ICS 49.090
CCS M50

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13186-2017

Replacing GB/T 13186-1991

General specification for airborne Doppler navigation systems

机载多普勒导航系统通用规范

Issued on: December 29, 2017 **Implemented on: July 1, 2018**

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

Table of Contents

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 13186-1991 "General Conditions for Airborne Doppler Navigation System", compared with GB/T 13186-1991 The main technical changes are as follows:

--- Removed the "indicator" "maintainability" "field replaceable unit (LRU) and infield replaceable unit SRU" three terms and set Justice (see Chapter 3 of the.1991 edition);

--- Added "waypoint" "route" "magnetic difference" "ground speed" "drift angle" "to be flying (flight time)" "yaw" "Doppler radar" "hover" Terms and definitions (see Chapter 3);

--- Modify the composition of the Doppler system (see 4.1,.1991 version 4.1.1);

--- Removed the test effects, indicators, temperature shocks, surface topography characteristics (see.1991 version 4.1.5, 4.1.6, 4.3.3, 4.2.4.1);

--- Increased lighting (see 4.7);

--- Modify the input and output interface (see 4.1,.1991 version 4.1.9);

--- Increasing the measurement speed, navigation and positioning, self-test, hover instructions (see 4.10.1.1, 4.10.1.2, 4.10.1.5, 4.10.1.6);

--- Modify the navigation accuracy of the content (see 4.2.10.2.1,.1991 version 4.2.2);

--- Increased navigation computer content (see 4.10.2.2);

--- Increase the hover indicator and data loading device in some specific indicators (see 4.10.2.4, 4.10.2.5);

--- Modify the vibration test curve in Figure 1 (see 4.11.5,.1991 version 4.3.6);

--- Added Figure 2 random vibration test curve (see 4.11.5);

--- Modify the electromagnetic compatibility (see 4.14,.1991 version 4.4);

1 Scope

GB/T 13186-2017 is the Chinese national standard on general specification for airborne

doppler navigation systems, 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 29 December 2017 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 July 2018. Classification: ICS 49.090, CCS M50. 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 standard specifies the requirements of the airborne Doppler navigation system (hereinafter referred to as Doppler system), test methods, inspection rules, and signs, Packaging, shipping and storage requirements. This standard applies to all types of aircraft used by the Doppler system, Doppler systems used by other aircraft can also refer to the use.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 191 Packaging - Pictorial signs

GB/T 8567 computer software documentation specification

GB/T 9386 computer software test document preparation specifications

GB/T 13384 mechanical and electrical product packaging General technical conditions

GB/T 15532 computer software test specification Accuracy assessment of inertial navigation systems HB6167.2-1989 civil aircraft airborne equipment - Environmental conditions and test methods Temperature and altitude test HB6167.3-1989 civil aircraft airborne equipment environmental conditions and test methods humidity test Civil aircraft airborne equipment - Environmental conditions and test methods - Damp heat test HB6167.5-1989 civil aircraft airborne equipment environmental conditions and test methods Aircraft impact and crash safety test Civil aircraft airborne equipment - Environmental conditions and test methods - Vibration test Civil aircraft airborne equipment - Environmental conditions and test methods - Explosion test Civil aircraft airborne equipment - Environmental conditions and test methods - Waterproof test Civil aircraft airborne equipment - Environmental conditions and test methods - Sand dust test Civil aircraft airborne equipment - Environmental conditions and test methods - Mold test Civil aircraft airborne equipment - Environmental conditions and test methods - Salt spray test

SJ3212 electronic products, transport and packaging of general technical conditions

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Waypoint waypoint Points selected for navigation and traffic control on or near the route.

3.2 Route courseline Projection of the path of scheduled sailing in horizontal plane.

3.3 Magnetic difference The angle between the meridian of a point on the ground and the geomagnetic meridian.