AIRSPEAK

RADIOTELEPHONY
COMMUNICATION
FOR PILOTS

F. A. ROBERTSON
AIRSPEAK
Radiotelephony Communication for pilots
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CONTENTS

Foreword viii
Acknowledgements xi
Introduction xii
Notes to the teacher xiv
Notes to the learner — how to use this book xvii
Standard words and phrases xix

Part One — Pre-flight to line-up 1

1.1 Departure information 3
   1.1.1 Departure information (routine) 3
   1.1.2 Departure information (ATIS) 4
   CHECK for Section 1.1 7

1.2 Route clearances 10
   CHECK for Section 1.2 12

1.3 Start-up 14
   1.3.1 Start-up (routine) 14
   1.3.2 Start-up (non-routine) 18
   CHECK for Section 1.3 20

1.4 Push-back 24
   1.4.1 Push-back (routine) 24
   1.4.2 Push-back (non-routine) 25
   CHECK for Section 1.4 27

1.5 Taxiing 29
   1.5.1 Taxi (routine) 29
   1.5.2 Taxi (routine exchanges) 32
   1.5.3 Taxi (non-routine) 35
   CHECK for Section 1.5 37

1.6 Line-up 41
   1.6.1 Line-up (routine) 41
   1.6.2 Line-up (non-routine) 44
   CHECK for Section 1.6 45

1.7 Review of Part One 48
   1.7.1 Routine phraseology review 48
   1.7.2 Flight from Rexbury to Winton (from Departure ATIS to line-up) 48
   1.7.3 Flight from Dublin to Paris (from initial contact to line-up) 49
   CHECK for Section 1.7 53

1.8 Supplementary vocabulary 55
   1.8.1 Phases of flight 55
   1.8.2 Airport words 56
   1.8.3 Airport vehicles 57
   CHECK for Section 1.8 58

Part Two — Take-off to top of climb 59

2.1 Distress and urgency messages 61

CHECK for Section 2.1 64
2.2 Take-off 66
  2.2.1 Take-off (routine) 66
  2.2.2 Take-off (non-routine) 69
  CHECK for Section 2.2 71

2.3 Initial climb 75
  2.3.1 Initial climb (routine) 75
  2.3.2 Initial climb (non-routine) 77
  CHECK for Section 2.3 79

2.4 Climb 82
  2.4.1 Climb (routine) 82
  2.4.2 Climb (non-routine) 85
  CHECK for Section 2.4 86

2.5 End of climb 89
  2.5.1 End of climb (routine) 89
  2.5.2 End of climb (non-routine) 91
  CHECK for Section 2.5 92

2.6 Review of Part Two 96
  2.6.1 Flight from Rexbury to Winton (take-off and climb) 96
  2.6.2 Flight from Dublin to Paris (take-off and climb) 96
  CHECK for Section 2.6 98

2.7 Supplementary vocabulary 99
  2.7.1 Words for planes 99
  2.7.2 Parts of a plane 101
  2.7.3 Cockpit instruments 104
  CHECK for Section 2.7 105

Part Three — cruise to descent 109

3.1 Volmets 111
  CHECK for Section 3.1 114

3.2 En route: position reports 116
  3.2.1 En route: position reports (routine) 116
  3.2.2 En route (non-routine) 118
  CHECK for Section 3.2 120

3.3 En route: traffic information 122
  3.3.1 En route: traffic information (routine) 122
  3.3.2 En route (non-routine) 125
  CHECK for Section 3.3 127

3.4 Descent 130
  3.4.1 Descent (routine) 130
  3.4.2 Descent (non-routine) 134
  CHECK for Section 3.4 135

3.5 Review of Part Three 138
  3.5.1 Flight from Rexbury to Winton (en route) 138
  3.5.2 Flight from Dublin to Paris (en route) 138
  CHECK for Section 3.5 140

3.6 Supplementary vocabulary 142
  3.6.1 Weather words 142
  3.6.2 Cabin and safety equipment words 144
  CHECK for Section 3.6 146
Part Four — Approach to parking  149

4.1 Arrival (ATIS)  151
CHECK for Section 4.1  154

4.2 Approach  156
4.2.1 Approach (routine)  156
4.2.2 Approach (non-routine)  160
CHECK for Section 4.2  162

4.3 Final approach and landing  165
4.3.1 Final approach and landing (routine)  165
4.3.2 Final approach and landing (non-routine)  168
CHECK for Section 4.3  171

4.4 After landing  175
4.4.1 After landing (routine)  177
4.4.2 After landing (non-routine)  176
CHECK for Section 4.4  178

4.5 Review of Part Four  180
4.5.1 Flight from Rexbury to Winton (approach and landing)  180
4.5.2 Flight from Dublin to Paris (descent and landing)  180
CHECK for Section 4.5  182

4.6 Supplementary vocabulary  185
Aviation jobs  185
CHECK for Section 4.6  186

Part Five — Final review  187

5.1 Rexbury to Winton (complete flight)  189
CHECK for Section 5.1  193

5.2 Dublin to Paris (complete flight)  196
CHECK for Section 5.2  200

Tapescript for controller's part
and for non-dialogue tasks  203
FOREWORD

The Radiotelephony Language System

A dependence upon dear, concise and unambiguous human speech via radiotelephony (RT) remains, despite considerable technological development, a prominent feature of the control circuits of aviation. It is about twenty five years since we abandoned the somewhat cumbersome, yet unambiguous and intra-linguistic 'Q Code' with wireless telegraphy and adopted, as standard, that disarmingly familiar, infinitely adaptable and fast moving apparatus, human speech, on RT for medium and long distance flights.

RT was clearly an operational necessity and the International Civil Aviation Organisation (ICAO) gave early recognition of the need for a standard and unambiguous language system with which to operate it; a language system which required explicit designing and regular updating. The result was the creation and continuing evolution of what is probably the world's most successful semi-artificial international language: English-based RT phraseology and procedures.

Despite the considerable linguistic caution which can be inferred from the International Standards and Recommended Practices for Aeronautical Communications contained in ICAO Annex 10 Volume 2 (Communication Procedures) which states that:

... in general, the air ground radiotelephony communications should be conducted in the language normally used by the station on the ground.

and elsewhere that:

pending the development and adoption of a more suitable form of speech for universal use for aeronautical radio telephony communication, the English language should be used as such and should be available on request from any aircraft station unable to comply with the previously mentioned provision at all stations on the ground serving designated airports and routes used by international air services.

it is fair to say that the spirit of the recommendations has been interpreted correctly and that to all intents and purposes English-based RT is the international 'lingua Franca' of air traffic control. Confidence in the use of this language system is a prerequisite for all pilots and controllers involved in international traffic and a fundamental aim of this course is to provide an aid to gaining and, just as important, maintaining that confidence.

Disaffection with RT

The utility of RT for aviation is however being questioned by those who believe, with increasing traffic densities, leaving both air traffic controllers and pilots less time for clarifying ambiguous messages, that the operational tolerances of this method of communication have been reached. The proponents of this view look to a radical extension of the role played by devices such as Secondary Surveillance Radar (SSR) and more recently 'Mode S' to more comprehensive data links which are not speech-dependent.

Another view, also critical of RT, reaches a different conclusion. Namely, that whilst purely technical devices like SSR transponders perform a unique and valuable service by declaring an aircraft height and identity (without the use of a speech circuit), we are nevertheless a long way from a sufficiently flexible or communicatively powerful data link for air traffic control which can replace human speech on RT entirely. This school of thought believes that it is not the operational tolerances of RT itself which are being reached but rather the operational tolerances of RT as it is currently practised. Thus, by way of illustration, it is not the design of the car but the way it is driven that causes accidents.

The truth must inevitably lie between these views. There is, on the one hand, every justification for serious investigation into linguistic or mechanistic enhancements of, or alternatives to, the existing almost totally speech-dependent communications provisions. On the other hand, and more pressing, is the justification for renewed efforts to improve current RT practice.

The course assembled here by Fiona Robertson represents a significant contribution to the latter effort by providing pilots and trainee pilots — native and non-native speakers of English — with easy access to the language system in its most up-to-date form.
Impediments to Safe RT

The effort which has gone into the preparation of this course and the effort expected or "pilots so achieve a high language competence is justified by the extremely inhospitable operational environment within which the language system must operate.

The odds are heavily stacked against fail-safe RT communications. Indeed, with physical impediments such as blocked frequencies and simultaneous transmissions which occasionally inhibit radio contact altogether, propagation noise, background interference, electrostatic noise, the far from ideal acoustic environment of the flight deck, (all of which contribute to the degradation of the signals received by the brain), it is astonishing that RT is as effective as it is. In addition to these not inconsiderable 'physical' impediments, the pilot must be prepared to encounter, cope with, and resist himself, non-standard RT behaviour which seems to be a predictable consequence of the fact that the system is operated by humans not automatons. Standard behaviour does not come naturally — even on the purely procedural, as opposed to the linguistic, side, complaints about sloppy RT discipline are commonly heard. For example, clipped transmissions and the neglect of such essential communicative steps as «read-back» at very busy locations.

Non-standard linguistic behaviour is perhaps easier to account for. Natural languages are never static, their users impose change continuously. This partly explains why the efforts of well-meaning scholars to create unambiguous and easy-to-learn artificial languages such as Esperanto for international communication have been doomed to failure. RT phraseology goes against nature and has to counter the same influences which are otherwise given free rein in natural language. It is no surprise therefore to find the development of a professional 'gloss' to RT performance characterised by such things as ellipsis (missed out words); the inclusion of catch phrases and well meant additions and the creation of jargon, all of which often result in speech which is incomprehensible or too fast for reliable interpretation, or both. Indeed, the potential for misunderstanding is compounded by the normal conversational inclination to hear what you expect to hear and the almost irrepressible desire to make sense of a message (at any cost).

Regional pronunciation variation, often caused by mother-tongue interference, and non-standard articulation generally cause particular problems for non-native speakers of the base language. It is not (simply) that a single misheard phoneme can completely destroy the value of an entire message but the time wasting which is incurred where, for example, there is insufficient interpretation of message priority.

There are, too, what one might term 'organisational' or 'administrative' impediments which have to be faced by the RT user. For example, it is frequently reported that in some pans of the world there is severe inadequacy in the language training of air traffic controllers; an inadequacy which shows up (he moment messages deviate from the routine. This may not be due entirely to lack of will to learn but also in some part to the lack of guidance on the language requirements for non-routine situations. Clearly, what is required is more than the routine phraseology but less than the totality of the natural language. Resolution of this question requires research similar to that carried out at this College' on maritime VHF. In the meantime we must continue to rely on the pilot's or air traffic controller's native language competence and professional intuition for non-routine situations. For this course Fiona Robertson has, however, distilled some important aspects of this part of the language and provides practice with the more commonly encountered non-routine language.

The Call for Standardisation

Many of the problems cited have a common theme, a theme which is heard at every gathering of air traffic controller's and pilots; lack of standardisation. As far as the standardisation of the language system and its operation are concerned there appear to be (at least) four requirements:

i) A definitive recommendation by ICAO of what this standard language is for both routine and non-routine situations.

ii) Identical interpretation of that standard by national bodies, iii) Worldwide uniformity in training and certification, iv) Measures designed to ensure continued operational adherence to the standard.
The authoritative documents produced under i) and ii) above are not adequate for training purposes. These are declared reference works. For example, the ICAO Manual of Radiotelephony contains 'examples ... intended to be representative of radiotelephony phraseology in common use'. For item iii) above to be fulfilled a prerequisite must be the creation of an intermediate document or course with an explicit training function. Until such a document is produced control of what is actually taught is limited and the considerable variation in the methods, standards and subject matter of aviation language teaching will continue to impede efforts to impose an operational standard.

The Relevance of this course

This material has already proved popular with pilots and some of that popularity seems to be due to the use of *live* recordings which provide 'authentic' practice otherwise unobtainable outside the cockpit. This fulfills one of ICAO's recommendations: '... when the pilot is flying the plane, attention is taken up by things other than searching for the correct RT phraseology. Training for RT must be done elsewhere, not in flight. In flight, the words and phrases must come automatically and understanding must be instantaneous. There is no time today for the "What did he say?" type of dialogue in the cockpit'.

During this course the learner may progress through a carefully controlled sequence for IFR traffic in each stage of flight and engage in exercises which graduate from simple four line dialogues to complete flight simulations.

There is evidence to suggest a link between the misuse of language and aircraft accidents. It is surprising, in the light of the foregoing list of impediments to good communication, that there is not more such evidence. This could be due in part to the controllers' and pilots' awareness of these impediments and the general realisation that speech over RT is just one more perceptual tool: a tool like any other with limitations. Their reliance on the tool is likely to be proportional to their awareness of those limitations.

A thorough grounding in the RT language system, such as this course provides, ought, therefore, to have one further beneficial effect on the learner: an appreciation of the limits and potential dangers of RT.

E.J.

*Wolfson College Communication Unit.*
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- Air Inter (pp. 101, 107, 144)
- Jeppesen & Co. GMBH (pp. 50-52)
- The International Civil Aviation Organisation (p. xix)

I also wish to express thanks to all my friends and pupils at Air Inter, whose professional expertise is a constant source of information and inspiration for me.

F.A.R.
INTRODUCTION

Purpose

This course contains a carefully sequenced selection of training materials, giving progressive, systematic practice in radiotelephony phraseology for pilots.

The exercises are designed primarily to teach operational fluency in the ROUTINE phraseology for IFR flights. Unlike routine phraseology, the language of NON-ROUTINE situations is not highly predictable. However, practice is also provided for a selection of non-routine situations, plus additional vocabulary work.

This course is suitable for pilots or pilot trainees who wish to learn, or revise, the language used for radiotelephony communications. It is particularly suitable for people working at home or in a learning resources centre. All the exercises are self-correcting.

Organisation

There are five parts to the course. Parts 1 — 4 trace the normal pattern of a flight as follows:

- Part One  Pre-flight to line-up
- Part Two  Take-off to top of climb
- Part Three Cruise to descent
- Part Four  Approach to parking

Each Part is divided into Sections which follow the normal sequence of events for each stage of a flight. For example, Part One (Pre-flight to line-up) is divided as follows:

- 1. Departure information
- 2. Route clearances
- 3. Start-up
- 4. Push-back
- 5. Taxi

Each Section is divided into ROUTINE phraseology practice, and then NON-ROUTINE exercises. These events are then followed by a REVIEW, which serves to bring together the phrases learned in each Section. Each Review contains:

--- Model Flight
— Live Traffic

AM the exercises build up gradually to Part Five, which is the FINAL REVIEW. In this part there are two simulations of complete flights, one an imaginary model flight, the other based on live traffic.

Level of English

The minimum level of English required to start this course is what language teachers call 'lower intermediate', i.e. a knowledge of the basic verb tense structures, how to make questions and negative; verb forms, an ability to make simple, correct statements and to understand fairly easy dialogue — in other words, the result of about three years of positive learning experience at school.

Additionally, the learner should know the international alphabet (Alpha, Bravo, Charlie, etc.) and the system of numbers used in aviation. The learner should also have a basic knowledge of flying procedures.

XII
Recordings

Except for a few supplementary vocabulary exercises, ALL the exercises in this book are recorded. The recorded exercises are of the following types:

a. routine phraseology practice
b. non-routine situations
c. simulation of a flight with an imaginary scenario
d. simulation of a flight using live traffic
e. supplementary vocabulary practice

All the callsigns and place names used in this book are imaginary, except for those in the live recordings of ATIS, VOLMETS and METARS, and in the Dublin to Paris flight. The sound quality of the live recordings reflects the working environment.

It should be emphasised that the live recordings have been chosen, not as exemplary models, but as practice to help learners get to grips with reality.

Warning

This course is based on a considerable amount of authentic material, but it does not attempt to teach:

— flying procedures
— anything about aviation other than English words and phrases used in RT
— all the words that can be found in any situation during a flight

References

Throughout the book, references are given for the ICAO, CAA and DGAC phraseologies. The documents referred to are:

- Civil Aviation Authority, CAP413, 1984 edition
- Direction Generale de l Aviation Civile, Procedures de Radiotelephony a l Usage - de la Circulation Aerienne Generale — Phraseologie, Arrete du 7 Septembre 1984

The ICAO Manual of Radiotelephony has been chosen in preference to the recommendations in the PANS-RAC, as the presentation of short dialogues in the Manual is considerably easier to place in the context of its correct phase of flight than the original recommendations. However, it has occasionally been necessary to return to the source, as it were, for example in the Route Clearances Section. In this case the document referred to is:

This material can be adapted for use in the classroom, with a tape-recorder, and it is ideal for use in the language laboratory.

**Suggestions for Classroom Work**

**Key words and phrases**
Before looking at the list of key words and phrases, find out what students already know by 'brainstorming', as follows:

Write the section title on the board (e.g. Departure ATIS) and ask the class to write down all the words they know related to the subject, first individually, then in pairs. Finally put together the whole class's knowledge of the vocabulary connected with Departure ATIS, either by writing it up on the board or by pinning up pieces of paper used by the class to list their words. Check that all the words mentioned in the book have been covered. If not, teach those that remain.

Another approach to this list is to ask the students to organise it into categories. Each student may see a different way to organise the words, but this is not a problem — in fact, it can be enriching. Try to help the students to understand that there is no 'right answer' here. The exercise is aimed at helping students remember words by thinking about them, and coming to their own individual decisions about them. Different ways to categorise the Departure ATIS list could be: (i) units, weather words, navigation words; (ii) abbreviations, single syllable words, two syllable words, three syllable words, phrases. Once each student establishes different categories, they can be shown and explained to the rest of the group.

Check the pronunciation and accentuation of the words in the list.

**Typical exchange**
This presents an analysis of a typical exchange, and it shows the layout of the pilot-controller exchange which will be practised in the exercises. There are paragraph references to some of the official phraseologies. Whenever there are variations, the ICAO phraseology is used here, but possible variations are described in the NOTES.

A useful preparation for the listening and speaking exercises which follow is to elicit this kind of analysis from the class. If that seems too difficult, write up the dialogue layout with a few elements missing. Then ask the class to supply the missing items.

**Routine phraseology**
Routine phraseology has been divided into short model dialogues for each phase of flight; and for each phase, the taped material is presented in the same sequence:

- Listen
- Listen and Repeat
- Write
- Check
- Listen and Speak
- Check
This sequence has been chosen so that the learner hears and says the phrases before seeing them in print. Since the 'answers' also appear in the book, the learner has to be dissuaded from reading the answers before doing the exercise. With adult learners it is fairly easy to show that the objective is to understand the spoken word without written support and hence to accept the discipline of listening and repeating before looking at the written text. However, it would be counter-productive to be too authoritarian in this matter. The learner should take responsibility for his or her own learning, and therefore has a choice whether to accept advice or not.

All the material presented here can be used for classroom work or language laboratory work. Each section contains 10-20 minutes of taped material on routine phraseology, the contents of which provide ample material for 1½ hours of classwork, including 40 — 45 minutes of individual work in the laboratory, or in pairs.

The initial Listen and Repeat practice can be usefully done in a group with the teacher correcting pronunciation. The written exercise is important so that the learner knows exactly the words which will be used in the Listen and Speak exercise. The written phrases must therefore be carefully checked. In the language laboratory, time must be given for the writing phase.

The Listen and Speak exercise can be practised in pairs with the use of the Tapescript of Controller's Part (pages 203 — 219). In pairs, students take turns as the controller and the pilot. With an odd number of students, the odd-one-out could check the 'pilot', using the CHECK pages. In classroom practice of this kind, insist on the use of 'say again' for any parts of messages which are not understood.

Non-routine exercises
These take the form of listening comprehension followed by 'auto-dictation” blank-fill. The listening comprehension can be done in the classroom, but the blank-fill is best done individually. However, it can be used as a recall exercise, rather than an 'auto-dictation*. Preparation for these exercises can take the form of classroom discussion on possible non-routine situations that could occur at the particular phase of flight, with students recounting any personal experiences they may have had.

Supplementary vocabulary exercises
Although these are grouped at the end of each Part of the course, they should be used in small doses along with the sections on phraseology. You may want to enlarge these sections with other kinds of activities centred on learning vocabulary. Many of the word games used in general language courses can be adapted to suit specific areas. One could have activities such as: What's My Job in Aviation? (a yes/no guessing game); Describe and Arrange, with matching sets of pictures of different types of planes; aviation crosswords; number games.

Suggestions for other activities
Remember that for the learner, a little RT practice goes a long way. Never try to cover more than one Routine RT Section and one Non-routine RT Section in one lesson. Classroom time can be usefully spent reviewing basic English structures in an aviation context, for example:
— describe your last flight (past tense)
— what do you do before you board the plane (present simple tense)?
— what are the essential qualities for a pilot ('should*)?
— how will civil aviation develop in the next 20 years (expressions of futurity)?
A collection of pictures of planes, airports, ground vehicles, etc. is very useful, as the learner can talk about the pictures within his or her own level of competence.

Accident and incident reports always arouse a spark of-interest, although the formal language used in this type of text can be difficult.

Always encourage the learners to extend their knowledge of English in general. Routine RT phraseology is not enough to cope with non-routine situations when pilots have to fall back on their own linguistic resources.
NOTES TO THE LEARNER — HOW TO USE THIS BOOK

You will need:
— the recordings
— pencil and paper for notes
— a cassette recorder with index numbers
— an aviation dictionary

A typical Section of the book

Example: 1.1.1  Departure information (routine)
1 Key Words and Phrases.  Check that you understand each word on the list.
2 Typical Exchange.  This shows the kind of dialogue that will be practised in the following exercises. You can see on the PILOT side what you will have to say, and on the CONTROLLER side what you will have to understand.
   There are paragraph references to some of the official phraseologies if you want to see how the language is presented there. There are also NOTES about possible variations.
3 Listen.  Put on the cassette, set the index numbers to zero and listen to the dialogue.
4 Listen and Repeat.  Repeat the pilot's words. Practise until you can do it easily. Do not look at the Listen and Write Section yet. You must learn to understand the controller's words without looking at the text. Remember, there is no text of the controller's words when you are in the cockpit.
5 Write.  Write the pilot's words in the boxes (the controller's words are given). Check with the recording if necessary.
6 Check.  Check that your written words are exactly the same as the word in the CHECK section. If there is a mistake, correct it, and listen to the recording again.
7 Listen and Speak.  This is a role-play exercise using the same phraseology as the first three exercises (Listen, Listen and Repeat, Write). The example is recorded again, and then you can play the pilot's role for each of the six different flights. The six callsigns are listed on page 4. If the pauses on the tape are not long enough for you to speak, you can make them longer by stopping the tape, then speaking, then restarting the tape.
8 Check.  A correct version of the pilot's words in the Listen and Speak exercise is given in the CHECK section. If the Listen and Speak exercise is difficult at first, you can read aloud from the CHECK section as you play the tape once through, then try again without looking at the CHECK section.

Exercises with non-routine situations

When you know the routine phraseology very well, you can turn to the non-routine section.

Example: 1.3.2  Stan-up (non-routine) p. 180
1 Listen and Write.  Set the recorder index numbers to zero. Read the question for the first dialogue. Listen to the first dialogue and the question at the end of it. Stop
the tape. If you know the answer, write it down; if not, listen again. If the questions seem too difficult, come back to them after the second Listen and Write exercise. Continue in the same way with dialogues 2 and 3.

2 Check. Check your answers to the questions in the CHECK section.

3 Listen and Write. Rewind the cassette to zero (the beginning of the first dialogue) and use the recording for "auto-dictation* to write in the words in the blank spaces.

4 Check. Check your answers by looking at the pilot's words in the CHECK section.

**Review section**

Near the end of each Part there is a review of the phraseology learned. The review is done in two simulations. The first is an imaginary scenario, the second is based on live traffic.

**Example: 1.7.1** Flight from Rexbury to Winton (from ATIS to line-up) p. 48.

1 Read. Look at the information given to help prepare the flight.

2 Listen and Read. Listen to the tape and follow the information given in the book about the phase of the flight.

3 Listen and Speak. Set the recorder index numbers to zero. Think about the flight information (callsign, route, parking stand) and be ready to play the pilot's role. Have pencil and paper ready to take notes for clearances, etc. Start the tape and reply to the controller and follow the instructions/on the tape. If you find the pace too fast at first, practise by making the pauses longer — stop the tape, speak, then start the tape again. But remember, try again without stopping the machine.

4 Check. Check your words with the model answers. If you want to read the controller's words, you can find them in the *Tapescript of Controller's Part*, pages 203-219.

**Example: 1.7.2** Flight from Dublin to Paris (initial contact to line-up) p. 48.

1 This simulation uses live traffic. The procedure is the same as for the Rexbury—Winton simulation. Maps of the area are given. Study them before you start. *These mops ore not to be used for navigation.* They are given here to make the simulation as realistic as possible.

   NOTE: Real time has been compressed in these simulations, and there are no long pauses without RT. In a real flight there are often quite long periods without RT communications.

**Supplementary vocabulary**

At the end of each Part there is practice with supplementary vocabulary. These exercises use various techniques to help you learn words related to the phases of flight practised in the RT sections. These words do not appear in routine phraseology, but they are useful for non-routine situations. The exercises are grouped at the end of each Part. You may prefer to do them bit by bit.
The following words and phrases shall be used in radiotelephony communications as appropriate and shall have the meaning given below.

<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledge</td>
<td>Let me know that you have received and understood this message.</td>
</tr>
<tr>
<td>Affirm</td>
<td>Yes.</td>
</tr>
<tr>
<td>Approved</td>
<td>Permission for proposed action granted.</td>
</tr>
<tr>
<td>Break</td>
<td>I hereby indicate the separation between portions of the message. (To be used where there is no clear distinction between the text and other portions of the message.)</td>
</tr>
<tr>
<td>Break Break⁴</td>
<td>I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Annull the previously transmitted clearance.</td>
</tr>
<tr>
<td>Check</td>
<td>Examine a system or procedure. (No answer is normally expected.)</td>
</tr>
<tr>
<td>Cleared</td>
<td>Authorized to proceed under the conditions specified.</td>
</tr>
<tr>
<td>Confirm</td>
<td>Have I correctly received the following ...? or Did you correctly receive this message?</td>
</tr>
<tr>
<td>Contact</td>
<td>Establish radio contact with ....</td>
</tr>
<tr>
<td>Correct</td>
<td>That is correct.</td>
</tr>
<tr>
<td>Correction</td>
<td>An error has been made in this transmission (or message indicated). The correct version is ....</td>
</tr>
<tr>
<td>Disregard</td>
<td>Consider that transmission as not sent.</td>
</tr>
<tr>
<td>Go ahead</td>
<td>Proceed with your message.</td>
</tr>
<tr>
<td>How do you read</td>
<td>What is the readability of my transmission?</td>
</tr>
<tr>
<td>I say again</td>
<td>I repeat for clarity or emphasis.</td>
</tr>
<tr>
<td>Monitor</td>
<td>Listen out on (frequency).</td>
</tr>
<tr>
<td>Negative</td>
<td>No or Permission not granted or That is not correct.</td>
</tr>
<tr>
<td>Over</td>
<td>My transmission is ended and I expect a response from you.</td>
</tr>
<tr>
<td>NOTE: Sol normally used in VHF communications.</td>
<td></td>
</tr>
<tr>
<td>Out</td>
<td>This exchange of transmissions is ended and no response is expected.</td>
</tr>
<tr>
<td>Read back</td>
<td>Repeat all. or the .specified pan. of this message back to me exactly as received.</td>
</tr>
<tr>
<td>Recleared⁵</td>
<td>A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof.</td>
</tr>
<tr>
<td>Report⁴</td>
<td>Pass me the following information.</td>
</tr>
<tr>
<td>Request</td>
<td>I should like to know .... or I wish to obtain ....</td>
</tr>
<tr>
<td>Roger</td>
<td>I have received all of your last transmission.</td>
</tr>
<tr>
<td>NOTE: Under no circumstances to be used in reply to a question requiring 'Read back' or a direct answer in the affirmative (Affirm) or negative (Negative).</td>
<td></td>
</tr>
<tr>
<td>Say again</td>
<td>Repeat all., or the following pan. of your last transmission.</td>
</tr>
<tr>
<td>Speak slower</td>
<td>Reduce your rate of speech.</td>
</tr>
<tr>
<td>Standby</td>
<td>Wait and I will call you.</td>
</tr>
<tr>
<td>Verify</td>
<td>Check and confirm with originator.</td>
</tr>
<tr>
<td>Wilco</td>
<td>(Abbreviation for 'will comply'.) I understand your message and will comply with it.</td>
</tr>
<tr>
<td>Words twice</td>
<td>a) As a request; Communication is difficult. Please send every word or group of words twice.</td>
</tr>
<tr>
<td></td>
<td>b) As information: Since communication is difficult, every word or group of words in the message will be sent twice.</td>
</tr>
</tbody>
</table>

**AUTHOR’S NOTES**

1. Break Break is not used by the CAA in CAP413.
2. Go ahead is not used by the CAA in CAP413; the phrase Pass your message is used instead.
3. Recleared is not used in CAP413.
4. Report in this meaning (pass me the following information) is replaced by Say in the DGAC phraseology regulations.
Report for the DGAC means 'make a position report at the following place.
Examples:

<table>
<thead>
<tr>
<th>ICAO</th>
<th>DGAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL — Report heading</td>
<td>CTL — Say heading</td>
</tr>
<tr>
<td>CTL — Report passing X</td>
<td>CTL — Report passing X</td>
</tr>
<tr>
<td>CTL — Next report at A</td>
<td>CTL — Next report at A</td>
</tr>
</tbody>
</table>

---

**Standard words and Phrases — Simplified Meanings**

- **Approved**: I give permission for you to do what you asked.
- **Break**: This shows the end of the message, and the beginning of another.
- **Break Break**: This shows the end of the message to one aircraft, and the beginning of another message.
- **Cancel**: Cancel the last clearance I gave you.
- **Check**: Check a system or procedure. (No answer is normally expected.)
- **Cleared**: I give permission for you to proceed under the conditions stated.
- **Contact**: Make radio contact with ....
- **Correction**: There was a mistake in this transmission (or message). The correct version is ....
- **Disregard**: Pay no attention to that transmission.
- **Go ahead**: Give your message.
- **How do you read**: Give an estimation of the quality of the transmission on a scale of 1 (unreadable) to 5 (excellent reception).
- **I say again**: I repeat to make the message clearer.
  - or
    - I repeat because this message is very important.
- **Over**: My transmission is ended and I expect a reply from you.
- **Out**: This exchange of transmissions is ended and I do not expect a reply from you.
- **Read back**: Repeal all of this message back to me exactly as you receive it.
  - or
    - Repeat the part of this message I specify, exactly as you receive it.
- **Request**: I have received all of your last transmission.
  - want to know .... or I want to have ....
- **Roger**: (NEVER use 'roger' in reply to a question which needs read-back, or an answer 'affirm' or 'negative'.)
- **Say again**: Repeal your last transmission.
  - or
    - Repeat the part of your last transmission that I specify.
- **Verify**: Check and confirm with me.
Part One
Pre-flight to line-up
1.1 DEPARTURE INFORMATION

1.1.1 Departure Information (routine)

**Key words and phrases**
Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

- ATIS (Automatic Terminal Information Service)
- Surface wind
- Temperature dew point
- Runway
- Runway in use
- Gusting
- Visibility
- No sig (no significant change)
- Kilometres (km)
- Feet (ft)
- Degrees
- Knots
- Plus
- Minus
- Centigrade
- Mist
- Millibars (mb)
- QNH
- CAVOK (ceiling and visibility OK)
- ILS (Instrument Landing System)
- Noise abatement procedure
- Transition level
- Okta
- Cumulo nimbus
- Wet
- Braking action
- Trend
- RVR (runway visual range)
- Threshold
- Taxi way
- SID (standard instrument departure)
- Hectopascal
- Flock of birds

**Typical exchange**

1. **call control**
   - Name of control
   - Callsign
   - Request data

2. **control replies**
   - Aircraft callsign
   - Runway
   - Wind direction & strength
   - Temperature, dew point
   - QNH

3. **pilot replies**
   - Readback
   - Callsign

**NOTES**
- The controller usually gives the information in the following order: runway in use, wind direction and strength, **visibility**, temperature, dew point, QNH, other information.
- The pilot generally reads back the essential bits — wind data, QNH and runway number.
Phraseology practice
Listen If the airport has no ATIS (Automatic Terminal Information Service) recording, the pilot must ask for departure information. Listen to the recording.
Listen and Repeat Listen again and repeat the pilot's words.
Write Complete the text below by writing in the pilot's words. Check with the recording if necessary.

1 call control

control replies
SF398, runway in use 29, wind 350° 23 knots, gusting 30, temperature 12 dew point 10, runway is wet, braking action good, QNH 1023.. x

3 pilot replies

Check Check your answers, page 7.
Listen and Speak Take the part of the pilot, ask for departure data in the same way, and give the read-back. Listen to the example. Continue in the same way for the following flights. Start with the example again.

Callsigns

1 SF398 4 CV159
2 KM563 5 JD460
3 SV295 6 EN926

Check Practise this exercise several times. When it seems easy, and you think your answers are all correct, check them, page 7.

1.1.2 Departure Information (ATIS)

A typical ATIS recording
Some airports have separate departure and arrival ATIS, and others have one for both arrival and departure. The different items in the ATIS also vary according to the weather. A typical ATIS has the following items. Those in brackets () depend on the weather and the type of information.
airport name
information code
time
runway(s) in use
(runway condition: wet, snow, slush, ice, braking action) transition level
(operational information: expect ______ departure, flocks of birds, restricted areas, etc.)
wind direction (in degrees) and strength (in knots)
visibility in metres, kilometres up to 'ten kilometres or more
(RVR)
(present weather: mist; fog, snow, drizzle, etc.)
(cloud cover in oktas, height of base of clouds in feet or metres) (CAVOK, pronounced 'CAV-O-KAY')
temperature and dew point
QNH
(QFE)
trend («no sig» or expected weather changes)
(extra information)

**Listen and Read** If the weather is good, the ATIS recording is short. Listen and follow the text.

This is Heathrow departure information N, 1109 hours weather, 330°, IS knots, temperature +2, dew point — 3, QNH 1021 millibars, departure runway 28R.

If the weather is poor, the recording is longer. Listen to this example of an ATIS recording

This is Orly information H, recorded at 1300 Z time. ILS approach runway 07, take-off runway 08, expected 3V standard departure, transition level is 50. Wind 080° 12 knots, visibility 7 kilometres, ceiling 5 oktas at 700 metres and 7 pktas at 1800 metres. Temperature - 1, dew point -4, QNH 1008, QFE 997. Roissy is facing East. At first contact advise you have received information H; and caution taxiway 2A, taxiway 2JA and B area closed.

Remember that you can listen several times to an ATIS recording.

**Phraseology practice**

Listen and Write Before start-up or before taxi, the pilot listens to the ATIS. If there is no ATIS, the controller gives the latest weather data.

Listen to the following ATIS recordings and make notes for each one in the tables below, as in the examples. *You will have to listen more than one time to each one to get all the details.*
Check When you think you have all the correct details, check your answers from texts on page 8.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heathrow</td>
<td><strong>E, 200</strong></td>
<td>09, 21 09, 1017, 286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Heathrow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Heathrow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>De Gaulle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Orly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Frankfurt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Athens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Hamburg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check When you think you have all the correct details, check your answers from the texts on page 8. Remember that you will have to listen several times to each ATIS,
1.1 CHECK

1.1.1 Write (from page 4)

1 call control
   Ground, SF398, request departure information.

2 control replies
   SF398, runway in use 29, wind 350° 23 knots, gusting 30, temperature 12, dew point 10, runway is wet, braking action good, QNH 1023.

3 pilot replies
   350° 23 knots, QNH 1023 runway 29, SF398.

1.1.1 Listen and Speak (from page 4)
   The dotted lines (............) show when he controller speaks.

1 PIL Ground, SF398, request departure information.
   CTL .................................................................

2 PIL Ground, KM 563, request departure information.
   CTL .................................................................
   PIL 060° 18 knots, QNH 1008, runway 08, KM 563.

3 .PIL Ground, SV 295, request departure information.
   CTL .................................................................
   PIL 180° 9 knots, QNH 1014, runway 23, SV 295.

4 PIL Ground, CU 795, request departure information.
   CTL .................................................................
   PIL Wind calm, QNH 1015, runway 33 Right, CU 759.

5 PIL Ground JD 460, request departure information
   CTL .................................................................
   PIL 260° 10 knots, gusting to 25, QNH 1005, runway 19 Left, JD 460.

6 PIL Ground, EN 926, request departure information
   CTL .................................................................
   PIL 320° 5 knots, QNH J,019. runway 21, EN 926
I.I.2 **Listen and Write, I** (from page 6)

Departure information: texts of the ATIS recordings.

A This is Rexbury departure information Alpha, 00.05 hours weather, surface wind 270°, 19 knots, temperature 6° dew point 3°, QNH 1001, departure runway 27

B ... departure information Bravo, 00.30 hours, takeoff runway 04R, wind 050° 9 knots, temperature 25, dew point 18, QNH 1013.

C ... departure information Charlie, runway in use for takeoff 23, 280° 03 knots! QNH 1017, temperature 27, dew point 15.

D ... departure information Delta, take-off runway 25, 030° 02 knots, QNH 1002 temperature 04, dew point 04.

E ... departure information Echo, runway in use 36, wind 340° 10 knots gusting to 25, temperature 12, dew point 09, QNH 1005.

F ... departure information Foxtrot, 02.30 hours weather, surface wind 270° 10 knots gusting to 20, temperature 8, dew point 6, QNH 1011 millibars, departure runway 31

G ... departure information Golf, take-off runway 28R, 330° 20 knots, visibility 10 km or more, 1 okta 7000 feet, temperature +1, dew point —3, QNH 1022, no sig

1.1.2 **Listen and Write, 2** (from page 6) Texts

of ATIS recordings

1 This is Heathrow Departure information E, 18.15 hours weather, 200° 09 knots; temperature +21, dew point +09, QNH 1017 millibars, departure runway 28L

2 This is Heathrow Departure information B, 16.45 hours weather. 200° 11 knots temperature 24, dew point 12, QNH 1017 millibars, departure runway 28L.

3 This is Heathrow Departure information Z, 15.45 hours weather, 210° 10 knots, temperature 26, dew point +11, QNH 1017 millibars, departure runway 28L.

4 This is de Gaulle at time 13 Д0, information I. Landing runways 09 and 10, take-off runways 09 and 10, expect SID3G or 3H, braking action is good. Transition level 50, wind 080° 18 knots, visibility 7 kilometres, ceiling 4 oktas 3000 feet, 7 oktas 8900 feet, temperature -0°, dew point -5°, QNH 1008, QFE threshold 09 995, threshold 10 996, confirm I received on your first contact.

5 This is Orly E information, record 09.00. ILS approach landing runway 07, take-off runway 08, transition level 50, Roissy facing East, expect 3V departure, caution flock of birds on airfield, wind 080° 4 knots, visibility 4000 metres, mist, ceiling 3 oktas 900 metres, 3 oktas 7500 metres, temperature -2°, dew point -4°, QNH 1006, QFE 995, confirm E with first contact with Orly.

6 Frankfurt information A, time 15.20. Runways in use 25, 18, transition level 60, met report as of 15.20: wind 260° 11 knots, visibility 20 kilometres and recent snow shower, cloud 3 oktas 2700, 3 oktas 9000 feet, temperature 1, dew point -1 centigrade, QNH 1015, hectopascal equals 29.97 inches, trend no sig. Warning for Frankfurt, weather announcement tomorrow morning 6 o'clock, strong winds 320° at 15 knots gusts up to 34 knots, information A out.

7 This is Athens Airport information S. Weather report 09.00 hours: wind 280° 8 knots, CAVOK, temperature 27, QNH 1011 mb, 2985 inches, transition level 65. Runway in use
33R, taxiway Charlie between runway 33R and taxiway Bravo closed. It is reminded to follow strictly the noise abatement procedures.

8 Good day, this is Hamburg Tower, information Y. Runway for take-off 34, for landing 23, transition level 50. Met report as of 13.20: wind 310 with 7 knots, visibility 10 km, cloud 1 okta cumulo nimbus at 1500 ft, 5 oktas at 1800 ft. temperature - 1, dew point -2, QNH 1027 mb, trend no significant change.

Additional information: all departing aircraft are requested to squawk A4405 when airborne and runway is wet and braking action good. Hamburg information Y, out
Key words and phrases

that you understand all the words and phrases in this list. new words in an aviation dictionary.

flight planned route
left/right turn out
climb
maintain
*request
level change
en route
airborne
squawk
*cleared
Heading

ATC (Air Traffic Control)
Clearance
SID (standard instrument departure)
Approach
Initially
Frequency
flight level (FL)
*contact

(*These words are explained in the section on Standard Words and Phrases, page: xix—xx.)

Typical exchange

PILOT                                     CONTROLLER

1  control calls
   - aircraft callsign
   - offers clearance

2  pilot replies
   - 'ready to copy'
   - callsign

3  route clearance
   - name of ground station
   - 'clears' aircraft callsign
   - to _______ (destination)
   - Avia flight planned route'
   - standard departure
   (— additional details)
   - level instructions
   - frequency to contact after departure
   - squawk number

4  read back
   — callsign
   — cleared to _______ (destination)
   — Avia flight planned route*
   — standard departure
   (— additional details)
   — level instructions
   — frequency
   — squawk number

5  control replies
   - 'that is correct'
   - aircraft callsign
NOTES
— 'Additional details' added to a standard departure usually-just repeat some essential points (e.g. left/right turn out after departure; climb on runway heading to ...) or may contain a modification.
— Level instructions in route clearances often contain restrictions (e.g. 'FL190 initially, request level change en route).

**Phraseology practice**

Listen  Route clearance is given before engine start-up or during taxiing. Listen to the recording.

**Listen and Repeat**  Listen again, take notes, and repeat the pilot's words.

**Write**  Complete the text below by writing in the missing words. Check with the recording if necessary.

1  **control calls**
   SF196, here is your clearance.

**pilot replies**

3  **route clearance**
   Rexbury ATC clears SF196 to Winton via flight planned route, November 2 departure, left turn out after departure, climb to and maintain FL250, request level change en route, contact 120.26 when airborne, and squawk 2514.

**readback**

5  **control replies**
   That is correct SF196.

Check  Check your answers, page 12.

**Listen and Speak**  Take the pilot's part and reply to the controller for the following flights:

1  SF196 to Winton
2  Sunair 926 to Paris Charles de Gaulle
3  Sunair 831 to Winton
4  Sunair 4J5 to Rexbury
5  Sunair 921 to Rexbury

Check  Practise this exercise several times. When it seems easy, and you think your replies are correct, check your answers, page 12.
CHECK

1.2 Write (from page 11)

1 control calls
SF196, here is your clearance.

2 pilot replies
"Ready to copy, SF196.

3 route clearance
Rexbury ATC clears SF196 to Winton via flight planned route, N2 departure, left turn out after departure, climb to and maintain FL 250, request level change en route, contact 120.26 when airborne, and squawk 2514.

4 readback
SF196, cleared to Winton, flight planned route, N2 departure, turn left after departure FL250, request level change en route, 120.26 when airborne, and squawk 2514.

5 control replies
That is correct SF196.

Listen and Speak (from page 11)

The dots indicate the controller's part.

1 CTL ........................................................................................................................................
PIL Ready to copy SF196.

   CTL ........................................................................................................................................
PIL SF196 cleared to Winton, flight planned route, November 2 departure, FL250 turn left after departure, request level change en route, 120.26 when airborne, and squawk 2514.

2 CTL ........................................................................................................................................
PIL Ready to copy, Sunair 926.

   CTL ........................................................................................................................................
PIL Sunair 926 cleared to Paris Charles de Gaulle via Upper Red 10, Depart 31, FL290, 120.15 when airborne.

3 CTL ........................................................................................................................................
PIL Ready to copy, Sunair 831

   CTL ........................................................................................................................................
PIL Sunair 831 cleared to Winton, flight planned; route, Romeo 1 departure, turn left after departure, FL210 initially, request level change en route, 120.26 when airborne.

4 CTL ........................................................................................................................................
PIL Ready to copy, Sunair 435.

   CTL ........................................................................................................................................
PIL Sunair 435 cleared to Rexbury, Oscar 3 departure, to climb on runway heading) to FL160, squawk 1537, 121.3 when airborne.
PIL Sunair 921 cleared to Rexbury, Whisky 1 departure, flight planned route, FL180 initially, request level change en route, squawk 1525, 121.3 when airborne.
1.3 START-UP
1.3.1 Start-up (routine)

Key words and phrases

Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

*go ahead  stand number
stand callsign
*approved slot
*standby slot time
Gate at your discretion
destination expect
*say again call you back

(*These words are explained in the section on Standard Words and Phrases, pages xix—xx.)

Typical exchange

PILOT

1 call control
   — name of ground station
   — callsign
   — greeting

2 control replies
   -- 'go ahead'
   -- callsign

3 pilot replies
   — callsign
   — stand number
   — ATIS information code
   — request start-up
   — name of destination

4a control replies
   — aircraft callsign
   — 'start-up approved'

5a pilot replies
   — 'starting up'
   — callsign

3 or

4b control replies
   — aircraft callsign
   — 'stand by for start'

5b -pilot replies
   — 'standing by'
   — callsign

NOTE
   — In control reply 2, the controller may use: aircraft callsign, name of ground station, greeting; or name of ground station, greeting, aircraft callsign.
**Phraseology practice**

**Listen**  Listen to the recorded dialogue.

**Listen and Write**  Listen to the dialogues on the tape. Write down the callsign, stand (or gate), information code and destination in the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Callsign</th>
<th>Stand/Gate</th>
<th>ATIS Information</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check  Check your answers from the texts on page 20.

Listen and Repeat  Listen to the first two dialogues again, and repeat the pilot's words. Write  Complete the texts of the dialogues by writing in the pilot's words below. Listen to the recording again if necessary.

1  a  call control

   2  control replies  Go ahead, SF153.

3  pilot replies

   4  control replies  SF153, start-up approved.

5  pilot replies

   

(b)  call control

   2  control replies  Go ahead FBG.

3  pilot replies

   4  control replies  FBG, stand by for sun.

5  pilot replies
Check  Check your answers, page 21.

Listen and Speak  Now look again at the table you filled in on page 15. Using the recording, ask for start-up for each flight, and reply to the controller. Listen to the example. Then continue in the same way, starting with the example again.

Check  Check your answers, page 20.

Typical exchange

<table>
<thead>
<tr>
<th>PILOT</th>
<th>CONTROLLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 1 pilot calls</td>
<td>2 control replies</td>
</tr>
<tr>
<td>— callsign</td>
<td>— aircraft callsign</td>
</tr>
<tr>
<td>— stand number</td>
<td>— instruction to start up at ______ (time)</td>
</tr>
<tr>
<td>— request start-up</td>
<td></td>
</tr>
<tr>
<td>— for ______ (destination)</td>
<td></td>
</tr>
<tr>
<td>3 pilot replies</td>
<td></td>
</tr>
<tr>
<td>— Roger</td>
<td></td>
</tr>
<tr>
<td>— readback start-up instructions</td>
<td></td>
</tr>
<tr>
<td>— callsign</td>
<td></td>
</tr>
</tbody>
</table>

or

(b) 1 pilot calls | 2 control replies |
| — callsign | — aircraft callsign |
| — stand number | — expect departure at ______ (time) |
| — request start-up | — start up 'at your discretion' |
| — for ______ (destination) | |
| 3 pilot replies | |
| — Roger | |
| — expecting departure at ______ (time) | |
| — callsign | |

or

(c) 1 pilot calls | 2 control replies |
| — callsign | — aircraft callsign |
| — stand number | — slot time ______(time) |
| — request start-up | — start up 'at your discretion' |
| — for ______ (destination) | |
| 3 pilot replies | |
| — Roger | |
| — slot time ______ (time) | |
| — callsign | |
**Phraseology practice**

**Listen**  Ac a busy airport, there is often a queue for departure, and the controller has a sic; for each flight. Listen to the recording.

**Listen and Repeat**  Listen again and repeat the pilot's words.

**Write**  Complete the dialogues by writing in the pilot's words.

(a)  
1. pilot calls  
2. control replies  
   SF153, stand up at 35.  
3. pilot replies  

(b)  
1. pilot calls  
2. control replies  
   FBG, expect departure at 45, start up at your discretion.  
3. pilot replies  

(c)  
1. pilot calls  
2. control replies  
   AG235, slot time 55, start up at your discretion.  
3. pilot replies  

**Check**  Check your answers, page 21
**Listen and Speak**  Look at a longer version of the table you filled in on page 15.

Data for 10 flights.

<table>
<thead>
<tr>
<th>No.</th>
<th>Callsign</th>
<th>Stand/Gate</th>
<th>ATIS</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SF153</td>
<td>B5</td>
<td>J</td>
<td>Athens</td>
</tr>
<tr>
<td>2</td>
<td>FBG</td>
<td>C8</td>
<td>K</td>
<td>New York</td>
</tr>
<tr>
<td>3</td>
<td>AG235</td>
<td>gate 21</td>
<td>M</td>
<td>Frankfurt</td>
</tr>
<tr>
<td>4</td>
<td>THI</td>
<td>A9</td>
<td>C</td>
<td>Rome, Fiumicccino</td>
</tr>
<tr>
<td>5</td>
<td>NUM</td>
<td>gate D7</td>
<td>I</td>
<td>Cairo</td>
</tr>
<tr>
<td>6</td>
<td>WJD</td>
<td>13</td>
<td>L</td>
<td>London, Heathrow</td>
</tr>
<tr>
<td>7</td>
<td>ESQ</td>
<td>5</td>
<td>P</td>
<td>Palma</td>
</tr>
<tr>
<td>8</td>
<td>KVX</td>
<td>A4</td>
<td>R</td>
<td>Copenhagen</td>
</tr>
<tr>
<td>9</td>
<td>YFL</td>
<td>19</td>
<td>D</td>
<td>Algiers</td>
</tr>
<tr>
<td>10</td>
<td>OPR</td>
<td>B6</td>
<td>F</td>
<td>Madrid</td>
</tr>
</tbody>
</table>

Ask for start-up for each flight, and reply to the controller. Listen to the example. Then continue in the same way. Start with the same example.

**Check**  Check your answers, page 22.

### 1.3.2 Start-up (non-routine)

Listen and Answer  "Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. Why does the pilot ask for an early start-up?

2. How long is the delay and for what reason?

3. Why does the pilot want to delay his departure?

**Check**  Check your answers, page 23.
Listen and Write  Listen again to the same dialogues and complete the texts below:

1  PIL- Rexbury Ground, Sunair _____________, good morning ____________ start-up.
   CTL Sunair 670, ____________ departure 50, ____________ for start.
   PIL ____________ start-up quickly please. We've got ____________ in the
   CTL Stand by one.
   CTL Sunair 670, start-up
   PIL Starting up.

2  PIL Rexbury Ground, Sunair 539, good morning, ____________ to start.
   CTL Good morning Sunair 539, there's a ___________ this morning due to a
   ________, your_________________ is 09.45.
   PIL 09.45, roger, Sunair 539.

3  PIL Rexbury Ground, Sunair 692, good morning__________ __ start-up.
   CTL Good morning Sunair 692, ____________ . start-up ____________ .
   PIL (readback) _________________________________________
   PIL (at 25) Sunair 692, we wish to delay our start-up due to___________ We have
   one passenger . ____________ .
   CTL Roger, Sunair 692.

Check  Check your answers, page 23.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about.
Try to guess the meaning, in English or in your own language, and write it down. Then
check with a dictionary-. Make your own vocabulary notebook, like this:

<table>
<thead>
<tr>
<th>Words or expressions</th>
<th>Your idea about the meaning</th>
<th>Dictionary meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 1.3.1 Write (from page 15); also Listen and Speak (page 16)

1 PIL Winton Ground, Sierra Foxtrot 153, good morning.
   CTL
   PIL Sierra Foxtrot 153, stand Bravo 5, information Juliet, request start-up for Athens.
   CTL
   PIL Starting up, Sierra Foxtrot 153.

2 PIL Winton Ground, Foxtrot Bravo Golf, good morning.
   CTL
   PIL Foxtrot Bravo Golf, stand Charlie 8, information Kilo, request start-up for New York.
   CTL
   PIL Standing by, Foxtrot Bravo Golf.

3 PIL Winton Ground, Alpha Golf 235, good morning.
   CTL
   PIL Alpha Golf, gate 21, information Mike, request start-up for Frankfurt.
   CTL
   PIL Gate 21, Alpha Golf.
   CTL
   PIL Starting up, Alpha Golf 235.

4 PIL Winton Ground, Tango Hotel India, good morning.
   CTL
   PIL Tango Hotel India.
   CTL
   PIL Tango Hotel India, stand Alpha 9, information Charlie, request start-up for Rome Fiumicino.
   CTL
   PIL Standing by, Tango Hotel India.

5 PIL Winton Ground, November Uniform Mike, good morning.
   CTL
   PIL November Uniform Mike, gate Delta 7, information India, request start-up for Cairo.
   CTL
   PIL Gate Delta 7, November Uniform Mike.
   CTL
   PIL Standing by, November Uniform Mike.
   CTL
   PIL Starting up, November Uniform Mike.

6 PIL Winton Ground, Whisky Juliet Delta, good morning.
   CTL
   PIL Whisky Juliet Delta.
PIL Whisky Juliet Delta, stand 13, information Lima, request start-up for London, Heathrow.

CTL............................................................................................................................

PIL Starting up, Whisky Juliet Delta.

1.3.1 Write (from page 15)

(a) 1 call control  
Winton Ground, SF153, good morning.  

2 control replies  
Go ahead. SF153.

3 pilot replies  
SF153, stand B5, information J, request start-up for Athens.

4 control replies  
SF153, sian-up approved.

5 pilot replies  
Starting up, SF153.

(b) 1 call control  
Winton Ground, FBG, good morning.

2 control replies  
Go ahead, FBG.

3 pilot replies  
FBG, stand C8. information K, request start-up for New York.

4 control replies  
FBG, stand by for start.

5 pilot replies  
Standing by FBG.

1.3.1 Write (from page 17)

(a) 1 pilot calls  
SF153, stand B5, request start-up for Athens.

2 control replies  
SF153, start-up at 35.

3 pilot replies  
Roger, start-up at 35, SF153.

(b) 1 pilot calls  
FBG, stand C8, request start-up for New York.

2 control replies  
FBG, expect departure at 45, start-up at your discretion.

3 pilot replies  
Roger, expecting departure at 45, FBG
1.3.1 Listen and Speak (from page 18)

1  PIL  Sierra Foxtrot 153, stand Bravo 5, information Juliet, request sun-up for Athens.
    CTL  .................................................................
    PIL  Roger, start-up at 35, Sierra Foxtrot 153.

2  PIL  Foxtrot Bravo Golf, stand Charlie 8, information Kilo, request start-up for New York.
    CTL  .................................................................
    PIL  Roger, departure at 45.

3  PIL  Alpha Golf 235, gate 21, information Mike, request start-up for Frankfurt.
    CTL  .................................................................
    PIL  Roger, slot time 55, Alpha Golf 235.

4  PIL  Tango Hotel India, stand Alpha 9, information Charlie, request start-up for Rome Fiumicino,
    CTL  .................................................................
    PIL  Roger, departure at 05, Tango Hotel India.

5  PIL  November Uniform Mike, Gate Delta 7, information India, request start-up for Cairo.
    CTL  .................................................................
    PIL  Gate Delta 7, November Uniform Mike.

6  PIL  WJD, stand 13, information L, request start-up for London, Heathrow.
    CTL  .................................................................
    PIL  Whisky Juliet Delta.
    CTL  .................................................................
    PIL  Roger, slot time 10, WJD.

7  PIL  ESQ, stand 5, information P, request start-up for Palma.
    CTL  .................................................................
    PIL  Roger, start-up at 50, ESQ.

8  PIL  KVX, stand A4, information R, request start-up for Copenhagen.
    CTL  .................................................................
    PIL  Starting up, KVX.

9  PIL  YFL, stand 19, information D, request start-up for Algiers.
    CTL  .................................................................
    PIL  Roger, slot time 15, YFL.
10 PIL OPR, stand B6, information F, request stan-up for Madrid.
PIL Stand B6, OPR.

1.3.2 \textbf{Listen and Answer} (from page 18)

1. Why does the pilot ask for an early start-up?
   There is livestock on board.

2. How long is the delay and for what reason?
   A 55 minute delay due to a computer failure.

3. Why does the pilot want to delay his departure?
   Because of a baggage identification process due to a missing passenger.

1.3.2 \textbf{Listen and Write} (from page 19)

1 PIL Rexbury Ground, Sunair 670, good morning, request start-up.
PIL Could we start-up quickly please. We've got livestock in the hold.

2 PIL Rexbury Ground, Sunair 539, good morning, ready to start.
CTL Good morning Sunair 539, there's a 55 minute delay this morning due to a computer failure, your slot time is 09.45.
PIL 09.45, roger, Sunair 539.

3 PIL Rexbury Ground, Sunair 692, good morning, request start-up.
PIL Slot time 35, start-up 10 minutes before, Sunair 692.
PIL (at 25) Sunair 692, we wish to delay our start-up due to passenger baggage identification process. We have one passenger missing.
CTL Roger, Sunair 692.
1.4 PUSH-BACK

1.4.1 push-back (routine)

Key words and phrases
Check that you understand the following words and phrases;

hold position    before
pass behind      after

Typical exchange

PILOT

(a) 1 — callsign
— 'request push-back'
— 'from ___(stand number)'

3 — 'pushing back'
callsign

(b) 1 — callsign
— 'request push-back'
— 'from___ (stand number)'

3 — 'holding position'
callsign

CONTROLLER

2 — aircraft callsign
— 'push-back approved'

2 — aircraft callsign
— 'expect ____ minutes
delay'
— 'due...(reason)'

Phraseology practice

Listen   Listen to the recorded dialogues.
Listen and Repeat   Listen to the dialogues again and repeat the pilot's words.
Write Complete the texts of these dialogues by writing in the pilot's words.

(a) 1 call control

2 control replies
SF153, roger, push-back approved.

3 pilot replies
1. call control

2. control replies
   FBG, expect 2 minutes delay, due 747 taxiing behind.

3. pilot replies

Check   Check your answers, page 27.

Listen and Speak   Ask for push-back for flights 1-6 below. Listen to the example, then continue in the same way, starting with the example again.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Parkins stand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SF153</td>
<td>B5</td>
</tr>
<tr>
<td>2 FBG</td>
<td>C8</td>
</tr>
<tr>
<td>3 AG235</td>
<td>gate 21</td>
</tr>
<tr>
<td>4 THI</td>
<td>A9</td>
</tr>
<tr>
<td>5 NUM</td>
<td>gate D7</td>
</tr>
<tr>
<td>6 WJD</td>
<td>13</td>
</tr>
</tbody>
</table>

Check   Practise this exercise several times. When it seems easy, and you think it is all correct, check your answers, page 27.

1.4.2 Push-back (non-routine)

Listen and Answer   Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue

1. Where is the 747 going?

2. What is causing problems?

3. Why will there be a delay?

Check   Check your answers, page 28.

Listen and Write   Listen again and complete the texts below.

1 PIL Sunair 559, request push-back. I

   CTL Sunair 559, there's a 747 to _________ and ____________, after him,
2 PIL  Sunair 310, we're __________ with the __________ We're waiting for_____

    CTL Roger Sunair 310, call me back when __________

3 PIL  Sunair 892, we're going to be __________ . The __________ seems to have__________ .

    CTL Roger Sunair 892, call me back for taxi when you've got it __________

Check  Check your answers, page 28.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning, in English or in your own language and write it down. Then check with a dictionary.
1.4.1 Write (from page 24)

(a) 1 call control
    SF153, request push-back, stand B5.

                      2 control replies
    SF153, roger, push-back approved.

                      3 pilot replies
    Pushing back, SF153.

(b) 1 call control
    FBG, request push-back, stand C8.

                      2 control replies
    FBG, expect 2 minutes delay, due 747 taxiing behind.

                      3 pilot replies
    Holding position, FBG.

1.4.1 Listen and Speak (from page 25)

1 PIL SF153, request push-back from stand B5.
   CTL ......................................................................................................................... ................
   PIL Pushing back, SF153.

2 PIL FBG, request push-back from stand C8.
   CTL ........................................................................................................................ ................
   PIL Holding position, FBG.
   CTL ........................................................................................................................ ................
   PIL Pushing back, FBG.

3 PIL AG235, request push-back from gate 21.
   CTL ........................................................................................................................ ................
   PIL Holding position, AG235.

4 PIL THI, request push-back from stand A9.
   CTL ........................................................................................................................ ................
   PIL Pushing back, THI.

5 PIL NUM. request push-back from gate D7.
   CTL ........................................................................................................................ ................
   PIL Holding position, NUM.
   CTL ........................................................................................................................ ................
   PIL Holding position, NUM.

6 PIL WJD, request push-back from stand 13.
   CTL ........................................................................................................................ ................
   PIL Holding position, WJD.
   CTL ........................................................................................................................ ................
   PIL Stand 13, WJD.
   CTL ........................................................................................................................ ................
   PIL Holding position, WJD.
1.4.2 Listen and Answer  (from page 25)

1. Where is the 747 going?
   It is passing behind to park.
2. What is causing problems.
   The tow-bar.
3. Why will there be a delay?
   The tug has broken down.

1.4.2 Listen and Write  (from page 25)

1 PIL Sunair 559, request push-back.
   CTL Sunair 559, there's a 747 to pass behind and park behind, after him,
   push-back approved. PIL After the 747, pushing back.

2 PIL Sunair 310, we're having problems with the tow-bar. We're waiting for
   another one. CTL Roger Sunair 310, call me
   back when ready.

3 PIL Sunair 892, we're going to be delayed for a while. The tug seems to have
   broken down. CTL Roger Sunair 892, call me back for taxi when you've
   got it sorted out.
1.5 TAXIING

1.5.1 Taxi (routine)

*Key words and phrases*

Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

- first
- second
- third
- turning
- on your right/left
- give way
- overtake
- follow
- straight ahead
- intersection
- in front of you
- turn off

*Phraseology practice*

*Look, Listen and Write*

Listen to the taxi instructions, look at the diagrams and identify which aircraft the instructions apply to. Write the correct aircraft in the table.

*Example:* 1. Take the second turning on the left.

This instruction applies to aircraft November, so write N beside Instruction 1 in the table.

<table>
<thead>
<tr>
<th>Instruction number</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<tr>
<td>4</td>
<td></td>
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<td>5</td>
<td></td>
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<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>
**Check**  Check your answers, page 37.

**Look and Speak**  This time, take the controller's pan and give the taxi instructions.

Look at the diagrams on pages 30—31 and give taxi instructions to the aircraft named on the tape, like this:

*Example:*  A (Alpha)

Go straight ahead at the intersection.

Stan with the example again, you will hear the correct instructions on the tape after you have spoken.

**Check**  Check your answers, page 37.

### 1.5.2 Taxi (routine exchanges)

#### Typical exchanges

<table>
<thead>
<tr>
<th>PILOT</th>
<th>CONTROLLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 1</td>
<td>pilot calls</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>— request for taxi</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3 pilot replies</td>
<td>— read back</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5 pilot replies</td>
<td>— traffic in sight</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
</tbody>
</table>

**Check**  Check your answers, page 37.
NOTES

--In practice, the language used for taxi instructions is affected by each particular airport layout.
--In pilot reply (b) 8, DGAC regulations use 'crossing' instead of 'cross'.
--Position of callsign in pilot replies. This conforms to the ICAO and CAA publications (DGAC does not use callsigns in its regulations). In general, it seems the callsign comes at the end when the pilot expects a break to come in the dialogue with control.
--There is a time lapse and/or dialogue with other traffic between:

pilot reply 3 and control call in (a) 4
pilot reply 3 and pilot call in (b) 4
pilot reply 6 and control call in (b) 7
pilot reply 8 and pilot call in (b) 9
Phraseology practice

Listen  Listen to the recorded dialogues.
Listen and Repeat  Listen and repeat the pilot's words.
Write  Complete the texts by filling in the pilot's words. Check with the tape if necessary.

(a) 1 pilot calls

2 control replies
SF133, taxi via runway C, to holding point 29L.

3 pilot replies

4 control calls
SF133, give way to the 747 passing left to right.

5 pilot replies

(b) 1 pilot calls

2 control replies
SF133, taxi via taxiway C to holding point 29L.

3 pilot replies

4 pilot calls

5 control replies
SF133, negative, hold short runway 29L.

6 pilot replies

7 control calls
SF133, cross runway 29L, report vacated.

8 pilot replies

9 pilot calls
Check Check your answers, page 38.

**Listen and Speak** Ask for taxi instructions and reply to the controller. Listen to the example and continue in the same way, starting with the example again. Your callsign is SF133.

Check Practise this exercise several times. When it seems easy, and you think it is all correct, check your answers, page 39.

### 1.5.3 Taxi (non-routine)

**Listen and Answer** Listen to the dialogues and answer these questions. There is one question for each dialogue.

1. Which runway must the pilot backtrack, and which runway must he cross?

2. What crossed in front of the plane and where was it going?

3. Why must the plane pull in?

4. Why does the aircraft have to wait for the 'follow me'?

Check Check your answers, page 40.

**Listen and Write** Listen again and complete the texts below:

1. P1L Sunair 978, request taxi.

   CTL Sunair 978, __________________________ , __________ call me back __________

   PIL (readback) __________ __________ __________ __________ __________

   PIL Sunair 978, reaching __________ runway 32.

   CTL Sunair 978 __________ runway 32.

   PIL __________ runway 32.

2. P1L Sunair 978, a___________dog___________ the taxiway ___ | ________.

   CTL Sunair 978, __________ was it going?

   PIL __________________________

   CTL Thank you Sunair 978, we'll try to get someone __________. 35
3 CTL Sunair 385,____________ , there's a Concorde____________ ,

   PIL _____________ Sunair 385.

4 CTL Sunair 497,____________ You _____________ . Wait there____________ .

   PIL   Sunair 497, wilco. Check

Check your answers, page 40.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning in English or in your own language, and write it down. Then check with a dictionary.
CHECK

1 5.1  **Listen and Write**  (from page 29)

<table>
<thead>
<tr>
<th>Instruction number</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>A or J</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>I</td>
</tr>
<tr>
<td>5</td>
<td>K</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>O</td>
</tr>
<tr>
<td>8</td>
<td>P</td>
</tr>
<tr>
<td>9</td>
<td>D</td>
</tr>
</tbody>
</table>

1.5.1  **Look and Speak**  (from page 32)

- **A** (Alpha) Go straight ahead at the intersection.
- **C** (Charlie) Give way to the aircraft on your left.
- **D** (Delta) Follow the aircraft in front of you.
- **G** (Golf) There's an aircraft overtaking you on your right.
- **H** (Hotel) Taxi straight ahead.
- **I** (India) Take the first turning on the right.
- **K** (Kilo) Give way to the aircraft on your right.
- **L** (Lima) Take the third turning on the right.
- **M** (Mike) Take the second turning on the right.
- **N** (November) Take the second turning on the left.
- **O** (Oscar) Take the first left turn-off.
- **P** (Papa) Take the third turning on the left.
1.5.2 Write (from page 35)

(a) 1 pilot calls
    SF133, request taxi.

2 control replies
    SF133, taxi via taxiway C to holding point 29L.

3 pilot replies
    Taxiway C to holding point 29L, SF133.

4 control calls
    SF133, give way to the 747 passing left to right.

5 pilot replies
    Traffic in sight, SF133.

(b) 1 pilot calls
    SF133, request taxi.

2 control replies
    SF133, taxi via taxiway C, to holding point 29L.

3 pilot replies
    Taxiway C to holding point 29L, SF133.

4 pilot calls
    SF133, approaching holding point 29L, request cross runway 29L.

5 control replies
    SF133, negative, hold short runway 29L.

6 pilot replies
    Holding short, SF133.

7 control calls
    SF133, cross runway 29L, report vacated.

8 pilot replies
    SF133, cross runway 29L.

9 pilot calls
    SF133, runway vacated.
1.5.2 Listen and Speak (from page 35)

1 PIL SF133, request taxi.
   CTL ------ .................................................................
   PIL Taxiway C to holding point 29L, SF133.
   CTL .................................................................
   PIL Traffic in sight, SF133.

2 PIL SF133, request taxi. ..................................................
   CTL .................................................................
   PIL Taxiway C to holding point 29L.
   PIL SF133, approaching holding point 29L, request cross runway 29L.
   CTL .................................................................
   PIL Holding short, SF133.
   CTL .................................................................
   PIL SF133, cross runway 29L.
   PIL SF133, runway vacated.

3 PIL SF133, request taxi.
   CTL .................................................................
   PIL Taxi to holding point runway 09, traffic in sight, SF133.
   CTL .................................................................
   PIL Following the 767, SF133. .,

4 PIL SF133, request taxi.
   CTL .................................................................
   PIL Taxiway E to holding point runway 18, SF133.
   CTL .................................................................
   PIL Hold at next intersection, traffic in sight, SF133.
   PIL SF133 approaching holding point runway 18, request cross runway 18.
   CTL .................................................................
   PIL SF133, cross runway 18.
   PIL SF133, runway vacated.

5 PIL SF133, request taxi.
   CTL .................................................................
   PIL Taxiway I to holding point runway 31, traffic in sight, SF133.
   CTL .................................................................
   PIL Expediting, SF133.
   PIL SF133, approaching holding point runway 31, request cross runway 31.
   CTL .................................................................
   PIL Holding short, SF133.
   CTL .................................................................
   PIL SF133, cross runway 31.
   PIL SF133, runway vacated.

6 PIL SF133, request taxi.
   CTL .................................................................
   PIL Taxiway D to holding point runway 14, SF133.
   CTL .................................................................
   PIL Hold at next intersection, traffic in sight, SF133.
1.5.3 **Listen and Answer**  (from page 35)

1. Which runway must the pilot backtrack, and which runway must he cross?
   He must backtrack runway 11, and cross runway 32.
2. What crossed in front of the plane and where was it going?
   A large dog crossed in front going from right to left.
3. Why must the plane pull in?
   The plane must pull in to allow a Concorde to overtake on the left.
4. Why does the aircraft have to wait for the 'follow me'?
   He missed the correct taxiway.

1.5.3 **Write**  (from page 35)

1 PIL Sunair 978, request taxi.
   CTL Sunair 978, taxiway D4, cross runway 32, backtrack to threshold runway 11, call me back reaching 32.
   PIL Taxiway D4, backtrack 11, call you back reaching 32, Sunair 978.
   PIL Sunair 978, reaching intersection with runway 32.
   CTL Sunair 978, cross runway 32.
   PIL Crossing runway 32.

2 PIL Sunair 978, a large dog has just crossed the taxiway ahead of us.
   CTL Sunair 978, which direction was it going?
   PIL It crossed from right to left.
   CTL Thank you Sunair 978, we'll try to get someone to catch it.

3 CTL Sunair 385, pull in to the right, there's a Concorde overtaking you, on your left.
   PIL Pulling in, Sunair 3S5.

4 CTL Sunair 497, you've gone too far. You missed taxiway D4. Wait there for the 'follow me' car.
   PIL Sunair 497. wilco.
1.6 LINE-UP

1.6.1 Line-up (routine)

**Key words and phrases**

Check that you understand the following words and phrases. Look up any new words in an aviation dictionary.

- holding point
- wait
- on final
- in sight
- landing
- behind
- hold short
- number 2 for departure
- negative departure

**Typical Exchanges**

**PILOT**

(a) 1 pilot calls
    — callsign
    — position (holding point__)

2 control replies
    — callsign
    — instruction 'line up and wait'

3 pilot replies
    — 'lining up'
    — callsign

(b) 1 pilot calls
    — callsign
    — position

    2 control replies
    callsign — 'report the_____ sight' (aircraft type) on final

3 pilot replies
    — callsign
    — ' ___ (aircraft type) in sight'

4 control replies
    — callsign
    — 'behind the landing___ on final line up behind

5 pilot replies
    — behind the landing__ line up
    — callsign
NOTES
— In control reply (b) 4 and pilot reply (b) 5, the CAA phraseology is:

4. (control replies)
   — callsign
   — 'after that ____ (aircraft type) line up'

5. (pilot replies)
   — 'after the ____ (aircraft type) line up'
   — callsign

Phraseology practice
Listen  Listen to dialogue (a).
Listen and Repeat  Repeat the pilot's words.
Listen  Listen to dialogue (b).
Listen and Repeat  Repeat the pilot's words.
Listen  Listen to dialogue (c).
Listen and Repeat  Repeat the pilot's words.
Write  Write in the missing words. Listen to the tape again if necessary
Listen and Speak  Using the information below, call the Tower from the correct holding point and reply to the instructions, as in the recorded example.

<table>
<thead>
<tr>
<th>No.</th>
<th>Callsign</th>
<th>Holding point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SF153</td>
<td>28R</td>
</tr>
<tr>
<td>2</td>
<td>FBG</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>AG235</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>ESQ</td>
<td>13L</td>
</tr>
<tr>
<td>5</td>
<td>KVX</td>
<td>05</td>
</tr>
<tr>
<td>6</td>
<td>YFL</td>
<td>33</td>
</tr>
<tr>
<td>7</td>
<td>OPR</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>ZE692</td>
<td>09</td>
</tr>
</tbody>
</table>

Check  Practise this exercise several times. When it seems easy, and you think it is all correct, check your answers, page 46.

Check  Check your answers, page 45.
1.6-2 Line-up (non-routine)

Listen and Answer  Listen to the dialogues and answer the questions below. There is one question for each dialogue.

1. Why can't the aircraft line up? __________________________________________

2. Why can't the aircraft line up? __________________________________________

3. Why does the pilot ask to return to the stand? __________________________________________

Check  Check your answers, page 46.

Listen and Write  Listen again and complete the texts below;

1 PIL Sunair 329, _______________ 32.
CTL Sunair 329, line up and _______________.
PIL Sunair 329, we have a ____________, the ____________ seems to be

CTL Do you require a ____________?
PIL Affirm. Request ____________ to tow us back to the apron.

2 PIL Sunair 473, holding point 18 Left.
CTL Suggest you hold there ____________ the ____________ is rapidly
approaching ____________ of the runway.
PIL Wildo, Sunair 473.

3 PIL Sunair 968, ____________ holding point 29, request return to ____________
the ____________ arc ____________.
CTL Roger, Sunair 968, turn in the ____________, "take the first ____________ onto
__________ J.
PIL ____________ turn onto ____________ J.

Check  Check your answers, page 47.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning, in English or in your own language, and write it down. Then check with a dictionary.
CHECK

1.6.1 Write (from Page 43)

(a) 1 pilot calls
    SF153, holding point 28R.
    2 control replies
        SF153, line up and wait.
    3 pilot replies
        Lining up, SF153.

(b) 1 pilot calls
    FBG, holding point 19.
    2 control replies
        FBG, report the Airbus on final in sight.
    3 pilot replies
        FBG, Airbus in sight.
    4 control replies
        FBG, behind the landing Airbus on final, line up behind.
    5 pilot replies
        Behind the landing Airbus, line up, FBG.

(c) 1 pilot calls
    AG235, holding point 25.
    2 control replies
        AG235, hold short of the runway, you're number 2 for departure after the Airbus.
    3 pilot replies
        Holding short, number 2 for departure, AG235.
    4 control calls
        AG235, line up and wait.
    5 pilot replies
        Lining up, AG235,
1.6.1 **Listen and Speak**  (from page 43)

1. PIL  Sierra Foxtrot 153, holding point 28R.
   
   CTL .......................................................... .......................................................... .......................................................... ..........................................................
   
   PIL  Lining up, Sierra Foxtrot 153.

2. PIL  Foxtrot Bravo Golf, holding point 19.
   
   CTL .......................................................... .......................................................... ..........................................................
   
   PIL  Foxtrot Bravo Golf, Airbus in sight.
   
   CTL .......................................................... .......................................................... ..........................................................
   
   PIL  Behind the landing Airbus line up, Foxtrot Bravo Golf.

3. PIL  Alpha Golf 235, holding point 25.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Holding short, number 2 for departure, Alpha Golf 235.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Lining up, Alpha Golf 235.

4. PIL  Echo Sierra Quebec, holding point 13 Left.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Echo Sierra Quebec, 767 in sight.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Behind the landing 767 line up, Echo Sierra Quebec.

5. PIL  Kilo Victor X-ray, holding point 05.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Holding short, number 2 for departure, Kilo Victor X-ray.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Lining up, Kilo Victor X-ray.

6. PIL  Yankee Foxtrot Lima, holding point 33.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Lining up, Yankee Foxtrot Lima.

7. PIL  Oscar Papa Romeo, holding point 18.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Holding position, number 2 for departure, Oscar Papa Romeo.
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Lining up, Oscar Papa Romeo.

8. PIL  Zulu Echo 692, holding point 09.
   
   CTL .......................................................................................................................... ..........................................................
   
   CTL .......................................................................................................................... ..........................................................
   
   PIL  Lining up, Zulu Echo 692.

6.2 **Listen and Answer**  (from page 44)

1. Why can't the aircraft line up?
   
The nose wheel steering is jammed.

2. Why can't the aircraft line up?
   
   There is a thunderstorm approaching the far end of the runway.

3. Why does the pilot ask to return to the stand?
   
   The brakes are overheating.
1.6.2 **listen and Write**  (from page 44)

1 PIL Sunair 329, holding point 32.
   CTL Sunair 329, line up-and wait.

   *(pause)*

   PIL Sunair 329, we have a problem, the nose wheel steering seems to be jammed.
   CTL Do you require a tug?
   PIL Affirm. Request tug to tow us back to the apron.

2 PIL Sunair 473, holding point 18 Left.
   CTL Suggest you hold there for a few minutes, the thunderstorm is rapidly approaching
   the far end of the runway.
   PIL Wilco, Sunair 473.

3 PIL Sunair 968, reaching holding point 29, request return to stand, the brakes are
   overheating.
   CTL Roger, Sunair 968, turn in the holding bay, take the first convenient left
   turn, onto taxiway Juliet.
   PIL Left turn onto taxiway Juliet.
1.7 REVIEW OF PART ONE

1.7.1 Routine phraseology review

Start-up and push-back

Write The dialogue for start-up and push-back has been mixed up. Put it into the correct sequence:

1. — Sunair 369, request push-back from C6.
2. — Starting up, Sunair 369.
3. — Sunair 369, stand C6, information Fox, request start-up for Winton.
4. — Sunair 369, push-back approved.
5. — Sunair 369, start-up approved.
6. — Sunair 369, hold position, I’ll call you back.
7. — Go ahead Sunair 369.
8. — Rexbury Ground, Sunair 369, good morning.

Check Check your answers, page 00.

Taxi and line-up

Write Put the dialogue for taxi and line-up into the correct sequence.

1. — Holding point 12, Sunair 369.
2. — Sunair 369, line up and wait.
3. — Winton Ground, Sunair 369 ready to taxi.
4. — Lining up, Sunair 369.
5. — Reaching holding point 12, Sunair 369.
6. — Sunair 369, taxi to holding point 12.

Check Check your answers, page 53.

1.7.2 Flight from Rexbury to Winton (from departure ATIS to line-up)

Scenario

Winton is 1200 nautical miles East of Rexbury. The alternate for Winton is Overby, 75 BauJcaJ miles North West of Winter.. !c 4-bridget Airport is 50 miles South East; of Rexbury.
Rexbury Airport
Runway: 29
Taxiways: Yankee, Delia
SID's: November 2, Romeo 1, Golf 5
Tower frequency: 118.3
Approach frequency: 120.26
Rexbury Area Control: 128.9

Winton Airport
Runways: 07, 12
Taxiways: Inner/Outer
Tower frequency: 118.1
Winton Radar frequency: 121.1
Approach frequency: 121.3
Ground frequency: 121.7
VOR-RED (Redhill)

En route
New County Upper Control: 135.9
Valley Control: 128.5
Meadow Control: 126.3

Reporting points
RIV (River)
BCK (Blackrock)
LAK (Lake)
RED (Redhill)

Listen and Read
You are flying from Rexbury to Winton. Your callsign is Sunair 367 your stand is 19. The time is 13.40. The recording begins with ATIS information, and then asks you to make initial contact with Rexbury Ground.

Listen and Speak
Follow the instructions on the tape, and reply to the controller.
Check
Check your answers, page 53.

1.7.3 Flight from Dublin to Paris (initial contact to line-up)

Listen and Read
Flight plan details:
   callsign: SF309 reporting points:
   Liffy
   Wallasey
   Telba
   Midhurst
Study the maps provided on pages 50—52 before you start.
Runways at Dublin: 11, 17 and 23.

Note that the callsign letters Sierra Foxtrot are often abbreviated to Sierra Fox.

Listen and Speak
Take the pilot's pan, follow the instructions on the tape and reply to the controller. The exercise contains route clearance, so you must be ready to copy (have pencil and paper ready). The exercise starts with initial contact with Dublin Ground Control. Check
Check your answers, page 54.
CHECK

**Start-up and push-back 1**  
*(from page 48)*

PIL  Rexbury Ground, Sunair 369, good morning. (8)  
CTL  Go ahead Sunair 369. (7)  
PIL  Sunair 369, Stand C6, information F, request start-up for Winton. (3)  
CTL  Sunair 369, start-up approved. (5)  
PIL  Starting up, Sunair 369. (2)

PIL  Sunair 369, request push-back- from C6. (1)  
CTL  Sunair 369, push-back approved. (4)  
CTL  Sunair 369, hold position, I’ll call you back. (6)

**Taxi and line-up**  
1.7.1  *Write*  
*(from page 48)*

PIL  Winton Ground, Sunair 369 ready to taxi. (3)  
CTL  Sunair 369, taxi to holding point 12. (6)  
PIL  Holding point 12, Sunair 369. (1)

PIL  Reaching holding point 12, Sunair 369. (5)  
CTL  Sunair 369, line up and wait. (2)  
PIL  Lining up, Sunair 369. (4)

1.7.2  *Listen and Speak*  
*(from page 49)*

ATIS  This is Rexbury departure information Foxtrot at 13.30 Zulu time. Take-off and landing  
runway 29, wind 260° 12 knots, CAVOK, temperature 14, dew point 11, QNH 1023,  
no sig. This was information Foxtrot.

PIL  Rexbury Ground, Sunair 367, good afternoon.  
CTL  ........................................................................................................................... .................................  
PIL  Sunair 367, stand 19, information Fox received, request start-up.  
CTL  ........................................................................................................................... .................................  
PIL  Stand 19, Sunair 367.  
CTL  ........................................................................................................................... .................................  
PIL  Starting up, Sunair 367.  
CTL  ........................................................................................................................... .................................  
PIL  Ready to copy, Sunair 367.  
CTL  ........................................................................................................................... .................................  
PIL  Sunair 367 is cleared to Winton via flight planned route. Golf 5 departure, climb  
to FL110 initially, level change en route.  
CTL  ........................................................................................................................... .................................  
PIL  Sunair 367, request push-back  
CTL  ........................................................................................................................... .................................  
PIL  Holding point 29, taxiway D, Sunair 367.  
CTL  ........................................................................................................................... .................................  
PIL  Tower on 118.3, goodbye.  
PIL  Rexbury Tower, Sunair 367, good afternoon, reaching holding point 29.  
CTL  ........................................................................................................................... .................................
PIL  Sunair 367, 727 in sight.
CTL  ...........................................................................................................................
PIL  Behind the landing 727 line up, Sunair 367.

1.7.3 **Listen and Speak**  (from page 49)

PIL  Dublin Ground, SF309.
CTL  ...........................................................................................................................
PIL  We’ll be ready to start-up in 20 minutes, SF309.
CTL  ...........................................................................................................................
PIL  SF309, What is the departure runway?
CTL  ...........................................................................................................................
PIL  Runway 17, 110° 20 knots.
CTL  ...........................................................................................................................
PIL  Ready to copy, SF309.
CTL  ...........................................................................................................................
PIL  SF309, cleared to Paris Orly, via Liffy Blue 1, flight planned route, FL230 to request level change.
CTL  ...........................................................................................................................
PIL  Backtrack runway 11, Dublin Tower 118.6, SF309, goodbye.

PIL  Dublin Tower, SF309, good morning.
CTL  ...........................................................................................................................
PIL  Backtrack 11, expediting, approved to line up and wait runway 17.
CTL  ...........................................................................................................................
### 1.8.1 Phases of flight

**Write** Put the different phases of flight in the correct sequence, filling in the table below.

<table>
<thead>
<tr>
<th>phase of flight</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>climb</td>
<td>push-back</td>
</tr>
<tr>
<td>take-off</td>
<td>final approach</td>
</tr>
<tr>
<td>descent</td>
<td>taxi</td>
</tr>
<tr>
<td>start-up</td>
<td>take-off roll</td>
</tr>
<tr>
<td>approach</td>
<td>touch-down</td>
</tr>
<tr>
<td>cruise</td>
<td>line-up</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>no.</th>
<th>phase of flight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Check** Check your answers, page 58.
1.8.2 Airport Words

**Look and Write**  Look at the pictures and write down the number that corresponds to these words.

<table>
<thead>
<tr>
<th>No.</th>
<th>terminal building</th>
<th>holding bay/area</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td></td>
<td>___</td>
</tr>
<tr>
<td>___</td>
<td>intersection</td>
<td>high-speed turn-off</td>
</tr>
<tr>
<td>___</td>
<td>satellite</td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>tower</td>
<td>runway</td>
</tr>
<tr>
<td>___</td>
<td>jetway</td>
<td>holding point</td>
</tr>
<tr>
<td>___</td>
<td>taxiway</td>
<td>passenger steps</td>
</tr>
<tr>
<td>___</td>
<td></td>
<td>threshold</td>
</tr>
</tbody>
</table>

**Check**  Check your answers, page 58
### 1.8.3 Airport vehicles

**Read and Write** Look at the list of phrases in the table which describe different vehicles found at an airport. Match them with the list of vehicles under the table, and write in the names of each vehicle.

<table>
<thead>
<tr>
<th>It helps you not to get lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used at push-back</td>
</tr>
<tr>
<td>Used for electrical power at the parking stand</td>
</tr>
<tr>
<td>For extinguishing fires</td>
</tr>
<tr>
<td>To clear the tarmac on winter days</td>
</tr>
<tr>
<td>It carries fuel</td>
</tr>
<tr>
<td>It carries food</td>
</tr>
<tr>
<td>It takes passengers to the plane</td>
</tr>
<tr>
<td>Like a huge bus which rises to the level of the door</td>
</tr>
</tbody>
</table>

| Shuttle bus  |  
| Fuel tanker  |  
| GPU (ground power unit)  |  
| Follow Me van  |  
| Mobile lounge  |  
| Catering truck  |  
| Snow plough  |  
| Fire truck tug  |  

**Check** Check your answers, page 58.
CHECK

1.8.1 Write (from page 55)

1
2
3
4
5
6
7
8
9
10
11
12

1.8.2 Look and Write (from page 56)

<table>
<thead>
<tr>
<th>No.</th>
<th>term</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>terminal building</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>intersection</td>
<td>4</td>
</tr>
<tr>
<td>II</td>
<td>satellite</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>tower</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>jetway</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>taxiway</td>
<td>9</td>
</tr>
</tbody>
</table>

1.8.3 Read and Write (from page 57)

<table>
<thead>
<tr>
<th>it helps you not to get lost</th>
<th>FOLLOW ME van</th>
</tr>
</thead>
<tbody>
<tr>
<td>used at push-back</td>
<td>tug</td>
</tr>
<tr>
<td>used for electrical power at the parking stand</td>
<td>GPU</td>
</tr>
<tr>
<td>for extinguishing fires</td>
<td>fire truck</td>
</tr>
<tr>
<td>to clear the tarmac on winter days</td>
<td>snow plough</td>
</tr>
<tr>
<td>it carries fuel</td>
<td>fuel tanker</td>
</tr>
<tr>
<td>it carries food</td>
<td>catering truck</td>
</tr>
<tr>
<td>it takes passengers to the plane</td>
<td>shuttle bus</td>
</tr>
<tr>
<td>like a huge bus which rises to the level of the door</td>
<td>mobile lounge</td>
</tr>
</tbody>
</table>
Part Two
Take-off
To top of climb
DISTRESS AND URGENCY MESSAGES

NOTE: Each Incident in real life is different and must be evaluated separately. The exercises in this section are designed to practise language, not procedure.

Read  Study the following definitions:
Distress: a dangerous situation requiring immediate assistance.
Urgency: a dangerous situation not requiring immediate assistance.
For example:
Uncontrollable engine fire is a distress situation. A passenger taken seriously ill is an urgency situation.

Read and Write  Classify these incidents into the 'distress' or 'urgency' category, and write them in the table below.
- total electrical failure
- depressurisation
- fire in the hold
- fire in the toilets
- fuel endurance 10 minutes at initial approach phase
- a bomb scare
- injuries among passengers and cabin crew after severe turbulence
- engine flameout
- bird ingestion at initial climb, one engine shut down
- wheel well fire
- passenger with a heart attack

<table>
<thead>
<tr>
<th>Distress</th>
<th>Urgency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check  Check your answers, page 64.
**Read and Write**  Look at this list of possible incidents during flight. Think of actions you might take to solve each problem.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. total electrical failure</td>
<td></td>
</tr>
<tr>
<td>2. depressurisation</td>
<td></td>
</tr>
<tr>
<td>3. fire in the hold</td>
<td></td>
</tr>
<tr>
<td>4. fire in the toilets</td>
<td></td>
</tr>
<tr>
<td>5. fuel endurance very low</td>
<td></td>
</tr>
<tr>
<td>6. a bomb scare</td>
<td></td>
</tr>
<tr>
<td>7. severe icing</td>
<td></td>
</tr>
<tr>
<td>8. injuries among passengers and cabin crew after severe turbulence</td>
<td></td>
</tr>
<tr>
<td>9. engine flameout</td>
<td></td>
</tr>
<tr>
<td>10. bird ingestion after take-off</td>
<td></td>
</tr>
<tr>
<td>11. wheel well fire</td>
<td></td>
</tr>
<tr>
<td>12. passenger with heart attack</td>
<td></td>
</tr>
</tbody>
</table>

Now look at this list of possible actions to solve the problems. Choose an action for each problem and write it in the table above. The same answer may be used several times.

- look for a doctor on board and land as soon as possible
- put on oxygen mask and make an emergency descent
- land immediately
- release fire bottle and land immediately
- ask for priority landing
- change level
- look for VMC conditions and land
- return to the airport
- try to extinguish the fire and land immediately
- land immediately
- try to make an airstart

**Check**  Check your answers, page 6-4.

**Read**  Distress messages should consist of:
1. **MAYDAY, MAYDAY, MAYDAY**
2. aircraft identification
3. description of the emergency
4. intention of the pilot
5. position, level and heading
6. other information
Urgency messages should have the same elements, with 'MAYDAY' replaced by PAN PAN PAN PAN PAN PAN PAN

1. PAN PAN, PAN PAN, PAN PAN
2. aircraft identification
3. description of the emergency
4. intention of the pilot
5. position, level and heading
6. other information

Listen and Read  Listen to the recorded examples of distress and urgency messages.

Read You are flying from Rexbury to Winton on a twin engined jet aircraft. The flight time is about 2 hours; alternate for Winton is Overby, situated 75 miles North-West of Winton. Newbridge airport is 50 miles South-East of Rexbury. Winton is 1200 miles East of Rexbury.

Listen and Speak  Look at the following flight details and situations. Decide on the appropriate action, and call control. You will hear a version of each call after you speak.

1. Sunair 664 — 60 miles West of Winton — FL310 — depressurisation
2. Sunair 967 — 40 miles East of Rexbury — FL280 — bomb scare
3. Sunair 663 — 20 miles East of Rexbury — FL190 — bird ingestion — one engine shut down
4. Sunair 525 — 15 miles North East of Rexbury — FL140 — wheel well fire

Check  Check your answers, page 64. (There are no 'right answers' because there are so many variables in real life, but you can compare the possible answers with your own.)
2.1 Read and Write (from page 61)

<table>
<thead>
<tr>
<th>Distress</th>
<th>Urgency</th>
</tr>
</thead>
<tbody>
<tr>
<td>total electrical failure</td>
<td>fuel endurance 10 minutes at initial approach</td>
</tr>
<tr>
<td>fire in the hold</td>
<td>a bomb scare</td>
</tr>
<tr>
<td>fire in the toilets</td>
<td>injuries among passengers and cabin crew</td>
</tr>
<tr>
<td>wheel well fire</td>
<td>engine flameout</td>
</tr>
<tr>
<td>depressurisation</td>
<td>bird ingestion</td>
</tr>
<tr>
<td></td>
<td>passenger with a heart attack</td>
</tr>
</tbody>
</table>

(Remember, each real situation is different so the 'answers' to this exercise may be different)

2.1 Read and Write (from page 62)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. total electrical failure</td>
<td>look for VMC conditions and land</td>
</tr>
<tr>
<td>2. depressurisation</td>
<td>put on oxygen mask and make an emergency descent</td>
</tr>
<tr>
<td>3. fire in the hold</td>
<td>land immediately</td>
</tr>
<tr>
<td>4. fire in the toilets</td>
<td>try to extinguish the fire and land immediately</td>
</tr>
<tr>
<td>5. fuel endurance very low</td>
<td>ask for priority landing</td>
</tr>
<tr>
<td>6. a bomb scare</td>
<td>land immediately</td>
</tr>
<tr>
<td>7. severe icing</td>
<td>change level</td>
</tr>
<tr>
<td>8. injuries among passengers and cabin crew after severe turbulence</td>
<td>look for a doctor on board and land as soon as possible</td>
</tr>
<tr>
<td>9. engine flameout</td>
<td>try to make an airstart</td>
</tr>
<tr>
<td>10. bird ingestion after take-off</td>
<td>return to the airport</td>
</tr>
<tr>
<td>11. wheel well fire</td>
<td>release fire bottle and land immediately</td>
</tr>
<tr>
<td>12. passenger with heart attack</td>
<td>look for a doctor on board and land as soon as possible</td>
</tr>
</tbody>
</table>
Listen and Speak  (from page 63)

1 MAYDAY, MAYDAY, MAYDAY, Sunair 664.
   Emergency descent due to depressurisation.
   Squawking A7700.
   Position 60 miles west of Winton.
   Leaving flight level 310 descending to flight level 100 over.

2 PAN PAN, PAN PAN, PAN PAN, Sunair 967.
   We are coming back to Rexbury. There seems to be a bomb on board.
   Position 40 miles East of Rexbury, heading 270, flight level 280. Request
   priority landing and emergency services.

3 Sunair 663, Rexbury Control 20 miles East of Rexbury. Flight level 190, we are
   coming back. We have shut down one engine due to bird ingestion. Request descent  SEC
   and landing data at Rexbury.

4 MAYDAY MAYDAY MAYDAY, Sunair 525.
   We have a fire warning on the main gear.
   Request emergency landing at Rexbury.
   Our position is 15 miles North East of Rexbury, flight level 140.
2.2 TAKE-OFF

2.2.1 take-off (routine)

Key words and phrases
Check that you understand all the words in this list. Look up any new words in an aviation dictionary.

- immediate
- report
- immediately
- stop
- obstructing
- calm
- vacate
- cancel
- vehicle

Typical exchange

PILOT

1 call control
   -- callsign
   — ready to depart

2 control replies
   — aircraft callsign
   — clearance
   — wind direction & strength

3 pilot replies
   — readback clearance
   (— wind data)
   — callsign

NOTES
— The pilot can omit the wind data in the reply.
— In pilot reply 3, DGAC variant is ‘taking off, ICAO and CAA use ‘cleared to takeoff,

Phraseology practice 1

Listen  Listen to the dialogue on the tape. Listen and Repeat  Listen and repeat the pilot's words. Write  Complete the dialogue below by writing in the pilot's words. Check with the tape if necessary.

1 call control

2 control replies
   SF153, cleared for takeoff, wind 290° 12 knots.

3 pilot replies
Listen and Speak  Get take-off clearance for the flights below, and reply to me controller's instructions. Listen to the example and then continue in the same way, starting with the example again.

No.  Callsign
1   SF153
2   FBG
3   AG235
4   ESQ

Typical exchange
If the controller wants to stop the departure or vacate the runway quickly, the exchange looks like this:

PILOT

1  call control
   — callsign
   — "ready to depart"

CONTROLLER

2  control replies
   — aircraft callsign
   --- clearance
   — wind direction & strength

3  pilot replies
   — readback clearance
   (— wind data)
   — callsign

4a  control calls
   — aircraft callsign
   — instruction to take off or vacate

5a  pilot replies
   — intention (either take off or vacate)
   — callsign

or

5b  pilot replies
   — «holding»
   — callsign

   4b  control calls
   — aircraft callsign
   — instruction to hold
   — Cancellation of take-off

5c  pilot replies
   — «stopping»
   — callsign

   4c  control calls
   — callsign
   — instruction to stop repeated
2.2.2 Take-off (non-routine)

Listen and Answer  Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. Why was the take-off abandoned?

2. Why did the controller stop the take-off?

3. Why was the take-off aborted?

Check  Check your answers, page 73.

Listen and Write  Listen again and complete the texts below.

1. CTL Sunair 332, cleared to take-off, _________________.
   PIL Taking off, Sunair 332.
   PIL Sunair 332_____________ Take-off abandoned, due to _____________.
   CTL Do you request taxi to the ___________ Sunair 332?
   PIL ____________ , request return to parking area.

2. PIL Sunair 596, ready for departure.
   CTL Sunair 596, cleared to take-off, ____________ .
   PIL Sunair 596, taking off.
   (pause)
   CTL Sunair 596, _______________________________
       coming from left main 'gear.
   PIL Sunair 596 stopping.
   PIL Sunair 596, _________________ , request _____________.

3. PIL Sunair 879, take-off __________ due to ___________ We ____________
   slightly off the runway.
CTL Sunair 879, are you able to__________?

PE. Negative, the right gear is __________ Request _________________
and __________ to take the passengers to the______________

CTL Roger, Sunair 879, we'll get a___________to come out to you as well.

Check  Check your answers, page 74.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning in English or in your own language, and write it down. Then check with a dictionary.


CHECK

2.2.1 Listen and Write (from page 66)

(a) 1 call control
SF153, ready for departure.

2 control replies
SF153, cleared for take-off, wind 290° 12 knots.

3 pilot replies
Cleared for take-off, 290° 12 knots, SF153.

2.2.1 Listen and Speak (from page 67)

1 PIL  SF 153 ready for departure.
       CTL ..............................................................
       PIL  Cleared for take off, 290° 12 knots, SF153.

2 PIL  FBG ready for departure.
       CTL ..............................................................
       PIL  Cleared for take-off, 200°, 8 knots, FBG.

3 PIL  AG235 ready for departure.
       CTL ..............................................................
       CTL ..............................................................
       PIL  Cleared for take-off, wind calm, AG235.

4 PIL  ESQ ready for departure.
       CTL ..............................................................
       PIL  Cleared for take-off, 005°, 19 knots, ESQ.

2.2.1 Write (from page 68)

(a)   1 call control
       SF153 ready for departure.

       2 control replies
       SF153, cleared for take-off, wind
       290’ 12 knots, report airborne.

       3 pilot replies
       Cleared for take-off, SF153.

       4 control calls
       SF153, take-off immediately or vacate
       runway.

       5 pilot replies
       Taking off, SF153.
(b) 1 call control
FBG ready for departure

2 control replies
FBG cleared for Lake off, wind 200° 8 knots.

3 pilot replies
Cleared for take-off, 200° 8 knots
FBG.

4 control calls

5 pilot replies
Holding, FBG.

(c) 1 call control
AG235 ready for departure.

2 control replies
AG235 cleared for take-off, wind calm.

3 pilot replies
Cleared for take-off, wind calm, AG235

4 control calls
AG235, stop immediately,
AG235, stop immediately.

5 pilot replies
Stopping, AG235.

2.2.1 Listen and Speak (from page 69)

1 PiL SF153 ready for departure.
   CTL ..........................................................
   PiL Cleared for take-off, 290° 12 knots, SF153
   CTL ..........................................................
   PiL Taking off, SF153.
2 PIL FBG ready for departure
CTL ...................................................................................................................................................
PIL Cleared for take-off, 200° 8 knots, FBG.
CTL ...................................................................................................................................................
PIL Holding FBG.
3 PIL AG235 ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, wind calm, AG235.
CTL ...................................................................................................................................................
PIL Stopping, AG235.
4 PIL JDI ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, 120° 16 knots, JDI.
CTL ...................................................................................................................................................
PIL Stopping JDI.
5 PIL MPH ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, 150° 11 knots, MPH.
CTL ...................................................................................................................................................
PIL Taking off (or 'vacating runway'), MPH.
6 PIL RST ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, 340° 5 knots, RST.
CTL ...................................................................................................................................................
PIL Holding, RST.
7 PIL DNO ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, 090° 7 knots, DNO.
CTL ...................................................................................................................................................
PIL Stopping, DNO.
8 PIL UCQ ready for departure.
CTL ...................................................................................................................................................
PIL Cleared for take-off, 170° 13 knots, UCQ.
CTL ...................................................................................................................................................
PIL Holding, UCQ.

Listen and Answer  (from page 69)

1. Why was the take-off abandoned?
   It was abandoned because of engine failure.
2. Why did the controller stop the take-off?
   He stopped the take-off because of fire in the left main gear.
3. Why was the take-off aborted?
   It was aborted due to a tyre blow-out.
2.2.2 **Listen and Write**  (from page 69)

1. **CTL** Sunair 332, cleared to take-off, wind 340° 16 knots,  
   **PIL** Taking off, Sunair 332.  
   **PIL** Sunair 332 stopping. Take-off abandoned, due to engine failure.  
   **CTL** Do you request taxi to the parking area Sunair 332?  
   **PIL** Affirm, request return to parking area.

2. **PIL** Sunair 596, ready for departure.  
   **CTL** Sunair 596, cleared for take-off, wind calm.  
   **PIL** Sunair 596, taking off.  
   *(pause)*  
   **CTL** Sunair 596, stop immediately, I say again, stop immediately, flames coming from  
   left main gear.  
   **PIL** Sunair 596 stopping  
   **PIL** Sunair 596, activating escape slides, request emergency services.

3. **PIL** Sunair 879, take-off aborted due to tyre blow-out. We slid slightly off the runway.  
   **CTL** Sunair 879, are you able to taxi off the runway?  
   **PIL** Negative, the right gear is bogged down. Request passenger steps and buses to  
   take the passengers to the terminal. **CTL** Roger, Sunair 879,  
   we'll get a tug to come out to you as well.
2.3 INITIAL CLIMB

2.3.1 initial climb (routine)

Key words and phrases
Check that you understand all the words and phrases in this list.

- present heading
- so as to cross...
- continue climb
- change until
- on track
- expedite report
- reaching report
- passing
- correction

Typical exchange

PILOT

2 pilot replies
- readback heading
- readback level
- callsign

CONTROLLER

1 control calls
- aircraft identification
- airborne lime
- heading instructions
- level instructions

3 control continues
- frequency change
- greeting

4 pilot replies
- readback of frequency
- callsign
- greeting

NOTE
— There may be a pause, or/and communication with other traffic between pilot reply 2 and control call 3. In this case, of course, control starts with the aircraft callsign, as a new exchange is starting.

Phraseology practice
Write Here is a list of various instructions given during the climb. Listen to the tape, identify each instruction on the list, and write the number beside it.
<table>
<thead>
<tr>
<th>Instruction</th>
<th>Number on tape</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Climb to flight level 190.</td>
<td></td>
</tr>
<tr>
<td>B Climb on present heading.</td>
<td></td>
</tr>
<tr>
<td>C Climb straight ahead.</td>
<td></td>
</tr>
<tr>
<td>D Climb on track to Delta.</td>
<td></td>
</tr>
<tr>
<td>E Turn right, heading 190.</td>
<td></td>
</tr>
<tr>
<td>F Turn left, heading 190.</td>
<td></td>
</tr>
<tr>
<td>G Climb so as to cross Delta at flight level 190.</td>
<td></td>
</tr>
<tr>
<td>H Continue present heading until flight level 150.</td>
<td></td>
</tr>
<tr>
<td>I Expedite climb to flight level 190.</td>
<td></td>
</tr>
</tbody>
</table>

Check  Check your answers, page 79.

Listen and Speak  Listen to the instructions on the tape. Reply to the instructions like this, beginning with the examples again.

1.  CTL Turn left heading 190
    PIL Left heading 190.
2.  CTL Climb to flight level 220.
    PIL Climbing to flight level 220.

Check  Check your answers, page 79.

Listen  Listen to the dialogue on the tape.

Listen and Repeat  Listen and repeat the pilot's words.

Write  Complete the dialogue below by writing in the pilot's words. If necessary, listen to the tape again.

1 control calls
SF153, airborne 33, turn right heading 130, Continue climb to flight level 150.

2 pilot replies

3 control continues
Contact 125.8, goodbye.

4 pilot replies

76
Listen and Speak  Reply to the instructions given to the following flights. Listen to the example, then continue in the same way, starting with the example again.

Callsigns

1  SF153  4  OPR
2  AG235  5  DNO
3  YFL    6  ZE692

Listen and Answer  Listen to the three dialogues and write down the answers to these questions. There is one question for each dialogue.

1. Why have they shut down an engine?

2. Why are they returning?

3. What must they do before returning to Rexbury?

Listen and Write  Listen again and complete the texts below.

1  PJL  Sunair 670, Rexbury Approach, we've __________ no. I engine after a __________. We're__________

   CTL Do you require __________ Sunair 670?
   PIL  Negative, there is no ______. Sunair 670.
   CTL Roger, Sunair 670, turn left heading 250.

2  PIL  Sunair 539, we're returning. We seem to have a __________ the __________ has just___________. Request_________________________ and__________.__________.

   CTL Roger, Sunair 539, I'll call you back.
   CTL Sunair 539, you're __________________ call Tower on 118.5.
   PIL  118.5, Sunair 539.

3  PIL  Sunair 281, we have an___. _______ We intend to____________ to Rexbury, but we __________ 40 tons of fuel first.
CTL Roger, Sunair 281, ___________________________ , at 5000 feet, right
______________ over Forest. ____________________________

PEL Sunair 281, 5000 feet over forest.

(pause)
PIL Sunair 281, reaching forest, ready to dump fuel.

CTL Roger, go ahead Sunair 281, break.

All aircraft, Rexbury Control,___________ in progress, DC8, ____________
Forest VOR,_______________________________ flight below 5000
feet _____________ 10 nautical miles of__________________________

PIL Sunair 281, fuel dumping completed, request approach to Rexbury.

Check Check your answers, page 80.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about.
Try to guess the meaning, in English or in your own language, and write it down. Then
check with a dictionary.
### 2.3.1 Listen and Write (from page 76)

<table>
<thead>
<tr>
<th>Instruction</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>G</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td>8</td>
</tr>
<tr>
<td>I</td>
<td>9</td>
</tr>
</tbody>
</table>

#### 2.3.1 Listen and Speak (from page 76)

1. Left heading 190.
2. Climbing flight level 220.
3. Climbing straight ahead.
4. Left heading 260.
5. Climbing on track to Papa.
6. Climbing to flight level 270.
7. Right heading 310.
8. Climbing to cross Zulu at 150.
9. Present heading until flight level 190.
10. Climbing on track to Zulu.
11. Expediting climb to flight level 170.

#### 2.3.1 Write (from page 76)

1. **control calls**
   - SF153, airborne 33, turn right heading 130, continue climb to flight level 150.

2. *pilot replies*
   - Right heading 130, climbing level 150, SF153

3. **control continues**
   - Contact 125.8 goodbye

4. *pilot replies*
   - SF153, goodbye!
2.3.1 Listen and Speak (from page 77)

1. CTL .................................................................
   PIL Right heading 130, climbing to 150, SF153.
   CTL .................................................................
   PIL 125.8, SF153, goodbye.

2. CTL .................................................................
   PIL Climbing on present heading to FL110, AG235.
   CTL .................................................................
   PIL 129.6, AG235, goodbye.

3. CTL .................................................................
   PIL Left heading 230, expediting to FL70, YFL.
   CTL .................................................................
   PIL 129.7, YFL, goodbye.

4. CTL .................................................................
   PIL Climbing to cross November at FL90, OPR.
   CTL .................................................................
   PIL 128.6, OPR, goodbye.

5. CTL .................................................................
   PIL Right heading 190, climbing to FL130, DNO.
   CTL .................................................................
   PIL 132.9, DNO, goodbye.

6. CTL .................................................................
   PIL Climbing on present heading to FL130, ZE692.
   CTL .................................................................
   PIL 134.2, ZE692. goodbye.

2.3.2 Listen and Answer (from page 77)

1. Why have they shut down an engine?
   Because of a bird strike/bird ingestion.

2. Why are they returning?
   There is a wheel well fire.

3. What must they do before returning to Rexbury?
   They must dump fuel.

2.3.2 Listen and Write (from page 77)

1. PIL Sunair 670, Rexbury Approach, we've shut down no. 1 engine after a bird strike.
   We're coming back.
   CTL Do you require landing priority, Sunair 670?
   PIL Negative. There is no fire warning, Sunair 670.
   CTL Roger, Sunair 670, turn left heading 250.

2. PIL Sunair 539, we're returning. We seem to have a wheel well fire — the warning
   light has just flashed on. Request priority landing and emergency services.
   CTL Roger, Sunair 539, I’ll call you back.
   CTL Sunair 539, you're number one to land, call Tower on 118.5.
   PIL 118.5, Sunair 539.
PIL Sunair 281, we have an engine failure. We intend to return to Rexbury, but we have to dump 40 tons of fuel first.

CTL Roger, Sunair 281, proceed to fuel dumping area, at 5000 feet, right pattern over Forest. Report when reaching.

PIL Sunair 281, 5000 feet over Forest.

(pause)

PIL Sunair 281, reaching Forest, ready to dump fuel.

CTL Roger, go ahead Sunair 281, break.

All aircraft Rexbury Control, fuel dumping in progress, DC8, on radial 240 Forest VOR, ranging 14 to 20 nm, avoid flight below 5000 feet within 10 nautical miles of fuel dumping track.

PIL Sunair 281, fuel dumping completed, request approach to Rexbury.
2-4 CLIMB

2.4.1 Climb (routine)

**Key words and phrases**
Check that you understand all the words in this list. Look up any new words in a dictionary.

heading  
good morning  
reach  
good afternoon  
goodbye  
good evening  
maintain present heading  
report

**Typical exchange sequences**

<table>
<thead>
<tr>
<th>PILOT</th>
<th>CONTROLLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1 control calls</td>
</tr>
<tr>
<td></td>
<td>— aircraft callsign</td>
</tr>
<tr>
<td></td>
<td>— new frequency</td>
</tr>
<tr>
<td></td>
<td>— greeting</td>
</tr>
<tr>
<td></td>
<td>change of frequency</td>
</tr>
<tr>
<td></td>
<td>2 control replies</td>
</tr>
<tr>
<td></td>
<td>— go ahead</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>3 pilot replies</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>— level (or altitude)</td>
</tr>
<tr>
<td></td>
<td>— heading</td>
</tr>
<tr>
<td></td>
<td>4 control</td>
</tr>
<tr>
<td></td>
<td>— climb instructions</td>
</tr>
<tr>
<td></td>
<td>— heading instructions</td>
</tr>
<tr>
<td></td>
<td>5 pilot replies</td>
</tr>
<tr>
<td></td>
<td>— readback climb instructions</td>
</tr>
<tr>
<td></td>
<td>— readback heading instructions</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>↓ (pause)</td>
</tr>
<tr>
<td></td>
<td>6 pilot calls</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>— level</td>
</tr>
<tr>
<td></td>
<td>7 control replies</td>
</tr>
<tr>
<td></td>
<td>— aircraft callsign</td>
</tr>
<tr>
<td></td>
<td>— further climb instructions</td>
</tr>
<tr>
<td></td>
<td>8 pilot replies</td>
</tr>
<tr>
<td></td>
<td>— readback level</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
<tr>
<td></td>
<td>9 control</td>
</tr>
<tr>
<td></td>
<td>— new frequency</td>
</tr>
<tr>
<td></td>
<td>— greeting</td>
</tr>
<tr>
<td></td>
<td>10 pilot replies</td>
</tr>
<tr>
<td></td>
<td>— readback level</td>
</tr>
<tr>
<td></td>
<td>— greeting</td>
</tr>
<tr>
<td></td>
<td>— callsign</td>
</tr>
</tbody>
</table>
NOTES

— Greetings: Greetings like 'good morning', 'good afternoon' in the first call, and 'goodbye' at the end of an exchange are very commonly used. They do not appear in official phraseologies, but 'good morning', 'good afternoon' or 'good evening' replaces 'how do you read?' at initial contact; and 'goodbye' replaces 'over' or 'over and out'. The greetings are a little bit of human exchange, and quite often the speaker will translate them into the language of the receiver ('bonjour') to a French person, 'buenas dias' to a Spaniard, etc.).

— Use of callsigns: In control reply 2, the controller may use: aircraft callsign, name of ground station, greeting; or name of ground station, greeting, aircraft callsign.

Once contact is made, the callsign can be omitted until the end of the exchange (CAA ref. 2.7.3.1; (b)), so numbers 4 and 9 have no callsigns here.

At initial contact, the pilot says the name of the ground station first, then the aircraft callsign, as in pilot call 1.

When the pilot calls a ground station another time, the aircraft callsign comes first, and the name of the ground station is normally unnecessary (pilot call 6).

At the end of an exchange, when the pilot is 'signing off, the callsign is at the end, e.g. pilot replies 5 and 10.

— Order of items in readbacks: In readbacks there is a strong tendency for the pilot to put the most important (the most immediate) instruction first. So in pilot reply 5, the readback of heading instructions may come first, followed by the readbacks of climb instructions.

Phraseology practice Listen
Listen to the dialogue.
Listen and Repeat  Listen and repeat the pilot's words.
Write  Complete the dialogue below by filling in the pilot's words. Check with the tape if necessary.

1  control calls
   SF153, contact Delta Control on 128.7, goodbye.

2  pilot replies

change of frequency

1  pilot calls

2  control replies -
   .Go ahead, SF153.

3  pilot replies
5 pilot replies
control
Climb to (light level 210, report reaching
Maintain present heading.

(pause)

6 pilot calls

control replies
Roger, SF153, climb to level 310.

8 pilot replies

control
Change now 129.4, goodbye.

10 pilot replies

Check  Check your answers, page 86.

Listen and Speak  Take the pilot's part and reply to the controller's instructions on
the tape. Listen to the example, then reply in the same way using the data for
the following flights. Start with the example again.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Present flight level</th>
<th>Heading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SF153</td>
<td>90</td>
<td>130</td>
</tr>
<tr>
<td>2 AG235</td>
<td>110</td>
<td>250</td>
</tr>
<tr>
<td>3 YFL</td>
<td>70</td>
<td>230</td>
</tr>
<tr>
<td>4 OPR</td>
<td>80</td>
<td>180</td>
</tr>
<tr>
<td>5 DNO</td>
<td>90</td>
<td>190</td>
</tr>
<tr>
<td>6 ZE692</td>
<td>80</td>
<td>090</td>
</tr>
</tbody>
</table>

Check  Check your answers, page 86.
2.4.2 Climb (non-routine)

**Listen and Answer**  Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. What was the cause of the turbulence?

2. Why does the controller want the pilot to change his rate of climb?

3. What is the emergency, and what immediate action are they taking?

---

**Check**  Check your answers, page 88.

**Listen and Write**  Listen again and complete the texts below.

1. PIL  Sunair 928. we've just come through some__________ What kind of traffic is there__________?
   
   CTL  It must've been__________there’s a 747_______,although_______ ___ was provided.

2. CTL Sunair 596, ________ ________?
   
   PIL ________ ________.

   CTL_______traffic,_______ ________ ________ FL180 at the ________?
   
   PIL _______ FL180 ________,________ Sunair 596.

3  PIL  MAYDAY MAYDAY MAYDAY, Winton Control, Sunair 165, we have
   
   ______________________ , we are________________________

   _________ to FL30, leaving FL310, left of Green 4, _____________

   Newbridge for________________________ , please ____________.

   ______________________ , _________ 040, _____________ Winton VOR.

---

**Check**  Check your answers, page 88.

**Your word list**

Write down any words in the dialogues you do not understand or are not sure about. Try to guess the meaning, in English or in your own language and write it down. Then check with a dictionary.
2.4.1 **Listen and Write** (from page 84)

1. **control calls**
   SF153, contact Delta Control on 128.7, goodbye.

2. **pilot replies**
   128.7, SF153, goodbye.

3. **pilot calls**
   Delta Control, SF153, good morning.

4. **control**
   Climb to flight level 210, report reaching, maintain present heading.

5. **pilot replies**
   Climbing level 210, maintaining present heading, SF153.

6. **pilot calls**
   SF153, reaching level 210.

7. **control replies**
   Roger, SF153, climb to level 310.

8. **pilot replies**
   Climbing level 310, SF153,

9. **control**
   Change now 129.4, goodbye.

10. **pilot replies**
    129.4, SF153, goodbye.
2.4.1 Listen and Speak  (from page 84)

1  CTL ...........................................................................................................................................
    PIL 128.7, Sierra Foxtrot 153, goodbye.
    PIL Delta Control, Sierra Foxtrot 153, good morning.
    CTL ...........................................................................................................................................
    PIL Sierra Foxtrot 153, flight level 90, heading 130.
    CTL ...........................................................................................................................................
    PIL Climbing level 210, maintaining present heading, Sierra Foxtrot 153. PIL
    Sierra Foxtrot 153, reaching level 210.
    CTL ...........................................................................................................................................
    PIL Climbing level 310.
    CTL ...........................................................................................................................................
    PIL 129.4, Sierra Foxtrot 153, goodbye.

2  CTL ...........................................................................................................................................
    PIL 132.4, goodbye Alpha Golf 235.
    PIL Foxtrot Control, Alpha Golf 235, good morning.
    CTL ...........................................................................................................................................
    PIL Alpha Golf 235, FL110, heading 250.
    CTL ...........................................................................................................................................
    PIL Climbing to level 210, report passing level 180. Alpha Golf 235.
    PIL Alpha Golf 235, passing level 180.
    CTL ...........................................................................................................................................
    PIL Right turn heading 330, climbing to level 280. Alpha Golf 235.
    CTL ...........................................................................................................................................
    PIL 131.7, Alpha Golf 235, goodbye.

3  CTL ...........................................................................................................................................
    PIL 126.5, goodbye.
    PIL Mike Control, Yankee Foxtrot Lima, good morning.
    CTL ...........................................................................................................................................
    PIL Yankee Foxtrot Lima, flight level 70, heading 230.
    CTL ...........................................................................................................................................
    PIL Climbing to flight level 250, expediting until passing level 150. Yankee Foxtrot
    Lima.
    CTL ...........................................................................................................................................
    PIL Left turn heading 180. Yankee Foxtrot Lima.
    CTL ...........................................................................................................................................
    PIL 128.9, goodbye. Yankee Foxtrot Lima.

4  CTL ...........................................................................................................................................
    PIL 127.3 goodbye
    PIL November Control, Oscar Papa Romeo, good morning.
    CTL ...........................................................................................................................................
    PIL Oscar Papa Romeo, flight level 80, heading 180.
    CTL ...........................................................................................................................................
    PIL Right turn heading 230, climbing to flight level 240. Oscar Papa Romeo.
    PIL Oscar Papa Romeo, reaching level 240.
    CTL ...........................................................................................................................................
    PIL Climbing to flight level 290. Oscar Papa Romeo.
    CTL ...........................................................................................................................................
    PIL 129.5, goodbye. Oscar Papa Romeo.
5  CTL .................................................................................................................................
PIL  133.2, goodbye. 
PIL Whisky Control, Delta November Oscar, good morning.
CTL ....................................................................................................................................
PIL  Delta November Oscar, flight level 90, heading 190.
CTL ....................................................................................................................................
PIL Climbing level 250, report passing level 150.
PIL Delta November Oscar, passing level 150.
CTL ....................................................................................................................................
PIL Left turn heading 160, climbing level 270.
CTL ....................................................................................................................................
PIL  129.5, goodbye. Delta November Oscar.

6  CTL ....................................................................................................................................
PIL  126.9, goodbye.
PIL Foxtrot Control, Zulu Echo 692, good morning.
CTL ....................................................................................................................................
PIL Zulu Echo 692, flight level 80, heading 090.
CTL ....................................................................................................................................
PIL Right turn heading 130, climbing to level 210, expediting until passing level 150.
Zulu Echo 692.
CTL ....................................................................................................................................
PIL Wiico.
PIL Zulu Echo 692, reaching level 210.
CTL ....................................................................................................................................
PIL  128.2, goodbye. Zulu Echo 692.

2.4.2 Listen and Answer  (from page 5)
1. What was the cause of the turbulence?
   It was wake turbulence caused by a 747.
2. Why does the controller want the pilot to change his rate of climb?
   Due to traffic, he wants the plane to climb quickly to FL180.
3. What is the emergency and what immediate action are they taking?
   There is a fire in the hold. They are making an emergency descent to FL30.

2.4.2 Listen and Write   (from page 85)
1  PIL Sunair928, we've just come through some severe turbulence. What kind of traffic
   is there ahead of us?
   CTL It must've been wake turbulence, there's a 747 ahead, although normal separation
   was provided.

2  CTL Sunair 596, what is your rate of climb?
   PIL  700 feet per minute.
   CTL Due to traffic, can you adjust your rate of climb to be above flight level ISO at
   the FIR boundary? PIL  Above flight level 180 at the FIR
   boundary, wildo, Sunair 596.

3  PIL  MAYDAY MAYDAY MAYDAY, Winton Control, Sunair 165, we have fire
   in the hold, we are making an emergency descent to FL30, leaving FL310. left
   of Green 4, heading to Newbridge for emergency landing, please advise. Present
   position, radial 040, 50 miles from Winton VOR.
2.5.1 End of climb (routine)

Key words and phrases
Check that you understand all the words and phrases in this list.

available  can you accept?
negative  not at the moment
further  unavailable
climb heavy  traffic

Typical exchange

PILOT

1  pilot calls
   — callsign
   — greeting

2  controller replies
   — "go ahead"
   — callsign

3  pilot replies
   — callsign
   — flight level
   — heading

4  controller replies
   — heading instructions
   — climb instructions
   — 'report when reaching'

5  pilot replies
   — readback heading
   — readback level
   — callsign
   {pause)

6  pilot calls
   — callsign
   — 'reaching level __'

7

S  pilot replies
   — readback climb instructions
   — request for higher level

8  controller replies

9  controller replies
   — 'negative*
   — offers another higher level

10 pilot replies
    — refuses level offered

11 controller replies

12 controller replies
   4 frequency change

13 controller replies
   — 'goodbye'

14 controller replies
   — aircraft callsign
   — climb instructions

15 controller replies
   — "roger"

16 controller replies
   — callsign

17 controller replies
   — offered higher level

18 controller replies
   — not at the moment

19 controller replies
   — available

20 controller replies
   — can you accept?

21 controller replies
   — further

22 controller replies
   — climb heavy

23 controller replies
   — traffic

89
**Phraseology practice**

**Listen**  Listen to the recorded dialogue.

**Listen and Repeat**  Listen and repeat the pilot's words

**Write**  Complete the text below by writing in the pilot's words. Check with the recording if necessary.

1. **pilot calls**
   
2. **control replies**
   Go ahead, 153.

3. **pilot replies**
   
4. **control replies**
   Maintain present heading, climb FL 210, report when reaching.

5. **pilot replies**
   
6. **pilot calls**
   
7. **control replies**
   Roger, SF153. climb to level 270.

8. **pilot replies**

9. " **control replies**
   Negative. Can you accept level 390?

10. **pilot replies**

11. **control replies**
   Change now on 129.4

12. **pilot replies**

13. **control replies**
   Goodbye.

**Check**  Check your answers, page 92.

Listen and Speak Continue for each of the following flights. Try to negotiate a good cruise level if necessary. Listen to the example, then continue in the same way, starting with the example again.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Present flight level</th>
<th>Heading</th>
<th>Preferred cruise level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SF153</td>
<td>90</td>
<td>130</td>
<td>310</td>
</tr>
<tr>
<td>2 AG235</td>
<td>110</td>
<td>250</td>
<td>330</td>
</tr>
<tr>
<td>3 YFL</td>
<td>70</td>
<td>230</td>
<td>330</td>
</tr>
<tr>
<td>4 OPR</td>
<td>80</td>
<td>180</td>
<td>290</td>
</tr>
<tr>
<td>5 DNO</td>
<td>90</td>
<td>190</td>
<td>210</td>
</tr>
<tr>
<td>6 ZE692</td>
<td>100</td>
<td>090</td>
<td>330</td>
</tr>
</tbody>
</table>

**Check**  Check your answers, page 93.
2.5.2 End of climb (non-routine)

Listen and Answer  Listen to the three dialogues and write down the answers to these questions. There is one question for each dialogue.

1. What is the problem and what action is being taken?

2. Why does the pilot want a lower level?

3. Why does the pilot change her route?

Check  Check your answers, page 94.

Listen and Write  Listen again and complete the texts below.

1  PIL  Winton Control, Sunair 883, ____________________________, ______ is rising fast, __________________________ to FL120.

   CTL Roger, descend to FL120, _ __________.

   PIL  Descending to FL120, Sunair 883.

   PIL  Sunair 883, reaching FL120.

   CTL Roger, Sunair 883,__________________________?

   Pit, Request __________ to Rexbury _________ this level.

2  PIL  Sunair 596, could we have a ____________________? We're ___________ at this level.

   CTL Sunair 596, call you back.

   CTL Sunair 596, ___________ to FL280.

   PIL ___________ to FL280, Sunair 596.

3  PIL  Sunair 725, request ___________ to Overby, a passenger is ________________, probably a ____________.

   CTL Roger Sunair 725, turn right heading 290, I'll tell Overby you ____________

   PIL  Turning right 290, Sunair 725.

Check  Check your answers, page 94.

Your word list  Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning, in English or in your own language, and write it down. Then check with a dictionary.
CHECK

2.5.1 Write (from page 90)

1  pilot calls
   Echo Control SF153, good morning.

2  control replies
   Go ahead, 153.

3  pilot replies
   SF153, FL90, heading 130.

4  control replies
   Maintain present heading, climb FL210, report when reaching.

5  pilot replies
   Climbing level 210, SF153.

6  pilot calls
   SF153, reaching level 210

7  control replies
   Roger, SF153, climb to level 270.

8  pilot replies
   Climbing level 270. Is level 310 available?

9  control replies
   Negative. Can you accept level 390?

10 pilot replies
    Negative

11 control replies
    Change now on 129.4.

12 pilot replies
    129.4, goodbye SF153.

13 control replies
    Goodbye.

NOTE
If the pilot wanted to accept the much higher level offered, there would be an additional exchange:

10 pilot replies
   Affirm.

10a control replies
   Climb to FL390.

10b pilot replies
   Climbing to FL390.
2.5.1 **Listen and Speak** (from page 90)

1. **PIL** Echo Control, Sierra Foxtrot 153, good morning.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Sierra Foxtrot 153, flight level 90, heading 130.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 210, Sierra Foxtrot 153.
   
   **PIL** SF153, reaching level 210.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 270. Is 310 available?
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Negative.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** 129.4, goodbye.

2. **PIL** Echo Control, Alpha Golf 235, good morning.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Alpha Golf 235, flight level 110, heading 250.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Right turn 290. Alpha Golf 235.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 280, Alpha Golf 235. Is 330 available?
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Negative.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** 131.7, goodbye.
   
   **CTL** .............................................................................................................................................................

3. **PIL** Echo Control, Yankee Foxtrot Lima, good morning.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Yankee Foxtrot Lima, flight level 70, heading 230.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 190. Yankee Foxtrot Lima.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Yankee Foxtrot Lima, reaching level 190.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 330.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** 126.8, goodbye. Yankee Foxtrot Lima.
   
   **CTL** .............................................................................................................................................................

4. **PIL** Echo Control, Oscar Papa Romeo, good morning.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Flight level 80, heading 180.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Left rum heading 160.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 250, OPR, is level 290 available?
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Negative.
   
   **CTL** .............................................................................................................................................................
   
   **PIL** Climbing level 250 OPR.
PIL  OPR, reaching 250.
PIL  132.9, goodbye.

5 PIL- Echo Control, Delta November Oscar, good morning.
PIL  Reaching level 90, heading 190.
PIL  Climbing 170.
PIL  DNO, reaching level 170.
PIL  Climbing 210.
PIL  129.3, goodbye. Delta November Oscar.

6 PIL  Echo Control, Zulu Echo 692, good morning.
PIL  Reaching level 100, heading 90.
PIL  Left turn, 010, climbing level 170, report 150. PIL
PTL  133.2, goodbye. ZE 692.

2.5.2 Listen and Answer  (from page 91)
1. What is the problem and what action is being taken?
   There is a pressurisation problem. They are descending to FL120, to continue their flight.
2. Why does the pilot want a lower level?
   There is moderate turbulence at their present level.
3. Why does the pilot change her route?
   A passenger has had a heart attack.

2.5.2 Listen and Write  (from page 91)
1 PIL  Winton Control, Sunair 883, we are unable to control pressurisation, cabin altitude is rising fast, request immediate descent to flight level 120.
PIL  Descending to FL120, Sunair 883.
PIL  Sunair 83, reaching FL120.
CTL  Roger, Sunair 883, what are your intentions?
PIL  Request resume our flight to Rexbury at this level.

2 PIL  Sunair 596, could we have a slightly lower flight level? We're experiencing moderate turbulence at this level.
PIL  Descending to FL280, Sunair 596.
PIL  Sunair 725, request divert to Overby, a passenger is seriously ill, probably a heart attack.

CTL Roger Sunair 725, turn right heading 290, I'll tell Overby you require medical assistance on landing.

PIL  Turning right 290, Sunair 725.
2.6 REVIEW OP PART TWO

2.6.1 Flight from Rexbury to Winton (take-off and climb)

**Listen and Read**  Flight plan details:
- ATC clearance: Golf 5 departure, climb initially to FL110
- Flight planned cruising level 290
- Route: reporting points RTV(River) then BCK (Blackcock)

For further details, turn to page 48.

**Listen and Speak** You are flying from Rexbury to Winton, callsign Sunair 367. Follow the instructions on the tape and reply to the controller. The exercise starts with the aircraft lined up on runway 29 and ready for departure.

Check  Check your answers, page 98.

2.6.2 Flight from Dublin to Paris (take-off and climb)

**Listen and Read**  Flight plan details:
- Callsign SF309 reporting points: Li fyWallasey Telba Midhurst

Study the maps provided on pages 50—52 before you start.

**Listen and Speak**  Take the pilot's part, follow the instructions on the tape and reply to the controller. The exercise starts with the aircraft lined up on runway 17 ready for departure.

NOTE: You will hear communications with other traffic on your frequency.

Check  Check your answers, page 98.
2.6.1 Listen and Speak (from page 96)

PIL  Ready for departure, Sunair 367.

CTL ............................................................................................................................ ................................

PIL  Cleared for take-off, Sunair 367.

CTL ............................................................................................................................ ................................

PIL  Climbing to FL110, Rexbury Control on 128.8, Sunair 367, goodbye.

PIL  Rexbury Control, Sunair 367, good afternoon.

CTL ............................................................................................................................ ................................

PIL  Right turn, heading 050, climbing to FL220, Sunair 367.

CTL ......................................................................................................................... ...................

PIL   Climbing to FL270, direct to Romeo India Victor VOR, Sunair 367.

PIL  Sunair 367, is FL330 available?

CTL ............................................................................................................................ ................................

PIL   Climbing to FL270, Sunair 367.

PIL   Sunair 367, reaching FL270.

CTL........................................................................................................................ ..............

PIL   135.9, Sunair 367, goodbye.

2.6.2 Listen and Speak (from page 96)

PIL SF309 ready to depart.

CTL ............................................................................................................................ ................................

PIL  Cleared to take-off runway 17, left turn-out direct Liffy, 100 20 knots.

CTL.......................................................................................................................... ..................................

CTL ........................................................................................................................... ................................

PIL   Dublin 128.0, SF3O9, goodbye.

PIL   Dublin, SF3O9, good afternoon.

CTL ......................................................................................................................... ...................

PIL  Direct Liffy, climbing FL230, SF309.

CTL .......................................................................................................................... ..................................

PIL  FL100, SF309.

CTL ............................................................................................................................... ................

PIL  Climbing to FL230, London 128.05, SF309.

PIL  London, SF309, good afternoon.

CTL............................................................................................................................... .................................

PIL  Maintain 230 on reaching, squawking 5260.

CTL ............................................................................................................................... ................................

PIL  Climbing to FL290, SF309.

CTL ............................................................................................................................... ................................

PIL  Climbing to FL330, SF309.
2.7 SUPPLEMENTARY VOCABULARY

2.7.1 Words for planes

Read and Write  Look at these six groups of words about planes. Choose the correct heading for each group from the list of headings below.

**Group 1** ___________
aeroplane
aircraft plane
airplane

**Group 3** ___________
long haul
short haul
medium haul
STOL*
VTOL*

**Group 5** ___________
twin jet
single-engined aircraft
tri-jet
four-engined aircraft
jet
turbo prop

**Group 2** ___________
helicopter
balloon glider
airship

**Group 4** ___________
fighter
airliner
freighter
bomber
tanker
business jet
executive aircraft
seaplane

**Group 6** ___________
narrow-bodied plane
wide-bodied plane
a jumbo

* STOL — short take-off and landing
* VTOL — vertical take-off and landing

__Check__ Check your answers, page 105.
Read and Write  The same six groups of words are organised here into a 'word tree', but one word from each group is missing. Write in the missing words.

Check  Check your answers, page 105.
2.7.2 Parts of a plane

Look and Think  Look at the pictures on this page. There is a word which corresponds to each number. Decide which of the words you know.
Look, Listen and Repeat  Look at the picture, listen to the tape and repeat the words.

Look, listen and Speak  Now test yourself. How many of the words do you remember? Listen to the tape, look at the picture and say the correct word when you hear the number. Then you will hear the right answer. Remember, don't repeat the words; try to say them before you hear them on the tape. Listen to an example. Now continue in the same way. Start with the example again.

Check  Check how the words are written, page 105.
Read  Look at these words for parts of a plane.

- door
- wheel
- nose
- slats
- tail
- flap
- leading edge
- fuselage
- engine nacelle
- tail-fin
- typr
- elevator
- nose gear
- ailerons
- rudder
- windshield
- stabiliser
- airbrakes
- landing gear
- spoiler

Write  Now fill in the 'word tree' below by putting a term in each box. (Some words are filled in for you.) Try to give some kind of organisation to the tree. There is no right or wrong answer here. It is an exercise to help you to remember the words by thinking about them.
Write  Now try to make the same word tree, but this time, *do not look* at the tree you filled in or the list of words.

Check  Check your version of the tree with the version given on page 106.

(NOTE: There is no single right answer — this is just one possibility.)

2.7.3  **Cockpit instruments**

**Listen and Write** Listen to the description of the main control panel and write in the abbreviations for the names of the instruments in the correct place on the diagram. The first two instruments are labelled for you.

![Diagram of cockpit controls with labeled parts](image)

Check  Check your answers, page 107.

Complete  Complete the text below so that the description corresponds to the diagram on page 107.

The captain's main control panel on the Airbus 300B. Starting in the bottom left-hand corner, on the ________ there is a clock. _________ the clock is the DME (Distance Measuring Equipment) and _______ the DME you find the Air Speed Indicator _________ of the Air Speed Indicator is the Attitude Director Indicator (the ADI) _________ the ADI there is the Horizontal Situation Indicator (HSI).
On the bottom row, ___________, is the Automatic Direction Finder, the ADF. 

__________ the ADF and the HSI is an altimeter, and ______________ it is a radio 

altimeter __________ of the radio altimeter __________ the ADF, is the ver-

tical speed indicator.

**Check**  Check your answers, page 107.

**CHECK**

2.7.1  Read and Write  (from page 99)

*Group 1: Plane Words*

*Group 2: Flying Machines*

*Group 3: Range*

*Group 4: Purpose*

*Group 5: Power*

*Group 6: Size*

2.7.1  Read and Write  (from page 100)

1. twin jet
2. short haul
3. aircraft
4. business jet
5. wide-bodied plane
6. glider

2.7.2  Look, Listen and Speak  (from page 102)

1. nose
2. windshield (or windscreen)
3. door
4. fuselage
5. wing
6. wing tip
7. slats
8. landing gear (or undercarriage)
9. tail fin
10. rudder
11. elevators
12. stabiliser
13. window
14. hold (or cargo compartment) door
15. trailing edge
16. leading edge
17. engine nacelle
18. nose gear
19. ailerons
20. spoilers
21. airbrakes
22. flaps
2.7.2 Write (from page 103)

Compare your tree with this one. There are many equally good ways to organise the words.
2.7.3 **Listen and Write**  (from page 104)

2.7.3 **Complete**  (from page 104)

The captain's main control panel on the Airbus 300B. Suiting in the bottom left-hand corner, on the left there is a clock. Next to the clock is the DME (Distance Measuring Equipment) and above the DME you find the Air Speed Indicator. On the right of the Air Speed Indicator is the Attitude Director Indicator (the ADI). Below the ADI there is the Horizontal Situation Indicator (HSI). On the bottom row, on the right, is the Automatic Direction Finder, the ADF. Between the ADF and the HSI is an altimeter, and above it is a radio altimeter. On the right of the radio altimeter, above the ADF, is the vertical speed indicator.
Part Three
Cruise to descent
VOLMETS

**Key words and phrases**
Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

- mist
- thin
- gradu
- scattered
- rain
- more than
- tempo
- less than
- drizzle
- ceiling
- visibility
- overcast
- freezing rain
- haze
- recent
- RVR = Runway Visual Range

**Typical volmets**
These recorded broadcasts follow the same pattern at each station. There is a little variation in some of the items from station to station, but the order is very similar to ATIS weather reports.

- airport name
- wind data: direction and strength
- visibility (in metres or kilometres)
- present weather (rain, mist, snow, drizzle, etc.)
- cloud cover (in oktas)
- ceiling (in feet or metres)
- temperature
- dew point
(- QNH)
- trend: no sig
*or* gradu (plus expected change)
*or* tempo (plus possible temporary conditions)

NOTE: Some countries (e.g. USSR, Poland) give wind strength in metres per second.
**Phraseology practice**

Listen and Write  Listen to the rust, reports and note the details in the table below. You may have to listen several times.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>London Heathrow</td>
</tr>
<tr>
<td>2</td>
<td>London Gatwick</td>
</tr>
<tr>
<td>3</td>
<td>Birmingham</td>
</tr>
<tr>
<td>4</td>
<td>Manchester</td>
</tr>
<tr>
<td>5</td>
<td>Prestwick</td>
</tr>
<tr>
<td>6</td>
<td>Manchester</td>
</tr>
<tr>
<td>7</td>
<td>London Gatwick</td>
</tr>
<tr>
<td>8</td>
<td>Copenhagen Kastmp</td>
</tr>
<tr>
<td>9</td>
<td>Stockholm Arlanda</td>
</tr>
<tr>
<td>10</td>
<td>Gothenburg</td>
</tr>
<tr>
<td>11</td>
<td>Praha</td>
</tr>
<tr>
<td>12</td>
<td>Bratislava</td>
</tr>
<tr>
<td>13</td>
<td>Warsaw</td>
</tr>
<tr>
<td>14</td>
<td>Bologna Borgo Panigale</td>
</tr>
<tr>
<td>15</td>
<td>Catania Fontanarossa</td>
</tr>
<tr>
<td>16</td>
<td>Palermo Puntaraisi</td>
</tr>
<tr>
<td>17</td>
<td>Athenai</td>
</tr>
<tr>
<td>18</td>
<td>Thessaloniki</td>
</tr>
<tr>
<td>19</td>
<td>Malta</td>
</tr>
<tr>
<td>20</td>
<td>Kerkira</td>
</tr>
<tr>
<td>21</td>
<td>Beirut</td>
</tr>
<tr>
<td>22</td>
<td>Cairo</td>
</tr>
<tr>
<td>23</td>
<td>Ben Gurion</td>
</tr>
</tbody>
</table>

**Check**  Check your notes using the texts on page 114.
3.1 **Listen and Write** (from page 112)

1. This is London Volmet main. This is London Volmet main. London Heathrow 11.50. 130° 05 knots, 2000m, mist, 2 oktas 300 ft, 8 oktas 400 ft, temp 5, dew point 5, QNH 1012, gradu, 7 km, 5 oktas 1500 ft.

2. London Gatwick at 11.50, 240° 03 knots, 1800 m, recent rain, 7 oktas 300 ft, temp 7, dew point 6, QNH 1012, gradu, 7 km, 5 oktas 1500 ft.

3. Birmingham at 11.50. 110° 06 knots, 3000 m, recent rain, 5 oktas 300 ft, 8 oktas 400 ft, temp 4, dew point 3, QNH 1010, temp 0, 2 oktas 300 ft.

4. Manchester at 11.50. 090° 09 knots, 10 km or more, rain 1 okta 1000 ft, 7 oktas 1600 ft, temp 3, dew point 1, QNH 1010, temp 0, 7 oktas 1400 ft.

5. Prestwick at 11.50. 070° 14 knots, 10 km or more, 1 okta 1000 ft, 3 oktas 10000 ft, temp 6, dew point 1, QNH 1010, no sig.

6. Manchester met report, Manchester. 280° at 8 knots, visibility 1100 m, RVR 1200 raj drizzle, 8 oktas 200 ft, temp 8, dew point 7, gradu, visibility 5000 m, 6 okus IOO0ft.

7. London Gatwick met report, London Gatwick. 270° 5 knots, visibility 7km, haze, 1 okta 1500 ft, 7 oktas 2000 ft, temp 8, dew point 6, no sig.

8. Copenhagen Kastrup met report, Copenhagen Kastrup. 200° 12 knots, visibility 8 km, mist, 2 oktas IOO0ft, 8 oktas 1600ft, temp 1, dew point -4, no sig.


10. Gothenburg met report, Gothenburg. 210° 19 knots, visibility 3500m, mist, 7 oktas I 500ft, temp —2, dew point —3, tempo, visibility 2000 m, freezing rain, soft at 300 ft.

11. Metar Praha, 14.00 GMT. Wind 080°, 1 m per second, visibility 5000 m, snow showers, clouds I okta 240 m, 5 oktas 450 m, temperature 0, dew point - 1, QNH 1032, no sig, runway 13 damp up to 100%, braking action good, runway 07 damp up to 100%, braking action good.

12. Metar Bratislava 14.00 GMT. Wind 340°, 3 m per second, visibility 8 km, misu clouds 6 oktas 1200 m, temperature 3, dew point —2, QNH 1030, no sig.

13. Metar Warsaw 14.00 GMT. Wind 110° 3 m per second, visibility 10 km, clouds 7 oktas 690 m, temperature —2, dew point -5, QNH 1035, runway 33, wet up to 100%, braking action good.

14. Bologna Borgo Panigale. 04.50 Z. Wind 050° 11, visibility 4500 m, rain, 8 okus 12000ft, temperature 18, dew point 16.

15. Catania Fontanarossa, 04.50 Z. Wind calm, visibility 8 km, mist, temperature 21, dew point 20, QNH 1009.

16. Palermo Puntaraisi, 04.50 Z. Wind calm, visibility 7 km, mist, temperature 25, dew point 23.
17 05.50 Athenai. Calm, visibility 8 km, mist, sky clear, temperature 24, dew point 19, no sig.
18 05.50 Thessaloniki. Calm, visibility 7 km, mist, sky clear, temperature 22, dew point 20, no sis.
19 05.50 Malta. 310° II knots, visibility 10 km, 1 okta 1200 ft, temperature 24, dew point 20, no sig.
20 05.50 Kerkira. 170° 5 knots, visibility 7 km, mist, 3 oktas 1800 ft, temperature 25, dew point 22, no sig.
21 06.00 Beirut. Calm, visibility 10 km, 3 oktas 2600 ft, temperature 26, dew point 20, QNH 1009, no sig. Break.
22 Cairo missing. Break'
23 05.50 Ben Gurion. 190° 05 knots, visibility 9 km, 4 oktas 2500 ft, temperature 26, dew point 16, no sig. Break.
3.2 EN ROUTE: POSITION REPORTS

3.2.1 En route: position reports (routine)

Key words and phrases
Check that you understand the words and phrases in this list. Look up any new words in an aviation dictionary.

omit, radial
position reports, resume
intercept, VOR

Phraseology practice
Listen and Write   Listen to the controller's instructions about position reports. Identify each instruction on the list below, and write its number in the box. The first one is done for you.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Report passing Alpha.</td>
</tr>
<tr>
<td>B</td>
<td>Next report at Alpha.</td>
</tr>
<tr>
<td>C</td>
<td>Omit position reports until Alpha.</td>
</tr>
<tr>
<td>D</td>
<td>Omit position reports this frequency.</td>
</tr>
<tr>
<td>E</td>
<td>Report intercepting the 210 radial of the Alpha VOR.</td>
</tr>
<tr>
<td>F</td>
<td>Report 15 miles from Alpha DME.</td>
</tr>
<tr>
<td>G</td>
<td>Resume position reporting.</td>
</tr>
<tr>
<td>H</td>
<td>Report intercepting the 120 radial of the Alpha VOR.</td>
</tr>
<tr>
<td>I</td>
<td>Report 5 miles from Alpha DME.</td>
</tr>
<tr>
<td>J</td>
<td>Report passing the Alpha VOR 342 radial.</td>
</tr>
</tbody>
</table>

Check  Check your answers, page 120.

Typical exchange

PILOT                     CONTROLLER

1  control calls
   — callsign
   — new frequency
   — greeting

2  pilot replies
   — readback of frequency
   — callsign
   — greeting

 -(change of frequency)
Phraseology practice 2

Listen  Listen to the dialogue on the tape.
Listen and Repeat  Listen again and repeat the pilot’s words.
Write  Complete the dialogue below by writing in the pilot’s words. Check with the tape if necessary.

1 control calls
   SF153, contact 129.4, goodbye.

2 pilot replies

1 pilot calls

2 control replies  Go ahead, SF153.

3 pilot position report

4 control replies  Roger, SF153, next report at Z.

5 pilot replies

Check  Check your answers, page 120.
**Listen and Speak** Make position reports for the following flights using the data; given below. Listen to the example, then continue in the same way, starting 'vim the example again.

<table>
<thead>
<tr>
<th>No.</th>
<th>Callsign</th>
<th>Flight level</th>
<th>Position</th>
<th>Time</th>
<th>Next reporting point</th>
<th>Estimated time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SF153</td>
<td>310</td>
<td>R</td>
<td>35</td>
<td>Y</td>
<td>+ 10'</td>
</tr>
<tr>
<td>2</td>
<td>AG235</td>
<td>280</td>
<td>S</td>
<td>28</td>
<td>Z</td>
<td>+ 12'</td>
</tr>
<tr>
<td>3</td>
<td>BI196</td>
<td>290</td>
<td>N</td>
<td>43</td>
<td>O</td>
<td>+ 15'</td>
</tr>
<tr>
<td>4</td>
<td>NJ342</td>
<td>250</td>
<td>G</td>
<td>23</td>
<td>H</td>
<td>+ 16'</td>
</tr>
<tr>
<td>5</td>
<td>MO725</td>
<td>230</td>
<td>S</td>
<td>52</td>
<td>U</td>
<td>+ 10'</td>
</tr>
</tbody>
</table>

**Check** Check your answers, page 120.

### 3.2.2 En route: (non-routine)

**Listen and Answer** Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. What is the problem and what action is being taken?

2. What is the problem and what action is being taken?

3. Why does the pilot ask for a change of heading?

**Check** Check your answers, page 121.

**Listen and Write** Listen again and complete the texts below.

1. PIL  MAYDAY, MAYDAY, MAYDAY, Sunair 822, there is ___________ we ___________ an _____________________________ to FL25, ___________ to Overby for ________________________ .

2. PIL  Sunair 506, we have _____________ all______________, ____________ the _____________________________ . Request to _________________________ to Newbridge.

   CTL Roger, Sunair 506, turn ___________ heading 030, ___________ to FL150

   PIL  ___________ left heading 030, ___________ FL330 to level 150, Sunair 506.

3. PIL  Sunair 312, ___________ ______ to avoid ____________.

   CTL Roger, Sunair 312, what will _______ be?

   PIL  Heading 250°, Sunair 312.
PIL  Sunair 312, we're clear of ___________ now.

CTL Roger, Sunair 312, turn left heading 230 __________________________

Check  Check your answers, page 121.

**Your word list**
Write down any words in the dialogues you do not understand or are not sure about. Try to guess the meaning, in English or in your own language and write it down. Then check with a dictionary.
3.2.1 **Listen and Write** (from page 116)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>A</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
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<tr>
<td>9</td>
<td>E</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
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<tr>
<td>3</td>
<td>G</td>
</tr>
<tr>
<td>4</td>
<td>H</td>
</tr>
<tr>
<td>5</td>
<td>I</td>
</tr>
<tr>
<td>6</td>
<td>J</td>
</tr>
</tbody>
</table>

1. **control calls**
   SF153, contact 129.4, goodbye.

2. **pilot replies**
   129.4, SF153, goodbye.

-----------------------------------------------------------------------------

1. **pilot calls**
   SF153, good morning.

2. **control replies**
   Go ahead, SF153.

3. **pilot position report**
   SF153, R at 35, flight level 310, estimating Y at 45.

4. **control replies**
   Roger, SF153, next report at Z.

5. **pilot replies**
   Wilco, SF153.

3.2.1 **Listen and Speak** (from page 118)

1. **CTL**
   Sierra Foxtrot, Romeo at 35, flight level 310, estimating Yankee at 45.

2. **CTL**
   Wilco, Sierra Foxtrot 153.

2. **PIL**
   Alpha Golf 235, Sierra at 28, flight level 280, estimating Zulu at 40.

2. **CTL**
   Wilco, Alpha Golf 235.
3 CTL .................................................................................................................................
PO. Bravo India 196, November at 43, flight level 290, estimating Oscar at 58.
CTL.................................................................................................................................
PIL  Wilco, Bravo India 196.

4 CTL .................................................................................................................................
PIL  November Juliet 342, Golf at 23, flight level 250, estimating Hotel at 39.
CTL.................................................................................................................................
PIL  Wilco, November Juliet 342.

5 CTL.................................................................................................................................
PIL  Mike Oscar 725, Sierra at 52, flight level 230, estimating Uniform at 02.
CTL.................................................................................................................................
PIL  Wilco, Mike Oscar 725.

3.2.2 **Listen and Answer**  (from page 118)

1. What is the problem and what action is being taken? 
   There is depressurisation, and they are making an emergency descent.

2. What is the problem and what action is being taken? 
   They have lost all electrical power except the emergency circuit, so they are diverting to Newbridge.

3. Why does the pilot ask for a change of heading? 
   To avoid a build-up (or CB’s).

3.2.2 **Listen and Write**  (from page 118)

1 PIL  MAYDAY, MAYDAY, MAYDAY, Sunair 822, there is depressurisation, we are making an emergency descent to FL25, heading to Overby for emergency landings.

2 PIL  Sunair 506, we have lost all electrical power, except the emergency circuit. Request to divert immediately to Newbridge.
   CTL Roger, Sunair 506, turn left heading 030, descend to FL150. PIL  Turning left heading 030, leaving FL330, descending to level 150, Sunair 506.

3 PIL  Sunair 312, request 10° heading change right of track to avoid build-up.
   CTL Roger, Sunair 312, what will your heading be?
   PIL  Heading 250°, Sunair 312.
   PIL  Sunair 312, we’re clear of CBs now.
   CTL Roger, Sunair 312, turn left heading 230 to come back on track.
3.3 EN ROUTE: TRAFFIC INFORMATION

3.3.1 En route: traffic Information (routine)

Key words and phrases
Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

- unknown same
- direction
- moving fast
- moving parallel
- -descend —
- negative contact

vectors
resume own navigation
direct
magnetic track
distance
at your 10 o'clock position
opposite direction

Phraseology practice 1

Listen and Write Listen to the items of traffic information on the tape, and look at the diagrams. Identify the diagram which corresponds to each item in the table below.

(Y = the plane receiving the information
X = the unknown traffic)

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
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<tr>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>G</td>
</tr>
</tbody>
</table>

Check Check your answers, page 127.
### Typical exchange

<table>
<thead>
<tr>
<th>PILOT</th>
<th>CONTROLLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 pilot replies</td>
<td>1 control calls</td>
</tr>
<tr>
<td>— callsign</td>
<td>— aircraft callsign</td>
</tr>
<tr>
<td>— 'negative contact'</td>
<td>— traffic position</td>
</tr>
<tr>
<td>— 'request vectors'</td>
<td>— traffic distance</td>
</tr>
<tr>
<td>— traffic direction</td>
<td>— traffic direction</td>
</tr>
</tbody>
</table>

| — readback turn and heading instructions | — callsign |
| 4 pilot replies                          | 3 control replies |
| — turn left/right                        | — turn left/right |
| — heading ___                            | — heading ___ |

| — readback navigation instructions       | 5 control calls |
| 6 pilot replies                          | — aircraft callsign |
| — 'roger'                                | — 'clear of traffic' |
| — 'resume own navigation'                | — 'resume own navigation' |
| — navigation instructions: next en route point, track and distance | — navigation instructions: next en route point, track and distance |
**Phraseology practice 2** Listen

Listen to the recorded dialogue.

**Listen and Repeat** Listen to the same dialogue and repeat the pilot's words. Write Complete the text below by filling in the pilot's words. Check with the tape if necessary.

1. **control calls**
   SF153, unknown traffic, 10 o'clock
   5 miles, crossing left to right.

2. **pilot replies**

3. **control replies**
   Turn left, heading 050.

4. **pilot replies**

5. **control calls**
   SF153, clear of traffic, resume own navigation, direct C, magnetic track 070, distance 27 miles.

6. **pilot replies**

**Check** Check your answers, page 127.

**Listen and Speak** Listen and respond to the traffic information on the tape. Your callsign is SF153.

**Check** Check your answers, page 127.

**Phraseology practice 3**

**Listen** Listen to the recorded dialogue.

**Listen and Repeat** Listen and repeat the pilot's words.

**Write** Mark the position of the 'unknown traffic' on the diagram below.
Listen and Write  Complete the diagrams below.

Check  Check your answers, page 128.

3.3.2 En route: (non-routine)

Listen and Answer  Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. What evasive action did the pilot take, and with what results?

2. What is the problem, and what action is the pilot taking?

3. What is the problem, and what action is the pilot taking?

Check  Check your answers, page 128.

Listen and Write  Listen again and complete the texts below.

1  PIL  Sunair 593, ______  _____ ____________ to avoid , ___________ with

CTL  Do you have any other __________? Did you see the ________, or

___________ 7

PIL  It was a___________ , that's all we know.

CTL  Do you___________ an __________?

PIL _____________ It was a very close thing. ____________ if the__________

are OK.
PIL Sunair 593, _____________ passengers have been __________________________
but there's a doctor _____________ , so we'll continue our _____________ .

CTL Roger, Sunair 593.

2 PEL Sunair 715, we have a __________________________ , request _____________ to
Overby.

CTL Sunair 715, _____________ now, _____________ 280, _____________ to
FL110.

PIL _____________ right 280 _____________ 180 _____________ to FL110,
Sunair 715.

CTL Do you . . . . . . . . . . . . . . . . . . . . . . . . at Overby?

PIL _____________ , Sunair 715.

CTL Roger, will . _____________ .

3 CTL Sunair 177, Winton Control, your company _____________ us you _____________
have a _____________

PIL Do you have any ___________ about ___________ ?

CTL Negative.

PIL _____________ to Newbridge, request _____________
___________ on _____________ , Sunair 177.

Check Check your answers, page 128.

Your word list
Write down any words in the dialogues you do not understand, or are not sure
about. Try to guess the meaning in English or your own language, and write it down.
Then check with a dictionary.
### 3.3.1 Listen and Write (from page 122)

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
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<tr>
<td>4</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
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<tr>
<td>6</td>
<td>E</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
</tr>
</tbody>
</table>

### 3.3.1 Write (from page 124)

1. **control calls**
   - SF153, unknown traffic, 10 o'clock, 5 miles crossing left to right.

2. **pilot replies**
   - SF153, negative contact, request vectors.

3. **control replies**
   - Left turn, heading 050.

4. **pilot replies**
   - SF153, clear of traffic, resume own navigation, direct C, magnetic track 070, distance 27 miles.

5. **control calls**
   - SF153, unknown traffic, 10 o'clock, 5 miles crossing left to right.

6. **pilot replies**
   - Roger, track 070, SF153.

### 3.3.1 Listen and Speak (from page 124)

1. **CIL**
   - SF153, negative contact, request vectors.
   - Left turn heading 050, SF153.
   - Roger, track 070, SF153.

2. **CIL**
   - SF153, negative contact, request vectors.
   - Right turn heading 170, SF153.
   - Roger, track 149, SF153.
3.3.1 Listen, Speak and Write  (from page 125)

1. What evasive action did the pilot take, and with what results?
   He dived and avoided colliding with converging traffic, but six passengers were badly bruised.

2. What is the problem and what action is the pilot taking?
   There is a fuel leak, so they are diverting to Overby.

3. What is the problem and what action is the pilot taking?
   There is a bomb scare on this flight, so they are diverting to Newbridge.

3.3.2 Listen and Answer  (from page 125)

1. What evasive action did the pilot take, and with what results?
   He dived and avoided colliding with converging traffic, but six passengers were badly bruised.

2. What is the problem and what action is the pilot taking?
   There is a fuel leak, so they are diverting to Overby.

3. What is the problem and what action is the pilot taking?
   There is a bomb scare on this flight, so they are diverting to Newbridge.

3.3.2 Listen and Write  (from page 126)

1 PIL Sunair 593, we've just had to dive to avoid colliding with converging traffic.
   CTL Do you have any other details? Did you see the type or the markings?
   PIL It was a white jet, that's all we know.
   CTL Do you wish to file an airmiss report?
   PIL Affirm. It was a very close thing. I'll check if the passengers are OK.
   PIL Sunair 593, six passengers have been badly bruised, but there's a doctor on board, so we'll continue on our route.
   CTL Roger Sunair 593.

2 PIL Sunair 715, we have a serious fuel leak, request divert to Overby.
   CTL Sunair 715, turn right now, heading 280, descend to FL110.
   PIL Turning right 280, leaving level 180, descending to FL110, Sunair 715.
   CTL Do you require emergency assistance at Overby?
   PIL Affirm, Sunair 715.
   CTL Roger, will advise.
CTL- Sunair 177, Winton Control, your company has informed us you may have a bomb on board.
PIL  Do you have any information about the type of bomb?
CTL Negative.
PIL  Diverting immediately to Newbridge, request emergency services on landing, Sunair 177.
3.4 DESCENT

3.4.1 Descent (routine)

Key words and phrases
Check that you understand all the words and phrases in the list below. Look up any new words in an aviation dictionary.

- squawk ident
- affirm
- radar contact
- increase
- leave
- confirm
- rate of descent

Typical exchange

PILOT

(a)

2 pilot replies
   - 'identing'
   - callsign

CONTROLLER

1 control calls
   - aircraft callsign
   - 'squawk idem'

3 control calls
   - aircraft callsign
   - 'radar contact'
   - descent instructions

4 pilot replies
   - leaving flight level
   - 'descending to level'
   - callsign

5 control calls
   - aircraft callsign
   - further descent instructions
   - 'report passing_____'
   - (flight level)

6 pilot replies
   -- descending to flight level_____
   - callsign

(pause)
7 pilot calls
   -- callsign
   -- 'passing flight level
   --'descending'

8 control replies
   -- callsign
   -- 'confirm leaving level''

7 pilot replies
   -- 'affirm'
   -- callsign

(b)

1 control calls
   -- callsign
   -- 'squawk A___'

2 pilot replies
   -- 'squawking__',
   -- callsign

3 control
   -- callsign
   -- descent instructions

4 pilot replies
   -- 'leaving level___
   -- 'descending to level
   -- callsign

5 control calls
   -- aircraft callsign
   -- instruction to increase rate of
descent
   - 'report passing ___'

6 pilot replies
   -- readback. of instructions
   -- callsign

   (pause)

7 pilot calls
   -- callsign
   -- 'passing flight level___'
   -- descending

8 control replies
   -- 'confirm leaving level____'
   -- aircraft callsign

9 pilot replies . .:
   -- 'negative
   -- leaving level
   -- callsign

131
**phraseology practice**

**Listen**  Listen to dialogue (a).

**Listen and Repeat**  Listen again and repeat the pilot's words.

**Write**  Complete the text of dialogue (a) below. Check with the tape if necessary.

(a)

1. **control calls**  
   SF153, squawk

2. **pilot replies**

3. **control calls**  
   SF153, radar contact.  
   Descend to flight level 220.

4. **pilot replies**

5. **control calls**  
   SF153, continue descent to flight level 110, report passing 150.

6. **pilot replies**

7. **pilot calls**

8. **control replies**  
   SF153, confirm leaving level 150.

9. **pilot replies**

**Check**  Check your answers, page 135.
Listen  Listen to dialogue (b).
listen and Repeat  Listen again and repeat the pilot's words. Write  Complete the text below by writing in the pilot's words. Check with the tape if necessary.

(b)

1 control calls  
AG235, squawk A2744.

2 pilot replies

3 control  
AG235, descend now to flight level 210.

4 pilot replies

5 control calls  
AG235, increase rate of descent so as to cross T at FL150, report passing level 180.

6 pilot replies

7 pilot calls

8 control replies  
Confirm leaving FL190, AG235.

9 pilot replies

Check  Check your answers, page 135.
Listen and Speak  Reply to the instructions for the following flights.

<table>
<thead>
<tr>
<th>No.</th>
<th>Callsign</th>
<th>Cruising level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SF153</td>
<td>310</td>
</tr>
<tr>
<td>2</td>
<td>AG235</td>
<td>280</td>
</tr>
<tr>
<td>3</td>
<td>BI196</td>
<td>290</td>
</tr>
<tr>
<td>4</td>
<td>NJ342</td>
<td>250</td>
</tr>
<tr>
<td>5</td>
<td>MO725</td>
<td>230</td>
</tr>
</tbody>
</table>

Check  Check your answers, page 136.
3.4.2 Descent (non-routine)

Listen and Answer  Listen to the dialogues and write down the answers to these questions. There is one question for each dialogue.

1. What is the problem and how does this affect descent?

2. What is the emergency and what are the pilot's intentions?

3. What is the problem?

Check  Check your answers, page 137.

Listen and Write  Listen to the dialogue again and complete the texts below.

1 PIL  Winton Control, Sunair 939, _______________ to descend.
       CTL Roger, Sunair 939, descend to FL190.
       PIL __________ FL320_________ to FL190, Sunair 939.
       (pause)
       PIL Sunair 939, we're having ________________ with the pressurisation,
       CTL Roger, Sunair 939, ________________ to FL170, __________ when reaching.
       PIL Descending to FL170, Sunair 939.

2 PIL  MAYDAY, MAYDAY, MAYDAY, Winton Control, Sunair 662, we have
       ________________ , we are descending to FL30, request
       ________________ at Winton, ___________ , 50 miles West of Winton,
       ________________ 75°.
       CTL Sunair 662, Winton Control, roger Mayday, ________________ , ____________ on
       126.3 ________________ Mayday.
       (pause)
       PIL  Mayday Winton. Sunair 662, fire now_____________________ , ____________ .
       CTL Roger, Sunair 662.
       Mayday all stations ________________

3 PIL  Sunair 779, ________________ __________ due to ________________
       Sunair 779, FL290, heading  110. ____________________ Plaintree VOR this time,
       ____________________ FL100 over RIV ____________________
       next for landing runway 32 at Winton.

Check  Check your answers, page 137.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning in English or in your own language, and write it down. Then check with a dictionary.
CHECK

3.4.1 Write (from pages 132 and 133)

(a)

2 pilot replies
Ideating, SF153.

4 pilot replies
Leaving flight level 310, descending to level 220, SF153.

6 pilot replies
Descending to flight level 110, SF153.

7 pilot calls
SF153, passing flight level 150, descending.

9 pilot replies
Affirm, SF153.

(b)

2 pilot replies
Squawking 2744, AG235.

4 pilot replies
Leaving level 280, descending to level 210, AG235.

6 pilot replies
Roger, descending to T at FL150, AG235.
7 pilot calls
AG235, passing FL180, descending.
9 pilot replies
Negative, leaving FL180, AG235

3.4.1 Listen and Speak (from page 133)

1 CTL .................................................................
PIL Identing, Sierra Foxtrot 153.
CTL .................................................................
PIL Leaving flight level 310, descending to level 220, Sierra Foxtrot 153.
CTL .................................................................
PIL Descending to flight level 110, SF153.
PIL Sierra Foxtrot 153, passing flight level 150, descending.
CTL .................................................................
PIL Affirm, Sierra Foxtrot 153.

2 CTL .................................................................
PIL Squawking 2744, Alpha Golf 235.
CTL .................................................................
PIL Leaving level 280, descending to level 210, Alpha Golf 235.
CTL .................................................................
PIL Roger, descending to Tango at flight level 150, Alpha Golf 235.
PIL Alpha Golf 235, passing flight level 180, descending.
CTL .................................................................
PIL Negative, leaving flight level 180, Alpha Golf 235.

3 CTL .................................................................
PIL Identing, Bravo India 196.
CTL .................................................................
PIL Leaving level 290, descending to level 190, Bravo India 196.
CTL .................................................................
PIL Descending to flight level 90, Bravo India 196.
PIL Bravo India 196, passing level 160.
CTL .................................................................
PIL Affirm, Bravo India 196.

4 CTL .................................................................
PIL Squawking 4526, November Juliet 342.
CTL .................................................................
PIL Leaving level 250, descending to level 130, November Juliet 342.
CTL .................................................................
PIL Roger, descending to cross Sierra at 80, November Juliet 342.
PIL November Juliet, passing level 110.
CTL .................................................................
PIL Negative, leaving flight level 110, November Juliet 342.
3.4.2 **Listen and Answer** (from page 134)

1. **What kind of problem is there and how does this affect descent?**
   There is a pressurisation problem so they have to descend slowly.

2. **What is the emergency and what are the pilot’s intentions?**
   There is a fire in the rear toilets. The pilot intends to make an emergency landing at Winton.

3. **What is the problem?**
   They have a receiver failure.

3.4.2 **Listen and Write** (from page 134)

1. **PIL** Winton Control, Sunair 939, ready to descend.
   **CTL** Roger, Sunair 939, descend to FL190.
   **PIL** Leaving FL310, descending to FL190, Sunair 939.
   **(pause)**
   **PIL** Sunair 939, we're having problems with the pressurisation. we'll have to descend slowly.
   **CTL** Roger, Sunair 939, recleared to FL170, call me back when reaching.
   **PIL** Descending to FL170, Sunair 939.

2. **PIL** MAYDAY MAYDAY MAYDAY, Winton Control, Sunair 662, we have fire in the rear toilets, w-e are descending to FL30, request an emergency landing at Winton, position, 50 miles West of Winton, heading 75°.
   **CTL** Sunair 662, Winton Control, roger Mayday, break.
   **(pause)**
   **PIL** Mayday Winton. Sunair 662, fire now under control, cancel distress.
   **CTL** Roger, Sunair 662.
   **(pause)**
   Mayday all stations distress traffic ended.

3. **PIL** Sunair 779, transmitting blind due to receiver failure.
   Sunair 779, FL290, heading 110. Over Plaintree VOR this time, descending to be at FL100 over RIV intersection, standard arrival procedure next for landing runway 32 at Winton,
3.5 REVIEW OF PART THREE

3.5.1 Flight from Rexbury to Winton (en route)

Listen and Read  Flight plan details:
     Blackrock (BCK) beacon, estimated 48
     Lake (LAK) VOR, estimated 15

     You are flying from Rexbury to Winton, callsign Sunair 367. You are cruising at
     FL270. You are being handed over from Rexbury Control to New County Upper Con-
     trol. After the handover you tune in to the Volmets for the area. You are 55 nm from
     Blackrock, the next reporting point.

Listen and Speak  Follow the instructions on the tape, and reply to the controller.
Check  Check your answers, page 140.

3.5.2 Flight from Dublin to Paris (en route)

Listen and Read  Flight plan details:
     Callsign SF3O9
     reporting points: Wallesey, Telba, Midhurst, Sitet, Etrat. Route maps are on pages
     50-52.

Listen and Speak  Take the pilot's part. Follow the instructions and reply to the
     controllers; SF309 is now climbing to FL330.
Check  Check your answers, page 140.
3.5.1 **Listen and Speak** (from page 138)

PIL New County Upper Control, Sunair 367, good afternoon.

CTL..............................................................................................................................................................

PIL Continue to Blackrock, report reaching, Sunair 367.

This is Winton Volmet. This is Winton Volmet.
Winton airport at 14.30, 280° 10 knots, 8000 metres, 3 oktas 3500 ft, temperature 12,
dew point 11, QNH 1020, no sig.

Overby at 14.30, 240° 12 knots, 10 km or more, 4 oktas 2000 ft, temperature 8, dew
point 6, QNH 1020, no sig.

Newbridge at 14.30, 250° 4 knots, 3000 metres, mist, 3 oktas 500 ft, temperature 6, dew
point 4, QNH 1016, no sig.

CTL..............................................................................................................................................................

PIL Roger, traffic in sight, Sunair 367.

CTL..............................................................................................................................................................

PIL 128.5, Sunair 367, goodbye.

PIL Valley Control, Sunair 367, good afternoon, estimating BCK at 48.

CTL..............................................................................................................................................................

PIL Roger, continue to Blackrock.

PIL Sunair 367, over Blackrock this time, estimating LAK at 15.

CTL..............................................................................................................................................................

PIL Roger.

PIL Sunair 367, request turn right 30° to avoid build-up.

CTL..............................................................................................................................................................

PIL 025°, Sunair 367.

CTL..............................................................................................................................................................

PIL Turning right heading 050, Sunair 367.

PIL Sunair 367, we have passed the build-up, are now back on track.

CTL..............................................................................................................................................................

PIL Proceeding to Lake, Sunair 367.

PIL Over LAK this time, Sunair 367.

CTL..............................................................................................................................................................

PIL To RED, Sunair 367.

3.5.2 **Listen and Speak** (from page 138)

CTL..............................................................................................................................................................

PIL Heading 100, SF309.

CTL..............................................................................................................................................................

PIL Turning right, heading 125.

PIL SF309reaching FL33O.

CTL..............................................................................................................................................................
PIL  Own navigation to Honiley, SF309.

CTL..................................................................................................................................................
PIL  Direct to Midhurst, SF309.

CTL..................................................................................................................................................
PIL  London 133.7, SF309, good day.
PIL  London, SF309, good afternoon.

CTL..................................................................................................................................................
PIL  Maintaining FL330, direct Midhurst, SF309.

CTL..................................................................................................................................................
PIL  London 127.7, SF309.
PIL  London, SF309, good afternoon.

CTL..................................................................................................................................................
PIL  Maintaining FL330, SF309.

CTL..................................................................................................................................................
PIL  Go ahead SF309.

CTL..................................................................................................................................................
PIL  Descending to FL310.

CTL..................................................................................................................................................
PIL  Paris 132.0.
PIL  Paris, SF309, good afternoon.

CTL..................................................................................................................................................
PIL  Maintaining FL310, cleared to Reymy, squawking 0444.
### 3.6 SUPPLEMENTARY VOCABULARY

#### 3.6.1 weather words

**Listen and Write** Listen to the recording and write the weather words you recognise under the correct heading below. For example, rain goes under precipitation.

<table>
<thead>
<tr>
<th>WIND</th>
<th>PRECIPITATION</th>
<th>VISIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SURFACES</th>
<th>CLOUD</th>
<th>STORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Listen and Check** Listen to the categories and words read out on the recording, then check the words you don't know. (You can read the words on page 146). Note that some words fit into more than one category, e.g. CB's fits under both clouds and storms.

Choose from these words to complete the 'weather word tree' below. There is no right or wrong answer here. It is an exercise to help you to remember the words by thinking about them. Try to choose some words that you do not know very well.

sandstorm  wet  CAVOK  drizzle  broken  headwind
CB's  hail  damp  gusts  fog-bound  tornado  pools of water
snow  dispersing  clear air turbulence  black ice  slush
a build-up  (thick/dense) fog  light rain  snow
snow drifts  hailstones  ceiling  turbulence  haze
(in and out of) the tops  crosswind  flooded
freezing rain  a rainbow  storm cells  fog patches
overcast heavy rain water spout
strong wind snow ruts down/up-draught frost
sleet icy patches cirrus closing in
VMC conditions a flash of lightning
3.6.2 Cabin and safety equipment words

Look and Think Look at the diagrams on this page. Do you know the words which correspond to the numbers?

Look, Listen and Repeat Look at the diagrams, listen to the tape and repeat the words.
Look, Listen and Write Look at the diagrams and listen to the tape. Write down the words which correspond to each number, below.

1 .................................. 7 ..................................
2 .................................. 8 ..................................
3 .................................. 9 ..................................
4 .................................. 10 ..................................
5 .................................. 11 ..................................
6 .................................. 12 ..................................

Check Check your answers, page 147.

Look, Listen and Speak Now test yourself. Look at the diagrams only. Do not look at the words. Listen to the tape and say the correct word when you hear the number. Then you will hear the right answer.
**CHECK**

**Listen and Check** (from page 142)

<table>
<thead>
<tr>
<th>WIND</th>
<th>PRECIPITATION</th>
<th>VISIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>calm</td>
<td>rain</td>
<td>CAVOK</td>
</tr>
<tr>
<td>headwind</td>
<td>drizzle</td>
<td>VMC conditions</td>
</tr>
<tr>
<td>tailwind</td>
<td>scattered showers</td>
<td>mist</td>
</tr>
<tr>
<td>crosswind</td>
<td>heavy rain</td>
<td>(thick/dense) fog</td>
</tr>
<tr>
<td>drift</td>
<td>light rain</td>
<td>fog patches</td>
</tr>
<tr>
<td>gusts</td>
<td>sleet</td>
<td>haze</td>
</tr>
<tr>
<td>strong wind</td>
<td>snow</td>
<td>dispersing</td>
</tr>
<tr>
<td>light wind</td>
<td>hail</td>
<td>closing in</td>
</tr>
<tr>
<td>turbulence</td>
<td>hailstones</td>
<td>fog-bound</td>
</tr>
<tr>
<td>clear air turbulence</td>
<td>slush</td>
<td></td>
</tr>
<tr>
<td>severe/moderate turbulence</td>
<td>freezing rain</td>
<td></td>
</tr>
<tr>
<td>windshear</td>
<td>icing</td>
<td></td>
</tr>
<tr>
<td>down/up draught</td>
<td>frost</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a rainbow</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SURFACES</th>
<th>CLOUDS</th>
<th>STORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>wet</td>
<td>broken</td>
<td>sandstorm</td>
</tr>
<tr>
<td>damp</td>
<td>overcast</td>
<td>tornado</td>
</tr>
<tr>
<td>Hooded</td>
<td>CB’s</td>
<td>hurricane</td>
</tr>
<tr>
<td>icy patches</td>
<td>(in and out of) the tops typhoon</td>
<td></td>
</tr>
<tr>
<td>standing water</td>
<td>ceiling</td>
<td>water spout</td>
</tr>
<tr>
<td>pools of water</td>
<td>cirrus</td>
<td>thunder</td>
</tr>
<tr>
<td>snow ruts</td>
<td>a bank of clouds</td>
<td>lightning</td>
</tr>
<tr>
<td>snow banks</td>
<td>storm cells</td>
<td>a flash of lightning</td>
</tr>
<tr>
<td>snow drifts</td>
<td>a build-up</td>
<td>to be struck by lightning</td>
</tr>
<tr>
<td>black ice</td>
<td></td>
<td>CB’s</td>
</tr>
</tbody>
</table>
3.6.1 **Write** (from page 143)

3.6.2 **Look, Listen and Write** (from page 145)

1. the cabin
2. the cockpit
3. a door
4. an aisle (or alley)
5. a row of seats
6. toilets
7. a galley
8. a jump seat
9. an oxygen mask
10. a life jacket (or life vest)
11. an escape slide (or chute)
12. a seat-belt
Part Four
Approach to parking
4.1. ARRIVAL (ATIS)

**Key words and phrases**
Check that you understand all the words and phrases in this list. Look up any new words in an aviation dictionary.

- fog
- vertical visibility
- minima
- QFE
- repairs
- damp
- flock of birds
- north/south/east/west
- Showers
- radar vectors
- instrument approach
- unserviceable (US)
- ILS (Instrument Landing System)
- turn-off
- hectopascal

**Typical ATIS recording**
Look at page 4 for a description of the items in these recordings.

**Phraseology practice**

**Listen and Write** Listen to the following ATIS recordings and make notes for each one in the table below. The first one is done for you.

<table>
<thead>
<tr>
<th></th>
<th>Winton</th>
<th>07, TL50, 330° 16 kts, 3000 m, 6/8 1000, 12 10, 1002</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Rexbury</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Newbridge</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Overby</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lambek</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Frankfurt</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Heathrow</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Hamburg</td>
<td></td>
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<tr>
<td>9</td>
<td>Schiphol</td>
<td></td>
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<tr>
<td>10</td>
<td>Kastrup</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Kastrup</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Heathrow</td>
<td></td>
</tr>
</tbody>
</table>

**Check** Check your notes using the texts on page 154
CHECK

Listen and Write (from page 152)

1 This is Winton arrival information Charlie, recorded at 08.15. ILS approach landing runway 07, runway condition wet, braking action good, transition level 50, wind 330° 16 knots, visibility 3000 metres, present weather: continuous rain, 6 oktas 1000 feet, temperature 12, dew point 10, QNH 1002. This was information Charlie.

2 This is Rexbury arrival information Uniform, at 17.30 Zulu time. ILS approach landing runway 29, transition level 45, wind calm, visibility 220 metres, present weather: fog, vertical visibility 45 metres, check your minima, temperature 5, dew point 5, QNH 1020. Taxiway Yankee closed for repairs. This was information Uniform.

3 This is Newbridge arrival information Mike at 15.30. ILS approach landing runway 15 Left, runway condition damp, braking action good, transition level 55, large flock of birds at 1500 feet moving West, wind 225° 9 knots, visibility more than 10 km, present weather: 3 oktas 800 feet, temperature 13, dew point 11, QNH 1014. This was information Mike.

4 This is Overby information India at 14.00 hours. ILS approach landing runway 33, take-off runway 33, transition level 35, wind 165° 21 knots, visibility 10 km or more, present weather: rain showers, temperature 6, dew point 3,*QNH 1006. This was information India.

5 ... 20. ILS approach runway 21 in use, runway braking action good, transition level 45. Met report: 210° 24 knots, visibility 2000 m in mist, 2 oktas 200 ft, 7 oktas 300 ft, temperature —2, dew point —3, QNH 1029, temporarily freezing rain, 7 oktas 200 feet, Landvetter, information E.

6 This is Frankfurt information M, observation time 10.20. Expect radar vectors for instrument approach, runway in use 07L and 07R. Attention ILS runway 07L unserviceable. Transition level 60. Met report: wind variable 3 knots, visibility 9 km, clouds 1 okta 2900 ft, temperature 5, dew point -2, QNH 1034, hectopascal 30.54 inches, no sig. Information M, out.

7 This is Heathrow arrival information K, 21.15 hours weather: wind 240° 07 knots, visibility 8 kilometres in haze, temperature + 17, dew point +10, QNH 1018 millibars, 28R single runway operations, no turn-off, available block 14. Ockam VOR US. Report aircraft type and information K received on first contact with Heathrow Approach.

8 This is Hamburg information Mike, time 10.50. Expect radar vectors for an ILS approach runway 15, take-off runway 23, transition level 60. Additional information: extensive bird activity across the Hamburg area, direction West-East, estimated altitude 3500 ft, wind 200°, 6 knots, visibility more than 10km, cloud 7 okus 2600 ft, temp 1, dew point —4, QNH 1036, and no sig. Information M, out.

9 Schiphol Arrival information Charlie. Main landing runway 27, 270° IS knots, visibility 10 kilometres, 1 okta 1800 feet, temp 6, dew point 3, QNH 1001 mbs, transition level 50, no sig.
This is Kastrup arrival information Bravo. Runway in use for landing O4L, met report 13.50. 070° 8 knots, visibility 20 kms, 1 okta, cumuo nimbus 4000 ft, temp 28. dew point 17, QNH 1012, no sig. Transition level 60. This was information Bravo.

This is Kastrup arrival information Sierra. Runway in use for landing 04L. Met report 09.20. 060° 9 knots, visibility 15 kilometres, 2 oktas 9000 ft, temp 24, dew point 18, QNH 1013, no sig. Transition level 50. This was information Sierra.

This is Heathrow arrival information E, 18.15 hours weather: 200° 09 knots, CAVOK, temperature +21, dew point +09, QNH 1017 millibars, landing runway 28R. Pilots are reminded that there is no turn-off from runway 28R at block 14. Report aircraft type and information E received on first contact with Heathrow Approach.
4.2 APPROACH

**Key words and phrases**
Check that you understand all the words in the list below. Look up any new words in an aviation dictionary.

- reduce speed
- delay
- no delay expected
- holding pattern
- enter
- delay not
- determined
- snow removal

**Typical exchange**

**PILOT**

(a) 1 **pilot calls**

- name of ground station
- callsign
- greeting

**CONTROLLER**

2 **control replies**

--aircraft callsign
--name of ground station
--‘go ahead’

3 **pilot replies**

- callsign
- flight level
- information received

4 **control replies**

- callsign
- squawk number
- reporting point
- speed reduction instruction

5 **pilot replies**

- 'squawking____)(number)’
- ‘reducing ___knots’
- callsign

6 **control**

- callsign
- approach clearance
- runway number
- 'no delay expected'

7 **pilot replies**

- readback approach clearance
- --- callsign
(b) 1 pilot calls

--- name of ground station
--- greeting
--- callsign

2 control replies
— aircraft callsign
— name of ground station
— 'go ahead'

3 pilot replies
— callsign
— flight level
— ‘descending to ___ (flight level)’
— information received

4 control replies
— descent instructions
— hold instructions
— ‘expect approach time ___’

5 pilot replies
— ‘descending to ______’,
— readback hold instructions
— ‘expected approach time ____’
— callsign

NOTES
— In (a) pilot call 1, the greeting should be at the end. However, in practice it often comes between name of ground station and callsign, as in (b) 1.
— In (b) control reply 4, the callsign is not used, as this is part of a dialogue, and contact is clearly established (see notes on Use of Callsigns in 2.4.1, Climb).
**Phraseology practice**

*Listen* Listen to dialogue (a) en the tape.

*Listen and Repeat* Listen and repeat the pilot's words.

*Write* Complete the text by filling in the pilot's words (flight details below). Check with the recording if necessary.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Flight level</th>
<th>ATIS information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF153</td>
<td>50</td>
<td>M</td>
</tr>
</tbody>
</table>

(a) 1 pilot calls
Orly Approach, SF153,

2 control replies
SF153, Orly Approach, go ahead.

3 pilot replies

4 control replies
SF153, squawk A4263, report MEL, reduce speed to 250 knots.

5 pilot replies

6 control
SF153, cleared "ILS approach, runway 07, no delay expected.

7 pilot replies

**Check** Check your answers, page 162
Listen Listen to dialogue \((b)\) on the tape. 
Listen and Repeat Listen again and repeat the pilot's words.
Write Complete the text by filling in the pilot's words (flight details below). Check with the recording if necessary.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Flight level</th>
<th>ATIS information</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG235</td>
<td>150-0</td>
<td>K</td>
</tr>
</tbody>
</table>

\((b)\) 1 pilot calls

2 control replies
AG235, Orly Approach, go ahead.

3 pilot replies

4 control replies
Descend to FL60, on reaching MEL, hold, expect approach time at 45.

5 pilot replies

Check Check your answers, page 162.

Listen and Speak Listen to the tape. Using the flight details below, call Approach Control.

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Flight level</th>
<th>ATIS information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SFI53</td>
<td>-50</td>
<td>M</td>
</tr>
<tr>
<td>2 AG235</td>
<td>150-80</td>
<td>K</td>
</tr>
<tr>
<td>3 BI196</td>
<td>-90</td>
<td>L</td>
</tr>
<tr>
<td>NJ342</td>
<td>130-80</td>
<td>P</td>
</tr>
<tr>
<td>MO725</td>
<td>-90</td>
<td>T</td>
</tr>
</tbody>
</table>

Check Check your answers, page 162
4.2.2 Approach (non-routine)

Listen and Answer Listen to the dialogues and write down the answers to these questions. There are four questions for dialogue 1.

1 (a) What is the problem?
_____________________________________________________________________________

(b) What does the pilot do first?
_____________________________________________________________________________

(c) Then what does he do?
_____________________________________________________________________________

(d) What can the Tower controller see?
_____________________________________________________________________________

2. Why did they overshoot?
_____________________________________________________________________________

3. What problem does Sunair 572 have?
_____________________________________________________________________________

Check Check your answers, page 163.

Listen and Write Listen to the following dialogues and complete the texts below.

1 PIL SF662, Orly Tower, our __________________________ is ____________.

CTL SF662, what are ____________?

PIL Request proceed to ____________ in order to ____________ complete check.

CTL Roger, climb 2000 ft and turn left heading 350 to MEL VOR.

PIL ____________ to 2000 ft ____________ left heading 350 to MEL.

(pause)

PIL SF662, ____________ MEL 2000 ft, landing gear ____________ but ____________.

CTL Roger, make a low pass at 200 ft heading 200, ____________ of Tower.

PIL At 200 feet, heading 200, North of Tower.

(pause)

CTL SF662 your landing gear ________________

PIL SF662, ________________ and we intend to land.
2 PEL Sunair 594,_____________

CTL Sunair 594, you're number 1 to land_________________________at 600 feet
2 miles final, runway 07.

PIL Number 1 to land, Sunair 594.
(pause)
PIL Sunair 594,_____________

CTL Sunair 594,_____________when____________1000 ft, run right to Redhill
VOR.

3 PIL Sunair 572,________________________10°. Request____________
____________to runway 26 which is the____________.

CTL Roger Sunair 572,_________________________. over RIV VOR while we sort
out the traffic,____________when ready.

PIL Thank you Winton, request____________for landing, Sunair 572.

Check Check your answers, page164.

Your word list
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the
meaning, in English or in your own language, and write it down. Then check with a dictionary.
4.2.1 Write (from page 158)

(a) 1 pilot calls
Orly Approach, SF153, good afternoon.

2 control replies
SF153, Orly Approach, go ahead.

3 pilot replies
SF153, reaching FL50, information M received.

4 control replies
SF153, squawk A4263, report MEL, reduce speed to 250 knots

5 pilot replies
Squawking 4263, reducing to 250 knots, SF153

6 control
SF153, cleared ILS approach, runway 07, no delay expected.

7 pilot replies
Cleared ILS 07, SF153

4.2.1 Write (from page 159)

(b) 1 pilot calls
Orly Approach, bonjour, AG235

2 control replies
AG235, Orly Approach, go ahead

3 pilot replies
AG235, FL150, descending to FL80, information K received

4 control replies
Descend to FL60, on reaching MEL, hold, expect approach time at 45.

5 pilot replies
Descending to FL60, at MEL enter the holding pattern, expected approach time 45, AG235.

4.2.1 Listen and Speak (from page 159)

1 PIL Orly Approach, Sierra Foxtrot 153, good afternoon.
   CTL ............................................................
   PIL Sierra Foxtrot 153, reaching flight level 50, information Mike received.
   CTL ............................................................
   PIL Squawking 4263, reducing to 250 knots, Sierra Foxtrot 153.
   CTL ............................................................
   PIL Cleared ILS 07, Sierra Foxtrot 153.
2 PIL Orly Approach, bonjour, Alpha Golf 235.
   CTL ..............................................................
   PIL Alpha Golf 235, flight level 150, descending to flight level 80, information Kilo received.
   CTL ..............................................................
   PIL Descending to flight level 60, at Mike Echo Lima enter the holding pattern, expected approach time 45, Alpha Golf 235.

3 PIL Orly Approach, Bravo India 196, good morning.
   CTL ..............................................................
   PIL Bravo India 196, reaching flight level 90, information Lima received.
   CTL ..............................................................
   PIL Negative, reaching level 90, Bravo India 196.
   CTL ..............................................................
   PIL Squawking 3127, desending level 70, reducing 200 knots, cleared Mike Echo Lima, report reaching. Bravo India 196.
   CTL ..............................................................
   PIL Cleared ILS approach runway 26, Bravo India 196.

4 PIL Orly Approach, November Juliet 342, good afternoon.
   CTL ..............................................................
   PIL November Juliet 342, flight level 130, descending to level 80, information Papa received.
   CTL ..............................................................
   PIL Affirm, November Juliet 342.
   CTL ..............................................................
   PIL Descending to flight level 50, at Mike Echo Lima, enter the holding pattern, November Juliet 342.

5 PIL Orly Approach, Mike Oscar 725, good afternoon.
   CTL ..............................................................
   PIL Mike Oscar 725, reaching flight level 90, information Tango received.
   CTL ..............................................................
   PIL Squawking idem, descending to level 60, reducing to 210 knots, will report Mike Echo Lima on reaching, Mike Oscar 725.
   CTL ..............................................................
   PIL Cleared ILS 07, Mike Oscar 725.

4.2.2 Listen and Answer (from page 160)

(a) What is the problem?
The left main landing gear is jammed.
(b) What does the pilot do first?
He carries out a complete check while in a holding pattern.
(c) Then what does he do?
He makes a low pass near the Tower.
(d) What can the Tower controller see?
He can see that the landing gear seems to be fully extended.
2. Why did they overshoot?
Because of wind shear on the approach.
3. What problem does Sunair 572 have?
They cannot extend the flaps more than 10°.
4.2.2 Listen and Write (from page 161)

1  PIL Sierra Foxtrot 662, Orly Tower, our left main landing gear is jammed.  
CTL Sierra Foxtrot 662, what are your intentions?  
PIL. Request proceed to holding area in order to carry out complete check.  
CTL Roger, climb 2000 ft and turn left heading 350 to Mike Echo Lima VOR.  
PIL Climbing to 2000 ft, turning left heading 350 to Mike Echo Lima.  
(pause)  
PIL Sierra Foxtrot 662, over Mike Echo Lima 2000 ft, landing gear down but maybe not locked. We intend to make a low pass near the Tower to have the undercarriage checked.  
CTL Roger, make a low pass at 200 ft heading 200, North of Tower.  
PIL At 200 ft, heading 200, North of Tower.  
(pause)  
CTL SF662, your landing gear seems to be completely extended.  
PIL SF662, request emergency services and we intend to land.

2  PIL Sunair 594, outer marker.  
CTL Sunair 594, you're number 1 to land. Caution wind shear reported at 600 feet 2 miles final, runway 07. PIL Number 1 to land, Sunair 594.  
(pause)  
PIL Sunair 594, going around.  
CTL Sunair 594, standard procedure, when passing 1000 ft, turn right to Redhill VOR.

3  PIL Sunair 572, unable to extend flaps beyond 10°. Request high speed flat approach to runway 26 which is the longest available.  
CTL Roger Sunair 572, proceed to holding pattern over RIV VOR while we sort out the traffic, call you back when ready.  
PIL Thank you Winton, request emergency services for landing, Sunair 572.
4.3 FINAL APPROACH AND LANDING

4.3.1 Final approach and landing (routine)

Key words and phrases
Check that you understand the words and phrases below. Look up any new words in an aviation dictionary.

- estimate...
- tower
- straight in approach
- outer marker
- established

Typical exchange

PILOT

1 pilot calls
— name of ground station
— callsign

2 control replies
— aircraft callsign
— name of ground station

3 pilot replies
— callsign
— flight level
— 'Estimating____(next reporting point)____(time)' 
— information received

4 control replies
— aircraft callsign
— speed reduction instructions
— clearance to beacon

5 pilot replies
— readback clearance
— 'reducing to____knots'
— callsign

5 control
— aircraft callsign
— 'expect____(type of approach)'
— runway number
— QNH
— 'report established'
7 pilot replies
— runway number
- - Q N H
— callsign

(pause)

8 pilot calls
— callsign
— 'established'
— 'runway___in sight'

control replies
— aircraft callsign
— ‘number 1’
— 'contact Tower___(frequency)’

10 pilot replies
— readback frequency
— callsign

11 pilot calls
— name of ground station
— callsign

12 control replies
— callsign
— 'report outer marker'

13 pilot replies
— callsign

(pause)

14 pilot calls
— callsign
— 'outer marker'

control replies
— aircraft callsign
— landing clearance
--- wind direction and strength

16 pilot replies
— readback landing clearance
--- callsign

NOTE
— In pilot reply 16, ICAO and CAA use 'Cleared to land'; DGAC uses 'Landing'.
**Phraseology practice**

**Listen** Listen to the dialogue on the tape.

**Listen and Repeat** Listen and repeat the pilot's words.

**Write** Complete the text of the dialogue below, using the flight details given. Check with the tape if necessary.

**Flight details:**
callsign SF153, flight level 50, reporting point estimation RED 32, ATIS information M.

1 **pilot calls**

2 **control replies**
SF153, Winton Approach.

3 **pilot replies**

4 **control replies**
SF153, reduce speed to 250 knots, cleared RED.

5 **pilot replies**

6 **control**
SF153, expect straight in ILS approach runway 07, QNH 1005, report established.

7 **pilot replies**

8 **pilot calls**

9 **control replies**
SF153, number 1, contact Tower 118.1

10 **pilot replies**

change of frequency

change of frequency
Listen and Speak Take the pilot's role in the following three recorded approach sequences. Use the flight details below.

### Callsign | Flight Level | Estimated time at RED | ATIS
--- | --- | --- | ---
1 SF153 | 50 | 32 | M
2 AG235 | 150 | 16 | K
3 BI196 | 90 | 54 | O

Check Check your answers, page 171.

### 4.3.2 Final approach and landing (non-routine)

**Listen and Answer** Listen to the dialogues and write down answers to these questions. There are two questions for each dialogue.

1(a) Why must Sunair go around?

(b) What might cause problems on runway 12?

2(a) Why can't Sunair 350 vacate the runway?
(b) What do they ask the controller to do?

3(a) Why must Sunair go around?

(b) Why does the pilot decide to divert to Overby?

Check Check your answers, page 173.

Listen and Write Listen to the dialogues again and complete the texts below.

1 PIL Winton Tower, Sunair 323,_________________________, good morning.

   CTL Sunair 323, good morning, you are_________________________, report short
   final.

   PIL Number 2 to land, Sunair 323.

   (pause)

   PIL Sunair 323,__________.

   CTL Sunair 323, the aircraft__________________________to ____________ the
   runway, go around.

   PIL__________, Sunair 323.

   (pause)

   PIL Approach, Sunair 323.

   CTL Sunair 323,__________________________, proceed to Redhill____________
   ____________, runway 07 is____________by a_________________________.

   PIL Roger, Sunair 323, ____________to runway 12?

   CTL Standby one, I'll call you back.

   CTL Sunair 323, can you__________a__________of 18 knots__________
   to 25? PIL Affirm, Sunair 323.

2 CTL Sunair 350, cleared to land, wind 320° 12 knots.

   PIL Cleared to land, Sunair 350.

   (pause)

   PIL Winton Tower, Sunair 350, we__________________________and have at least
   2__________________________We are________________________, please
advise ___________ and we request ___________ and buses to take the passengers ___________.

3 PIL Winton Tower, Sunair 697, _____________.

CTL Sunair 697, number 1 to land, _____________.

(pause) CTL Sunair 697, go around, _____________, there's a _________________.

PIL ____________. Confirm the standard procedure, Sunair 697.

CTL Climb to 3000 ft ________________ and contact Approach on 121.3.

PIL Climbing to 3000 ft, and Approach on 121.3.

PIL Winton Approach, Sunair 697.

CTL Sunair 697, proceed to ________________ Redhill.

PIL ____________, we ____________ longer than five minutes, do you know ________________?

CTL Delay is ________________ for the moment — there seems to be a problem with the _________________.

PIL Request ____________ to Overby, Sunair 697.

Check Check your answers, page 173.

Your word list
Wine down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning, in English or in your own language, and write it down. Then check with a dictionary.
CHECK

4.3.1 Write (from page 167)

1 pilot calls
Winton Approach, SF153.

2 control replies
SF153, Winton Approach.

3 pilot replies
SF153, FL50, estimating RED 32, information M.

4 control replies
SF153, reduce speed to 250 knots, cleared RED.

5 pilot replies
Cleared RED, reducing to 250 knots, SF153.

6 control replies
SF153, expect straight-in ILS approach, runway 07, QMH 1005, report established.

7 pilot replies
Runway 07, QNH 1005, SF153

8 pilot calls
SF153, established, runway 07 in sight

9 control replies
SF153, number 1. contact Tower 118.1

10 pilot replies
118.1, SF153

11 pilot calls
Winton Tower, SF153

12 control replies
SF153, report outer marker

13 pilot replies
SF153.

14 pilot calls
SF153, outer marker

15 control replies
SF153, cleared to land, wind 330°, 10 knots.

16 pilot replies
Cleared to land, SF153
Listen and Speak (from page 168)

1  PIL Winton Approach, Sierra Foxtrot 153.
   CTL ..............................................................
   PIL Sierra Foxtrot 153, flight level 50, estimating Romeo Echo Delta 32, information Mike.
   CTL ..............................................................
   PIL Cleared Romeo Echo Delta, reducing to 250 knots, Sierra Foxtrot 153.
   CTL ..............................................................
   PIL Runway 07, QNH 1005, Sierra Foxtrot 153.
   PIL Sierra Foxtrot 153 established, runway 07 in sight.
   CTL ..............................................................
   PIL 118.1, Sierra Foxtrot 153.
   PIL Winton Tower, Sierra Foxtrot 153.
   PIL ..............................................................
   PIL Sierra Foxtrot 153.
   PIL Sierra Foxtrot 153, outer marker.
   CTL ..............................................................
   PIL Cleared to land Sierra Foxtrot 153.

2  PIL Winton Approach, Alpha Golf 235.
   CTL ..............................................................
   PIL Alpha Golf 235, leaving flight level 150, descending flight level 80, estimating Romeo Echo Delta 16, information Kilo.
   CTL ..............................................................
   PIL Cleared Romeo Echo Delta, descending flight level 60, Alpha Golf 235.
   CTL ..............................................................
   PIL Squawking Alpha 4263, runway 07, Alpha Golf 235. PIL Alpha Golf 235 established, runway 07 in sight.
   CTL ..............................................................
   PIL 118.1, Alpha Golf 235.
   PIL Winton Tower, Alpha Golf 235.
   CTL ..............................................................
   PIL Alpha Golf 235.
   PIL Alpha Golf 235, outer marker.
   CTL ..............................................................
   PIL Cleared to land Alpha Golf 235.

3  PIL Winton Approach, Bravo India 196.
   CTL ..............................................................
   PIL Bravo India 196, flight level 90, estimating Romeo Echo Delta at 54, information Oscar.
   CTL ..............................................................
   PIL Leaving flight level 90, descending to 4000 feet. Bravo India 196.
   CTL ..............................................................
   PIL Runway 07, QNH 1012, Bravo India 196.
   PIL Bravo India 196, established ILS runway 07.
   CTL ..............................................................
   PIL 118.1, Bravo India 196.
   PIL Winton Tower, Bravo India 196.
   CTL ..............................................................
4.3.2 **Listen and Answer** (from page 168)

1 (a) Why must Sunair go around?
   The aircraft in front was unable to vacate the runway.
(b) What might cause problems on runway 12?
   There is a strong crosswind.

2(a) Why can't Sunair 350 vacate the runway?
   They aquaplaned and have at least 2 tyres blown out on main gear.
(b) What do they ask the controller to do?
   Advise company maintenance and arrange for passenger steps and buses.

3(a) Why must Sunair go around? The runway lights have failed.
(b) Why does the pilot decide to divert to Overby? They are running short of fuel.

4.3.2 **Listen and Write** (from page 169)

1 PIL Winton Tower, Sunair 323, over outer marker, good morning.
   CTL Sunair 323, good morning, you are number 2 for landing, report short final.
   PIL Number 2 to land, Sunair 323.
   (pause)
   PIL Sunair 323, short final.
   CTL Sunair 323, the aircraft in front of you is unable to vacate the runway, go around.
   PIL Going around, Sunair 323.
   (pause)
   PIL Approach, Sunair 323.
   CTL Sunair 323, climb to 4000 ft, proceed to Redhill holding pattern, runway 07 is
   blocked by a crashed aircraft.
   PIL Roger, Sunair 323, may we proceed to runway 12?
   CTL Standby one I’ll call you back.
   CTL Sunair 323, can you accept a crosswind of 18 knots gusting to 25?
   PIL Affirm, Sunair 323.

2 CTL Sunair 350, cleared to land, wind 320° 12 knots.
   PIL Cleared to land, Sunair 350.
   (pause)
   PIL Winton Tower, Sunair 350, we aquaplaned after touch-down and have at least 2 tyres
   blown out on right main gear. We are unable to vacate the runway, please advise company
   maintenance and we request passenger steps and buses to take the passengers to the terminal.

3 PIL Winton Tower, Sunair 697, long final.
   CTL Sunair 697, number 1 to land, wind calm.
   (pause)
   CTL Sunair 697, go around, standard procedure, there's a runway lighting failure.
   PIL Going around. Confirm the standard procedure, Sunair 697.
   CTL Climb to 3000 feet on runway heading and contact Approach on 121.3.
PIL Climbing to 3000 ft, and Approach on 121.3.
PIL Winten Approach, Sunair 697.
CTL Sunair 697, proceed to holding area over Redhill.
PIL We're running low on fuel, we cannot hold longer than five minutes, do you know how long the delay will be?
CTL Delay is undetermined for the moment — there seems to be a problem with the generators.
PIL Request divert to Overby, Sunair 697.
4.4 AFTER LANDING

4.4.1 After landing (routine)

Key words and phrases
Check that you understand the following words and phrases. Look up any new words in an aviation dictionary.

vacated
inner/outer taxiway
turn-off

Typical exchange

PILOT

1 control calls
— callsign
— taxi instruction
— frequency change

2 pilot replies
— readback of frequency
— callsign

3 pilot calls
— name of ground station
— callsign
— 'runway vacated'

4 control replies
— callsign
— taxi instructions
— parking stand number

5 pilot replies
— readback of taxi instructions
— stand number
— callsign

CONTROLLER
**Phraseology practice**

**Listen** Listen to the recorded dialogue.

**Listen and Repeat** Listen again and repeat the pilot's words.

**Write** Complete the text below by writing in the pilot's words. Check with the tape if necessary.

1 *control calls*
SF153, take the first right and contact Ground on 121.9.

2 *pilot replies*

3 *pilot calls*

4 *control replies*
SF153, take the second left, inner taxi way, to stand D7.

5 *pilot replies*

**Check** Check your answers, page 178.

**Listen and Speak**: Reply to the taxi instructions for the following flights in a similar way. Listen to the example first. Then continue in the same way, starting with the example again.

No Callsign
1 SF153
2 AG235
3 BI196
4 NJ342
5 MO725

**Check** Check your answers, page 178.
4.4.2 After landing (non-routine)

**Listen and Answer** Listen to the dialogues and write down the answers to these questions.

1. Why does Sunair have to hold on the taxiway?
   
2. Why does Sunair need a tug?
   
**Check** Check your answers, page 179.

**Listen and Write** Listen to the dialogues again and complete the texts below.

1. CTL Sunair 229, take the_________________________, then________________________
   
PIL Sunair 229,________________
   
   CTL Sunair 229,____________________ a 727 ___________________________ and is _______________ the taxiway. You'll have to wait ___________________ beyond the next______________
   
PIL Roger,________________________, Sunair 229.

2. CTL Sunair 223, take the____________left and contact Ground on 121.7.

PIL 121.7, Sunair 223.

PIL Winton Ground, Sunair 223, good morning. We seem to have had__________
   
   __________________________ on Request ___","___________________.

   CTL Roger, Sunair 223, can you________________________ 50 yards or so ____________ the next intersection?

   PIL Affirm, I think we can____________ that slowly.

   CTL Thank you Sunair 223, we'll ___________ as soon as possible.

**Check** Check your answers, page 179.

**Your word list**
Write down any words in the dialogues you do not understand or are not sure about. Try to guess the meaning, in English or in your own language, and write it down. Then check with a dictionary.
4.4.1 Write (from page 176)

1 control calls
SFI53, take the first right and contact Ground on 121.9

2 pilot replies
121.9, SF153

3 pilot calls
Winton Ground, SF153, runway vacated

4 control replies
SF153, take the second left, inner taxiway, to stand D7.

5 pilot replies
Second left, inner taxiway, stand D7, SF153

4.4.1 Listen and Speak (from page 176)

1 CTL.......................................................... PIL 121.9, Sierra Foxtrot 153.
PIL Winton Ground, Sierra Foxtrot 153, runway vacated.
CTL ..........................................................
PIL Second left, inner taxiway, stand Delta 7, Sierra Foxtrot 153.

2 CTL..........................................................
PIL 121.6, Alpha Golf 235.
PIL Winton Ground, Alpha Golf 235, runway vacated.
CTL ..........................................................
PIL Taxiway Bravo, stand Charlie 10, Alpha Golf 235.

3 CTL..........................................................
PIL 121.8, Bravo India 196.
PIL Winton Ground, Bravo India 196, runway vacated.
CTL ..........................................................
PIL Turn right, outer taxiway, gate 39, Bravo India 196.

4 CTL..........................................................
PIL 121.6, November Juliet 342.
PIL Winton Ground, November Juliet 342, runway vacated.
CTL ..........................................................
PIL Taxiway Bravo, stand 12, November Juliet 342.

5 CTL..........................................................
PIL 121.6, Mike Oscar 725.
PIL Winton Ground, Mike Oscar 725, runway vacated.
CTL ..........................................................
PIL Straight ahead, first right, taxiway Bravo, stand 28, Mike Oscar 725.
4.4.2 Listen and Answer (from page 176)

1. Why does Sunair have to hold on the taxi way?
   A 727 has taken a wrong turning and is blocking the taxiway.

2. Why does Sunair need a tug?
   They have had a tyre blow out on the nose gear.

4.4.2 Listen and Write (from page 177)

1  CTL Sunair 229, take the first convenient turn-off, then turn right into taxiway Bravo. PIL Sunair 229, runway vacated.
   
   CTL Sunair 229, stop taxi, a 727 has taken a wrong turning and is blocking the taxiway. You'll have to wait until a tug pushes him back beyond the next intersection.
   
   PIL Roger, holding, Sunair 229.

2  CTL Sunair 223, take the second left and contact Ground on 121.7. PIL 121.7, Sunair 223.
   
   PIL Winton Ground, Sunair 223, good morning. We seem to have had a nose gear tyre blow out on landing. Request a tug to tow us to the apron.
   
   CTL Roger, Sunair 223, can you move forward under your own power, 50 yards or so until you're past the next intersection?
   
   PIL Affirm, I think we can manage that, slowly.
   
   CTL Thank you Sunair 223, we'll get a rug out to you as soon as possible.
4.5 REVIEW OF PART FOUR

4.5.1 Flight from Rexbury to Winton (approach and landing)

Listen and Read You are now in contact with Valley Control, cruising at FL270 and preparing for descent. You expect to change to Meadow Control soon. The next reporting point is RED (Redhill) VOR. For further details (Winton radio frequencies) turn to page 49.

Listen and Speak You are ready to begin your descent towards Winton. Listen to the recording, follow the instructions and reply to the controller. The recording begins with Winton ATIS.

Check Check your answers, page 182.

4.5.2 Flight from Dublin to Paris (descent and landing)

Listen and Read Flight plan details:
Callsign SF309. (Note that for historical reasons the callsign letters Sylvia Foxtrot are sometimes pronounced as Safa.) Look again at the maps on pages 50—52.

Listen and Speak Take the pilot's pan. Follow the instructions and reply to the controller. SF309 is cruising at FL310 and preparing for descent. The recording begins with Paris Orly Arrival ATIS.

Check Check your answers, page 182.
4.5.1 Listen and Speak (from page 180)

ATIS This is Winton information Lima recorded at 15.30 Zulu time. Runway for landing 25, for take-off 30, transition level 50, surface wind 280° 10 knots visibility 8000 metres, 3 oktas strato-cumulus at 3500 ft, temp 12, dew point 11, QNH 1020. On initial contact report information Lima received.

PIL Sunair 367, ready for descent.

CTL..............................................................
PIL Descending FL190, Meadow Control 128.5, goodbye.
PIL Meadow Control, Sunair 367, good afternoon.
CTL..............................................................
PIL Descending FL120, RED direct, Sunair 367.

CTL
PIL Winton Approach on 121.3, Sunair 367, goodbye.
PIL Winton Approach, Sunair 367, good afternoon.
CTL..............................................................
PIL To intercept the Redhill VOR 070 radial and descending to FL60, expecting ILS approach runway 25, Sunair 367.
PIL Sunair 367, reaching FL70, descending to 60.

CTL
PIL Winton Radar on 121.1, Sunair 367, goodbye.
PIL Winton Radar, Sunair 367, good afternoon.
CTL..............................................................
PIL Descending to 3000 ft, QNH 1020, turning right heading 160, Sunair 367.

CTL..............................................................
PIL Descending to 2000 ft, turning right heading 230, Sunair 367.
PIL Sunair 367, established on the glide slope.

CTL..............................................................
PIL Tower 118.1, Sunair 367, goodbye.
PIL Tower, Sunair 367, good afternoon.

CTL..............................................................
PIL Number 2 to land, Sunair 367.
PIL Sunair 367, outer marker.
CTL..............................................................
PIL Cleared to land, Sunair 367.
PIL Sunair 367, runway vacated.
CTL..............................................................
PIL 121.7, Sunair 367, goodbye.
PIL Ground, Sunair 367, good afternoon.
CTL..............................................................
PIL Second left, inner taxiway, stand D7, Sunair 367.

4.5.2 Listen and Speak (from page 180)

ATIS landing runway 26, take-off runway 25, attention taxiway 2A closed, attention bird situation, surface wind 242° 13 knots, visibility 10 km, 3 oktas 350 metres, 6 oktas 7000 metres, temperature +10, dew point +8, QNH 1017mbQFE 1006 mb, transition level 40, CDG is facing West, confirm information India received on initial contact.
PH. Paris, SF309, ready to descend.

CTL .................................................................

PEL 124.05, SF309, goodbye.
PIL Paris, SF309, bonjour.

CTL ...................................................................

PIL Descending to FL240 initially, SF309.

CTL ...................................................................

PIL Descending to FL110, SF309.

CTL ...................................................................

PIL Descending to FL80, SF309.

CTL ...................................................................

PIL Turning left to Reymy, SF309.
PIL Reaching FL80, SF309.

CTL .................................................................

PIL Orly Approach 120.85, SF309, goodbye.
PIL Orly Approach, SF309, good afternoon.

CTL ...................................................................

PIL Squawking 4244, SF309.
PIL SF309, reaching Reymy.

CTL .................................................................

PIL TSU, radial 075, runway 26, SF309.

CTL ...................................................................

PIL 300, SF309.

CTL .................................................................

PIL Reducing to 250 knots, descending to 4000 feet. QNH1017, SF309.
PIL SF309, reaching 4000 feet.

CTL ...................................................................

PIL Descending to 3000 feet, SF309.

CTL .................................................................
PIL Heading 170, SF309.

CTL .................................................................
PIL Turning right heading 230, cleared ILS 26, SF309.

CTL ...................................................................

PIL 180 knots till OYP. change 118.7, SF309, goodbye.
PIL Orly, SF309, bonjour.

CTL .................................................................
PIL Roger.

CTL .................................................................
PIL Negative, 180 knots, SF309.
PIL SF309, over outer marker.

CTL .................................................................
PIL Cleared to land, SF309.
CTL .................................................................
PIL First right, Ground 121.7, SF309.
PIL Ground, SF309, runway vacated.
CTL ...................................................................
PIL Delta 8, SF309.
4.6 SUPPLEMENTARY VOCABULARY

Aviation Jobs

Read and Write Here is a table with the names of jobs in aviation, followed by a list of definitions of the jobs. Match the jobs with the definitions, and write the definitions in the table.

<table>
<thead>
<tr>
<th>Jobs</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>co-ordinator</td>
<td></td>
</tr>
<tr>
<td>ticket sales clerk</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>station manager</td>
<td></td>
</tr>
<tr>
<td>flight engineer</td>
<td></td>
</tr>
<tr>
<td>Purser</td>
<td></td>
</tr>
<tr>
<td>Captain</td>
<td></td>
</tr>
<tr>
<td>reservations clerk</td>
<td></td>
</tr>
<tr>
<td>customs officer</td>
<td></td>
</tr>
<tr>
<td>shuttle bus driver</td>
<td></td>
</tr>
<tr>
<td>Marshaller</td>
<td></td>
</tr>
<tr>
<td>flight attendant</td>
<td></td>
</tr>
<tr>
<td>baggage handler</td>
<td></td>
</tr>
</tbody>
</table>

DEFINITIONS
a person who works in the cabin
the third crew member in the cockpit
this person helps the pilot to park the plane
the person in the left-hand seat in the cockpit
the boss of the ground staff
the person in charge of the bus from the plane to the terminal
someone who loads and unloads the luggage
this person may work in the Tower
the person who can inspect passengers' luggage
the person who sells tickets
the person who works mainly on the telephone
the first person to come on board when a flight arrives
the chief of the cabin crew

Check Check your answers, page 186.
### Jobs Definitions

<table>
<thead>
<tr>
<th>Jobs</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>co-ordinator</td>
<td>the first person to come on board when a flight arrives</td>
</tr>
<tr>
<td>ticket sales clerk</td>
<td>the person who sells tickets</td>
</tr>
<tr>
<td>controller</td>
<td>this person may work in the Tower</td>
</tr>
<tr>
<td>station manager</td>
<td>the boss of the ground staff</td>
</tr>
<tr>
<td>flight engineer</td>
<td>the third crew member in the cockpit</td>
</tr>
<tr>
<td>purser</td>
<td>the chief of the cabin crew</td>
</tr>
<tr>
<td>captain</td>
<td>the person in the left-hand seat in the cockpit</td>
</tr>
<tr>
<td>reservations clerk</td>
<td>the person who works mainly on the telephone</td>
</tr>
<tr>
<td>customs officer</td>
<td>the person who can inspect passengers' luggage</td>
</tr>
<tr>
<td>shuttle bus driver</td>
<td>the person in charge of the bus from the plane to the terminal</td>
</tr>
<tr>
<td>marshaller</td>
<td>this person helps the pilot to park the plane</td>
</tr>
<tr>
<td>flight attendant</td>
<td>a person who works in the cabin</td>
</tr>
<tr>
<td>baggage handler</td>
<td>someone who loads and unloads the luggage</td>
</tr>
</tbody>
</table>
Part Five

Final review
5.1 REXBURY TO WINTON (COMPLETE FLIGHT)

Scenario

Read

Winton is 1200 nautical miles East of Rexbury. The alternate for Winton is Overby, 75 nautical miles North West of Winton. Newbridge Airport is 50 miles South East of Rexbury.

<table>
<thead>
<tr>
<th>Rexbury Airport</th>
<th>Winton Airport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runway: 29</td>
<td>Runways: 07, 12</td>
</tr>
<tr>
<td>Taxiways: Yankee, Delta</td>
<td>Taxiways: Inner/Outer</td>
</tr>
<tr>
<td>SID's: November 2, Romeo 1, Golf 5</td>
<td>Tower frequency: 118.1</td>
</tr>
<tr>
<td>Tower frequency: 118.3</td>
<td>Winton Radar frequency: 121.1</td>
</tr>
<tr>
<td>Approach frequency: 120.26</td>
<td>Approach frequency: 121.3</td>
</tr>
<tr>
<td>Rexbury Area Control: 128.9</td>
<td>Ground frequency: 121.7</td>
</tr>
<tr>
<td></td>
<td>VOR-RED (Redhill)</td>
</tr>
</tbody>
</table>

En route

<table>
<thead>
<tr>
<th>New County Upper Control: 135.9</th>
<th>Reporting points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valley Control: 128.5</td>
<td>RIV (River)</td>
</tr>
<tr>
<td>Meadow Control: 126.3</td>
<td>BCK (Blackrock)</td>
</tr>
<tr>
<td></td>
<td>LAK (Lake)</td>
</tr>
<tr>
<td></td>
<td>RED (Redhill)</td>
</tr>
</tbody>
</table>

Listen and Read You are flying from Rexbury to Winton. Your callsign is Sunair 367, your stand is 19. The time is 13.40. The recording begins with ATIS information, and then asks you to make initial contact with Rexbury Ground.

Listen and Speak Follow the instructions on the tape, and reply to the controller. If necessary, you can read the controller's part included below. But then try to reply without reading the controller's part.

Check Check your answers, page 193.

Tapescript of recorded simulation (controllers pan only). The dotted lines (...) show where the pilot (you) should speak.

ATIS (twice): This is Rexbury departure information Foxtrot at 13.30 Zulu time. Takeoff and landing runway 29, wind 260° 12 knots, CAVOK, temperature 14, dew point 11, QNH 1023, no sig. This was information Foxtrot.

PIL (call Rexbury Ground) ........................................................................................................................................

CTL Good afternoon, Sunair 367, go ahead.
PIL (ask for start-up) .................................................................
CTL Say again stand number, Sunair 367.
PIL .............................................................................................

CTL Sunair 367, start-up approved,
PIL .............................................................................................

CTL Sunair 367, here is your ATC clearance.
PIL .............................................................................................

CTL ATC clears Sunair 367 to destination Winton airport via flight planned route. Golf 5 departure, climb initially to FL110, expect level change en route.
PIL .............................................................................................
CTL That is correct, Sunair 367.
PIL (call for push-back) .............................................................

CTL Sunair 367, push-back approved, taxi to holding point 29 via taxiway Delta.
PIL .............................................................................................
CTL Sunair 367, contact Tower now on 118.3.
PIL .............................................................................................
PIL (call reaching holding point) ...................................................
CTL Sunair 367, report the 727 on final in sight.
PIL .............................................................................................
CTL Behind the landing 727, line up behind,
PIL .............................................................................................
PIL (call ready for departure) ...................................................
CTL Sunair 367, cleared for take-off, wind 255° 13 knots.
PIL .............................................................................................
CTL Sunair 367, airborne 04, climb on present heading to FL1.10, contact Rexbury Control on 128.8.
PIL .............................................................................................
CTL Sunair 367, Rexbury Control, good afternoon. Turn right now heading 050 and continue climb to flight level 220.
PIL .............................................................................................
CTL Sunair 367, proceed now to Romeo India Victor VOR and recleared to flight level 270, cruising level.
PIL .............................................................................................
PIL (ask if you can have flight level 330) ..........................................................
CTL Standby Sunair, I'll call you back.

CTL Sunair 367, can you accept flight level 370?
PIL (you can't) ...........................................................................

CTL Sunair 367, climb to flight level 270, report when reaching.
PIL (call at flight level 270) .........................................................

CTL Roger, Sunair 367, change now to New County Upper Control, frequency 135.9, goodbye.
PIL .............................................................................................
PIL (call New County Upper Control).................................
CTL Good afternoon, Sunair 367, continue to Blackrock, repon when reaching;

PIL......................................................................................
(you now tune in to Winton Volmet)

VOLMET This is Winton Volmet. This is Winton Volmet.

Winton airport at 14.30. 280° 10 knots, 8000 metres, 3 oktas 3500 ft. temp 12, dew point 11, QNH 1020, no sig.
Overby at 14.30. 240° 12 knots, 10 km or more, 4 oktas 2000 ft, temp 8, dew point 6, QNH 1020, no sig.
Newbridge at 14.30. 250° 4 knots, 3000 metres, mist, 3 oktas 500 ft, temp 6, dew point 4, QNH 1016, no sig.

CTL Sunair 367, unknown traffic 10 o'clock, 8 miles, moving from left to right.

PIL (you see the traffic, reply) ...........................................
CTL Roger.
CTL Sunair 367, contact Valley Control now on 128.5, goodbye.

PIL ..............................................................................
PIL (call Valley Control) ..............................................
CTL Sunair 367, good afternoon, continue to Blackrock, report reaching.

PIL ..............................................................................
PIL (call over Blackrock) ...........................................
CTL Roger, Sunair 367, proceed to Lima Alpha Kilo direct.

PIL ..............................................................................
PIL (you want to turn 30° right to avoid build-up) ....................
CTL Roger. Sunair 367, what is your present heading?

PIL (025°, reply) ...........................................................
CTL Sunair 367, turn right heading 050° for 15 miles, report back on track.

PIL (you have passed the build-up) ......................................
CTL Roger, Sunair 367, resume own navigation to Lake.

PIL ............................................................................... 
PIL (call over LAK) ..................................................
CTL Sunair 367, proceed to Romeo Echo Delta, call me back when ready for descent.

PIL ..............................................................................
(you now tune in to Winton ATIS)

ATIS (twice) This is Winton information Lima recorded at 15.30 Zulu time. Runway for landing 25 for take-off 30, transition level 50, surface wind 280° 10 knots, visibility 8000 metres, 3 oktas strato-cumulus at 3500 ft, temp 12, dew point 11, QNH 1020. On initial contact report information Lima received.

PIL (ask for descent) ......................................................
CTL Sunair 367, descend to flight level 190 and contact Meadow Control on 128.5, goodbye.

PIL ..............................................................................
PIL (call Meadow Control) .............................................
CTL Good afternoon, Sunair 367, radar contact, descend to flight level 120 Romeo Echo Delta VOR direct.
PIL ...................................................................

CTL Sunair 367, you are approaching Romeo Echo Delta, contact Winton Approach now on 121.3, goodbye.
PIL .................................................................
PIL *(call Winton Approach)* .............................

CTL Good afternoon, Sunair 367, radar identified, passing Romeo Echo Delta VOR. Intercept radial 070 Romeo Echo Delta VOR and descend to flight level 60, expect radar vectoring to ILS runway 25, report crossing 70.
PIL .................................................................
PIL *(call reaching 70)* .................................
CTL Sunair 367, contact Winton Radar on 121.1, goodbye. ______
PIL ....................................................................
PIL *(call Winton Radar)* ...............................  

CTL Good afternoon, 367, radar contact, descend to 3000 ft, QNH 1020. Take heading 160.
PIL ....................................................................

CTL Sunair 367, continue descent to 2000 ft. turn right heading 230, cleared for ILS approach runway 25, report established.
PIL .................................................................
PIL *(call established)* ....................................

CTL Sunair 367, contact Tower on 118.1, goodbye.
PIL .................................................................
PIL *(call Tower)* ............................................

CTL Good afternoon, Sunair 367, number 2 to land, number I at touch down, report over outer marker.
PIL .................................................................
PIL *(call at outer marker)* .........................

CTL Sunair 367, clear to land runway 25, wind 260° 08 knots.
PIL .................................................................
PIL *(call runway vacated)* .........................
CTL Roger, Sunair 367, contact Ground on 121.7.
PIL .................................................................
PIL *(call Ground)* .........................................

CTL Sunair 367, good afternoon, take the second left onto the inner taxiway, stand Delta 7.
PIL .................................................................
**CHECK**

5.1 **Listen and Read** (from page 189)

ATIS This is Rexbury departure information Foxtrot at 13.30 Zulu time. Take-off and landing runway 29, wind 260° 12 knots, CAVOK, temperature 14, dew point 11, QNH 1023, no sig. This was information Foxtrot.

PIL Rexbury Ground, Sunair 367, good afternoon.

PIL Sunair 367, stand 19, information Foxtrot received, request start-up.

PIL Stand 19, Sunair 367.

PIL Starting up, Sunair 367.

PIL Ready to copy.

PIL Sunair 367 is cleared to Winton via flight planned route. Golf 5 departure, climb to FL110 initially, level change en route.

PIL Sunair 367, request push-back * *

PIL Holding point 29, taxi way D, Sunair 367.

PIL Tower on 118.3, goodbye.

PIL Rexbury Tower, Sunair 367, good afternoon, reaching holding point 29.

PIL Sunair 367, 727 in sight.

PIL Behind the landing 727 line up, Sunair 367.

PIL Ready for departure, Sunair 367.

PIL Cleared for take-off, Sunair 367.

PIL Climbing to FL110, Rexbury Control on 128.8, Sunair 367, goodbye.

PIL Rexbury Control, Sunair 367, good afternoon.

PIL Right turn, heading 050, climbing to FL220, Sunair 367.

PIL Climbing to FL270, direct to Romeo India Victor VOR, Sunair 367.

PIL Sunair 367, is FL330 available?

PIL Sunair 367, is FL330 available?
PIL Negative, Sunair 367.

CTL .................................................................

PIL Climbing to FL270, Sunair 367.
PIL Sunair 367, reaching FL270.

CTL .................................................................
PIL 135.9, Sunair 367, goodbye.
PIL New County Upper Control, Sunair 367, good afternoon.

CTL .................................................................
PIL Continue to Blackrock, report reaching, Sunair 367.

VOLMET This is Winton Volmet. This is Winton Volmet.
Winton airport at 14.30, 280° 12 knots, 8000 metres, 3 oktas 3500 ft, temperature 12, dew point 11, QNH 1020, no sig.
Overby at 14.30, 240° 12 knots, 10 km or more, 4 oktas 2000 ft, temperature 8, dew point 6, QNH 1020, no sig.
Newbridge at 14.30, 250° 4 knots, 3000 metres, mist, 3 oktas 500 ft, temperature 6, dew point 4, QNH 1016, no sig.

CTL .................................................................
PIL Roger, traffic in sight, Sunair 367.

CTL .................................................................

PIL 128.5, Sunair 367, goodbye.

CTL .................................................................
PIL Roger, continue to Blackrock.
PIL Sunair 367, over Blackrock this time, estimating LAK at 15.

CTL .................................................................
PIL Roger.
PIL Sunair 367, request turn right 30° to avoid build-up.

CTL .................................................................
PIL 025°, Sunair 367.

CTL .................................................................
PIL Turning right, heading 050, Sunair 367.
PIL Sunair 367, we have passed the build-up, are now back on track.

CTL .................................................................
PIL Proceeding to Lake, Sunair 367.
PIL Over LAK this time, Sunair 367.

CTL .................................................................
PIL To RED, Sunair 367.
ATIS This is Winton information Lima recorded at 15.30 Zulu time. Runway for landing 25 for take-off 30, transition level 50, surface wind 280* 10 knots, visibility 8000 metres, 3 oktas strato cumulus at 3500 ft, temperature 12, dew point 11, QNH 1020. On initial contact report information Lima received.

PIL Sunair 367, ready for descent.
CTL ..............................................................

PIL Descending FL190, Meadow Control 128.5, goodbye.

PIL Meadow Control, Sunair 367, good afternoon.
CTL ..............................................................

PIL Descending FL120, RED direct, Sunair 367.
CTL ..............................................................
PIL Winton Approach on 121.3, Sunair 367, goodbye.

PIL Winton Approach, Sunair 367, good afternoon.
CTL ..............................................................

PIL To intercept the Redhill VOR 070 radial and descending to FL60, expecting ILS approach runway 25, Sunair 367.
PIL Sunair 367, reaching FL70, descending to 60.
CTL ..............................................................
PIL Winton Radar on 121.1, Sunair 367, goodbye.
PIL Winton Radar, Sunair 367, good afternoon.

CTL ..............................................................
PIL Descending to 3000 ft, QNH 1020, turning right heading 160, Sunair 367.

CTL ..............................................................
PIL Descending to 2000 ft, turning right heading 230, Sunair 367.

PIL Sunair 367, established on the glide slope.
CTL ..............................................................

PIL Tower 118.1, Sunair 367, goodbye.

PIL Tower, Sunair 367, good afternoon.
CTL ..............................................................

PIL Number 2 to land, Sunair 367.
PIL Sunair 367, outer marker.

CTL ..............................................................

PIL Cleared to land, Sunair 367.
PIL Sunair 367, runway vacated.
CTL ..............................................................

PIL 121.7, Sunair 367, goodbye.
PIL Ground, Sunair 367, good afternoon.

CTL ..............................................................
PIL Second left, inner taxiway, stand D7, Sunair 367.
5.2 DUBLIN TO PARIS (COMPLETE FLIGHT)

Read Before you start this simulation, study the following details carefully.

Dublin airport: runways 11, 17, 23
Tower frequency 118.6

Route to Paris and reporting points:
Liffy
Wallasey (WAL)
Telba
Midhurst (MID)
Sitet
Etrat
Reymy
Toussus
Orly (OYE)

Frequencies en route
Dublin Control 128.0
London Control 128.05
London Control 133.7
London Control 127.7
France Control 132.0
Paris Control 12.4.05
Orly Approach 120.85
Orly Tower 118.7

Orly airport: runway 26,
Ground frequency 121.7

Study the maps on pages 50—52.

Listen and Read You are flying from Dublin to Paris. Your callsign is SF309. Note that the callsign letters Sierra Foxtrot are often abbreviated to Sierra Fox, and are sometimes pronounced as Safa. The recording begins by asking you to make initial contact with Dublin Ground.

Listen and Speak Follow the instructions on the tape, and reply to the controller.
If necessary, you can read the controller's part below. But then try to reply without reading the controller's part.

Check Check your answers, page 200.

Tapescript of Dublin-Paris simulation (controller's pan only). The dotted lines (...) show where the pilot (you) should speak.
PIL {call Ground}..............................................................
CTL SF309, Ground, good morning.
PIL {ready to start-up in 20 minutes}......................................
CTL Yes, that is OK, no restrictions into Orly.
PIL {ask for departure runway}..............................................
CTL Runway 17, surface wind 110° 20 knots.
PIL .................................................................
CTL 309, Ground, your ATC clearance.
PIL .................................................................
CTL SF309, cleared Dublin to Paris, Orly via Liffy Blue I, flight planned route, FL230, to request level change.
PIL.................................................................
CTL ... request level change is correct, cleared enter backtrack runway 11, contact Dublin Tower frequency 118.6, good morning.
PIL .................................................................
PIL (call Tower) ...................................................

CTL Roger, 309, backtrack 11, expedite the taxi please and cleared to line up and hold runway 17.
PIL .....................................................................

CTL That's it 309.
PIL (call ready to depart)....................................................

CTL Roger, 309 is clear to take-off runway 17. It's a left turn-out direct for Liffy, wind is 100° 20 knots.
PIL .....................................................................

CTL That is correct.

CTL 309 airborne, time 23, contact Dublin Control 128.0.
PIL .................................................................
PIL (call Dublin) ....................................................
CTL SF309, direct Liffy climb FL230.
PIL .................................................................
CTL SF309, report FL.
PIL (level 100) ....................................................

CTL SF309, continue climb to 230, call London 128.05.
PIL .................................................................
PIL (call London) ....................................................

CTL SF309, squawk 5260, maintain 230 on reaching.
PIL .................................................................
CTL SF309, climb to FL290.
PIL .................................................................
CTL SF309, climb to FL330.
PIL .................................................................
CTL SF309, what is your heading?
PIL (100) ............................................................... 
CTL SF309, roger, turn right heading 125.
PIL .................................................................
PIL (call FL330) ....................................................

CTL SF309, resume own navigation to Honiley.
PIL .................................................................
CTL SF309, correction the last message. You can set course direct to Midhurst.
PIL .................................................................

CTL SF3O9, contact London 133.7, good day.
PIL .................................................................
PIL (call London) ....................................................
CTL SF309, good day, maintain FL330, present position direct Midhurst.
PIL..................................................................................
CTL SF309, contact London now 127.7.
PIL...................................................................................
PIL (call London)................................................................

CTL SF309, good afternoon, maintain FL330.
PIL..................................................................................
CTL SF309.                                           
PIL .............................................................................
CTL SF309, descend to FL310.
PIL .............................................................................

CTL SF309, continue now with Paris 132.0.
PIL ..................................................................................
PIL (call Paris)..........................................................
CTL SF309, bonjour, maintain FL310 standard routing, Reymy clearance limit, runway 26 at Orly, squawk 0444.
PIL .............................................................................
(be ready to copy Orly AT IS)

ATIS ... landing runway 26, take-off runway 25, attention taxiway 2A closed, attention bird situation, surface wind 242° 13 knots, visibility 10 km, 3 oktas 350 m, 6 oktas 7000 m, temperature +10, dew point +8. QNH 1017 mb, QFE 1006 m b, transition level 40, Charles de Gaulle is facing West. Confirm information I received on initial contact.

PIL (call and ask for descent)........................................
CTL SF309, cleared FL 250, contact Paris 124.05, goodbye.
PIL ..................................................................................
PIL (call Paris)................................................................

CTL SF309, good evening, clearance FL240 initially, I’ll call you back.

PIL ..................................................................................
CTL SF309, recleared down FL110.                         
PIL ..................................................................................
CTL SF309, recleared down FL80 now.                     
PIL ..................................................................................
CTL SF309, you turn left to Reymy now.                  
PIL ..................................................................................
PIL, (call reaching FL80)...........................................  
CTL SF309, roger, call Orly Approach now 120.85, goodbye sir.
PIL ..................................................................................

PIL (call Orly) .........................................................
CTL Good afternoon, 309, your squawk on 4244.
PIL ..................................................................................
PIL (call reaching Reymy)...........................................

CTL SF309, radar contact, cross to TSU now radar vectoring runway 26 after Toussus radial 075
CTL SF309, what's your speed?

PIL  (300)..............................................................

CTL  Roger.

CTL  SF309, reduce 250 knots and after descend 4000 feet, QXH 1017.

PIL .................................................................

PIL  (call reaching 4000 feet) ..................................

CTL  Roger, descend 3000 feet.

CTL  SF309, heading 170.

PIL  .................................................................

CTL  SF309, turn right heading 230 cleared ILS 26.

PIL  .................................................................

CTL  SF309, maintain 180 knots minimum till OYE, call Airport 118.7, bye.

PIL  .................................................................

PIL  (call Orly) ......................................................


PIL  .................................................................

CTL  SF309, 160 knots?

PIL  (your speed is 180 knots, reply)........................

CTL  OK.

PIL  (call over outer marker) ..................................

CTL  SF309, clear to land, wind 240° 12 knots.

PIL  .................................................................

CTL  SF309, first right and call Ground 121.7.

PIL  .................................................................

PIL  (call Ground, runway vacated) .........................

CTL  SF309, bonjour, taxi for D8.

PIL  .................................................................
5.2 **Listen and Speak** from page 196

PIL Dublin Ground, SF309.
CTL .................................................................
PIL We’ll be ready to start-up in 20 minutes.
CTL .................................................................
PIL SF309, what is the departure runway?
CTL .................................................................
PIL 17, 110° 20 knots.
CTL .................................................................
PIL Ready to copy, SF309.
CTL .................................................................
PIL SF309 is cleared to Paris, Orly via Liffy Blue 1, flight planned route, FL230, to request level change en route.
CTL .................................................................
PIL Back track runway 11, Tower 118.6, SF309.
PIL Tower, SF309, good afternoon.
CTL .................................................................
PIL Backtrack 11, expediting, approved to line up and wait runway 17.
CTL .................................................................
PIL SF309, ready to depart.
CTL .................................................................
PIL Cleared to take-off runway 17, left turn-out direct Liffy, 100° 20 knots.
CTL .................................................................
CTL .................................................................
PIL Dublin 128.0, SF309, goodbye.
PIL Dublin, SF309, good afternoon.
CTL .................................................................
PIL Direct Liffy, climbing FL230, SF309.
CTL .................................................................
PIL FL100, SF309.
CTL .................................................................
PIL Climbing to FL230, London 128.05, SF309.
PIL London, SF309, good afternoon.
CTL .................................................................
PIL Maintain 230 on reaching, squawking 5260.
CTL .................................................................
PIL Climbing to FL290, SF309.
CTL .................................................................
PIL Climbing to FL330, SF309.
CTL .................................................................
PIL Heading 100, SF309.
PIL  Turning right, heading 125.

PIL  SF309, reaching FL330.

CTL  .................................................................

PIL  Own navigation to Honiley, SF309.

CTL  .................................................................

PIL  Direct to Midhurst, SF309.

CTL  .................................................................

PIL  London 133.7, SF309, good day.
PIL  London, SF309, good afternoon.

CTL  .................................................................

PIL  Maintaining FL330, direct Midhurst, SF309.

PIL  London 127.7, SF309.
PIL  London, SF309, good afternoon.

CTL  .................................................................

PIL  Maintaining FL330, SF309.

CTL  .................................................................

PIL  Go ahead, SF309.

CTL  .................................................................

PIL  Descending to FL310.

CTL  .................................................................

PIL  Paris 132.0.

CTL  .................................................................

PIL  Maintaining FL310, cleared to Reymy, squawking 0444.

ATIS  .................................................................

PIL  Paris, SF309, ready to descend.

CTL  .................................................................

PIL  124.05, SF309, goodbye.
PIL  Paris, SF309, bonjour.

CTL  .................................................................

PIL  Descending to FL240 initially, SF309.

CTL  .................................................................

PIL  Descending to FLUO, SF309.

CTL  .................................................................

PIL  Descending to FL80, SF309.

CTL  .................................................................

PIL  Turning left to Reymy, SF309.
PIL  Reaching FL80, SF309.

CTL  .................................................................

PIL  Orly Approach 120.85, SF309, goodbye.
PIL  Orly Approach, SF309, good afternoon.
PIL  Squawking 4244, SF3O9.
PIL  SF309, reaching Reymy.

CTL .................................................................
PIL  TSU, radial 075, runway 26, SF309.

CTL .................................................................
PIL  300, SF3O9.

PIL  Reducing to 250 knots, descending to 4000 feet, QNH1017, SF3O9.
PIL  SF309, reaching 4000 feet.

PIL  Descending to 3000 feet, SF309.

PIL  Heading 170, SF309.

PIL  Turning right heading 230, cleared ILS 26, SF309.

PIL  180 knots till OYE, change 118.7, SF309, goodbye.
PIL  Orly, SF309, bonjour.

PIL  Roger.

PIL  160 knots, SF3O9.
PIL  SF309, over outer marker.

PIL  Cleared to land, SF309.

PIL  Ground, SF309, runway vacated.

PIL  First right. Ground 121.7, SF309.

PIL  Ground, SF309, runway vacated.

PIL  Delta 8, SF3O9.
Tapescript for controller’s part and for non-dialogue tasks
The controller's words will not normally be read by the student. However, it may occasionally be useful for students to see the controller's words, for example in pairwork practice. There may also be occasions when the teacher wishes to read out the controller's words to students. To avoid duplication, reference is made to the CHECK Sections, in cases where the controller's words can be found there.

1.1.1 (page 4)
Listen
Listen and Repeat
Write
See CHECK section (page 7)

1.1.1 (page 4)
Listen and Speak

1 PIL (ask for departure information)........
CTL SF398, runway in use 29, wind 350° 23 knots gisting 30. temperature 12. dew point 10. runway is wet, braking action good. QNH1023.

2 PIL (ask for departure information)........
CTL Kilo Mike 563, 60° 18 knots, temperature-2, dew point -6, QNH 1008, take-off runway 08

3 PIL (ask for departure information)........
CTL Sierra Victor 295, QNH 1014. temperature 23, dew point 21, surface wind 180° 9 knots, take off runway 23.

4 PIL (ask for departure information)........
CTL Charlie Uniform 759, latest take-off data — wind calm, temperature 18. dew point 16. runway in use 33 Right, QNH 1015, taxiway India closed.

5 PIL (ask for departure information)........
CTL Juliet Delta, runway in use 19 Left, 260° 10 knots gusting to 25, QNH 1005. temperature 8, dew point 5.

6 PIL (ask for departure information)........
CTL Echo November 926, runway in use 21, wind 320° 5 knots, temperature +2. dew point minus 1, QNH 1019.

1.1.2 (page 5)
Wright (Exercises I and 2)
CHECK Section (pages 7-9)

1.2 (page 11)
Listen
Listen and Repeat
Write
See CHECK Section (page 12)

1.2 (page 11)
Listen and Speak

1 CTL SF196, here is your clearance.
PIL........................................
CTL Rexbury ATC clears SF196 to Winton via flight planned route, N2 departure left turn-out after departure, climb to and maintain FL250, request level change en route, contact 120.26 when airborne, and squawk 2514.
PIL........................................

2 CTL Sunair 926, here is your clearance.
PIL........................................
CTL Frankfurt ATC clears Sunair 926 to Paris Charles de Gaulle, via Upper Red 10, Standard Instrument Departure 31, climb to and maintain FL290, contact Approach on 120.15 when airborne.
PIL........................................

3 CTL Sunair 831, here is your clearance.
PIL........................................
CTL Rexbury ATC clears Sunair 831 to Winton via flight planned route, Romeo 1 depanure, left turn-out after departure, flight level 210 initially, request level change en route, contact Approach on frequency 120.26 when airborne.
PIL........................................

4 CTL Sunair 435, clearance.
PIL........................................
CTL Winton ATC clears Sunair 435 to Rexbury, Oscar 3 departure, climb on runway heading to FL160, squawk 1537, contact 121.3 when airborne.
PIL........................................

5 CTL Sunair 921, here is your clearance.
PIL........................................
CTL Winton ATC clears Sunair 921 to Rexbury, Whisky 1 departure, flight planned route, flight level 150 initially, request level change en route, squawk 1525- frequency 121.3 when airborne.
PIL........................................

1.3.1 (page 15)
1 PIL Winton Ground, SF153, good morning.

205