

ICS 49.140
CCS V 70



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

GB/T 45737-2025

Pre-launch space debris mitigation review requirements

发射前空间碎片减缓审查要求

Issued on: May 30, 2025

Implemented on: September 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 General Requirements	2
4.1 Overview	2
4.2 Main review points	2
4.3 Review Basis	2
4.4 Review and approval requirements	3
5 Requirements for review of space debris mitigation measures for launch vehicles	3
5.1 Basic Information of Launch Project	3
5.2 Limiting the release of operational fragments	4
5.3 Preventing on-orbit disintegration	4
5.4 Post-mission deorbit disposal	5
5.5 Post-mission passivation	6
5.6 Space debris collision avoidance and on-orbit maneuvers	6
5.7 Reentry Safety Analysis	6
6 Requirements for review of space debris mitigation measures for spacecraft	7
6.1 Basic Information of Launch Project	7
6.2 Limiting the release of operational fragments	8
6.3 Preventing on-orbit disintegration	8
6.4 Post-mission deorbit disposal	9
6.5 Post-mission passivation treatment	10
6.6 Space Debris Collision Avoidance and On-Orbit Maneuvers	10
6.7 Reentry Safety Analysis	11
Reference	14

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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed and coordinated by the National Technical Committee for Standardization of Aerospace Technology and Its Applications (SAC/TC425).

This document was drafted by: National Astronomical Observatory of the Chinese Academy of Sciences, China Institute of Space Standardization, China Great Wall Industry Corporation, Major Special Engineering Center of the State Administration of Science, Technology and Industry for National Defense.

The main drafters of this document are: Liu Jing, Zhang Yao, Li David, Quan Haofang, Li Xiaolong, Gao Jun, Tang Menghui, Jiang Hai, Yang Xu, Cheng Haowen, Gan Qingbo, Zhao Nanying and Zhang Jia.

Pre-launch Space Debris Mitigation Review Requirements

1 Scope

This document specifies the technical requirements for space debris mitigation review and compliance assessment of spacecraft and launch vehicles before launch.

Requirements mainly include limiting the release of operational debris, preventing on-orbit disintegration, post-mission deorbit disposal, post-mission passivation disposal, and space debris collision.

Avoidance and on-orbit maneuvers, re-entry safety analysis, etc.

This document applies to the declaration and review of the implementation of space debris mitigation measures taken by spacecraft and launch vehicles.

2 Normative references

GB/T 32308-2015

GB/T 32455-2024

GB/T 34513-2017

GB/T 43224-2023

GB/T 45621

GB/T 45740-2025

3 Terms and definitions

Terms defined in GB/T 34513-2017, GB/T 43224-2023, GB/T 45621, GB/T 32455-2024 and the following terms and definitions apply to this document.

3.1 measures to address adverse impacts on the long-term sustainability of activities

In order to reduce the impact of space debris generation, long-term orbiting or reentry on the flight safety of on-orbit spacecraft and launch vehicles or on the outer space

3.2 Operational Debris

Objects that are separated or released into orbit during normal spacecraft operation according to design requirements.

Note 1. Adapters, connectors, protective devices or other parts are considered operational debris.

Note 2. Spacecraft and launch vehicle orbital stages have complete structures and are not considered operational debris.

Note 3. The slag ejected during the combustion of solid rocket motors and the liquid released from spacecraft are not considered operational debris.

3.3 de-orbit

After the mission is completed, the spacecraft or launch vehicle leaves the original orbit and enters a lower orbit to re-enter the atmosphere or leave the protection as soon as possible.

The process of maneuvering flight in which the area enters the prescribed grave orbit.