SAE Aerospace
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AEROSPACE STANDARD

SAE AS5116 REV. C

Issued 1996-11
Revised 2003-06
Cancelled 2007-08

Superseded by AS5681

Minimum Operational Performance Specification for Ground Ice Detection Systems

RATIONALE

AS5116 is a Minimum Operational Performance Specification (MOPS) for Remote On-Ground Ice Detection Systems (ROGIDS), issued in February 2002. Since that time Human Factors tests, regulatory reviews and laboratory tests have emphasized the need for separate Standards for On-Ground Remote, On-Board Remote, and On-Board In Situ Sensors. Accordingly, a new upgraded document to cover Remote On-Ground Ice Detection Systems (ROGIDS) only, AS5681 is under development and scheduled for issue in 2007. At the present time work on an appropriate new Standards for On-Board sensors has not been initiated.

Based on a decision made by the G-12ID Committee, it was agreed to declare the subject specification CANCELLED.

CANCELLATION NOTICE

This document has been declared "CANCELLED" as of August 2008 and has been superseded by AS5681. By this action, this document will remain listed in the Numerical Section of the Aerospace Standards Index noting that it is superseded by AS5681.

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FOREWORD

The development of these guidelines was jointly accomplished by EUROCAE Working Group 54 and the Society of Automotive Engineers (SAE) G-12 Ice Detection Subcommittee through a consensus process. It was accepted by the Council of EUROCAE on November 2001 as ED 104 and SAE on February 2002 as AS5116A.

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1. SCOPE:

This SAE Aerospace Standard (AS)/Minimum Operational Performance Specification (MOPS) specifies the minimum performance requirements of Ground Ice Detection Systems (GIDS). These systems may be mounted onboard the airplane, or be ground-based. They may provide information for indication and/or control.

Chapter 1 provides information required to understand the need for the GIDS characteristics and tests defined in the remaining chapters. It describes typical GIDS applications and operational objectives and is the basis for the performance criteria stated in Chapter 3 through Chapter 5. Definitions essential to the proper understanding of this document are provided in Chapter 1.

Chapter 3 contains general design requirements for an ice detection system used during ground operations.

Chapter 4 contains the Minimum Operational Performance Requirements for the GIDS, defining performance under icing conditions likely to be encountered during ground operations.

Chapter 5 describes environmental test conditions providing laboratory means of testing the overall performance characteristics of the GIDS under conditions which may be encountered in actual operations.

Chapter 6 describes recommended test procedures for demonstrating compliance with Chapters 3 and 4.

Chapter 7 contains the Minimum Operational Performance Requirements for installed GIDS. Ground and flight tests are included when performance cannot be adequately determined through testing under standard test conditions.

1.1 Applications of This Document:

Compliance with this AS/MOPS ensures that the GIDS will satisfactorily perform its intended functions as given by 1.2 during airplane ground operations.

Compliance with this AS/MOPS does not necessarily constitute compliance with regulatory requirements. Any regulatory application of this document in whole or in part is the sole responsibility of the appropriate government agencies.

The measured values of the GIDS performance characteristics may be a function of the method of measurement. Therefore, standard test conditions and methods of testing are recommended in this document.