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Part 11: Control system

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Flight dynamics — Vocabulary —

Part 11: Control system

1 Scope

This document establishes the terms and definitions of the basic concepts applied in science, engineering and manufacturing in the field of flight control systems of aircraft (airplane and helicopter).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1 Basic concepts

3.1.1
system
combination of components, parts, and elements that are interconnected to perform one or more specific functions

3.1.2
control system
set of mechanical or electronic devices that manages, commands, directs or regulates the behaviour of other devices or *systems* (3.1.1) by controlling the output

3.1.3
flight control system
complex of mechanical and electronic devices of aircraft (airplane and helicopter) providing its stability and controllability to allow the pilot to control the movement and attitude of aircraft at all stages and the modes of flight by changing the external forces or moments acting on aircraft

3.1.4
automatic flight control system
AFCS
type of flight control system (3.1.3) which provides aircraft control by measuring controlled variables and comparing them with reference input to reach the goal defined over measured values in terms of quality

Note 1 to entry: The AFCS is composed of several sub-systems that work together to provide automatic flight control. The main components of the AFCS are the *autothrottle system* (3.3.9), *flight director system* (3.3.10), *autopilot system* (3.3.11), *flight management system (FMS)* (3.3.12).

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