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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45976-2025

**Aircraft - Environmental test for airborne fluid system
components - Resistance to fire in designated fire zones**

飞机 机载流体系统部件的环境试验 指定火区的火焰耐受性

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is equivalent to ISO 23935:2006 "Environmental test procedures for components of aircraft onboard fluid systems - Flame resistance in specified fire zones". Receptivity".

The following minimal editorial changes have been made to this document.

--- To coordinate with the existing standard, the name of the standard is changed to "Flame in designated fire zones for environmental testing of aircraft onboard fluid system components Tolerance.

1 Scope

This document specifies the flame tolerance test requirements for fluid system components within designated fire zones. Such fluid system components must meet the specified Minimum flame resistance rating requirements.

This document does not address flame resistance outside designated fire zones, flammability requirements, and conditions arising from combustion chamber flames.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

ISO 2685:1998 Aircraft-borne equipment environmental test procedure flame resistance in a specified fire zone

3 Terms and Definitions

The following terms and definitions apply to this document.

designated fire zone designated fire zone the area of an aircraft defined by the aircraft designer in accordance with the requirements of the certifying authority, for example, the compartment containing the main engine and auxiliary power unit.

component

A unit in a fluid system that transports and/or contains liquids or gases.

fire resistant

The ability of a component (3.2) to withstand a standard flame impact for 5 min 3.4 fireproof the ability of a component (3.2) to withstand a standard flame impact for 15 min

4 Test equipment

The test equipment should comply with ISO 2685:1998.

The test equipment should be able to withstand the test conditions and simulate the actual fluid flow working conditions as much as possible.