

CS-DEFINITIONS AMENDMENT 1 - CHANGE INFORMATION

Certification Specifications (CS) are used for establishing the certification basis for applications made after the date of entry into force of a CS including any amendments. Since the complete text of a CS, including any amendments to it, is relevant for establishing the certification basis, the Agency has decided to enact and publish all amendments to CS's as consolidated documents instead of enacting and publishing only the amended text.

Consequently, except for a note [Amdt. No.:Def/1] under the amended paragraph, the consolidated text of CS-Definitions does not allow readers to see the detailed changes introduced by the new amendment. To allow readers to also see these detailed changes this document has been created. The same format as for publication of Notices of Proposed Amendments has been used to show the changes.

1. text not affected by the new amendment remains the same: unchanged
2. deleted text is shown with a strike through: ~~deleted~~
3. new text is highlighted with grey shading: **new**
4.
Indicates that remaining text is unchanged in front of or following the reflected amendment.
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1. General Definitions

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'Aircraft' means a machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

'Aircraft-Supplied Data' means all data which is supplied by or via aircraft systems and is used by the Engine/Propeller Control System.

'Aircraft-Supplied Electrical Power' means any electrical power which is supplied by or via aircraft systems and is used by the Engine/Propeller Control System.

'Airframe' means the fuselage, booms, nacelles, cowlings, fairings, aerofoil surfaces (including rotors but excluding propellers and rotating aerofoils of engines), and landing gear of an aircraft and their accessories and controls.

'Alternate Mode' (Engine related definition) means any Control Mode, including Back-up Modes that are not the Primary Mode used for controlling the Engine.

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'Auxiliary rotor' means a rotor that principally serves to counteract the effect of the main rotor torque on a rotorcraft and/or to manoeuvre the rotorcraft about one or more of its three principal axes.

'Back-up Mode' (Engine related definition) means the Control Mode of the back-up system.

'Back-up System' means a part of the Engine/Propeller Control System where the operating characteristics or capabilities of the Engine/Propeller control are sufficiently different from the Primary System that the operating characteristics or capabilities of the aircraft, crew workload, or what constitutes appropriate crew procedures may be significantly impacted or changed.

'Brake Horsepower' means the power delivered at the main output shaft of an aircraft engine.

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'Continuous OEI Power and/or Thrust Rating' means the minimum test bed acceptance power and/or thrust, as stated in the engine type certificate data sheet, when running at the specified conditions and within the appropriate acceptance limitations.

'Control Mode' (Engine related definition) means each defined operational state of the Engine Control System where satisfactory Engine control can be exercised by the crew.

'Covered Fault' means a Fault which is detected and accommodated.

'Critical Engine' means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

'Detent' means a mechanical arrangement which indicates, by feel, a given position of an operating control. Once the operating control is placed in this position the detent will hold the lever there and an additional-to-normal force will be required to move the operating control away from the position.

'Electronic Engine Control System' (EECS) means an Engine Control System in which the primary functions are provided using electronics. It includes all the components (e.g. electrical, electronic, hydromechanical and pneumatic) necessary for the control of the Engine and may incorporate other control functions where desired.

'Engine' means an engine used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for the functioning and control, but excludes the propeller.

'Engine Control System' means any system or device which is part of the Engine Type design, which controls, limits or monitors Engine operation and is necessary for continued airworthiness of the Engine.

'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.

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'External load attaching means' means the structural components used to attach an external load to an aircraft, including external-load containers, the backup structure at the attachment points, and any quick-release device used to jettison the external load.

'Fault (or) Failure' means an occurrence which affects the operation of a component, part, or element such that it can no longer function as intended.

'Fault (or) Failure Accommodation' means the capability to mitigate, either wholly or in part, the effects of a Fault or Failure.

'Final take-off speed' means the speed of the aeroplane that exists at the end of the take-off path in the en-route configuration with one engine inoperative.

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'Flash resistant' means not susceptible to burning violently when ignited.

'Full-up Configuration' (Engine related definition) means an EECS that has no known Faults or Failures present.

'Gyroplane' means a rotorcraft the rotors of which are not engine driven except for initial starting, but are made to rotate by action of the air when the rotorcraft is moving, and the means of propulsion of which, consisting usually of conventional propellers, is independent of the rotor system.

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'Pitch Setting' means the propeller blade setting determined by the blade angle, measured in a manner and at a radius declared by the manufacturer and specified in the appropriate Engine Manual.

'Powered sailplane' means an aircraft, equipped with one or more engines having, with engine(s) inoperative, the characteristics of a sailplane.

'Primary Mode' (Engine related definition) means the mode that is intended to be used for controlling the Engine under normal operation. This is often referred to as the 'normal mode'.

'Primary System' means the part of the Engine/Propeller Control System used for controlling the Engine/Propeller under normal operation.

'Programmable Logic Device' (PLD) means an electronic component that is altered to perform an installation specific function. PLDs include, but are not limited to, Programmable Array Logic components (PAL), General Array Logic components (GAL), Field Programmable Gate Array (FPGA) components, and Erasable Programmable Logic Devices (EPLD).

'Propeller' means a complete propeller including all parts attached to and rotating with the hub and blades, and all any equipment defined in the Propeller type design required for the control and operation of the propeller.

'Protective breathing equipment' means breathing equipment for protection against smoke, fumes and other harmful gases.

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'Reference landing speed' means the speed of the aeroplane, in a specified landing configuration, at the point where it descends through the landing screen height in the determination of the landing distance for manual landings.

'Reversible Pitch Propeller' means a Propeller in which blade angle can be changed by the flight crew to produce reverse thrust.

'Rotational Direction of Equipment' means the direction of rotation as observed when looking at the drive face of the equipment (usually described as 'clockwise' or 'anti-clockwise').

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'True airspeed' means the airspeed of an aircraft relative to undisturbed air. True airspeed is equal to equivalent airspeed multiplied by $(\rho_0/\rho)^{1/2}$.

'Uncovered Fault' means a Fault or Failure for which either no detection mechanism exists or, if detected, no accommodation exists.

'Variable Pitch Propellers' means a Propeller, the Pitch Setting of which changes or can be changed, when the Propeller is rotating ~~or stationary~~. This includes:

- a. A non-governing Propeller, the Pitch Setting of which is directly under the control of the flight crew (controllable Pitch Propeller).
- b. A governing Propeller, the Pitch Setting of which is controlled by a governor or other automatic means which may be either integral with the Propeller or separately mounted equipment and which may or may not be controlled by the flight crew (constant speed Propeller).
- c. A governing Propeller, the Pitch Setting of which may be controlled by a combination of the methods of a. and b.

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