

## Definitions and abbreviations.

1. **Aircraft identification** – A group of letters, figures or a combination which is the coded equivalent of the aircraft call sign used in air-ground communications.

2. **Altitude**: the vertical distance of a level (an aircraft) measured from mean sea level.

3. **ATC service** - A service provided for the purpose of:

a) preventing collisions:

- between aircraft
- on the maneuvering area between aircraft and obstructions

b) expediting and maintaining an orderly flow of air traffic

4. **ATC clearance** – Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.

5. **ATS (Air Traffic Service)** – a generic term meaning flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

6. **ATIS** – Automatic terminal information service a service which provides a pilot's current weather and weather forecast. Recorded non control information continuously broadcast in selected terminal areas. ATIS information contains weather observations, altimeter setting, instrument approaches in use, and information needed for approaching the airport. The ATIS information is updated every 30 minutes or as needed. The broadcast is identified by a letter of the phonetics alphabet.

7. **Airway** – a control area or its portion established in the form of a corridor. A corridor generally comprising a width of 5 miles on each side of the centre line equipped with radio navigation aids.

8. **Aerodrome** – a defined area on land or water (including any buildings, installations and equipment) which to used for the arrival, departure and surface movement of aircraft.

9. **Alternate aerodrome** - an aerodrome to which an aircraft may proceed when it becomes impossible to proceed to or to land at the aerodrome of destination. *Reasons: Bad weather conditions, low fuel endurance, abnormal or emergency conditions, problems with passengers or crew members, unserviceable aerodrome facilities, closed destination aerodrome.*

10. **Briefing Officer** – the person who provides information before the beginning of the flight and he receives the pilot's Flight Plan at the aerodrome of departure.

11. **Control area** – a controlled airspace extending upwards from a specified limit above the earth.

12. **Controlled airspace** - airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification

All CTA (control terminal area) airspace of Russia along airways at altitudes from the lower safe flight level up to the upper allowed flight level is class A.

13. **Distress** – a dangerous situation requiring immediate assistance.

14. **Urgency** – a dangerous situation not requiring immediate assistance.

Distress and urgency are two categories of emergency situations

*In accordance with Russian Federation regulations the following situations are declared as emergency:*

- engine failure
- fire on board
- loss of communication
- loss of aircraft stability, control and strength
- hijacking
- off-field landing
- emergency descent

15. **Estimated time of arrival** – for IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point by reference to navigation aids, from which an instrument approach procedure will be commenced. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.



16. **Flight level:** the surface of constant atmospheric pressure which is related to 1013,2 hPa and is separated from other such surfaces by specific pressure intervals.

17. **Flight Plan** - specified information provided to air traffic services units, about an intended flight or portion of a flight of an aircraft. FP provides information on the aircraft's identity and equipment, the point and time of departure, the route and altitude, destination, estimated time of arrival, alternate airport and so on.

18. **FIR** (Flight information region) – An airspace of defined dimensions within which flight information service and alerting service are provided.

19. **Level** - a generic term relating to the vertical position of an aircraft in flight and meaning variously **height, altitude or flight level**.

All the three terms have distinct meanings in aviation and ATC:

- When altimeter is set to a QNH, it will indicate altitude.
- When set to QFE altimeter setting, it will indicate height.
- When set to a standard pressure, it will indicate flight level.

20. **Hazardous weather phenomena** are dangerous weather conditions, which can affect flight safety.

They are:

- thunderstorm (with hail, squall line)
- severe turbulence (clear air turbulence)
- severe icing
- sand / dust storm
- wind shear (for aerodrome control)

21. **Height:** the vertical distance of a level (an aircraft) measured from a specified datum, e.g. airport elevation point.

22. **Holding point** - location where aircraft wait for line up

23. **IFR** (Instrument Flight Rules) – The symbol used to designate the instrument flight rules. These rules must be used when visibility is poor but many flights are controlled in accordance with these rules even in good weather.

24. **ILS** is a special type of electronic guidance system used to allow aircraft to land when the ceiling and visibility are too low for a safe visual approach to the runway. An ILS is made up of four basic parts: *the localizer, glide slope, marker beacons and approach lights*.

25. **IMC** – the symbol used to designate **Instrument Meteorological Conditions**. Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

26. **NOTAM** (Notices to Airmen) – A notice distributed by means of telecommunication containing information concerning the establishment, condition or change aeronautical facility, service, procedure or hazard.

AIP and NOTAM include the following

- What sort of facilities are available en route and at the aerodrome his destination.
- If the aerodrome has suitable fuel available; paved runways; the length of these runways; the elevation of the aerodrome; what hangar space is available; the communication frequencies, and what meteorological information is available.

27. **PSR** (Primary surveillance radar) – a radio detection device which, by use of reflected radio signals, provides information on range and azimuth of objects

28. **SSR** (secondary surveillance radar) – a radar system used in air traffic control, that not only detects and measures the position of aircraft but also request additional information from the aircraft itself such as its identity and altitude.

29. **Squawk** - a term used by ATC to request a pilot to activate specific modes, codes or functions on the aircraft transponder.

7500-hijacking

7700-emergency situation

7600-loss of communication

30. **SIDs** (Standard instrument departures). A SIDs details a specific initial route or track from a

particular aerodrome runway, often with altitude and, occasionally, speed limits at specific points along the track.

**31. STARs** (Standard instrument arrivals) A STARs details a specific final route or track onto a particular runway approach, often with altitude and, occasionally, speed limits at specific points along the track.

**32. Touchdown** – the point where the nominal glide path intercepts the runway.

**33. TCAS or ACAS:** Traffic Collision Avoidance System or Airborne Collision Avoidance System. It is an aircraft system based on SSR transponder signals which operates independently of ground – based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

**34. Threshold** – the beginning of that portion of the runway usable for landing.

**35. Transition level** – the lowest flight level available for use above the transition altitude.

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**37. STAR** (Standard instrument arrival) -A STAR details a specific final route or track onto a particular runway approach, often with altitude and, occasionally, speed limits at specific points along the track.

**38. Vectoring-** the air traffic controller on the ground has radar contact with the aircraft. He can give the pilot a vector or a heading to fly the aircraft in safe direction.

**40. VFR** – (Visual Flight Rules) – When visibility is good a pilot may fly in accordance with visual flight rules

**41. VMC** – The symbol used to designate Visual Meteorological Conditions. Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.