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BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

अंतरिक्ष प्रणालियाँ — परिक्रमा करने वाली वस्तुओं के
बीच टकराव से बचना

Draft Indian Standard

**SPACE SYSTEMS — AVOIDING COLLISIONS AMONG
ORBITING OBJECTS**

ICS: 49.140

Air and Space Vehicles Sectional Committee, TED 14

**Last date for receipt of comments is
25/09/2023**

Air and Space Vehicles Sectional Committee, TED 14

NATIONAL FOREWORD

(Formal Clause to be added later)

The text of ISO standard is proposed for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

SCOPE

This document is a guide for establishing essential collaborative enterprises to sustain the space environment and employ it effectively. This document describes some widely used techniques for perceiving close approaches, estimating collision probability, estimating the cumulative probability of survival, and manoeuvring to avoid collisions.

NOTE Satellite operators accept that all conjunction and collision assessment techniques are statistical. All suffer false positives and/or missed detections. The degree of uncertainty in the estimated outcomes is not uniform across all satellite orbits or all assessment intervals. No comparison within a feasible number of test cases can reveal the set of techniques that is uniformly most appropriate for all.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO/TR 16158 : 2021 or CONTACT:

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