1. Introduction

1.1. What is phraseology?

Phraseology is the way to communicate between the pilot and air traffic controller (ATC unit) for the purpose of ensuring uniformity in RTF (radiotelephony) communication.

If standard phrases are adhered to when composing a message, any possible ambiguity will be reduced to a minimum.

Phraseology shows the text of a complete message. They are not intended to be exhaustive, and when circumstances differ, pilots and controllers will be expected to use plain language, which should be as clear and concise as possible.

As a pilot, you must repeat the air traffic controller clearances you received. That’s called the read back procedure.

It’s a mandatory procedure except when a pilot is in state of emergency and he has no time to read back or when the pilot’s radio is broken.

Source of this phraseology is extracted from ICAO documentation 4444 16th edition dated 10/Nov/2016

1.2. Basic Rules

The phraseology shall be used in conjunction with call signs.

- An ATC shall start all messages with the call sign of the addressed aircraft.
- A pilot usually ends read-back messages with his call sign.
- A pilot usually starts a message with the ATC call sign followed by his own call sign when he calls the ATC unit for the first time.

The Phraseology for the movement of vehicles, other than tow-tractors, on the manoeuvring area shall be the same as those used for the movement of aircraft, with the exception of taxi instructions, in which case the word “PROCEED” shall be substituted for the word “TAXI” when communicating with vehicles.

Some abbreviations may be spoken using their constituent letters rather than the spelling alphabet, for example, ILS, QNH, RVR.

The following words may be omitted from transmissions provided that no confusion or ambiguity will result:
- “Surface” in relation to surface wind direction and speed
- “Degrees” in relation to radar headings
- “Visibility”, “Clouds” and “Height” in meteorological reports
- “Hecto Pascal” when giving pressure settings

The use of courtesies should be avoided.

The word “IMMEDIATELY” should only be used when immediate action is required for safety reasons.

You shall avoid words like “this is”, “over”, and other similar terms from radio transmissions provided there is no likelihood of misunderstanding.

### 1.3. Conditional instructions

Conditional phrases, such as “behind landing aircraft” or “after departing aircraft”, shall not be used for movements affecting the active runway(s), except when the aircraft or vehicles concerned are seen by the appropriate controller and pilot.

The aircraft or vehicle causing the condition in the clearance issued **shall be the first aircraft/vehicle to pass in front of the other aircraft concerned**. In all cases a conditional clearance shall be given in the following order and consist of:

- identification
- the condition
- the clearance and
- brief reiteration of the condition

For example: SAS 941, BEHIND DC9 ON SHORT FINAL, LINE UP BEHIND.

### 1.4. Transmitting technique

The following transmitting techniques will assist in ensuring that transmitted speech is clear and satisfactorily received:

1. **before transmitting, listen out on the frequency** to be used to ensure that there will be no interference with a transmission from another station
2. use a normal conversational tone, and speak clearly and distinctly
3. maintain the speaking volume at a constant level
4. **a slight pause before and after numbers** will assist in making them easier to understand
5. **avoid using hesitation sounds** such as “er”
6. be familiar with the microphone operating techniques, particularly in relation to the maintenance of a constant distance from the microphone
7. **depress the transmit switch fully before speaking and do not release it until the message is completed**

We give you a specific advice for using the IVAO voice server. After switching to a new channel using the voice server, be aware that you never hear the current speaking person. Always wait 3/5 seconds minimum, before transmitting your message.
1.5. Read-back

The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice (and by text for IVAO).

Read-back requirements have been introduced in the interest of flight safety.

The following shall always be read back:

- ATC route clearances
- clearances and instructions to enter, land on, take off from, hold short of, cross and backtrack on any runway
- runway-in-use, altimeter settings, SSR codes, level instructions, heading and speed instructions
- transition level

ATC advice, suggestions and requests should not be read back.

Unless requested by an ATC unit, voice read back of a data link communication message is not required.

Strict adherence to read-back procedures ensures not only that the clearance has been received correctly, but also that the clearance was transmitted as intended.

The stringency of the read-back requirement is directly related to the possible seriousness of a misunderstanding in the transmission and receipt of ATC clearances and instructions.

**ATC:** DEHBA, taxi holding point runway 01
**Pilot:** Taxi holding point runway 01, DEHBA
**ATC:** DEHBA, squawk 4525
**Pilot:** 4525, DEHBA
1.6. How to read this document

The sentences written in this document follow some rules:

- The text between brackets "[" and "]" are optional. This text can be added or removed in function of the situation: example: [PASSING/LEAVING/REACHING (level)]

- The lower case text between brackets "(" and ")" shall be replaced by any possible value of the designation written between brackets: example: (level) → FL210

- The upper case text between brackets "(" and ")" preceded by the lowercase text "or" can replace the preceding upper case text: example: CLIMB (or DESCENT) → DESCENT can replace CLIMB in the phraseology in function of the situation

- When 2 or more texts are separated by the slash "/" character, you shall select one of the possibilities given: example PASSING/LEAVING/REACHING → you shall select PASSING, LEAVING or REACHING in the sentence

Example:
Sentence:
EXPEDITE CLIMB (or DESCENT) [UNTIL PASSING (level)]
Possible solutions:
- EXPEDITE CLIMB
- EXPEDITE DESCENT
- EXPEDITE CLIMB UNTIL PASSING FL200
- EXPEDITE DESCENT UNTIL PASSING FL110

Example:
Sentence:
AT (or OVER) (time or place) [or WHEN] [PASSING/LEAVING/REACHING (level)] CONTACT (unit call sign) (frequency)
Possible solutions:
- OVER VALAX CONTACT Nantes Approach 123.750
- AT 1200 UTC CONTACT Paris Control 128.1
- WHEN REACHING FL110 CONTACT Nantes Approach 123.750
- WHEN PASSING FL140 CONTACT Nantes Approach 123.750
2. General phraseology

2.1. Description of level

The air traffic controller instructions or clearances can contain a certain level to comply.

This level is transmitted by using the following possibilities:

- FLIGHT LEVEL (number)
- (number) METRES
- (number) FEET

This level description will be coded in the whole document as “(level)”, i.e. you can replace this code with the 3 possibilities described above.

Examples:
FLIGHT LEVEL 90, FLIGHT LEVEL 340, 300 METRES, 8500 FEET.

2.2. Speed Control

ATC instruction to manage aircraft speed:

- REPORT SPEED
- MAINTAIN (number) KILOMETRES PER HOUR (or KNOTS) [OR GREATER (or OR LESS)] [UNTIL (significant point)]
- DO NOT EXCEED (number) KILOMETRES PER HOUR (or KNOTS);
- MAINTAIN PRESENT SPEED
- INCREASE (or REDUCE) SPEED TO (number) KILOMETRES PER HOUR (or KNOTS) [OR GREATER (or OR LESS)]
- INCREASE (or REDUCE) SPEED BY (number) KILOMETRES PER HOUR (or KNOTS);
- RESUME NORMAL SPEED
- REDUCE TO MINIMUM APPROACH SPEED
- REDUCE TO MINIMUM CLEAN SPEED
- RESUME PUBLISHED SPEED.

ATC instruction to cancel all speed restrictions:

- NO [ATC] SPEED RESTRICTIONS

Pilot answer to ATC giving its current speed:

- SPEED (number) KILOMETRES PER HOUR (or KNOTS)
### 2.3. Level changes, reports and rate

#### Climb ATC instruction:
- CLIMB TO (level)
- CLIMB TO AND MAINTAIN BLOCK (level) TO (level)
- CLIMB TO REACH (level) AT (time or significant point)
- CLIMB TO (level), REPORT LEAVING/REACHING/PASSING (level)
- CLIMB AT (number) FEET PER MINUTE [OR GREATER/LESS]
- CLIMB AT (number) METRES PER SECOND [OR GREATER/LESS]
- REPORT STARTING ACCELERATION (or DECELERATION). ➔ for supersonic jets

#### Descent ATC instruction:
- DESCEND TO (level)
- DESCEND TO AND MAINTAIN BLOCK (level) TO (level)
- DESCEND TO REACH (level) AT (or BY) (time or significant point)
- DESCEND REPORT LEAVING (or REACHING, or PASSING) (level)
- DESCEND AT (number) FEET PER MINUTE [OR GREATER/LESS]
- DESCEND AT (number) METRES PER SECOND [OR GREATER/LESS]
- REPORT STARTING ACCELERATION/DECELERATION ➔ for supersonic jets

#### Climb and descent ATC instruction to modify the level change process of an aircraft:
- MAINTAIN AT LEAST (number) METRES (or FEET) ABOVE (or BELOW) (aircraft call sign)
- STOP CLIMB (or DESCEND) AT (level)
- CONTINUE CLIMB (or DESCENT) TO (level)
- EXPEDITE CLIMB (or DESCENT) [UNTIL PASSING (level)]
- WHEN READY CLIMB (or DESCEND) TO (level)
- EXPECT CLIMB (or DESCENT) AT (time or significant point)

#### ATC instruction to add restrictions:
- CROSS (significant point) AT (or ABOVE, or BELOW) (level)
- CROSS (significant point) AT (time) OR LATER (or BEFORE) AT (level)
- CRUISE CLIMB BETWEEN (levels) (or ABOVE (level))
- CROSS (distance) MILES, (GNSS or DME) [(direction)] OF (name of DME station) OR (distance) [(direction)] OF (significant point) AT (or ABOVE or BELOW) (level)

#### ATC instruction to check the pilot altimeter setting:
- CHECK ALTIMETER SETTING AND CONFIRM (level)

#### Pilot request for a flight level change:
- REQUEST LEVEL (or FLIGHT LEVEL or ALTITUDE)
- REQUEST DESCENT AT (time)
Specific words for ATC instruction to require action at a specific time or place:

- IMMEDIATELY
- AFTER PASSING (significant point)
- AT (time or significant point)

ATC instruction to require action when convenient:

- WHEN READY (instruction)

ATC instruction to require an aircraft to climb or descend maintaining own separation and VMC:

- MAINTAIN OWN SEPARATION AND VMC [FROM (level)] [TO (level)]
- MAINTAIN OWN SEPARATION AND VMC ABOVE (or BELOW, or TO) (level)

ATC instruction when there is doubt whether an aircraft can comply with a clearance or instruction:

- IF UNABLE (alternative instructions) AND ADVISE

Pilot answer when he is unable to comply with a clearance or instruction:

- UNABLE

ATC instruction to ask a level confirmation to a pilot:

- CONFIRM (level)

2.4. TCAS alert management

Pilot and ATC exchange after the pilot starts to deviate from any ATC clearance or instruction to comply with an ACAS resolution advisory (RA):

- Pilot: TCAS RA
- ATC: ROGER

Pilot and ATC exchange after the response to an ACAS RA is completed and a return to the ATC clearance or instruction is initiated (Pilot and controller interchange):

- Pilot: CLEAR OF CONFLICT, RETURNING TO (assigned clearance)
- ATC: ROGER (or alternative instructions)

Pilot and ATC exchange after the response to an ACAS RA is completed and the assigned ATC clearance or instruction has been resumed (Pilot and controller interchange):

- Pilot: CLEAR OF CONFLICT (assigned clearance) RESUMED
- ATC: ROGER (or alternative instructions)

Pilot and ATC exchange after an ATC clearance or instruction contradictory to the ACAS RA is received, the flight crew will follow the RA and inform ATC directly (Pilot and controller interchange):

- Pilot: UNABLE, TCAS RA
- ATC: ROGER
2.5. Instruct a manoeuvre

ATC instruction to instruct a pilot to execute specific manoeuvres outside procedures for delaying aircraft or for separating aircraft in a potential conflict situation:

- MAKE A THREE SIXTY TURN LEFT (or RIGHT) [reason]
- ORBIT LEFT (or RIGHT) [reason]
- MAKE ALL Turns RATE ONE (or RATE HALF, or (number) DEGREES PER SECOND) START AND STOP ALL TURNS ON THE COMMAND “NOW”
- TURN LEFT (or RIGHT) NOW
- STOP TURN NOW

When it is necessary to specify a reason for vectoring or for the above manoeuvres, the following phraseologies should be used:

- DUE TRAFFIC
- FOR SPACING
- FOR DELAY
- FOR DOWNWIND (or BASE, or FINAL)

2.6. Transfer of control and frequency change

ATC instruction: use “CONTACT” on a frequency when it is intended that the Pilot will initiate communications:

- CONTACT (unit call sign) (frequency) [NOW]
- AT (or OVER) (time or place) [or WHEN] [PASSING/LEAVING/REACHING (level)] CONTACT (unit call sign) (frequency)
- IF NO CONTACT (instructions)
- WHEN READY CONTACT (unit call sign) (frequency)
- REMAIN THIS FREQUENCY

ATC instruction: use “STAND BY” on a frequency when it is intended that the ATS unit will initiate communications:

- STAND BY FOR (unit call sign) (frequency)

ATC instruction: use “MONITOR” on a frequency when information is being broadcast thereon (example Unicom):

- MONITOR (unit call sign) (frequency)

Pilot and ATC exchange for a frequency change request from a pilot:

- Pilot: REQUEST CHANGE TO (frequency)
- ATC: FREQUENCY CHANGE APPROVED
2.7. Entering airspace clearance

Entering and leaving airspace ATC instruction to a pilot from uncontrolled zone:

- ENTER CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route)] AT (level) [AT (time)]
- LEAVE CONTROLLED AIRSPACE (or CONTROL ZONE) [VIA (significant point or route)] AT (level) (or CLIMBING, or DESCENDING)

ATC instruction to instruct a pilot to join a specific point with restrictions given by ATC:

- JOIN (specify) AT (significant point) AT (level) [AT (time)]

2.8. Termination of radar service

ATC instruction to inform a pilot that service is terminated:

- RADAR SERVICE (or IDENTIFICATION) TERMINATED [DUE (reason)] (instructions)
- WILL SHORTLY LOSE IDENTIFICATION (appropriate instructions or information)
- IDENTIFICATION LOST [reasons] (instructions)

2.9. Change of Call Sign

When an Air traffic controller has in his frequency two close aircraft call signs that might create confusion, he may instruct aircraft to change its call sign:

Example: AFR145 and AFR945

ATC instruction to instruct an aircraft to change its type of call sign:

- CHANGE YOUR CALL SIGN TO (new call sign) [UNTIL FURTHER ADVISED]

ATC instruction to advise an aircraft to revert to the call sign indicated in the flight plan:

- REVERT TO FLIGHT PLAN CALL SIGN (call sign) [AT (significant point)]

2.10. Traffic information

ATC instruction to send traffic information to pilots:

- TRAFFIC (information)
- TRAFFIC (number) O’CLOCK (distance) (direction of flight) [any other pertinent information]

Additional information to complete the previous ATC traffic information instruction:

- UNKNOWN
- SLOW MOVING
- FAST MOVING
- CLOSING
- OPPOSITE (or SAME) DIRECTION;
- OVERTAKING;
- CROSSING LEFT TO RIGHT (or RIGHT TO LEFT);
- (aircraft type)
- (level);
- CLIMBING (or DESCENDING);

ATC instruction to notify aircraft that there is no traffic in the vicinity:
- NO REPORTED TRAFFIC

ATC instruction to propose guidance for avoiding action:
- DO YOU WANT VECTORS?

Pilot Instruction or answer to ATC in order to get vectors for avoiding action:
- REQUEST VECTORS;

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

ATC instruction to notify pilots that no more traffic threats exist:
- CLEAR OF TRAFFIC [appropriate instructions]

Pilot acknowledgement of traffic information:
- LOOKING OUT
- TRAFFIC IN SIGHT
- NEGATIVE CONTACT [reasons]
- [ADDITIONAL] TRAFFIC (direction) BOUND (type of aircraft) (level) ESTIMATED (or OVER) (significant point) AT (time)
- TRAFFIC IS (classification) UNMANNED FREE BALLOON(S) WAS [or ESTIMATED] OVER (place) AT (time) REPORTED (level(s)) [or LEVEL UNKNOWN] MOVING (direction) (other pertinent information, if any)
2.11. Meteorological conditions

Wind information given by ATC:
- [SURFACE] WIND (number) DEGREES (speed) (units)
- WIND AT (level) (number) DEGREES (number) KILOMETRES PER HOUR (or KNOTS)

Note: Wind is always expressed by giving the mean direction and speed and any significant variations thereof.

RVR information given by ATC:
- RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (distance) (units)
- RUNWAY VISUAL RANGE (or RVR) RUNWAY (number) NOT AVAILABLE (or NOT REPORTED)

Multiple RVR observations given by ATC:
- 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 end 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.

RVR information given by ATC in the event that RVR information on any one position is not available, this information will be included in the appropriate sequence:
- RUNWAY VISUAL RANGE (or RVR) [RUNWAY (number)] (first position) (distance) (units), (second position) NOT AVAILABLE, (third position) (distance) (units)

Other weather information given by ATC:
- PRESENT WEATHER (details)
- CLOUD (amount, [(type)] and height of base) (units)
- SKY CLEAR
- CAVOK
- TEMPERATURE [MINUS] (number) (and/or DEWPOINT [MINUS] (number))
- QNH (number) [units]
- QFE (number) [(units)]
- (aircraft type) REPORTED (description) ICING (or TURBULENCE) [IN CLOUD] (area) (time)
- REPORT FLIGHT CONDITIONS

Note. CAVOK pronounced CAV-O-KAY.
2.12. Position Report

ATC instruction:
- REPORT PASSING (significant point)
- NEXT REPORT AT (significant point)

ATC instruction to omit position reports until a specified position:
- OMIT POSITION REPORTS [UNTIL (specify)]

ATC instruction to resume the position report procedure:
- RESUME POSITION REPORTING

Instruction to request a report at a specified place or distance:
- REPORT (distance) MILES (GNSS or DME) FROM (name of DME station) (or significant point)

Instruction to report at a specified place or distance:
- (distance) MILES (GNSS or DME) FROM (name of DME station) (or significant point)
- REPORT PASSING (three digits) RADIAL (name of VOR) VOR

Instruction to request a report of present position:
- REPORT (GNSS or DME) DISTANCE FROM (significant point) or (name of DME station)

Typical position report from a pilot:
- (distance) MILES (GNSS or DME) FROM (name of DME station) (or significant point).
- (coordinates North/South) and (coordinates East/West)

2.13. Aerodrome information

Information of aerodrome condition of use given by ATC:
- [(location)] RUNWAY SURFACE CONDITION RUNWAY (number) (condition)
- [(location)] RUNWAY SURFACE CONDITION RUNWAY (number) NOT CURRENT
- LANDING SURFACE (condition)
- CAUTION CONSTRUCTION WORK (location)
- CAUTION (specify reasons) RIGHT (or LEFT), (or BOTH SIDES) OF RUNWAY [number]
- CAUTION WORK IN PROGRESS (or OBSTRUCTION) (position and any necessary advice)
- RUNWAY REPORT AT (observation time) RUNWAY (number) (type of precipitant) UP TO (depth of deposit) MILLIMETRES. ESTIMATED SURFACE FRICTION GOOD (or MEDIUM TO GOOD, or MEDIUM, or MEDIUM TO POOR, or POOR)
- BRAKING ACTION REPORTED BY (aircraft type) AT (time) GOOD (or MEDIUM to GOOD, or MEDIUM, or MEDIUM to POOR, or POOR)
- RUNWAY (or TAXIWAY) (number) WET (or STANDING WATER, or SNOW REMOVED (length and width as applicable), or TREATED, or COVERED WITH PATCHES OF DRY SNOW (or WET SNOW, or COMPACTED SNOW, or SLUSH, or FROZEN SLUSH, or ICE, or WET ICE, or ICE UNDERNEATH, or ICE AND SNOW, or SNOWDRIFTS, or FROZEN RUTS AND RIDGES)]

ATC own clearance given to the pilot:

- (aircraft call sign) CLEARED TO (or FOR) (clearance)

Example: N52515, runway 10, cleared to land.
Example: N11444, runway 33R, cleared for take-off.

Other ATC clearance reported by current ATC:

- (name of unit) CLEARS (aircraft call sign) TO (clearance)

Modified clearance given by ATC:

- RECLEARED (amended clearance details) [REST OF CLEARANCE UNCHANGED]
- RECLEARED (amended route portion) TO (significant point of original route) [REST OF CLEARANCE UNCHANGED]

Clearance can be departure, arrival, crossing zone, flight plan change …

Indication of route and clearance limit for ATC clearance:

- FROM (location) TO (location)
- TO (location),
- TO (location), DIRECT
- TO (location), VIA (route and/or significant points)
- TO (location), FLIGHT PLANNED ROUTE
- TO (location), VIA (distance) DME ARC (direction) OF (name of DME station)

Specific case when clearance cannot be issued or followed by ATC or Pilot:

- (route) NOT AVAILABLE DUE (reason) ALTERNATIVE[S] IS/ARE (routes) ADVISE.
- CANNOT BE ISSUED
- UNABLE, TRAFFIC (direction) BOUND (type of aircraft) (level)
- ESTIMATED (or OVER) (significant point) AT (time) CALL SIGN
- (call sign) ADVISE INTENTIONS.
## 2.15. Transponder mode and code

ATC instruction to a pilot in order to change or check the transponder mode and/or code:

- **RESET SQUAWK [(mode)] (code)**
- **CONFIRM SQUAWK (code)**

Pilot read back:

- **RESETTING [(mode)] (code)**
- **SQUAWKING (code)**

ATC instruction for squawking ident procedure:

- **SQUAWK [(code)] [AND] IDENT**

ATC request for suspension of transponder operation (Stand-by):

- **SQUAWK STANDBY**

ATC request the pilot to set emergency code (MAYDAY):

- **SQUAWK MAYDAY [CODE SEVEN-SEVEN-ZERO-ZERO]**

ATC request the pilot for the transmission of pressure altitude:

- **SQUAWK CHARLIE**
- **TRANSMIT ADS-B ALTITUDE**
3. In the vicinity of the aerodrome

3.1. Starting procedures

Pilot requests permission to start:

- [aircraft location] REQUEST START UP
- [aircraft location] REQUEST START UP, INFORMATION (ATIS identification)

Reply given by ATC:

- START UP APPROVED
- START UP AT (time)
- EXPECT START UP AT (time)
- START UP AT OWN DISCRETION
- EXPECT DEPARTURE (time) START UP AT OWN DISCRETION

Caution: Starting procedures in some countries do not signify that the pilot is obliged to start the engines. When receiving this instruction, it is the permission to start the complex aircraft starting procedure that ends with the engine running. Usually, the pilot in command shall initiate the start of main engines in coordination with ground personnel around the aircraft.

3.2. Pushback Procedures

Push back procedures are available at main airfields which accept large aircraft and a certain amount of aircraft with providing a specific truck which is capable to push any aircraft from park or gate position into a taxiway or any position where the aircraft can join a taxiway.

Note: When local procedures so prescribe, authorization for pushback should be obtained from the control tower. Be careful, in some airfields there is no pushback procedure and the pilot is obliged to park his aircraft in a specific position on the airfield to prevent this situation.

Pilot requests a pushback from its position:

- [aircraft location] REQUEST PUSHBACK

ATC reply:

- PUSHBACK APPROVED
- STAND BY
- PUSHBACK AT OWN DISCRETION
- EXPECT (number) MINUTES DELAY DUE (reason).
3.3. Towing procedure

Pilot requests towing procedure:

- REQUEST TOWING FROM (Aircraft location) TO (location)

ATC reply:

- TOW APPROVED VIA (specific routing to be followed)
- HOLD POSITION
- STAND BY

3.4. Requesting departure information

Pilot requests current UTC time:

- REQUEST TIME CHECK

ATC reply:

- TIME (time)

Pilot requests departure information when no ATIS broadcast is available or information is considered as outdated:

- REQUEST DEPARTURE INFORMATION

ATC reply:

- 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)]
3.5. Taxi procedures

Pilot requests taxi to the assigned runway given in the clearance:
- [aircraft type] [wake turbulence category if “heavy”] [aircraft location] REQUEST TAXI [intentions]

Pilot requests taxi to the active runway and he has not received any clearance:
- [aircraft type] [wake turbulence category if “heavy”] [aircraft location] (flight rules) TO (aerodrome of destination) REQUEST TAXI [intentions]

ATC reply or ATC instruction without any request to a departing aircraft:
- TAXI TO HOLDING POINT [number] [RUNWAY (number)] [HOLD SHORT OF RUNWAY (number) (or CROSS RUNWAY (number))] [TIME (time)]
- TAXI TO HOLDING POINT [number] [RUNWAY (number)] VIA (specific route to be followed) [HOLD SHORT OF RUNWAY (number) (or CROSS RUNWAY (number))] [TIME (time)]

Pilot requests detailed taxi instructions:
- [aircraft type] [wake turbulence category if “heavy”] REQUEST DETAILED TAXI INSTRUCTIONS

ATC instruction to a departing aircraft where detailed taxi instructions are required:
- TAXI TO HOLDING POINT [number] [RUNWAY (number)] VIA (specific route to be followed) [TIME (time)] [HOLD SHORT OF RUNWAY (number) (or CROSS RUNWAY (number))]

ATC instruction to help a pilot join his destination on ground:
- TAKE (or TURN) FIRST (or SECOND) LEFT (or RIGHT)
- TAXI VIA (identification of taxiway)
- TAXI STRAIGHT AHEAD

ATC instruction to instruct a pilot to taxi to the final destination on ground:
- TAXI TO TERMINAL [STAND (number)]
- TAXI TO GENERAL AVIATION AREA
- TAXI TO (other location)

ATC instruction to instruct a pilot to taxi via a runway:
- TAXI VIA RUNWAY (number)

Request movement from helicopter:
- REQUEST AIR-TAXIING FROM (or VIA) TO (location or routing as appropriate)

ATC reply or ATC instruction:
- AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.)]
- 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)

Pilot requests backtracking operation:
- REQUEST BACKTRACK

ATC reply or ATC instruction:
- BACKTRACK APPROVED
- BACKTRACK RUNWAY (number)

ATC instruction to handle taxiing aircraft with traffic around:
- TAXI WITH CAUTION
- GIVE WAY TO (description and position of other aircraft)
- GIVING WAY TO (traffic)
- TRAFFIC (or type of aircraft) IN SIGHT
- TAXI INTO HOLDING BAY
- FOLLOW (description of other aircraft or vehicle)

Other ATC instruction on ground:
- VACATE RUNWAY
- EXPEDITE TAXI [(reason)]
- [CAUTION] TAXI SLOWER [reason]

Pilot reply to previous instructions:
- RUNWAY VACATED
- EXPEDITING
- SLOWING DOWN.

3.6. Holding on Ground

ATC instruction:
- HOLD (direction) OF (position, runway number, etc.)
- HOLD POSITION
- HOLD (distance) FROM (position)
- HOLD SHORT OF (position)

Pilot replies to previous instructions:
- HOLDING
- HOLDING SHORT

The procedure words “ROGER” and “WILCO” are insufficient acknowledgement of the instructions HOLD, HOLD POSITION and HOLD SHORT OF (position). In each case the acknowledgement shall be by the phraseology HOLDING or HOLDING SHORT, as appropriate.
3.7. Crossing runway

Pilot requests a runway cross:

- REQUEST CROSS RUNWAY (number)

Note. If the control tower is unable to see the crossing aircraft (e.g. night, low visibility), the instruction should always be accompanied by a request to report when the aircraft has vacated the runway.

ATC reply or ATC instruction:

- CROSS RUNWAY (number) [REPORT VACATED]
- EXPEDITE CROSSING RUNWAY (number) TRAFFIC (aircraft type) (distance) KILOMETRES (or MILES) FINAL
- TAXI TO HOLDING POINT [number] [RUNWAY (number)] VIA (specific route to be followed), [HOLD SHORT OF RUNWAY (number)] or [CROSS RUNWAY (number)]

Note. The pilot will, when requested, report “RUNWAY VACATED” when the entire aircraft is beyond the relevant runway-holding position.

Pilot reports after runway vacation:

- RUNWAY VACATED.

3.8. Preparation for take-off

- UNABLE TO ISSUE (designator) DEPARTURE (reasons)

ATC checks pilot to be ready for departure:

- REPORT WHEN READY [FOR DEPARTURE]
- ARE YOU READY [FOR DEPARTURE]?
- ARE YOU READY FOR IMMEDIATE DEPARTURE?

Pilot replies to ATC instruction:

- READY

ATC instruction to enter runway and await take-off clearance:

- LINE UP [AND WAIT]
- LINE UP RUNWAY (number)
- LINE UP. BE READY FOR IMMEDIATE DEPARTURE

ATC instruction for conditional clearances:

- (condition) LINE UP RUNWAY (number) (brief reiteration of the condition)

Acknowledgement of a conditional clearance by a pilot:

- (condition) LINING UP RUNWAY (number) (brief reiteration of the condition)
ATC confirmation or otherwise of the read-back of conditional clearance:

- [THAT IS] CORRECT
- (NEGATIVE) [I SAY AGAIN] Instruction (as appropriate)

Pilot requests departure information for take-off (VFR operation…):

- REQUEST DEPARTURE INSTRUCTIONS

ATC reply to departure information request:

- AFTER DEPARTURE TURN RIGHT (or LEFT, or CLIMB) (instructions as appropriate)

### 3.9. Take-off clearance

ATC clearance for take-off operation:

- RUNWAY (number) CLEARED FOR TAKE-OFF [REPORT AIRBORNE]

ATC instruction when reduced runway separation is used or traffic information with close traffic around:

- (traffic information) RUNWAY (number) CLEARED FOR TAKE-OFF

ATC instruction when take-off clearance has not been complied with:

- TAKE OFF IMMEDIATELY OR VACATE RUNWAY
- TAKE OFF IMMEDIATELY OR HOLD SHORT OF RUNWAY

ATC instruction to cancel a take-off clearance before an aircraft has commenced take-off roll:

- HOLD POSITION, CANCEL TAKE-OFF I SAY AGAIN CANCEL TAKE-OFF (reasons)

Pilot replies to ATC:

- HOLDING

ATC Instruction to stop a take-off after an aircraft has commenced take-off roll:

- STOP IMMEDIATELY [(repeat aircraft call sign) STOP IMMEDIATELY]

Pilot replies to ATC:

- STOPPING

ATC instruction for helicopter operations:

- CLEARED FOR TAKE-OFF [FROM (location)] (present position, taxiway, final approach and take-off area, runway and number)
3.10. After take-off

Pilot requests turn after departure (VFR):
- REQUEST RIGHT (or LEFT) TURN

ATC replies:
- RIGHT (or LEFT) TURN APPROVED
- WILL ADVISE LATER FOR RIGHT (or LEFT) TURN

ATC Instruction to request airborne time:
- REPORT AIRBORNE

Pilot replies:
- AIRBORNE (time)

Pay attention that “Airborne” phraseology is used according to local regulations. For some airports, this phraseology is mandatory, but for some other reserved for military aircraft only, and forbidden in some countries.

ATC instruction with a level constraint:
- AFTER PASSING (level), (instructions)

ATC Instruction heading to be followed:
- CONTINUE RUNWAY HEADING (instructions)

ATC Instruction when a specific track is to be followed:
- TRACK EXTENDED CENTRE LINE (instructions)
- CLIMB STRAIGHT AHEAD (instructions)

3.11. Entering in aerodrome traffic circuit (VFR)

Pilot requests clearance to enter the zone requesting landing:
- [aircraft type] (position) (level) INFORMATION (ATIS identification) FOR LANDING
- [aircraft type] (position) (level) FOR LANDING

ATC replies:
- JOIN [(direction of circuit)] (position in circuit) (runway number) [SURFACE] WIND (direction and speed) (units)
- JOIN (position in circuit) [RUNWAY (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)]
ATC replies to instruct aircraft to perform straight-in-approach:

- MAKE STRAIGHT-IN APPROACH, RUNWAY (number) [SURFACE] WIND (direction and speed) (units) [TEMPERATURE [MINUS] (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)]

ATC information instruction when ATIS is not available or not read by pilot:

- [TEMPERATURE [MINUS] (number)] QNH (or QFE) (number) [(units)] [TRAFFIC (detail)]

Pilot informs ATC about its position inside the aerodrome circuit:

- (position in circuit, e.g. DOWNWIND/FINAL), RUNWAY (number)

ATC instructs a pilot his order inside the aerodrome circuit depending on the other traffic:

- NUMBER (number) FOLLOW (aircraft type and position) [additional instructions if required].

### 3.12. Final approach instruction (VFR)

ATC instructs a pilot to perform the aerodrome circuit to FINAL:

- MAKE SHORT APPROACH RUNWAY (number)
- MAKE LONG APPROACH RUNWAY (number)
- REPORT FINAL (or LONG FINAL) RUNWAY (number)

Other possibilities of instructions for ATC to manage pilots in function of traffic:

- REPORT BASE RUNWAY (number)
- CONTINUE APPROACH [PREPARE FOR POSSIBLE GO AROUND].
- EXTEND DOWNWIND RUNWAY (number)

Pilot reports final to ATC:

- FINAL RUNWAY (number)

The report “FINAL” is required less than 7 km (4 NM) from touchdown. The report “LONG FINAL” is made when aircraft turn on to final approach at a distance greater than 7 km (4 NM) from touchdown or when an aircraft on a straight-in approach is 15 km (8 NM) from touchdown.
3.13. Landing clearance

ATC issuing landing clearance:

- RUNWAY (number) CLEARED TO LAND

Instruction when reduced runway separation is used

- (traffic information), RUNWAY (number) CLEARED TO LAND

Note: in all landing clearances, the term “CLEARED” is mandatory. The term “RUNWAY” followed by the runway number is also mandatory.

Instruction special operations:

- CLEARED TOUCH AND GO
- MAKE A FULL STOP

Pilot requests an approach along, or parallel to a runway, descending to an agreed minimum level:

- REQUEST LOW APPROACH (reasons)

ATC instruction to instruct pilot to perform an approach along, or parallel to a runway, descending to an agreed minimum level:

- CLEARED LOW APPROACH [RUNWAY (number)] [(altitude restriction if required) (go around instructions)]

Pilot requests to fly past the control tower or other observation point for the purpose of visual inspection by persons on the ground

- REQUEST LOW PASS (reasons)

ATC instruction to fly past the control tower or other observation point for the purpose of visual inspection by persons on the ground:

- CLEARED LOW PASS APPROACH [RUNWAY (number)] [(altitude restriction if required) (go around instructions)]

Helicopter pilot requests for landing or approaching the landing area:

- REQUEST STRAIGHT-IN (or CIRCLING APPROACH, LEFT (or RIGHT) TURN TO (location))

ATC instruction for helicopter operations:

- MAKE STRAIGHT-IN (or CIRCLING APPROACH, 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.
3.14. Delaying VFR aircraft

ATC instruction in order to delay a VFR aircraft for landing:

- CIRCLE THE AERODROME
- ORBIT (RIGHT, or LEFT) [FROM PRESENT POSITION]
- MAKE ANOTHER CIRCUIT.

3.15. Missed approach

ATC instructs an aircraft to perform a missed approach and cancel his landing:

- GO AROUND

Pilot mandatory read back or Pilot information to ATC when he performs a unexpected missed approach:

- GOING AROUND.

3.16. Specific aerodrome operation

ATC Instruction when pilot requested visual inspection of landing gear (during a low pass):

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)

ATC instruction informing about wake turbulence:

- CAUTION WAKE TURBULENCE [FROM ARRIVING (or DEPARTING) (type of aircraft)] [additional information as required]

Instruction jet blast on apron or taxiway:

- CAUTION JET BLAST

Instruction propeller-driven, aircraft slipstream:

- CAUTION SLIPSTREAM.
3.17. Runway vacating and communication after landing

ATC instruction after aircraft has landed successfully:

- CONTACT GROUND (frequency)
- WHEN VACATED CONTACT GROUND (frequency)
- EXPEDITE VACATING
- TAKE (or TURN) FIRST (or SECOND, or CONVENIENT) LEFT (or RIGHT) AND CONTACT GROUND (frequency)
- YOUR STAND (or GATE) (designation)

ATC instruction for helicopter operations:

- AIR-TAXI TO HELICOPTER STAND (or) HELICOPTER PARKING POSITION (area)
- AIR-TAXI TO (or VIA) (location or routing as appropriate) [CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.)]
- 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)