Harold E. Morehouse Flying Pioneers Biographies Collection - Kirkham, Charles B.

Extracted on Mar-28-2024 11:53:54

The Smithsonian Institution thanks all digital volunteers that transcribed and reviewed this material. Your work enriches Smithsonian collections, making them available to anyone with an interest in using them.

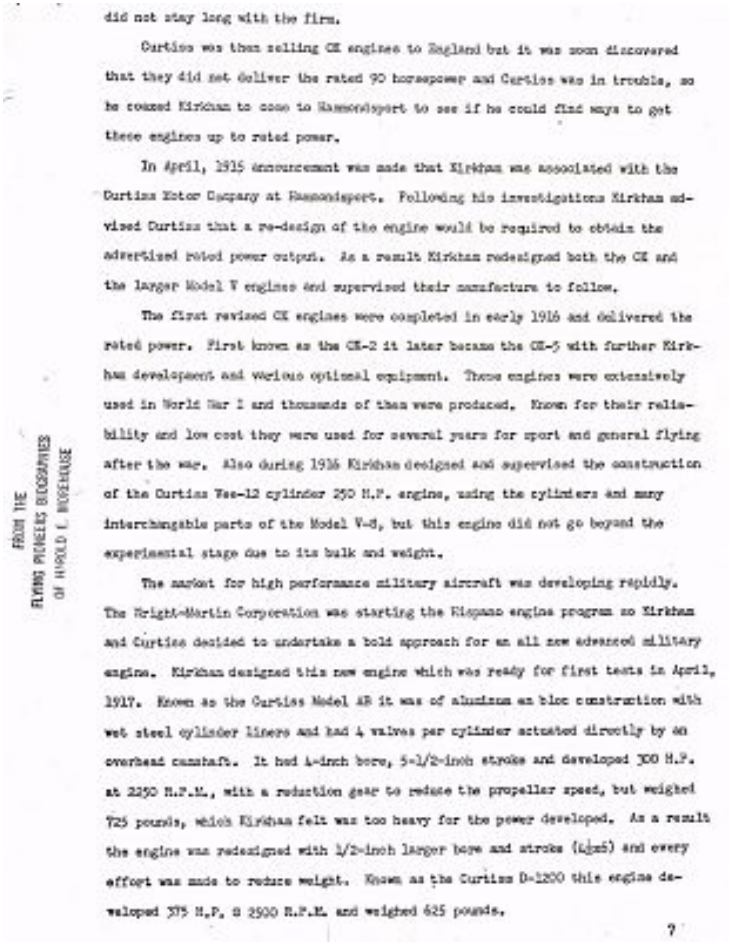
did not stay long with the firm.

Curtiss was then selling OX engines to England but it was soon discovered that they did not deliver the rated 90 horsepower and Curtiss was in trouble, so he coaxed Kirkham to come to Hammondsport to see if he could find ways to get these engines up to rated power.

In April, 1915 announcement was made that Kirkham was associated with the Curtiss Motor Company at Hammondsport. Following his investigations Kirkham advised Curtiss that a re-design of the engine would be required to obtain the advertized[[advertised]] rated power output. As a result Kirkham redesigned both the OX and the larger Model V engines and supervised their manufacture to follow.

The first revised OX engines were completed in early 1916 and delivered the rated power. First known as the OX-2 it later became the OX-5 with further Kirkham development and various optional equipment. These engines were extensively used in World War I and thousands of them were produced. Known for their reliability and low cost they were used for several years for sport and general flying after the war. Also during 1916 Kirkham designed and supervised the construction of the Curtiss Vee-12 cylinder 250 H.P. engine, using the cylinders and many interchangeable parts of the Model V-89, but this engine did not go beyond the experimental stage due to its bulk and weight.

The market for high performance military aircraft was developing rapidly. The Wright-Martin Corporation was starting the Hispano engine program so Kirkham and Curtiss decided to undertake a bold approach for an all new advanced military engine. Kirkham designed this new engine which was ready for first tests in April, 1917. Known as the Curtiss Model AB it was of aluminum en bloc construction with wet steel cylinder liners and had 4 valves per cylinder actuated directly by an overhead camshaft. It had 4-inch bore 5-1/2-inch stroke and developed 300 H.P. at 2250 R.P.M., with a reduction gear to reduce the propeller speed, but weighed 725 pounds, which Kirkham felt was too heavy for the power developed. As a result the engine was redesigned with 1/2-inch larger bore and stroke (42x6) and every effort was made to reduce weight. Known as the Curtiss D-1200 this engine developed 375 H.P. @ 2500 R.P.M. and weighed 625 pounds.



did not stay long with the firm.

Curtiss was then selling OX engines to England but it was soon discovered that they did not deliver the rated 90 horsepower and Curtiss was in trouble, so he coaxed Kirkham to come to Hammondsport to see if he could find ways to get these engines up to rated power.

In April, 1915 announcement was made that Kirkham was associated with the Curtiss Motor Company at Hammondsport. Following his investigations Kirkham advised Curtiss that a re-design of the engine would be required to obtain the advertized rated power output. As a result Kirkham redesigned both the OX and the larger Model V engines and supervised their manufacture to follow.

The first revised OX engines were completed in early 1916 and delivered the rated power. First known as the OX-2 it later became the OX-5 with further Kirkham development and various optional equipment. These engines were extensively used in World War I and thousands of them were produced. Known for their reliability and low cost they were used for several years for sport and general flying after the war. Also during 1916 Kirkham designed and supervised the construction of the Curtiss Vee-12 cylinder 250 H.P. engine, using the cylinders and many interchangeable parts of the Model V-8, but this engine did not go beyond the experimental stage due to its bulk and weight.

The market for high performance military aircraft was developing rapidly. The Wright-Martin Corporation was starting the Hispano engine program so Kirkham and Curtiss decided to undertake a bold approach for an all new advanced military engine. Kirkham designed this new engine which was ready for first tests in April, 1917. Known as the Curtiss Model AB it was of aluminum en bloc construction with wet steel cylinder liners and had 4 valves per cylinder actuated directly by an overhead camshaft. It had 4-inch bore, 5-1/2-inch stroke and developed 300 H.P. at 2250 R.P.M., with a reduction gear to reduce the propeller speed, but weighed 725 pounds, which Kirkham felt was too heavy for the power developed. As a result the engine was redesigned with 1/2-inch larger bore and stroke (42x6) and every effort was made to reduce weight. Known as the Curtiss D-1200 this engine developed 375 H.P. @ 2500 R.P.M. and weighed 625 pounds.

7

FROM THE FLYING PIONEERS BIOGRAPHIES OF HAROLD E. MOREHOUSE

Harold E. Morehouse Flying Pioneers Biographies Collection - Kirkham, Charles B.
Transcribed and Reviewed by Digital Volunteers
Extracted Mar-28-2024 11:53:54