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

GB/T 14410.7-2008

Replacing GB/T 14410.7-1993

**Flight mechanics -- Concepts, quantities and symbols -- Part 7:
Flight points and flight envelopes**

飞行力学 概念、量和符号 第7部分：飞行点和飞行包线

(English Translation)

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Foreword

GB/T 14410 "Flight mechanics - Concepts, quantities and symbols" is divided into nine sections.

- Part 1. Axis systems and motion state variables;
- Part 2. Forces, moments, their coefficients and derivative;
- Part 3. aircraft stability and control;
- Part 4. flight performance;
- Part 5. flight measurement;
- Part 6. Aircraft geometry;
- Part 7. Flight points and flight envelope;
- Part 8. dynamic characteristics of the aircraft;
- Part 9. atmospheric disturbance model.

This section GB/T 14410 Part 7.

The partial modification of the use of ISO 1151-7. 1985 "flight dynamics point of terminology and symbols flight and flight envelope." This portion ISO 1151-7. 1985 is the main difference between the adjusted part of the order entry.

This Part replaces GB/T 14410.7-1993 "Flight mechanics - Concepts, quantities and symbols - Part 7. Flight points and flight envelope." Section compared with the GB/T 14410.7-1993 The main changes are as follows.

- a) increase the "practical flight envelope 3.7.1", "3.7.2 allows the flight envelope" and "3.7.2 Use the flight envelope" and other definitions;
- b) Modify the "flight point 3.6.2 effective" and other terms and definitions;
- c) modify the terms and definitions refer to other chapters of the label;

d) an increase in the English index.

This part is proposed by the China Aviation Industry Corporation.

This part of the jurisdiction of the China Aviation Industry Corporation.

This section is drafted. Beijing University of Aeronautics and Astronautics, China Aviation Technology Institute Comprehensive, China Aviation Industry Institute of Aerodynamics, China Aviation Industry Development Research Center.

1 Scope

This section provides flight mechanics used in the study to determine the status of the flight terminology and symbols.

This section applies to fixed-wing aircraft, other aircraft can use the reference.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this section, however, encourage the parties to this part of the research agreement Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14410.5-2008 Flight mechanics - Concepts, quantities and symbols - Part 5.
Measurement Flight

3 Terms and Definitions

The following terms and definitions apply to this section.

Definition number or description 3.1.1 task mission in certain restrictions, especially in the time and space constraints, the flight should reach the goal of.

NOTE: The purpose and limits should be specified in the flight plan.

3.1.2

Flying Outline

flightprogram

In practical flight envelope (3.7.1) to accomplish specific tasks within the (3.1.1) required Intermediate target schedule.

Note: In the outline should indicate the flight during the flight due to environmental changes (such as fault, gas Meteorological conditions and air traffic, etc.) leaving the intermediate objectives adopted by certain conditions change Measures.

3.1.3

Flight phase

flightphase

Flight segment to indicate intermediate goals. For example, takeoff, climb, cruise, under Drop approach (approach), landing.

When defining the intermediate target, the targets have been identified should be given tolerance is reached.

And meet the conditions of tolerance begin the next phase of flight.

3.1.4

Sub-phase of flight

flightsub-phase

To indicate the flight phase (3.1.3) phases of flight primitive goals. example such as "take-off" phase of the "ground roll", "landing" phase of the "flattening" and "ground Surface roll. "When defining the target motif, shall be given to the identified target has been reached Tolerance and tolerance meet the conditions to start the next sub-phase.

Note: Due to the phase of flight is divided into several sub-stages, so certain parameters in the sub-stage the number is usually regarded as a constant value (such as the quality characteristics of the aircraft, atmospheric conditions, etc.).