

THE ART OF FLYING

CAPTAIN NORMAN MACMILLAN, M.C., A.F.C.



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Foreword by
AIR VICE-MARSHALL
SIR SEFTON BRANCKER
K.C.B., A.F.C.

Chas. Pears.

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WITH A FOREWORD BY
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NORMAN MACMILLAN.

2nd January, 1928.

FOREWORD

by

AIR VICE-MARSHAL SIR SEFTON BRANCKER,
K.C.B., A.F.C., DIRECTOR OF CIVIL AVIATION

I APPRECIATE the honour which Captain Norman Macmillan did me when he invited me to write a foreword to this book, his first—but I hope not his last—venture into the realms of literature.

So far as my experience goes, I believe this to be the first work on aviation written from the test pilot's point of view ; the result is not only instructive, but offers a fascinating insight to the romance and adventure inseparable from aeronautical progress.

Captain Macmillan is eminently fitted as an airman to undertake this task. He had a brilliant record in the War, and since he left the service has been in the forefront of British air development.

Immediately after the War, he took up test-flying with considerable success, but in 1922 he conceived the idea of flying round the world and establishing yet another British record, at a time when we were leading the way in long-distance flights.

One of my first and most pleasant recollections when I took up the appointment of Director of Civil Aviation in 1922 was wishing Macmillan

good luck when starting on his sporting effort to fly round the world. After various adventures, this enterprise, through no fault of his, wound up with a fifty hours' drift on a derelict seaplane in the Bay of Bengal. Undeterred by this experience, he decided to make another attempt in 1923.

This time it was decided to reconnoitre and establish fuel bases along part of the route by ship in advance of the flight. The ship started, but money ran out, and the undertaking had perforce to be abandoned.

These two failures in the adventurous realms of aviation led Macmillan to return to the more serious rôle of test pilot in 1924, and from that time on British aeronautical design has benefited much. He has the rare quality of being a perfect pilot, equipped with a sound and scientific brain, which enables him to translate ideas into clearly recorded action, and action back again to improved ideas.

This book brings out the vital importance of commercial aviation to the British Empire in the future—an importance which very few people even in aviation circles fully realize. It records the very marked progress in aeronautical design which has been accomplished by British brains and British enterprise during the last few years—and it takes the reader into the domains of the high heavens realistically and truthfully.

I wish it all good fortune.

SEFTON BRANCKER.

3rd January, 1928.

INTRODUCTION

FLYING is an art. Like all arts it requires practice. It is unfortunate that in the early stages of flying practice there is an element of danger. Although this may not deter the young enthusiast, it does withhold public confidence in flying by reason of the accidents which result.

For those who intend to take up flying, and who wish to learn to fly, the instruction which is given at the light-plane flying clubs covers the normal use of the flying controls. Several excellent private schools exist to-day. The instructional courses of the Royal Air Force train the Service pilot most thoroughly. Beyond the scope of such instruction, however, towers the accumulated experience of years of intensive research flying where problems are met and solved which do not present themselves to those undergoing normal instructional flying on standard type aeroplanes.

In the course of more than eleven years' continuous flying there have been presented to me, in the air and on the ground, many problems connected with the actual art of flying, the proper consideration and solution of which have proved of the greatest value to myself as a pilot. From this experience I have come to consider the art of applied flying by more far-reaching

values than movements of the controls in relation to the nose of the aeroplane on the horizon.

What I want to attempt in this book is to present clearly to the reader a picture of what flying is, with its possibilities and limitations, in relation to himself as the brains of the aeroplane. If I enlarge his conception of the art of flying, the result must be greater security of mind and greater certainty of hand, and an increase in the safety of flying to the individual. I hope that indirectly, through a resulting decrease in avoidable accidents, I may have played some part in building up the public confidence in aviation which aviation so badly needs.

Although this book is written primarily for the aeroplane pilot of to-day (and to be), I shall avoid technicalities, because the wider its appeal the greater will be its value. I hope that the fathers of sons who wish to fly will read it, as well as the sons themselves. I have met many people who, knowing nothing of flying, have been keenly interested in the many problems of flight. Their many questions are all answered in these pages. To all who are inclined to read this book I trust that I will arouse in them some of my own enthusiasm for, and belief in, flying.

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