

25 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.

Eddy currents

Current induced in a metal cup or disc when it is crossed by lines of flux from a moving magnet.

Eddy current damping

The decreased amplitude of oscillations by the interaction of magnetic fields. In the case of a vertical card magnetic compass, flux from the oscillating permanent magnet produces eddy currents in a damping disk or cup. The magnetic flux produced by the eddy currents opposes the flux from the permanent magnet and decreases the oscillations.

EFC

See expect-further-clearance.

FAA definition of **Expect-further-clearance (EFC)**:

The time a pilot can expect to receive clearance beyond a clearance limit.

EFD

See electronic flight display.

FAA definition of **Electronic flight display (EFD)**:

For the purpose of standardization, any flight instrument display that uses LCD or other image-producing system (cathode ray tube (CRT), etc.)

EGT

See exhaust gas temperature.

FAA definition of **Exhaust gas temperature (EGT)**:

The temperature of the exhaust gases as they leave the cylinders of a reciprocating engine or the turbine section of a turbine engine.

Electronic flight display (EFD)

For the purpose of standardization, any flight instrument display that uses LCD or other image-producing system (cathode ray tube (CRT), etc.)

Elevator

The horizontal, movable primary control surface in the tail section, or empennage, of an airplane. The elevator is hinged to the trailing edge of the fixed horizontal stabilizer.

Elevator illusion

The sensation of being in a climb or descent, caused by the kind of abrupt vertical accelerations that result from up- or downdrafts.

Emergency

A distress or urgent condition.

Empennage

The section of the airplane that consists of the vertical stabilizer, the horizontal stabilizer, and the associated control surfaces.

Emphasis error

The result of giving too much attention to a particular instrument during the cross-check, instead of relying on a combination of instruments necessary for attitude and performance information.

Empty-field myopia

Induced nearsightedness that is associated with flying at night, in instrument meteorological conditions and/or reduced visibility. With nothing to focus on, the eyes automatically focus on a point just slightly ahead of the airplane.

EM wave

Electromagnetic wave.

Encoding altimeter

A special type of pressure altimeter used to send a signal to the air traffic controller on the ground, showing the pressure altitude the aircraft is flying.

Engine pressure ratio (EPR)

The ratio of turbine discharge pressure divided by compressor inlet pressure, which is used as an indication of the amount of thrust being developed by a turbine engine.

En route facilities ring

Depicted in the plan view of IAP charts, a circle which designates NAVAIDs, fixes, and intersections that are part of the en route low altitude airway structure.

En route high-altitude charts

Aeronautical charts for en route instrument navigation at or above 18,000 feet MSL.

En route low-altitude charts

Aeronautical charts for en route IFR navigation below 18,000 feet MSL.

EPR

See engine pressure ratio.

FAA definition of **Engine pressure ratio (EPR)**:

The ratio of turbine discharge pressure divided by compressor inlet pressure, which is used as an indication of the amount of thrust being developed by a turbine engine.

Equilibrium

A condition that exists within a body when the sum of the moments of all of the forces acting on the body is equal to zero. In aerodynamics, equilibrium is when all opposing forces acting on an aircraft are balanced (steady, unaccelerated flight conditions).

Equivalent airspeed

Airspeed equivalent to CAS in standard atmosphere at sea level. As the airspeed and pressure altitude increase, the CAS becomes higher than it should be, and a correction for compression must be subtracted from the CAS.

Evaporation

The transformation of a liquid to a gaseous state, such as the change of water to water vapor.

Exhaust gas temperature (EGT)

The temperature of the exhaust gases as they leave the cylinders of a reciprocating engine or the turbine section of a turbine engine.

Expect-further-clearance (EFC)

The time a pilot can expect to receive clearance beyond a clearance limit.

Explosive decompression

A change in cabin pressure faster than the lungs can decompress. Lung damage is possible.