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

MH/T 1064.2-2017

**Safety code of power working with the helicopter. Part
2-Inspection operation
(English Translation)**

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Foreword

MH/T 1064 "Safety Regulations for Helicopter Electric Operation" is divided into the following seven parts.

- Part 1: General requirements;
- Part 2: Inspection operation;
- Part 3: Laser scanning operation;
- Part 4: Live work;
- Part 5: Electric water washing operation;
- Part 6: Hoisting and assembly tower operations;
- Part 7: Unfold the guide rope operation.

This part is part 2 of MH/T 1064.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part was proposed by the Transportation Department of the Civil Aviation Administration of China.

This part was approved by the Aircraft Airworthiness Certification Department of the Civil Aviation Administration of China.

This part is under the jurisdiction of the China Academy of Civil Aviation Science and Technology.

Drafting organizations of this section. The Second Research Institute of Civil Aviation Administration of China, State Grid General Aviation Co., Ltd.

1 Scope

This part of MH/T 1064 stipulates the use of manned helicopters (hereinafter referred to as helicopters) to inspect overhead transmission lines General requirements, safety requirements of different inspection methods, and work requirements before and after operations.

This section applies to the inspection of overhead transmission lines by manned helicopters equipped with special equipment.

2 Normative references

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

GB 26859 Electric Safety Work Regulations (Part of Power Lines) DL/T 288 Technical Guidelines for Helicopter Inspection of Overhead Transmission Lines DL/T 289 Helicopter inspection operation warning signs for overhead transmission lines RTCA/DO-160 Aviation Radio Technology Committee/Airborne Equipment Environmental Conditions and Test Procedures

3 Terms and definitions

The following terms and definitions apply to this document.

Helicopter inspection Use helicopters to carry infrared, ultraviolet, visible light and other equipment to the transmission line related facilities (main body, auxiliary facilities) and channel environment Conduct inspections and inspections.

Helicopter optoelectronic pod Integrate one or more photoelectric sensors (such as visible

light camera, visible light camera, infrared thermal imager, ultraviolet imager, etc.) in the top the screw stabilized platform can be mounted on the enclosed equipment under the helicopter body.

Control and display equipment A complete set of equipment used to receive and display the status and data of the optoelectronic pod, and to control the task of the optoelectronic pod, generally including a display and control 3.4 Adapter bracket A bracket that realizes the mechanical connection between the pod shock absorber and the aircraft bracket so that the pod installation hole position and the aircraft installation hole position can be matched.

Visible inspection

Use helicopters to carry relevant visible light equipment to inspect the main body of the transmission line, auxiliary facilities and line corridors and record relevant information.

Infrared inspection

Use helicopter-mounted thermal imaging cameras to detect temperature and record phases of wire connection points, clamps, insulators and other components of transmission lines
Related information.

UV inspection

Use helicopter-mounted ultraviolet imager to perform corona detection on wires, insulators and fittings of transmission lines and record relevant information interest.

Fault inspection

After the line fails, the line inspection is carried out to find out the line fault point, the cause of the fault and the fault situation.

Post-disaster inspection After severe weather and natural disasters occur, the operation status, damage and environmental changes of the corridors of the section of the line
Inspections.

4.1 Personnel

4.1.1

The captain performing helicopter inspection operations shall meet the following requirements.

- The total flight time of the helicopter not less than 600 h;
- Not less than 100 hours of helicopter inspection flight experience;
- Have the flight qualification of the operating model, and complete the technical training for landing at ultra-low altitude and temporary outdoor landing sites, and have the ability to fly in mountains, Low-altitude flight, hovering, and other stable flight technology level.

4.1.2

The personnel on board performing helicopter inspection operations shall meet the following requirements.

-Meet the requirements of GB 26859 for staff in terms of physical conditions, safety production knowledge and skills, electrical knowledge and business skills, etc.

Requirements;

--Familiar with aviation, meteorology, geography and other related professional knowledge, and have undergone professional training in helicopter inspection operations.

4.2 Equipment

4.2.1

The photoelectric pod of a helicopter shall include a gyro stabilized platform, photoelectric sensors, display and control equipment and supporting software.

4.2.2

The photoelectric sensor of the helicopter should be one or more groups of visible light camera, visible light camera, infrared thermal imager, ultraviolet imager, etc.

Together.

4.2.3

The electromagnetic compatibility design of the electro-optical pod of the helicopter shall comply with the relevant regulations of RTCA/DO-160. The distance between AC and DC transmission lines of 500 kV and above it should be able to be used normally when the road is 20 m.

4.2.4

The gyro stabilized platform shall have a self-locking function.

4.2.5

The pod adapter bracket (shock-absorbing bracket) should have the function of vibration isolation, and the mechanical strength should meet the requirements for pod mounting.

4.2.6

The pod adapter bracket (damping bracket) should be universal and interchangeable between different helicopter platforms.

4.2.7

Operating helicopters should be equipped with navigation, flight records, remote real-time monitoring and command and hazard warning systems.