cars. As you now have a fully assembled train of six slag cars, you can head off to the slagheap.
- Drive the train forward out of the blast furnace siding under the bridge and on through to the slagheap.
- When approaching the slagheap, slow down and prepare to stop when warned by the *Pause* icon. Ideally you should stop so that the loco is at the end of the slagheap, which is defined by the blackened area emitting smoke that is long enough to handle all slag cars.
- The stop zone at the slagheap is fairly generous and gives you several car lengths as a margin of error. You will know if you stopped in the correct place when the screen starts fading out to black.
- Once stopped in the right location, the scene will fade out and for a few seconds and fade back in with your train, which now has 6 empty slag tipper cars sitting beside an extra steamy slagheap.
- Take the train back to the mill and drop three slag cars off in each siding of the blast furnace where you initially picked them up from.
- Note that it doesn't matter which three slag cars go into which blast furnace siding. Remember to be careful not to go too fast in the blast furnace sidings as you won't be able to stop in time and will derail over the end.
- As you drive away from the final empty slag cars you drop off in place at the blast furnace, the dispatcher will give you your next order, which is to deliver the foundry cars to the foundry mill.
- Take your switcher to the siding where the foundry cars are located (they look like bottles and there are three of them). You will have to go all the way to the bridge overpass to change over to the correct siding.

- Once coupled up with the foundry cars, pull out of the siding back to the junction near the bridge. Start heading to towards the foundry mill (see the map on the clipboard by pressing 'k'). Make sure the blast furnace junction is changed so you don't end up back in the blast furnace sidings.
- Sometime around now, you will notice that a coal train is making its way through the mill. As this train obstructs your path to the foundry mill, you will have to wait until it is clear.
- When the coal train is clear, the junctions to get to the foundry mill will be changed for you and a message will be displayed informing you it is now safe to cross over.
- Crossover the line that the coal train passed through on, heading towards the foundry mill. Stop the train when all three cars are inside the foundry mill building and decouple them from your switcher.
- As you pull out of the foundry mill siding after dropping off the foundry cars, the dispatcher will tell you to go back to the blast furnace and pickup the slag car tipplers which have been refilled and need to be taken to the slag heap for dumping again.
- As before, pick up all loaded slag cars from both blast furnace sidings and when you have them all in a single consist, head off to the slagheap and stop.
- Again, the screen will fade out and when it fades back in, your train now has six empty slag tipper cars.
- Take the emptied slag cars back to the blast furnace and drop them off in the sidings with three per siding, as before on the first return trip.
- After pulling out of the blast furnace siding where all the empty slag cars have been dropped off, the dispatcher will then order you to pickup the box cars and delivery them for pickup.
- Return back to the siding that leads to the foundry mill, but this time head for the large shed where the boxcars are. Note that the junction to the large shed has been changed for you.
- Once the boxcars have been coupled up with, back all the way out of the siding with your train. Change the junction that leads to the factory and foundry sidings so that it now is set to go through the steel mill to the drop off zone.
- Push the boxcars towards the drop zone. Once stopped, decouple your locomotive from them so the waiting locos can haul them away. The drop zone is very generous so precision isn't too important here, but don't exit the mill area either.
- A brief conversation with driver of the waiting locos takes place as you pull away from the boxcars and the scenario ends.

Scenario #6 - Alcopulse Railroad

This is one of the simpler scenarios where you take on both freight and passenger duties with a pair of multi-purpose Alco FA1 units. The freight duty is a boxcar delivery to a marshalling yard while the passenger duty is an express through to a destination station.

Hints, Special Instruction and Warnings

- There is not much other traffic in this scenario, so you won't be waiting at signals for other trains or have to worry about collisions with them either.
- No junction changes are required as it is all handled automatically.
- When switching over to the passenger role, your train is logically reverse and you move over to the cab of what was the rear loco which is now the front loco.

Points & Scoring

The scoring in this scenario is objective based with no timetable and the only penalties are for speeding and fast couple-ups.

The scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000
Blue Sky pass-through	+200
Decouple in marshalling yard	+300
Couple up with passenger cars	+300
Cleared to depart Central station:	+100
Stopped at Blue Sky:	+300
Coupled at speed greater than 5mph:	-50
Speeding:	-1 (for each second speeding)

Note that:

- Not many coupling operations take place, so the penalty for coupling too fast shouldn't have a major impact on the total score.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 6mph more than the current speed limit, so you can safely travel several mph over the speed limit.

Walkthrough

The scenario starts out with you in the cab of the front loco. Before anything can happen however, you must select DCC or Cabin Control mode from the pop window. Once selected, the instruction sheet pops up and once you have closed it, the scenario can begin:

- Drive through out of the siding and follow the track over the small bridge and into Blue Sky station. You will notice a coal train approaching from a mine, but it doesn't interfere with your route, so you can safely ignore it and go on.
- Keep on going through past the station and follow the route through the canyon until you reach the entrance to the marshalling yard.
- As you approach the yard, the *Pause* icon will be displayed warning you to slow down. Start slowing down and prepare to stop at the end of the siding when the *Stop* icon is displayed.
- Once stopped, the 'decouple' icon is displayed, so uncouple the locos from the freight cars and start moving them forward out of the siding.

- Next, drive the locos on forward and follow the junctions through to Central station.
- When the station terminus station is in sight, start to slow down. Proceed carefully and couple up with the passenger cars on the far left platform.
- Once coupled, your train will switch directions so you are now in what was the rear loco.
- Wait for the guard's clearance and a green signal, then take the train out of the station, observing all speed limits and follow the line all the way through to Blue Sky station. Don't stop at any other station encountered on the way.
- When stopping at Blue Sky, stop just before the red signal towards the end of the siding. Once stopped, the scenario is finished.

Scenario #7 – Highland Valley Coal

This is the hardest of the scenarios as it involves lots of switching moves to perform various drop-offs and pick-ups. What makes this scenario particularly tricky is that you can complete the switching tasks any way you like, as there is no specific required way to do them. However we do have our own recommended solution, which is described in the walkthrough section below.

Hints, Special Instructions and Warnings

- How efficiently you do the switching tasks affects your final score. The less switching operations you perform during an objective, the more points you will get for that objective. An operation is defined as being either a junction change, couple-up or decoupling.
- Like the *Biriburra Yards* scenario, you will be switching on tracks that are sloped, so you must be careful when in Cabin Control mode to ensure brakes are set on dropped off cars. See the *Biriburra Yards* section for details on how to ensure breaks are applied on decoupled cars. In DCC mode, you need not worry about brakes on cars as the scenario handles them automatically.
- Signals don't play a large role in this scenario. Red signals at the mines can be safely ignored. The only signal you need to worry about is at the Stormont passing section.
- You will be required to do just about all of the junction changes yourself unless otherwise specified in the walkthrough.

Points & Scoring

The scoring in this scenario is not only dependent on completed objectives, but how many operations you perform to achieve the objective is also considered. The more operations performed, the less points you will get so the idea is to complete the scenario with the minimum amount of operations performed to maximize your score. No time limits are applied, so you can take your time to figure things out.

The scoring for this scenario is listed in the table below:

<i>Reason</i>	<i>Points</i>
Starting score:	+1000

Greenwood yard switching:	+400
Robbins pickup:	+300
Stormont passing:	+200
Odlum Mine drop-off:	+500
Afton Mine drop-off:	+500
Highland Valley drop-off:	+200
Afton Mine pickup:	+400
Odlum Mine pickup:	+400
Arrival at Greenwood coal dump:	+300
Decouple operation:	-5
Couple operation:	-5
Junction change:	-5
Coupled at speed greater than 5mph:	-50
Speeding:	-1 (for each second speeding)

Note that:

- An operation is defined as either a junction change, couple-up or decoupling. Each operation performed will result in 5 points being deducted from the total score for the objective being attempted.
- As this scenario involves lots of switching, the penalty for coupling too fast can be substantial as 50 points is deducted each time.
- For every second the train is over the floating speed limit, 1 point is deducted. The floating speed limit for this scenario is 6mph more than the current speed limit, so you can safely travel several mph over the speed limit.
- A detailed score card is displayed when you complete the scenario providing detailed information on how and why you scored points for each objective.
- Objectives that don't involve performing operations will be scored for the full value listed in the table. These objectives are Stormont Passing and Greenwood Coal Dump.

Walkthrough

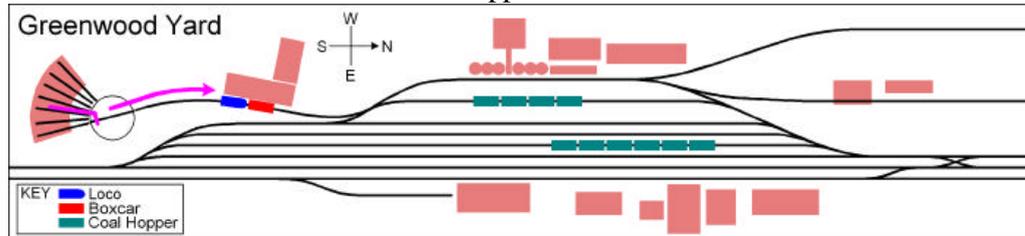
The scenario starts out with you having a conversation with the dispatcher overlooking the roundhouse where your locomotive is. After the conversation is completed, you are placed in the locomotive cab in the roundhouse with your instruction clipboard and are ready to go. Note that there are several ways to complete this scenario and the way described below is the ideal recommended solution, although there could very well be another more efficient way we haven't discovered.

The walkthrough for this scenario, divided into sections by objective is:

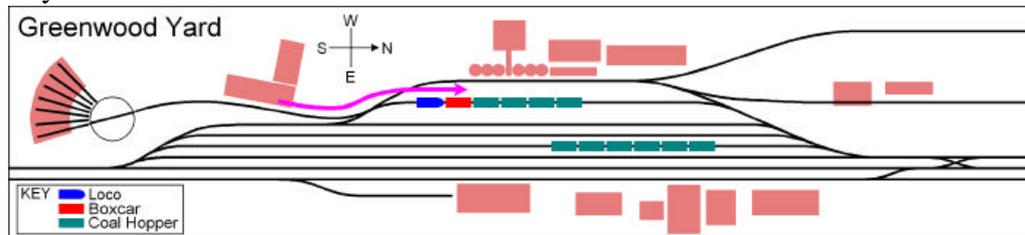
Greenwood Yard switching:

- Once in the loco cab in the roundhouse and clipboard is closed, you are ready to do the first objective, which is to collect all of the coal hoppers and the single boxcar from the yard and assemble them into a single train.
- Move to an external view and shift the turntable around so it is lined up with the roundhouse stall your locomotive is in.

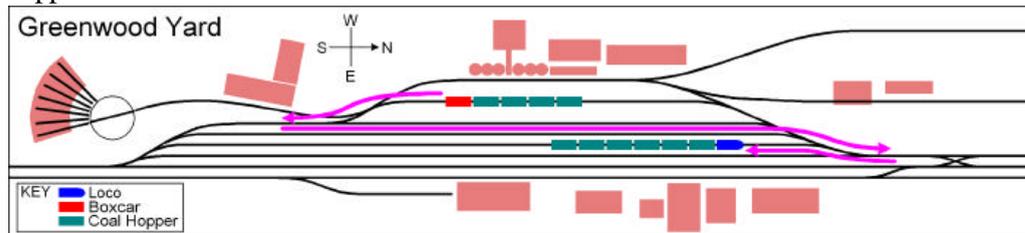
- Ease the locomotive out of shed and stop it on the turntable. Then shift the turntable left so that it lines up with the left-most exit siding in front of the loco (the one that heads towards the siding where the boxcar is).
- Move forward and couple the front of your locomotive up with the boxcar. Just ahead of the boxcar, make sure the junctions are set so you can keep going forward and connect with the four coal hoppers near the silos.



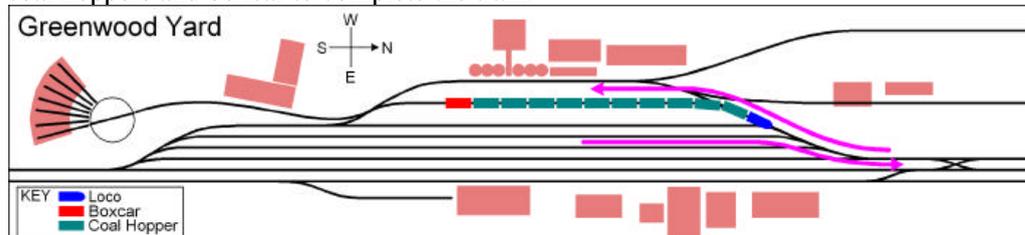
- Keep moving forward and couple the boxcar up with the four coal hoppers. Once coupled up, uncouple your locomotive, leaving the boxcar and hoppers where they are.



- Reverse back out of the siding far enough so you can transfer over to the parallel siding to your immediate right. Drive down that siding and up to the yard entrance so you can reverse back into the six remaining coal hoppers.
- Change the junction so you can reverse and pickup the six remaining coal hoppers.



- When coupled up with the hoppers (the rear of your loco this time), haul them out of the yard. Now change junctions again and reverse the train back into the four coal hoppers and boxcar to complete the train.



- Once all cars are coupled up with your locomotive, you have completed the first objective and can now proceed on.

- As the route up to Highland Valley has been set, you can simply take the train forward without needing to change any junctions, so go forward and follow the branch line past the steel mill, up over the mainline and into the overpass loop.



Robins pickup:

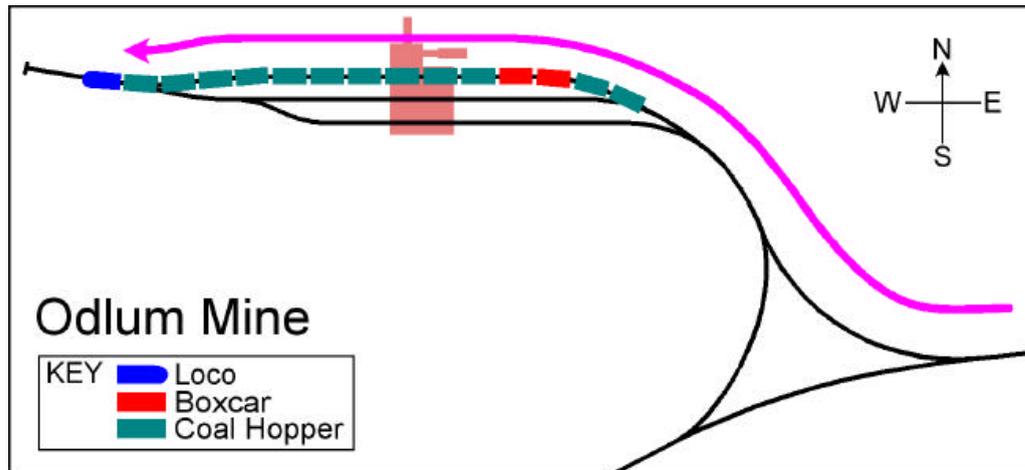
- When approaching the overpass loop just after you pass under the bridge, the dispatcher will tell you to pickup two coal cars and a boxcars at Robins which is the next station ahead just after this overpass loop.
- Slowly go through to Robins station until the rear of your train has passed the junction that leads to the siding where the boxcar and two coal hoppers are located.
- Change the junction and slowly reverse your train. Once you have coupled up with the first boxcar, keep going backwards slowly so you can pickup the two coal hoppers as well.
- Once these two boxcars have been picked up and connected to your train, you have finished the Robins Pickup objective and can proceed on. The Robins repair crew will thank you as you leave.

Stormont passing:

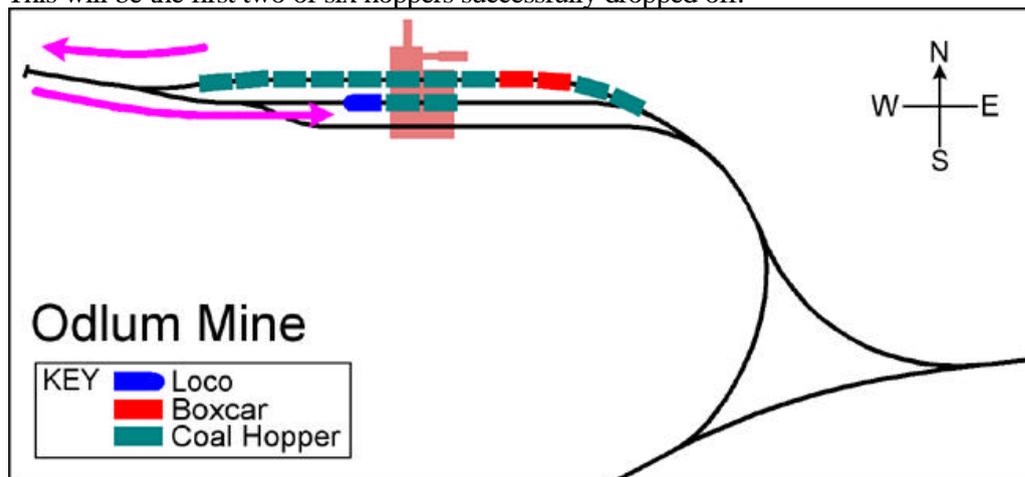
- Keep follow the line up and around and after you go around the small dam, you will soon approach a junction. This is Stormont station where you will need to stop and wait for a passenger train to pass through before you can go to Odlum mine for your first drop-off.
- Go into the right station siding (the junction is set for you) and stop just before red signal at the end of the siding. You will be warned with the *Pause* icon and then the *Stop* icon as you approach the red signal.
- Very soon, a passenger train will pass and as soon as it's clear of the line ahead, the *Go-Ahead/Proceed* icon is displayed, the signal will change to green and the junction will be changed so you can go on.

Odlum Mine drop-off:

- Not long after leaving Stormont, you will encounter a wye junction that is the entrance to Odlum mine. The first junction in the wye you will encounter has been set to take you into the mine, so follow the track through.
- When going into the mine, your train will be diverted into the right-most siding. Drive up that siding all the way such that the rear most car is just clear of the junction to the left siding (it is ok for it to overlap on the junction for the center siding).

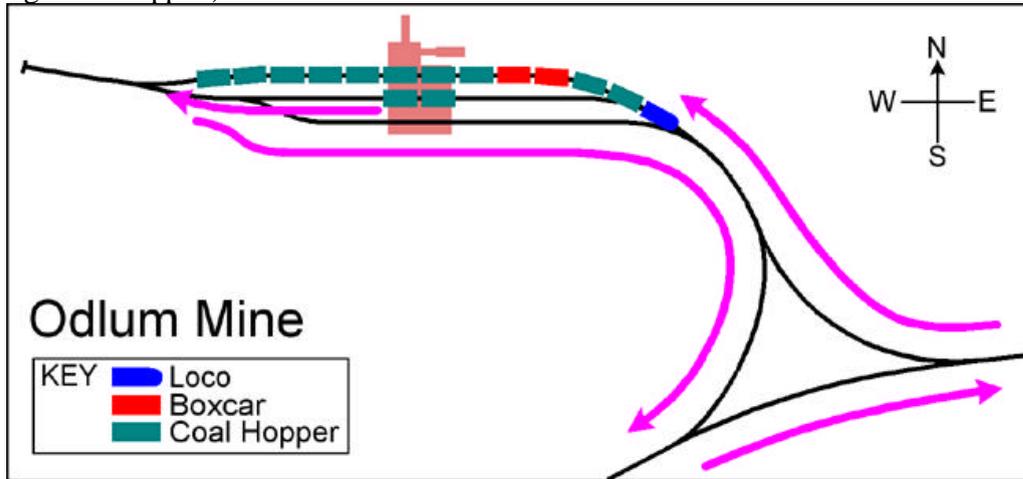


- Uncouple the loco and the two front coal hoppers from the train and take them forward so you can switch over to the center track.
- Reverse the train into the center siding and stop when the two coal hoppers are underneath the mine. Uncouple the locomotive and haul away from the hoppers. This will be the first two of six hoppers successfully dropped off.

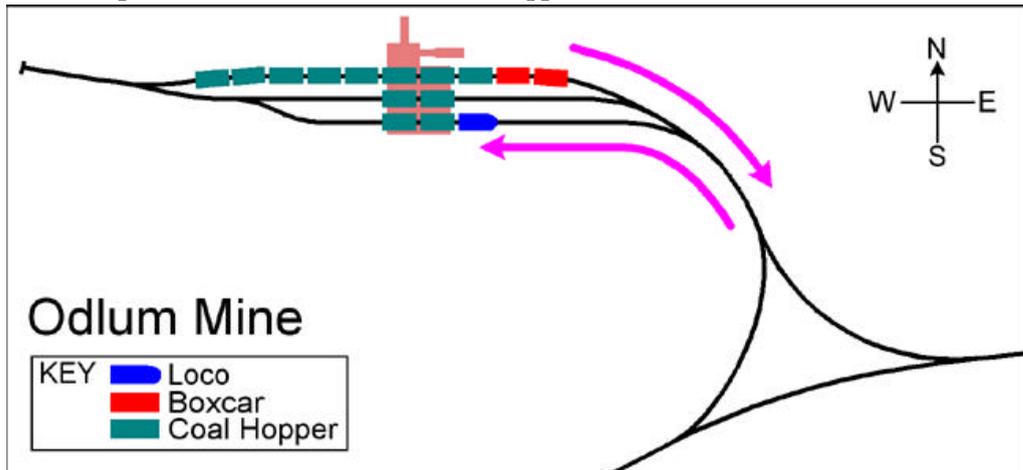


- Drive the loco forward past the junction so you can transfer across to the left siding. Then go down the left hand siding, past the rear of your initial train and into the wye to turn your loco around.
- Once turned around, reverse your loco and couple up with the rear of the main train (the end with two coal hoppers followed by two box cars and the remaining

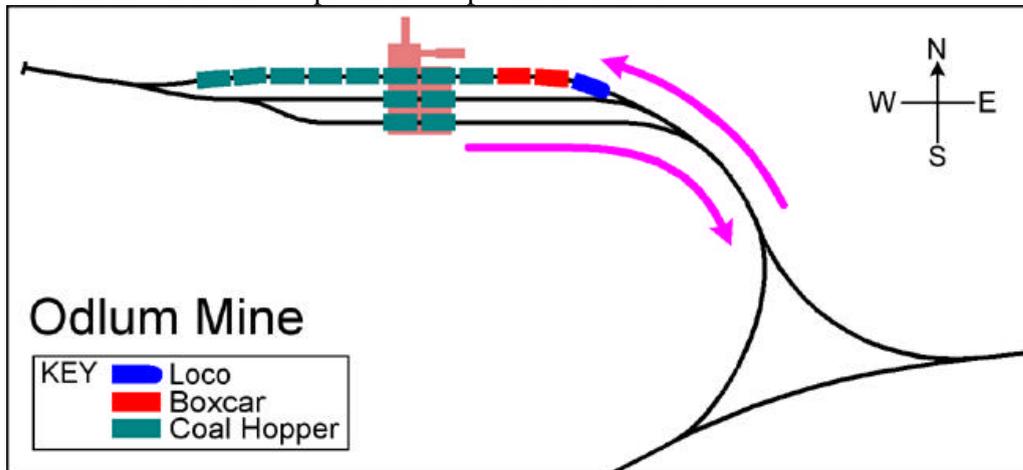
eight coal hoppers).



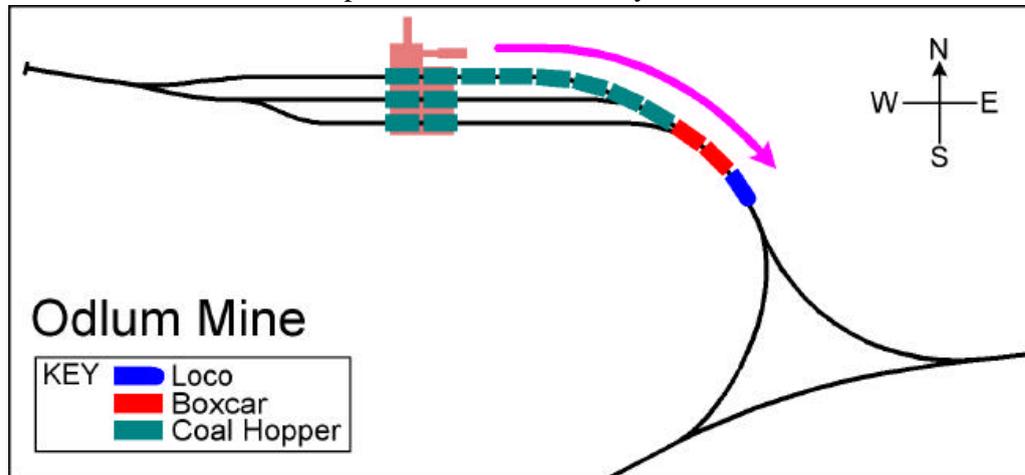
- Uncouple the two rear coal hoppers from the rest of the cars and pull out of the siding so you can get to the junction and switch across to the left track.
- Reverse up the left track until the two coal hoppers are under the mine.



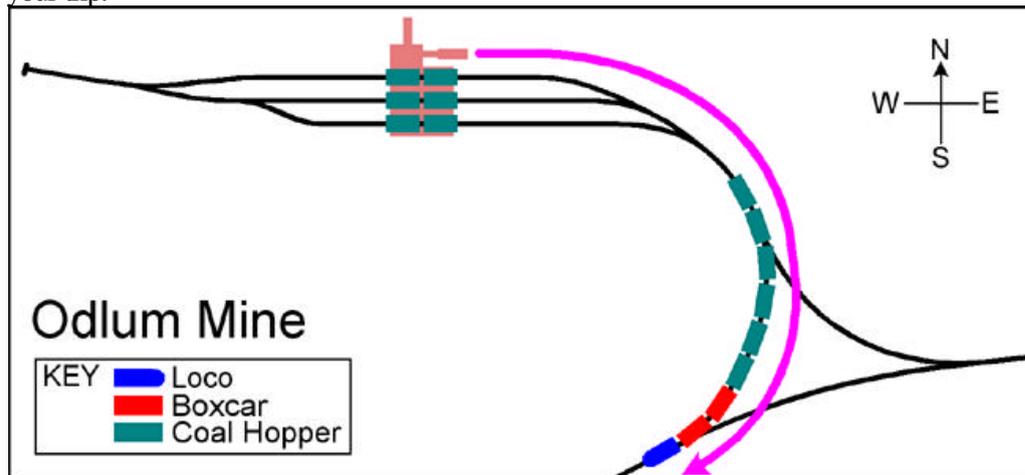
- Uncouple the loco from the two coal hoppers and leave the siding, returning back to the main consist and couple the loco up with the boxcar.



- Slowly move the train forward until the two coal hoppers at the end of the train are under the mine and decouple them from the rest of your train.

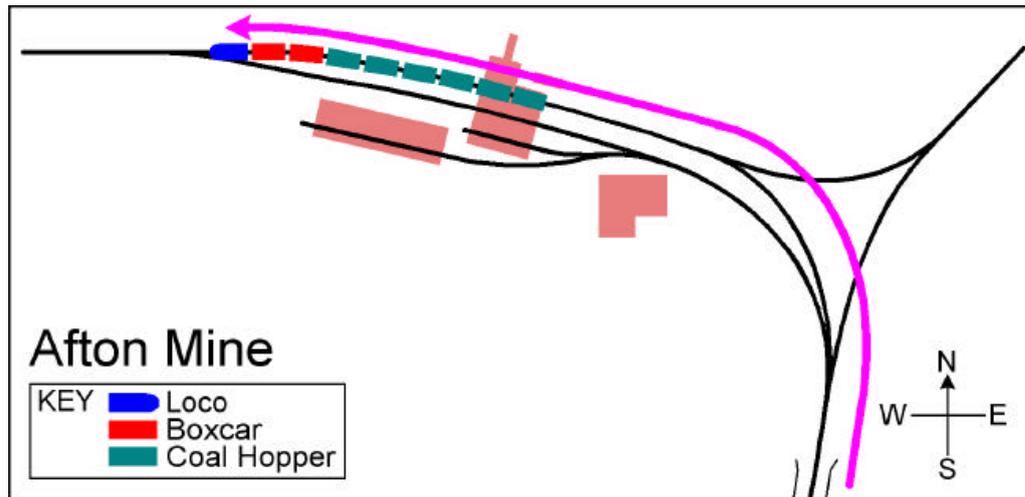


- Move forward through the wye (remember to make sure the junction is set to left so you can go off in the right direction) and back onto the mainline to continue your trip.

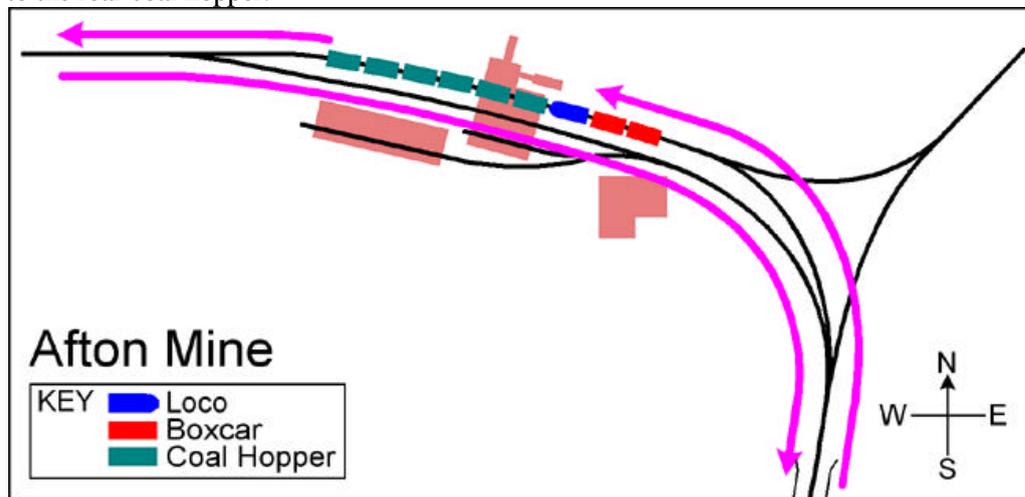


Afton Mine drop-off:

- After leaving Odlum mine, follow the route up around the small dam and through the next junction over the steel bridge into Afton mine.
- Drive the train into the mine siding and stop it when the first two coal hoppers are under the mine building.
- Decouple the boxcars and loco from the coal hoppers.

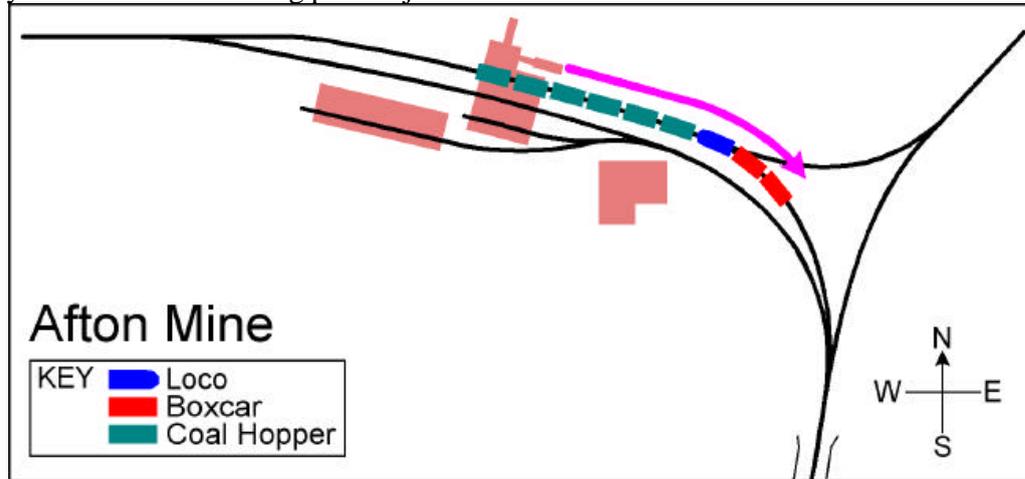


- Ease forward out of the right mine siding where you left the coal hoppers so you can change over to the other siding. Be careful, going too fast will mean a long fall at the end of the siding.
- Reverse the boxcars down the left mine siding and keep going all the way past the coal hoppers until you past the junction at the other end of the siding near the bridge so you can change over to the right mine siding and approach the hoppers from the rear.
- Drive the train up to the right-hand siding again and couple the nose of your loco to the rear coal hopper.

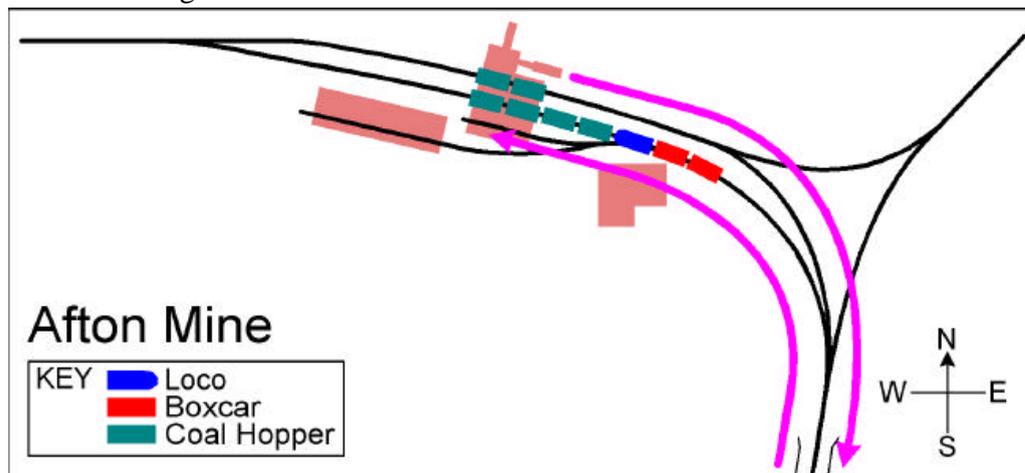


- Decouple the two coal hoppers under the mine building that are at what is now the end of the train and haul the four remaining coal hoppers attached to the front of

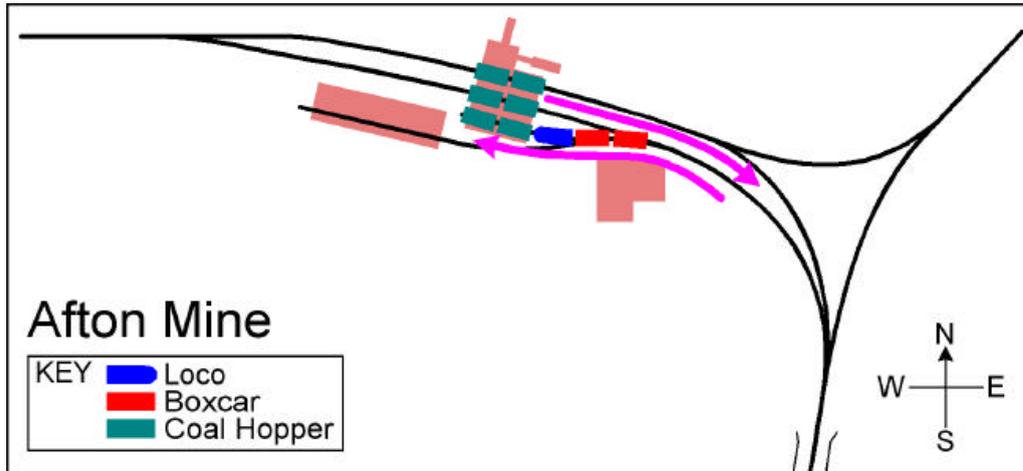
your loco out of the siding past the junction.



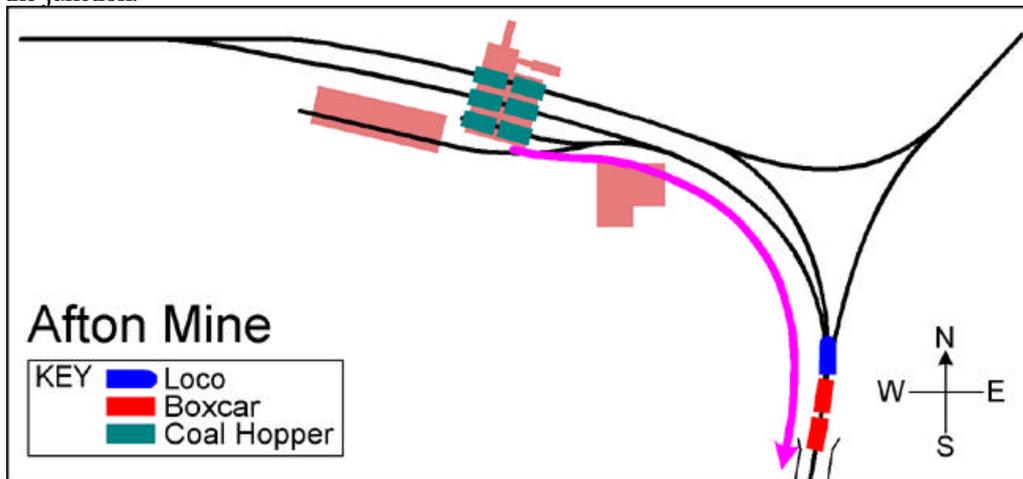
- Once backed out to the bridge past the junction, change the junction and go up to the left-hand siding until the two coal hoppers at the end of your consist are under the mine building.



- Uncouple the rear two coal hoppers that are under the mine building and pull out of the siding until your train is past the junction that provides access to the terminated mine siding.
- Change the junctions and push the remaining two coal hoppers under the mine building. Be careful here as this siding is terminated and barely has room for two cars. Going too fast and derailling is a potential trap here (remember that a derailment will terminate the scenario!).



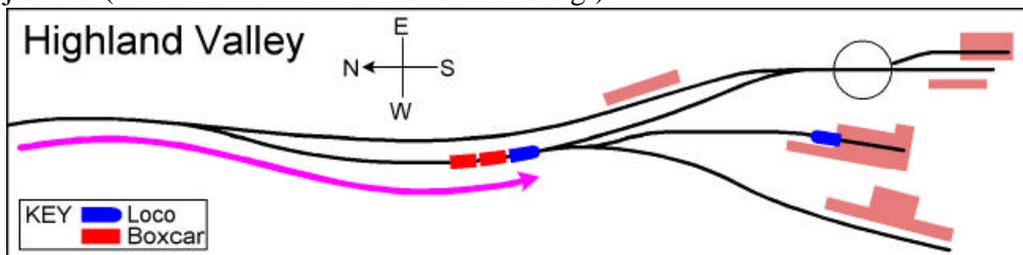
- Decouple the coal hoppers and back out of the siding. Keep driving your consist (which only has two boxcars left by now) back over the bridge and stop just after the junction.



- Change the junction so you can continue on to your final destination, Highland Valley. Follow the track through up to Highland Valley.

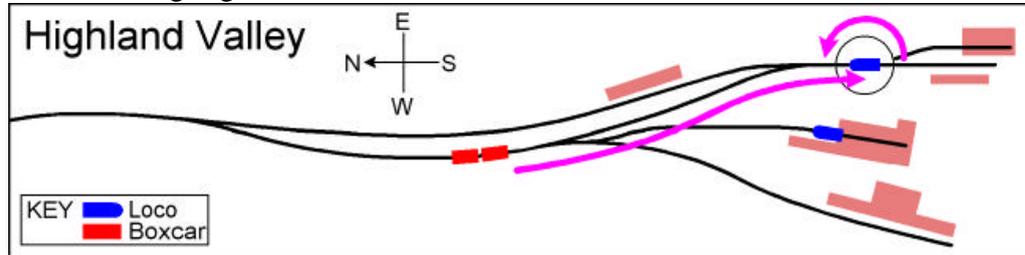
Highland Valley drop-off:

- When you approach Highland Valley, the first junction you come across leads you to the right hand track. Slow down and stop the train just before the next junction (the one that leads to the terminated sidings).

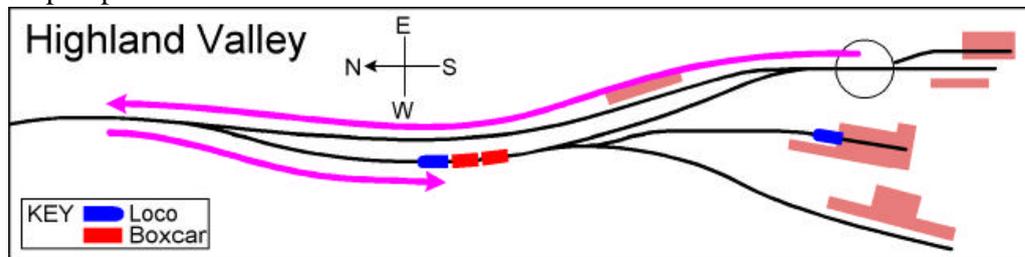


- Uncouple the locomotive from the boxcars and take it through to the turntable.

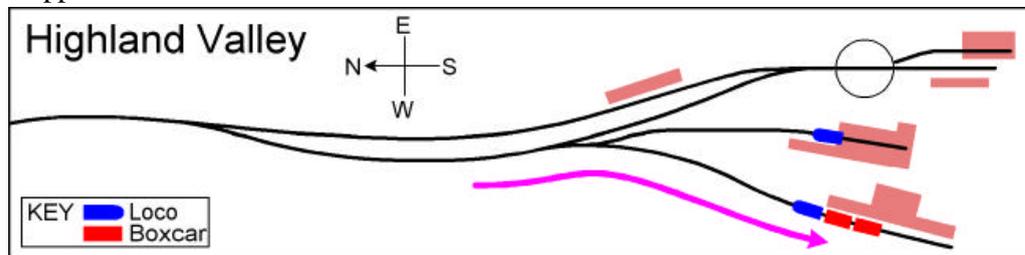
- Turn the locomotive around a full 180 degrees. Although this is not essential, driving an F unit backwards for your return journey is not advisable, as you can't see where you are going from the cab.



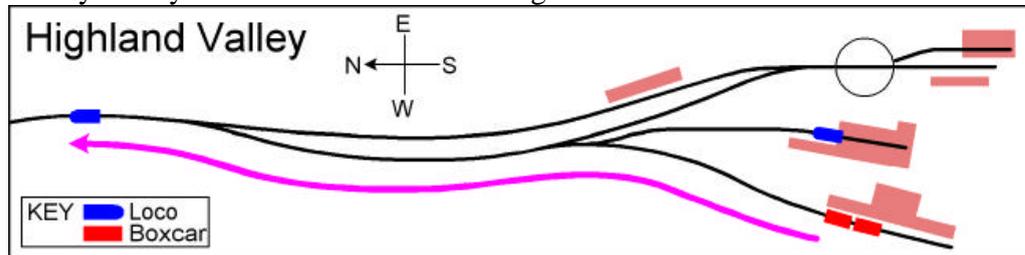
- Once fully turned, drive the locomotive out of the turntable, but change the junction ahead and go down the siding to the right.
- Follow this siding all the way to the junction at the entrance of Highland Valley.
- Change the entrance junction and reverse the locomotive into the boxcars and couple up with them.



- Push the boxcars into the left-most terminated siding where they need to be dropped off.



- Uncouple from the boxcars and drive out of the siding. As you leave the siding, a friendly thank you from the mechanics will be given.



Afton Mine pickup:

- After leaving Highland Valley (just your loco), head back to the Afton mine to pickup the loaded coal hoppers

- Stop past the junction to access Afton and reverse across the bridge into the mine. Here, you will see the six coal cars you dropped off earlier have been loaded
- Back the locomotive into each siding and pickup the coal cars. There is no tricky shunting or optimal order here, simply back into each siding for the pickups.
- Once all six coal cars are in your consist, drive back over the bridge, heading towards your next stop, Odlum mine.

Odlum Mine pickup:

- As you approach Odlum mine, don't go left on the wye junction you first encounter, instead, go through the wye entirely so you can reverse your train up into the mine sidings.
- Ensuring all junctions are set, reverse back up the wye and back into each siding, pickup the coal hoppers in pairs as you back in each siding.
- Once all cars are picked up, leave the mine, heading down the line back towards Greenwood.

Arrival at Greenwood coal dump:

- All switching has now been complete and the line is clear, so you can follow the line through Stormont and Robins without having to stop. Just be careful as you are now going downhill and have 12 fully loaded coal hoppers behind you.
- As your train crosses over the double-track mainline, start slowing down as you are now approaching the coal dump (junction has been changed automatically for you).
- Carefully approach the coal dump, but don't slow down too much as there is a steep hump to get over.
- As you approach the coal dump, the autopilot will take over and switch you to an external view. The train will slowly make its way to the dumping point, stop and start releasing coal from the hoppers.
- The scenario is now finished and a detailed scorecard will be displayed. Close the scorecard pop-up window to end the scenario.

Note that it is possible to improve on it by not turning the loco around or driving over junctions that are not set properly. Although they are things you shouldn't really do, the scenario can't enforce that. If you want to improve your score, try to figure out a new way to do the drop-offs. There is possibly a better and more efficient way than our sample solution described here.