

# Preface

Aviation English is unique in English for Specific Purposes due to the high stakes of its outcomes which directly affect the safety of the travelling public. Aviation students are set apart by the immediacy and individual responsibility of their decision-making, the demands imposed by the precision of their language, the voice-only character of their communication, and the fact that the lives of so many people are suspended in mid-air.

In the *Flightpath Teacher's Book* we have tried to meet this exciting and daunting challenge by providing teachers with the strongest support possible, not only in terms of appropriate teaching strategies but also in terms of information about the operational background and the functional relevance of the content and exercises. This is not just a Teacher's Book to accompany a coursebook, but can also be used as a self-training manual and reference source for Aviation English teachers at many different levels of experience.

The pedagogical principles you will find here are based upon the 2010 edition of ICAO Document 9835, the holistic descriptors of the rating scale, and ICAO Circular 323. We have tried to build on and exemplify these in specific operational situations, but we cannot encourage you strongly enough to return regularly to these sources.

We hope that the safety and operational content which is the basis of *Flightpath* will not only fire your students' motivation and enhance their learning, but also provide the means to extend their professional skills after the course by directing them to the full range of media and documentation on aviation language and safety which is available in English.

For pilots and controllers, achieving and maintaining communicative proficiency in English is a life-long process and an integral part of their professional lives. As teachers, few commitments can be as stimulating and rewarding as supporting them effectively in this process: certainly, I feel deeply privileged to have been involved in the aviation community.

I am extremely grateful to Jeremy Day for all the expertise, experience and innovation he has brought to this project: with his work on the Teacher's Book, he has also greatly extended the scope of the activities in the Student's Book. You can find further material on the course website, [www.cambridge.org/elt/flightpath/](http://www.cambridge.org/elt/flightpath/). This contains a substantial aviation glossary and regularly updated articles, case studies, media links, classroom resources and activities.

This book is dedicated to the unsung heroines, and a few heroes, of aviation English: teachers working over the years for air navigation service providers, aviation training centres, airlines and technical universities, many of whom gathered together for the first time around Fiona Robertson in March 1984 in what was to become the International Civil Aviation English Association. They have been the pioneers and the guarantors of good practice in Aviation English.

**Philip Shawcross**

# To the teacher

## What do pilots and air traffic control officers (ATCOs) need?

For the vast majority of their work, pilots and ATCOs need to be able to use and understand standard phraseology, the simplified and highly structured version of English that they use to communicate with each other. But they also need to be ready to cope with unexpected and non-routine situations of all sorts. For such cases, they need to understand and be able to use plain English.

The purpose of this book is not to teach standard phraseology, which pilots and ATCOs will have learned as part of their initial training courses. Nor is it to persuade pilots and ATCOs to replace standard phraseology with plain English. The strongest message one hears from pilots and ATCOs is that 'we don't want English teachers coming in and telling us how to do our job'. Rather, we need to provide them with an additional resource that may, in exceptional situations, save many lives.

## Can I teach Aviation English if I don't understand standard phraseology?

In principle, yes, you can use your expertise in plain English, as well as your knowledge of clear pronunciation, to provide a useful service to pilots and ATCOs. In this Teacher's Book, we have been careful to include explanations (**Background notes**) of all the standard phraseology and technical language used in the course. We have also provided detailed sample answers to all open-ended questions, role-plays and discussions in the course (**Suggested answers, Possible answers**), again so that you can provide expertise without being an expert yourself. If you are an experienced teacher of Aviation English, some of this guidance may seem rather obvious, but we wanted to provide maximum support for less experienced teachers. Note that Unit 1 includes a lot of phraseology, so it could well be the easiest unit for your students, and the most difficult one for you to teach.

However, the more you know about your students' work and needs, the more useful your teaching will be. For this reason, we strongly advise you to study standard phraseology (for example, ICAO document 4444). There is a list of relevant **sources** near the beginning of each unit, which we recommend that you study. Aviation English is a very serious business, so you need to take your preparation seriously. We also recommend that Aviation English teachers are trained by reputable training providers, and that they continue to regard their professional development seriously throughout their careers, dedicating time to refresher courses and to self-study in their field.

One very basic component of phraseology that less experienced teachers will need to make sure they know is the International ICAO Radiotelephony Alphabet, and also the internationally agreed pronunciation of numerals in aviation radiotelephony.

A further support for all teachers that we have provided is an extensive **Aviation English Glossary**, which you can download at [www.cambridge.org/elt/flightpath/](http://www.cambridge.org/elt/flightpath/). You may want to print this out for your own use and also for the use of your students.

## What is the level of the course?

*Flightpath* is designed first and foremost to help learners reach ICAO Level 4. ICAO Level 4 is an internationally agreed standard of English – above that required to carry out standard radiotelephony – that all pilots and Air Traffic Control Officers need in order to work in the industry, and to fly planes or control traffic in international airspace. Within some organisations, a Level 5 standard may be desirable. The ICAO descriptors for levels 3, 4 and 5 are on page 8 and 9 of this *Teacher's Book*. The material in the course is designed to stretch and to challenge students, and with higher level learners, *Flightpath* can also be used to support learners aiming at a Level 5 standard of competence. It is also suitable for learners doing recurrent training after achieving Level 4 in the past.

*Flightpath* is designed to focus on the core professional skills rather than prepare learners for any particular test. There are many different tests of ICAO Level 4 worldwide, and it may be that your learners are preparing for one of them. Naturally, the best way to prepare for a sound test of language competence is to ensure that you work on the competence, rather than just 'teach to the test' – and this is particularly true in a safety-critical field such as aviation. However, it will still be useful for teachers to familiarise themselves with any test that their learners are preparing for.

## What is the main priority of Aviation English learners?

ICAO regard the components of Aviation English competence as a 'pyramid' (see page 8) with all the skills building up to support the most important one: **the ability to interact fluently and effectively in aviation communication**. The syllabus of *Flightpath* is built on the same principle of 'interaction above all': the core interactions of Aviation English, especially those that take place between pilots and ATCOs, are at the heart of the course.

## INTRODUCTION

### How is *Flightpath* structured?

Each of the ten units of *Flightpath* is built around a particular operational issue in aviation. There is an introductory unit which deals with general issues in aviation language. The remaining nine units fall into three sections corresponding to all the phases of flight: ground movements, en-route threats, and approach and landing incidents.

The units are divided into sections reflecting operational and communication issues in aviation. The unit starts with a **Lead-in**, usually based on discussion of an extract from safety-related material, which is designed to get students talking about the subject-matter of the unit and to help teachers get a feel for their students' awareness of the topic and ability to talk about it in English.

Each unit contains **Language Focus** sections, dealing with particular points of English grammar and vocabulary within the aviation context, and **ICAO Focus** sections which draw on ICAO and other industry publications to encourage a deeper understanding of issues in aviation communication.

The main part of the unit closes with a longer communication task, under the title **Putting it together**. This draws together the material in the unit and provides opportunities for students to put together the skills and language they have practised. See *How do I use the Putting it together sections?* below.

Most of the units also then have a task using the **DVD** which accompanies the course. See *How can I use the DVD?* below.

Each of the three sections of the course ends with a **Review**, which provides quick practice and a reminder of the language encountered in the preceding three units. The activities in the Review sections focus in turn on the six different competencies of the ICAO scales: Pronunciation, Structure, Vocabulary, Fluency, Comprehension and Interaction.

### How do I use the *Putting it together* sections?

The main part of each unit ends with a major communication task, where students practise the language and skills they have learnt during the unit. It is vital that you monitor these carefully to make sure that all students really have mastered the relevant language and skills. You should also analyse their performance carefully and openly during the **Debriefing**. The **Progress check** at the end of each unit is a tool for checking systematically for remaining problems. It is worth devoting plenty of time to discussing both of these sections with the class.

If problems remain, you will need to set up revision work, either for individual students or for the whole class. This could mean simply repeating exercises that you have already done from the coursebook, or using the glossary to make quizzes and tests. Alternatively, you may need to create your own exercises tailored to your students' specific needs. Remember that you can use your students' expertise and experience to generate situations for role-plays. They can also create exercises and tests for each other; the process of making a test is often the best way of learning. Make sure you follow up any problem areas in later units, and keep working on them until your students have mastered them.

### Why is there a lot of pairwork in the course?

Since Aviation English is driven so much by the efficient exchange of information, it is natural that *Flightpath* makes extensive use of pairwork activities built on the principle of the 'information gap', where two students have different sets of information and need to communicate effectively in order to transfer this to each other.

These are signposted through the course in two ways, depending on the emphasis of the activity. You will see references to *Pilots* and *ATCOs* for activities which are role-plays of pilot-ATCO communication, and *Student A* and *Student B* for more generic pairwork activities where students are not necessarily playing these two different roles.

In pilot-only classes, some students will often be expected to play the role of ATCOs. Likewise, in ATCO-only classes, you will find yourself asking students to play the role of pilots. We think this is a sound pedagogical approach: in order to speak a common language, it is essential that each of the two professional groups understand the culture of the other group and the particular difficulties they face. By putting themselves into the others' shoes in the language classroom, they may acclimatise themselves better to the other group's particular needs and difficulties, and be able to apply this in their professional practice.

In addition, we also recognise that there are some areas where ATCOs and pilots will have different priorities, and so we have provided different activity options and prompts to be used with ATCO-only classes or pilot-only classes. These are Unit 5, ex. 4; Unit 8, ex. 10 and 20; Unit 9, ex. 6 and 7a; and Unit 10, ex. 8c and d, 27a, and 34.


### What do I do if I have an odd number of students?

For every activity which is designed for pairs (or groups of three or four), this *Teacher's Book* provides guidance on how to adapt the activity for different class sizes.

### How can I use the audio CDs?

Many training centres for pilots or ATCOs are equipped with language labs, which allow students to complete listening tasks individually (e.g. listen and repeat, listen and respond). If you are lucky enough to have access to a language lab, we recommend that you use it for many of the listening tasks in *Flightpath*. In this *Teacher's Book*, however, we have provided guidance for teachers without language labs.

Since the students have the audio material from the course packaged with their *Student's Books*, they are likely to also derive a great deal of benefit from using the CD material for additional practice outside the class.

So that the tracks on the three CDs can be found easily by the teacher, the icons in the *Student's Book* refer directly to the CD and the track number: for example,  **2.14** means CD 2, Track 14, not Unit 2, Track 14.

The tasks which accompany the audio material in the course are aimed both at developing listening comprehension and also as models of, and cues for, spoken production.

### How can I use the DVD?

The *Flightpath DVD* contains eight extracts from authentic aviation industry training video materials, based on real incidents, produced by airlines and industry bodies such as Eurocontrol and the UK National Air Traffic Services. The original purpose for which it was designed in the industry training context was as thought-provoking material for discussion of more general safety issues and human factors in aviation during training workshops, and to encourage best practice for both pilots and Air Traffic Control Officers.

The DVD-based tasks in the *Student's Book* are designed both to foster this kind of professional discussion in class, and also for more specific focus on features of Aviation English.

The DVD has English-language subtitles which can be switched on and off depending on whether you want to focus on comprehension or on more detailed language study, and photocopiable transcripts of the DVD material are also available on the course website ([www.cambridge.org/elt/flightpath/](http://www.cambridge.org/elt/flightpath/)).

### Where can I find the answers?

For activities which have clear and unambiguous answers there is an **Answer Key** in the *Student's Book* (pages 166–173). This is to help the teacher save time in class, and will also support the self-study learner.

For the freer, more open-ended and more discursive activities in the course, answers are provided in the *Teacher's Book* and can be identified quickly by the grey shaded boxes. Depending on how open-ended the activity is, these keys have one of three headings:

**Answers:** if the activity demands a single, unambiguous answer. For easy reference, answers in the *Student's Book* key are also repeated in the *Teacher's Book*.

**Suggested answers:** where different answers are possible, but best practice makes certain answers very likely. Where students' answers differ from those provided here, teachers may find it very interesting to explore with the whole class why the answers differ and what reasons their students give for their answers, which may be just as valid as those in the *Teacher's Book*.

**Possible answers:** for more open-ended and discursive activities, especially where answers draw on the student's working contexts and experiences. There is no 'right' answer in these cases, but the keys will help the teacher understand the background and issues behind the answers their students may produce.

### Page references

Page references in the *Teacher's Book* refer to the *Student's Book* unless otherwise stated.

### Are you sure I can teach Aviation English?

There is nothing to be ashamed of in being an inexperienced teacher: all teachers have to start somewhere. As long as you take your work seriously, prepare carefully for your lessons, read as many of the background texts as you can and learn from your students and more experienced colleagues, you can be proud that you are doing a job that could help save hundreds of lives.

ICAO SCALES

General resources

The Teacher’s Brief at the beginning of each unit contains a detailed list of resources specific to the topics of that unit. However, the titles and websites below will be of constant benefit throughout your use of *Flightpath*.

Airbus: *Flight Operations Briefing Notes* ([www.airbus.com](http://www.airbus.com))  
Aviation English Services ([www.aeservices.net](http://www.aeservices.net))  
Boeing: *Aero* online magazine ([www.boeing.com](http://www.boeing.com))  
Eurocontrol: *Preventing runway incursions*, 2008 ([www.eurocontrol.int](http://www.eurocontrol.int))  
Eurocontrol: *Reducing Level Bust* ([www.eurocontrol.int](http://www.eurocontrol.int))  
Flightpath website: ([www.cambridge.org/elt/flightpath](http://www.cambridge.org/elt/flightpath))  
Flight Safety Foundation: *ALAR Tool Kit* ([www.flightsafety.org](http://www.flightsafety.org))  
Flight Safety Foundation: *AeroSafety World* online magazine ([www.flightsafety.org](http://www.flightsafety.org))  
Godwin, T. and Thom, T.: *The Air Pilot’s Manual*, vols. 3–7  
Gunston, B.: *The Cambridge Aerospace Dictionary*, 2004  
International Civil Aviation English Association ([www.icaea.pansa.pl](http://www.icaea.pansa.pl))  
ICAO: *Document 4444 – Air Traffic Management* ([www.icao.int](http://www.icao.int))  
ICAO: *Document 9835 – Manual on the Implementation of ICAO Language Proficiency Requirements*, 2<sup>nd</sup> edition, 2010 ([www.icao.int](http://www.icao.int))  
ICAO: *Circular 323 – Guidelines for Aviation English Training Programmes*, 2009 ([www.icao.int](http://www.icao.int))  
Live ATC: Live air traffic ([www.liveatc.net](http://www.liveatc.net))  
National Transportation Safety Board ([www.nts.gov/aviation/aviation.htm](http://www.nts.gov/aviation/aviation.htm))  
Robertson, Fiona: *Airpeak*, 2<sup>nd</sup> edition, 2008  
Skybrary ([www.skybrary.aero](http://www.skybrary.aero))  
Smart Cockpit ([www.smartcockpit.com](http://www.smartcockpit.com))

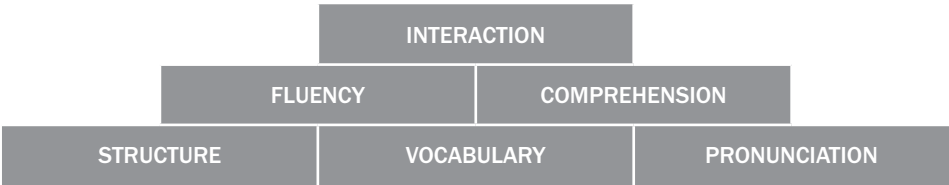
ICAO Language Proficiency Rating Scale Levels 3, 4 and 5

Proficient speakers shall:

- a) communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations;
- b) communicate on common, concrete and work-related topics with accuracy and clarity;
- c) use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings (e.g. to check, confirm or clarify information) in a general or work-related context;
- d) handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occurs within the context of a routine work situation or communicative task with which they are otherwise familiar; and
- e) use a dialect or accent which is intelligible to the aeronautical community.

For the full text of the ICAO Holistic Descriptors, which define the context in which language is used, see *Doc. 9835 4.5: Annex 1: Descriptors of ICAO Language Proficiency requirements*.

The ICAO Rating Scale contains six language skills; proficiency in all of these skills must be at least at Operational Level 4. However, as ICAO Doc. 9835, pages 2–10, emphasises, these proficiency skills form a pyramid in which the foundation skills support the aim of communication: interaction.



For a full explanation of the ICAO Rating Scale, see ICAO Doc. 9835 4.6: *Explanation of Rating Scale Descriptors*.

THE ICAO RATING SCALES: LEVELS 3, 4 and 5

PRONUNCIATION	STRUCTURE	VOCABULARY	FLUENCY	COMPREHENSION	INTERACTIONS
Level 5: Extended					
Pronunciation, stress, rhythm and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding.	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning.	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Able to speak at length with relative ease on familiar topics but may not vary speech flow as a stylistic device. Can make use of appropriate discourse markers or connectors.	Comprehension is accurate on common, concrete and work-related topics and mostly accurate when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to comprehend a range of speech varieties (dialect and/or accent) or registers.	Responses are immediate, appropriate and informative. Manages the speaker/listener relationship effectively.
Level 4: Operational					
Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances.	Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	Comprehension is mostly accurate on common, concrete and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	Responses are usually immediate, appropriate and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming or clarifying.
Level 3: Pre-operational					
Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation and frequently interfere with ease of understanding.	Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning.	Vocabulary range and accuracy are often sufficient to communicate on common, concrete, or work-related topics, but range is limited and the word choice often inappropriate. Is often unable to paraphrase successfully when lacking vocabulary.	Produces stretches of language, but phrasing and pausing are often inappropriate. Hesitations or slowness in language processing may prevent effective communication. Fillers are sometimes distracting.	Comprehension is often accurate on common, concrete and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication, or an unexpected turn of events.	Responses are sometimes immediate, appropriate and informative. Can initiate and maintain exchanges with reasonable ease on familiar topics and in predictable situations. Generally inadequate when dealing with an unexpected turn of events.