

## **F C Hibberd 'Planet' 0-4-0 No 2054 (Beryl)** **Summary of Loco and Engine History**

Beryl is an 0-4-0 'Planet' loco (No. 2054) built by F.C.Hibberd and was completed on 30th Sept 1937.

The loco was first delivered to the Bournemouth Gas and Water Co. on 3/1938. She was used at their Poole Gas Works, Pitwines site, until transferred to Corralls in March 1966 and was used as a standby engine at the Hamworthy Ballast Quay. (see ref 1) .

It seems likely that Beryl is the earliest example of a standard gauge F C Hibberd Planet in preservation and it appears that out of over 3000 vehicles produced by F.C.Hibberd it was the only one with a Dorman 4JORX 54hp engine installed in it. Of all the F. C. Hibberd standard gauge locos listed as being in preservation this is the only one with its original petrol/paraffin engine. All the others either being delivered with diesels or having been converted to diesel.

This loco is quite unique because of its inherent local history and its relevance to the Swanage Railway, being the first loco purchased for the restored railway on 26<sup>th</sup> June 1976, having been acquired by Geoff Pitman and John Vickery directly from Corralls (P D Fuels) at Hamworthy Dorset.

Although it was initially thought that the loco had never left Dorset discussions with Geoff Pitman produced information that 'Beryl' had indeed left Dorset, and under her own power. Geoff recorded the following:- "Corralls bought her as a replacement for the B4 "Normandy" which worked the quay with "Western Pride" She was driven from Poole Gas works to Hamworthy under her own power by the gas board driver and a pilotman. Not long after this both the engines at Corralls yard at Dibbles Wharf in Southampton failed. They needed a short wheelbase engine to handle the sharp curves there so Beryl was sent from Poole to Southampton to help out. She ran under own power, overnight on a Saturday, stacked with jerrycans of petrol but had to be put into a siding at New Milton dangerously low on fuel. Once topped up she made Dibbles Wharf without incident and shunted there for a couple of months. She was driven there because she could not be towed at 30mph in a normal unfitted goods train and had the bad habit of falling into gear. Apparently the drive chains were taken off for the return, towed, trip back. I heard all this from Ernie Brown the manager at Corralls at Hamworthy when I bought her, it was he who drove her there. Beryl was named after either his mother or wife I don't remember which and we got the nameplates cast at the old Poole foundry. It was a condition of the sale (£40 and a bottle of scotch plus to be painted in the company colours of blue and grey which she never carried in her working life). She was green new to the gas works, painted orange by Southern Gas and blue by Corralls". (ref 2)

The engine type is a petrol/paraffin engine which means that it can operate using petrol to start it and when warm can be switched over to paraffin which is heated and vaporised before entering the carburettor. If paraffin is used the fuel supply is switched back to petrol just prior to shutting down, so that it can start with carburettor full of petrol.

### **Other information compiled by Fraser White**

The F C Hibberd Works List compiled from Industrial Railway Society Records by John de Havilland and Brian Gent shows only one, 4JORX engine installed in a Hibberd loco, out of over 3000 vehicles produced.

The F C Hibberd Works List has the Swanage Railway Planet shown in it which is recorded as No. 2054. The list quotes the engine as being a Dorman 4JORX, No. 31056, 54hp. It also notes that the loco was delivered to the Bournemouth Gas and Water Co. on 3/1938.

Colin Stone's book RAILS TO POOLE HARBOUR 2<sup>nd</sup> edition - page 91 provides some additional details of its time at Hamworthy Quay. (See ref 1)

Looking at the website [https://en.wikipedia.org/wiki/F. C. Hibberd %26 Co.](https://en.wikipedia.org/wiki/F._C._Hibberd_%26_Co) Beryl is shown as the earliest example of a standard gauge F C Hibberd Planet in preservation.

After a failed attempt to restore the loco in about 1997 the loco was transferred to the ownership of the Trust with the expectation that the loco would be restored to working order. However there was no progress until in 2016? By which time the loco was almost beyond restoration. A clearance of a storage shed at Swanage resulted in some of the parts being found. Some were saved others were skipped but recovered. Only the Exhaust manifold and some of the cylinder head priming cups were lost.

### **Information received from Derek Jones of the Dorman Association**

"The original JO engine had a cylinder head that was integral with cylinder block but at some stage Ricardo became involved with a redesign of the engine to have a standard detachable head. It is assumed that this increased the engine performance although there is no evidence to prove this point.

The details recorded for the engine (No. 31056) are:-

Date of test 25-09-1937 Works order No. 15190 Report 8292

Mag Bosch 4B L111 41203

Carb Zenith 42.F.S.Z (R)

Governed speed 1380 RPM

Despatched to F C Hibberd, Coronation Rd., Park Royal NW10

Guarantee started 24-03-38

Next owner Bournemouth Gas & Water Company 24-03-38

Various filters were ordered over a period ( *I can not find dates - dj*)

New exhaust valves and seat ordered 30-03-41

New induction manifold ordered 01-04-53

There is no power output recorded for the engine but I assume it was shown on the report 8292 but none of these have survived. (*dj*)

This is a very late petrol engine manufactured by the company as all petrol engine production ended in 1939.” (dj)

### **Information received from Phil Jones of the Dorman Association**

Dorman Catalogue of circa 1938

4JORX Petrol/Paraffin Engine

Bore 124mm

Stroke 140mm

Volume 6762cc

Rating 54 bhp at 1000rpm

Royal Automobile Club (R.A.C) rating 38.2

*(For the RAC rating Horse Power =  $(D^2 \times n)/2.5$  where  $D$ =Diameter of the cylinder in inches and  $n$  = number of cylinders)*

A Dorman 4JORX was also fitted to a loco built by the Avonside Engine Co Ltd Bristol. In Brian Webbs book ‘The British Internal Combustion Locomotive: 1894 – 1940, page 66, the description shows:-

Rating

53HP at 1000 rpm

65HP at 1450 rpm

### **References**

Ref 1 - Rails to Poole Harbour 2<sup>nd</sup> edition - Colin Stone - page 91

Ref 2 – Email from Geoff Pitman to Fraser White dated July 28<sup>th</sup> 2017