



CLEARANCE – INSTRUCTION – READ BACK

1. Introduction

An **ATC clearance or an instruction** constitutes **authority for an aircraft to proceed** only in so far as known air traffic is concerned and is based solely on the need to safely expedite and separate air traffic.

ATC = Air traffic controller.

Pilots are required to **comply** with ATC clearances and instructions **accepted** by them and with ATC instructions directed to and **acknowledged** by them, subject to the pilot maintaining final responsibility for the aircraft's safety.

Everyone shall conduct transmissions in a normal conversational tone using standard phraseologies as prescribed in relevant documents or procedures.

2. Clearances and instructions

2.1. Definition

Air Traffic Control CLEARANCE: A clearance is **an authorization that allows a pilot to do something.**

Air Traffic Control INSTRUCTION: An instruction is **an action to be executed without delay.**

There is difference between an ATC clearance and an ATC instruction:

- A clearance use the term “cleared”
- An instruction will use an action verb in the imperative mood.

*Examples of action verbs in the imperative mood:
Taxi, stop, follow, descend, climb, turn, reduce, expedite, maintain...*

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

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Document	Clearance, instruction, read back	Version 1.0	January 15, 2014	Page 1
----------	-----------------------------------	-------------	------------------	--------



There are other types of messages which are not clearances and instructions:

- ATC advises an expect-approach-clearance time, delay, traffic information
- ATC suggests any advice to aircrafts
- ATC requests any information from an aircraft.

When the controllers use the term “expect” in communication, this is never a clearance or instruction. It’s information (or advice).

With the term “expect”, the pilot shall not proceed as a clearance or instruction, but prepare his aircraft for this future instruction.

Example:

SAU2455, expect ILS approach runway 35.

Here, the pilot shall take ILS runway 35 approach chart and start his preparation for this approach. This communication shall not clear the pilot to ILS approach runway 35. Pilot must hold the last point of previous clearance and not continue on the procedure given.

2.2.Format

Clearance shall contain positive and concise data and shall be phrased in a standard manner using phraseology.

ATC shall issue clearance items, as appropriate, in the following order:

- 1) Prefix.
- 2) Aircraft identification.
- 3) Clearance limit.
- 4) SID.
- 5) Route.
- 6) Altitude.
- 7) Mach-number.
- 8) Departure, en route, approach, or holding instructions.
- 9) Special instructions or information.
- 10) Traffic information.

2.3.Rules to know as a controller

ATC units shall issue such ATC clearances and instructions as are necessary to prevent collisions and to expedite and maintain an orderly flow of air traffic.

ATC units shall issue clearances and instructions that ensure an aircraft will remain within controlled airspace unless the aircraft requests otherwise.

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Document	Clearance, instruction, read back	Version 1.0	January 15, 2014	Page 2



ATC units shall issue clearances and instructions with the least possible delay.

ATC units shall identify and correct any error made during transmission of a clearance or instruction.
ATC units shall cancel and restate the clearance in full if there is any possibility of misunderstanding.

You may issue a clearance amending a previous clearance:

Example:
CDN92, CLEARED TO THE WINNIPEG AIRPORT VIA PRINCETON, J504 LUMSDEN, REMAINDER OF ROUTE UNCHANGED;

When a flight plan specifies that the first portion of a flight will be subject to air traffic control and the subsequent portion will be uncontrolled, the aircraft shall normally be cleared to the point at which the controlled flight terminates.

2.4. Rules to know as a pilot

If an air traffic control clearance is not suitable to the pilot-in-command of an aircraft, the flight crew may request and, if practicable, obtain an amended clearance.

ATC clearance do not constitute author to violate the applicable regulations for promoting the safety of flight operation or for any other purpose.

When a flight will be partially uncontrolled, aircraft shall be advised to obtain its clearance from the ATC unit in whose area controlled flight will be commenced.

What can I do if, as a pilot-in-command, I don't receive any further clearance?

If a clearance is not received, the aircraft is expected to hold in a published holding pattern or if there is no published pattern, a standard pattern on the inbound track to the clearance limit and to request further clearance or an approach clearance.

What can I do if, as a pilot-in-command, I can't contact the air traffic controller? (In IVAO, by voice and by text).

If communication cannot be established with ATC, the aircraft is then expected to proceed in accordance with communication failure rules and procedures.



2.5. Clearance limit

A clearance limit shall be described by specifying the name of the appropriate significant point.

At least 5 minutes before an aircraft reaches its clearance limit, issue:

- A further clearance;
- An approach clearance
- A holding clearance.

If a clearance is not received, the aircraft is expected to hold in a published holding pattern or if there is no published pattern, a standard pattern on the inbound track to the clearance limit and to request further clearance or an approach clearance.

A late clearance may cause an aircraft to overshoot the holding fix.

When the destination aerodrome is outside controlled airspace, the ATC unit responsible for the last controlled airspace shall issue the appropriate clearance for flight to the limit of that controlled airspace.

2.6. Route of flight

You may use the phrase “via flight planned route” provided:

- the previously filed route has not been changed
- the aircraft will be radar-monitored until past the first compulsory reporting point.

You may instruct an aircraft to follow a specified track or heading for a specified time, to a location, or to an altitude, provided the instruction does not prevent the aircraft from clearing all obstructions and terrain in accordance with the specified minimum.

Example:

*PROCEED VIA/REMAIN ON (specified radial or course) UNTIL (time or location).
CLIMB/DESCEND TO (altitude) ON (specified radial or course).*

You should inform a high-performance aircraft if you anticipate that it may be required to hold en route or during descent.

ATC unit can issue, with the holding clearance, an expected approach clearance time, expected further clearance time, or the time to depart the fix, and revise it as necessary:

Example:

EXPECT APPROACH CLEARANCE AT (time); EXPECT FURTHER CLEARANCE AT (time); DEPART (fix) AT (time).

2.7. Approach clearance

ATC unit shall specify in an approach clearance the published name of the approach as it appears in the AIP, and the route to be flown, if adherence to a particular procedure is required.

Use the prefix “RNAV” in radio communications concerning RNAV(GPS) approaches.

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Document	Clearance, instruction, read back	Version 1.0	January 15, 2014	Page 4
----------	-----------------------------------	-------------	------------------	--------



2.8. Resolution advisory (TA/RA)

An aircraft can deviate from an ATC clearance or instruction when an ACAS/TACS or a GPWS/TAWS resolution advisory manoeuvre occurs.

Aircraft crew that manoeuvre as a result of an ACAS/ TCAS or GPWS/TAWS RA and which may affect an ATC clearance will notify controllers when beginning the manoeuvre or as soon as workload permits.

When the ACAS/TCAS or GPWS/TAWS RA has been resolved, the aircraft crew must advise ATC they are returning to their previously assigned clearance or subsequent amended clearance.

Become aware that an aircraft has deviated from an ATC clearance or instruction as a result of an ACAS/TCAS or GPWS/TAWS resolution advisory manoeuvre.

Do not assume that other aircraft in the vicinity of an aircraft that is responding to an RA instruction are aware of its intended manoeuvres unless you are advised by them that they are also responding to an ACAS/ TCAS or GPWS/TAWS RA.

Continue to provide control instruction, safety alerts, and traffic advisories as appropriate to such aircraft.

ATC unit shall re-assume the responsibility for separation after an aircraft has responded to an ACAS/TCAS or GPWS/ TAWS RA when the aircraft informs you that:

- the manoeuvre is complete
- it has returned to its assigned altitude
- it is following an alternate clearance

If an aircraft manoeuvres outside the limits of its clearance, the controller is not responsible for separation between it and other aircraft, airspace protected for other aircraft, terrain or obstructions.

When the ACAS/TCAS or GPWS/TAWS RA has been resolved the aircraft must advise ATC they are returning to normal situation.

This manual is dedicated only for IVAO Network activities. This document must not be used in real aviation or in others networks.

Document	Clearance, instruction, read back	Version 1.0	January 15, 2014	Page 5
----------	-----------------------------------	-------------	------------------	--------

3. Read back requirements

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

Read-back requirements have been introduced in the interests 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 advices, suggestion and requests shall not be read back.
Unless requested by ATC unit, voice read back of a data link communication messages shall not be 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 shall listen to the read back to ascertain that the clearance or instruction has been correctly acknowledged by the flight crew.
ATC shall identify and correct any error made during read back of a clearance or instruction.

Examples of read back:

Pilot ✈	ATC 🗣
	🗣 DEHBA, taxi holding point runway 01
✈ taxi holding point runway 01, DEHBA	

Pilot ✈	ATC 🗣
	🗣 DEHBA, squawk 4525
✈ 4525, DEHBA	

If an aircraft read-back of a clearance or instruction is incorrect, the controller shall transmit the word "NEGATIVE I SAY AGAIN" followed by the correct version:

Pilot ✈	ATC 🗣
	🗣 DEHBA, QNH 1003
✈ QNH 1033, DEHBA	
	🗣 DEHBA, Negative I say again, QNH 1003
✈ QNH 1003, DEHBA	

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Document	Clearance, instruction, read back	Version 1.0	January 15, 2014	Page 6
----------	-----------------------------------	-------------	------------------	--------