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Space systems — Liquid rocket engines and test stands — Vocabulary

FDIS stage

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Contents

Foreword

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This document was prepared by Technical Committee TC 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 www.iso.org/members.html.

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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
RE
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
LRE
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
LRPS
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