In association with
**Caledonia Works**
&
**Simnation**

# GWR Class 2884



# INTRODUCTION

The Great Western Railway 2884 Class is a class of 2-8-0 steam locomotives designed by Charles Collet in 1938. Built between 1938 & 1942 at Swindon Works for heavy freight work & in fact were a development of the older GWR 2800 Class 2-8-0s, however the 2884s different from their older counterparts with a Collet cab & outside steam pipes as built. Over 83 of the 2884 class were built between 1938 & 1941. Those built after World War II did not have the side windows on the cab but the side windows were covered with a bolted plate. The was to reduce the glare from the fire, as a precaution against enemy air attacks. After the war, the windows were again reinstated.

With the GWR being absorbed into British Railways in 1948, the locomotives were so popular with the ex-Great Western crews that the British Railways Western Region operating authorities wanted more of the class built; however this request was turned down in favor of the BR Standard Class 9Fs. Between 1945 & 1947, coal shortages caused the GWR to experiment with oil fired 2800s. Eight of the 2884 Class were converted & renumbered from 4850. The experiment, encouraged by the government was abandoned in 1948 once the extra maintenance cost were calculated and the bill had arrived from the imported oil & the eight 2884s were converted back to coal firing.

The year of 1948 also saw one of the 2884s, No. 3803 (Now preserved), emerge remarkably successfully from the 1948 Locomotive Exchange Trials again more modern engines including the LMS 8F & the WD Austerity 2-8-0 & 2-10-0. It took the appearance in 1954 of the BR 9Fs to displace the 2800s from their main role of mineral haulage. Nevertheless, there was still work for them right up to the end of steam on the Western region in 1965. Six decades of service testify to the fundamental excellence of Churchward's original design. Withdrawal began in 1962 & by 1965 all the 2884s were gone from revenue earning service.

Nine examples of the 2884 were saved for preservation with four of them having operated in preservation.

# SPECIFICATIONS

➢      Build Date: 1938-1942

➢      Total Built: 83

➢      Running Service: 1938-65 (27 Years)

➢      Wheel Arrangement: 2-8-0

➢      Number of Cylinders: 2

➢      Wheel Size: 4ft 7.5in

➢      Boiler Pressure: 225 PSI

➢      Designer: Charles Collet

# FEATURES

➢ Numerous camera views

➢ Period accurate GWR Lamps

➢ Realistic Fully Functional Cab

➢ Variants ranging from 1936 to Preservation

➢ Custom sounds recorded from 2884s in preservation

➢ Customizable chimneys & safety valves

➢ 3D firebox and coal

➢ Animated Inside Valve Gear

➢ Dynamic particles

➢ SimNation's New Locomotion v1.4 scripting featuring:

➢ Performance Mode Pro

➢ Advanced Safety valves, chimney particles & systems

➢ Fire intensity synchronized with exhaust beat

➢ Carefully created simulation for realistic performance

# QUICK DRIVE REQUIREMENTS

- AP MK1 COACH PACK VOL.1
- FLAT WAGON PACK 1
- RIVIERA LINE IN THE FIFTIES: EXETER – KINGSWEAR ROUTE ADD-ON
- GROUPING VAN PACK 1

# Variations

- ➢ GWR 1938-42 Green

- ➢ GWR 1942-49 Green

- ➢ GWR Wartime Black

- ➢ BR Early Crest

- ➢ BR Late Crest

- ➢ BR Early Crest [Weathered]

- ➢ BR Late Crest [Weathered]

- ➢ GWR No. 3803

- ➢ GWR No. 2885

- ➢ GWR No. 3802 [BR Black]

- ➢ GWR No. 3802 [BR Brunswick]

- ➢ GWR No. 3802 [GWR]

- ➢ GWR No. 3822

- ➢ GWR No. 3850 [BR]

- ➢ GWR No. 3850 [GWR]

# CONTROLS

- ➢ "F" to open the firebox doors
- ➢ "Shift F" to close the firebox doors
- ➢ Quick press "R" to shovel individual lumps of coal
- ➢ Hold "R" to continue shovel lumps of coal
- ➢ "Control+R" to turn on & off Auto-Fireman
- ➢ "L" to turn on and off live water feed
- ➢ "O" to turn on and off live injector
- ➢ "K" to turn on and off live water feed
- ➢ "I" to turn on and off live injector
- ➢ "M" to open dampers
- ➢ "Shift+M" to close the Dampers
- ➢ "N" to turn on the Blower
- ➢ "Shift+N" to turn off the Blower
- ➢ "A" to open the regulator
- ➢ "D" to close the regulator
- ➢ "E" to toggle reverser lock
- ➢ "W" to move the reverser forwards
- ➢ "S" to move the reverser backwards
- ➢ "'" to open the brakes
- ➢ ";" to close the brakes
- ➢ "/" to turn on the handbrake
- ➢ "Shift+/" to turn off the handbrake
- ➢ "J" to open the brake ejector
- ➢ "Shift-J" to close the brake ejector
- ➢ "Space" looped Whistles
- ➢ "B" for second looped whistles
- ➢ "Control+Space" short Whistles
- ➢ "Tab" request to pass signal at danger
- ➢ "Control 1,2,3,4,5,6" to turn on lamps
- ➢ "Control+Shift 1,2,3,4" to turn on lamps on the Bunker
- ➢ "Shift+P" to turn on Performance Modes

# PERFORMANCE MODE

Performance mode features on these locomotives. What is the purpose of it? It is for the benefit of those with lower-end PC's to run these locomotives happily without experiencing regulator CTD's. Use control as described in the above table to turn it on/off.

# HOW TO USE THE AUTO-FIREMAN

Auto Fireman: Ctrl + R to enable & disable

The auto fireman is a new feature of Caledonia Works locomotives that comes with Locomotion 1.5. It is designed to assist drivers who do not want to worry about firing their locomotive, with the effect of taking over the fireman controls so that the driver simply needs to worry about driving. It is not intended to be 100% realistic behavior, rather acting as an assistant to the driving experience more than anything.

The auto-fireman controls stoking, injecting, blowing and damping in the following way:

• Stoking will top up the fire mass to an ideal value when it is running low

• Injecting will keep the boiler level stable, taking into account boiler pressure

• Blowing will occur when the boiler pressure is sub-optimal and the regulator is closed

• Dampers will be opened when at speed and closed when stopped or blowing off

Each locomotive is set up differently and the fireman will change its behavior accordingly.

NOTE: The auto fireman can be used with the F4 HUD, however it works best with the F4 HUD turned OFF.

   This is an early version of the auto fireman and it will be updated in the future.

# CUSTOMIZATION

When you load a GWR 2884 locomotive into a Train Simulator scenario editor, a random number will be generated from the list of locomotives that is accurate per variant & member. A variety of fittings can be changed by using the loco number field. These will be preset to their historic fitting. However, you may wish to change these to your liking. Here is how:

**Code:**

RN=Running Number

C_T=Chimney Type

SV=Safety Valve

SC=ShedCode

Place a loco on the track & double-click on it to bring up the number field (right-hand fly out window). You will only see the Running Number of the locomotive in the window. To overwrite the customization of the loco, simply type out what you would like to change in said window.
For instance, if a locomotive currently reads "RN=3827", type ";C_T=1" to give it a Copper Capped Chimney and press enter. **Note:** The level of customization available will depend on the era of the locomotive you load. Weathered variants do not have coppered capped chimneys & brass safety valves.

## GWR to Preservation Era

RN=Loco Number

C_T= Chimney Type (1 or 2)

SV= Safety Valve Type (1 or 2)

SC= Shedcode

# HOW TO USE THE LOCOMOTIVES IN TS

**Getting Started**

- ➢ 1. Keep the Coal between 575-600 lbs or 55% to 60%

- ➢ Keep water between 70%-90%
- ➢ Open Cylinder cocks as not to blow the cylinders and drain all moisture out of cylinders.
- ➢ Open your damper if you need to make steam, shut it if making too much (blowing off all the time)
- ➢ Release the brake and put into "running".
- ➢ Open to 50% regulator
- ➢ Open Sander if wheel slipping
- ➢ Once at 10 mph, turn off cylinder cocks and move reverser to 20% and open regulator between 50% & 100%.
- ➢ Keep on top of the fire & water mass.
- ➢ Adjust cut off or regulator when needed.
- ➢ You will also need to be on top of your fireman skills for boiler management as the new advanced simulation, injecting water on the move will use a lot of steam.

The GWR 2884 is semi advanced and has a boiler heating system and you will need to take a few minutes to let it warm up before setting off (if you want to make steam). Take this time to put coal on the fire. Once you fill the firebox, the boiler should be nice and hot, take it easy at first and you will be as right as rain in no time to thrash it all you want.
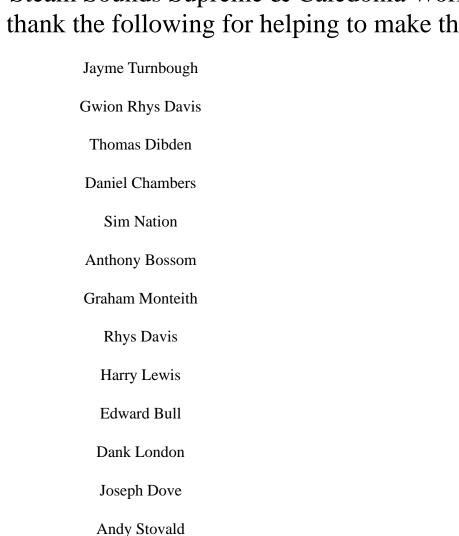
# USAGE AND DISTRIBUTION

➢ The pack is for purchase & download exclusively from Steam Sounds Supreme. It must not be uploaded to any other site or re-distributed in any form.

➢ The pack is for your PERSONAL use ONLY.

➢ The locomotive and all its parts have been created exclusively for Steam Sounds Supreme. It MUST NOT be uploaded to any file sharing site.

➢ The locomotive may be referenced in any freeware scenario the user creates. But they MUST NOT be included in any freeware route upload package. Creation of payware scenarios using these locos may only be done after receiving written permission from Steam Sounds Supreme.

➢ Distributing reskins of these locomotives must have all Geopcdx files removed.

➢ The GWR 2884 is the property of Caledonia Works & Steam Sounds Supreme. Editing, or reverse engineering of it is strictly prohibited.

➢ All audio files are the property of Steam Sounds Supreme. Editing, or reverse engineering of them is strictly prohibited.

➢ Any modifications you make to the included files must be for YOUR PERSONAL USE ONLY.

# CREDITS

## Steam Sounds Supreme & Caledonia Works would like to thank the following for helping to make the DLC possible.

Jayme Turnbough

Gwion Rhys Davis

Thomas Dibden

Daniel Chambers

Sim Nation

Anthony Bossom

Graham Monteith

Rhys Davis

Harry Lewis

Edward Bull

Dank London

Joseph Dove

Andy Stovald

Ethan Beadle