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## AIR NAVIGATION SERVICES

### COMMUNICATION

#### RADIOTELEPHONY PROCEDURES

☛ Indicates changes.

- ☛ 1. This AIC replaces AIC 011-2016 dated 08 DEC 2016.
  
2. **Time System.** Universal Co-ordinated Time (UTC) shall be used by all stations in the aeronautical telecommunication service. Midnight shall be designated as 2359 for the end of the day and 0001 for the beginning of the day.
  
3. **GENERAL**
  - 3.1 The transmission of messages on aeronautical mobile frequencies shall be avoided when the aeronautical fixed services or telephone channels are able to serve the intended purpose.
  - 3.2 Where it is necessary for an aircraft to send signals for testing or adjustment which are liable to interfere with the working of a neighboring aeronautical station, the consent of the station shall be obtained before such signals are sent. Such transmissions shall be kept to a minimum.
  - 3.3 When it is necessary for a station in the aeronautical mobile service to make test signals, either for the adjustment of a transmitter before making a call or for the adjustment of a receiver, such transmissions shall be kept to a minimum: {Example following the initial establishing of contact} – (Station) this is (Callsign) radio check, how do you read this transmission?
  - 3.4 Except as otherwise provided, the responsibility of establishing communication shall rest with the radio station having traffic to transmit.
  - 3.5 After a call has been made to the aeronautical station, a period of at least 10 seconds shall be allowed to elapse before a second call is made. This will eliminate unnecessary transmission while the aeronautical station is getting ready to reply. It should be borne in mind that most aeronautical stations monitor more than one frequency. Failure to reply may therefore be an indication that the operator might be busy on another frequency.
  - 3.6 When an aeronautical station is called simultaneously by several aircraft, the aeronautical station shall decide the order in which aircraft shall communicate.
  
4. **CATEGORIES OF MESSAGES**
  - 4.1 The following categories of messages may be handled by the aeronautical mobile service: -
    - (a) distress messages and distress traffic;
    - (b) urgency messages, including messages preceded by the medical transports signal;
    - (c) communications relating to direction finding;
    - (d) flight safety messages which shall comprise the following: -
      - (i) air traffic control messages;
      - (ii) position reports from aircraft;
      - (iii) messages originated by an aircraft operating agency or by an aircraft which are of immediate concern to other aircraft in flight;
    - (e) meteorological messages;
    - (f) flight regularity messages which shall comprise the following:
      - (i) messages concerning changes in aircraft operating schedules;
      - (ii) messages concerning the servicing of aircraft;

- (iii) instructions to aircraft operating agency representatives concerning changes in requirements for passengers and crew caused by unavoidable deviations from normal operating schedules (individual requirements of passengers or crew shall not be admissible in this type of message);
- (iv) messages concerning non-routine landings to be made by aircraft;
- (v) messages regarding the operation or maintenance of facilities essential for the safety of the aircraft operation.

4.2 Air traffic services units, (ATSU) using direct pilot controller communication channels shall only be required to handle flight regularity messages provided this can be achieved without interference with their primary role and no other channels are available for the handling of such messages.

## 5. ORDER OF PRIORITY

5.1 The order of priority in the establishment of communication and the transmission of messages in the aeronautical mobile service shall be as follows:

Type of message:

- (1) Distress calls, distress messages and distress traffic
- (2) Urgency Messages
- (3) Communications relating to direction finding
- (4) Flight safety messages
- (5) Meteorological messages
- (6) Flight regularity messages

5.2 Messages having the same priority will, in general, be transmitted in the order in which they are received for transmission.

## 6. LANGUAGES TO BE USED

6.1 English is used in radiotelephony communications, (Refer to the English Language Proficiency requirements as prescribed in SA-CAR 65.01.8) Pilots should note, however, that it is desirable that all aircraft in the same traffic pattern should be in a position to understand radiotelephony exchanges between aircraft and the related air traffic services unit.

## 7. WORD SPELLING IN RADIOTELEPHONY

7.1 When proper names, abbreviations and words of which the spelling is doubtful are spelled out, in radiotelephony, the following radiotelephony spelling alphabet shall be used:-

Letter	Word	Pronunciation
A	Alpha	<u>AL</u> FAH
B	Bravo	<u>BRA</u> VOH
C	Charlie	<u>CHAR</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	<u>HOH</u> TELL
I	India	<u>IN</u> DEE AH
J	Juliet	<u>JEW</u> LEE <u>ETT</u>
K	Kilo	<u>KEY</u> LOH
L	Lima	<u>LEE</u> MAH
M	Mike	MIKE
N	November	<u>NO</u> VEM BER
O	Oscar	<u>OSS</u> CAH
P	Papa	<u>PAH</u> PAH
Q	Quebec	<u>KEH</u> BECK
R	Romeo	<u>ROW</u> ME OH
S	Sierra	<u>SEE</u> AIR RAH
T	Tango	<u>TANG</u> GO
U	Uniform	<u>YOU</u> NEE FORM
V	Victor	<u>VIC</u> TAH
W	Whiskey	<u>WISS</u> KEY
X	X-ray	<u>ECKS</u> RAY
Y	Yankee	<u>YANK</u> KEY
Z	Zulu	<u>ZOO</u> LOO

Note: The syllables to be emphasized are underlined.

## 8. TRANSMISSION OF NUMBERS IN RADIOTELEPHONY

8.1 Pronunciation of numbers. Numbers shall be transmitted using the following pronunciation: -

<u>Numeral</u>	<u>Pronunciation</u>
0	ZE-RO
1	WUN
2	TOO
3	TREE
4	FOW-er
5	FIFE
6	SIX
7	SEV-en
8	AIT
9	NIN-er
100	HUNDRED
Decimal	DEH-SEE-MIL
Thousand	TOU-SAND

Note: The syllables printed in capital letters are to be stressed, for example, the two syllables in ZE-RO are given equal emphasis, whereas the first syllable of FOW-er is given primary emphasis.

8.2 Transmission of numbers. All numbers except those used in the transmission of altitude, cloud height, visibility and runway visual range (RVR) information, which contain whole hundreds and whole thousands, shall be transmitted by pronouncing each digit separately. Combinations of thousands and whole hundreds shall be transmitted by pronouncing each digit in the number of thousands followed by the word THOUSAND followed by the number of hundreds followed by the word HUNDRED.

Note: The following examples illustrate the application of these procedures:

aircraft call signs	transmitted as
CCA 238	Air China <b>two three eight</b>
OAL 242	Olympic <b>two four two</b>
flight levels	transmitted as
FL 180	flight level <b>one eight zero</b>
☛ FL 200	flight level <b>two hundred</b>
headings	transmitted as
100 degrees	heading <b>one zero zero</b>
080 degrees	heading <b>zero eight zero</b>
wind direction and speed	transmitted as
200 degrees 70 knots	wind <b>two zero zero</b> degrees <b>seven zero</b> knots
160 degrees 18 knots	wind <b>one six zero</b> degrees <b>one eight</b> knots
gusting 30 knots	gusting <b>three zero</b> knots
transponder codes	transmitted as
2 400	squawk <b>two four zero zero</b>
4 203	squawk <b>four two zero three</b>
runway	transmitted as
27	runway <b>two seven</b>
30	runway <b>three zero</b>
altimeter setting	transmitted as
1 010	QNH <b>one zero one zero</b>
☛ 1 000	QNH <b>one thousand</b>
Altitude	transmitted as
800	<b>eight hundred</b>
3400	<b>three thousand four hundred</b>
12 000	<b>one two thousand</b>
cloud height	transmitted as
2 200	<b>two thousand two hundred</b>
4 300	<b>four thousand three hundred</b>
visibility	transmitted as
1 000	visibility <b>one thousand</b>
700	visibility <b>seven hundred</b>

runway visual range  
600  
1700

transmitted as  
RVR six hundred  
RVR one thousand seven hundred

- 8.3 **Decimal Points.** Numbers containing a decimal point shall be transmitted as prescribed in para. 8.1 with the decimal point in appropriate sequence being indicated by the word DEH-SEE-MIL

*Note:* The following example illustrates the application of this procedure:

Number Transmitted as

118.1 WUN WUN AIT DEH-SEE-MIL WUN

- 8.4 **Time.** When transmitting time, only the minutes of the hour are normally required. Each digit must be pronounced separately. However, the hour should be included when any possibility of confusion is likely to occur. The phrase "This time" must not be used.

*Note:* The following example illustrates the application of these procedures:

<u>Time</u>	<u>Statement</u>
0920	TOO ZE-RO or ZE-RO NIN-er TOO ZE-RO
1643	FOW-er TREE or WUN SIX FOW-er TREE

- 8.5 **Verification of numbers.** When it is desired to verify the accurate reception of numbers the person transmitting the message shall either: -

- (a) repeat all numbers in accordance with para.8.1; or
- (b) request the receiving operator to repeat all numbers.

## 9. TRANSMITTING TECHNIQUE

- 9.1 Transmissions shall be conducted concisely in a normal conversational tone and standard ICAO phraseologies shall be used.

- 9.2 Speech transmitting technique must be such that the highest possible intelligibility is incorporated in each transmission. Fulfillment of this aim requires that air crew and ground personnel shall: -

- (a) enunciate each word clearly and distinctly;
- (b) maintain an even rate of speech not exceeding 100 words per minute. When a message is transmitted to an aircraft and its contents need to be recorded the speaking rate must be at a slower rate to allow for the writing process. A short pause preceding and following numerals makes them easier to understand;
- (c) maintain the speaking volume at a constant level;
- (d) be familiar with the microphone operating techniques, particularly in relation to the maintenance of constant distance from the microphone if a modulator with a constant level is not used;
- (e) suspend speech temporarily if it becomes necessary to turn the head away from the microphone.

- 9.3 From time to time, when transmitting long messages, the carrier must be interrupted momentarily during pauses in speech. This will permit the transmitting operator to ascertain whether the channel is clear before continuing the transmission.

### 9.4 STANDARD SPEECH ABBREVIATIONS

The words or phrases shown in the table below are to be used whenever applicable.

Phrase	Meaning
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 next and other portions of the message).
BREAK BREAK	I hereby indicate the separation between messages transmitted to different aircraft in a very busy environment.
CANCEL MY LAST	Annul the previously transmitted clearance.
RADIO CHECK	To test the serviceability of the radio prior to it being used.
CLEARED	Authorized to proceed under the conditions specified.
CONFIRM	Have I correctly received the following ...? or Did you correctly receive the message?
CONTACT	Establish radio contact with .....

<b>Phrase</b>	<b>Meaning</b>
<b>CORRECTION</b>	An error has been made in this transmission (or message indicated). The correct version is .....
<b>HOW DO YOU READ</b>	What is the readability of my transmission?
<b>I SAY AGAIN</b>	I repeat for clarity or emphasis.
<b>MONITOR</b>	Listen out on (frequency)
<b>NEGATIVE</b>	No or Permission not granted or That is not correct
<b>READ BACK</b>	Repeat all, or the specified part, of this message back to me exactly as received.
<b>READBACK CORRECT</b>	Following your correct readback to an ATC clearance that has been issued
<b>RECLEARED</b>	A change has been made to your last clearance and this new clearance supersedes your previous clearance or part thereof.
<b>REPORT</b>	Pass me the following information ...
<b>REQUEST</b>	I should like to know ... or I wish to obtain ...
<b>SAY AGAIN</b>	Repeat all, or the following part, of your last transmission.
<b>SAY AGAIN SLOWLY</b>	Reduce your rate of speech.
<b>STAND BY</b>	Wait and I will call you.
<b>STANDING BY</b>	Waiting for your further response
<b>VERIFY</b>	Check and confirm with originator

10.

### **CALLING**

- 10.1 The unit or service shall be identified in accordance with the table below, except that the name of the location or the unit/service may be omitted provided satisfactory communication has been established.

<b>UNIT/SERVICE AVAILABLE</b>	<b>CALLSIGN SUFFIX</b>
Area control centre	CONTROL
Approach control	APPROACH / RADAR
Director	DIRECTOR
Area	AREA /WEST / EAST / NORTH / SOUTH / CENTRAL
Aerodrome control	TOWER
Surface movement control	GROUND
Flight information service	INFORMATION
Clearance delivery	DELIVERY
Apron control	APRON
Company dispatch / Operations	DISPATCH / STATION CONTROL
Aerodrome Flight Information Service	RADIO

11.

### **RADIOTELEPHONY CALLSIGNS FOR AIRCRAFT**

#### **11.1 FULL CALLSIGNS**

An aircraft/helicopter radiotelephony callsign shall be one of the following types:

Type a) -	The characters corresponding to the registration marking of the aircraft/helicopter; or
Type b)-	The telephony designator of the aircraft/helicopter operating agency, followed by the flight identification number.

Note (1) -	The name of the aircraft/helicopter manufacturer or the name of aircraft/helicopter model may be used as a radiotelephony prefix to the Type a) callsign above.
Note (2) -	The callsigns referred to in a), b) and c) above comprise combinations in accordance with the ITU Radio Regulations (No. 2129 and No. 2130).
Note (3) -	The telephony designators referred to in b) above are contained in ICAO Doc 8585 – Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.
Note (4) -	Any of the foregoing callsigns may be inserted in field 7 of the ICAO flight plan as the aircraft identification. Instructions on the completion of the flight plan form are contained in PANS-RAC, Doc 4444.

#### **11.2 ABBREVIATED CALLSIGNS**

The aircraft radiotelephony callsigns shown above, may be abbreviated in the circumstances prescribed below. Abbreviated callsigns shall be in the following form:

Type a) -	The first character of the registration and at least the last two characters of the callsign;
Type b) -	The telephony designator of the aircraft operating agency, followed by at least the last two characters of the callsign;

**Note -** Either the name of the aircraft manufacturer or the aircraft model may be used in place of the first character in Type a) above.

**Examples of full callsigns and abbreviated callsigns**

	Type (a)	Type (b)	Type (c)	Type (d)
Full callsign	ZSABC	*CESSNA ZSABC	ROBINSON 22 ZSABC	SAA501
Abbreviated callsign	ZBC	CESSNA ABC	HELICOPTER ABC	Springbok 501

\*When applicable (See para. 11.1 Note 2)

**11.3 CHANGING CALLSIGNS**

An aircraft shall not change the type of its radiotelephony callsign during flight. Except temporarily on the instruction of an air traffic control unit in the interests of safety.

**12.**

**ESTABLISHMENT OF RADIOTELEPHONY COMMUNICATIONS**

12.1 Full radiotelephony callsigns shall always be used when establishing communication. The calling procedure of an aircraft establishing communication shall be in accordance with Table 1 below.

12.2 Stations having a requirement to transmit information to all stations likely to intercept should preface such transmission by the general call ALL STATIONS, followed by the identification of the calling station.

**Note:-** No reply is expected to such general calls unless individual stations are subsequently called to acknowledge receipt.

12.3 The reply to the above calls shall be in accordance with Table 2 below.

**Table 1 – Radiotelephony calling procedure**

	Type (a)	Type (b)	Type (c)
Designation of the station called	PORT ALFRED RADIO	JOHANNESBURG TOWER	CAPE TOWN EAST
Designation of the station calling	ZSABC	SPEEDBIRD 056 <sup>*</sup>	COMAIR 321 <sup>*</sup>

\* With the exception of the telephony designators and the type of aircraft, each character in the callsign shall be spoken separately. When individual letters are spelled out, the radiotelephony spelling alphabet prescribed in item 7 shall be used. Numbers are to be spoken in accordance with item 8.

**Table 2 – Radiotelephony reply procedure**

	Type (a)	Type (b)	Type (c)
Designation of the station called	ABC	SPEEDBIRD 056*	COMAIR 321*
Designation of the answering station	PORT ALFRED RADIO	TOWER	CAPE TOWN EAST
Invitation to proceed with transmission	GO AHEAD	GO AHEAD	GO AHEAD

\* With the exception of the telephony designators and the type of aircraft, each character in the callsign shall be spoken separately. When individual letters are spelled out, the radiotelephony spelling alphabet prescribed in item 7 shall be used. Numbers are to be spoken in accordance with item 8.

12.4 When a station is called but it is uncertain of the identification of the calling station it must reply by transmitting the following:-

STATION CALLING..... (station called) SAY AGAIN YOUR CALLSIGN.

Note: The following example illustrated the application of this procedure-

(Bloemfontein replying)

STATION CALLING BLOEMFONTEIN (pause) SAY AGAIN YOUR CALLSIGN.

- 12.5 Communications shall commence with a call and a reply when it is desired to establish contact, except that when it is certain that the station called will receive the call, the calling station may transmit the message without waiting for a reply from the station called.
- 12.6 Abbreviated radiotelephony callsigns, as prescribed above, may be used after satisfactory communication has been established and provided that no confusion is likely to arise. An aircraft shall only use its abbreviated callsign after it has been addressed in this manner by the ground station.
- 12.7 After contact has been established, continuous two-way communication shall be permitted without further identification (if no mistake in identity is likely to occur) until termination of the contact.

### 13. INDICATION OF FREQUENCY

- 13.1 As the aeronautical station operator generally guards more than one frequency the call must be followed by an indication of the frequency used, unless other suitable means of identifying the frequency are known to exist.
- 13.2 When no confusion is likely to arise only the first two digits of the High Frequency need be used to identify the transmitting channel.

Note: The following example illustrates the application of this procedure:-

(SAA 601 calling Johannesburg on 8861 kHz)

JOHANNESBURG OCEANIC INFORMATION THIS IS SPRINGBOK SIX ZERO WUN – ON AIT AIT SIX WUN

### 14. TEST PROCEDURES

- 14.1 The form of test transmissions must be as follows:-

- a) the identification of the station being called;
- b) the aircraft identification;
- c) the words "RADIO CHECK";
- d) the frequency being used.

- 14.2 The reply to a test transmission should be as follows:

- a) the identification of the aircraft;
- b) the identification of the aeronautical station replying;
- c) information regarding the readability of the aircraft transmission.

- 14.3 The operator of the ATSU being called will assess the transmission and will advise the aircraft making the test transmission in terms of the readability scale, together with a comment on the nature of any abnormality noted (i.e. excessive noise) using the following format:

- a) Aircraft identification;
- b) The callsign of the ATSU replying;
- c) READABILITY taken from the table below;
- d) Additional information with respect to any noted abnormality.

Quality	Scale
Unreadable	1
Readable now and then	2
Readable with difficulty	3
Readable	4
Perfectly readable	5

### 15. EXCHANGE OF COMMUNICATIONS

- 15.1 When no confusion is likely to arise, a shortened form of the procedure shall be permitted. For example, STAND BY, THIS IS and other similar phrases may be omitted at the discretion of the operators after initial contact has been established.

### 16. ACKNOWLEDGEMENT OF RECEIPT

- 16.1 The receiving operator shall make certain that the message has been received correctly before acknowledging receipt.

- 16.2 When transmitted by an aircraft the acknowledgement of receipt of a message shall comprise the callsign or identification of that aircraft.
- 16.3 An aircraft acknowledges receipt of ATC instructions and altimeter settings by reading them back and terminating the readback by its radio callsign. Messages not requiring readback must be acknowledged by transmitting the aircraft callsign only. Except in the event of an emergency or when attempting to reply to a transmission while experiencing a radio failure (suppose your receiver is operational but your transmitter is u/s), The double "clicking" of a microphone without modulation will not be used to acknowledge a message. If both instructions and information are received in the same message, only the instructions must be read back.

NOTE: The following example illustrates the application of this procedure: -  
ATC clearance to an aircraft

ATC:

**COMMUNICATION**

SPRINGBOK SIX ZERO WUN JOHANNESBURG APPROACH

Aircraft:

JOHANNESBURG APPROACH SPRINGBOK SIX ZERO WUN

ATC:

SPRINGBOK SIX ZERO WUN DESCEND TO SEVEN THOUSAND FIVE HUNDRED FEET

Aircraft (acknowledging):

DESCEND TO SEVEN THOUSAND FIVE HUNDRED FEET – SPRINGBOK SIX ZERO WUN

ATC (denoting accuracy of readback):

SPRINGBOK SIX ZERO WUN

- 16.4 When acknowledgement of receipt is transmitted by an aeronautical station:
- (a) To an aircraft:  
it shall comprise the callsign or identification of the aircraft, followed if considered necessary by the identification of the aeronautical station;
  - (b) to another aeronautical station:  
it shall comprise the identification of the aeronautical station that is acknowledging receipt.
- 16.5 An aeronautical station will acknowledge position reports and other flight progress reports by reading back the report and terminating the readback by its callsign, except that the readback procedure may be suspended temporarily whenever it will alleviate congestion on the communication channel.

NOTE: the following example illustrates the application of this procedure

(Network station acknowledging receipt of position report)

Aircraft:

JOHANNESBURG OCEANIC SPRINGBOK SIX ZERO WUN – WUN AIT AIT SIX WUN

Station:

SPRINGBOK SIX ZERO WUN – JOHANNESBURG OCEANIC

Aircraft:

SPRINGBOK SIX ZERO WUN – OVERHEAD UBVER AT WUN SIX – FLIGHT LEVEL WUN AIT ZERO – ESTIMATING EXAKO AT WUN TOO TREE AIT

Station (acknowledging):

SPRINGBOK SIX ZERO WUN – OCEANIC COPIES UBVER AT WUN SIX – FLIGHT LEVEL WUN AIT ZERO – REPORT AT EXAKO

Aircraft (denoting correctness of readback):

REPORT AT EXAKO SPRINGBOK SIX ZERO WUN

- 16.6 For verification, the receiving operator may repeat back the message as an additional acknowledgement of receipt. In such instances the station to which the information is read back should acknowledge the correctness of readback by transmitting its identification.
- 16.7 In both position report and other information – such as weather reports – are received in the same message, the information should be acknowledged with the words such as "WEATHER RECEIVED" after the position report has been read back, except when intercept of the information is required by other network stations. Other messages will be acknowledged by the aeronautical station transmitting its callsign only.



**17. END OF CONVERSATION**

- 17.1 A radiotelephone conversation shall be terminated by the receiving station using its own identification. This will indicate that no response is expected. The double "clicking" of a microphone without modulation is not to be used to terminate a transmission.

**18. CORRECTIONS AND REPETITIONS**

- 18.1 When an error has been made in transmission, the word CORRECTION shall be spoken, the last correct group or phrase repeated, and then the correct version transmitted.
- 18.2 When an operator transmitting a message considers that reception will be difficult, he should transmit the important elements of the message twice.
- 18.3 If the receiving operator is in doubt as to the correctness of the message received, he shall request repetition either in full or in part.
- 18.4 If repetition of an entire message is required, the words SAY AGAIN shall be spoken. If repetition of a portion of a message is required, the operator shall state: "SAY AGAIN ALL BEFORE ... (first word satisfactorily received)" or "SAY AGAIN ... (word before missing portion) To ... (word after missing portion)"; or "SAY AGAIN ALL AFTER ... (last word satisfactorily received)".
- 18.5 Specific items should be requested, as appropriate, such as "SAY AGAIN ALTITUDE", "SAY AGAIN WIND".
- 18.6 If a correction can best be made by repeating the entire message, the operator shall use the phrase "I SAY AGAIN" before transmitting the message a second time.
- 18.7 If, in checking the correctness of a readback, an operator notices incorrect items, he/she shall transmit the words "NEGATIVE I SAY AGAIN" at the conclusion of the readback, followed by the correct version of the items concerned.

*NOTE: The following example illustrates the application of the use of the word NEGATIVE in network operation:*

*Aircraft:*

JOHANNESBURG APPROACH SPRINGBOK SIX ZERO WUN

*Station:*

SPRINGBOK SIX ZERO WUN – JOHANNESBURG

*Aircraft:*

SPRINGBOK SIX ZERO WUN REQUEST CLIMB TO FLIGHT LEVEL WUN FOW-er ZERO

*Station (reading back):*

SPRINGBOK SIX ZERO WUN CLIMB TO FLIGHT LEVEL WUN SIX ZERO

*Aircraft (correcting error):*

SPRINGBOK SIX ZERO WUN NEGATIVE – REQUEST CLIMB TO FLIGHT LEVEL WUN FOW-er ZERO

*Station:*

SPRINGBOK SIX ZERO WUN CORRECTION CLIMB TO FLIGHT LEVEL WUN FOW-er ZERO

*Aircraft (noting the response of ATC):*

SPRINGBOK SIX ZERO WUN

**19. "OPERATIONS NORMAL" REPORTS**

- 19.1 When "operations normal" reports are transmitted by aircraft, they should consist of the prescribed call, followed by the words OPERATIONS NORMAL

*NOTE: The following example illustrates the application of this procedure*

*Aircraft:*

JOHANNESBURG OCEANIC SPRINGBOK SIX ZERO WUN – OPERATIONS NORMAL

*Station:*

SPRINGBOK SIX ZERO WUN – COPIED REPORT OPERATIONS NORMAL AT TIME 1100

**20. MAINTAINING A LISTENING WATCH**

- 20.1 *During flight aircraft shall maintain a listening watch and except for reasons of safety, shall not cease watch without informing the appropriate ATSU.*
- 20.2 *When it is necessary for an aircraft to suspend operation for any reason, it shall so inform the appropriate ATSU, giving the time at which it is expected that operations will be resumed. When operation is resumed, the ATSU shall be so informed.*
- 20.3 *When it is necessary to suspend operation beyond the time specified in the original notice, a revised time of resumption of operation shall be transmitted at or near the time first specified.*

**21. ESTABLISHMENT OF CONTACT**

- 21.1 *For aircraft being provided with an aerodrome control service, the initial call shall contain:*

- a) *Designation of the station being called;*
- b) *The full callsign/registration of the aircraft/helicopter;*

*NOTE 1: Aircraft in the "Heavy" and "Super Heavy" wake turbulence category shall include the word heavy after the callsign / registration.*

*NOTE 2: Pilots of helicopters are to indicate in the initial transmission "Helicopter ZS-XXJ..." to ensure that the controller is aware of the type of aircraft that is being dealt with.*

*NOTE 3: It is suggested that a student embarking on a training flight shall advise ATC on initial transmission that they are a student pilot i.e. - "Student ZS-ILP" to ensure that the controller is aware of the limited capabilities and can be handled as such.*

- c) *Position; and*
- d) *Additional elements as required by the appropriate ATS authority.*  
*\* see AIC20.19*

**22. FREQUENCIES TO BE USED**

- 22.1 *Aircraft shall operate on the appropriate radio frequencies.*
- 22.2 *The appropriate ATSU shall designate the frequency to be used by aircraft.*

**23. COMMUNICATIONS FAILURE**

- 23.1 *When an aircraft fails to establish contact with the appropriate ATSU on the designated frequency, it shall attempt to establish contact on another frequency appropriate to the route. If this attempt fails, the aircraft shall attempt to establish communications with other aircraft and/or air traffic services units on frequencies appropriate to the route. In addition, an aircraft operating within a network shall monitor the appropriate frequency for calls from nearby aircraft, and squawk 7600.*
- 23.2 *If the attempts specified under para 23.1 fail, the aircraft shall transmit its message twice on the designated frequency (ies), preceded by the phrase "TRANSMITTING BLIND" and, if necessary, include the addressee for whom the message is intended.*
- 23.3 *A message which is transmitted blind on the primary frequency should be attempted to be transmitted twice on any available frequencies. Before changing frequency, the aircraft should announce the frequency to which it is changing.*
- 23.4 *When an aircraft is unable to establish communication due to receiver failure, it shall transmit reports at the scheduled times, or positions, on the frequency in use preceded by the phrase "TRANSMITTING BLIND POSSIBLE RADIO FAILURE". The aircraft shall transmit the intended message, following this by a complete repetition. During this procedure, the aircraft shall also advise the time of its next intended transmission if the situation permits i.e. – AVIATE – NAVIGATE - COMMUNICATE.*
- 23.5 *An aircraft which is provided with air traffic control service, or for which overdue action is being provided, shall in addition to complying with the provisions of paragraph 23.4, transmit information regarding the intention of the pilot-in-command with respect to the continuation of the flight.*

**24. DISTRESS AND URGENCY PROCEDURES: GENERAL**

- 24.1 *Distress and urgency traffic shall comprise all radiotelephony messages relative to the distress and urgency conditions respectively. Distress and urgency conditions are defined as: -*
- (a) *DISTRESS: a condition of being threatened by serious and/or imminent danger and/or requiring immediate assistance; i.e. – That of a possible / actual structural damage to the aircraft.*
  - (b) *URGENCY: a condition concerning the safety of an aircraft, vessel, vehicle, or person on board or within sight, but which does not require immediate assistance; i.e. – That of a medical condition or a situation where an aircraft is required by circumstances to carry out a precautionary landing.*
- 24.2 *The radiotelephony distress signal MAYDAY (transmitted three times) and the radiotelephony urgency signal*

PAN-PAN (transmitted three times), shall be used as the commencement of the first distress or urgency communication respectively.

24.3 In distress and urgency traffic the radiotelephony distress and urgency signals may be used if it is considered necessary at the commencement of a subsequent communication.

24.4 Messages addressed to an aircraft in distress or urgency condition shall be restricted to the minimum and the content of such messages be only as required by the condition.

24.5 If no acknowledgement of the distress or urgency messages is made by the station addressed by the aircraft, other stations shall render assistance, as prescribed in paragraphs 25.2 and 26.2, respectively.

NOTE: "Other stations" is intended to refer to any other station which has received the distress or urgency message and has become aware that it has not been acknowledged by the station addressed.

24.6 Distress and urgency traffic will normally be maintained on the frequency on which such traffic was initiated until it is considered that better assistance can be provided by transferring the traffic to another frequency.

24.7 In cases of distress and urgency communications, the transmissions by radiotelephony should be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

## 25 DISTRESS COMMUNICATION

25.1 Action by the aircraft in distress. In addition to being preceded by the radiotelephony distress signal MAYDAY, spoken three times, the distress message to be sent by an aircraft should: -

- (a) be on the air-ground frequency in use at the time;
- (b) consists of as many as possible of the following elements spoken distinctly and, if possible, in the following order:
  - (i) name of the station addressed (time and circumstances permitting);
  - (ii) the identification of the aircraft;
  - (iii) the nature of the distress condition;
  - (iv) the intention of the person in command;
  - (v) present position, level and heading

NOTE (1) The foregoing provisions are not intended to prevent: -

- (a) the distress message of an aircraft being made on another aeronautical mobile frequency, if considered necessary or desirable;
- (b) the distress message of an aircraft being broadcast, to all stations if time and circumstances make this course preferable;
- (c) the aircraft transmitting on the maritime mobile service radiotelephony calling frequencies;
- (d) the aircraft using any means at its disposal to attract attention and make known its condition;
- (e) any station taking any means at its disposal to assist an aircraft in distress;
- (f) any variation in the elements listed under para 25.1(b) when the transmitting station is not itself in distress, provided that such circumstances are clearly stated in the distress message.

NOTE (2) The station addressed will normally be that station communicating with the aircraft or in whose area of responsibility the aircraft is operating.

25.2 Action by the station addressed or first station acknowledging the distress message.

The station addressed by an aircraft in distress or first station acknowledging the distress message shall: -

- (a) immediately acknowledge the distress message;
- (b) take control of the communications, or specifically and clearly transfer that responsibility, advising the aircraft if a transfer is made;
- (c) take immediate action to ensure that all necessary information is made available, as soon as possible to: -
  - (i) the appropriate air traffic services unit;
  - (ii) the aircraft operating agency concerned;

NOTE: The requirement to inform the aircraft operating agency does not have priority over any other action which involves the safety of the aircraft in distress or of any other aircraft in the area, or which might affect the progress of expected flights in the area.

- (d) warn other stations, as appropriate, in order to prevent the transfer of traffic to the frequency of the distress communication.

25.3 *Imposition of silence. The station in distress, or the station in control of distress traffic, shall be permitted to impose silence, either on all stations or on any station which interferes with the distress traffic. It shall address these instructions "to all stations", or to one station only, according to circumstances. In either case, it shall use the words "ALL STATIONS STOP TRANSMITTING" (or anything similar based on the situation at the time) together with the radiotelephony distress signal MAYDAY (x3). The use of these signals are reserved for the aircraft in distress and for the station controlling the distress traffic.*

25.4 *Action by all other stations. The distress communications have absolute priority over all other communications and a station aware of them shall not transmit on the frequency concerned, unless:*

- (a) the distress is cancelled or the distress traffic is terminated;
- (b) all distress traffic has been transferred to other frequencies;
- (c) the station controlling communications gives permission;
- (d) it has to render assistance.

*Any station which has knowledge of distress traffic and which cannot itself assist the station in distress shall nevertheless continue listening to such traffic until it is evident that assistance is being provided.*

25.5 *Termination of distress communications and of silence. When an aircraft is no longer in distress it shall transmit a message cancelling the distress condition.*

*When the station which has controlled the distress communication traffic becomes aware that the distress condition is ended it shall take immediate action to ensure that this information is made available as soon as possible to: -*

- (a) the ATSU concerned;
- (b) the aircraft operating agency concerned.

*The distress communication and silence conditions shall be terminated by transmitting a message, including the words "ALL STATIONS THIS IS (Calling Station) RADIO SILENCE TERMINATED", on the frequency being used for the distress traffic. This message shall be originated by the station controlling the communications after the reception of the message from the aircraft which had been in distress, cancelling the distress condition.*

26

#### **URGENCY COMMUNICATIONS**

26.1 *Action by the aircraft reporting an urgency condition. In addition to being preceded by the radiotelephony urgency signal PAN-PAN, spoken three times, the urgency message to be sent by an aircraft reporting an urgency condition should: -*

- (a) be transmitted on the air-ground frequency in use at the time;
- (b) consist of as many of the following elements spoken distinctly and, if possible, in the following order: -
  - (i) the name of the station addressed;
  - (ii) the identification of the aircraft;
  - (iii) the nature of the urgency condition;
  - (iv) the intention of the person in command;
  - (v) present position, level (i.e. flight level, altitude, etc. as appropriate) and heading;
  - (vi) any other useful information.

*Note 1: The foregoing provisions are not intended to prevent an aircraft broadcasting an urgency message to all stations, if time and circumstances make this course preferable.*

*Note 2: The station addressed will normally be that station communicating with the aircraft or in whose area of responsibility the aircraft is operating.*

26.2 *Action by the station addressed or first station acknowledging the urgency message. The station addressed by an aircraft reporting an urgency condition, or first station acknowledging the urgency message, shall: -*

- (a) acknowledge the urgency message;
- (b) take immediate action to ensure that all necessary information is made available, as soon as possible to: -
  - (i) the appropriate ATSU;
  - (ii) the aircraft operating agency concerned;

*NOTE: The requirement to inform the aircraft operating agency does not have priority over any other action which involves the safety of the aircraft or of any other aircraft in the area or which might affect the progress of expected flights in the area.*

(c) If necessary, exercise control of communications.

26.3 The urgency communications have priority over all other communications, except distress, and all stations shall take care not to interfere with the transmission of urgency traffic.

## 27 PRONUNCIATION

27.1 In view of the uncertainty existing about the correct pronunciation of the word "kilometre" and of the increased use of the word in aviation, the correct pronunciation is KEY-LOW-METRE and not KI-LOW-METRE, i.e. KEY LOW as in the radiotelephony spelling alphabet or similar to the pronunciation of "centimetre", "millimetre", etc.

27.2 Pilots are requested to use the correct pronunciation as the clear pronunciation of each syllable of a word greatly enhances the chances of the word being correctly understood in poor conditions.

## 28 RTF PHRASEOLOGY COMMON TO ALL ATS UNITS

Words in brackets indicate that specific information such as a flight level, a place or a time, etc, must be inserted to complete the phrase, or alternatively that optional phrases may be used. Words in square brackets indicate optional additional words or information that may be necessary in specific instances.

The following symbols should be noted in the following sub-paragraph to differentiate between pilot and ATC specific responses:

\* denotes pilot transmission

### General Phraseology

Circumstances	Phraseologies
Description of levels (subsequently referred to as "(level)")	a) FLIGHT LEVEL (number); or b) (number) FEET
Level changes, reports and rates	a) CLIMB (or DESCEND); Followed by: i) To ii) AND MAINTAIN (flight level)
....instruction that a climb (or descent) to a level as defined is to commence.	a) TO REACH (level) AT (time or significant point); b) REPORT LEAVING (or REACHING, or PASSING) (flight level); c) AT (number of) FEET PER MINUTE [OR GREATER (or OR LESS); d) STOP CLIMB (or DESCENT) AT (level); e) CONTINUE CLIMB (or DESCENT) TO (level); f) EXPEDITE CLIMB (or DESCENT) [UNTIL PASSING (level)]; g) WHEN READY CLIMB (or DESCEND) TO (level); h) EXPECT CLIMB (or DESCENT) AT (time or significant point); i) *REQUEST DESCENT AT (time); j) IMMEDIATELY; k) AFTER PASSING (significant point);

<b>Circumstances</b>	<b>Phraseologies</b>
...to require action at a specific time or place.	a) AT (time or significant point);
.....to require action when convenient	a) WHEN READY (instruction);
...to require an aircraft to climb or descend maintaining own separation and VMC	a) MAINTAIN OWN SEPARATION AND VMC
...when there is doubt that an aircraft can comply with a clearance or instruction	a) IF UNABLE TO COMPLY (alternative instructions) REPORT YOUR INTENTIONS;
....when a pilot is unable to comply with a clearance or instruction.	a) *UNABLE TO COMPLY;
...after modifying vertical speed to comply with an ACAS resolution advisory (Pilot & controller interchange)	a) *TCAS CLIMB (or DESCENT);
... after ACAS "Clear of Conflict" is annunciated (Pilot & controller interchange)	a) *RETURNING TO (assigned clearance);
...after the response to an ACAS resolution advisory is completed (Pilot & controller interchange)	a) *TCAS CLIMB (or DESCENT) RETURNING TO (assigned clearance);
...after returning to clearance after responding to an ACAS resolution advisory (Pilot & controller interchange)	a) *TCAS CLIMB (or DESCENT), COMPLETED (assigned clearance) RESUMED;
...when unable to comply with a clearance because of an ACAS resolution advisory (Pilot & controller interchange)	a) *UNABLE, TCAS RESOLUTION ADVISORY;

**Transfer of Control and/ or Frequency Change**

<b>Circumstances</b>	<b>Phraseologies</b>
<p>Note - An aircraft may be requested to "STAND BY" on a frequency when it is intended that the ATS unit will initiate communications soon and to "MONITOR" a frequency when information is being broadcast thereon.</p>	a) CONTACT (unit call sign) (frequency)
	b) AT (or OVER) (time or place) [or WHEN] [PASSING/LEAVING/REACHING](level)] CONTACT (unit call sign) (frequency);
	c) IF NO CONTACT (instructions);
	d) (unit call sign/ frequency); STAND BY HANDOVER
	e) MONITOR (unit call sign) (frequency);
	f) *MONITORING (frequency);
	g) WHEN READY CONTACT (unit call sign) (frequency);
	h) REMAIN ON THIS FREQUENCY.

**Transfer of Control and/ or Frequency Change**

<b>Circumstances</b>	<b>Phraseologies</b>
... to instruct an aircraft to change its call sign	a) CHANGE YOUR CALL SIGN TO (new call sign) (with reasons)
...to advise an aircraft to revert to the call sign indicated in the flight plan.	a) (callsign) CANCEL MY PREVIOUS INSTRUCTION REVERT TO PREVIOUS FLIGHT PLAN CALL SIGN (with reasons)

**Traffic Information**

<b>Circumstances</b>	<b>Phraseologies</b>
...to pass traffic information	a) TRAFFIC (information); b) NO REPORTED TRAFFIC;
... to acknowledge traffic information	a) *LOOKING OUT; b) *TRAFFIC IN SIGHT; c) *NEGATIVE CONTACT; or DO NOT HAVE TRAFFIC IN SIGHT d) [ADDITIONAL] TRAFFIC (direction) ROUTING IS A (type of aircraft) (level) ESTIMATED (or OVER) (significant point) AT (time); e) TRAFFIC IS (classification) AN UNMANNED FREE BALLOON (S) WAS [or ESTIMATED] OVER (place) AT (time) REPORTED (level(s)) [or LEVEL UNKNOWN] MOVING (direction) (other pertinent information, if any).

**Meteorological Conditions**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SURFACE WIND (number) DEGREES (speed) (units);  Note - Wind is always expressed by giving the mean direction and speed and any significant variations thereof.
	b) VISIBILITY (distance) (units) [direction]
<b>Circumstances</b>	<b>Phraseologies</b>
	c) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (distance) (units); d) RUNWAY VISUAL RANGE (or RVR) RUNWAY (number) NOT AVAILABLE AT PRESENT (or NOT REPORTED);
... for multiple RVR observations	e) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (first position) (distance) (units), (second position) (distance) (units), (third position) (distance) (units);
	Note 1 - Multiple RVR observations are always representative of the touchdown zone, midpoint zone and the roll-out/stop zone respectively.
	Note 2 - Where reports for three locations are given the indication of these locations may be omitted, provided that the reports are passed in the order of touchdown zone, followed by the midpoint zone and ending with the roll-out/stop end zone report.
...in the event that RVR information on any one position is not available this information will be included in the appropriate sequence	f) RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (first position) (distance) (units), (second position) NOT AVAILABLE, (third position) (distance) (units);

	g) <i>PRESENT WEATHER (details);</i>
	h) <i>CLOUD (amount, [(type)] and height of base) (units) (or SKY CLEAR);</i>
	i) <i>CAVOK;</i> <i>Note - CAVOK pronounced CAV-O-KAY.</i>
	j) <i>TEMPERATURE [MINUS] (number) (and/or DEW-POINT [MINUS] (number));</i>
	k) <i>QNH (number) [(units)];</i>

<i>Circumstances</i>	<i>Phraseologies</i>
	a) <i>QFE (number) [(units)];</i>
	a) <i>(aircraft type) REPORTED (description) ICING (or TURBULENCE) [IN CLOUD] (area) (time);</i>
	a) <i>REPORT FLIGHT CONDITIONS</i>

#### **Position Reporting**

<i>Circumstances</i>	<i>Phraseologies</i>
	a) <i>REPORT AT (significant point);</i>

#### **Additional Reports**

<i>Circumstances</i>	<i>Phraseologies</i>
<i>...to request a report at a specified place or distance.</i>	a) <i>REPORT PASSING (significant point);</i>
	b) <i>REPORT (distance) FROM (name of DME station) DME (or significant point);</i>
	c) <i>REPORT PASSING (three digits) RADIAL (name of VOR) VOR;</i>
<i>...to request a report of present position</i>	a) <i>REPORT DISTANCE FROM (significant point);</i>
	b) <i>REPORT DISTANCE FROM (name of DME station) DME;</i>

#### **Aerodrome Information**

<i>Circumstances</i>	<i>Phraseologies</i>
	a) <i>[(location) RUNWAY (number) (condition);</i>
	b) <i>[(location) STANDBY RUNWAY (number) NOT AVAILABLE AT PRESENT;</i>
	c) <i>CAUTION CONSTRUCTION WORK IN PROGRESS (location);</i>
	d) <i>CAUTION (specify reasons) RIGHT (or LEFT) (or BOTH SIDES) OF RUNWAY [number];</i>
	e) <i>CAUTION OBSTRUCTION (position and any necessary advice);</i>
	f) <i>RUNWAY REPORT AT (observation time) RUNWAY (number) (type of precipitant) UP TO (depth of deposit) MILLIMETERS. BRAKING ACTION REPORTED BY PREVIOUS AIRCRAFT AS GOOD (or MEDIUM TO GOOD, or MEDIUM, or MEDIUM TO POOR, or POOR or UNRELIABLE) [and/or BRAKING COEFFICIENT (equipment and number);</i>
	c) <i>BRAKING ACTION REPORTED BY (aircraft type) AT (time) GOOD (or MEDIUM or POOR);</i>
	d) <i>BRAKING ACTION [(location)] (measuring equipment used), RUNWAY (number), TEMPERATURE [MINUS] (number), WAS (reading) AT (time);</i>



	e) TOWER OBSERVES (weather information);
	f) PILOT REPORTS (weather information);
	g) RUNWAY (or TAXIWAY) (number) WET [or DAMP, WATER PATCHES, FLOODED (depth), or SNOW REMOVED (length and width as applicable), or TREATED, or COVERED WITH PATCHES OR DRY SNOW (or WET SNOW, or COMPACTED SNOW, or SLUSH, or FROZEN SLUSH, or ICE, or ICE UNDERNEATH, or ICE AND SNOW, or SNOWDRIFTS, or FROZEN RUTS AND RIDGES)];

**Operational Status of Visual and Non-Visual Aids**

Circumstances	Phraseologies
	a) (specific visual or non-visual aid) RUNWAY (number) (description of deficiency);
	b) (type) LIGHTING (unserviceability);
	c) ILS CATEGORY (category) (serviceability state);
	d) TAXIWAY LIGHTING (description of deficiency);
	e) (type of visual approach slope indicator) RUNWAY (number) (description of deficiency);

**Area Control Service  
Issuance of a Clearance**

Circumstances	Phraseologies
	a) (name of unit) CLEARS (aircraft call sign);
	b) (aircraft call sign) CLEARED TO;
	c) RECLEARED (amended clearance details)[REST OF CLEARANCE UNCHANGED];
	d) RECLEARED (amended route portion) TO (significant point of original route) [REST OF CLEARANCE UNCHANGED]
	e) ENTER CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route)] AT (level) [AT (time)];
	f) LEAVE CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route) ] AT (level) (or CLIMBING, or DESCENDING);
	g) JOIN (specify) AT (significant point) AT (level) [AT (time)]

**Indication of Route and Clearance Limit**

Circumstances	Phraseologies
	a) FROM (location) TO (location);
	b) TO (location),  Followed as necessary by :
	i) Direct;
	ii) VIA (route and/or significant points);
	iii) VIA FLIGHT PLANNED ROUTE;

### Maintenance Of Specified Levels

Circumstances	Phraseologies
	a) MAINTAIN (level) [TO (significant point)];
	b) MAINTAIN (level) UNTIL PASSING (significant point);
	c) MAINTAIN (level) UNTIL PASSING (significant point);
	d) MAINTAIN (level) UNTIL (time);
	e) MAINTAIN (level) UNTIL FURTHER ADVISED;
	Note - the term "MAINTAIN" is not to be used in lieu of "DESCEND" or "CLIMB" when instructing an aircraft to change level.

### Specification of Cruising Level

Circumstances	Phraseologies
	b) CROSS (significant point) AT (or ABOVE, or BELOW) (level);
	c) CROSS (significant point) AT (time) OR LATER (or BEFORE) AT (level);
	c) CROSS (distance) DME [(direction)] OF (name of DME station) AT (or ABOVE or BELOW) (level).

### Emergency Descent

Circumstances	Phraseologies
	a) *EMERGENCY DESCENT (intentions);
	b) ATTENTION ALL AIRCRAFT IN THE VICINITY OF [or AT] (significant point or location) EMERGENCY DESCENT IN PROGRESS FROM (level) (followed as necessary by specific instructions, clearances, traffic information, etc)

### If Clearance Cannot Be Issued Immediately Upon Request

Circumstances	Phraseologies
	a) EXPECT CLEARANCE (or type of clearance) AT (time).

### Separation Instructions

Circumstances	Phraseologies
	a) CROSS (significant point) AT (time) [OR LATER (OR BEFORE)];
	b) ADVISE IF ABLE TO CROSS (significant point) AT (time or level);
	c) MAINTAIN MACH (number) [OR GREATER (OR LESS) [UNTIL (significant point)]];
	d) DO NOT EXCEED MACH (number);

### Instructions Associated With Flying A Track (Offset), Parallel To The Cleared Route.

Circumstances	Phraseologies
	a) ADVISE IF ABLE TO PROCEED PARALLEL OFFSET;
	b) PROCEED OFFSET (distance) RIGHT/LEFT OF (route) (track) [CENTRE LINE] [AT (significant point or time)] [UNTIL (significant point or time)];
	c) CANCEL OFFSET (instructions to rejoin cleared flight route or other information).

## Approach Control Service

### Departure Instructions

Circumstances	Phraseologies
	a) [AFTER DEPARTURE] TURN RIGHT (or LEFT HEADING (three digits) (or CONTINUE RUNWAY HEADING) (or TRACK EXTENDED CENTRE LINE) TO (level or significant point) [(other instructions as required)];
	b) AFTER REACHING (or PASSING) (level or significant point) (instructions);
	c) TURN RIGHT (or LEFT) HEADING (three digits) TO (level) INTERCEPT (track, route, airway, etc);
	d) (standard departure name and number) DEPARTURE;
	e) TRACK (three digits) DEGREES [MAGNETIC (or TRUE)] TO (or FROM) (significant point) UNTIL (time, or REACHING (fix or significant point or level)) [BEFORE PROCEEDING ON COURSE];
	f) CLEARED VIA (designation).
	Note - Conditions associated with the use of these phrases are in Part III, 12.2. (Doc 4444).

### Approach Instructions

Circumstances	Phraseologies
	a) CLEARED (or PROCEED) VIA (designation);
	b) CLEARED TO (clearance limit) VIA (designation);
	c) CLEARED (or PROCEED) VIA (details of route to be followed);
	d) CLEARED (type of approach) APPROACH [RUNWAY (number)];
	e) CLEARED (type of approach) RUNWAY (number) FOLLOWED BY CIRCLING APPROACH TO RUNWAY (number);
	f) CLEARED APPROACH [RUNWAY (number)];
	g) COMMENCE APPROACH AT (time);
	h) *REQUEST STRAIGHT-IN [(type of approach)] APPROACH [RUNWAY (number)];
	i) CLEARED STRAIGHT-IN [(type of approach)] APPROACH [RUNWAY (number)];
	j) REPORT (particular area) VISUAL;
	k) REPORT RUNWAY [LIGHTS] IN SIGHT;
	l) *REQUEST VISUAL APPROACH;
	m) CLEARED VISUAL APPROACH RUNWAY (number);
	n) REPORT (significant point); [OUTBOUND, or INBOUND];
	o) REPORT COMMENCING PROCEDURE TURN;
	p) *REQUEST VMC DESCENT
	q) MAINTAIN OWN SEPARATION;
	r) MAINTAIN VMC;

	s) CONFIRM YOU CAN COMPLY WITH (name) APPROACH PROCEDURE;
	t) *REQUEST (type of approach) APPROACH [RUNWAY (number)];
	u) REQUEST (RNAV plain language designator);
	v) CLEARED (RNAV plain language designator);

### Holding Clearances

Circumstances	Phraseologies
.....visual	a) HOLD VISUALLY [OVER] (position), (or BETWEEN (two prominent landmarks));
...published holding procedure over a facility or fix	b) CLEARED (or PROCEED) TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] AS PUBLISHED EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time);
	c) * REQUEST HOLDING INSTRUCTIONS;
...when a detailed holding clearance is required.	d) CLEARED (or PROCEED) TO (significant point, name of facility or fix) [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [(specified) RADIAL, COURSE, INBOUND TRACK (three digits) DEGREES] [RIGHT (or LEFT) PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary);
	e) CLEARED TO THE (three digits) RADIAL (NAME OF VOR) AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD [(direction)] [RIGHT (or LEFT) PATTERN] [OUTBOUND TIME (number) MINUTES] EXPECT APPROACH CLEARANCE (or FURTHER CLEARANCE) AT (time) (additional instructions, if necessary);
	f) CLEARED TO THE (three digits) RADIAL OF THE (name) VOR AT (distance) DME FIX [MAINTAIN (or CLIMB or DESCEND TO) (level)] HOLD BETWEEN (distance) AND (distance) DME [RIGHT (or LEFT) PATTERN] EXPECTED APPROACH TIME AT (time) (additional instructions, if necessary).

Circumstances	Phraseologies
	a) NO DELAY EXPECTED;
	a) EXPECTED APPROACH TIME (time);
	a) REVISED EXPECTED APPROACH TIME (time);
	a) DELAY NOT DETERMINED OR DELAY DUE TO (reasons)

### Expected Approach Time

### Phraseologies for Use on and in the vicinity of the Aerodrome

### Identification of Aircraft

Circumstances	Phraseologies
	SELECT LANDING LIGHTS.

### Acknowledgement by Visual Means

Circumstances	Phraseologies
	a) ACKNOWLEDGE THIS TRANSMISSION BY MOVING AILERONS (or RUDDER);
	b) ACKNOWLEDGE THIS TRANSMISSION BY ROCKING WINGS;
	c) ACKNOWLEDGE THIS TRANSMISSION BY FLASHING LANDING LIGHTS;

### The Issuing of clearances

<b>Circumstances</b>	<b>Phraseologies</b>
Radar Environment	a) (CALLSIGN) Cleared from (DEPARTURE AERODROME) to (DESTINATION AERODROME) (STANDARD INSTRUMENT DEPARTURE) (APPROACH FREQUENCY) (SQUAWK)

<b>Circumstances</b>	<b>Phraseologies</b>
Non-Radar Environment OR In a radar environment with the radar temporary u/s	b) (CALLSIGN) Cleared (NON-STANDARD) from (DEPARTURE AERODROME) to (DESTINATION AERODROME) after departure (RUNWAY) (CLEARANCE);(APPROACH FREQUENCY)

### Starting Procedures

<b>Circumstances</b>	<b>Phraseologies</b>
.....to request permission to start engines	a) * [aircraft location] REQUEST START;
	b) *[aircraft location] REQUEST START, INFORMATION (ATIS identification);
<b>Circumstances</b>	<b>Phraseologies</b>
...ATC replies	a) START APPROVED;
	b) START APPROVED AT (time);
	c) EXPECT START AT (time);
	d) START AT OWN DISCRETION;

### Push-Back Procedures

<b>Circumstances</b>	<b>Phraseologies</b>
Note - When local procedures so prescribe, authorisation for pushback should be obtained from the control tower, alternatively, the ATC may give you an instruction which will require you to request pushback.	a) *[aircraft location] REQUEST PUSHBACK;
...aircraft/ATC	a) PUSHBACK APPROVED; FACE WEST/EAST/NORTH/SOUTH
	b) STAND BY PUSHBACK;
	c) PUSHBACK AT OWN DISCRETION;
	d) EXPECT (number) MINUTES DELAY DUE (reason);

### Towing Procedures

<b>Circumstances</b>	<b>Phraseologies</b>
Denotes transmission from aircraft/ tow vehicle combination.	a) REQUEST TOW [company name] (aircraft type) FROM (location) TO (location);
...ATC response	a) TOW APPROVED VIA (specific routing to be followed)OR PUSHBACK TOW APPROVED FROM (specific instructions) REPORT TOW COMPLETE ;
	b) HOLD POSITION;
	c) PUSHBACK APPROVED FACE SOUTH/NORTH/EAST/WEST STAND BY TOW.

**To Request Time Check and/ Or Aerodrome Data For Departure**

<b>Circumstances</b>	<b>Phraseologies</b>
...when no ATIS broadcast is available, ATC will reply.	a) *REQUEST TIME CHECK;
	b) *REQUEST DEPARTURE INFORMATION

<b>Circumstances</b>	<b>Phraseologies</b>
	a) RUNWAY (number), WIND (direction and speed) (units) QNH (or QFE) (number) [(units)] TEMPERATURE [MINUS] (number), [VISIBILITY (distance) (units) (or RUNWAY VISUAL RANGE (or RVR) (distance) (units))] [TIME (time)].
	Note - If multiple visibility and RVR observations are available, those that represent the roll-out/stop end zone should be used for take-off.

**Taxi Procedures**

<b>Circumstances</b>	<b>Phraseologies</b>
...for departure	a) *[aircraft type] [wake turbulence category if "heavy" / "super heavy" [This is Optional ], [aircraft location] REQUEST TAXI [intentions];
	b) *[aircraft type] [wake turbulence category if "heavy" / "super heavy"] [aircraft location] (flight rules) TO (aerodrome of destination) REQUEST TAXI [intentions] (as per flight plan reference number);
	c) TAXI TO HOLDING POINT [number] [RUNWAY (number)] [HOLD SHORT OF RUNWAY (number) or, CROSS RUNWAY (number)] [TIME (time)];
	d) *(Callsign / Registration) [wake turbulence category if "heavy" / "super heavy"] [This is optional] REQUEST TAXI INSTRUCTIONS;
...where taxi instructions are required with specified procedures in place:	a) TAXI TO (TYPE OF) HOLDING POINT [(number)] [RUNWAY (number) VIA (specific route to be followed) [TIME (time)] [HOLD SHORT OF RUNWAY (number) or, CROSS RUNWAY (number)];
...where taxi instructions are required with specified procedures not in place:	a) TAXI VIA (taxiway) TO HOLD SHORT OF (runway) AT THE (taxiway) HOLDING POINT
...where aerodrome information is not available from an alternative source such as ATIS	a) TAXI TO HOLDING POINT [(number)] (followed by aerodrome information as applicable) [TIME (time)]; NOTE: Time checks are not compulsory
	b) TAKE (or TURN) FIRST (or SECOND) LEFT (or RIGHT);
	c) TAXI VIA (identification of taxiway); TAXI IN TURN TO THE AIRCRAFT AHEAD VIA (identification of taxiway)
	d) TAXI VIA RUNWAY (number);
	e) TAXI TO PARKING BAY (or other location, e.g. GENERAL AVIATION AREA) [STAND (number)];

...for helicopter operations	a) * REQUEST AIR-TAXIING FROM (or VIA) TO (location or routing as appropriate);
	b) § AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.)]
	c) § AIR TAXI VIA (direct, as requested, or specified route) TO (location, heliport, operating or movement area, active or inactive runway). CAUTION (aircraft or vehicles or personnel);
....after landing	a) * REQUEST BACKTRACK;
	b) BACKTRACK APPROVED;
	c) BACKTRACK RUNWAY (number);
	d) *[(aircraft location)] REQUEST TAXI TO (destination on aerodrome);
	e) TAXI STRAIGHT AHEAD;
	f) TAXI WITH CAUTION;
	g) GIVE WAY TO (description and position of other aircraft);
	h) *GIVING WAY TO (traffic);
	i) *TRAFFIC (or type of aircraft) IN SIGHT;
	j) TAXI INTO PARKING BAY;
	k) FOLLOW THE TRAFFIC AHEAD (description of other aircraft or vehicle);
	l) VACATE RUNWAY;
	m) *RUNWAY VACATED;
	n) EXPEDITE TAXI [(reason)];
	o) *EXPEDITING;
	p) [CAUTION] TAXI SLOWER [reason];
	q) *COPIED SLOWING DOWN.
	r) BEHIND THE (traffic) CROSS RUNWAY (number) BEHIND

#### Holding

Circumstances	Phraseologies
... to hold not closer to a runway than specified in Section 3, Chapter 1, Para 4.7.1 (CAA Standards and Procedures Manual)	a) HOLD (direction) OF (position, runway number, etc);
	b) HOLD POSITION;
	c) HOLD (distance) FROM (position);
	d) HOLD SHORT OF (position);
	e) *HOLDING;
	f) *HOLDING SHORT.

# **To Cross A Runway**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) * REQUEST TO CROSS RUNWAY (number);  Note - If the control tower is unable to see the crossing aircraft (e.g. night, low visibility, etc), the instruction should always be accompanied by a request to report when the aircraft has vacated and is clear of the runway.
Note - The pilot will, when requested, report "RUNWAY VACATED" when the aircraft tail section is well clear of the runway.	b) CROSS RUNWAY (number) [REPORT VACATED];
	c) EXPEDITE CROSSING RUNWAY (number) TRAFFIC (aircraft type) (distance) (MILES) FINAL;
	d) TAXI TO HOLDING POINT [number] [RUNWAY (number) VIA (specific route to be followed), [HOLD SHORT OF RUNWAY (number) or [CROSS RUNWAY (number)]. or (Taxiway)
Note - The pilot will, when requested, report "RUNWAY VACATED" when the aircraft tail section is well clear of the runway.	e) *RUNWAY VACATED.
	f) STANDBY (designator) DEPARTURE (reasons);

## **Preparation for Take-Off**

<b>Circumstances</b>	<b>Phraseologies</b>
	g) REPORT WHEN READY [FOR DEPARTURE];
	h) CONFIRM YOU ARE READY [FOR DEPARTURE]? ;
	i) CONFIRM YOU ARE READY FOR IMMEDIATE DEPARTURE? ;
	j) *READY; or AFFIRM; or NEGATIVE
... if unable to issue take-off clearance	a) STANDBY DEPARTURE [reason];
...clearance to enter runway and await take-off clearance	a) LINE UP [AND WAIT];
	b) # LINE UP RUNWAY (number);
	c) LINE UP. BE READY FOR IMMEDIATE DEPARTURE;
... conditional clearances	a) # (condition) LINE UP IN TURN TO THE (aircraft type ahead) BEHIND THE LANDING (aircraft type) LINE UP AND WAIT BEHIND
...acknowledgement of a conditional clearance	a) *(condition) LINING UP;
...confirmation or otherwise correction of the readback of conditional clearance	a) [THAT IS] CORRECT (or NEGATIVE) [I SAY AGAIN] ... (as appropriate)).
	# Where there is the possibility of confusion during multiple runway operations.
	II Provisions concerning the use of conditional clearances are contained in Section 8, Chapter1, Paragraph 5.8.( CAA Standards and Procedures Manual)



**Take-Off Clearance**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) <i>RUNWAY (number) CLEARED FOR TAKE-OFF SURFACE WIND (degrees &amp; knots) [REPORT AIRBORNE];</i>
<i>...when reduced runway separation is used.</i>	b) <i>(traffic information) RUNWAY (number) CLEARED FOR TAKE-OFF; SURFACE WIND (degrees &amp; knots)</i>
<i>...when take-off clearance has not been complied with.</i>	c) <i>TAKE-OFF IMMEDIATELY OR VACATE RUNWAY (instructions);</i> d) <i>TAKE OFF IMMEDIATELY OR HOLD SHORT OF RUNWAY;</i>
<i>...to cancel a take-off clearance.</i>	e) <i>HOLD POSITION, CANCEL TAKE-OFF I SAY AGAIN CANCEL TAKE-OFF (reasons);</i> f) <i>*HOLDING;</i>
<i>... to stop a take-off after an aircraft has commenced take-off roll.</i>	g) <i>ABORT TAKE OFF[(repeat aircraft call sign) I SAY AGAIN ABORT TAKE OFF</i>
	h) <i>*ABORTING</i>
<i>...for helicopter operations</i>	i) <i>CLEARED FOR TAKE-OFF [FROM (location)] (present position, taxiway, final approach and take-off area, runway and number);</i>
	j) <i>* REQUEST DEPARTURE INSTRUCTIONS;</i> k) <i>AFTER DEPARTURE TURN RIGHT (or LEFT or CLIMB) (instructions as appropriate);</i> <i>Note - HOLDING and ABORTING are the procedural responses to (e) and (g) respectively.</i>

**Turn or Climb Instructions After Take-Off**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) <i>* REQUEST RIGHT (or LEFT) TURN</i> b) <i>RIGHT (or LEFT) TURN APPROVED;</i> c) <i>WILL ADVISE LATER FOR RIGHT (or LEFT) TURN;</i>
<i>...to request airborne time</i>	a) <i>REPORT AIRBORNE;</i> b) <i>* AIRBORNE (time);</i> c) <i>AFTER PASSING (level) (instructions);</i>
<i>... heading to be followed</i>	a) <i>CONTINUE RUNWAY HEADING (instructions);</i>
<i>...when a specific track is to be followed</i>	a) <i>TRACK EXTENDED CENTRE LINE (instructions);</i> b) <i>CLIMB STRAIGHT AHEAD (instructions);</i>

**Entering An Aerodrome Traffic Circuit**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) <i>*[aircraft type] (position) (level) FOR LANDING;</i> b) <i>JOIN [(direction of circuit)] (position in circuit) (runway number) [SURFACE WIND] (direction and speed) (units) [TEMPERATURE [MINUS] (number)] QNH (or QFE) (number) [(units)] [TRAFFIC detail]] ;</i>
	a) <i>JOIN AND REPORT [LEFT/RIGHT] (DOWNWIND /</i>

	BASE / FINAL) RUNWAY (number) [SURFACE] WIND (direction and speed) (units) [TEMPERATURE [MINUS] (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)];
... when right hand traffic circuit in use	a) JOIN RIGHT HAND (position in circuit) (runway number) [SURFACE] WIND (direction and speed) (units) [TEMPERATURE [MINUS] (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)];
...when ATIS information is available	a) *(aircraft type) (position) (level) INFORMATION (ATIS identification) FOR LANDING;
	b) JOIN (position in circuit) [RUNWAY (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)].

### In the Circuit

Circumstances	Phraseologies
	a) *(position in circuit, e.g. DOWNWIND/FINAL);
	b) NUMBER... FOLLOW (aircraft type and position) [additional instructions if required].

### Approach Instructions

Circumstances	Phraseologies
<p>Note - The report "LONG FINAL" is made when an aircraft turns on to final approach at a distance greater than 7km (4NM) from touchdown or when an aircraft on a straight-in approach is 15km (8NM) from touchdown. In both cases a report "FINAL" is required at 7km (4NM) from touchdown.</p>	c) MAKE A SHORT APPROACH;
	d) POSITION AND REPORT LONG FINAL (or EXTEND DOWNWIND);
	e) REPORT BASE (or FINAL, or LONG FINAL);
	f) CONTINUE APPROACH [PREPARE FOR POSSIBLE GO AROUND].

### Landing Clearance

Circumstances	Phraseologies
	a) RUNWAY (number) CLEARED TO LAND;
... when reduced runway separation is used.	a) (traffic information) RUNWAY (number) CLEARED TO LAND;
...special operations	a) CLEARED TOUCH AND GO;
	b) MAKE FULL STOP;
...to make an approach along, or parallel to a runway, descending to an agreed minimum level	a) *REQUEST LOW LEVEL FLY PAST (reasons);
	b) LOW LEVEL FLYPAST APPROVED [RUNWAY (number)] [(altitude restriction if required) (go around instructions)];
... to flypast the control tower or other observation point for the purpose of visual inspection by persons on the ground.	a) *REQUEST LOW PASS (reasons);
	b) CLEARED LOW PASS [as in f)];
... For helicopter operations.	c) *REQUEST TO POSITION LEFT (or RIGHT) TURN TO (location));
	d) POSITION LEFT (or RIGHT) TURN TO (location, runway, taxiway, final approach and take-off area)) [ARRIVAL (or ARRIVAL ROUTE) (number, name or code)] [HOLD SHORT OF (active runway, extended runway centre line, other)] [REMAIN (direction or distance) FROM (runway, runway centre line, other helicopter or aircraft)] [CAUTION (power lines, unlighted obstructions, wake turbulence, etc)] CLEARED TO LAND. LAND AT OWN DISCRETION

### Delaying Aircraft

Circumstances	Phraseologies
	a) CIRCLE THE AERODROME;
	b) ORBIT (RIGHT, or LEFT) [FROM PRESENT POSITION];
	c) MAKE ANOTHER CIRCUIT.

### Missed Approach

Circumstances	Phraseologies
	a) GO AROUND; I SAY AGAIN GO AROUND
	b) *GOING AROUND.

### Information to Aircraft

Circumstances	Phraseologies
...when pilot requested visual inspection of landing gear	a) LANDING GEAR APPEARS DOWN;
	b) RIGHT (or LEFT, or NOSE) WHEEL APPEARS UP (or DOWN);
	c) WHEELS APPEAR UP;
	d) RIGHT (or LEFT, or NOSE) WHEEL DOES NOT APPEAR UP (or DOWN);
	e) CAUTION WAKE TURBULENCE [FROM ARRIVING (or DEPARTING) (type of aircraft)] [additional information as required];
	f) CAUTION JET BLAST;
	g) CAUTION SLIPSTREAM.

### Runway Vacating and Communications After Landing

Circumstances	Phraseologies
	a) CONTACT GROUND (frequency);
	b) WHEN VACATED CONTACT GROUND (frequency);
	c) EXPEDITE VACATING;
	d) YOUR STAND (or GATE) (or PARKING BAY) designation);
	e) TAKE (or TURN) FIRST (or SECOND, or CONVENIENT) LEFT (or RIGHT) AND CONTACT GROUND (frequency);
... for helicopter operations.	f) AIR-TAXI TO HELICOPTER STAND (or) HELICOPTER PARKING POSITION (area);
	g) AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxing light aircraft, personnel, etc)];
	h) AIR-TAXI VIA (direct, as requested, or specified route) TO (location, heliport, operating or movement area, active or inactive runway). AVOID (aircraft or vehicles or personnel).

## Coordination Between ATS Units

### Estimates and Revisions

Circumstances	Phraseologies
...sending unit	a) ESTIMATE [direction of flight] (aircraft call sign) [SQUAWKING (SSR Code)] (type) ESTIMATED (significant point) (time) (level) (or DESCENDING FROM (level) TO (level) [SPEED (filed TAS)] (route) [REMARKS];
	b) (aircraft call sign) ESTIMATE (significant point) at time

Circumstances	Phraseologies
...receiving unit reply (if flight plan details are not available)	c) Negative flight plan (with information)
...receiving unit reply (if flight plan details are available)	(aircraft type) (destination);
...sending unit reply.	[SQUAWKING (SSR Code) [ESTIMATED] (significant point) (time) AT (level);  Note - In the event that flight plan details are not available the receiving station shall reply to b) NO DETAILS and transmitting station shall pass full estimate as in a).
	c) ESTIMATE UNMANNED FREE BALLOON(S) (identification and classification) ESTIMATED OVER (place) AT (time) REPORTED FLIGHT LEVEL(S) (figure or figures) [or FLIGHT LEVEL UNKNOWN] MOVING (direction) ESTIMATED GROUND SPEED (figure) (other pertinent information, if any);
	d) REVISION (aircraft call sign) (details as necessary).

### Transfer Of Control

Circumstances	Phraseologies
	a) REQUEST RELEASE OF (aircraft call sign);
	b) (aircraft call sign) RELEASED [AT (time)] [conditions/restrictions];
	c) IS (aircraft call sign) RELEASED [FOR CLIMB (or DESCENT)];
	d) (aircraft call sign) STANDBY RELEASE [UNTIL (time or significant point)];
	e) UNABLE TO ACCOMODATE (aircraft call sign) [TRAFFIC IS (details)].

### Change Of Clearance

Circumstances	Phraseologies
	a) REQUEST TO CHANGE CLEARANCE OF (aircraft call sign) TO (details of alteration proposed);
	b) AGREED TO (alteration of clearance) OF (aircraft call sign);
	c) UNABLE (aircraft call sign),
	d) UNABLE (desired route, level, etc.) [FOR (aircraft call sign)] [DUE (reason)] (alternative clearance proposed).

## Approval Request

Circumstances	Phraseologies
	a) APPROVAL REQUEST (aircraft call sign) ESTIMATED DEPARTURE FROM (significant point) AT (time);
	b) (aircraft call sign) REQUEST APPROVED [(restriction if any)];
	c) (aircraft call sign) STANDBY REQUEST; FOLLOWED BY (alternative instructions) IF UNABLE TO ASSIST

## Inbound Release

Circumstances	Phraseologies
	d) [INBOUND RELEASE] (aircraft call sign) [SQUAWKING (SSR Code)] (type) FROM (departure point) RELEASED AT (significant point, or time, or level) CLEARED TO AND ESTIMATING (clearance limit) (time) AT (level) [EXPECTED APPROACH TIME or NO DELAY EXPECTED] CONTACT AT (time).

## Radar Handover

Circumstances	Phraseologies
	a) RADAR HANDOVER (aircraft call sign) SQUAWKING (SSR Code)] POSITION (aircraft position) (level).

## Expedition Of Clearance

Circumstances	Phraseologies
	a) EXPEDITE CLEARANCE (aircraft call sign) EXPECTED DEPARTURE FROM (place) AT (time);
	b) EXPEDITE CLEARANCE (aircraft call sign) [ESTIMATED] OVER (place) AT (time) REQUESTS (level or route, etc).

## Failure of Controller Pilot Data Link Communication (CPDLC)

Circumstances	Phraseologies
	[ALL STATIONS] CPDLC FAILURE (instructions).

## GENERAL RADAR PHRASEOLOGIES

### Identification Of Aircraft

Circumstances	Phraseologies
	a) REPORT HEADING [AND FLIGHT LEVEL (or ALTITUDE)];
	b) FOR IDENTIFICATION TURN LEFT (or RIGHT) HEADING (three digits);
	c) TRANSMIT FOR IDENTIFICATION AND REPORT HEADING;
	d) RADAR CONTACT [position];
	e) IDENTIFIED [position];
	f) NOT IDENTIFIED [reason], [RESUME (or CONTINUE OWN NAVIGATION)].

### Position Information

Circumstances	Phraseologies
	POSITION (distance) (direction) OF (significant point) (or OVER or ABEAM (significant point)).

### Vectoring Instructions

Circumstances	Phraseologies
	a) LEAVE (significant point) HEADING (three digits);
	b) CONTINUE HEADING (three digits);
	c) CONTINUE PRESENT HEADING;
	d) FLY HEADING (three digits);
	e) TURN LEFT (or RIGHT) HEADING (three digits) [reason]; or SUGGESTED TRACK REQUIRED(Class G Airspace)
	f) TURN LEFT (or RIGHT) (number of degrees) DEGRESS [reason];
	g) STOP TURN HEADING (three digits);
	h) FLY HEADING (three digits), WHEN ABLE PROCEED DIRECT (name) (significant point);
	i) HEADING IS GOOD.

### Termination of Radar Vectoring

Circumstances	Phraseologies
	a) RESUME OWN NAVIGATION (position of aircraft) (specific instructions);
	e) RESUME OWN NAVIGATION [DIRECT] (significant point) [MAGNETIC TRACK (three digits) DISTANCE (number) MILES].

### Manoeuvres

Circumstances	Phraseologies
	a) ORBIT LEFT (or RIGHT) [reason];
...(in case of unreliable directional instruments on board aircraft)	a) MAKE ALL TURNS RATE ONE (or RATE HALF, or (number) DEGREES PER SECOND) START AND STOP ALL TURNS ON THE COMMAND "NOW";
<p>Note - When it is necessary to specify a reason for radar vectoring or for the above manoeuvres, the following phraseologies should be used:</p> <p>a) DUE TRAFFIC; b) FOR SPACING; c) FOR DELAY; d) FOR DOWNWIND (or BASE, or FINAL).</p>	b) TURN LEFT (or RIGHT) NOW;
	a) STOP TURN NOW.

# Speed Control

Circumstances	Phraseologies
	a) REPORT SPEED;
	b) *SPEED (number) KNOTS;
	c) MAINTAIN (number) KNOTS [OR GREATER (or OR LESS)] [UNTIL (signification point)];
	d) DO NOT EXCEED (number) KNOTS;
	e) MAINTAIN PRESENT SPEED;
	f) INCREASE (or REDUCE) SPEED TO (number) KNOTS [OR GREATER (OR LESS)];
	g) INCREASE (or REDUCE) SPEED BY (number) KNOTS;
	h) RESUME NORMAL SPEED;
	i) REDUCE TO MINIMUM SAFE APPROACH SPEED;
	j) REDUCE TO MINIMUM CLEAN SPEED;
	k) NO [ATC] SPEED RESTRICTIONS.

# Position Reporting

Circumstances	Phraseologies
... to omit position reports when under radar control	a) OMIT POSITION REPORTS [UNTIL (specify)];
	b) NEXT REPORT AT (significant point);
	c) REPORTS REQUIRED ONLY AT (significant point(s));

# Traffic Information and Avoiding Action

Circumstances	Phraseologies
	a) TRAFFIC (number) O'CLOCK (distance) (direction of flight) [any other pertinent information];
	b) UNKNOWN; UNIDENTIFIED
	c) APPEARS TO BE SLOW MOVING;
	d) APPEARS TO BE FAST MOVING;
	e) APPEARS TO BE CLOSING;
	f) IN THE OPPOSITE (or SAME) DIRECTION;
	g) OVERTAKING; PASSING YOUR (O' CLOCK)
	h) CROSSING FROM LEFT TO RIGHT (or RIGHT TO LEFT);
...(if known)	a) (aircraft type);
	b) (level);
	c) CLIMBING (or DESCENDING);
...to request avoiding action	a) * REQUEST VECTORS;
	b) DO YOU WANT VECTORS?;
...when passing unknown traffic	a) CLEAR OF TRAFFIC [appropriate instructions];

... for avoiding action	a) TURN LEFT (or RIGHT) IMMEDIATELY HEADING (three digits) TO AVOID [UNIDENTIFIED] TRAFFIC AT (bearing by clock-reference and distance).
	b) TURN LEFT (or RIGHT) (number of degrees) DEGREES IMMEDIATELY TO AVOID [UNIDENTIFIED] TRAFFIC AT (bearing by clock-reference and distance).

#### Communications And Loss Of Communications

Circumstances	Phraseologies
...if loss of communications suspected	a) [IF] RADIO CONTACT IS LOST (instructions);
	b) IF NO TRANSMISSIONS RECEIVED FOR (number) MINUTES (or SECONDS) (instructions);
	c) (instructions); LAST TRANSMISSION UNREADABLE
	d) IF YOU READ [manoeuvre instructions or SQUAWK (code or IDENT)]; CLICK TWICE ON THE PTT
	e) (manoeuvre or SQUAWK) OBSERVED. POSITION (position of aircraft) WILL CONTINUE RADAR CONTROL.

#### Termination of Radar Service

Circumstances	Phraseologies
	a) RADAR CONTROL TERMINATED [DUE (reason)];
	b) RADAR SERVICE TERMINATED (instructions);
	f) WILL SHORTLY LOSE IDENTIFICATION (appropriate instructions or information);
	d) IDENTIFICATION LOST [reason] (instructions).

#### Radar Equipment Degradation

Circumstances	Phraseologies
	a) SECONDARY RADAR OUT OF SERVICE (appropriate instructions or information);
	b) PRIMARY RADAR OUT OF SERVICE (appropriate instructions or information).

#### Radar in an Approach Control Service

##### Vectoring for Approach

Circumstances	Phraseologies
	a) VECTORING FOR (type of pilot-interpreted aid) APPROACH RUNWAY (number) ;
	b) VECTORING FOR VISUAL APPROACH RUNWAY (number) REPORT FIELD (or RUNWAY) IN SIGHT;
	c) VECTORING FOR (positioning in the circuit);
	d) VECTORING FOR SURVEILLANCE RADAR APPROACH RUNWAY (number);
	e) VECTORING FOR PRECISION APPROACH RUNWAY (number);
	f) (type) APPROACH NOT AVAILABLE DUE (reason) (alternative instructions).



### Vectoring for ILS and Other Pilot-Interpreted Aids

Circumstances	Phraseologies
	a) POSITION (number) MILES from (fix). TURN LEFT(or RIGHT) HEADING (three digits);
	b) YOU WILL INTERCEPT (radio aid or track) (distance) FROM (significant point or TOUCHDOWN);
...when a pilot wishes to be positioned a specific distance from touchdown.	c) * REQUEST (distance) TO TOUCHDOWN;
	d) CLEARED FOR (type of approach) APPROACH RUNWAY (number);
...instructions and information	e) REPORT ESTABLISHED ON [ILS] or (LOCALISER or GLIDEPATH);
	f) EXPECT VECTOR ACROSS (localiser course or radio aid) (reason);
	g) THIS TURN WILL TAKE YOU THROUGH (localiser course or radio aid) [reason];
	h) TAKING YOU THROUGH (localiser course or radio aid) [reason];
	i) MAINTAIN (altitude) UNTIL GLIDE PATH INTERCEPTION;
	j) REPORT ESTABLISHED ON GLIDE PATH;
	k) INTERCEPT (localiser course or radio aid) [REPORT ESTABLISHED].

### Manoeuvre during Independent and Dependant Parallel Approaches

Circumstances	Phraseologies
	a) CLEARED FOR (type of approach) APPROACH RUNWAY (number) LEFT (or RIGHT);
	b) YOU HAVE CROSSED THE LOCALISER. TURN LEFT (or RIGHT) IMMEDIATELY AND INTERCEPT THE LOCALISER;
	c) ILS RUNWAY (number) LEFT (or RIGHT) LOCALISER FREQUENCY IS (frequency);
...for avoidance action when an aircraft is observed penetrating the NTZ	d) TURN LEFT (or RIGHT) (number) DEGREES (or HEADING) (three digits) IMMEDIATELY TO AVOID TRAFFIC [DEVIATING FROM ADJACENT APPROACH] CLIMB TO (altitude).
...for avoidance action below 120m (400ft) above the runway threshold elevation where parallel approach obstacle assessment surfaces (PAOAS) criteria are being applied.	e) CLIMB TO (altitude) IMMEDIATELY TO AVOID TRAFFIC [DEVIATING FROM ADJACENT APPROACH] (further instructions).

### Elevation

Circumstances	Phraseologies
	a) DESCEND NOW [TO MAINTAIN A (number) DEGREE GLIDE PATH] or VACATE LEVEL WITHIN (time)
	b) (distance) FROM TOUCHDOWN APPROXIMATELY (miles) FROM TOUCHDOWN

**Position**

<b>Circumstances</b>	<b>Phraseologies</b>
	(distance) FROM TOUCHDOWN. GPS – REPORT DISTANCE FROM (SIGNIFICANT POINT) VOR – REPORT DME (navaid)

**Checks**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CHECK GEAR DOWN [AND LOCKED]; (OPTIONAL TRANSMISSION)
	b) OVER THRESHOLD.

**Completion of Approach**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) REPORT VISUAL;
	b) REPORT RUNWAY [LIGHTS] IN SIGHT;
	c) IN CASE OF A GO AROUND (instructions)

**Azimuth**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) DO NOT ACKNOWLEDGE FURTHER TRANSMISSIONS;
	b) REPLY NOT RECEIVED, WILL CONTINUE INSTRUCTIONS
	c) HEADING IS GOOD;
	d) ON TRACK;
	e) SLIGHTLY (or WELL, or GOING) LEFT (or RIGHT) OF TRACK;
	f) (number) DEGREES LEFT (or RIGHT) OF TRACK.

**Elevation**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) COMMENCE DESCENT NOW [AT (number) FEET PER MINUTE (or ESTABLISH A (number) DEGREE GLIDE PATH)];
	b) RATE OF DESCENT IS GOOD;
	c) [STILL] (number) (FEET) TOO HIGH (or TOO LOW);
	d) ADJUST RATE OF DESCENT;
	e) RESUME NORMAL RATE OF DESCENT;
	f) (distance) FROM TOUCHDOWN.

**Position**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) (distance) FROM TOUCHDOWN;
	b) OVER APPROACH LIGHTS;
	c) OVER THRESHOLD.

**Checks**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CHECK GEAR DOWN AND LOCKED;

**Completion of Approach**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) REPORT VISUAL WITH THE AIRFIELD;
	b) REPORT RUNWAY [LIGHTS] IN SIGHT;

**Missed Approach**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CONTINUE VISUALLY OR GO AROUND [missed approach instructions];
	b) GO AROUND I SAY AGAIN GO AROUND [missed approach instructions] (reasons);
	c) CONFIRM ARE YOU GOING AROUND?;
	d) IF GOING AROUND (appropriate instructions);
	e) *GOING AROUND.

**Secondary Surveillance Radar (SSR) Phraseologies****To Request the capability of the SSR Equipment.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CONFIRM TRANSPONDER EQUIPPED
	b) *TRANSPONDER MODE A/C/S (as per flight plan);
	c) *NEGATIVE TRANSPONDER EQUIPPED.

**To instruct setting of Transponder.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SQUAWK (code).

**To request the Pilot to reselect the assigned Mode and Code.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) RECYCLE SQUAWK [(mode)] (code);
	b) *RECYCLING (mode) (code).

**To request reselection of Aircraft Identification.**

<b>Circumstances</b>	<b>Phraseologies</b>
	RECYCLE MODE S FOR IDENTIFICATION.

**To request the Pilot to confirm the code selected on the Aircraft's Transponder.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CONFIRM SQUAWKING (code);
	b) *AFFIRM / NEGATIVE SQUAWKING (code).

**To request the operation of the IDENT feature.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SQUAWK [(code)] [AND] IDENT;

**To request temporary suspension of Transponder operation.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SQUAWK STANDBY.

**To Request Termination of Transponder Operation.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SQUAWK STANDBY.

**To Request Transmission of Pressure Altitude.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) SQUAWK MODE CHARLIE or SQUAWK ALTITUDE

**To Request Pressure Setting Check and Confirmation of Level.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CHECK ALTIMETER SETTING AND CONFIRM (level).

**To Request Termination of Pressure Altitude Transmission Because of Faulty Operation.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CANCEL MODE CHARLIE

**To Request Level Check.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) CONFIRM (level).

**General ADS Phraseologies.**

**ADS Degradation.**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) ADS (or AUTOMATIC DEPENDANT SURVEILLANCE) UNSERVICEABLE; OR; NOT EQUIPPED WITH (appropriate information as necessary).

**Alerting Phraseologies.**

**Low Altitude Warning**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) (aircraft call sign) LOW ALTITUDE WARNING, CHECK YOUR ALTITUDE IMMEDIATELY, QNH IS (number) [(units)]. [THE MINIMUM FLIGHT ALTITUDE IS (altitude)].

**Terrain Alert**

<b>Circumstances</b>	<b>Phraseologies</b>
	a) (aircraft call sign) TERRAIN ALERT (suggested pilot action, if possible).

29. **Readback of ATS Co-ordination Messages**

Controllers must ensure they obtain a readback of any operationally significant information contained in telephone and intercom co-ordination messages, including:

- a) Levels;
- b) Headings;
- c) Speed Restrictions;
- d) Airways or route instructions;
- e) Runway in use;
- f) SSR Codes;
- g) Pressure Settings;
- h) Frequencies; and
- i) Release and contact points.

30. **GNSS/RNAV Phraseology**

<b>Circumstances</b>	<b>Phraseologies</b>
Reporting Distance For RNAV	a) REPORT (number) MILES FROM (waypoint, fix, significant point, Navaid)
Reporting Distance For GNSS	a) REPORT (number) MILES FROM (waypoint, fix, significant point, Navaid)
Reporting Distance For DME	a) REPORT (number) DME FROM (DME)facility name
Issuing crossing instructions For DME equipped	a) CROSS (number) DME AT (Altitude / Flight Level)
Issuing crossing instructions FOR RNAV/GNSS equipped	a) CROSS (number) MILES FROM (waypoint, fix, significant point, NAVAID) AT (Altitude / Flight Level)
Reporting of RAIM status	a) REPORT RAIM STATUS
Scenario reporting of RAIM alerts	<ul style="list-style-type: none"> <li>a) RAIM OUTAGE</li> <li>b) RAIM FAILURE</li> <li>c) RAIM STATUS ANNUNCIATION</li> <li>d) RAIM FLAG</li> <li>e) RAIM NOT AVAILABLE</li> <li>f) RAIM HOLE</li> <li>g) RAIM WARNING</li> <li>h) RAIM ALERT</li> </ul>
Issuing clearance via arcs	<ul style="list-style-type: none"> <li>a) CLEARED TO (destination) via (distance) DME ARC</li> <li>b) CLEARED VIA (number) MILE ARC-RNAV</li> </ul>
Requesting progress reports from an aircraft during its approach	a) REPORT ESTABLISHED ON THE RNAV APPROACH COURSE
<b>APPROACH CLEARANCES</b> 1) RNAV (GNSS) 2) RNAV (GNSS LNAV) 3) RNAV (GNSS BARO-VNAV) 4) RNAV (GLS)	a) CLEARED TO THE (destination) RNAV RUNWAY (number) APPROACH
Clearances via fixes of a GNSS Approach	<ul style="list-style-type: none"> <li>a) CLEARED VIA INITIAL APPROACH FIX</li> <li>b) CLEARED VIA INTERMEDIATE FIX</li> <li>c) CLEARED TO THE FINAL APPROACH FIX</li> </ul>
Clearances for RNAV STARs / SIDs TO FLY DIRECT	<ul style="list-style-type: none"> <li>a) CLEARED DIRECT (waypoint/fix) MAINTAIN (altitude)</li> <li>b) EXPECT VECTORS TO FINAL APPROACH</li> </ul>

<b>Circumstances</b>	<b>Phraseologies</b>
<b>GNSS SERVICE STATUS</b>	<p>a) GNSS REPORTED UNRELIABLE (or GNSS MAY NOT BE AVAILABLE [DUE TO INTERFERENCE]);</p> <p>1) IN THE VICINITY OF (location) (radius) [BETWEEN (levels)];</p> <p>or</p> <p>2) IN THE AREA OF (description) (or IN (name) FIR) [BETWEEN (levels)];</p> <p>b) BASIC GNSS (or SBAS, or GBAS) UNAVAILABLE FOR (specify operation) [FROM (time) TO (time) (or UNTIL FURTHER NOTICE)];</p> <p>*c) BASIC GNSS UNAVAILABLE [DUE TO (reason, e.g. LOSS OF RAIM or RAIM ALERT)];</p> <p>*d) GBAS (or SBAS) UNAVAILABLE.</p> <p>e) CONFIRM NAVIGATION GNSS</p> <p>* Denotes pilot transmission.</p>
<b>AREA CONTROL SERVICE SEPARATION INSTRUCTIONS</b>	<p>a) CROSS (significant point) AT (time) [OR LATER] or (OR BEFORE);</p> <p>b) ADVISE IF ABLE TO CROSS (significant point) AT (time or level);</p> <p>c) MAINTAIN MACH (number) [OR GREATER] or [OR LESS] UNTIL (significant point);</p> <p>d) DO NOT EXCEED MACH (number).;</p> <p>e) REPORT YOUR TRACK TO or (FROM) (significant point);</p> <p>f) TRACK (three digits) DEGREES [MAGNETIC] or [TRUE] TO (or) FROM (significant point);</p> <p>g) CONFIRM ESTABLISHED ON THE CENTRE LINE OF TRACK (three digits) DEGREES [MAGNETIC or [TRUE] TO or [ FROM] (significant point) or CONFIRM ESTABLISHED ON THE CENTRELINE OF TRACK BETWEEN (significant point) AND (significant point));</p> <p>*h) ESTABLISHED ON CENTRE LINE TRACK (three digits) DEGREES [MAGNETIC] or [TRUE]] TO or (FROM) (significant point) or [ESTABLISHED ON CENTRELINE OF TRACK BETWEEN] (significant point) AND (significant point));</p> <p>i) MAINTAIN TRACK (three digits) DEGREES [MAGNETIC] or [TRUE] TO or [FROM] (significant point) or [ MAINTAIN TRACK BETWEEN] (significant point) AND (significant point)) REPORT ESTABLISHED ON THE CENTRE LINE;</p> <p>*j) ESTABLISHED ON THE CENTRE LINE.</p> <p>* Denotes pilot transmission</p>

<b>Circumstances</b>	<b>Phraseologies</b>
<b>EXAMPLES OF INCORRECT R/T PHRASEOLOGIES ON THE VARIOUS SECTORS</b>	* Indicates the pilot's incorrect reply to an ATC instruction
<b>AERODROME</b>	<p>(aircraft) RUNWAY (number) CLEARED FOR TAKE OFF</p> <p>SURFACE WIND (speed and direction)</p> <p>* COPIED (aircraft)?</p> <p>.....</p> <p>(aircraft) BEHIND THE 747 ON FINAL LINE UP AND WAIT</p> <p>BEHIND RUNWAY 03LEFT</p> <p>*LINING UP AND WAITING BEHIND (aircraft)?</p>

<b>Circumstances</b>	<b>Phraseologies</b>
APPROACH	(aircraft) CLIMB TO FLIGHT LEVEL 120 *CLIMB FLIGHT LEVEL 120 (aircraft)? ..... ..... * RADAR (aircraft) confirm no speed traps? ..... .....
AREA	(aircraft) CONFIRM YOUR RATE OF DESCENT 2000 FEET PER MINUTE? * THAT'S A CHARLIE (aircraft)?



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