International Virtual Aviation Organisation

International Virtual Aviation Organisation

International Virtual Aviation Organisation

Intern



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.

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:

https://mediawiki.ivao.aero/index.php?title=General Phraseology&printable=yes&print key=ec8b61fba86b646830fd6967ba41e5c... 1/11

SPEED (number) KILOMETRES PER HOUR (or KNOTS)

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). (only 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 (only 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 DESCENT) 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)

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

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)

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:

MONITOR (unit call sign) (frequency)

Example: MONITOR UNICOM 122.8

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

- Pilot: REQUEST CHANGE TO (frequency)
- ATC: FREQUENCY CHANGE APPROVED

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)]

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)

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)].

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)

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)

Note1. Multiple RVR observations are always representative of the touchdown zone, midpoint zone and the roll-out/stop end zone, respectively.

Note2. 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.

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)

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)]
- TOWER OBSERVES (weather information)
- PILOT REPORTS (weather information)

ISSUANCE OF CLEARANCE

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.

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

SEE ALSO

 Aerodrome Phraseology, Approach and departure phraseology, En-route phraseology, Emergency phraseology, ATC coordination phraseology, Specific phraseology

REFERENCE

• ICAO Documentation 4444 - Air Traffic Management - 16th Edition 2016 - Chapter 12

AUTHOR

VID 150259 - Creation

DATE OF SUBMISSION

• 01:04, 15 November 2020

COPYRIGHT

• This documentation is copyrighted as part of the intellectual property of the International Virtual Aviation Organisation.

DISCLAIMER

• The content of this documentation is intended for aviation simulation only and must not be used for real aviation operations.