

Commercial Aviation Terminology

- ACARS - Aeronautical Communications Addressing and Reporting System which is a digital datalink between aircraft and ground stations
- ACL - Allowable cabin load, maximum. Difference between the BOW and ZFW.
- AFTN - Aeronautical Fixed Telecommunications Network the telex link between international ground stations
- AGL - Above Ground Level (measured in feet)
- AIREP - A spoken position report with weather information
- Airway- Designated flight route that an aircraft is required to follow
- Alternate - An airport nominated by a pilot if his aircraft can't land at its original landing site.
- AM - Amplitude modulation, and is the transmission mode employed by civil and military aircraft on the aviation bands
- APU - Auxiliary power unit, used to power lights, air etc and to help start the jet turbines
- ARINC - Aeronautical Radio Incorporated, suppliers of communications services & equipment to the airline industry
- ASI - Air speed indicator
- ASM - Air seat mile, a calculation for computing the costs of flying one seat one mile
- ATC - Air Traffic Control
- ATD - Actual time of departure
- ATM - Air transport movement; any single leg flown by a commercial transport
- AUW - All UP Weight, the total aircraft weight at any stage during flight
- Block - An allocated area of air space, such as block Flight Level 350. Which means the aircraft can operate at 35,000 feet
- Block Time - Period from initial movement of an aircraft under its own power until parking at the destination.

Bogey - Military slang for target or unidentified aircraft

BOW - Basic operating weight: AC empty weight plus crew, engine oil, potable water, and other items making up the materials required for dispatch

Carrier - Commercial passenger airline

CAS - "Calibrated airspeed" means the indicated airspeed of an aircraft, corrected for position and instrument error. Calibrated airspeed is equal to true airspeed in standard atmosphere at sea level

CAT - Clear Air Turbulence

CAVOK - Ceiling and Visibility OK, unlimited (The sky is clear and OK)

CB - Cumulonimbus clouds (thunderstorm clouds!)

Charlie or Roger - Copied/received transmission OK

Clearway - Area at ends of runway with no significant obstacles

CTA - Area being controlled by Air Traffic Control

EAS - "Equivalent airspeed" means the calibrated airspeed of an aircraft corrected for adiabatic compressible flow for the particular altitude. Equivalent airspeed is equal to calibrated airspeed in standard atmosphere at sea level.

ELT - Emergency Locator beacon: Upgraded now to GPS, has 3 emergency frequencies

Endurance - The time an aircraft can remain aloft before running out of fuel.

ETA - Estimated Time of Arrival

EPR - Exhaust Gas temperature, read on engine gage

ETD - Estimated Time of Departure

EW - Empty Weight, the weight of an aircraft less all items calculated in the BOW

FIR - Flight Information Region

FIS - Flight Information Services

Flight Time - A calculation that computes the time of a flight between the take off until touchdown. Always less than Block Time.

FMS - Flight Management System: Navigation hardware and software displaying and importing info to the crew on all areas of the flight

Go Round - An aborted landing

GPS - Global Positioning System

GPU - Ground Power Unit, provides aux power when plane on ground

Groundspeed - The aircraft speed over ground reference, adjusted for winds

Heavy - An aircraft with a AUW above 300,000 pounds.

Hectopascals : A measurement of atmospheric pressure = to millibars.

HF - High frequency radio, shortwave

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IFR - Instrument Flight Rules

ILS - Instrument landing system , provides localizer and glide slope guidance to pilot, via VHF frequency

IMC - Instrument Meteorological Conditions

JAR - Joint Air Regulations in force in the EU, basically the same as the FARS

Latitude - Position expressed as degrees, minutes & seconds North & South of the equator, each minute always = 1 nautical mile. 1 degree always = 60 nautical miles.

Longitude - Meridians: East & West, expressed as degrees, minutes and seconds from the prime Meridian (zero degrees Z time Point) 1 min of longitude only equals 1 nautical mile at the equator and decreases as the lines of longitude converge at the poles

Localizer - Electronic aid that aligns aircraft with runway

Mach - Percentage of the speed of sound (at ground level approx 670 mph/ 1,072km/h)

Medivac - Medical Evacuation flight

MEL - Minimum en-route altitude to avoid obstacles

Millibars - Atmospheric pressure measured with millibars instead of mmHg. The pressure of a standard atmosphere equals 1013 mbars.

Minimums - Lowest alt the pilot can descend to on a given instrument approach, In general 200' MSL & ½ mile

MTOW - Maximum take-off weight

MGTW - Max taxi weight

MSL - Measured sea level- Heights above mean sea level

NAT - North Atlantic Tracks

No Joy - No Communications Established

NOSIG - No significant weather to report

NOTAM - Notice to airmen, a significant WX message for pilots to take note of

OAT - Outside air temperature

OCA - Oceanic Control Area

PAR - Precision approach Radar

PAX - Passengers

PITOT - The tube that measures air pressure and translates it to IAS. named after the French inventor.

POB - Persons on board (not including crew)

Reserves - Minimal fuel requirements required on arrival

RNAV - VHF Radio navigation that can be set up by the pilot to create waypoints

Roger - Yes, copy OK

RSM - Revenue Seat mile, a commercial calculation for computing the profitability of a commercial airline flight

RVSM - Reduced vertical Separation Minimums: Provides 1000' separation in altitude between aircraft flying between FL 280 up to FL 410.

SAR - Search & Rescue

SATCOM - Satellite based voice communication systems

SID - Standard Instrument Departures, used at most international airports

Squawk Code - A transponder code assigned by ATC. AC can be identified on radar

STAR - Standard Terminal Arrival Route

STC - Supplemental type certificate- issued by the FAA

TAS - True airspeed, a calculation that factors the altitude and temp. True airspeed" means the airspeed of an aircraft relative to undisturbed air. True airspeed is equal to equivalent airspeed multiplied by $(\rho_0/\rho)^{1/2}$

TAWS - Terrain Awareness Systems: Mandatory Feb 20th 2005 for all commercial Jets: provides warning (visual and aural whenever the aircraft is flying below the level of the surrounding terrain

TOW - Take Off Weight , calculated by subtracting the taxi burn for the MGTW

VECTOR - Directional steering dictated to pilots by ATC

VFR - Visual Flight Rules

VMC - Visual metrological Conditions: generally 1000' and 3 miles

VOR - VHF omni directional radio range , directions instrument in cockpit

Waypoint - Airway reporting point, An arbitrary navigational point either compulsorily or non-compulsorily reporting point

WILCO - Will Comply

Yield - A commercial calculation determining the difference in cost between a RSM and ASM

ZFW - Zero fuel weight, all fuel above this weight must be in burnable fuel

Zulu: Is coordinated universal time (UTC/GMT) Z-time, all logs and schedules are kept in Z - time