



POOLEY'S

Pilot's Work Book

Pooleys EASA PPL Ground School

– To accompany the Air Pilot's Manuals –



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Communications

Pooleys EASA PPL Ground School – To accompany the Air Pilot's Manual, Vol. 7



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Pooleys Air Presentations, Communications, Pilot's Work Book.

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ISBN: 978-1-84336-232-6

First Edition June 2016

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Introduction

**“I know you think you heard
what you thought I said; however;**

**I don't think you realise what I said
is not what you heard.”**

When you are first exposed to the radio you could be forgiven for thinking that a different language is being spoken or at least an incomprehensible list of strange un-associated words and numbers.

With a little experience and gentle exposure to the radio, the mysterious “**gobbledy gook**” begins to unravel and soon begins to make sense. Slowly it becomes a more and more valuable tool that can prove most useful in so many ways.



Introduction

It puts us in contact with other aircraft enabling us to find out where other people are and what their intentions are. It also provides us with a very useful resource in the form of Air Traffic Control. Their primary goal is to help enable the **“safe and orderly flow of traffic.”** Amongst other things they provide emergency assistance, navigational assistance, radar services, traffic alerts and separation from other aircraft both in the air and on the ground and mostly try to help maintain general safety.

In order to make the best possible use of these services, we must try to maintain good communication technique. It is an important part of airmanship and a thorough understanding will be of benefit not only to you but also all those around you who share the airwaves and the airspace.

This workbook is therefore designed to help students develop and improve their Communication skills to a competent level and ultimately to pass the Communications exam which is part of the PPL syllabus.



Transmitting Technique (1)

Before Transmitting

- **THINK** about what you are going to say!
- Check that the receiver **volume** is satisfactory.
- **Listen** out on the frequency to be used to ensure that you will not transmit over another station.

General Points

- Maintain the microphone at a **constant distance** from your mouth. If using a hand held microphone also avoid turning your head whilst speaking. In either case allowing the microphone to touch your lips can seriously distort transmitted speech.
- Speak in a normal **conversational tone of voice** – shouting also distorts the transmitted signal.
- Speak at an **even rate**, around 100 words per minute at a maximum. The recipient may have to write down your details, if you know this is the case speak more slowly.
- Maintain a constant volume.
- **Avoid** using hesitation sounds such as “er” and “um.”



Transmitting Technique (2)

General Points

- On commencement, ensure that the transmit switch is **fully depressed** and ensure that you **do not release it until you have finished speaking**, this will ensure that your message is not “clipped.”
- **Enunciate** each word clearly and distinctly; remember that the first language of the recipient may not be the same as yours.
- Always ensure that you have **released** the transmit button after your message. This will avoid blocking a frequency, not only a great annoyance and potential danger, but possibly a great embarrassment, you may inadvertently broadcast something you do not want the rest of the world to hear!



Transmission of Letters – Phonetic Alphabet (1)

- The **phonetic alphabet** is used when individual letters are to be transmitted.
- Phonetic spelling is sometimes used where there is a chance of ambiguity.

Letter	Phonetic Word	Pronunciation
A	ALPHA	AL FAH
B	BRAVO	BRAH VOH
C	CHARLIE	CHAR LEE
D	DELTA	DELL TA
E	ECHO	ECK OH
F	FOXTROT	FOCKS TROT
G	GOLF	GOLF
H	HOTEL	HOH TELL
I	INDIA	IN DEE AH
J	JULIET	JEW LEE ETT
K	KILO	KEY LOH
L	LIMA	LEE MAH
M	MIKE	MIKE
N	NOVEMBER	NO VEM BER



Transmission of Letters – Phonetic Alphabet (2)

Letter	Phonetic Word	Pronunciation
O	OSCAR	OSS CAH
P	PAPA	PAH PAH
Q	QUEBEC	KEH BECK
R	ROMEO	ROW ME OH
S	SIERRA	SEE AIR RAH
T	TANGO	TANG GO
U	UNIFORM	YOU NEE FORM
V	VICTOR	VIK TAH
W	WHISKEY	WISS KEY
X	X-RAY	ECKS RAY
Y	YANKEE	YANG KEE
Z	ZULU	ZOO LOO



Transmission of Numbers (1)

No.	Pronunciation
0	ZERO
1	WUN
2	TOO
3	TREE
4	FOWER
5	FIFE
6	SIX
7	SEVEN
8	AIT
9	NINER
Decimal	DAYSEEMAL
Hundred	HUNDRED
Thousand	TOUSAND

With some exceptions all numbers are transmitted by pronouncing **each digit separately**.

<p>Aircraft Call signs BAL 455 EZY 203</p>	<p>Britannia four five five. Easy two zero three.</p>
<p>Flight Levels FL 180 FL 210</p>	<p>Flight level one eight zero. Flight level two one zero.</p>

The exceptions are flight levels involving whole hundreds e.g. FL100
“Flight level one hundred” FL200 **“Flight level two hundred,”** etc.