## W O Bentley Rotary Aero Engines

**Dr Tom Dine** 

W O Bentley is best known for engineering the Bentley car – the ultimate luxury sporting marque known for high performance and quality. But W O Bentley's genius shone first in the very early days of flight. The faster, stronger aero-engines he developed saved pilot lives and helped Britain to victory in the First World War.

After cutting his engine design teeth on railways with GNRC, his war work began in 1915 when he was commissioned into the Royal Naval Volunteer Reserve to develop aero-engines for the Royal Naval Air Service (RNAS). Bentley was not just responsible for the Bentley Rotary I (BR1) and Bentley Rotary 2 (BR2) but his ideas ensured that Rolls-Royce and Sunbeam aero-engines were fitted with aluminium pistons and that 30 more BHP were wrung from the French designed Clerget engines.

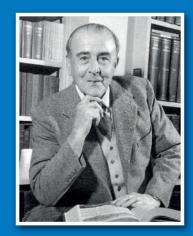
His tenacious engineering approach, and insistence on better performance, gained him a formidable reputation as an engineer. Countless tests and re-tests before allowing an engine into production ensured his work was recognised for saving many pilots' lives during the First World War. It was this contribution to Britain's war effort of which he himself was most proud, despite his later fame for introducing Bentley cars to the world's motor-sport spotlight.

"Thus to be posted to a B.R. squadron soon became the ambition of every knowledgeable scout pilot." RL DAVIDSON, NEW STATESMAN, JULY 1926

> Other books published by The W O Bentley Memorial Foundation.







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This is enshrined in a Trust Deed where the Charitable Objectives are "the advancement of public knowledge and appreciation of the Bentley Motorcar and its history by the establishment and maintenance of a museum, library and archive for the preservation, exhibition and study of the Collection".

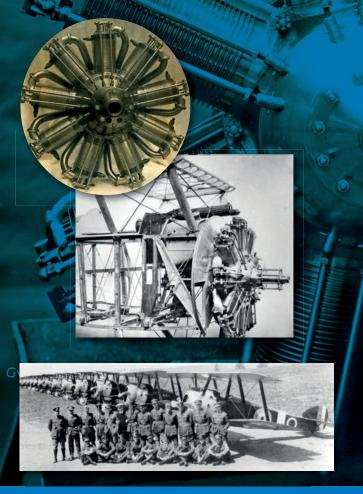
However the Foundation is also the champion and recorder of WO's life and engineering from his Premium Apprenticeship with the Great Northern Railway, through UNIC taxicabs and the DFP car to his genius with aero engine and material design during the First World War and beyond.

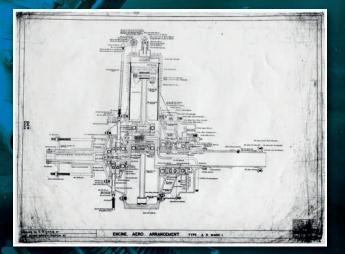
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## NEW BOOK FROM THE W O BENTLEY MEMORIAL FOUNDATION

The definitive reference book on Rotary Aero Engines and W O Bentley's role and contribution to Britain's war effort in the First World War When the name W O Bentley is mentioned, most people visualise large green cars thundering down the Mulsanne straight on their way to another Le Mans victory. However, WO was not all British Racing Green and laurel wreaths: he cut his engine design teeth on aeroplane and tank engines.

In more than 200 pages, this book aims to redress the balance, focusing on WO's work on aero-engines during the First World War. It describes the environment in which WO found himself, the reasons for the use of the technology and, briefly, some of the major players in the field at the time.





"An appalling sense of responsibility hung over me and never left me for the rest of the war, the figure of a pilot killed by engine failure leaning over my shoulder, like some ghostly conscience, whenever I was at work."

W O Bentley, on discovering that the engine of the plane in which he had just flown on patrol over enemy lines had been about to fail.

## **ORDER FORM**

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