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Space systems — Safety requirements — Part 3: Flight safety systems

Systèmes spatiaux — Exigences de sécurité — Partie 3: Systèmes de sauvegarde en vol



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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 14620-3 was prepared by Technica Committee ISO/TC 20, Aircraft and space vehicles, Subcommittee SC 14, Space systems and operations.

ISO 14620 consists of the following parts, under the general title *Space systems* — Safety requirements: — Part 1: System safety — Part 2: Launch site operations — Part 3: Flight safety systems — Reference of the following parts, under the general title *Space systems* — Safety requirements: — Part 1: System safety — Part 2: Launch site operations — Part 3: Flight safety systems — Reference of the following parts, under the general title *Space systems* — Safety requirements: — Part 1: System safety — Part 2: Launch site operations — Part 3: Flight safety systems — The following parts, under the general title *Space systems* — Safety requirements: — Part 2: Launch site operations — Part 3: Flight safety systems — Reference of the following parts, under the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — The following parts of the following parts, under the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — Reference of the following parts of the following parts of the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — Reference of the following parts of the following parts of the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — Reference of the following parts of the following parts of the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — Reference of the following parts of the following parts of the general title *Space systems* — Safety requirements: — Part 3: Flight safety systems — Reference of the following parts of the following parts

Introduction

Space launch activities can present hazards to people and damage to property and the environment. International space treaties adopted by the United Nations impose legal liabilities on countries involved in launching space vehicles to provide compensation for certain injuries and damages incurred as the result of such launches.

This part of ISO 14620 affects the safety of exposed people, property and environment, as well as those countries and organizations conducting commercial or civil launch activities.

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Space systems — Safety requirements —

Part 3: Flight safety systems



1 Scope

This part of ISO 14620 sets out the minimum requirements for flight safety systems (FSSs), including flight termination systems (FTSs, externally controlled systems or on-board automatic systems), tracking systems, and telemetry data transmitting systems for commercial or non commercial launch activities of orbital or suborbital, unmanned space vehicles. The intent is to minimize the risk of injury or damage to persons, property or the environment resulting from the launching of space vehicles.

This part of ISO 14620 can be applied by any country, by any international organization, whether intergovernmental or not, and by any agency or operator undertaking the launching of space vehicles.

This part of ISO 14620 is intended to be applied by any person, organization, entity, operator or launch authority participating in commercial or non-commercial launch activities of orbital, or suborbital, unmanned space vehicles unless more restrictive requirements are imposed by the launch site country.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14620-1:2002, Space systems — Safety requirements — System safety

ISO 14620-2:2000, Space systems — Safety requirements — Launch site operations

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14620-2 and the following apply.

3.1

flight safety system

combination of flight-, ground- or space-based hardware and software designed, installed and/or operated specifically for providing flight safety

NOTE 1 This combination of equipment, facilities, procedures and personnel required to monitor operations provides protection to personnel and property both foreign and domestic from any damage that may be caused by a non-nominal flight.

NOTE 2 The flight safety system may include flight termination systems, telemetry data transmitting systems and range tracking systems.