

ICS 49.020
CCS V04



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

GB/T 14410.4-2008

Replacing GB/T 14410.4-1993

**Flight mechanics - Concepts, quantities and symbols - Part 4:
Flight performance**

飞行力学 概念、量和符号 第4部分：飞行性能

Issued on: July 18, 2008

Implemented on: January 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3.4.1 Takeoff distance, "" takeoff distance 3.4.2 ", "

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 Part of 414,410. This Part replaces GB/T 14410.4-1993 "Flight mechanics - Concepts, quantities and symbols - Part 4. flight performance." Section compared with the GB/T 14410.4-1993 The main changes are as follows:

- a) increase the "
3.8.1 life" and other definitions;
- b) modify the "minimum control speed air 3.3.4", "
3.3.9 takeoff ground speed", "

1 Scope

GB/T 14410.4-2008 is the Chinese national standard on flight mechanics - concepts, quantities and symbols - part 4: flight performance, in the field of aircraft and space vehicle engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification

calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 July 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2009. Classification: ICS 49.020, CCS V04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section provides a description of the aircraft flight performance of 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 14410.7-2008 Flight mechanics - Concepts, quantities and symbols - Part 7. Flight points and flight envelope

3 Terms, definitions and symbols The following terms, definitions and symbols apply to this section. No terms are defined or explained symbols and units

3.1.1 Takeoff weight take-offweight With the amount of fuel required to complete the task and have Total aircraft takeoff roll at the start of the loading effect weight. WTO In kilograms (kg)

3.1.2 Landing weight landingweight Aircraft predetermined configuration, load and the remaining fuel Weight when Lu. WL In kilograms (kg)

Note. The weight means quality. No terms are defined or explained symbols and units

3.2.1 The maximum afterburner maximumaugmented (Afterburning) condition Maximum engine thrust when using the urging means (Power) operation. Its period of operation by limit.

3.2.2 Maximum thrust (power) state maximumthrust (power) condition Takeoff thrust (power) state take-ofthrust (power) condition Maximum push when the engine does not start energizing means Force (power) operation. Its period of operation Restricted.

3.4.1 Takeoff distance, "" takeoff distance 3.4.2 ", "

3.5.3 ceiling ", "

3.7.3 Energy height "and interpretation of terms;

c) the increase in supplementary decision speed, critical engine, the approach speed of the term;

d) modify the terms and definitions has a reference number of the other clauses marked;

e) increasing the dimension of the unit, and indicated in the symbol bar;

f) 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 Research Institute of air power, in State Aviation Industry Development Research Center. The main drafters of this section. Hong Koon, Jiao Zhiqiang, Wang Lixin, Quxiang Ju, Zhang Shuguang, Shao arrows, Zhou Li Fu, Chen, Liyun Jun, Xiao Yelun, Li Yirui. This part of the standard replaces the previous editions are.

--- GB/T 14410.4-1993. Flight mechanics - Concepts, quantities and symbols Part 4. Flight Performance