

The Air Pilot's **Manual**

Volume 7

Communications

'Recommended Reading'
UK Civil Aviation Authority
Singapore CAA Recommended Study Guide



POOLEYS
Air Pilot Publishing

*Nothing in this manual supersedes any EU legislation or European Aviation Safety Agency (EASA) Regulations or procedures; or any operational documents issued by any United Kingdom Government Department, the Civil Aviation Authority, National Aviation Authorities, the manufacturers of aircraft, engines and systems, or by the operators of aircraft throughout the world. As maps and chart are changed regularly, any extracts reproduced in this book **must not** be used for flight planning or flight operations.*

Copyright © 2019 Pooleys–Air Pilot Publishing Limited

ISBN 978-1-84336-226-5

First edition published 1997

Reprinted with amendments 1998

Second edition 2000

Reprinted with amendments 2001

Reprinted with amendments 2003

Third edition 2004

Reprinted with amendments 2005

Reprinted with revisions and colour illustrations 2006

Reprinted with amendments March 2007

Reprinted with amendments February 2009

Fourth edition January 2011

Fifth edition April 2013

Sixth edition May 2015

Reprinted with amendments January 2017

Reprinted with amendments July 2018

Reprinted with amendments November 2019

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic or mechanical including photocopying, recording or by any information storage and retrieval system, without permission from the publisher in writing.

Origination by Pooleys–Air Pilot Publishing Limited.

Published by Pooleys–Air Pilot Publishing Ltd

Elstree Aerodrome, Elstree, Hertfordshire, WD6 3AW. UK.

Tel: +44(0)208 207 3749

Web: www.pooleys.com

Email: sales@pooleys.com

Volume 7

Contents

Introduction	vii
Section One – Learning the Language	
1. Cockpit Radios	3
2. What to Say	27
3. Aerodrome Operations	39
4. Aerodrome Information	81
Section Two – Flying Further	
5. Airspace Classification	95
6. R/T in Uncontrolled Airspace	103
7. R/T in Controlled Airspace	135
Section Three – When Things Go Wrong	
8. Emergency Procedures	151
9. Radio Failure Procedures	165
Section Four – Putting It All Together	
10. Example VFR Flights	185
11. Example IFR Flights	199
Section Five – How Radio Works	
12. Radio Fundamentals	213
13. Radio Wave Propagation & Long-Range Communications ...	223
Abbreviations	239
Index	245

Editorial Team

Dorothy Saul-Pooley LLB (Hons) FRAeS FRIN

Dorothy holds an ATPL (A) and a CPL (H), and is both an instructor and examiner on aeroplanes and an instructor on helicopters. She is Head of Training for a school dedicated to running Flight Instructor courses at Shoreham. She is also a CAA Flight Instructor Examiner. In addition, having qualified as a solicitor in 1982, Dorothy acted for many years as a consultant specialising in aviation and insurance liability issues, and has lectured widely on air law and aviation insurance. This highly unusual combination of qualifications led to her appointment as Honorary Solicitor to the Guild of Air Pilots and Navigators (GAPAN).

Dorothy is a Fellow of the Royal Aeronautical Society, Fellow of the Royal Institute of Navigation, Past Chairman of the GAPAN Instructor Committee of which she was a founding member and the prime instigator of the Guild's Joint Forum with Central Flying School at RAF Cranwell for Senior Flying Instructors. She is a Past Chairman of the Education & Training Committee. After serving as a Warden on the Court of GAPAN for three years, she was appointed Master for the year 2014-2015 of the newly renamed Honourable Company of Air Pilots. She is also Founder and Chairman of the Professional Flying Instructors Association.

In 2003 Dorothy was awarded the Jean Lennox Bird Trophy for her contribution to aviation and support of Women in Aviation and the BWPA (British Women Pilots Association). In 2013, Dorothy received the prestigious award of a Master Air Pilots Certificate from GAPAN. In 2015 she was awarded the Brabazon Cup by the BWPA for her outstanding achievement in aviation. In 2019, Dorothy was awarded the Pike Trophy by the Honourable Company of Pilots. This award was to recognise Dorothy's outstanding contribution to the maintenance of high standards of civilian instruction.

A regular contributor to seminars and conferences, Dorothy is the author and editor of a large number of flying training books and has published articles in legal and insurance journals and many in aviation magazines. She is currently working on a biography of her inspiring and pioneering Great Great Aunt, who was a Doctor in India and first principal of a school training Indian Women to be Doctors and nurses.

Helena Hughes

On leaving university in 1989 Helena obtained a PPL in America, converting to UK licence on her return. Shortly afterwards she started work in Air Traffic Control at London Luton Airport, earning her controller's licence in 1990. Helena continues to be an operational Air Traffic Control Officer and is currently posted to Swanwick working 'Luton Radar', 'Thames Radar' and 'Heathrow SVFR'; she is involved

in controller training as an instructor, assessor and examiner. She holds a CPL/IR and has been a flying instructor since 1996, teaching PPL and associated ratings. She is a Ground and R/T examiner and has written both PPL and ATPL Radiotelephony Training Manuals.

Acknowledgements

The Civil Aviation Authority; National Air Traffic Services.

A Condensed History of the Air Pilot Manuals

For over 30 years the Air Pilot Manuals have led the academic training of pilots in the United Kingdom and in many countries around the world.

I first met Trevor Thom, a professional pilot and natural teacher, in Melbourne during a visit to Australia in January 1985. He already had his series of PPL Manuals for the Australian market and I asked him to produce a series for the New Zealand market where we had a small aviation business. Having completed this task, Trevor immediately began writing the first of the Air Pilot Manuals for the United Kingdom market and this project began in earnest on 5th December 1985.

Both Trevor Thom and Robert Johnson commenced the task in my office at Feldon. By the end of the following year, all four volumes were complete and were published in February 1987. At that time, we estimated that 95% of all the UK Flying Schools were using our manuals. Volumes 5, 6 and 7 followed, so completing the full series.

Unfortunately, Trevor Thom had a serious accident at home which prevented him from continuing with the editing of the manuals. His rights were eventually sold to David Robson, another experienced pilot and natural teacher, who progressively improved the drawings and brought colour into the manuals for the first time.

Over the years there have been many assistant editors, in particular Peter Godwin, whose help I first asked for in the very early days with Trevor Thom and which continued until quite recently. The rights in the Air Pilot Manuals are now vested with the Pooley family and they continue to be edited and published from our offices and the school at Shoreham Airport.

The Air Pilot Manuals have an outstanding reputation for accuracy and are continuously updated. They are recommended CAA reading material and are referred to extensively in the CAA examination answer booklet.

Robert Pooley

CS(t) FRIN FRAeS