

AIRSPEAK

RADIOTELEPHONY

COMMUNICATION

FOR PILOTS

F. A. ROBERTSON

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Radiotelephony Communication for Pilots

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in association with

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FOREWORD

The Radiotelephony Language System

A dependence upon clear, 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 of 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 parts of the world there is severe inadequacy in the language training of air traffic controllers; an inadequacy which shows up (the 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.

•Wolfson College. Cambridge University. Research program between 1981-1983.

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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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.

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:

- International Civil Aviation Organisation, *Manual of Radiotelephony*, First — Edition 1984, Doc 9432-AN/925
- 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:

- International Civil Aviation Organisation, *Procedures for Air Navigation, Rules of -the Air and Air Traffic Control*, 4444.

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/and language laboratory work. Each section contains 10-20 minutes of taped material on routine phraseology, the contents of which provide ample material for 1J 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.

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 ;»s 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 maps are 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.

STANDARD WORDS AND PHRASES

(From ICAO *Manual of Radiotelephony*)

The following words and phrases shall be used in radiotelephony communications as appropriate and shall **have** the meaning given below.

ICAORef:26

<i>Word/Phrase</i>	<i>Meaning</i>
Acknowledge	Let me know that you have received and understood this message.
Affirm	Yes.
Approved	Permission for proposed action granted.
Break	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.)
Break Break¹	I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment.
Cancel	Annul the previously transmitted clearance.
Check	Examine a system or procedure. (No answer is normally expected.)
Cleared	Authorized to proceed under the conditions specified.
Confirm	Have I correctly received the following ...? or Did you correctly receive this message?
Contact	Establish radio contact with
Correct	That is correct.
Correction	An error has been made in this transmission (or message indicated). The correct version is
Disregard	Consider that transmission as not sent.
Go ahead ²	Proceed with your message.
How do you read	What is the readability of my transmission?
I say again	I repeat for clarity or emphasis.
Monitor	Listen out on (frequency).
Negative	No or Permission not granted or That is not correct.
Over	My transmission is ended and I expect a response from you. SOTE: <i>Sol normally used in VHF communications.</i>
Out	This exchange of transmissions is ended and no response is expected. NOTE: <i>Normally used to indicate the end of an exchange of transmissions.</i>
Read back	Repeat all. or the .specified pan. of this message back to me exactly as received.
Reclcard ¹	A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof.
Report ⁴	Pass me the following information.
Request	I should like to know or I wish to obtain
Roger	I have received all of your last transmission. NOTE: <i>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).</i>
Say again	Repeat all, or the following pan. of your last transmission.
Speak slower	Reduce your rate of speech.
Standby	Wait and I will call you.
Verify	Check and confirm with originator.
Wilco	(Abbreviation for 'will comply'.) I understand your message and will comply with it.
Words twice	a) <i>As a request;</i> Communication is difficult. Please send every word or group of words twice. b) <i>As information:</i> Since communication is difficult, every word or group of words in the message will be sent twice.

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 Reclcard 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:

ICAO	DGAC
CTL — Report heading	CTL — Say heading
CTL — Report passing X	CTL — Report passing X
CTL — Next report at A	CTL — Next report at A

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 (unreadable) to 5	Give an estimation of the quality of the transmission on a scale of 1 (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	Repeat 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	want to know <i>or</i> I want to have
Roger	I have received all of your last transmission. (NEVER use 'roger' in reply to a question which needs read-back, or an answer 'affirm' or 'negative'.)
Say again	Repeat 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)

IOAO ref. 4.2.1

CAA ref. 4.3.1

DGAC ref. 11.5.1.1

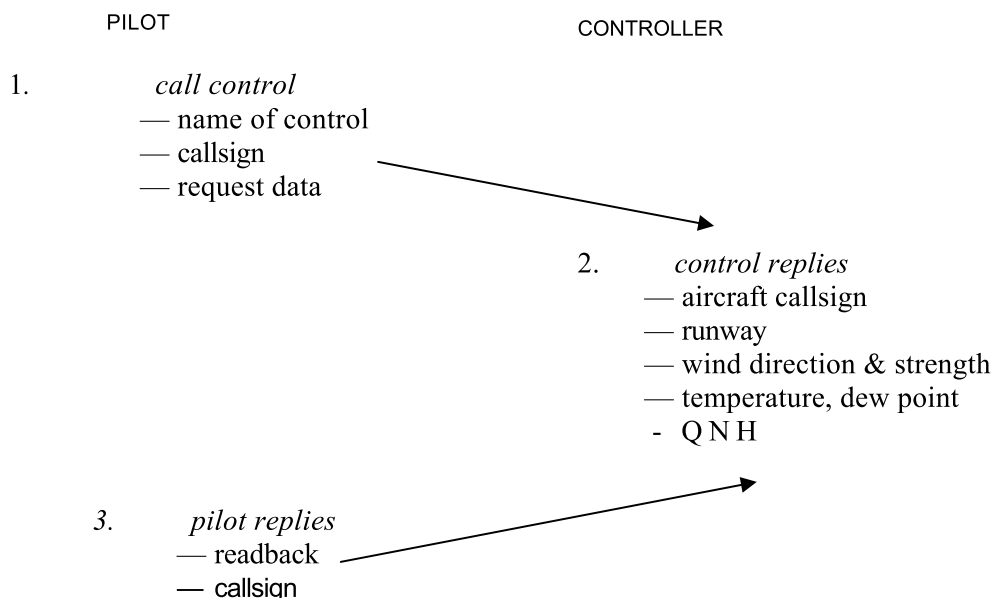
Key words and phrases

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



NOTES

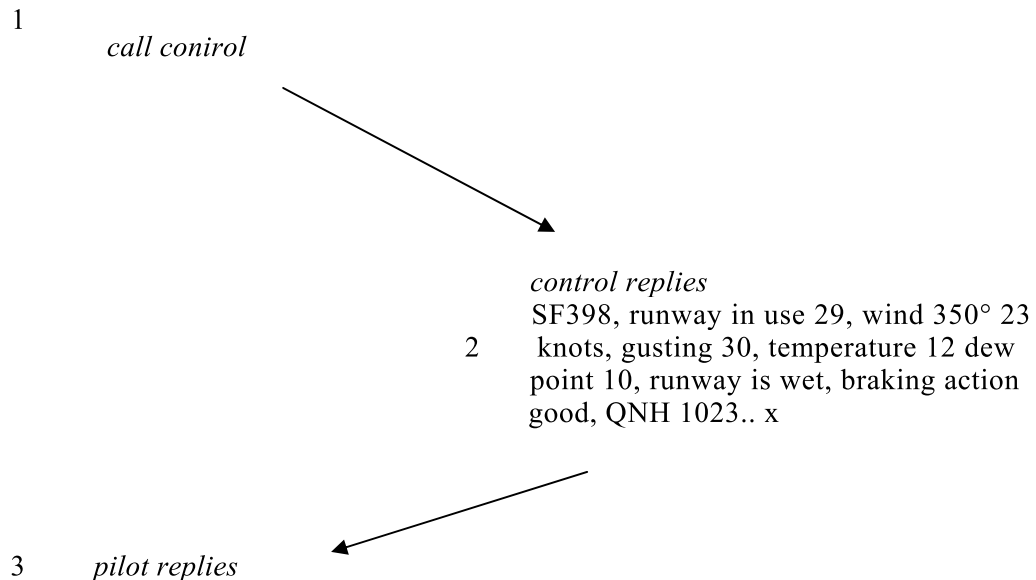
- The controller usually gives the information in the following order: runway in use, wind direction and strength, **visibility**, temperature, dew point, QNH, other information.
- The pilot generally reads back the essential bits — wind data, QNH and runway number.

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.



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°, 15 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.*

<i>A</i>	<i>wind 270* 19, temp 6, DP3, QNH1001, runway 29</i>
<i>B</i>	<i>wind ____, temp __, DP __, QNH ____, runway __</i>
<i>C</i>	

<i>D</i>	
<i>E</i>	
<i>F</i>	
<i>G</i>	

Check When you think you have all the correct details, check your answers from texts on page 8.

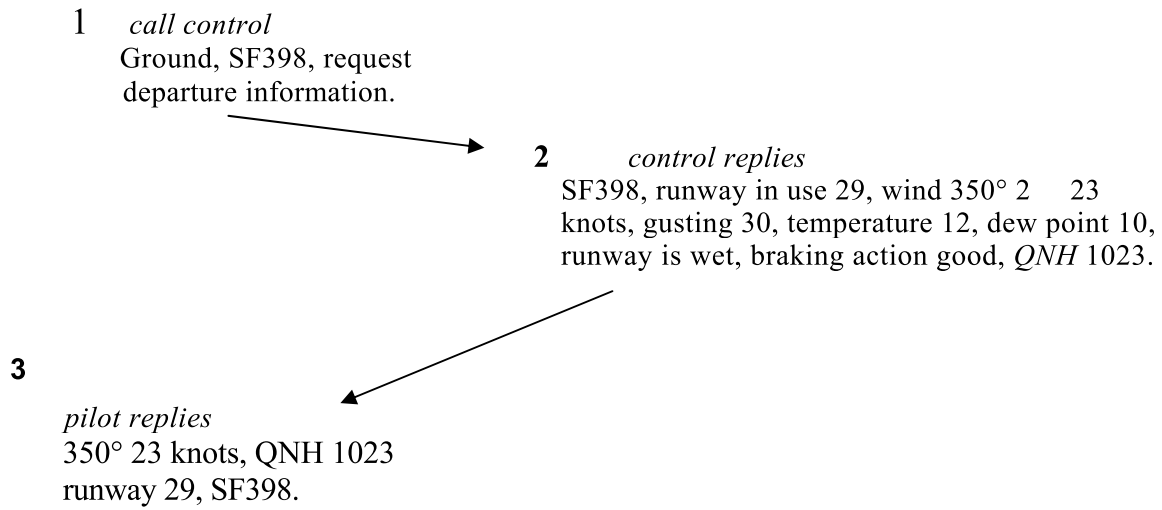
<i>1</i> Heathrow	<i>E, 200* 09, 21 09, 1017, 286</i>
<i>2</i> Heathrow	
<i>3</i> Heathrow	
<i>4</i> De Gaulle	
<i>5</i> Orly	
<i>6</i> Frankfurt	
<i>7</i> Athens	
<i>8</i> Hamburg	

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)



1.1.1 Listen and Speak (from page 4)

The dotted lines (.....) show when [he controller speaks.

- 1 PIL Ground, SF398, request departure information.
CTL
PIL 350° 23 knots, *QNH* 1023. Runway 29. SF398.
- 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_f019. runway 21, EN 926

I.I.2 **Listen and Write, 1** (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 + 1 1 , QNH 1017 millibars, departure runway 28L
- 4 This is de Gaulle at time 13D0, 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.

**Check
Look up any**

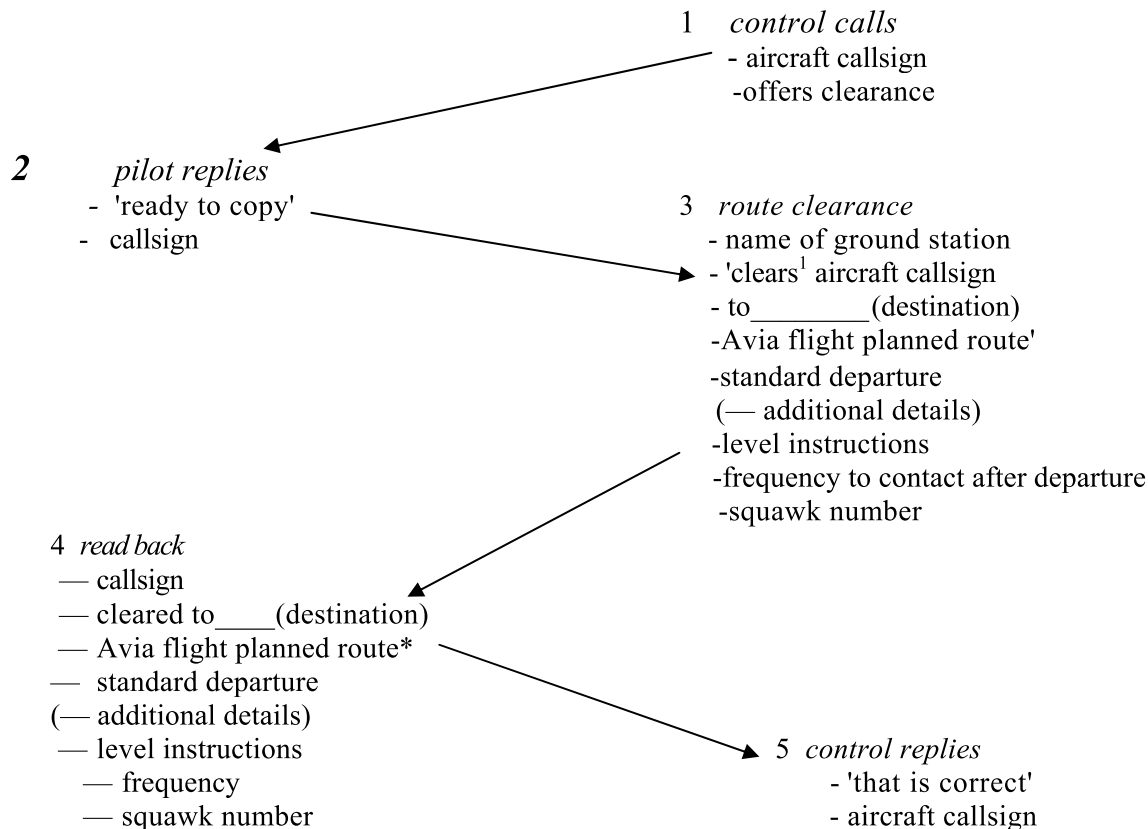
flight planned route	ATC (Air Traffic Control)
left/right turn out	Clearance
climb	SID (standard instrument departure)
maintain	Approach
*request	Initially
level change	Frequency
en route	flight level (FL)
airborne	*contact
squawk	
*cleared	
Heading	

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

Typical exchange

PILOT

CONTROLLER



NOTES

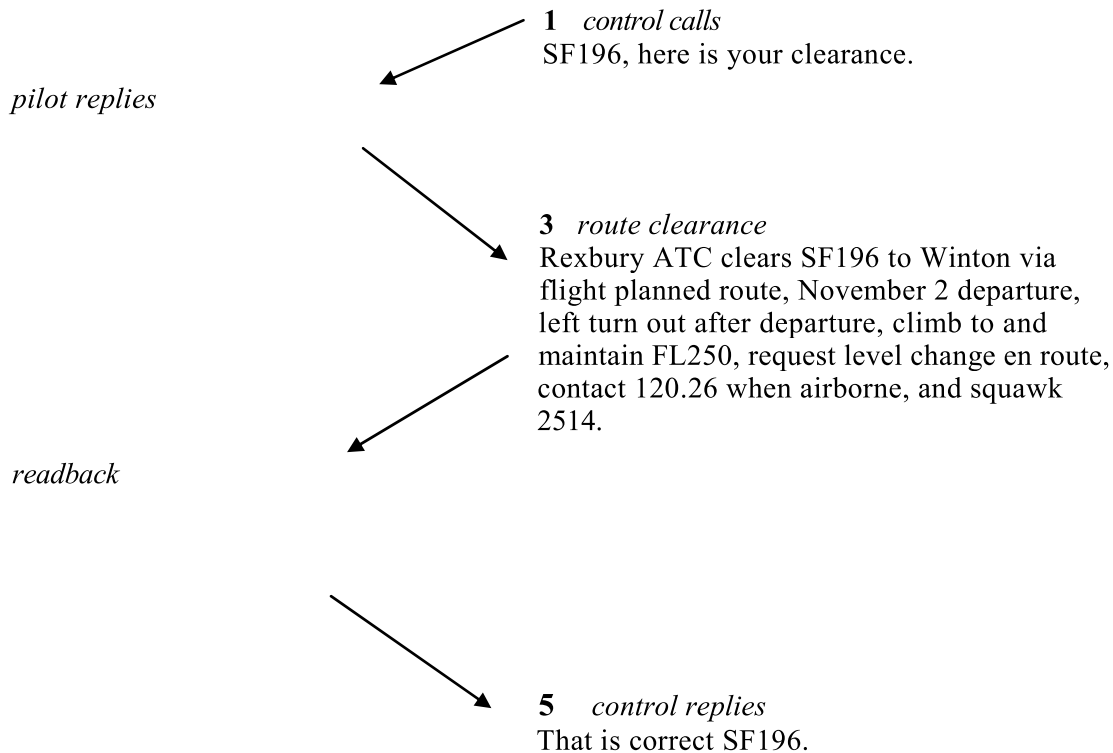
- 'Additional details' added to a standard departure usually-just repeat some essential points (e.g. left/right turn out after departure; climb on runway heading to ...) or may contain a modification.
- Level instructions in route clearances often contain restrictions (e.g. 'FL190 initially, request 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.



Check Check your answers, page 12.

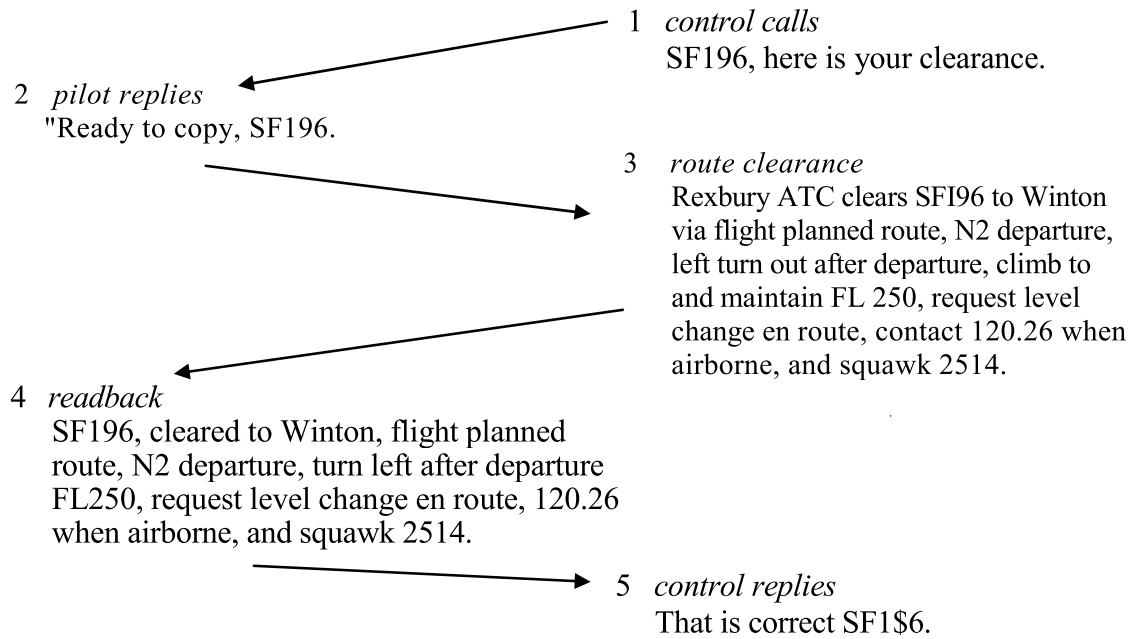
Listen and Speak Take the pilot's part and reply to the controller for the following flights:

- 1 SFI96 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)



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 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.

CTL

PE. Ready to copy, Sunair 921.

—

CTL

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)

ICAO ref. 4.2.2

CAA ref 4.3.2

4.3.3

DGAC ref.11.5.3i

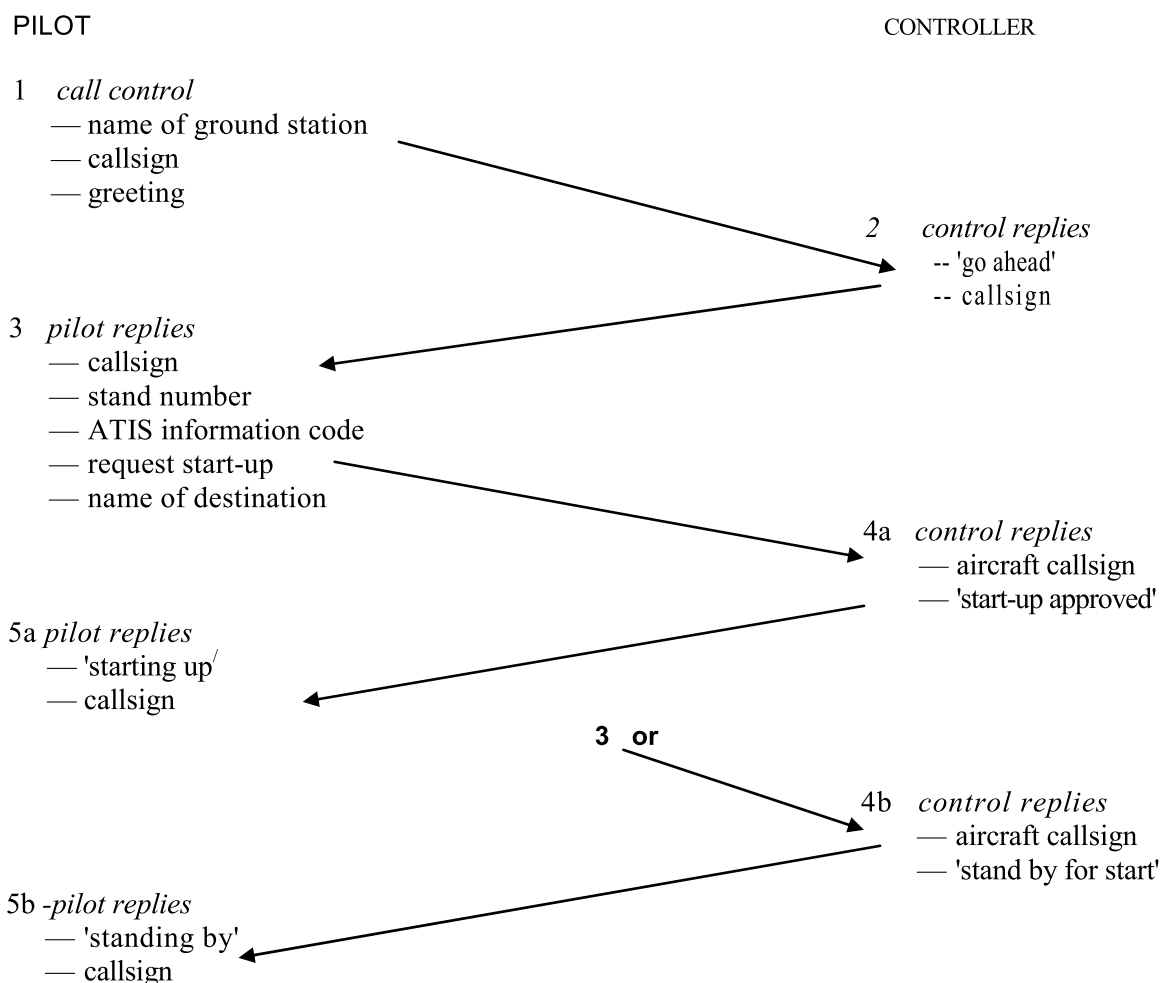
Key words and phrases

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



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.

No.	Callsign	Stand/Gate	ATIS Information	Destination
1				
2				
3				
4				
5				
6				

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*

3 *pilot replies*

5 *pilot replies*

(b)

1 *call control*

3 *pilot replies*

5 *pilot replies*

2 *control replies* Go ahead, SF153.

4 *control replies* SF153, start-up approved.

2 *control replies* Go ahead FBG.

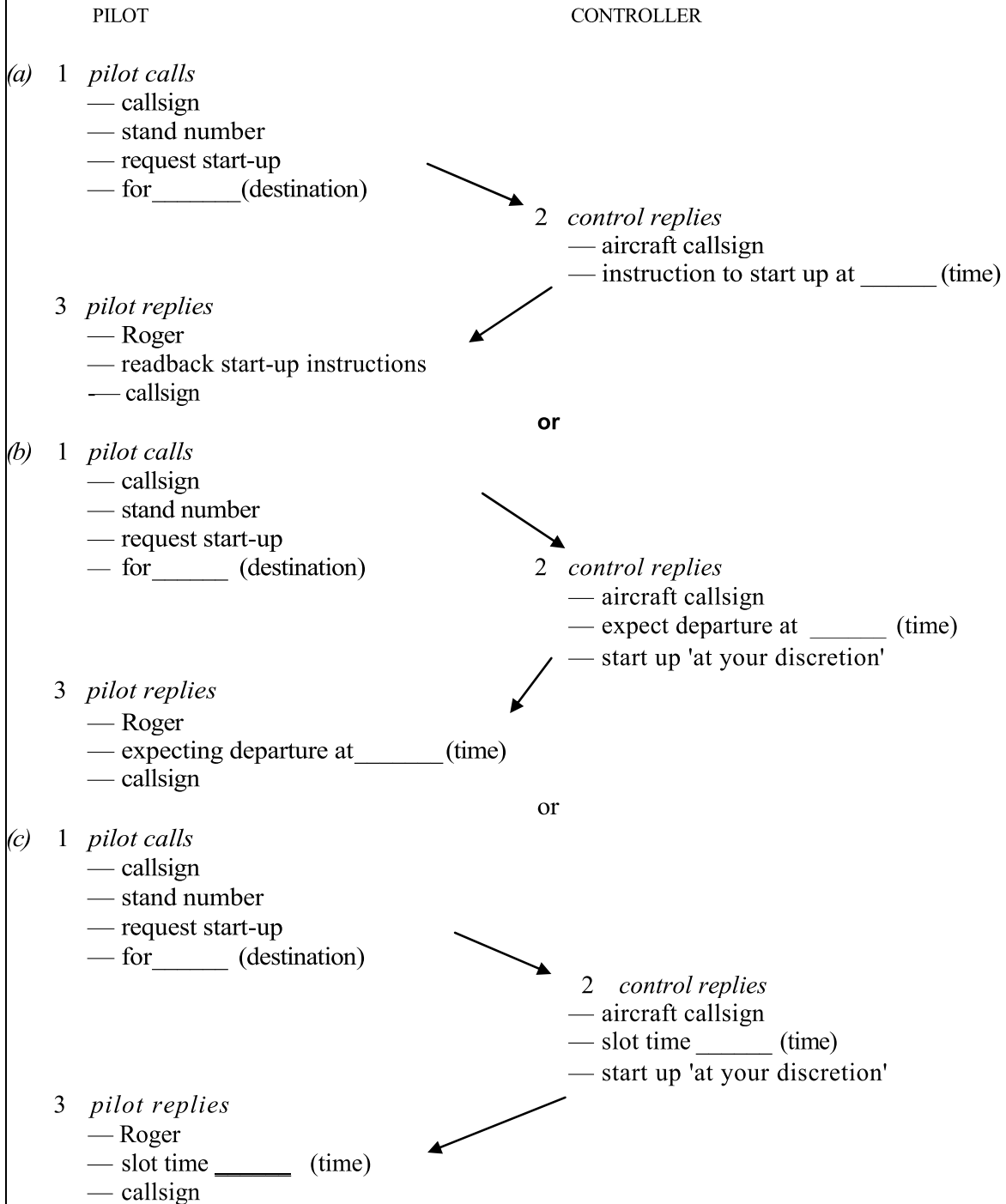
4 *control replies* FBG, stand by for sun.

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 -----



Phraseology practice

Listen At 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, stan 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.

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

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 PII- 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:

Words or expressions	Your idea about the meaning	Dictionary meaning

CHECK

SECTION 1.3.1 Write (from page 15); also Listen and Speak (page 16)

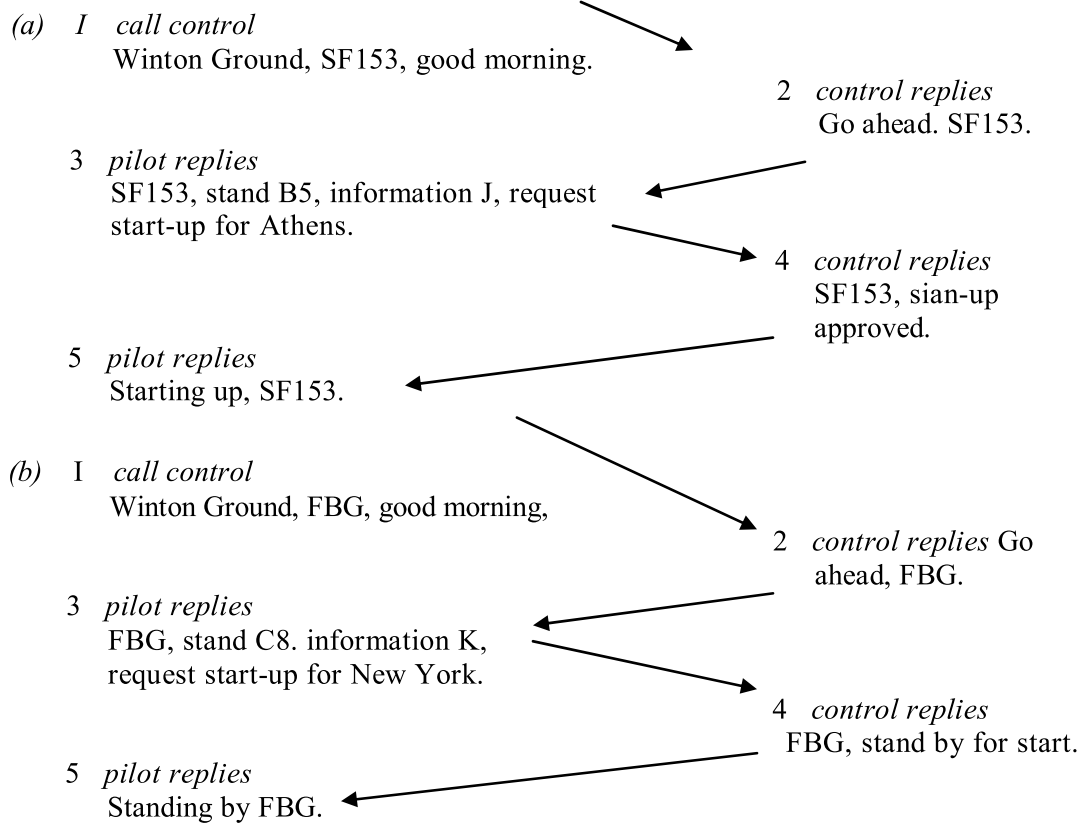
- 1 PIL Winton Ground, Sierra Foxtrot 153, good morning.
CTL
PIL Sierra Foxtrot 153, stand Bravo 5, information Juliet, request start-up for Athens.
CTL
PIL Starting up, Sierra Foxtrot 153.
- 2 PIL Winton Ground, Foxtrot Bravo Golf, good morning.
CTL
PIL Foxtrot Bravo Golf, stand Charlie 8, information 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 2 1, information Mike, request start-up for Frankfurt.
CTL
PIL Gate 2 1, 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.
CTL

PIL Whisky Juliet Delta, stand 13, information Lima, request start-up for London, Hearhrow.

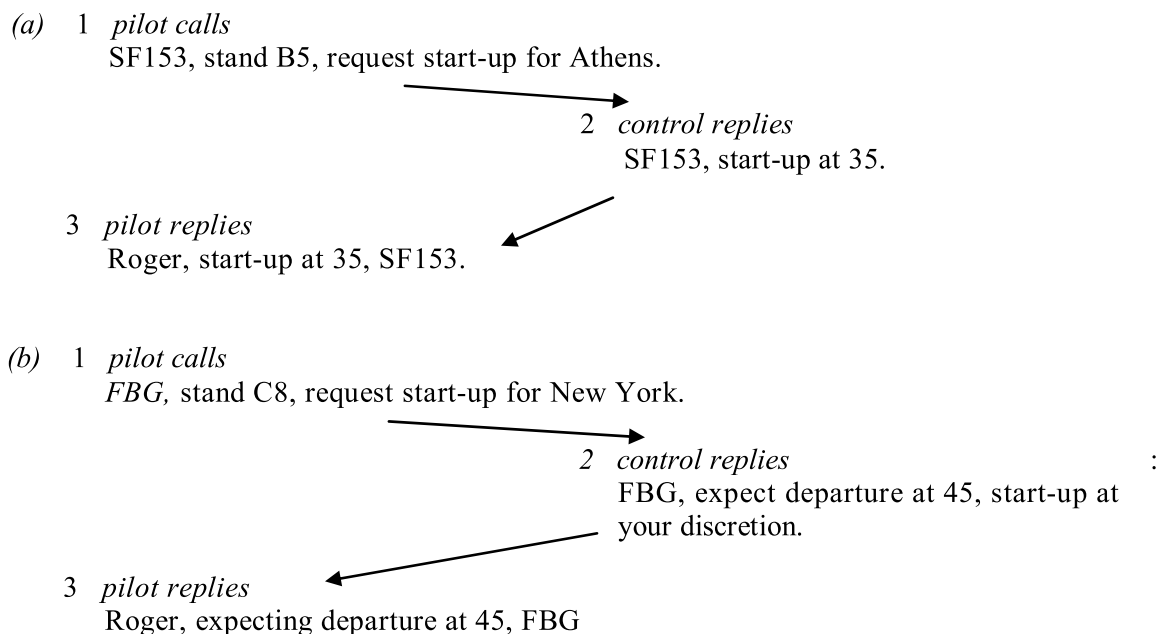
CTL.....

PIL Starting up, Whisky Juliet Delta.

1.3.1 Write (from page 15)



1.3.1 Write (from page 17)



- (c) 1 *pilot calls*
AG235, gate 21, request start-up for Frankfurt.
- 2 *control replies*
AG235, slot time 55, start-up at your discretion.
- 3 *pilot replies*
Roger, slot time 55, AG235.
-

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 K VX, stand A4, information R, request start-up for Copenhagen.
CTL
PIL Starting up, K VX.
- 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.	
	CTL	
	PIL	Stand B6, OPR.	SECT.
	CTL	1
	PIL	Roger, departure at 25, OPR.	

1.3.2 **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 **Listen and Write** (from page 19)

- 1
 - PIL Rexbury Ground, Sunair 670, good morning, request start-up.
 - CTL Sunair 670, expect departure 50, I'll call you back for start.
 - PIL Could we start-up quickly please. We've got livestock in the hold.
 - CTL Standby one.
 - CTL Sunair 670, start-up approved.
 - PIL Starting up.
- 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.
 - CTL Good morning Sunair 692, slot time 35, start-up 10 minutes before.
 - 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

ICAO ref. 4.3
CAA ref. 4.4
DGAC ref. 11.5.4

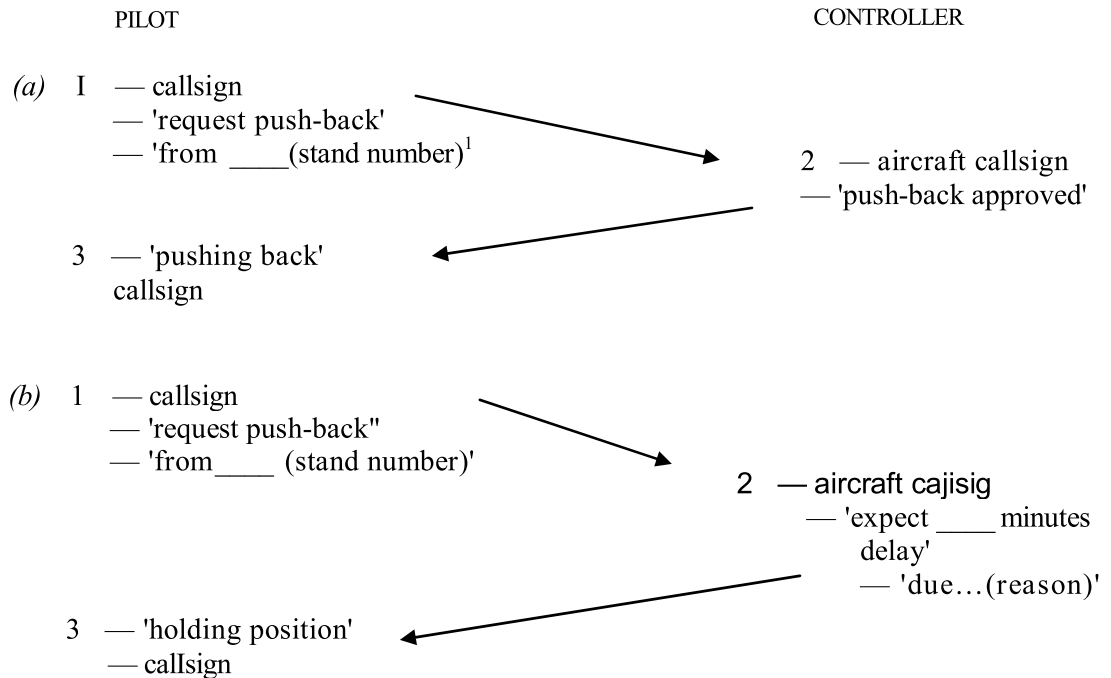
1.4.1 *push-back* (routine)

Key words and phrases

Check that you understand the following words and phrases;

hold position before
pass behind after

Typical exchange



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.



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.

Callsign	Parkins stand
1 SF153	B5
2 FBG	C8
3 AG235	gate 21
4 THI	A9
5 NUM	gate D7
6 WJD	13

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,

PIL After the 747, pushing back.

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 _____.

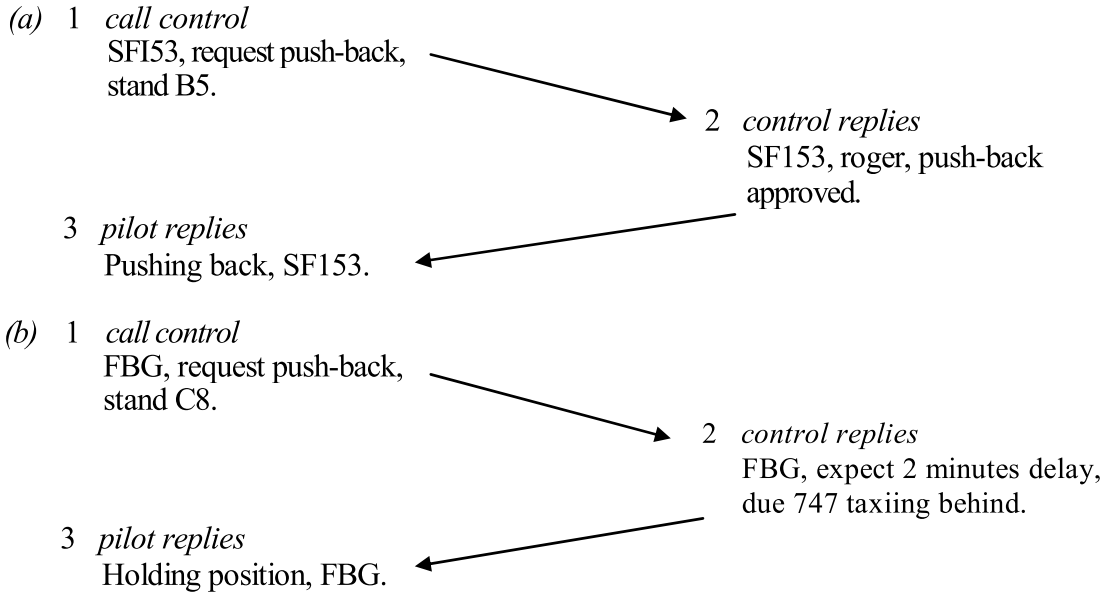
Check Check your answers, page 28.

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.

CHECK

1.4.1 Write (from page 24)



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

ICAO ref. 4	4
CAA ref. 4	5
DGACrefs	11.5.5 11.5.6

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

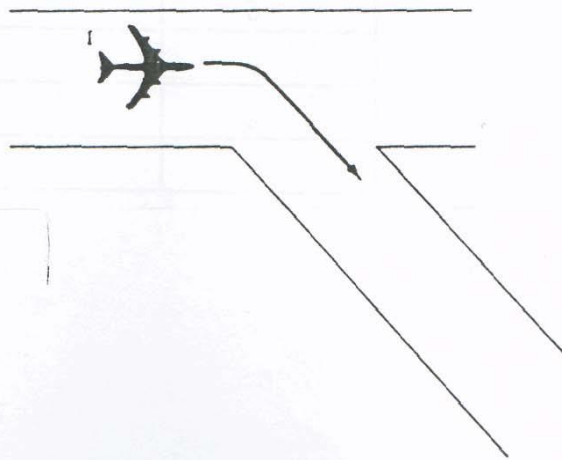
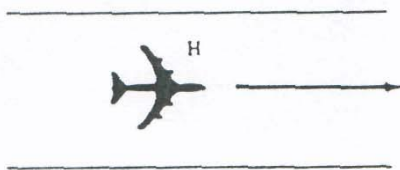
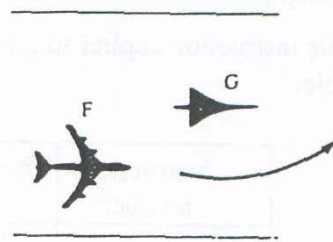
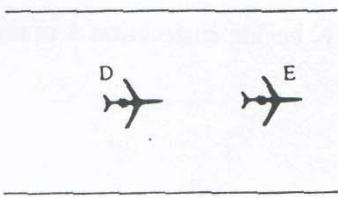
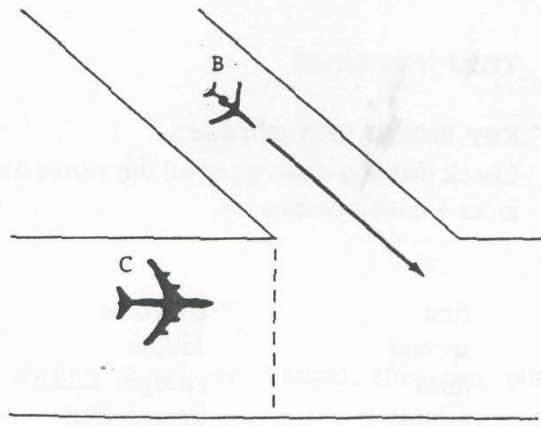
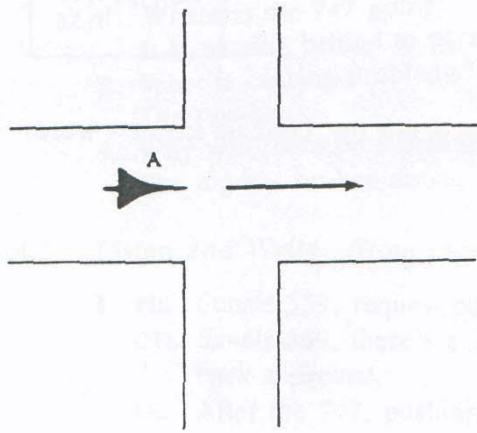
Phraseology practice

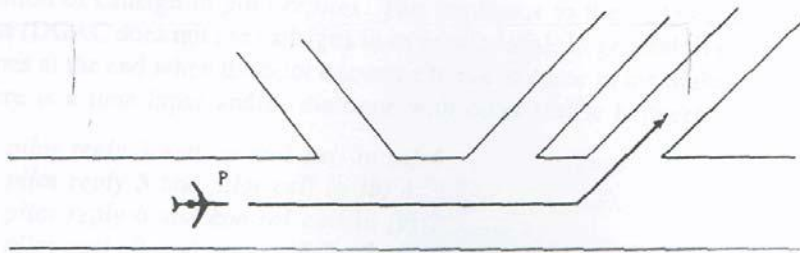
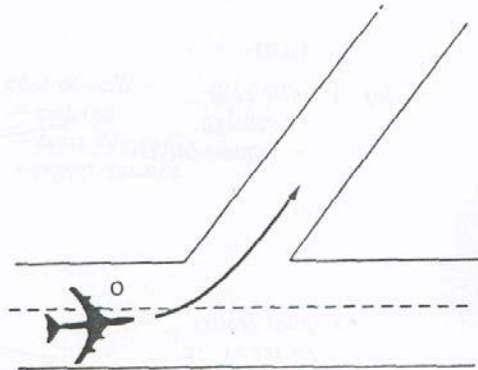
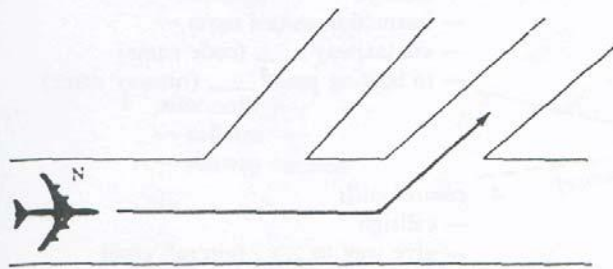
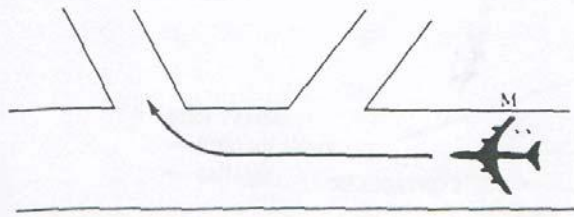
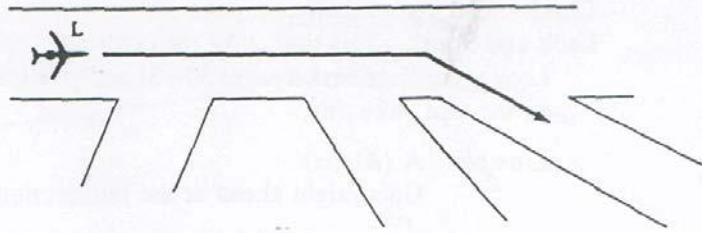
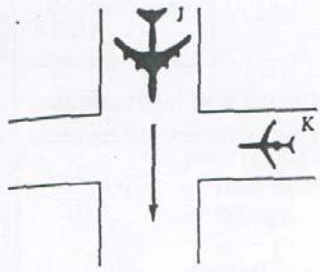
Look, Listen and Write Listen to the taxi instructions, look at the diagrams and identify which aircraft the instructions apply to. Write the correct aircraft in the table.

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

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

Instruction number	Aircraft
1	
2	
3	
4	
5	
6	
7	
8	
9	





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:

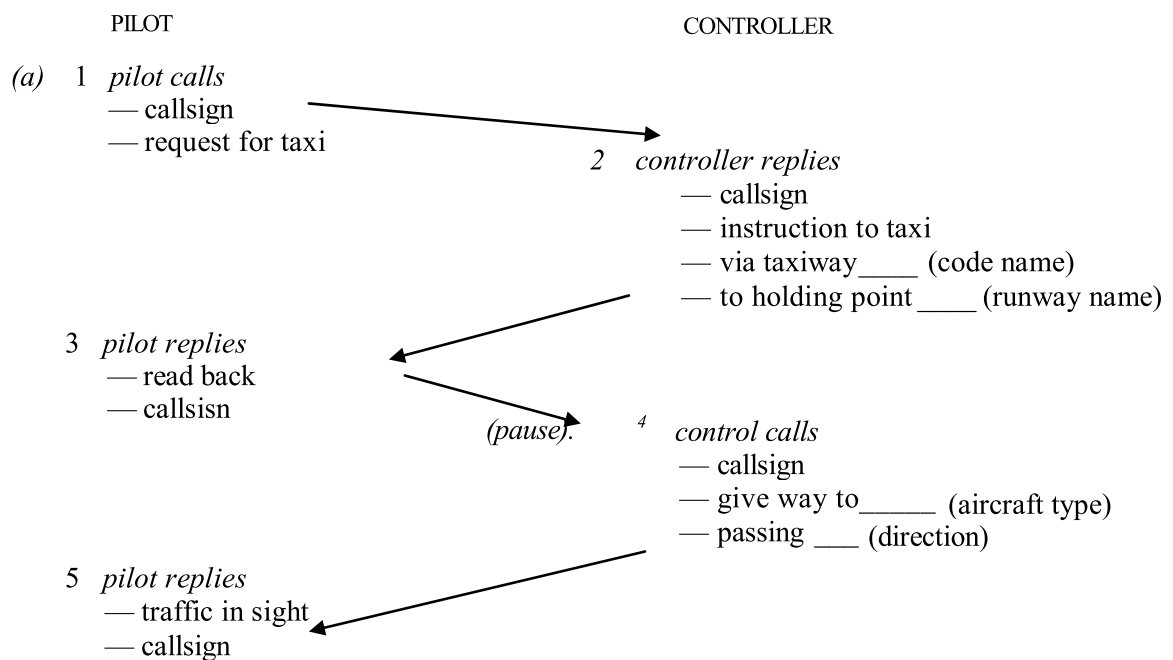
Example: A (Alpha)
 Go straight ahead at the intersection.

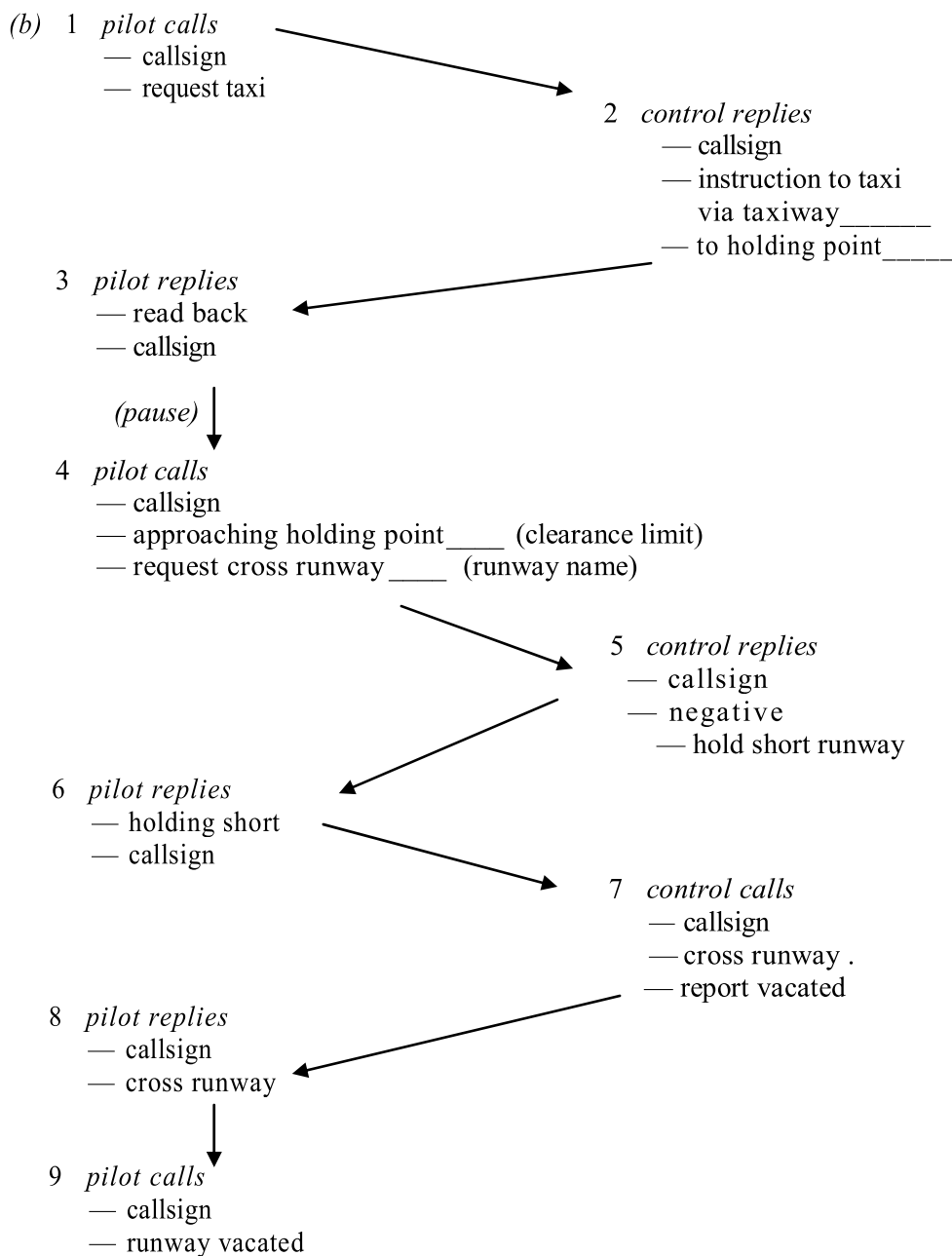
Stan with the example again, you will hear the correct instructions on the tape after you have spoken.

Check Check your answers, page 37.

1.5.2 Taxi (routine exchanges)

Typical exchanges





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

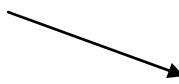
Phraseology practice

Listen Listen to the recorded dialogues.

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

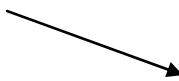
Write Complete the texts by filling in the pilot's words. Check with the tape if necessary.

(a) 1 pilot calls



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

3 pilot replies

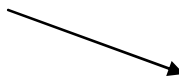


4 control calls
SF133, give way to the 747 passing left to
right.

5 pilot replies



(b) 1 pilot calls

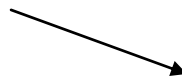


2 control replies
SF133, taxi via taxiway C to holding
point 29L.

3 pilot replies

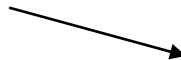


4 pilot calls



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. PIL 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. PIL Sunair 978, a _____ dog _____ the taxiway _____.

CTL Sunair 978, _____ was it going?

PIL _____.

CTL Thank you Sunair 978, we'll try to get someone _____.

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)

Instruction number	Aircraf
1	N
2	A or J
3	C
4	I
5	K
6	F
7	O
8	P
9	D

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, SFI33.
CTL
PIL Traffic in sight, SFI33.
- 2 PIL SFI33, 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 SFI33, 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, SFI33.
PIL SFI33 approaching holding point runway 18, request cross runway IS.
CTL
PIL SF133, cross runway 18.
PIL SFI33, runway vacated.
- 5 PIL SF133, request taxi.
CTL
PIL Taxiway I to holding point runway 31, traffic in sight, SF133.
CTL
PIL Expediting, SFI33.
PIL SFI33, 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)

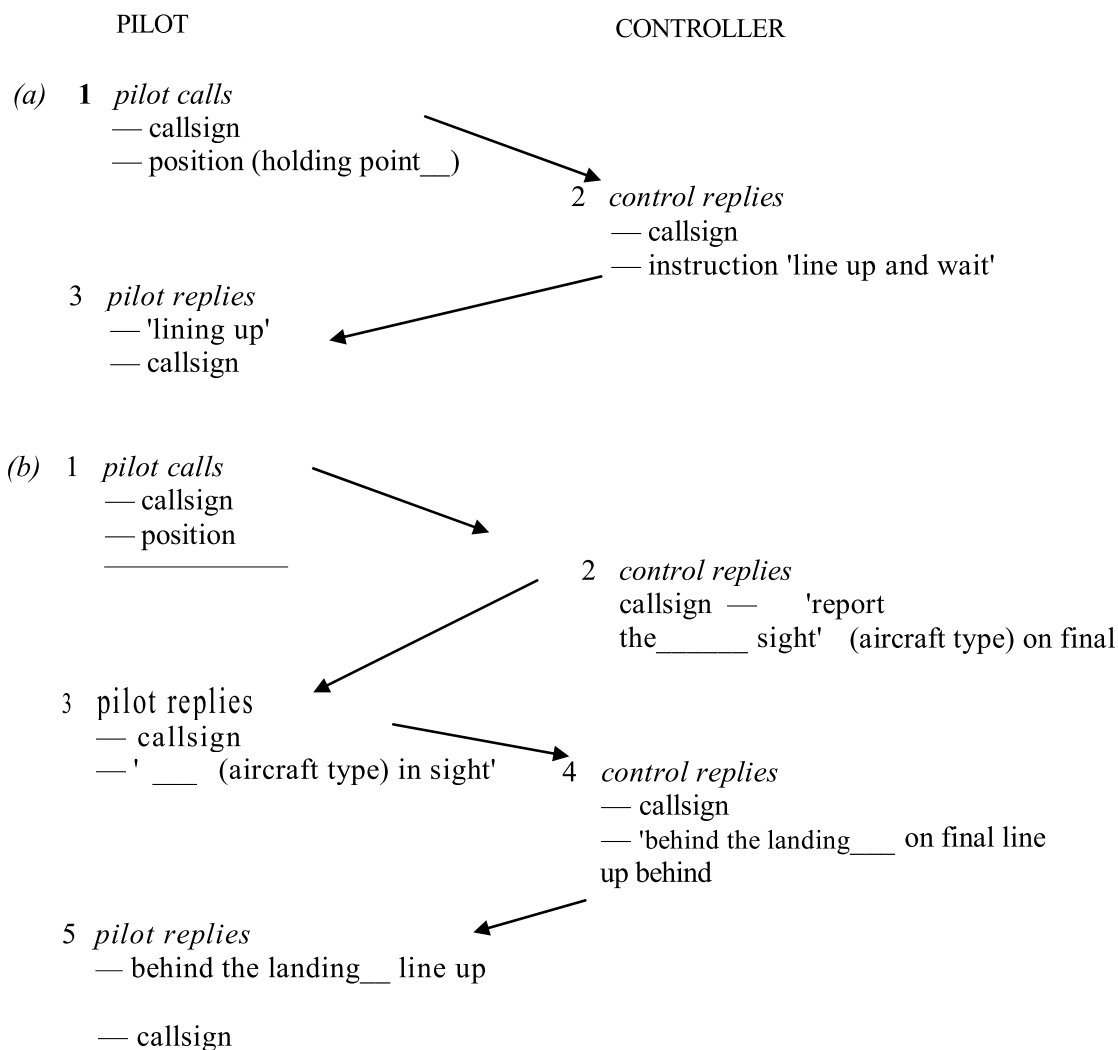
Key words and phrases

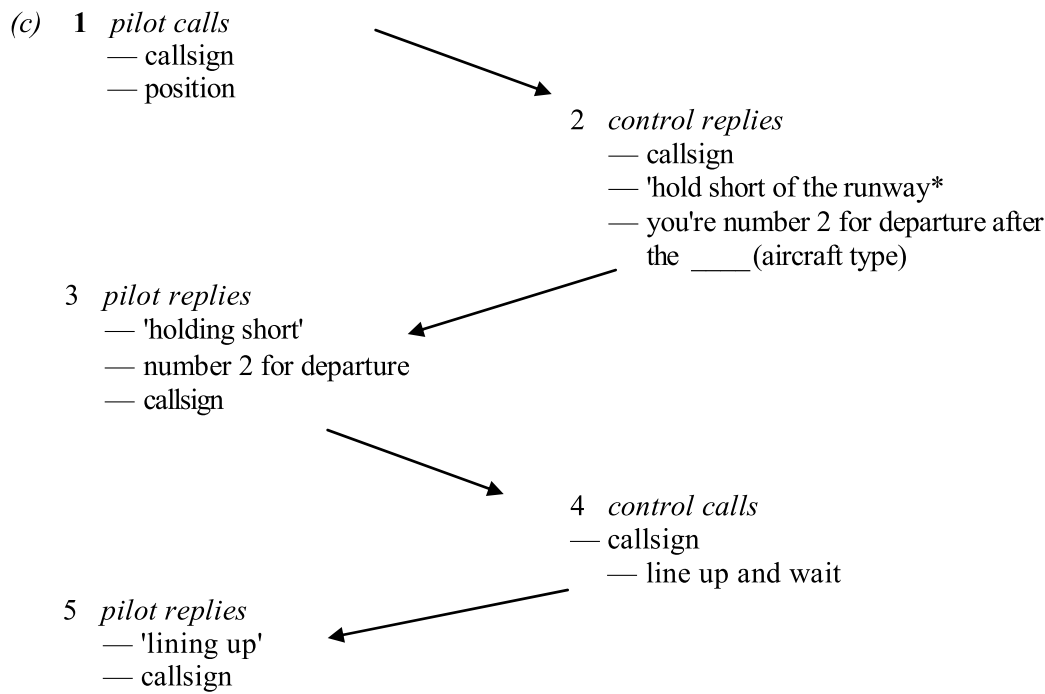
Check that you understand the following words and phrases.
Look up any new words in an aviation dictionary.

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

ICAO ref. 4.5.2
4.6.2
4.6.4
CAA ref 4.5.3
4.7.2
4.7.4
DGAC ref. 115.7.2
115.7.3

Typical Exchanges





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.

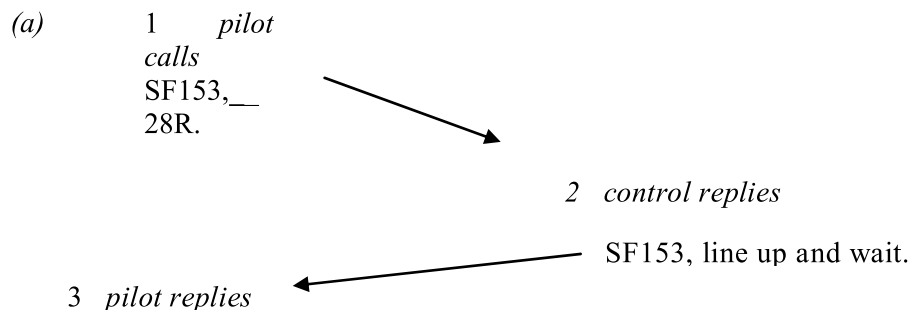
Listen Listen to dialogue (b).

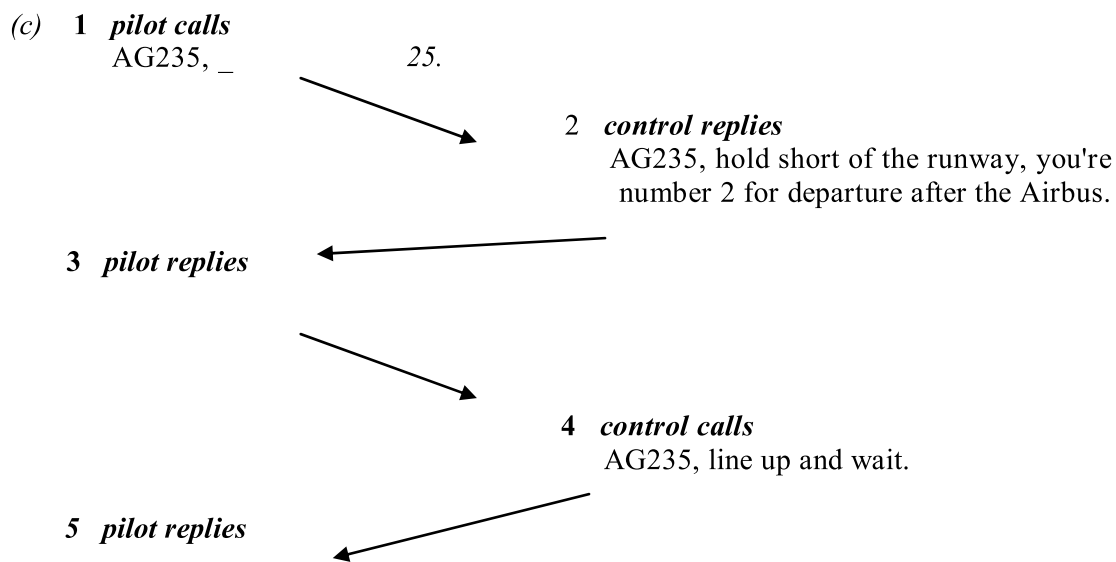
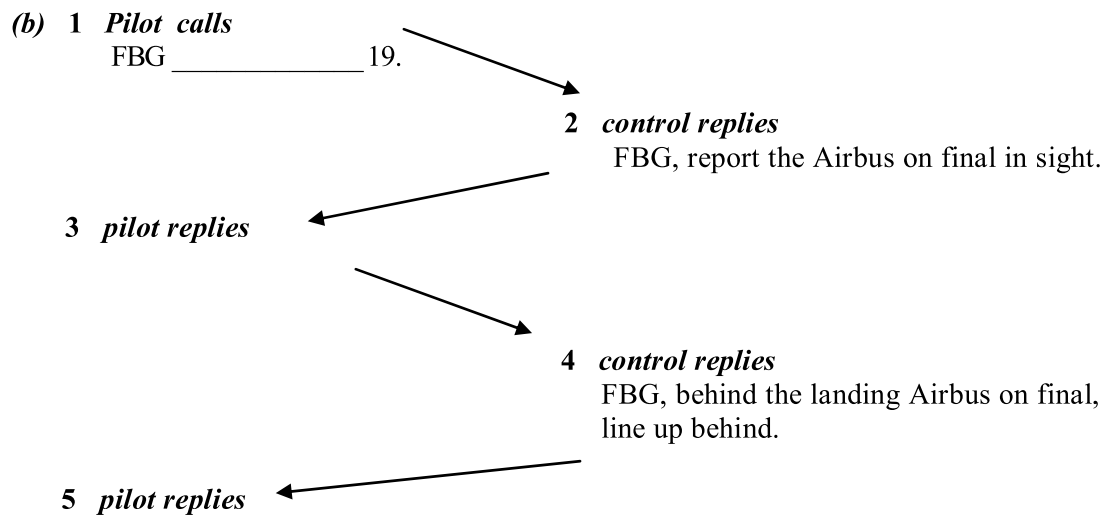
Listen and Repeat Repeat the pilot's words.

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





Check Check your answers, page 45.

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.

No.	Callsign	Holding point
1	SF153	28R
2	FBG	19
3	AG235	25
4	ESQ	13L
5	KVX	05
6	YFL	33
7	OPR	18
8	ZE692	09

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

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)

I 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

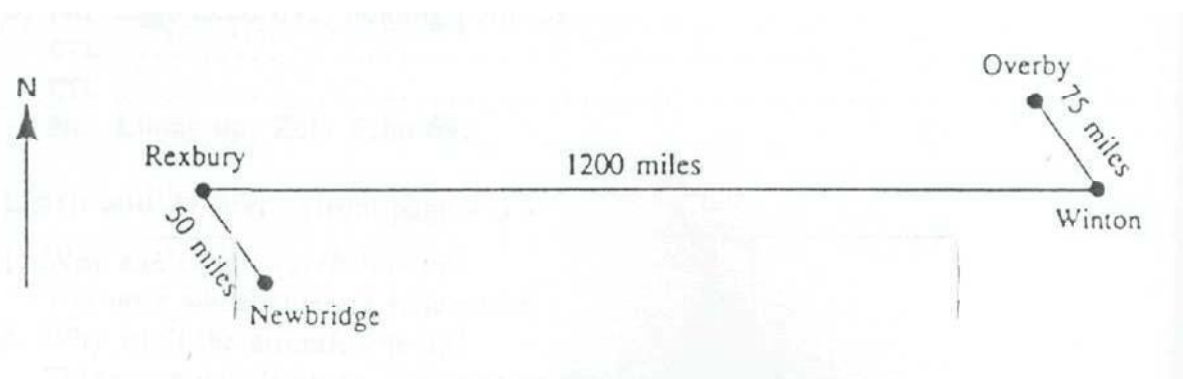
Write Put the dialogue for taxi and line-up into the correct sequence.

- (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 nautical miles North West of Winton. Newbridge 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

En route

New County Upper Control: 135.9

Valley Control: 128.5

Meadow Control: 126.3

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)

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

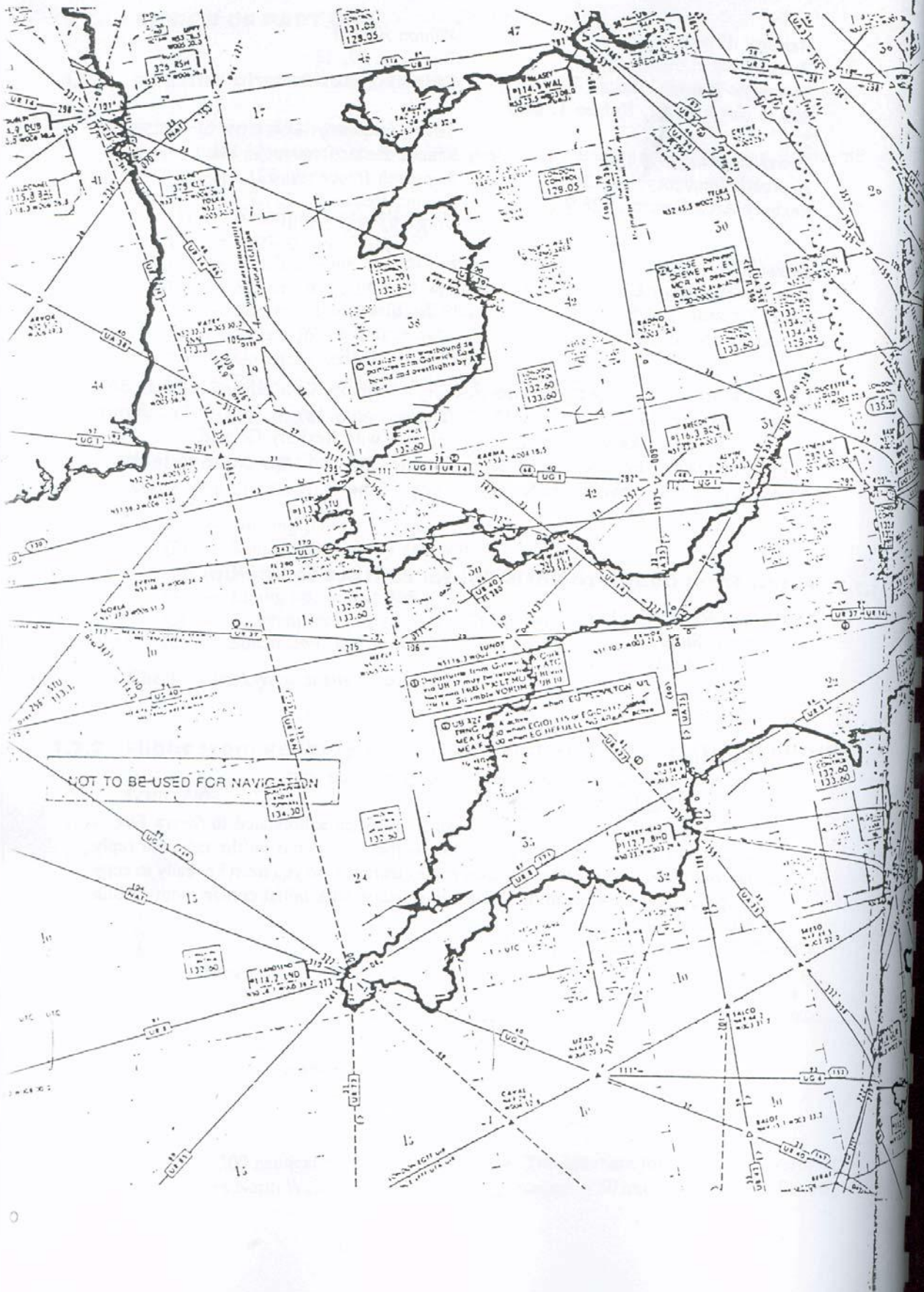
Study the maps provided on pages 50—52 before you start.

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.



NOT TO BE USED FOR NAVIGATION

131.05
128.05

114.2 WAL
MORSE CODE 114.2 WAL

128.05

Armed with westbound 20... from Central East... bound and overlights by...

132.60

PLEASE DURING...
MORSE CODE 116.2 BND

133.60

116.2 BND
MORSE CODE 116.2 BND

114.2 LND
MORSE CODE 114.2 LND

132.60

Discontinue from...
MORSE CODE 116.2 BND

US 327...
MORSE CODE 116.2 BND

134.30

131.50

116.2 BND
MORSE CODE 116.2 BND

133.60

133.60

114.2 LND
MORSE CODE 114.2 LND

132.60

116.2 BND
MORSE CODE 116.2 BND

133.60

133.60

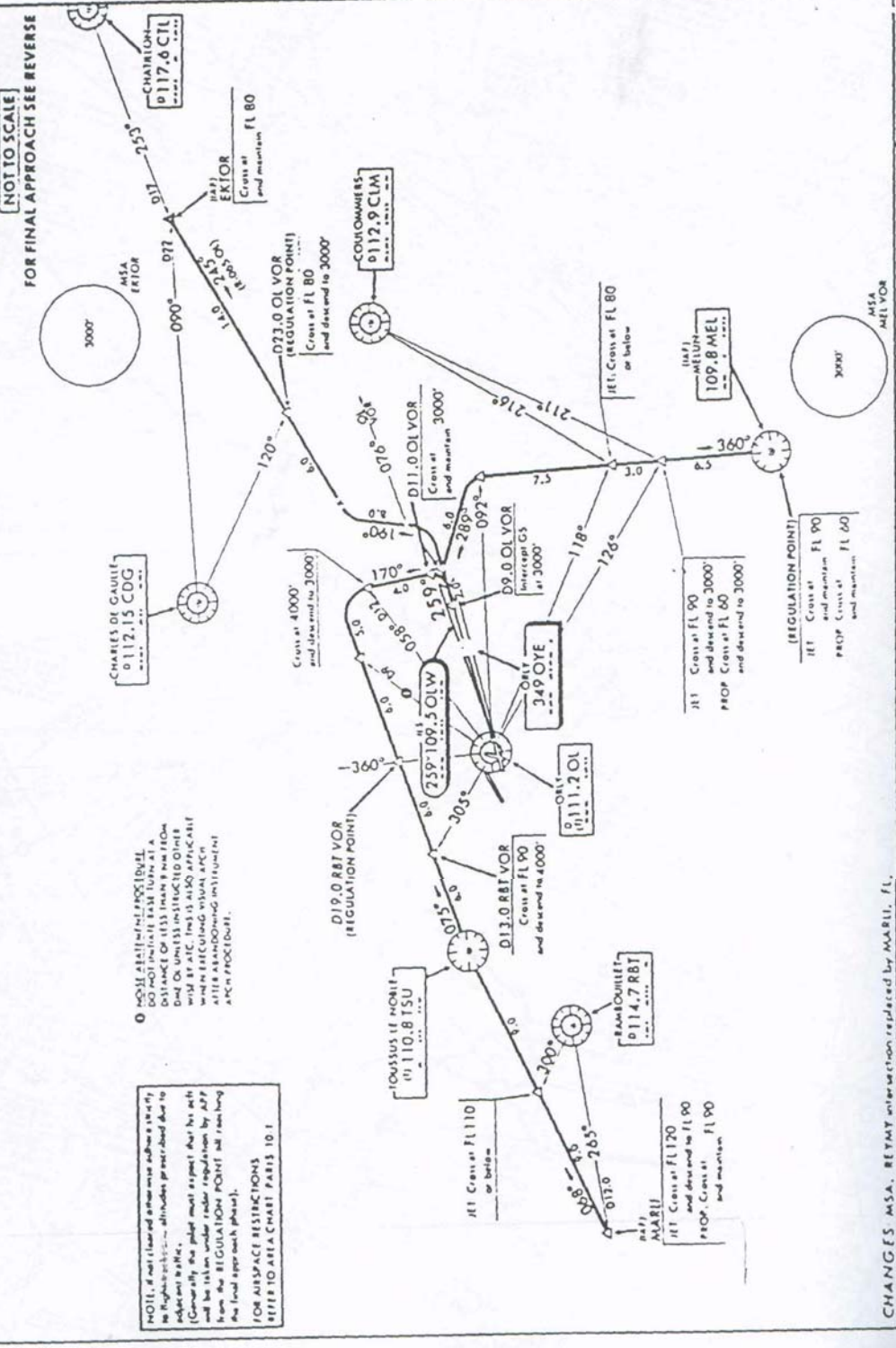
PARIS, FRANCE
 ONLY
 ILS & CAT II ILS Rwy 26
 LOCATOR Rwy 26
 LOC 109.5 OLV
 Apr. 1977



NOT TO BE USED FOR NAVIGATION

JEPPESEN 28 MAR 85
 A15 126.5
 Only Appr. 120.85 118.85 124.45
 Only 118.7 121.05 (121.05 and app. only)
 Ground 121.7
 Trans. based by AIC
 Trans. alt. 4000 (121.15)

"STANDARD APPROACH"
 (NOT TO SCALE)
 FOR FINAL APPROACH SEE REVERSE



CHANGES: MSA, REYMU intersection replaced by MARIU, FL. 6000, 4000, 3000, 2000, 1000, 500, 0

CHECK

Start-up and push-back 1

Write (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 SUPPLEMENTARY VOCABULARY

1.8.1 Phases of flight

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

climb push-back
take-off final approach
descent taxi
start-up take-off roll
approach touch-down
cruise line-up

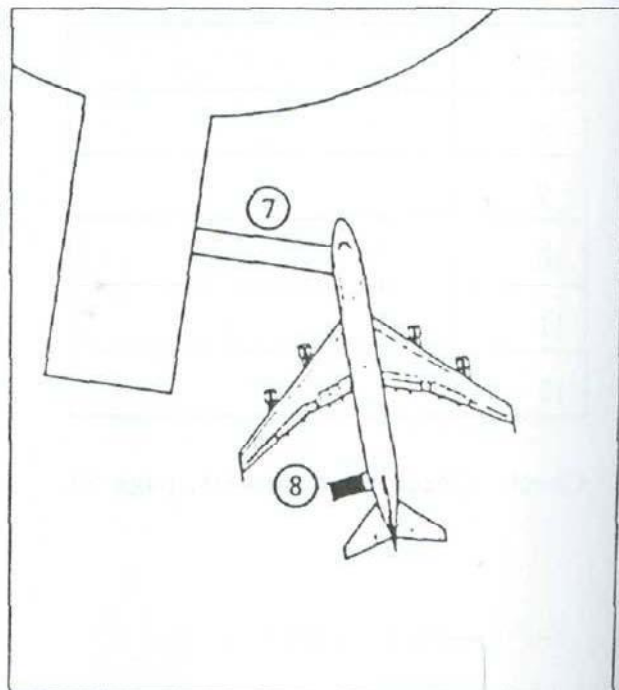
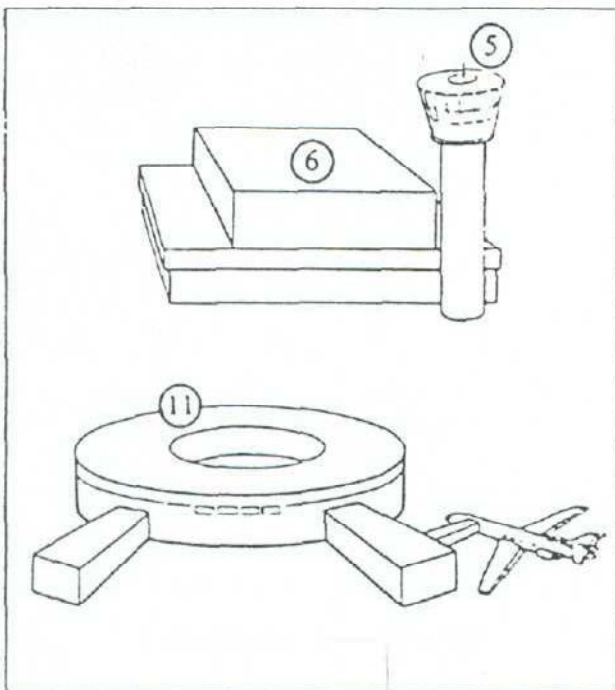
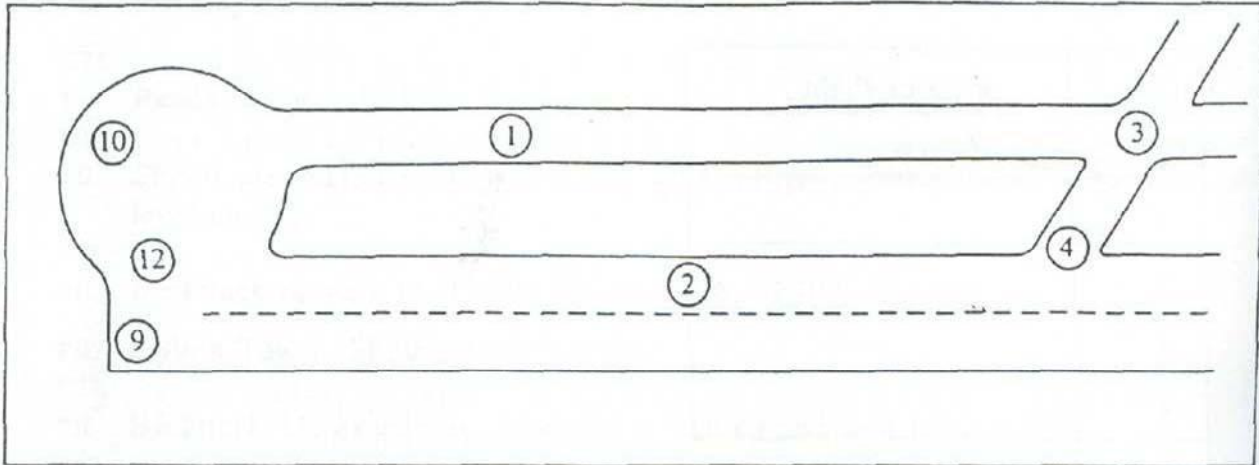
no.	phase of flight
I	
2	
3	
4	
5	
6	
7	
8	
9	
10	
II	
12	

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.

- | | |
|-----------------------|-------------------------|
| <i>No.</i> | <i>No.</i> |
| ___ terminal building | ___ holding bay/area |
| ___ intersection | ___ high-speed turn-off |
| ___ satellite | ___ runway |
| ___ tower | ___ holding point |
| ___ jetway | ___ passenger steps |
| ___ taxiway | ___ threshold |



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.

it helps you not to get lost	
used at push-back	
used for electrical power at the parking stand	
for extinguishing fires	
to clear the tarmac on winter days	
it carries fuel	
it carries food	
it takes passengers to the plane	
like a huge bus which rises to the level of the door	

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)

<i>No.</i>		<i>No.</i>	
6	terminal building	10	holding area/bay
3	intersection	4	high-speed turn-off
II	satellite	2	runway
5	tower	12	holding point
7	jetway	8	passenger steps
1	taxiway	9	threshold

1.8.3 Read and Write (from page 57)

it helps you not to get lost	FOLLOW ME van
used at push-back	tug
used for electrical power at the parking stand	GPU
for extinguishing fires	fire truck
to clear the tarmac on winter days	snow plough
it carries fuel	fuel tanker
it carries food	catering truck
it takes passengers to the plane	shuttle bus
like a huge bus which rises to the level of the door	mobile lounge

Part Two
Take-off
To top of climb

DISTRESS AND URGENCY MESSAGES

ICAO ref. 9.2
9.3
CAA ref. 9.3
9.4
DGAC ref. 9.2
9.3

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

Distress	Urgency

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.

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

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:

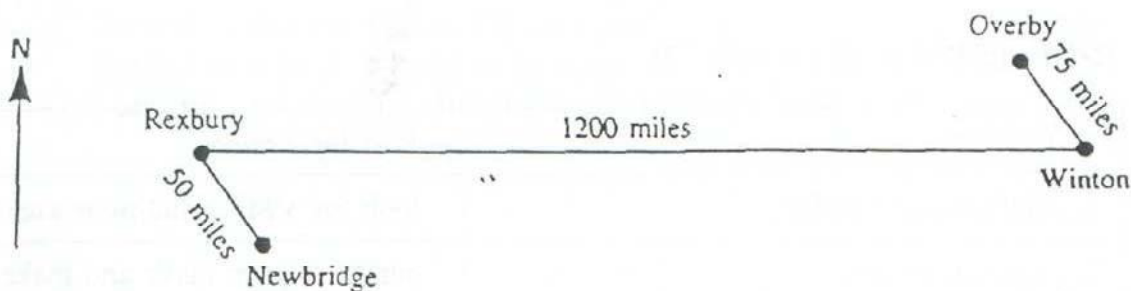
1. MAYDAY, MAYDAY, MAYDAY
2. aircraft identification
3. description of the emergency
4. intention of the pilot
5. position, level and heading
6. other information

Urgency messages should have the same elements, with 'MAYDAY' replaced by PAN PAN
PAN PAN PAN PAN

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.)

CHECK

2.1 Read and Write (from page 61)

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

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

2.1 Read and Write (from page 62)

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

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

ICAO ref. 4.6.1
4.6.3 4.E.5
4.6.7 4.6.8
CAAREf. 4.7.1
4.7.2
4.7.4
4.7.7
4.7.8
DGAC ref. 11.5.7.3
11.5.7.4

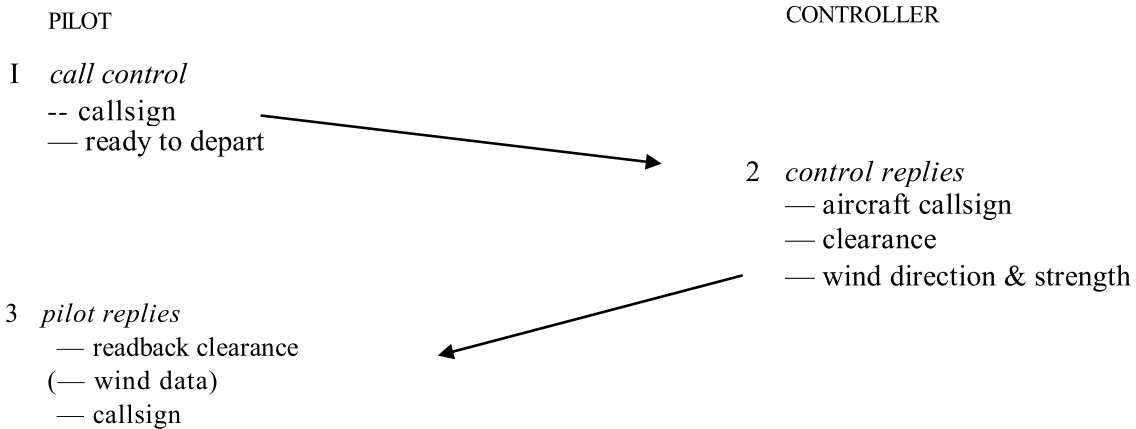
2.2.1 take-off (routine)

Key words and phrases

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

immediate	calm
report	vacate
immediately	cancel
stop	vehicle
obstructing	

Typical exchange



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.



Check Check your answers, page 71.

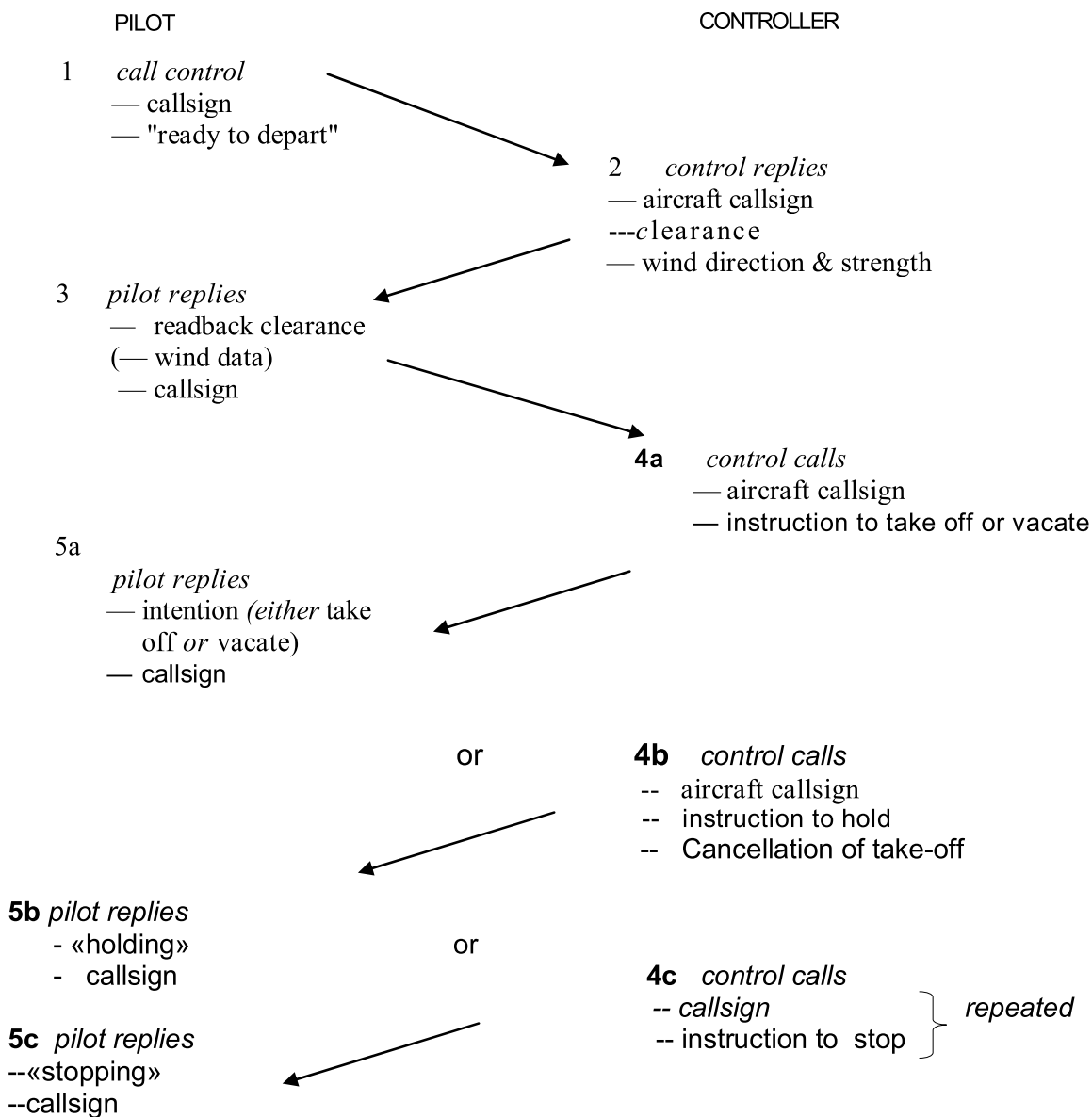
Listen and Speak Get take-off clearance for the flights below, and reply to me controller's instructions. Listen to the example and then continue in the same way, starting with the example again.

- | | |
|-----|----------|
| No. | Callsign |
| 1 | SF153 |
| 2 | FBG |
| 3 | AG235 |
| 4 | ESQ |

Check Check your answers, page 71.

Typical exchange

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



- | | |
|---------|-------|
| 1 SF153 | 5 MPH |
| 2 FBG | 6 RST |
| 3 AG235 | 7 DNO |
| 4 JDI | 8 UCQ |

Check Check your answers, page 72.

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^fgear.

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.

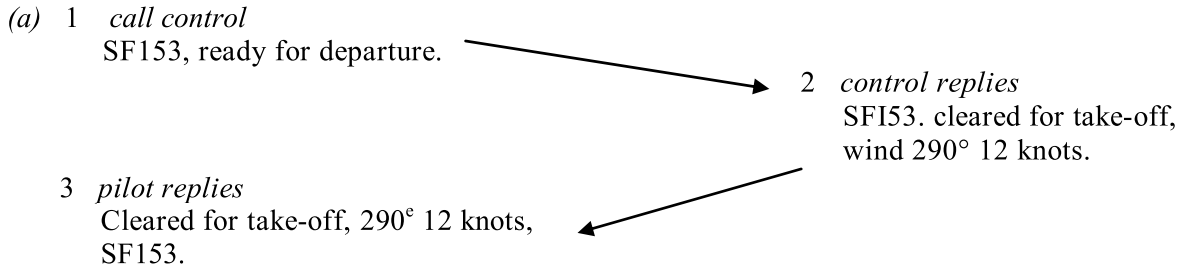
Check Check your answers, page 74.

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

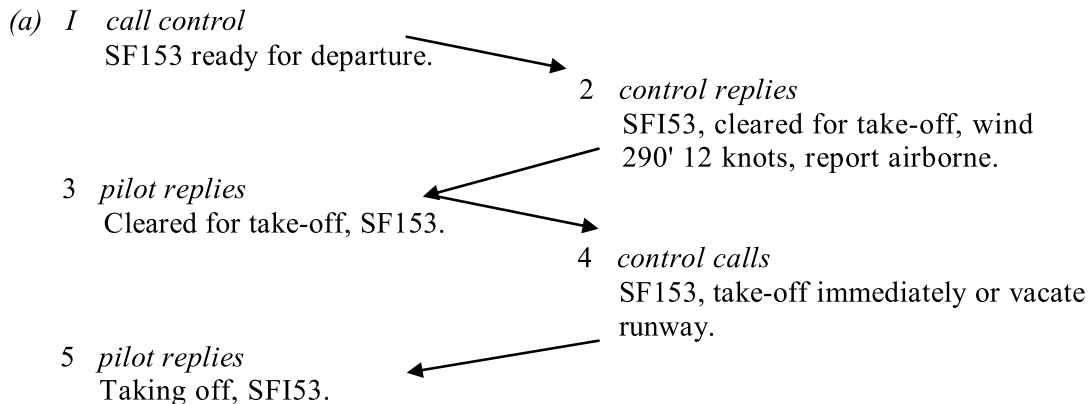
2.2.1 Listen and Write (from page 66)

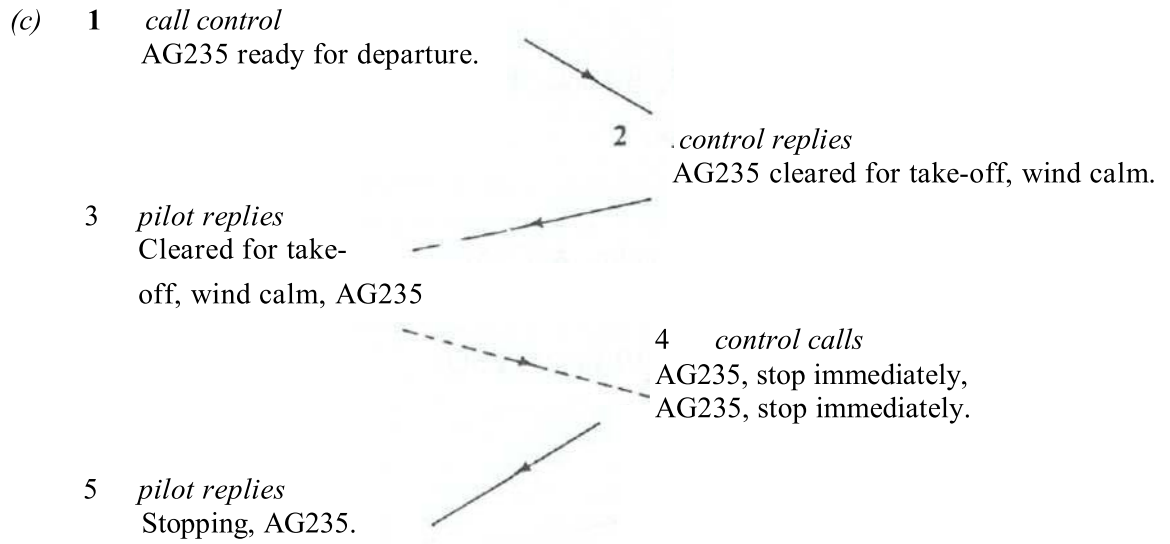
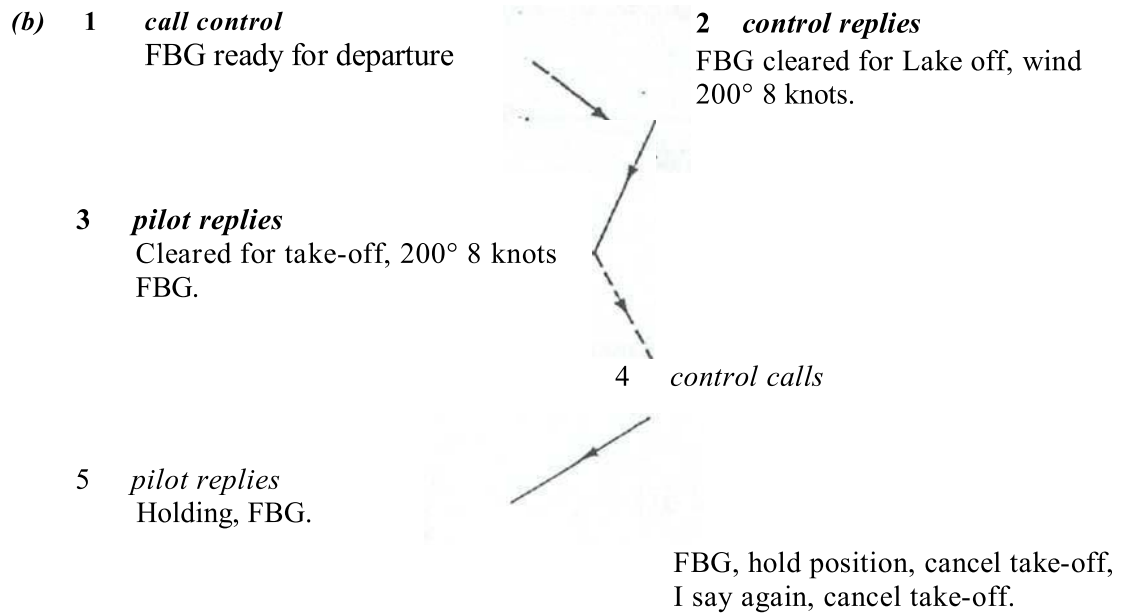


2.2.1 Listen and Speak (from page 67)

- 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)





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° II 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.

222 | 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)

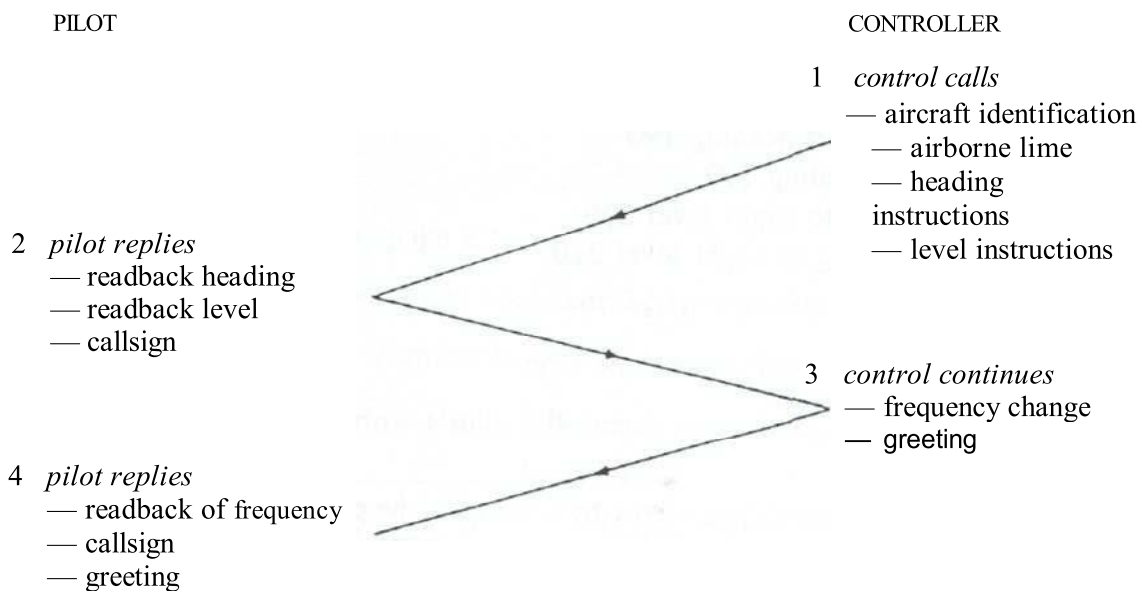
ICAO ref. 7.1.2
CAA ref. 7.1.2
DGAC ref. 11.5.7.5

Key words and phrases

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

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

Typical exchange



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.

Instruction	Number on tape
A Climb to flight level 190.	
B Climb on present heading.	
C Climb straight ahead.	
D Climb on track to Delta.	
E Turn right, heading 190.	
F Turn left, heading 190.	
G Climb so as to cross Delta at flight level 190.	
H Continue present heading until flight level 150.	
I Expedite climb to flight level 190.	

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.

- CTL Turn left heading 190
PIL Left heading 190.
- 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*

Check Check your answers, page 79.

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 |

Check Check your answers, page 80.

2-3-2 initial 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. Why have they shut down an engine?

2. Why are they returning?

3. What must they do before returning to Rexbury?

Check Check your answers, page 80.

Listen and Write Listen again and complete the texts below.

1 P/L Sunair 670, Rexbury Approach, we've _____ no. I engine after a _____ . We're _____

CTL Do you require _____ Sunair 670?

P/L Negative, there is no _____ . Sunair 670.

CTL Roger, Sunair 670, turn left heading 250.

2 P/L 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.

P/L 118.5, Sunair 539.

3 P/L 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.

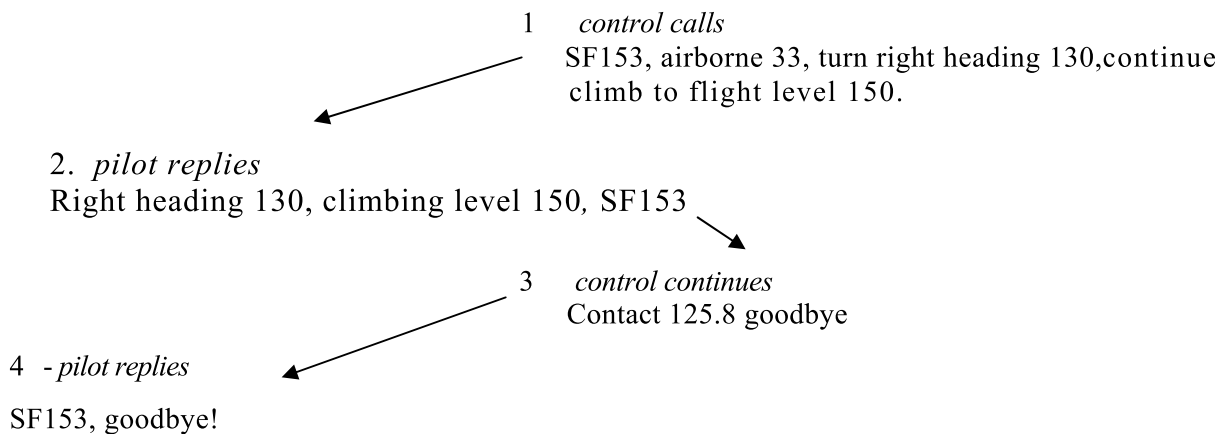
2.3.1 Listen and Write (from page 76)

Instruction	No.
A	5
B	6
C	1
D	7
E	2
F	4
G	3
H	8
I	9

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)



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 FLI30, DNO.
CTL
PIL 132.9, DNO, goodbye.
- 6 CTL
PIL Climbing on present heading to FLI30, ZE692.
CTL
PIL 134.2, ZE 692. 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.

3 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

ICAO refs. 2.8.1
2.8.2
3.2.2.1
CAA refc. 2.7.4.1
3.2.3.1
DGACreFs. 1.1.2.3.1
11.2.3.2

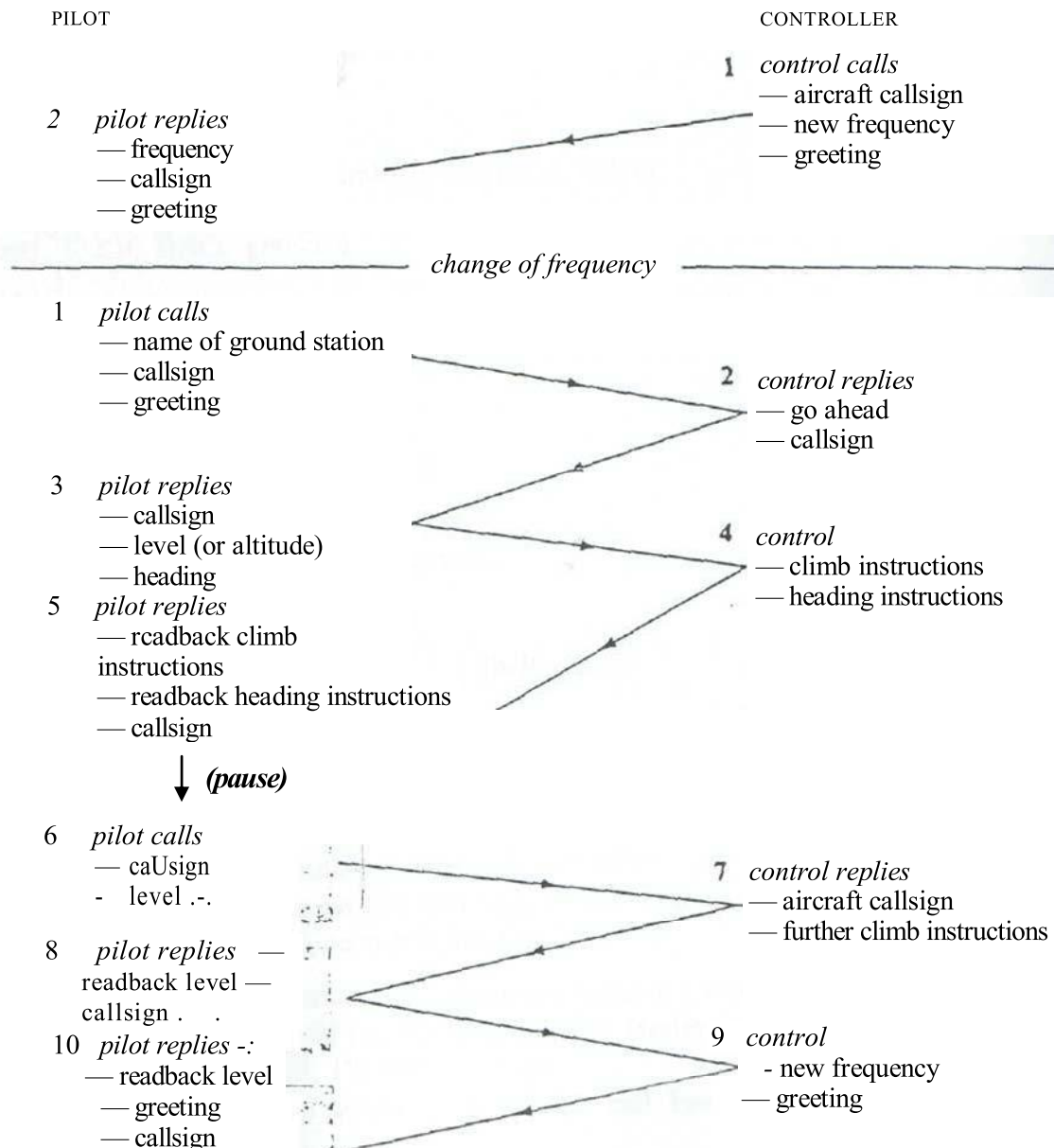
2.4.1 Climb (routine)

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	goodbye
flight level	good afternoon	maintain present heading
reach	good evening	report

Typical exchange sequences



NOTES

- *Greetings*: Greetings like 'good morning', 'good afternoon' in the first call, and 'good bye' 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

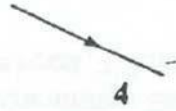
2 control replies -
.Go ahead, SF153.

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.

	Callsign	Present flight level	Heading
1	SF153	90	130
2	AG235	110	250
3	YFL	70	230
4	OPR	80	180
5	DNO	90	190
6	ZE692	80	090

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.

CHECK

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.

(change of frequency)-

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

2 *control replies* Go
ahead, SF153.

3 *pilot replies*
SF153, flight level 90, heading 130.

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

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

(pause) :

6 *pilot calls*
SF153, reachmg 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 55)

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 **END OF CLIMB**

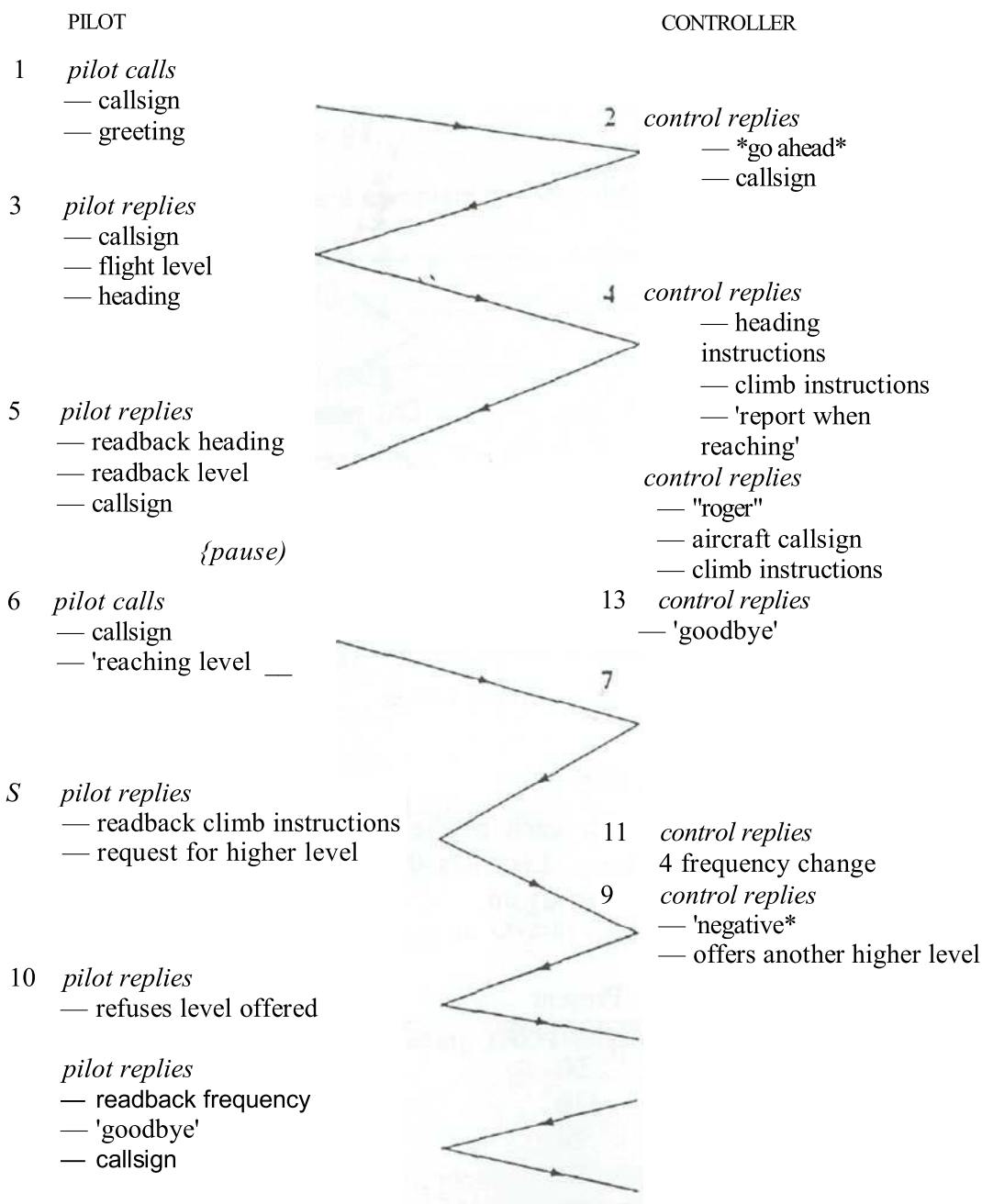
2.5.1 End of climb (routine)

Key words and phrases

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

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

Typical exchange



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.

Callsign	Present flight level	Heading	Preferred cruise level
1 SF153	90	130	310
2 AG235	110	250	330
3 YFL	70	230	330
4 OPR	80	180	290
5 DNO	90	190	210
6 ZE692	100	090	330

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.

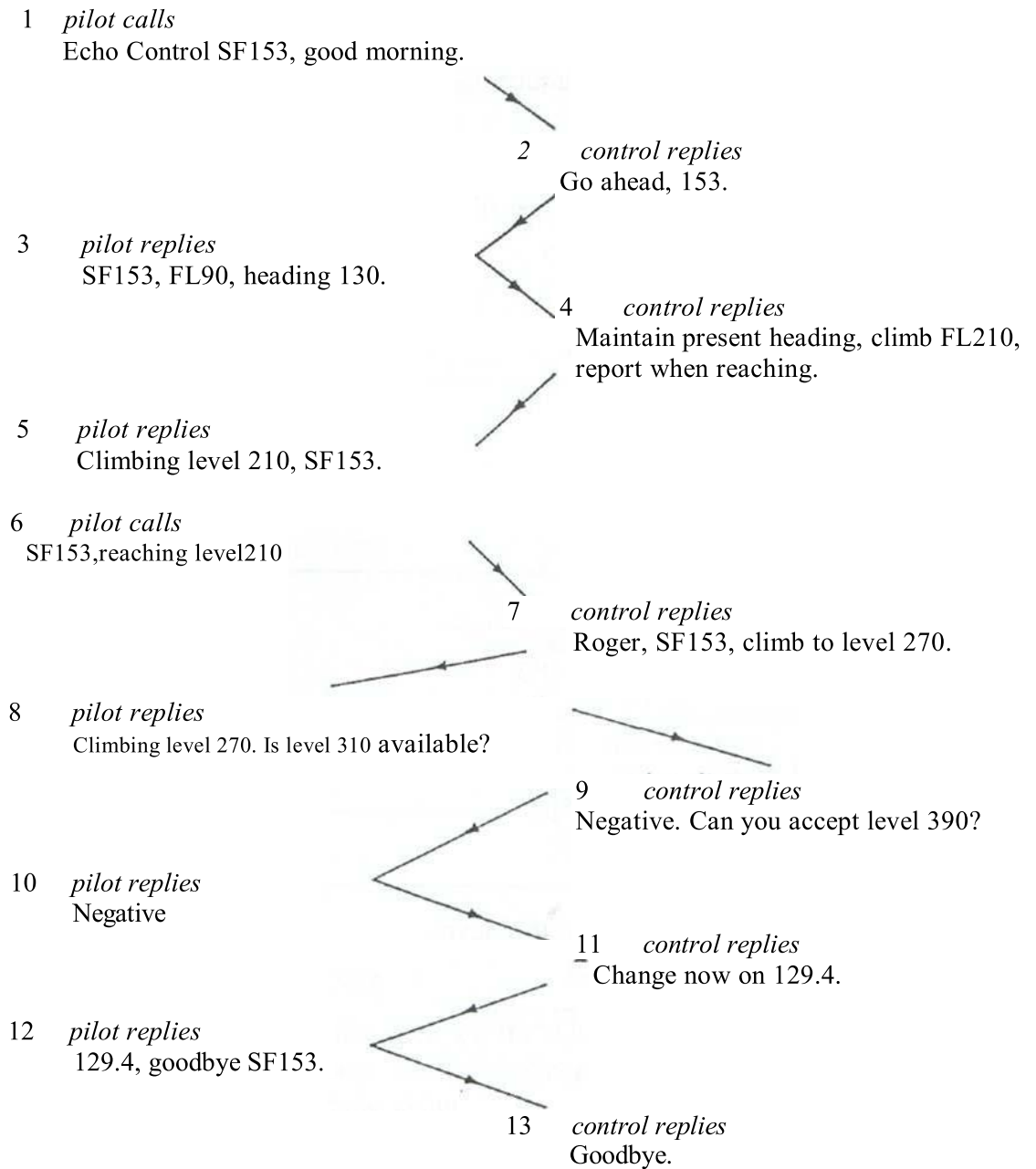
Check Check your answers, page 94.

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)



NOTE

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



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 turn 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.
 CTL.....
 PIL 132.9, goodbye.
- 5 PII- Echo Control, Delta November Oscar, good morning.
 CTL
 PIL Reaching level 90, heading 190.
 CTL
 PIL Climbing 170.
 PIL DNO, reaching level 170.
 CTL.....
 PIL Climbing 210.
 CTL ..:
 PIL 129.3, goodbye. Delta November Oscar.
 CTL
- 6 PIL Echo Control, Zulu Echo 692, good morning.
 CTL
 PIL Reaching level 100, heading 90.
 CTL
 PIL Left turn, 010, climbing level 170, report 150. PIL
 ZE 692, passing 150.
 CTL
 PIL Climbing level 290. Is 330 available?
 CTL
 PIL Negative.
 CTL
 PIL 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.
 CTL Roger, descend to flight level 120, report reaching.
 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.
 CTL Sunair 596, call you back.
 CTL Sunair 596, descend to FL280.
 PIL Descending to FL280, Sunair 596.

- 3 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 (Blackxock)

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

fry Wallasey 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.

CHECK

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.....

CTL.....

PIL Negative, Sunair 367.

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, 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.

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 2 _____

helicopter
balloon glider
airship

Group 3 _____

long haul
short haul
medium haul
STOL*
VTOL*

Group 4 _____

fighter
airliner
freighter
bomber
tanker
business jet
executive aircraft
seaplane

Group 5 _____

twin jet
single-engined aircraft
tri-jet
four-engined aircraft
jet
turbo prop

Group 6 _____

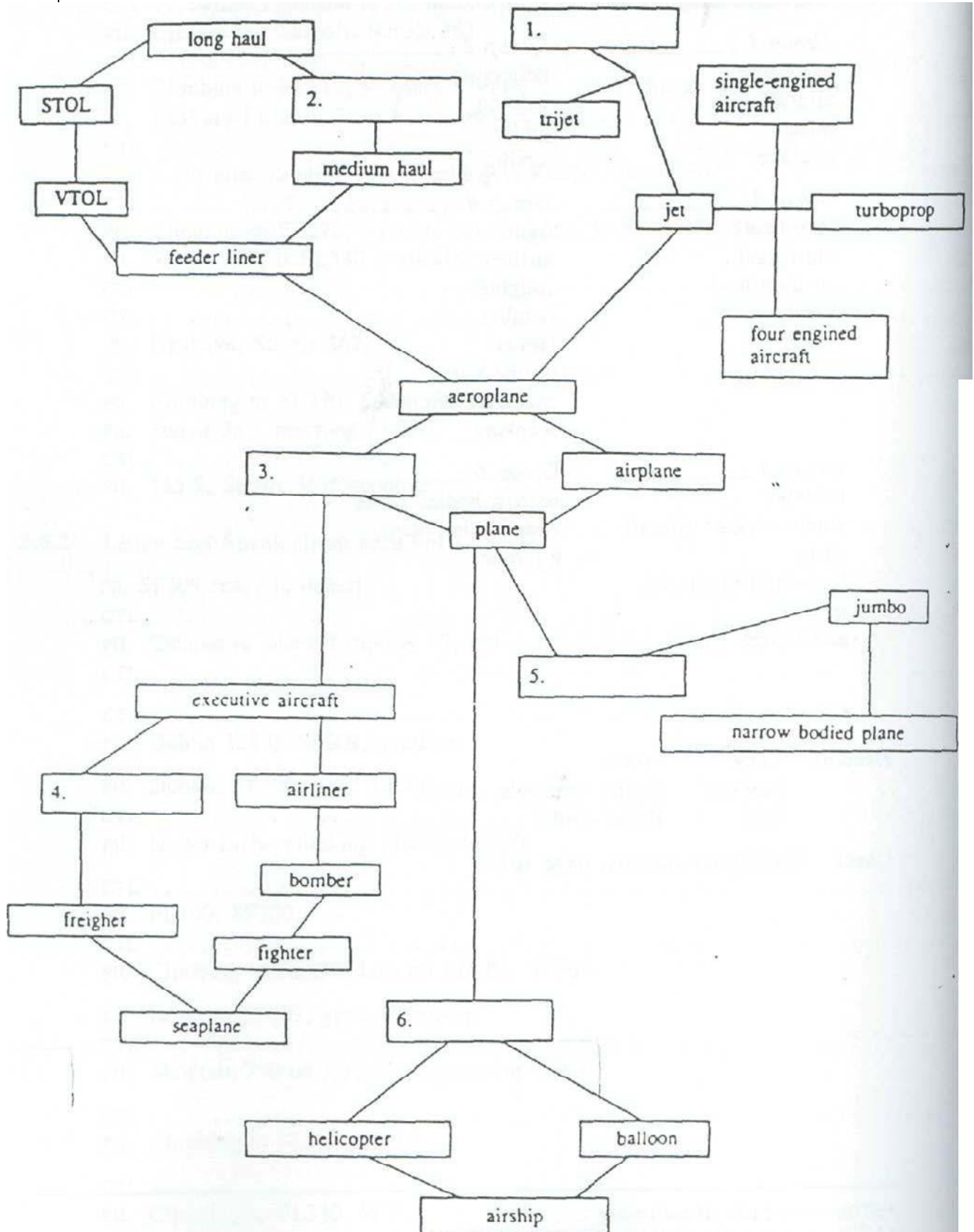
narrow-bodied plane
wide-bodied plane
a jumbo

Headings: Range Power
 Purpose Flying machines
 Size Plane words

Check Check your answers, page 105.

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

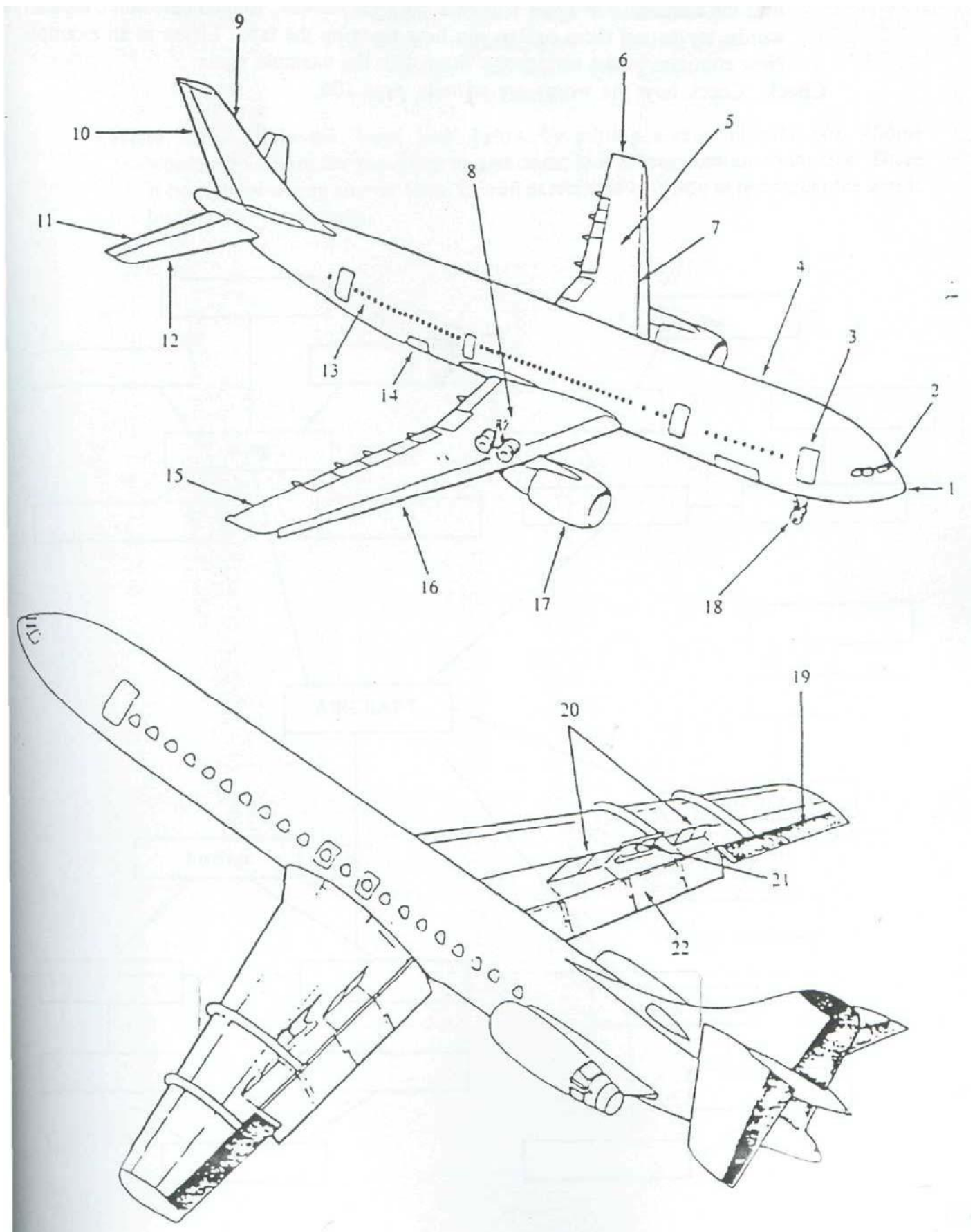
Read and Write The same six groups of words are organised here into a 'word tree'¹, but one word from each group is missing. Write in the missing words.



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.

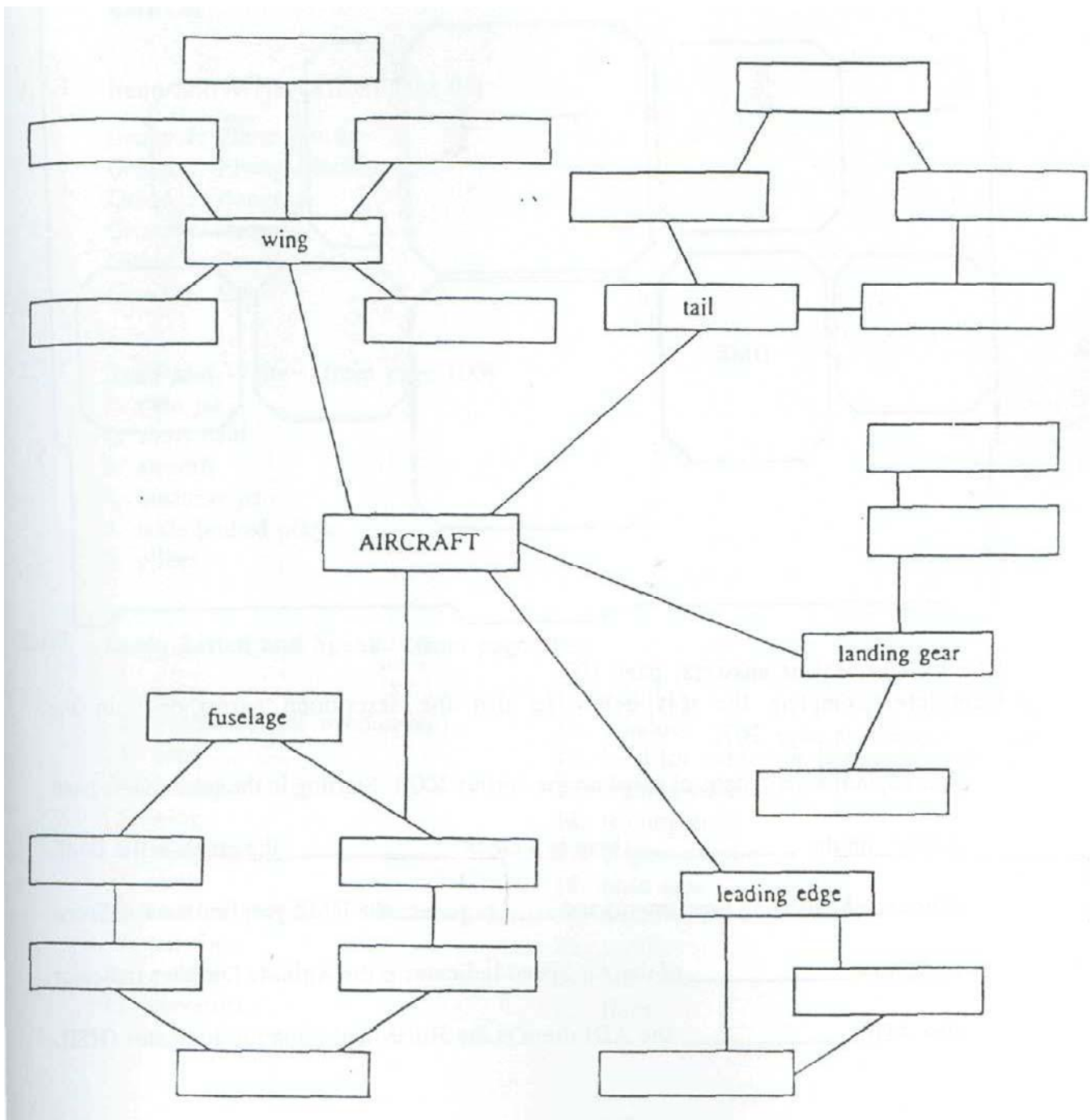
Look, listen and Speak Now test yourself. How many of the words do you remember? Listen to the tape, look at the picture and say the correct word when you hear the number. Then you will hear the right answer. Remember, don't repeat the words; try to say them *before* you hear them on the tape. Listen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

wing tip	door	ailerons
trailing edge	wheel	rudder
window	fuselage	nose
engine nacelle	slats	windshield
flaps	tyre	tail
elevators	landing gear	airbrakes
wing	tail-fin	leading edge
		nose gear
	spoilers	

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.



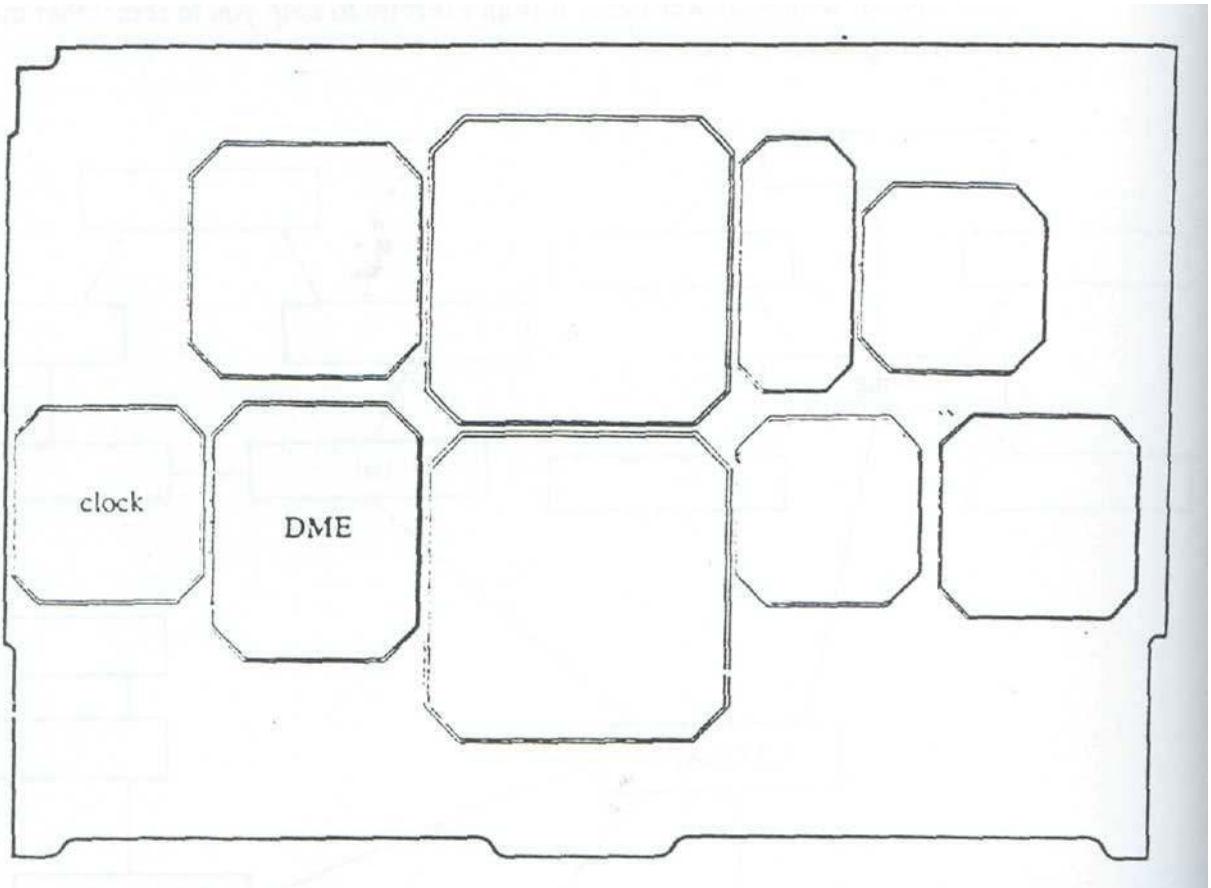
Write Now try to make the same word tree, but this time, *do not look* at the tree you fiUed in or the list of words.

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.



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)

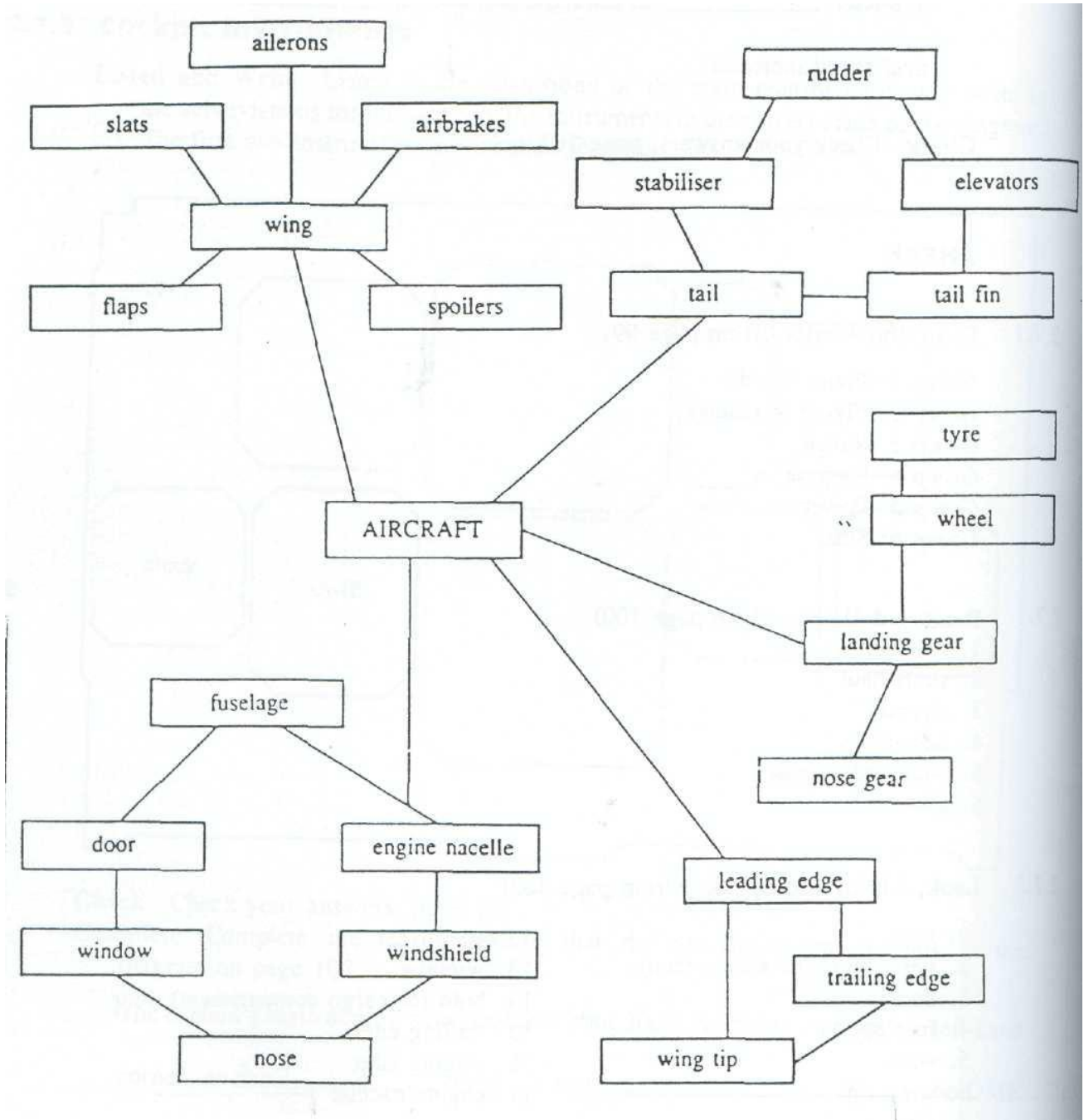
1. twin jet
2. short haul
3. aircraft
4. business jet
5. wide-bodied plane
6. glider

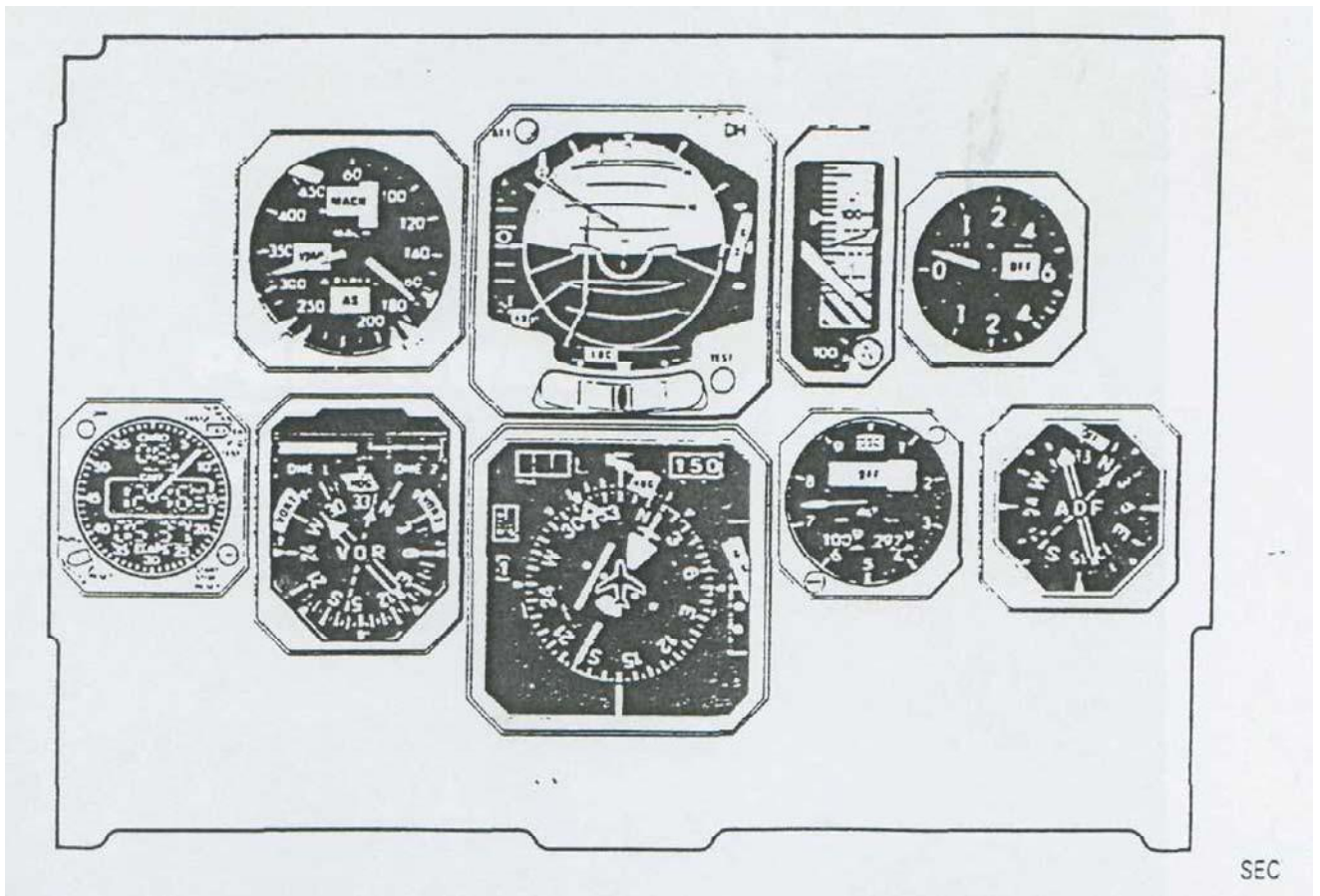
2.7.2 Look, Listen and Speak (from page 102)

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





SEC

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. Starting 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.

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

Check Check your notes using the texts on page 114.

CHECK

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, dewpoint 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 300ft, temp 7, dew point 6, QNH 1012, gradu, 7 km, 5 oktas 1500ft.
- 3 Birmingham at 11.50. 110° 06 knots, 3000 m, recent rain, 5 oktas 300ft, 8 oktas 400 ft, temp 4, dew point 3, QNH 1010, tempo, 2 oktas 300 ft.
- 4 Manchester at 11.50. 090°. 09 knots, 10 km or more, rain 1 okta 1000ft, 7 oktas 1600 ft, temp 3, dew point 1, QNH 1010, tempo 7 oktas 1400 ft.
- 5 Prestwick at 11.50. 070° 14 knots, 10 km or more, 1 okta 1000 ft, 3 oktas 2000 ft, 5 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 oktas 1000ft.
- 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, i mist, 2 oktas 1000ft, 8 oktas 1600ft, temp - 1, dew point -4, no sig.
- 9 Stockholm Arlanda met report, Stockholm Arlanda. 200° 18 knots, visibility 7 kmj mist, 7 oktas 1200ft, temp —3, dew point —5, no sig.
- 10 Gothenburg met report, Gothenburg. 210° 19 knots, visibility 3500m, mist, 7 oktas 1500ft, 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 1 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. Q4.50 Z. Wind 050° 11, visibility 4500 m, rain, 8 oktas 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 sig.
- 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

ICAOref. 3.3.2 3.3.3
CAA ref. 3.3
DGACref. 11.2.2.2

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.

	A	Report passing Alpha.
	B	Next report at Alpha.
	C	Omit position reports until Alpha.
1	D	Omit position reports this frequency.
	E	Report intercepting the 210 radial of the Alpha VOR.
	F	Report 15 miles from Alpha DME.
	G	Resume position reporting.
	H	Report intercepting the 120 radial of the Alpha VOR.
	I	Report 5 miles from Alpha DME.
	J	Report passing the Alpha VOR 342 radial.

Check Check your answers, page 120.

Typical exchange

PILOT

CONTROLLER

2 *pilot replies*
— readback of frequency
— callsign
— greeting

1 *control calls*
— callsign
— new frequency
— greeting



—(change of frequency)

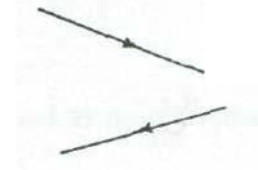
- 1 *pilot calls*
 — callsign
 — greeting



- 2 *control replies*
 — 'go ahead'



- 3 *pilot position report*
 — callsign
 — ___ (name of reporting point) at ___ (present time)
 — flight level
 — 'estimating ___ (next reporting point) at ___ time'



- 5 *pilot replies*
 -- 'wilco'
 — callsign

- 4 *control replies*
 — 'roger'
 — aircraft callsign
 — -next report at ___ (name of reporting point)

Phraseology practice 2

Listen Listen to the dialogue on the tape.

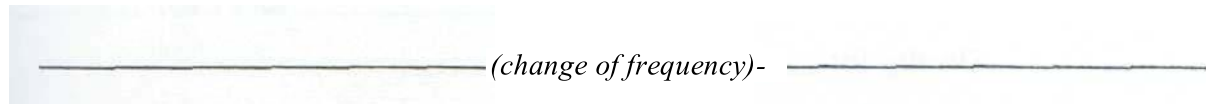
Listen and Repeat Listen again and repeat the pilot's words.

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*

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.

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

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.

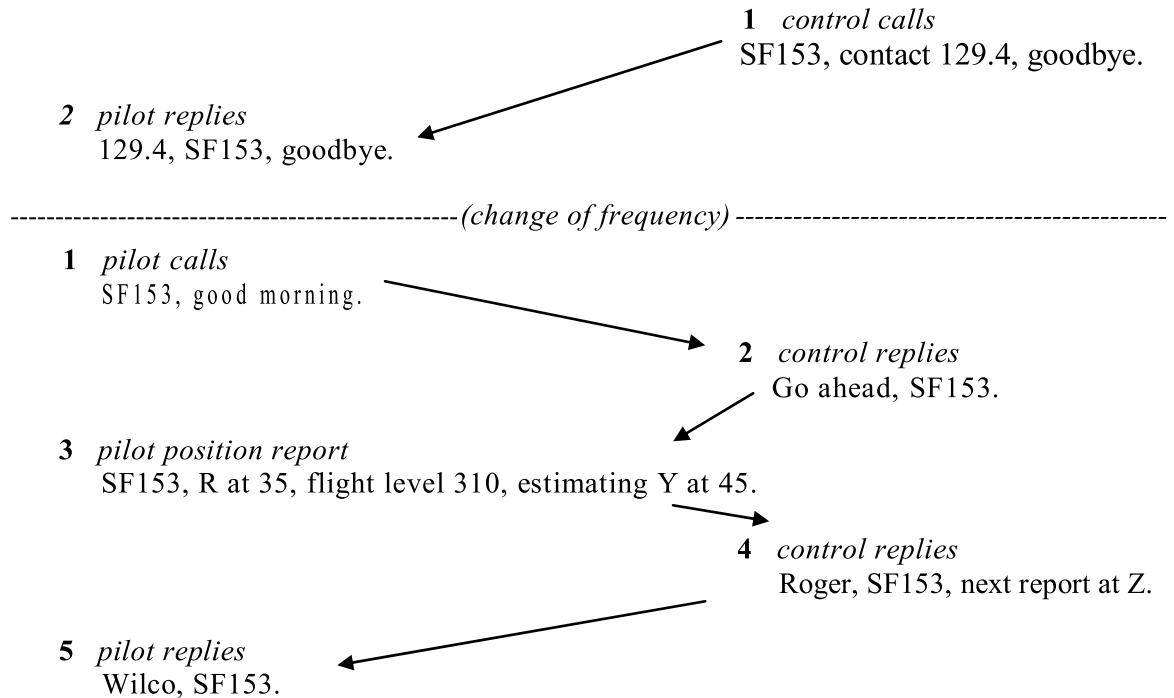
Your word list

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.

CHECK

3.2.1 Listen and Write (from page 116)

7	A	Report passing Alpha
2	B	Next report at Alpha
8	C	Omit position reports until Alpha.
1	D	Omit position reports this frequency
9	E	Report intercepting the 210 radial of the Alpha VOR.
10	F	Report 15 miles from Alpha DME
3	G	Resume position reporting
4	H	Report intercepting the 120 radial of the Alpha VOR
5	I	Report 5 miles from Alpha DME
6	J	Report passing the Alpha VOR 342 radial.



3.2.1 Listen and Speak (from page 118)

- 1 CTL
 PIL Sierra Foxtrot, Romeo at 35, flight level 310, estimating Yankee at 45.
 CTL
 PIL Wilco, Sierra Foxtrot 153.

- 2 CTL
 PIL Alpha Golf 235, Sierra at 28, flight level 280, estimating Zulu at 40.
 CTL
 PIL 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 landins.
- 2 PIL Sunair 506, we have lost ail 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 Sunatr 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)

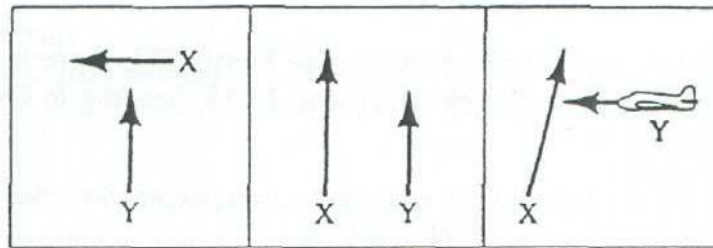
Key words and phrases

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

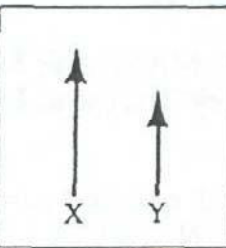
unknown same	vectors
direction	resume own navigation
moving fast	direct
moving parallel	magnetic track
-descend —	distance
negative contact	at your 10 o'clock position
	opposite direction

Phraseology practice 1

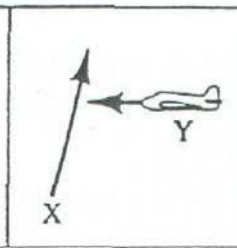
Listen and Write Listen to the items of traffic information on the tape, and look at the diagrams. Identify the diagram which corresponds to each item in the table below.
(Y = the plane receiving the information
X = the unknown traffic)



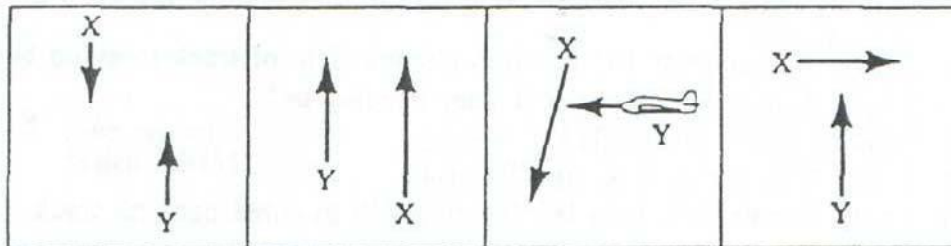
A



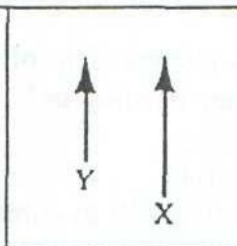
B



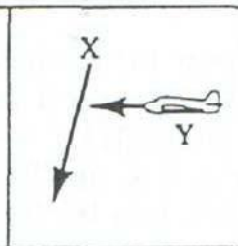
C



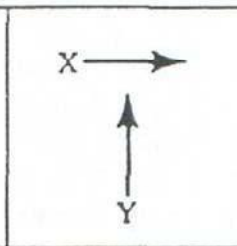
D



E



F



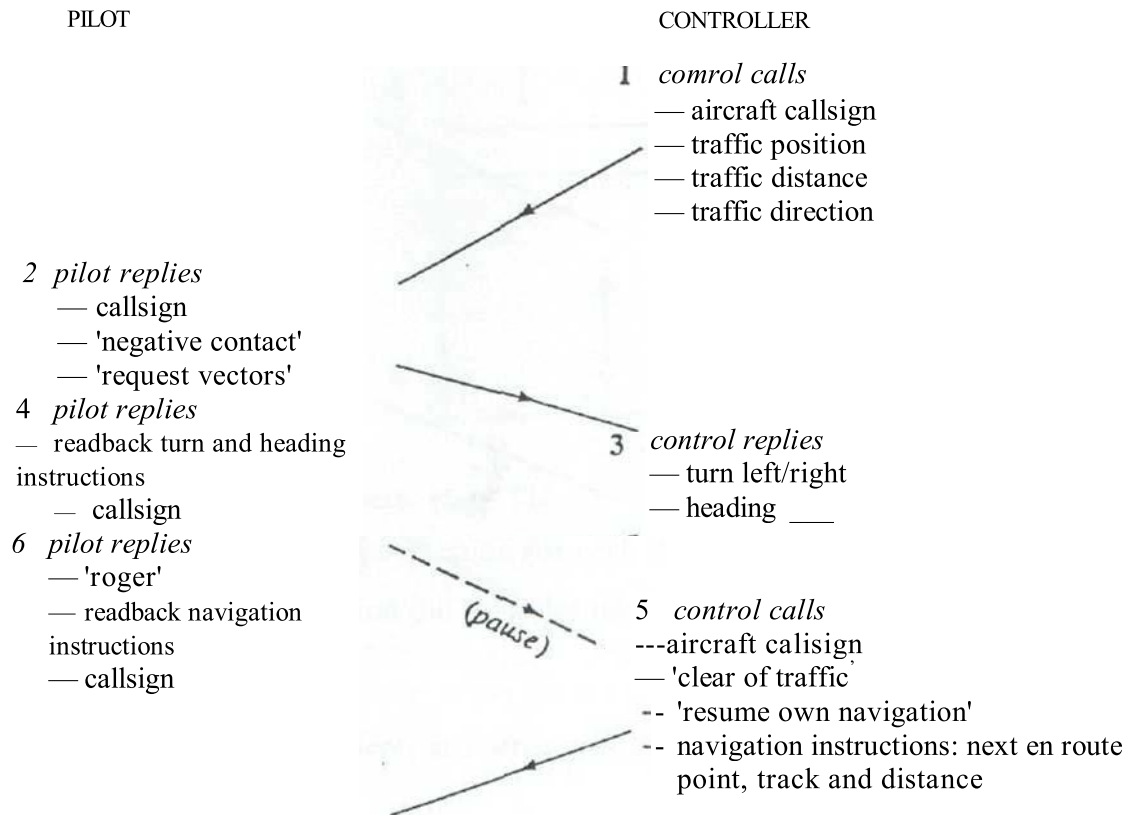
G

Item no.	Diagram
1	
2	
3	
4	
5	
6	
7	

Check Check your answers, page 127.

Typical exchange

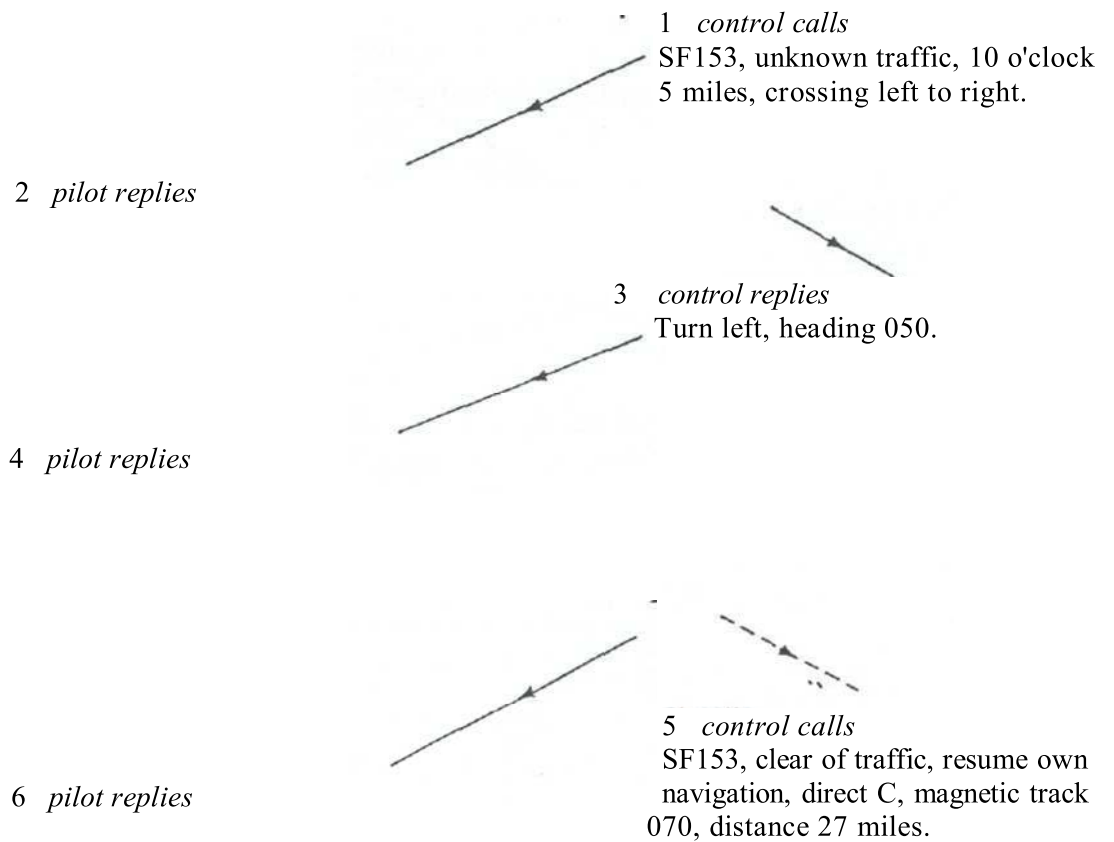
ICAOref. 6.4.3
CAA ref. 6.6
DGACref.112.11



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.



Check Check your answers, page 127.

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

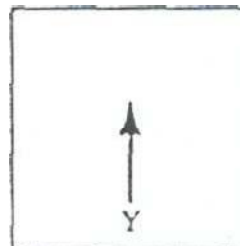
Check Check your answers, page 127.

Phraseology practice 3

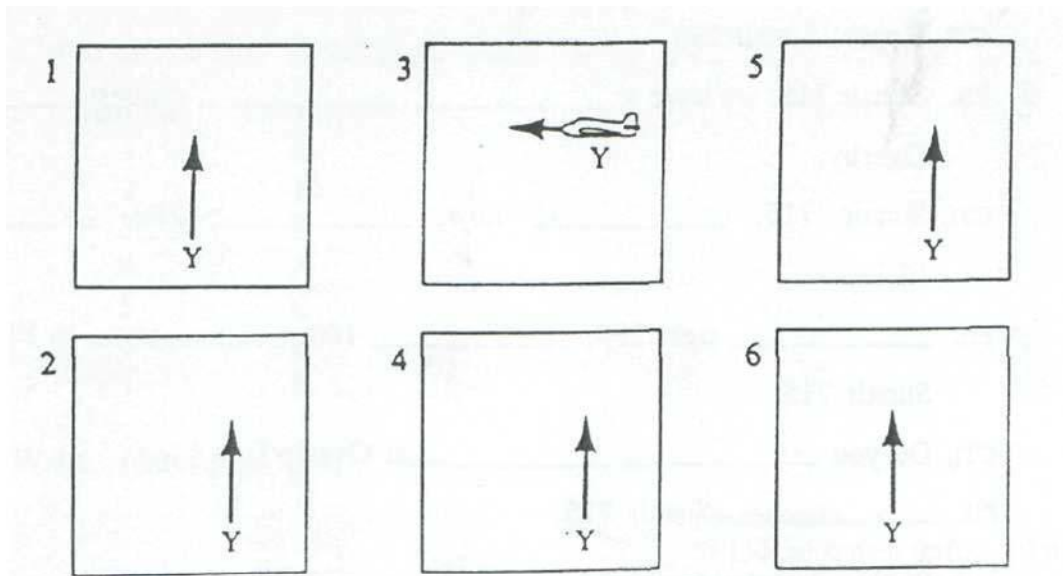
Listen Listen to the recorded dialogue.

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

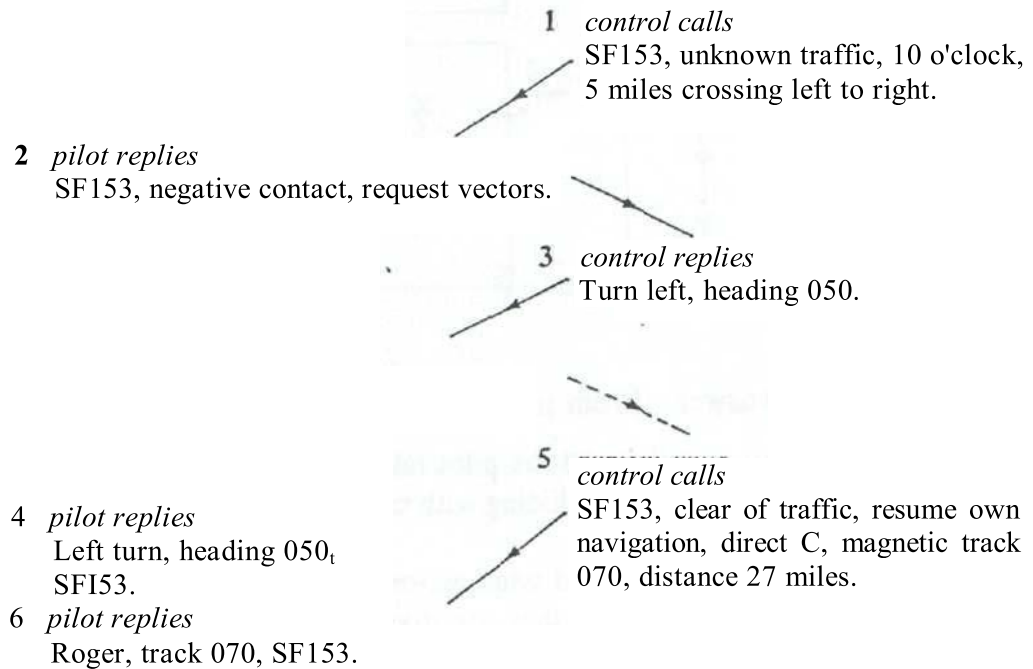
Write down any words in the dialogues you do not understand, or are not sure about. Try to guess the meaning in English or your own language, and write it down. Then check with a dictionary.

CHECK

3.3.1 Listen and Write (from page 122)

Item no.	Diagram
1	G
2	B
3	D
4	A
5	C
6	E
7	F

3.3.1 Write (from page 124)

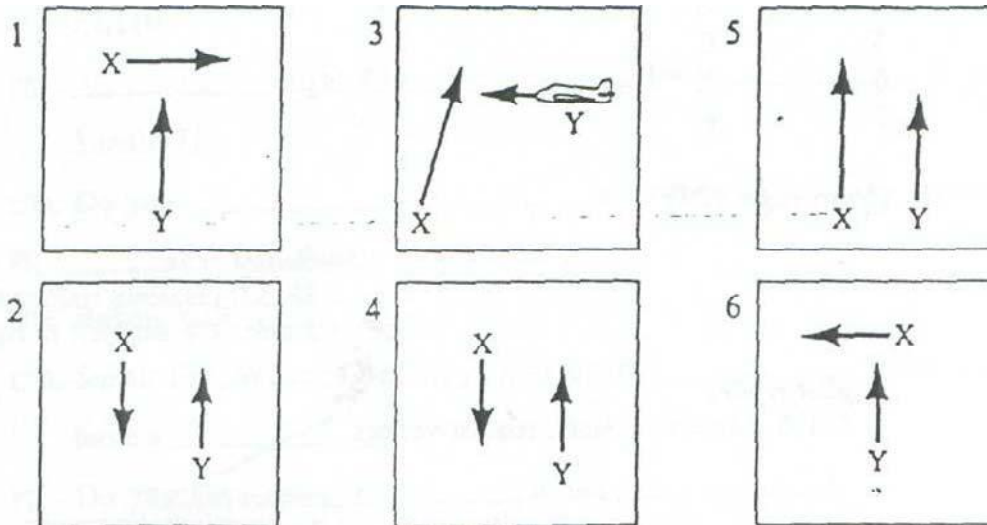


3.3.1 Listen and Speak (from page 124)

- 1 CTL
- PIL SF153, negative contact, request vectors.
- CTL.....
- PIL Left turn heading 050, SF153.
- CTL
- PIL Roger, track 070. SFI53.
- 2 CTL.....
- PIL SF153, negative contact, request vectors.
- CTL
- PIL Right turn heading 170, SF153.
- CTL
- PIL Roger, track 149, SF153.

- 3 CП.....
 PIL SF153, negative contact, request vectors.
 CTL;
 PIL Right turn heading 250, SF153.
 CTL
 PIL Roger, track 227, SFI53.

3.3.1 Listen, Speak and Write (from page 125)



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.

3 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)

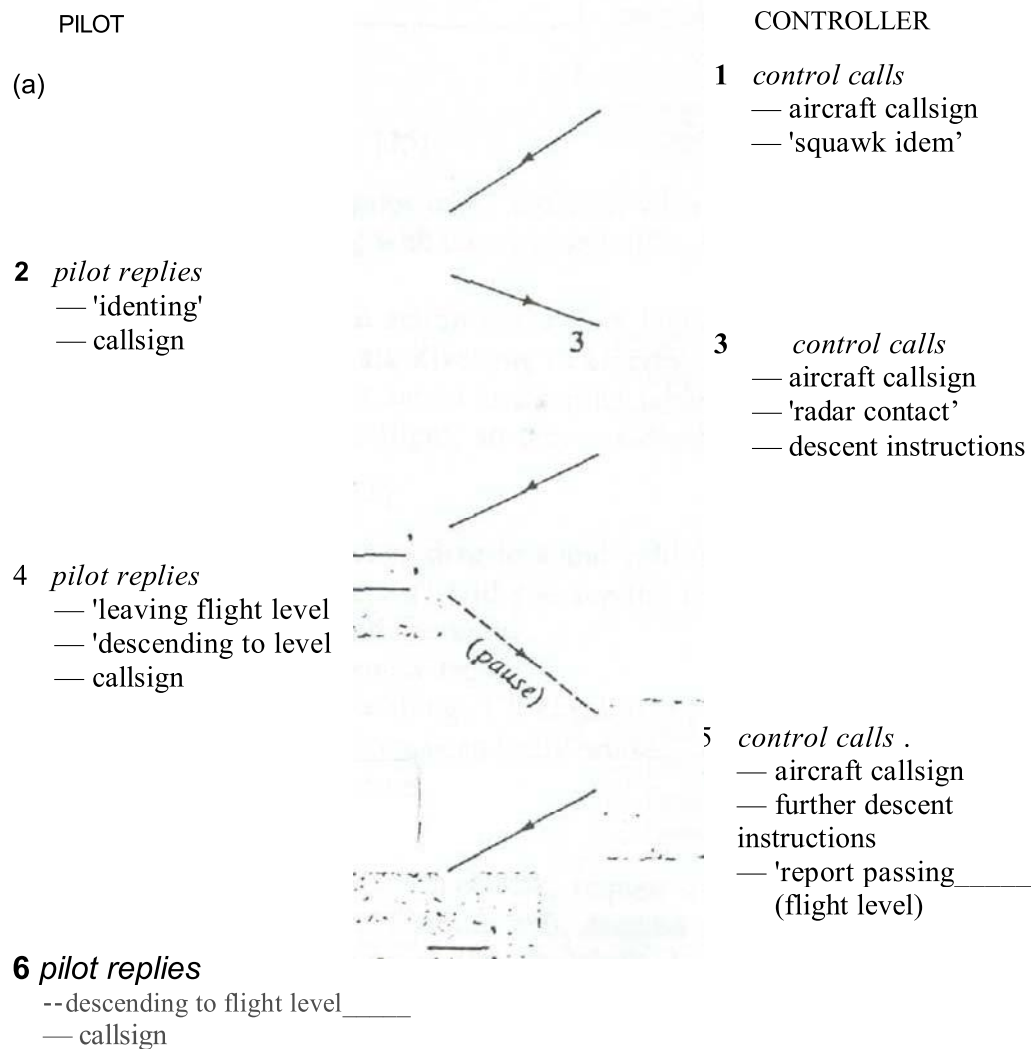
ICAO ref. 8.3.1
CAAREf.8.3
DGAC ref.
11.2.3.2

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	rate of descent
confirm	

Typical exchange



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

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.

No.	Callsign	Cruising level
1	SF153	310
2	AG235	280
3	BI196	290
4	NJ342	250
5	MO725	230

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. _____ Plaintiff VOR this time,
_____, _____ FL100 over RIV _____

next for landing runway 32 at Winton.

Check Check your answers, page 137.

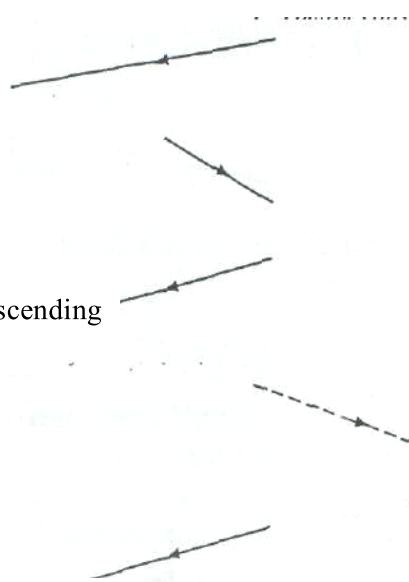
Your word list

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)



1 *control calls*
SF153, squawk ident.

2 *pilot replies*
Ideating, SF153.

3 *control*
SF153, radar contact. Descend
to flight level 220.

4 *pilot replies*
Leaving flight level 310, descending
to level 220, SF153.

5 *control calls*
SF153, continue descent to flight level
110, report passing 150.

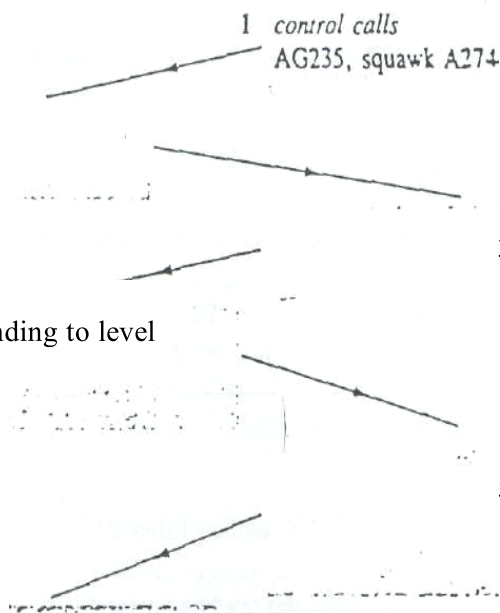
6 *pilot replies*
Descending to flight level 110, SF153.

7 *pilot calls*
SF153, passing flight level 150,
descending.

8 *control replies*
Confirm leaving level 150, SF153.

9 *pilot replies*
Affirm, SF153.

(b)



1 *control calls*
AG235, squawk A274

2 *pilot replies*
Squawking 2744, AG235.

3 *control*
AC235, descend now to FL210.

4 *pilot replies*
Leaving level 280, descending to level
210, AG235.

5 *control calls*
AG235, increase rate of descent so as
to cross T at FL150, report passing
level 180.

6 *pilot replies*
Roger, descending to T
at FL150, AG235.

7 *pilot calls*
AG235, passing FL180, descending.

9 *pilot replies*
Negative, leaving FL180, AG235

8 *control replies*
Confirm leaving FL190, 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.

- 5 CTL
 PIL Identing, Mike Oscar 725.
 CTL.....
 PIL Leaving level 230, descending to level 170, Mike Oscar 725.
 CTL
 PIL Roger, descending to cross Delta at level 90, Mike Oscar 725.
 PIL Mike Oscar 725, passing level 140.
 CTL
 PIL Affirm, Mike Oscar 725.

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, rccleared 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 75³.
 CTL Sunair 662, Winton Control, roger Mayday, break.
 AH stations on 126.3 stop transmitting, Mayday.
 (*pause*)
 PIL Mayday Winton. Sunair 662, fire now under control, cancel distress.
 CTL Roger, Sunair 662.
 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 Control. 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 SF309

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.

CHECK

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

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 lime, 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 SF309rreaching 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.

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.....

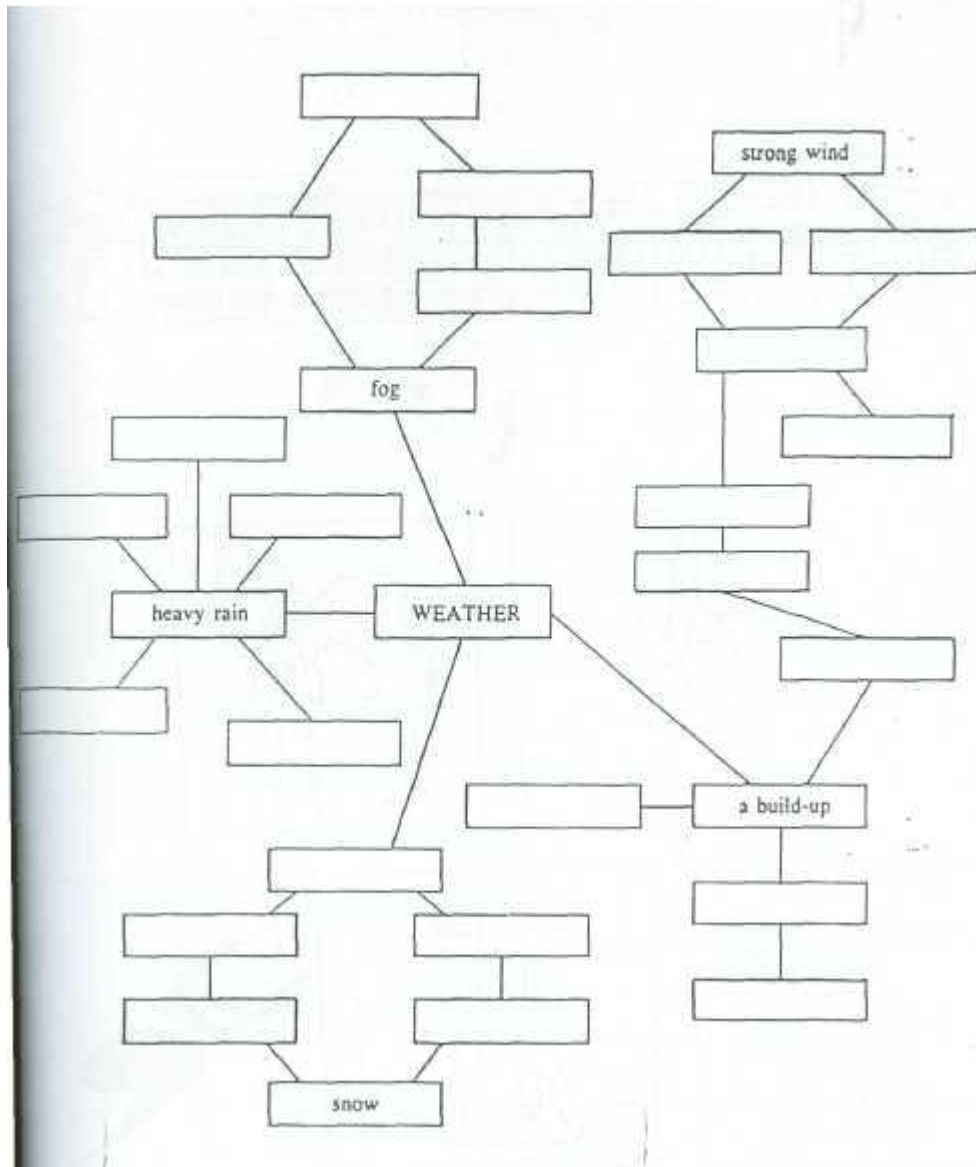
PIL Paris 132.0.

PIL Paris, SF309, good afternoon.

CTL..... ;.....

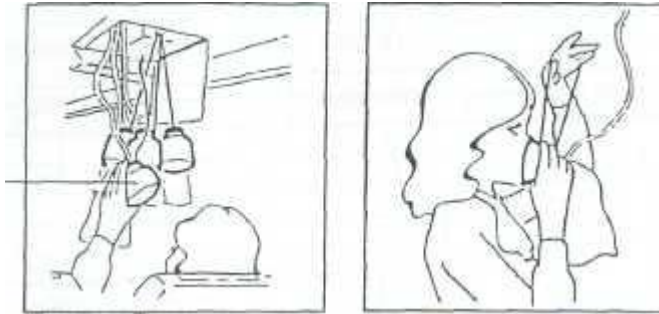
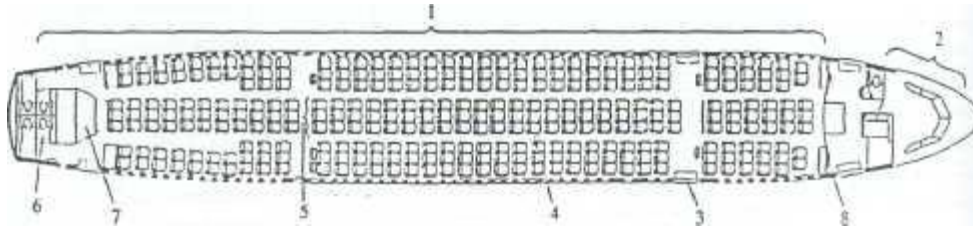
PIL Maintaining FL310, cleared to Reymy, squawking 0444.

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

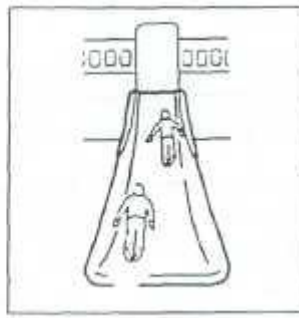


3.6.2 Cabin and safety equipment words

LOOK and Think Look at the diagrams on this page. Do you know the words which correspond to the numbers?



10



11



12

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)

WIND

calm
headwind
tailwind
crosswind
drift
gusts
strong wind
light wind
turbulence
clear air turbulence
severe/moderate turbulence
windshear
down/up draught

PRECIPITATION

rain
drizzle
scattered showers
heavy rain
light rain
sleet
snow
hail
hailstones
slush
freezing rain
icing
frost
a rainbow

VISIBILITY

CAVOK
VMC conditions
mist
(thick/dense) fog
fog patches
haze
dispersing
closing in
fog-bound

SURFACES

wet
damp
Hooded
icy patches
standing water
pools of water
snow ruts
snow banks
snow drifts
black ice

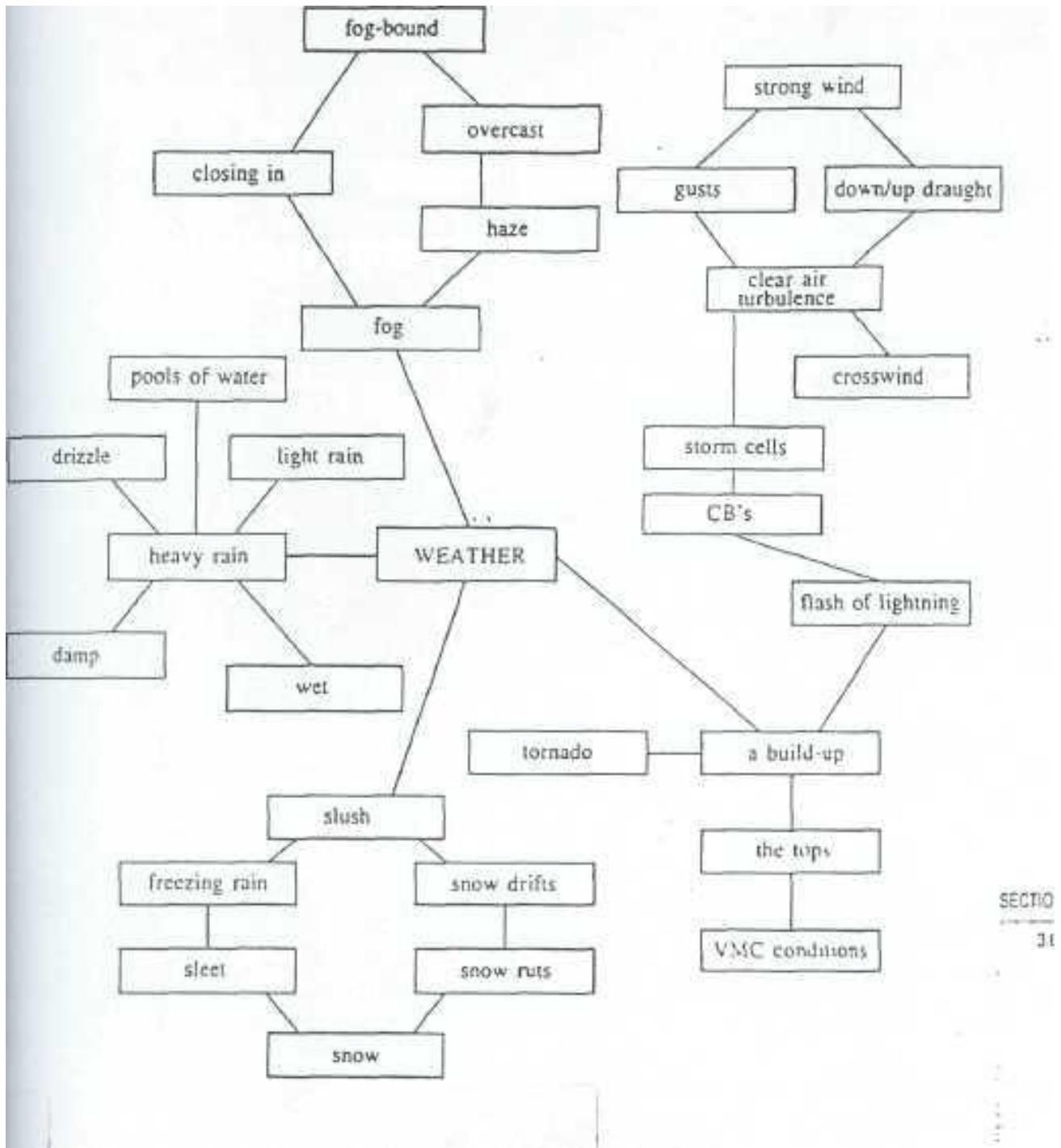
CLOUDS

broken
overcast
CB 's
(in and out of) the tops typhoon
ceiling
cirrus
a bank of clouds
storm cells
a build-up

STORMS

sandstorm
tornado
hurricane
water spout
thunder
lightning
a flash of lightning
to be struck by lightning
CB's

3.6.1 Write (from page 143)



3.6.2 Look, Listen and Write (from page 145)

- | | |
|-----------------------|---------------------------------|
| 1 the cabin | 7 a galley |
| 2 the cockpit | 8 a jump seat |
| 3 a door | 9 an oxygen mask |
| 4 an aisle (or alley) | 10 a life jacket (or life vest) |
| 5 a row of seats | 11 an escape slide (or chute) |
| 6 toilets | 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.

1	Winton	07, TL50, 330° 16 kts, 3000 m, 6/8 1000, 12 10, 1002
2	Rexbury	
3	Newbridge	
4	Overby	
5	Lambek	
6	Frankfurt	
7	Heathrow	7
8	Hamburg	
9	Schiphol	
10	Kastrup	
11	Kastrup	
12	Heathrow	

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.

- 9** This is Kastrup arrival information Bravo. Runway in use for landing 04L, met report 13.50. 070° 8 knots, visibility 20 kms, 1 okta, cumulo nimbus 4000 ft, temp 28. dew point 17, QNH 1012, no sig. Transition level 60. This was information Bravo.
- 10** 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.
- 12** 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 | enter |
| delay | delay not |
| no delay expected | determined |
| holding pattern | snow removal |

Typical exchange

PILOT

CONTROLLER

(a) 1 pilot calls

- name of ground station
- callsign
- greeting



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

(possible
Pause)

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

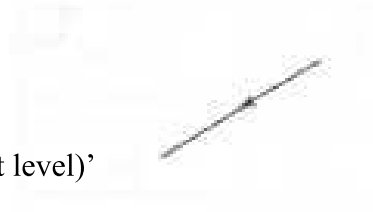


2 control replies

- 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) on 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

Callsign	Flight level	ATIS information
SF153	50	M

(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

SFI53, 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.

Callsign	Flight level	ATIS information
AG235	150- -0	K

(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.

	Callsign	Flight level	ATIS information
1	SFI53	-50	M
2	AG235	150- 80	K
3	BI196	-90	L
	NJ342	130- 80	P
	MO725	-90	T

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 _____
not _____. We intend to _____ near the Tower to have the ____
_____ checked.

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, rum 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, page 164.

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

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, descending 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)

1(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

ICAO ref. 7.3.2
Caa ref. 7.3
DGAC ref. 11.4.3.1
11.5.9.1

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

CONTROLLER

1 *pilot calls*

- name of ground station
- callsign



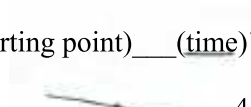
2 *control replies*

- 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



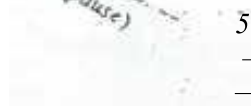
5 *pilot replies*

- 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'

10 pilot replies

- readback frequency
- callsign



control replies

- aircraft callsign
- 'number 1'
- 'contact Tower__(frequency)'



change of frequency

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



3 pilot replies



5 pilot replies



7 pilot replies



8 pilot calls



10 pilot replies

2 control replies

SF153, Winton Approach.

4 control replies

SF153, reduce speed to 250 knots, cleared RED.

6 control

SF153, expect straight in ILS approach runway 07, QNH 1005, report established.

9 control replies

SF153, number 1, contact Tower 118.1

change of frequency

11 pilot calls



12 control replies

SF153, report outer marker.

13 pilot replies

14 pilot calls



15 control replies

SF153, cleared to land, wind 330°,
10 knots

16 pilot replies

Check Check your answers, page 171.

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 → 80	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 Wintcn 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, QNH 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

PIL Bravo India 196.
PIL Bravo India 196, outer marker.
CTL.....
PIL Cleared to land. Bravo India 196.

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 Wintcn 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

ICAO ref. 4.10
CAA ref.4.11
DGAC ref. 11.5.9.4

4.4.1 After landing (routine)

Key words and phrases

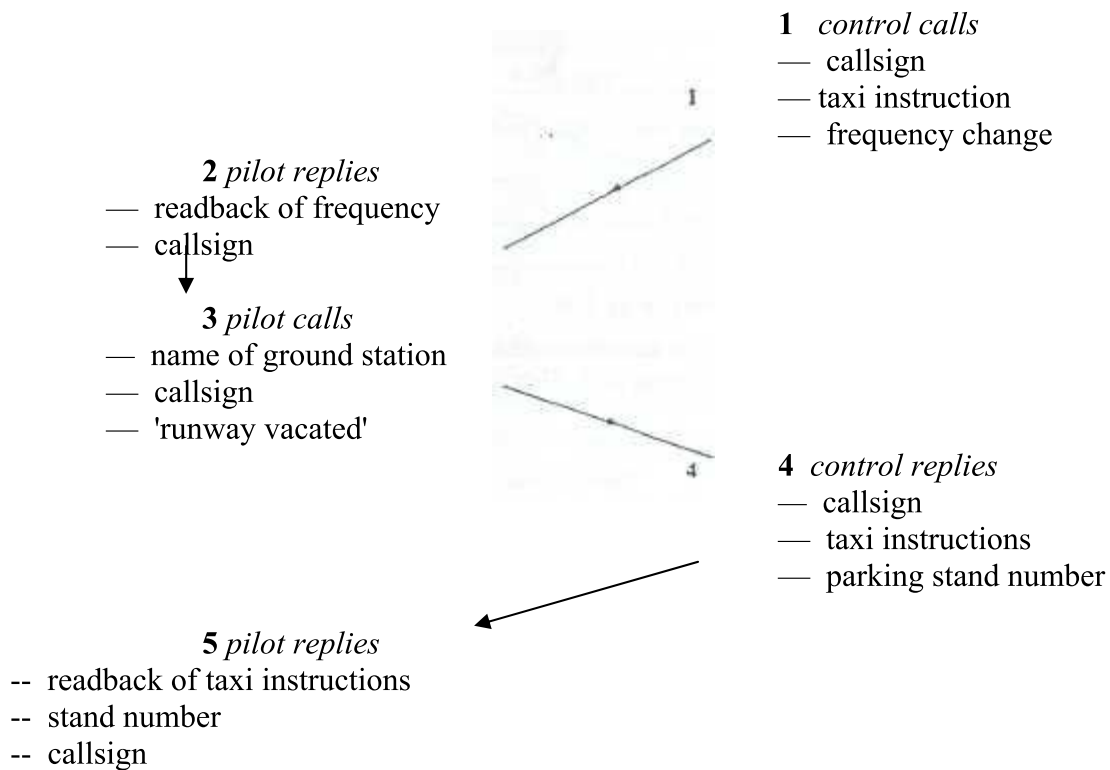
Check that you understand the following words and phrases. Look up any new words in an aviation dictionary.

vacated
inner/outer taxiway
turn-off

Typical exchange

PILOT

CONTROLLER

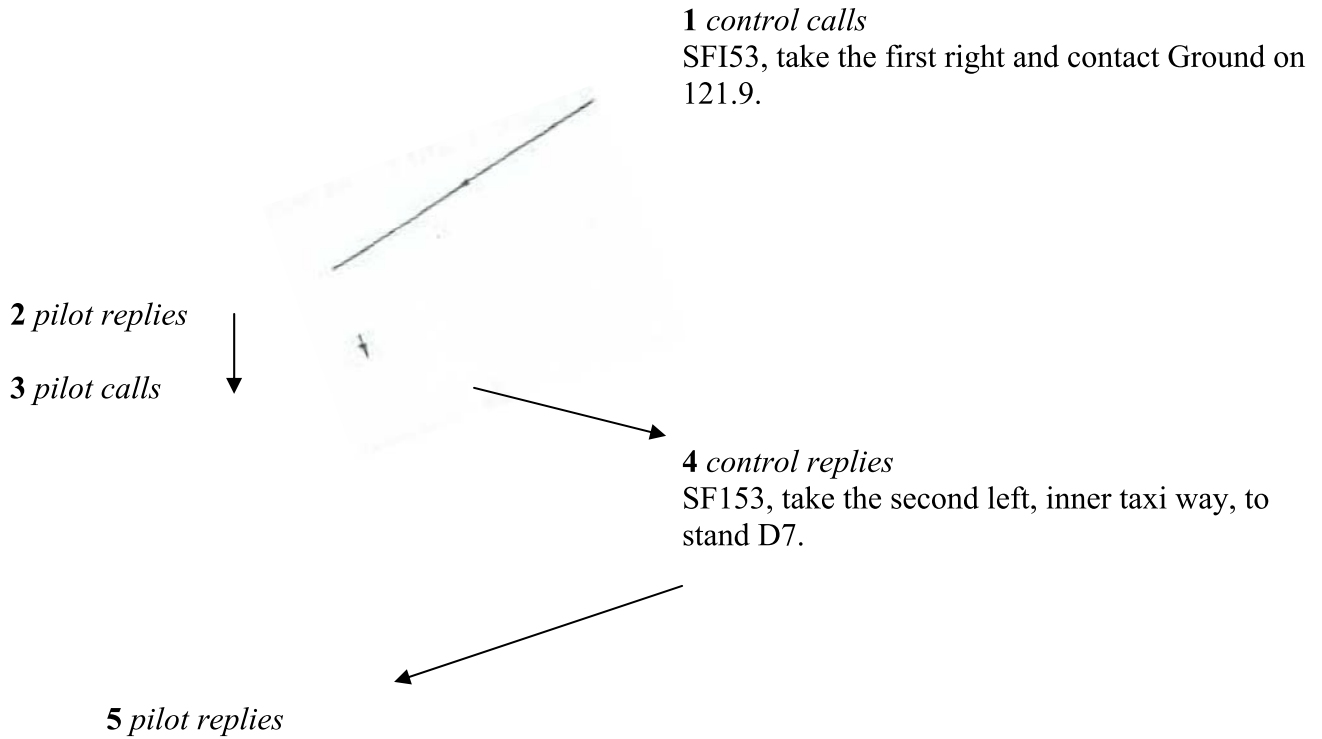


Phraseology practice

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.



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.

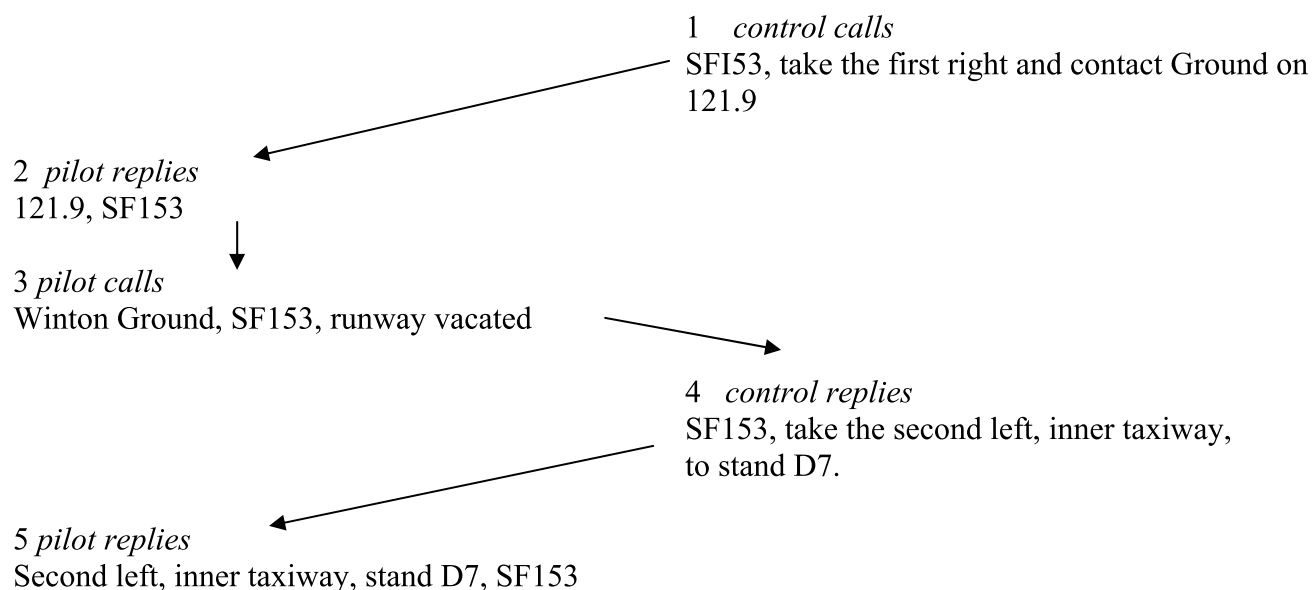
Check Check your answers, page 179.

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.

CHECK

4.4.1 Write (from page 176)



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
- 2 PIL Second left, inner taxiway, stand Delta 7, Sierra Foxtrot 153.
CTL
- 3 PIL 121.6, Alpha Golf 235.
PIL Winton Ground, Alpha Golf 235, runway vacated.
CTL
- 4 PIL Taxiway Bravo, stand Chariee 10, Alpha Golf 235.
CTL
- 5 PIL 121.8, Bravo India 196.
PIL Winton Ground, Bravo India 196, runway vacated.
CTL
- 6 PIL Turn right, outer taxiway, gate 39, Bravo India 196.
CTL.....
- 7 PIL 121.6, November Juliet 342.
PIL Winton Ground, November Juliet 342, runway vacated.
CTL
- 8 PIL Taxiway Bravo, stand 12, November Juliet 342.
CTL.....
- 9 PIL 121.6, Mike Oscar 725.
PIL Winton Ground, Mike Oscar 725, runway vacated.
CTL
- 10 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 tug 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.

CHECK

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
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.

Jobs	Definitions
co-ordinator	
ticket sales clerk	
Controller	
station manager	
flight engineer	
Purser	
Captain	
reservations clerk	
customs officer	
shuttle bus driver	
Marshaller	
flight attendant	
baggage handler	

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.

CHECK

4.6 Read and Write (from page 185)

Jobs	Definitions
co-ordinator	the first person to come on board when a flight arrives
ticket sales clerk	the person who sells tickets
controller	this person may work in the Tower
station manager	the boss of the ground staff
flight engineer	the third crew member in the cockpit
purser	the chief of the cabin crew
captain	the person in the left-hand seat in the cockpit
reservations clerk	the person who works mainly on the telephone
customs officer	the person who can inspect passengers' luggage
shuttle bus driver	the person in charge of the bus from the plane to the terminal
marshaller	this person helps the pilot to park the plane
flight attendant	a person who works in the cabin
baggage handler	someone who loads and unloads the luggage

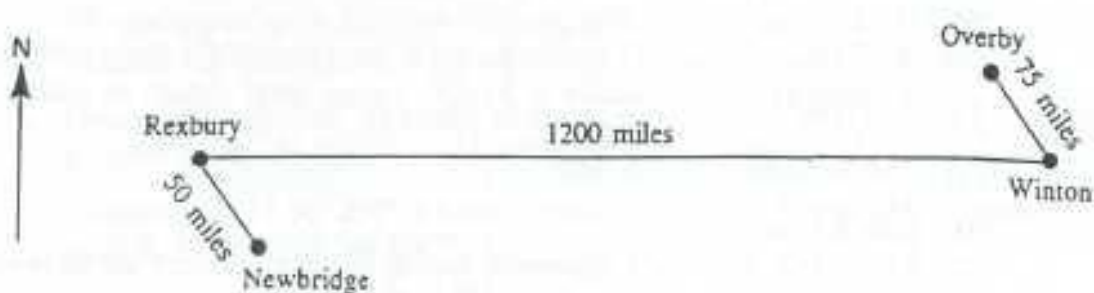
Part Five

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.

Rexbury Airport

Runway: 29
 Taxiways: Yankee, Delta
 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 (Redhili)

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

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 1 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.

CTL.....

PIL Sunair 367, stand 19, information Foxtrot received, request start-up.

CTL

PIL Stand 19, Sunair 367.

CTL

PIL Starting up, Sunair 367.

CTL.....

PIL Ready to copy.

CTL.....

PIL Sunair 367 is cleared to Winton via flight planned route. Golf 5 departure, climb to FL 110 initially, level change en route.

CTL

PIL Sunair 367, request push-back ' *

CTL

PIL Holding point 29, taxi way 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.

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

CTL

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

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.

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	France Control 132.0
London Control 128.05	Paris Control 124.05
London Control 133.7	Orly Approach 120.85
London Control 127.7	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 some times 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 SF309, 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 ATIS*)

ATIS ... landing runway 26, take-off runway 25, attention taxiway 2A closed, attention bird
situation, surface wind 242° 13 knots, visibility 10 km, 3oktas 350 m, 6 oktas 7000 m,
temperature +10, dew point + 8.QNH 1017mb,QFE 1006 mb, 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

PIL.....

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)

CTL SF309, bonjour, report passing outer marker runway 26.

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

CHECK

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.

CTL

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.

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, Paris, good afternoon.

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.

CTL

PIL Squawking 4244, SF309.

PIL. SF309, reaching Reymy.

CTL.....

PIL TSU, radial 075, runway 26, SF309.

CTL

PIL 300, SF309.

CTL

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 OYE, change 118.7, SF309, goodbye.

PIL Orly, SF309, bonjour.

CTL

PIL Roger.

CTL

PIL 160 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.

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

The controller's words will not normal]y 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 Repet

Wright

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 gusting 30. temperature 12. dew point 10, runway is wet, braking action good. QNH1023.

PIL.....

2 PIL (ask for departure information).....:

CTL Kilo Mike 563, 60* 18 knots, temperature-2, dew point -6, QNH 1008, take-off runway 08

PIL

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.

PIL

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.

PIL.....

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.

PIL.....

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.

PIL.....

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.

