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Minimum Operational Performance Standards (MOPS) for Airborne Weather and Ground Mapping Pulsed Radars

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Includes Errata and Change 1

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F O R E W O R D

This document was prepared by Special Committee 133, of the Radio Technical Commission for Aeronautics (RTCA). It was approved by RTCA on November 19, 1980.

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TABLE OF CONTENTS

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1.0 PURPOSE AND SCOPE

1.1 Introduction

This document sets forth Minimum Operational Performance Standards (MOPS) for Airborne Weather and Ground Mapping Pulsed Radars. In addition to updating and expanding the scope of RTCA DO-134 (Minimum Performance Standards - Airborne Weather and Ground Mapping Pulsed Radars) to incorporate the provisions of new radar technology, this document is also intended to serve as a standard for both air carrier or large aircraft-type radar systems. It takes into account those requirements and technologies pertinent to general aviation, where limitations on space and/or weight may apply.

Compliance with these standards by manufacturers, installers and users is recommended as a means of assuring that the equipment will perform its intended function under all conditions normally encountered in routine aeronautical operations. It is recognized that any regulatory application of these standards is the responsibility of appropriate governmental agencies.

The word "equipment" as used herein includes all components or units necessary (as determined by the manufacturer or installer) for the equipment to properly perform its function. For example, the airborne radar "equipment" may include an antenna, antenna mounting, transmission line, a receiver/transmitter unit, a control/display unit, shock mount, etc. In the case of this illustrative example, all of the foregoing components or units comprise the "equipment." It should not be inferred from this example that every equipment configuration will necessarily include (or be limited to) all of the foregoing components or units. This will depend on the design chosen by the equipment manufacturer.

Some system designs, as an example, may not include a dedicated radar display unit, per se, but rather may share a multipurpose display such as an EFIS (Electronic Flight Indicator System). For airborne radar systems of such architecture, the shared display device, when used for the purpose of displaying radar information (either weather or ground mapping), must meet the display requirements as set forth in this document.