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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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Specification for drawing safe firing area maps for weather modification rocket launching sites

人工影响天气火箭作业点安全射界图绘制规范

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed by the China Meteorological Administration. This standard is under the jurisdiction of the National Technical Committee for Artificial Weather Modification (SAC/TC538). This standard was drafted. Shandong Provincial People's Government Artificial Weather Influencing Office, China Meteorological Administration Shanghai Materials Management Office, Shanxi Province Labor Rainfall Flood Control Office, Qingdao Municipal People's Government Office of Artificial Weather Modification. The main drafters of this standard. Gong Yuli, Guo Jian, Liu Wei, Li Peiren, Wang Jun, Yan Zhen, Yang Fan, Zhang Hongsheng. Safety impact map of artificially affected weather rockets Drawing specification

1 Scope

China's national specification for producing the safe firing area map of a weather modification rocket site. It specifies the terms and definitions, the basic requirements, the selection of safe firing directions, the drawing of the map and its review. Weather modification in China is done at scale: thousands of ground sites fire rockets and artillery shells carrying silver iodide into cloud to suppress hail over farmland or to induce rain. The rockets reach several kilometres and what goes up comes down, so every site needs a map showing which bearings and elevations may be fired and which may not, drawn from what lies beneath the trajectory and the fall zone - villages, roads, railways, power lines, reservoirs, and the airways overhead. The map is the operational control: the operator fires by it. Standardising how it is drawn and reviewed is what makes the safety of several thousand sites a matter of procedure rather than of local judgement.

This standard stipulates the requirements for the selection of safety shots for the artificially affected weather rocket operating points and the drawing and review of safety shots. This

standard is applicable to the drawing of the safety shot boundary map of the artificially affected weather rocket operating point.

2 Normative references

The following documents are indispensable for the application of this document. 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 2260 Administrative division code of the People's Republic of China QX/T 151 Artificial Weather Influencing Terms

3 Terms and definitions

The following terms and definitions defined by QX/T 151 apply to this document.

3.1 Rocket safety shot safefiringareaofrocketlaunching In order to avoid the failure of the self-destruction or parachute device failure rockets fall into densely populated areas or safe areas preset by important facilities.

Note. Population-intensive areas refer to towns, villages, schools, etc.; important facilities refer to oil depots, chemical plants, high-speed railways, airports, cultural relics and military facilities.

4 Basic requirements

4.1 To draw a safe shot plot, the scope, plotting method and audit requirements of the safe shot should be clarified.

4.2 The safety shot map shall include the base map (6.1), the horizontal distance circle (6.2), the shooting distance circle (6.3), the bearing line segment (6.4), and the safety shot boundary pattern. (6.5), safety shot number (6.6), safety shot range table (6.7), labeling information (6.8) and other elements, the sample picture is shown in Figure A.1 of Appendix A.

4.3 The length of the printed frame of the safety shot line shall be not less than 0.9m and the width shall not be less than 0.6m.

5 Security shot selection

5.1 Selection rules The safety shot should be selected within the maximum theoretical range of the rocket around the operating point and observe the following rules.

a) Based on the launcher center, there should be no densely populated areas and important facilities within 1km of the launch of the rocket;

b) Avoid densely populated areas and important facilities, and the corresponding elevation angle should be 50°~75°;

c) The distance between the safety shooting boundary and the surrounding densely populated areas and important facilities should be greater than.200m.

5.2 Minimum range of safety shots The range of azimuth and azimuth of the rocket corresponding to the selected safety shot should meet the following conditions.