

**Internal Combustion**  
**&**  
**Electric Traction Policy**



**Policy and Procedure for the Preservation & Restoration of Bluebell Railway Based  
Internal Combustion & Electric Traction Assets as adopted by the Bluebell Railway  
Preservation Society.**



# Policy and Procedure for the Preservation & Restoration of Bluebell Railway Based Internal Combustion & Electric Traction Assets.

## 1. RESPONSIBILITIES

BRPS Locomotive Trustee	Locomotive Director	Works Manager	Locomotive Committee Chairman.	Locomotive Committee Members
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## 2. APPROVAL & AUTHORISATION

	Name	Sign	Function
Author	Laurie Iain Anderson		BRPS Locomotive Trustee
Reviewers	Locomotive Committee members		Locomotive Policy and Strategy
Owner	Laurie Iain Anderson		Locomotive Committee Chairman
Authorised	BRPS Board		Controller of Policies

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### 4. AMENDMENTS

■ INDICATES SECTIONS THAT HAVE CHANGED SINCE THE LAST ISSUE

DATE	ISSUE	REV.	PAGE (S)	DETAILS OF AMENDMENTS
16/06/2023	Draft	N/A	10	Original Draft.
18/01/2024	First Issue	1 year	10	Agreed Policy by BRPS Board

## 5. PURPOSE

To set out the policy of which the Bluebell Railway PLC must adhere to in accordance with the Bluebell Railway Preservation Society's Objectives, Aims & Plans of the Society 2020 Document and to review areas that are in need of improvement.

## 6. SCOPE

This procedure applies to all Locomotive and Motive Power Related assets, apart from on-track plant, that are owned by any constituent part of the Bluebell Railway. Privately-owned Locomotives subject to separate agreements will require involving direct discussions with the owning party.

## 7. DEFINITIONS AND ABBREVIATIONS

<u>Term</u>	<u>Meaning</u>
The Committee	Locomotive Committee
Locomotive	A Railway Engine of any size that is powered by Steam, Diesel, Gas or Electric.
The Bluebell Railway	The organisation comprising of three entities: The Preservation Society, the PLC and the Trust.
The PLC	The Bluebell Railway Public Limited Company.
The Trust	The Bluebell Railway Trust, a Registered Charity (No. 292497) which supports the conservation of skills and heritage on The Bluebell Railway.
The Society	Bluebell Railway Preservation Society
C & W	Carriage and Wagon.
The HRA	The Heritage Railway Association.

## 8. REFERENCES

Ref.	Title	Notes.
1	Bluebell Railway Preservation Society – Objectives, Aims & Plans of the Society 2020	Section 7: Department Aims – Locomotives  Page: 9 - 10
2	Bluebell Railway Preservation Society – Traction & Rolling Stock Collection Policy	
3	Bluebell Railway Preservation Society – Preservation Standard Manual	Section 5 - Locomotives
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## 9. BACKGROUND

The roles of the Bluebell Railway Preservation Society, the Bluebell Railway PLC (PLC) and the Locomotive Committee need to be represented in connection with the future planning of achieving the BRPS Objectives, Aims and Plans for Locomotives whilst also ensuring the PLC's Commercial Requirements are also covered.

The Locomotive Committee will hold responsibility for reviewing options for Motive Power Requirements of Bluebell owned Locomotives and subject to discussions, Privately Owned Locomotives and making recommendations to the Society. The Locomotive Engineering Committee is chaired by a Society Trustee and its membership includes the Locomotive Director, Locomotive Manager and Society Members who are working volunteers in the Locomotive Department, both Engineering & Operations. Its membership therefore has a strong understanding of the condition, characteristics and technical specifications of locomotives, its historic importance and the commercial needs of the railway.

## **10. THE BLUEBELL RAILWAY PRESERVATION SOCIETY OBJECTIVE, AIMS & PLANS FOR LOCOMOTIVES**

The core aims of the locomotive department are:

- 10.1 To provide working locomotives to satisfy the Railway's operating, commercial and heritage requirements.
- 10.2 **(Section 10.2 – 10.6 Not relevant to this document)**
- 10.7 To provide the facility for suitable privately-owned locomotives to be based at, and operate on, the Railway, and to provide the facility for other locomotives of special interest to be based at the Railway.
- 10.8 **(Section 10.8 – 10.9 Not relevant to this document)**
- 10.10 To provide the opportunity for volunteer staff to restore, for operational use, locomotives which comply with the aims of the department and the Railway.
- 10.11 To provide secure covered accommodation for all locomotives.
- 10.12 To provide and maintain other locomotives of special interest.
- 10.13 To enhance the works and yard facilities to assist the repair and maintenance of locomotives.
- 10.14 To provide training, including apprenticeships, to ensure that the works maintains the skills necessary to undertake this work.
- 10.15 To provide facilities, where possible, for visitors to view the Department's work, and to view as many of the fleet as possible.
- 10.16 To permit the hire of locomotives to other approved heritage operators, where this is in the Railway's interest.
- 10.17 To plan, in conjunction with the carriage and wagon department and operating department for the best matching of locomotives and rolling stock.

## **11. INTERNAL COMBUSTION & ELECTRIC TRACTION FLEET BASED ON OR OWNED BY THE BLUEBELL RAILWAY**

- 11.1 Internal Combustion Engine Locomotives:
  - BR Type 3 Class 33 D6570
  - BR 350hp Class 09 D4106
  - Sentinel Rolls-Royce Diesel/Hydraulic 10241
  - Fredrick Howard Ltd Petrol/Mechanical 957
- 11.2 Internal Combustion Engine Multiple Units:
  - BR Class 207 1305 (Two Car)
- 11.3 Electric Locomotives:
  - BR Electro-Diesel Class 73 E6040
- 11.4 Electric Multiple Units:
  - BR Class 423/1 4-VEP 3417 (Four Car)
  - BR Class 416 2-EPB 5765 (Motor Coach Only)
  - BR Class 416 2-EPB 5768 (Motor Coach Only)

## 12. Future Acquisitions & Disposals of Internal Combustion & Electric Traction Assets Based on or Owned by the Bluebell Railway

12.1 **Disposals** - These assets are either deemed surplus to requirement, beyond recovery or unsuitable for the Bluebell Railway:

- BR Class 416 2-EPB 5765 (Motor Coach Only) - Spares & Disposal
- BR Class 416 2-EPB 5768 (Motor Coach Only) - Spares & Disposal
- Sentinal Rolls-Royce Diesel/Hydraulic 10241 – Replacement required as not in keeping, requiring overhaul and lacks train brake creation capabilities.

12.2 **Acquisitions** – Should a suitable asset become available of the railway's requirements, then a proposal should be submitted:

- Either a BR Class 24 or Class 25 – as a Second Mainline Rated Locomotive
- Either a BR Class 03, 04 or 07 – as a replacement to Sentinal Rolls-Royce Diesel/Hydraulic 10241
- Third Coach (Preferably an Intermediate Coach) compatible with a BR Class 207 to boost capacity within the Unit

## 13. Requirements & Preservation of Internal Combustion Engine Locomotives & Multiple Units

13.1 While the Bluebell Railway is prominently a mainly Steam Run Railway, there is a need for Locomotives & Multiple Units of the Internal Combustion Engine Design to help support and run the railway operationally during maintenance and services periods.

13.2 **Shunting Locomotives** are a major requirement operationally for Locomotive, Carriage & Wagon and Permanent Way Depts. Due to the high demand and spontaneous requirement for Shunting Locomotives, there should be a Shunting Locomotive made readily available based at Horsted Keynes for Internal C&W Use Only and a Shunting Locomotive that is capable of Line Working, for Shunting Purposes Only, is permanently based at the railway for covering shunting duties should a Steam Locomotive is not available for use.

When it comes to Demonstration Shunts with Internal Combustion Engine Locomotives, it is important that all Eras are represented and are in keeping with the Surround Location. The use of the Fredrick Howard Ltd Petrol/Mechanical Locomotive from the 1920s should be utilised the most for demonstration shunting. Due to its size, it is an option to hire out the Fredrick Howard Ltd Petrol/Mechanical Locomotive to other interested railways that meet the approved level of standard to hire an asset from the Bluebell Railway.

13.3 **Mainline Locomotives** are critical in the support of the Steam Locomotive Fleet in the event of Major Failures, Rescue Requirements or Steam Bans in Abnormal High Heat Conditions. To prevent the acquisition of Underpowered or Oversized Mainline Locomotives, the Power Class for these should be of the Type 2 or 3 and to ensure it is in keeping, the Mainline Locomotives must be based or built for the Southern Region before 1965. There is requirement for two locomotives of a mainline status due to the potential risk of one failing or withdrawn for maintenance/overhaul. Preferably this being either a Class 24 or 25 due to their connection with the Southern Region.

13.4 **Multiple Units of the Internal Combustion Engine** verity would be useful for alternative low season and unsociable timed passenger services. A Single Multiple Unit of 2/3 Car Formation

should be retained for reduction of unnecessary mileage and wear to the Steam Locomotive Fleet and to reduce demands to Operational Staff. To ensure it is in keeping, the Multiple Unit must be based or built for the Southern Region before 1965.

- 13.5 **Liveries:** Due to the lifespan of Internal Combustion Engine Locomotives & Multiple Units, there is a need for limitation on the Liveries they carry whilst based on the Bluebell Railway to enable them to comply with the BRPS's Heritage Standards Policy. To ensure any Locomotive or Multiple Unit to comply to these Standards must be outshopped in a Pre 1965 Livery and to an appropriate authentic Livery or if classed as Industrial, to an authentic Livery to the Locomotive or a Bluebell Livery.



*Class 09 Locomotive in British Railways Green*



*Class 33 Locomotive in British Railway Green without Yellow Ends*



*Class 207 DEMU in British Railways Livery with Orange Hand Rails and Buffer Beam at East Grinstead High Level Station*



## 14. Requirements & Preservation of Electrical Locomotives & Multiple Units

14.1 At current, there is not Third Rail Section of Line on the Bluebell Railway which means there is no day-to-day operational requirement for an Electrical Locomotive or Multiple Unit. However, from a historical point of view, the railway in its own collection should have a representative of Third Rail Traction due to the historical importance of showing the development of Railways in the Southern Region and with the connection of the currently removed Third Rail Line between Haywards Heath and Horsted Keynes on the Bluebell Line.

14.2 The Bluebell Railway does own a 4 VEP Unit No. 3417 and is currently being restored offsite to Mainline Connection via a Support Group, Southern Electric Traction Group. 3417 should be retained in the Bluebell Railway Collection to be a Roaming Mainline Ambassador but managed by the Southern Electric Traction Group under agreement with the Bluebell Railway.

14.3 Whilst a Class 423, 4 VEP Unit falls outside the cut-off date for the Periods being Replicated on Bluebell Railway, it does represent the next Era on from our Collections Based on the Bluebell and should be the only exception to the ruling to represent this Era in the Collection. Due to 3417 being built as late as June, 1967, it would be preferred that it was liveried in the unit's original BR Plain Blue Livery.

14.4 Should the Bluebell Railway be offered an Electro-Diesel Locomotive; this should be retained for a historical example of how the Southern Region developed their section of British Railways. While these cannot be used practically on day to day peak services when a motive power replacement is required, it is practical for shorter supplement or catering services, in addition, it is a practical back up for any shunting duties should be required.

14.5 The Southern Region never used AC Traction so any AC Electric Traction offered to the collection should be declined as it does not fit with the Collection and does not benefit the Bluebell Railway Commercially or Operationally.



*Class 73 Electro-Diesel Locomotive in Early British Rail Blue Livery at Eastleigh Works*



*Class 423 EMU in Early British Rail Blue Livery*

## **15. Restoration & Maintenance Facilities Improvement Review**

Since Electric & Internal Combustion Traction is relatively new to the Bluebell Railway, there is a lack of facilities in a suitable environment. Whilst, there is a genuine need for these facilities it is understood that there is a priority order to the requirements of all on the railway. On this basis, the requirements will be set into three categories; Short Term, Medium Term and Long Term.

### **15.1 Short Term:**

- There is a need for temporary storage for all spares and removed components for all Bluebell Railway based Internal Combustion & Electric Traction Assets.
- To find and appoint a Trainer/Assessor to cover all Internal Combustion & Electric Traction types.
- To find and appoint a Diesel Traction Engineering Coordinator to cover all Internal Combustion & Electric Traction types.
- To recruit volunteers to overhaul, maintain and operate all Internal Combustion & Electric Traction types.
- Overhaul/Modify a wagon for Spare Engine and Main Generator Carrier

### **15.2 Medium Term:**

- Practical working space is to be created in order to allow all assets of internal combustion or electric traction based at the Bluebell Railway to be stored, maintained and if required, overhauled.
- A categorised stores system for all spares and components for all internal combustion or electric traction based at the Bluebell Railway.

### **15.3 Long Term:**

- A purpose built Maintenance Shed with workshop to house all assets of internal combustion or electric traction based at the Bluebell Railway in a suitable environment.

## **16. Training of Staff & Volunteers**

Training of volunteers in this area is important as it is unlikely that the railway could at current validate employing a full time member of staff to maintain or overhaul the fleet. Training of such will need to be carried out by qualified trainers and assessors to an agreed competency level set out by an appointed person in charge to look over this field. However, in order to carry this out, a regular intake of volunteers is required so that workforces can be created to overhaul, maintain and operate these types of traction. To help with training, Mutual Improvement Classes should be brought in to help one another understand and learn the internals and externals of internal combustion or electric traction based at the Bluebell Railway.

End of Document.