

FUELS

Preface

The following discussion of the part that fuel has played in the development of the piston-type aircraft engine has attempted to cover the subject in the least technical manner possible with a view to making it reasonably understandable to non-technical readers.

The discussion does not follow the practices of the Harvard Graduate School of Business Administration in respect to being the product of elaborate and painstaking research but rather is written almost entirely from memory. The author's memory has, however, been reinforced as a result of study of the discussion in manuscript form by the author's associates. As far as possible the consulting advice of these associates has been chosen on a basis of their having been concerned in the development of either engines or fuels.

The author has made a rigorous attempt to exclude personal prejudices from the discussion but realizes that this attempt has probably failed since judgment of the phases of development which warrant discussion, as well as the relative importance assigned to these phases, is bound to be a matter of personal opinion and therefore of prejudice. Even the choice of associates for criticism of the discussion involves prejudice, since associates who will probably condemn the discussion as worthless are unlikely to be chosen as critics. Despite the help of critics, the views expressed in the discussion are the sole responsibility of the author. Schlaifer, in his discussion of carburetors and fuel injection systems, points out that the Navy did not interfere in the engineering of fuel injection systems but nevertheless controlled engineering by its choice of which system it supported. The Navy choice was an expression of a prejudice, and it would appear that those usefully engaged in or associated with development never successfully avoid such prejudice. The inevitable prejudice of those engaged in or associated with development means that they are poor historians of development, and to this the author pleads guilty.

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The author realizes that the following discussion is far from being well written. That it is not a great deal worse is only due to the assistance the author has received as follows: detailed study and criticism of the entire manuscript in draft by Dr. D. P. Barnard and Mr. Robert V. Kerley; criticism of part of the text and supply of data by Mr. Wheeler G. Lovell, Dr. J. Bennett Hill, Mr. T. L. Apjohn, and Mr. L. S. Hobbs. Editorial and critical efforts of Mr. Arthur H. Tully, Jr., Assistant Director of Research of the Harvard Graduate School of Business Administration, have made it possible to complete the manuscript. Miss Ruth Norton and Miss Jananne Morse of the Division of Research have been responsible for untiring editorial efforts which have introduced some semblance of order into the text.

While the editorial work of the Business School staff has made it possible for the author to complete the text, the staff have been truly editors rather than censors. When the author was invited to write this history he was informed that the contents were the responsibility of the author, and that the only form of censorship exercised by the Business School would be one of refusing to publish the text. The author would express his considerable appreciation of this freedom of action to the Business School in general and to Dr. Melvin T. Copeland, Director of Research, in particular.

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Detroit

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