



FOUNDATION

Chairman of Trustees' Notes



The new board is working hard to move things forward and become closer to the Club. To that end we have a joint meeting between both

boards on the 29th March at Hunt House, where we will be exploring how we can work closer together. The Foundation has already agreed with the Club we will be present, with them, at the NEC show later this year, as well as any other events where the Club is having a stand.

Unfortunately, we have had to postpone our 20 Ghost event on 2nd April, as it clashes with the Bentley Foundations Talks Day and we feel that the audience would be very similar for both events. This is now expected to go ahead on 19th-20th of November 2022.

We hope to be able to announce some of our very popular lectures in the near future and I will keep you informed.

Our initial review of the Hunt House has been completed and we are looking to replace the flat roof, which is in a sorry state, and rebuild the pillar at the front of the property, which has become unsafe. Both of these need to wait for warmer weather but will be undertaken as soon as we can. In addition, we are looking to have a specialist give us a report on the conservatory which leaks badly.

By the time you read this the archive group, that has Members from both the Foundation and the Club, will have met to start the discussion on lots of items which include scanning and indexing (what, when and how much), agreement on what to do with the physical archives once fully scanned, agreeing the scope of both the Foundation's and the Club's interest i.e., when does the Foundation's interest start and

finish, for example we do not think it should include anything about Concorde even though it was powered by Rolls-Royce Olympus engines. We are also undertaking a review to ensure that the full asset inventory is up to date and is properly valued so that it can be shown correctly on both the Club and Foundation's accounts.

The current website is somewhat lacking in our ability to add new features and this will be the subject of a review in the near future. Until this is rectified, we will be posting our board agendas and minutes on the 'Questions for the Sir Henry Royce Memorial Foundation' part of the Club's forum. This is to ensure transparency on all aspects of the Foundation.

We would again ask that as many of you as possible join the Foundation to assist us in moving forward with these and other items.

Bob Fuller
Chairman of Trustees

FROM THE ARCHIVES 100 Years Ago... The Words Of Sir Henry Royce

In the spring of 1917 Henry Royce moved from St Margaret's Bay in Kent to 'Elmstead', his new home in the village of West Wittering, near to Chichester in West Sussex.

Henry brought with him a team of engineers, designers and draftsmen: Bernard Day, Ivan Evernden and Albert Elliot. He was ably assisted from Derby by Ernest Hives, head of the Experimental Department, and Eric Fowler Clarke the Company chief electrical engineer.

Royce's West Wittering team stayed with him until his death in 1933.

The searchable index of the West Wittering files is now complete, it is hoped that the index will be made available in the near future.

As an example, a search in the index for Henry Royce sketches regarding the development of the hydraulic shock absorber is reproduced opposite:

The scan of each individual document/drawing/sketch etc. will be available by hyperlink at the push of a button.

This regular feature will be included in each issue of *Spirit & Speed*, where a selection of the surviving documents from 100 years ago will be reproduced.

To follow are documents from March and April 1922, with a brief description of their contents.

March 1922

The Company used abbreviated initials to identify the authors of each document.

This document from Day (Da) to Bailey (By) with a copy to Fowler Clarke (EFC) the lead designer in Derby illustrated Henry Royce's concern with regards to the size and, more importantly, the weight of the battery and its box mounted in the chassis under the rear floorboards.

The document notes that tests would be carried out later to confirm the practicality of the design.

Goshawk was the experimental code name given to the model known later as the 20hp.

MATTERS

Royce shock absorber sketches				
Subject	X File	Date	Scan	Box
Hydraulic shock absorbers design trouble Royce (at Le Canadel) page 2 sketch	235	Dec-30	148	V
Hydraulic shock absorber front axle design Royce page 1 sketch	335	Feb-31	307	V
Hydraulic shock absorbers Delco design Royce page 1 sketch	235	Feb-31	374	V
Hydraulic shock absorbers Delco design Royce page 3 sketch	235	Feb-31	376	V
Hydraulic shock absorbers Delco design Royce page 3 continued sketch	235	Feb-31	385	V
Hydraulic shock absorbers Delco design Royce page 4 continued sketch	235	Feb-31	388	V
Hydraulic shock absorber modifications Royce sketch	8520	Feb-26	67	O
Hydraulic shock absorber failure Royce sketch page 1	235	Mar-26	97	O
Hydraulic shock absorber failure Royce sketch page 2	235	Mar-26	98	O
Hydraulic shock absorber oil leakage Royce sketch page 1	235	Mar-26	109	O
Hydraulic shock absorber oil leakage Royce sketch page 2	235	Mar-26	110	O
Hydraulic shock absorber modifications page 1 Royce oil leak sketch	235	Mar-26	127	O
Phantom hydraulic shock absorbers filter Royce sketch	235	Mar-26	145	O
Hydraulic shock absorbers modification Royce sketch	235	Feb-29	151	T
Hydraulic shock absorber automatic control Royce sketch	235	May-29	122	T
Hydraulic shock absorber design Royce sketch	235	Apr-31	94	V
Hydraulic shock absorber improved design sketch Royce comment	235	Apr-31	117	V
Goshawk Phantom hydraulic shock dampers sketch Royce	235	Feb-28	68	R

April 1922

Peregrine was the code name used for Henry Royce's suggestion for a third model, as an addition to the EAC (New Phantom) and Goshawk (20hp) model range.

It was to be a small, possibly 1.5 to 2 litre six cylinder engine.

Design work carried on at a pace throughout the early part of 1922, before other more pressing work on the 20hp and New Phantom overtook this model's development. Design

work was re-started in January 1931, which would eventually lead to development of the Derby Bentley model.

This document by Day (Da) to Bailey (By) was copied to Claude Johnson (CJ) Managing Director, Wormald (Wor), Works Manager and Hives (Hs) Head of the Experimental Department.

To By- from Da. ORIGINAL. 23/224. 3. 22.
 C. to CJP. ✓
 GOSHAWK 11. BATTERIES.
 Replying to your 18/224.3.22., when Mr. Clarke raised the question of a larger battery some few weeks ago, Mr. Royce definitely expressed his disapproval of any increase in the size. I suppose therefore that some authority has been obtained for introducing a larger battery.
 We have cursorily examined the situation and we think that it is not really possible to get a battery of the dimensions you give into the present position and that if it becomes necessary to use such a large battery we shall have to consider cutting it forward and under the front seats. There is a position there which has several advantages apart from this question of accommodating a larger battery, and we propose to rough out an arrangement of this in a short while so that it may be more fully considered.
 Referring to H.sch. 920 in this case the intention was that the lid should be taken off and then the 2 pivot bolts can be withdrawn. There is no question about the rear bolt but with regard to the front one there is a question of a handle on the battery which may interfere with the complete withdrawal of this bolt but it was thought that it would be possible to loosen the bolts at both ends and by inclining the battery box with the forward bolt drawn back as far as it will go, it would be possible to draw it clear of its bracket. We believe this method of disengaging is quite possible, and it was the original intention. We should certainly like to hear if it has been found by experience that it is impracticable.
 Da.

To By- from Da. ORIGINAL. 24/225.4.22.
 C. to Mr. ✓
 C. to Mr. ✓
 C. to Mr. ✓
 PEREGRINE REAR SPRINGS AND SHOCKERS. K4474 X4473
 We send herewith H.sch. 1297 showing the Peregrine rear spring together with the shackles and frame and fittings modelled on Goshawk 11. We have increased the surface of side thrust of the rear shackles but we have not altered the area of the front end as we think in view of Mr. Royce's most recent remarks, we ought to have more confirmation of the necessity for altering this before we add the considerable increase of weight to the spring eye.
 It will be noticed that we have embodied Mr. Royce's most recent instructions on the spring shackles namely, a hardened loose washer between every surface, the washer to be larger in diameter than the spring eye, and shackle surfaces and a suitable undercut arranged so that the shackle surface shall stand out.
 The washers on the shackled bolts are recessed to allow the bolt to have a full bearing in the shackle. We indicate longitudinal grooves in the spring bushes as well as circumferential.
 The question of spring gaiters and enclosing the spring shackles is being dealt with as a separate subject. For one thing we are awaiting the result of the Derby experiments with gaiters enclosing all the spring mechanism.
 Da.

The Sir Henry Royce Memorial Foundation

President: Charles Tabor Chairman: Bob Fuller Deputy Chairman: Colin Phillpotts Treasurer: David Towers Company Secretary: Alan Ferrier

Trustees: Graham Mead, John Neale

Chief Executive Officer John Baker

The Hunt House, Paulerspury, Northamptonshire NN12 7NA

T: 01327 811852 • E: admin@henryroyce.org.uk • www.henryroyce.org.uk

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