LNER Peppercorn Class A2 60532 “Blue Peter”

Release Version 1.0

1 Background

1.1 Loco

60532 *Blue Peter* is the sole survivor of the fifteen 4-6-2 Peppercorn A2 Class locomotives. Designed by Arthur Peppercorn of the LNER, 60532 was built at Doncaster Works and out-shopped by the newly formed British Railways on 25th March 1948.

Named in the LNER tradition of using the names of famous racehorses. *Blue Peter III* was the name of a horse owned by Harry Primrose, 6th Earl of Rosebery, which in 1939 won races including the Epsom Derby and the 2000 Guineas. The horse earned almost £32,000 for Lord Rosebery, more than enough to purchase three Doncaster Pacific locomotives at the time.

60532 worked between 1948 and 1966 and is now owned by the Royal Scot Locomotive and General Trust (RSL&GT) currently based at the Barrow Hill Engine Shed in Derbyshire.

In 1994, on a Railtour between Edinburgh and York, 60532 suffered extensive damage following uncontrolled wheel slip.

During an unscheduled stop at Durham station the inexperienced footplate crew overfilled the boiler. As the train departed south across Durham viaduct an initial slip was poorly controlled by the driver, who then reopened the regulator too early, probably worried about stalling on the bank up to Relly Mill. The force of the initial slip caused the boiler to prime, carrying water over into the regulator valve and jamming it open. This allowed passage of steam through to the cylinders, perpetuating the slip and accelerating the driving wheels. When the driver attempted to wind the reversing gear back into mid-position to halt the slip, the force of the motion spun it into full-forward position, and the driving wheels reached a rotational speed of 140 miles per hour before the cylinder heads blew off and the motion disintegrated.

The driver suffered major injury to his arms, as a result of the screw reversing lever whipping around when he released it. The accident brought to light the importance of train crews being trained on the specific locomotives they were driving, rather than simply a common general instruction on steam locomotives.

1.2 Design & Specification

Power Type	Steam
Locomotive Weight	102.6t
Vehicle Length	45ft (13.271m)
Build Date	1947-1948
Total Produced	15
Fuel Capacity	9.1t
Water Capacity	5,000 gal (23,000l)

2 Rolling Stock

2.1 LNER A2 60532 “Blue Peter”

2.2 Tender

2.3 Mk1 BSK

2.4 Mk1 BG

2.5 Mk1 BSK

2.6 Mk1 FK

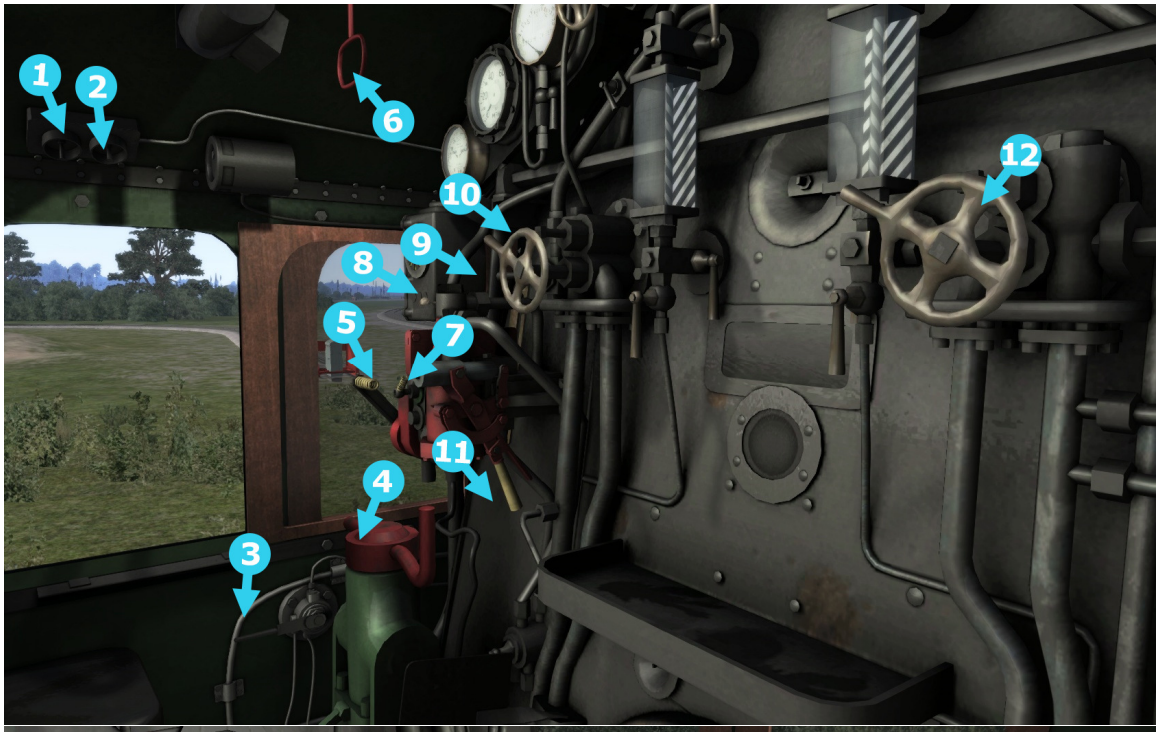
2.7 Mk1 RMB

2.8 Mk1 SK

2.9 Mk1 TSO

3 Driving the LNER A2 60532 “Blue Peter”

3.1 Cab Controls



1	Cab Light Switch
2	Dial Light Switch
3	Sander
4	Reverser
5	Train Brake
6	Whistle Control
7	Small Ejector Valve
8	AWS Reset
9	Regulator
10	Drivers Steam Injector
11	Steam Brake Control
12	Firemans Steam Injector
13	Firebox Door
14	Dampers
15	Drivers Water Injector
16	Cylinder Cock

3.2 Locomotive Keyboard Controls

Key Equivalent	Action
D A	Decrease or Increase the Regulator.
S W	Decrease or Increase the Reverser.
: ; " '	Decrease or Increase the Train Brake.
{ [}]	Decrease or Increase the Locomotive Brake.

3.3 General Keyboard Controls

Key Equivalent	Action
T	**Load/Unload.** Press once to load/unload passengers or freight.
H	**Lights.** Repeatedly pressing will cycle through headlight states.
Q	**(Expert) Alerter.** The Alerter is a system used to ensure that the driver has seen a signal. If the alert sounds (a black/yellow striped symbol is shown in the cab) it must be acknowledged by pressing the Alerter button or the emergency brakes will be applied.
X	**(Expert) Sander**. Causes sand to be laid on the rails next to the wheels to assist with adhesion. Press once to apply sand and again to stop.
Space	**Whistle.** Sound the locomotive whistle.
B	**Driving Mode Setting.** Toggles between Legacy and Realistic Driving Modes. This affects the simulation of the steam chest.
? /	**Handbrake On/Off.** This icon is displayed in the Coupling view
Shift Ctrl C	**Couple Manually.**

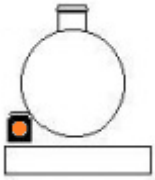
3.4 Expert Keyboard Controls for Steam Trains

Key Equivalent	Action
J	Small Ejector on or off
C	Cylinder Cocks Open/Close. The cylinder cocks are valves that allow condensed water to be removed from the Cylinders which power the wheels. If this water is not removed before pulling away from a stand, it can cause damage.
F Shift F	Open/Close the locomotive Firebox, to enable the fireman to shovel more coal.
R Shift R	Increase or reduce the rate the fireman shovels coal into the firebox.
O	Turn On/Off the Live Steam Injector. This uses steam direct from the boiler to move additional water into the boiler.
L Shift L	Increase or reduce the flow of steam to the Live Steam Injector.
I	Turn On/Off the Exhaust Injector. This uses waste steam from the cylinders to move additional water into the boiler.
K Shift K	Increase or reduce the flow of steam to the Exhaust Injector.
N Shift N	Increase or reduce the Blower. The Blower is a fan that increases air flow through the fire, making it hotter. It is powered by steam from the boiler. While running, the blower is not often needed because the exhaust steam draws air through the fire as well.
M Shift M	Increase or reduce the Damper. The Damper covers an opening in the firebox that allows fresh air in. Closing the Damper reduces air flow and hence the temperature of the fire.

3.5 Generic Headcode Lamp Positions

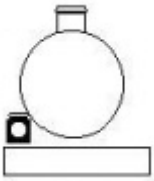
Lamp Position

1



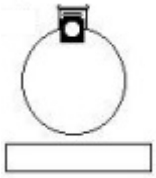
Initial TS2015 light position.

2



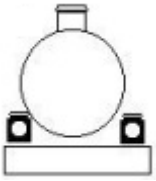
Light engine.

3



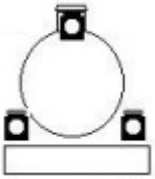
Stopping passenger, railmotor or a breakdown train returning from a job.

4



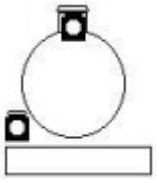
Express Passenger or a breakdown train / snow plough en-route to a job.

5



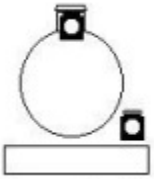
Empty coaching stock.

6



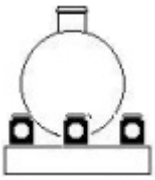
Express freight or livestock.

7

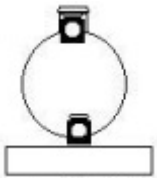


Express freight: all unfitted stock.

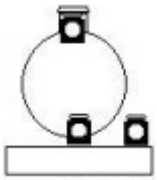
8



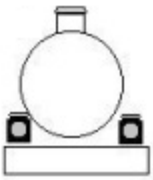
Through goods or mineral.

9 

Through freight or ballast.

10 

Stopping general goods.

11 

Headcode lamps off.

4 Scenarios

For driving tutorials, please visit the Academy from the main TS2015 menu screen*

4.1 [A2 Blue Peter] 1. At the Starting Gate

Drive the first part of the final leg of a Railtour between York and Kings Cross.

Duration: 35 Minutes
Difficulty: Hard

4.2 [A2 Blue Peter] 2. The Second Leg

The crowds at Hitchin have had plenty of time to take pictures and you need to depart in order to keep to the timetable. Leave for Kings Cross where more crowds have gathered for Blue Peter’s final stop, before heading to the depot.

Duration: 35 Minutes
Difficulty: Medium

4.3 [A2 Blue Peter] 3. The Final Furlong

After a successful Railtour from Peterborough to Kings Cross, head to Bounds Green where Blue Peter will be stabled for the night. Running tender-first propelling the support coach may prove to be tricky!

Duration: 25 Minutes
Difficulty: Hard

5 Acknowledgements

Dovetail Games would like to thank the Edward Fisk, Steam Sounds Supreme, and the Beta Testing Team for their contribution to the development of the LNER Peppercorn Class A2 60532 “Blue Peter”.