

77 entries — every glossary entry under this letter, no curation. Reproduced verbatim from the Pilot's Handbook of Aeronautical Knowledge (FAA-H-8083-25C (July 2023)), Glossary.

14 CFR

See Title 14 of the Code of Federal Regulations.

Cabin altitude

Cabin pressure in terms of equivalent altitude above sea level.

Cage

The black markings on the ball instrument indicating its neutral position.

Calibrated

The instrument indication compared with a standard value to determine the accuracy of the instrument.

Calibrated orifice

A hole of specific diameter used to delay the pressure change in the case of a vertical speed indicator.

Calibrated airspeed

The speed at which the aircraft is moving through the air, found by correcting IAS for instrument and position errors.

Camber

The camber of an airfoil is the characteristic curve of its upper and lower surfaces. The upper camber is more pronounced, while the lower camber is comparatively flat. This causes the velocity of the airflow immediately above the wing to be much higher than that below the wing.

Canard

A horizontal surface mounted ahead of the main wing to provide longitudinal stability and control. It may be a fixed, movable, or variable geometry surface, with or without control surfaces.

Canard configuration

A configuration in which the span of the forward wings is substantially less than that of the main wing.

Cantilever

A wing designed to carry loads without external struts.

CAS

Calibrated airspeed.

CDI

Course deviation indicator.

Ceiling

The height above the earth's surface of the lowest layer of clouds, which is reported as broken or overcast, or the vertical visibility into an obscuration.

Center of gravity (CG)

The point at which an airplane would balance if it were possible to suspend it at that point. It is the mass center of the airplane, or the theoretical point at which the entire weight of the airplane is assumed to be concentrated. It may be expressed in inches from the reference datum, or in percentage of mean aerodynamic chord (MAC). The location depends on the distribution of weight in the airplane.

Center of gravity limits

The specified forward and aft points within which the CG must be located during flight. These limits are indicated on pertinent airplane specifications.

Center of gravity range

The distance between the forward and aft CG limits indicated on pertinent airplane specifications.

Center of pressure

A point along the wing chord line where lift is considered to be concentrated. For this reason, the center of pressure is commonly referred to as the center of lift.

Centrifugal flow compressor

An impeller-shaped device that receives air at its center and slings the air outward at high velocity into a diffuser for increased pressure. Also referred to as a radial outflow compressor.

Centrifugal force

An outward force that opposes centripetal force, resulting from the effect of inertia during a turn.

Centripetal force

A center-seeking force directed inward toward the center of rotation created by the horizontal component of lift in turning flight.

CG

See center of gravity.

FAA definition of **Center of gravity (CG)**:

The point at which an airplane would balance if it were possible to suspend it at that point. It is the mass center of the airplane, or the theoretical point at which the entire weight of the airplane is assumed to be concentrated. It may be expressed in inches from the reference datum, or in percentage of mean aerodynamic chord (MAC). The location depends on the distribution of weight in the airplane.

Changeover point (COP)

A point along the route or airway segment between two adjacent navigation facilities or waypoints where changeover in navigation guidance should occur. Chart Supplement U.S. (formerly Airport/Facility Directory). An FAA publication containing information on all airports, communications, and NAVAIDs.

Checklist

A tool that is used as a human factors aid in aviation safety. It is a systematic and sequential list of all operations that must be performed to properly accomplish a task.

Chord line

An imaginary straight line drawn through an airfoil from the leading edge to the trailing edge.

Circling approach

A maneuver initiated by the pilot to align the aircraft with a runway for landing when a straightin landing from an instrument approach is not possible or is not desirable.

Class A airspace

Airspace from 18,000 feet MSL up to and including FL 600, including the airspace overlying the waters within 12 NM of the coast of the 48 contiguous states and Alaska; and designated international airspace beyond 12 NM of the coast of the 48 contiguous states and Alaska within areas of domestic radio navigational signal or ATC radar coverage, and within which domestic procedures are applied.

Class B airspace

Airspace from the surface to 10,000 feet MSL surrounding the nation's busiest airports in terms of IFR operations or passenger numbers. The configuration of each Class B airspace is individually tailored and consists of a surface area and two or more layers, and is designed to contain all published instrument procedures once an aircraft enters the airspace. For all aircraft, an ATC clearance is required to operate in the area, and aircraft so cleared receive separation services within the airspace.

Class C airspace

Airspace from the surface to 4,000 feet above the airport elevation (charted in MSL) surrounding those airports having an operational control tower, serviced by radar approach control, and having a certain number of IFR operations or passenger numbers. Although the configuration of each Class C airspace area is individually tailored, the airspace usually consists of a 5 NM radius core surface area that extends from the surface up to 4,000 feet above the airport elevation, and a 10 NM radius shelf area that extends from 1,200 feet to 4,000 feet above the airport elevation.

Class D airspace

Airspace from the surface to 2,500 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower. The configuration of each Class D airspace area is individually tailored, and when instrument procedures are published, the airspace is normally designed to contain the procedures.

Class E airspace

Airspace that is not Class A, Class B, Class C, or Class D, and is controlled airspace.

Class G airspace

Airspace that is uncontrolled, except when associated with a temporary control tower, and has not been designated as Class A, Class B, Class C, Class D, or Class E airspace.

Clean configuration

A configuration in which all flight control surfaces have been placed to create minimum drag. In most aircraft this means flaps and gear retracted.

Clearance

ATC permission for an aircraft to proceed under specified traffic conditions within controlled airspace, for the purpose of providing separation between known aircraft.

Clearance delivery

Control tower position responsible for transmitting departure clearances to IFR flights.

Clearance limit

The fix, point, or location to which an aircraft is cleared when issued an air traffic clearance.

Clearance on request

An IFR clearance not yet received after filing a flight plan.

Clearance void time

Used by ATC, the time at which the departure clearance is automatically canceled if takeoff has not been made. The pilot must obtain a new clearance or cancel the IFR flight plan if not off by the specified time.

Clear ice

Glossy, clear, or translucent ice formed by the relatively slow freezing of large, supercooled water droplets.

Coefficient of lift (CL)

The ratio between lift pressure and dynamic pressure.

Cold front

The boundary between two air masses where cold air is replacing warm air.

Compass course

A true course corrected for variation and deviation errors.

Compass locator

A low-power, low- or medium-frequency (L/MF) radio beacon installed at the site of the outer or middle marker of an ILS.

Compass rose

A small circle graduated in 360° increments, to show direction expressed in degrees.

Complex aircraft

An aircraft with retractable landing gear, flaps, and a controllable-pitch propeller.

Compressor pressure ratio

The ratio of compressor discharge pressure to compressor inlet pressure.

Compressor stall

In gas turbine engines, a condition in an axial-flow compressor in which one or more stages of rotor blades fail to pass air smoothly to the succeeding stages. A stall condition is caused by a pressure ratio that is incompatible with the engine rpm. Compressor stall will be indicated by a rise in exhaust temperature or rpm fluctuation, and if allowed to continue, may result in flameout and physical damage to the engine.

Computer navigation fix

A point used to define a navigation track for an airborne computer system such as GPS or FMS.

Concentric rings

Dashed-line circles depicted in the plan view of IAP charts, outside of the reference circle, that show en route and feeder facilities.

Condensation

A change of state of water from a gas (water vapor) to a liquid.

Condensation nuclei

Small particles of solid matter in the air on which water vapor condenses.

Cone of confusion

A cone-shaped volume of airspace directly above a VOR station where no signal is received, causing the CDI to fluctuate.

Configuration

This is a general term, which normally refers to the position of the landing gear and flaps.

Constant-speed propeller

A controllable-pitch propeller whose pitch is automatically varied in flight by a governor to maintain a constant rpm in spite of varying air loads.

Continuous flow oxygen system

System that supplies a constant supply of pure oxygen to a rebreather bag that dilutes the pure oxygen with exhaled gases and thus supplies a healthy mix of oxygen and ambient air to the mask. Primarily used in passenger cabins of commercial airliners.

Control and performance

A method of attitude instrument flying in which one instrument is used for making attitude changes, and the other instruments are used to monitor the progress of the change.

Control display unit

A display interfaced with the master computer, providing the pilot with a single control point for all navigations systems, thereby reducing the number of required flight deck panels.

Controllability

A measure of the response of an aircraft relative to the pilot's flight control inputs.

Controllable-pitch propeller (CPP)

A type of propeller with blades that can be rotated around their long axis to change their pitch. If the pitch can be set to negative values, the reversible propeller can also create reverse thrust for braking or reversing without the need of changing the direction of shaft revolutions.

Controlled airspace

An airspace of defined dimensions within which ATC service is provided to IFR and VFR flights in accordance with the airspace classification. It includes Class A, Class B, Class C, Class D, and Class E airspace.

Control pressures

The amount of physical exertion on the control column necessary to achieve the desired attitude.

Convective weather

Unstable, rising air found in cumiliform clouds.

Convective SIGMET

Weather advisory concerning convective weather significant to the safety of all aircraft, including thunderstorms, hail, and tornadoes.

Conventional landing gear

Landing gear employing a third rear-mounted wheel. These airplanes are also sometimes referred to as tailwheel airplanes.

Coordinated flight

Flight with a minimum disturbance of the forces maintaining equilibrium, established via effective control use.

COP

See changeover point.

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Coriolis illusion

The illusion of rotation or movement in an entirely different axis, caused by an abrupt head movement, while in a prolonged constant-rate turn that has ceased to stimulate the brain's motion sensing system.

Coupled ailerons and rudder

Rudder and ailerons are connected with interconnected springs in order to counteract adverse yaw. Can be overridden if it becomes necessary to slip the aircraft.

Course

The intended direction of flight in the horizontal plane measured in degrees from north.

Cowl flaps

Shutter-like devices arranged around certain air-cooled engine cowlings, which may be opened or closed to regulate the flow of air around the engine.

Crew resource management (CRM)

The application of team management concepts in the flight deck environment. It was initially known as cockpit resource management, but as CRM programs evolved to include cabin crews, maintenance personnel, and others, the phrase "crew resource management" was adopted. This includes single pilots, as in most general aviation aircraft. Pilots of small aircraft, as well as crews of larger aircraft, must make effective use of all available resources; human resources, hardware, and information. A current

definition includes all groups routinely working with the flight crew who are involved in decisions required to operate a flight safely. These groups include, but are not limited to pilots, dispatchers, cabin crewmembers, maintenance personnel, and air traffic controllers. CRM is one way of addressing the challenge of optimizing the human/machine interface and accompanying interpersonal activities.

Critical altitude

The maximum altitude under standard atmospheric conditions at which a turbocharged engine can produce its rated horsepower.

Critical angle of attack

The angle of attack at which a wing stalls regardless of airspeed, flight attitude, or weight.

Critical areas

Areas where disturbances to the ILS localizer and glideslope courses may occur when surface vehicles or aircraft operate near the localizer or glideslope antennas.

CRM

See crew resource management.

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Cross-check

The first fundamental skill of instrument flight, also known as "scan," the continuous and logical observation of instruments for attitude and performance information.

Cruise clearance

An ATC clearance issued to allow a pilot to conduct flight at any altitude from the minimum IFR altitude up to and including the altitude specified in the clearance. Also authorizes a pilot to proceed to and make an approach at the destination airport.

Current induction

An electrical current being induced into, or generated in, any conductor that is crossed by lines of flux from any magnet.