

# **Unit One**

## **Radiotelephony Fundamentals**

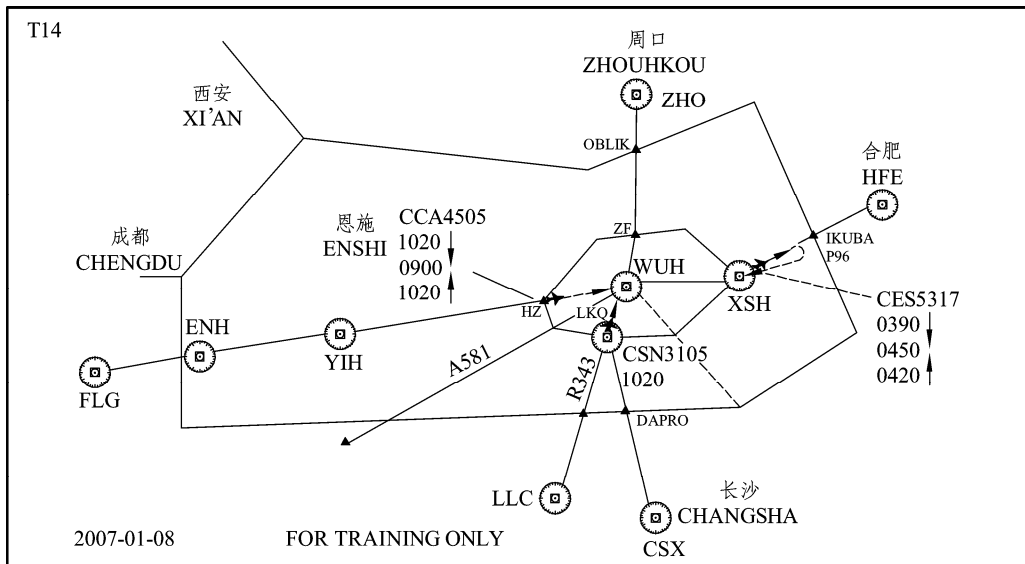
# Lesson One

## Letters and Standard Words

### Learning Objectives

#### *Communication procedures for this lesson*

- 1. Routine transmission for letters;
- 2. Nonroutine transmission for letters;
- 3. Standard words and phrases.



## Part I Warm-up Activities

### Lead-in

Directions: Listen to the passage and answer the questions.

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

## Part II Text

### Section A Communication Procedures

#### 1. Routine transmission for letters

1) To expedite communications, the use of phonetic spelling should be dispensed with if there is no risk of this affecting correct reception and intelligibility of the message.

2) The words in the table below shall be used when individual letters are required to be transmitted. The syllables to be emphasized are underlined.

Letter	Words	Pronunciation
A	Alpha	<u>AL</u> FAH
B	Bravo	<u>BRAH</u> VOH
C	Charlie	<u>CHAR</u> LEE or <u>SHAR</u> LEE
D	Delta	<u>DELL</u> TAH
E	Echo	<u>ECK</u> OH
F	Foxtrot	<u>FOKS</u> TROT
G	Golf	GOLF
H	Hotel	HOH <u>TELL</u>
I	India	<u>IN</u> DEE AH
J	Juliett	<u>JEW</u> LEE ETT
K	Kilo	<u>KEY</u> LOH
L	Lima	LEE MAH
M	Mike	MIKE
N	November	NO <u>VEM</u> BER
O	Oscar	<u>OSS</u> CAH
P	Papa	PAH <u>PAH</u>

Continued

Letter	Words	Pronunciation
<b>Q</b>	Quebec	KEH <u>BECK</u>
<b>R</b>	Romeo	<u>ROW</u> ME OH
<b>S</b>	Sierra	SEE <u>AIR</u> RAH
<b>T</b>	Tango	<u>TANG</u> GO
<b>U</b>	Uniform	<u>YOU</u> NEE FORM
<b>V</b>	Victor	<u>VIK</u> TAH
<b>W</b>	Whiskey	<u>WISS</u> KEY
<b>X</b>	X-ray	<u>ECKS</u> RAY
<b>Y</b>	Yankee	<u>YANG</u> KEY
<b>Z</b>	Zulu	<u>ZOO</u> LOO

## 2. Non-routine transmission for letters

1) Letters are transmitted as individual international phonetic alphabet pronunciation. The representative letter groups often employed in radiotelephony communication are the following such as: Navaid/Flight rules/Met information.

Letter group	pronunciation	Letter group	pronunciation
ILS	[ɑ:ɛles]	DME	[di:emi:]
IGS	[ɑɪdʒi:es]	ADF	[ɛrdi:ɛf]
MLS	[ɛmeles]	NDB	[ɛndi:bi:]
VOR	[vi:əuɑ:]	GPS	[dʒi:pi:es]
VMC	[vi:ɛmsi:]	IFR	[ɑ:ɛfa:]
VFR	[vi:ɛfa:]	QNH	[kju:ɛneitʃ]
QNE	[kju:ɛni:]	RVR	[ɑ:vi:ɑ:]

2) Letters are transmitted by the pronunciation of the words which are designated by the letter group. The representative letter groups often employed in radiotelephony communication are the following such as: Airlines/Aircraft types/Level.

Letter group	pronunciation	Letter group	pronunciation
BAW	Speebbird	CES	China Eastern
CCA	Air China	AFR	Air France
CSN	China Southern	JAN	Janpan Air
DH	[di:ɛrtʃ] or decision height	B747	Boeing 747
FL	flight level	A320	Airbus 320
MDA	[ɛmdi:ɛr] or minimum descent altitude		

3) Letters are transmitted by the pronunciation of a new word. The representative letter groups often employed in radiotelephony communication are the following such as: Navigation station /Met information/Flight procedures (letter group more than 3 letters).

Letter group	pronunciation	Letter group	pronunciation
TAMOT	[t'æmɛt]	IKUBA	[ɪk'ju:bɑ:]
CAVOK	[kɑ:v'əuk]	STAR	[stɑ:]

### 3. Standard words and phrases (ICAO)

Word/Phrase	Meaning
ACKNOWLEDGE	Let me know that you have received and understood this message.
AFFIRM	Yes.
APPROVED	Permission for proposed action granted.
BREAK	Indicates the separation between messages.
BREAK BREAK	Indicates the separation between messages transmitted to different aircraft in a busy environment.
CANCEL	Annul the previously transmitted clearance.
CHECK	Examine a system or procedure. (Not to be used in any other context. No answer is normally expected.)
CLEARED	Authorised to proceed under the conditions specified.
CONFIRM	I request verification of: (clearance, instruction, action, information).
CONTACT	Establish communications with... (your details have been passed).
CORRECT	True or accurate.
CORRECTION	An error has been made in this transmission (or message indicated). The correct version is...
DISREGARD	Ignore.
HOW DO YOU READ	What is the readability of my transmission?
I SAY AGAIN	I repeat for clarity or emphasis.
MAINTAIN	Continue in accordance with the condition(s) specified or in its literal sense, e.g. "Maintain VFR".
MONITOR	Listen out on (frequency).
NEGATIVE	No; or Permission not granted; or That is not correct; or Not capable.
OUT	This exchange of transmissions is ended and no response is expected. (Note: Not normally used in VHF communications.)
OVER	My transmission is ended and I expect a response from you. (Note: Not normally used in VHF communications.)
READ BACK	Repeat all, or the specified part, of this message back to me exactly as received.

Continued

<b>Word/Phrase</b>	<b>Meaning</b>
RECLEARED	A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof.
REPORT	Pass requested information.
REQUEST	I should like to know... or I wish to obtain...
ROGER	I have received all your last transmission. <i>Note: Under no circumstances to be used in reply to a question requiring a direct answer in the affirmative (AFFIRM) or negative (NEGATIVE).</i>
SAY AGAIN	Repeat all, or the following part of your last transmission.
SPEAK SLOWER	Reduce your rate of speech.
STANDBY	Wait and I will call you. <i>Note: No onward clearance to be assumed. The caller would normally re-establish contact if the delay is lengthy. STANDBY is not an approval or denial.</i>
UNABLE	I cannot comply with your request, instruction or clearance. <i>Unable is normally followed by a reason.</i>
WILCO	I understand your message and will comply with it (abbreviation for will comply)
WORDS TWICE	<i>As a request:</i> Communication is difficult. Please send every word twice. <i>As Information:</i> Since communication is difficult, every word in this message will be sent twice.

## **Section B Communication Procedure Information**

### **Pronunciation**

The spelling and pronunciation given are those officially prescribed by the ICAO, ITU, IMO, and the FAA. The ICAO indicates unstressed numeric syllables in lower case (stressed in UPPER CASE), unlike its own alphabet, where stressed syllables are UNDERLINED UPPER CASE (unstressed in UPPER CASE). In the interests of uniformity, the IMO/FAA style of stressed syllables in BOLD will be used here (underlines might be confused with links).

Wherever the agencies (ICAO, ITU, IMO, FAA, ANSI) differ, each agency's preferred pronunciations or spellings are also given in the table. The ICAO, ITU, and IMO give an alternate pronunciation for a couple of letter-words. The FAA gives the alternate pronunciations in one publication, but in other publications it does not. The FAA gives different spellings for their pronunciations depending on the publication consulted. These are from the FAA Flight Services manual (§ 14-1-5) and the ATC manual (§ 2-4-16). ANSI gives English spellings, but does not give pronunciations or numbers. The ICAO, NATO, and FAA

use the common English number words (with stress), which are also the second component of the more complex ITU and IMO number words (no stress), but not always pronounced the same. Only the ICAO prescribes pronunciation in the IPA, and then only for letters, not for numbers. Several of the pronunciations indicated do not occur in General American English or British Received Pronunciation. Both the IPA and Latin alphabet pronunciations were developed by the ICAO before 1956 with input from the governments of both the United States and the United Kingdom, so the pronunciations of both General American English and British Received Pronunciation are evident, especially in the rhotic and non-rhotic accents. The Latin alphabet version usually has a rhotic accent (“r” always pronounced), as in CHAR LEE, SHAR LEE, NO VEM BER, YOU NEE FORM, and OO NEE FORM, whereas the IPA version usually has a non-rhotic accent (“r” pronounced only before a vowel), as in [tʃɑ:lɪ] [ʃɑ:lɪ] [nɒvembə] and [ju:nɪfɔ:m]. Exceptions are OSS CAH and [ˈu:nɪfɔ:m]. The IPA form of Golf implies it is pronounced gulf, which does occur, but not in either General American English or British Received Pronunciation. The Latin alphabet and IPA forms of Bravo have different syllable stresses. The ŋ phoneme (“ng”) in the IPA forms of Tango and Yankee is shown as an “n” and marked “[ɹɪ]”. The midheight back rounded vowel shown in Oscar and Foxtrot is actually a low back rounded vowel in Received British, and a low unrounded vowel in General American. Furthermore, the pronunciation prescribed for “whiskey” agrees with many (but by no means all) English dialects, in which the “wh-” is simplified into the non-fricative “w-” sound.

## **New Words and Phrases**

1. **assign**: give out, give a task to 指定
2. **phonetic**: related to speech sounds 语音的
3. **lower case**: small letters 小写字母
4. **upper case**: capital letters 大写字母
5. **bold**: a typeface with thick heavy lines 黑体
6. **transcription**: a written form of something 抄写 ; 誊写
7. **ICAO**: International Civil Aviation Organization 国际民航组织

8. **IPA:** International Phonetic Alphabet, a system of sound notation 国际音标
9. **FAA:** Federal Aviation Administration 联邦航空局
10. **ITU:** International Telecommunication Union 国际电信联盟
11. **IMO:** International Maritime Organization 国际海事组织
12. **NATO:** North Atlantic Treaty Organization 北大西洋公约组织

### *Part III Exercises*

#### **1. Reading Aloud**

**Directions: Read aloud the following letters and letter groups.**

- 1) B          F          P          S          U          D
- 2) VYK      LKO      WXI      XSH      ZHO      HZ
- 3) GCDSQ HJRWX XMBVD YZTIP NPFUA
- 4) OBLIK    IKUBA    DAPRO    TAMOT    EPGAM
- 5) QNH      RVR      ILS      VOR      NDB      IFR
- 6) VFR      IMC      IMC      ETO      ATIS      CB
- 7) CCA      SIA      CES      CSN      DAL      DLH
- 8) JAL      UAL      BAW      AFR      TWA      HDA
- 9) A320    B777    B747    DC-10    MD-11    A330

#### **2. Dictation**

**Directions: Listen and write down the letters.**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

#### **3. Blank-Filling**

**Directions: Listen to the following transmissions and fill in the blanks with appropriate letters and standard words.**



- 1) PIL: Alpha Control, \_\_\_\_\_, over \_\_\_\_\_ at 4 500 meters, estimating \_\_\_\_\_ 35.  
CTL: Station calling Control, \_\_\_\_\_ your callsign.
- 2) PIL: Bravo Control, UAL215, over \_\_\_\_\_ maintaining 4 800 meters.  
CTL: UAL215, \_\_\_\_\_ Bravo Control on 118.4.
- 3) CTL: CCA101, cancel takeoff, \_\_\_\_\_, cancel takeoff, unknown vehicle crossing runway.  
PIL: Holding, CCA101.
- 4) CTL: BAW302, \_\_\_\_\_ you are maintaining at 8 900 m? \_\_\_\_\_, \_\_\_\_\_, stop descent at 9 200 meters.  
PIL: BAW302, \_\_\_\_\_, maintaining at 8 900 meters.
- 5) CTL: All stations, \_\_\_\_\_ is now 1002, \_\_\_\_\_, 1012, wind 030 degrees, 5 knots.