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Space systems — Liquid rocket engines and test stands — Vocabulary

# FDIS stage

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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This document was prepared by Technical Committee <u>TC</u> 20, *Aircraft and space vehicles*, Subcommittee SC 14, *Space systems and operations*.

This second edition cancels and replaces the first edition (ISO 17540:2016), which has been technically revised.

The main changes are as follows:

- several terms are revised, including "rocket engine", "liquid rocket propulsion system", "high-altitude firing test", etc.;
- redundant terms are deleted.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

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## Space systems — Liquid rocket engines and test stands — Vocabulary

## 1 Scope

This document provides terms and definitions for design, tests, reliability analysis and quality control of liquid rocket engines. The terms can be used in all types of documentation and subject-matter literature, related to standardization or use of the results of field-specific works.

#### 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 General

### 3.1.1 **3.1.1**

## rocket engine

reaction engine that contains within itself, or carry along with itself, all the substances necessary for its operation or for the consumption or combustion of its fuel, not requiring any outside substance

## 3.1.2 **3.1.2**

## liquid rocket engine

rocket engine (3.1.1(3.1.1)) which uses liquid propellant

## 3.1.3 **3.1.3**

## liquid-fuelled thruster

**LFT** 

liquid-propellant propulsion device which is used as an actuator in launch vehicles, spacecraft and descent vehicle control systems for acceleration, attitude control, stabilization, trajectory correction, rendezvous, docking, braking, descent, landing and other manoeuvring operations, as well as for generating gravity by imparting acceleration

## 3.1.4 **3.1.4**

## liquid rocket propulsion system

system consisting of LRE (3.1.2(3.1.2)), propellant tanks, propellant (propellants) feeding system, thrust vector control system and engine control system

## 3.1.5 **3.1.5**

## clustered liquid rocket propulsion system

**CLRPS** 

*liquid rocket propulsion system* (3.1.4(3.1.4)) consisting of rocket engines of various applications, which are fed from common propellant tanks, but have autonomous (independent) propellant feed systems