

# AEROSPACE STANDARD

AS5635™

REV. A

Issued Revised 2019-03 2022-06

Superseding AS5635

Message Boards (MBs)

### **RATIONALE**

This SAE Aerospace Standard (AS) establishes the minimum standard requirements for message boards (MBs) utilized at designated deicing facilities (central deicing facilities/remote deicing areas). This AS also defines the minimum content and appearance of the display, functional capabilities, design requirements, and inspection and testing requirements of MBs.

## **FOREWORD**

A visual message display system is intended to improve deicing facility safety and operations management.

The primary intent of the MB is to safely enhance all aircraft movements on a specific designated deicing facilities (DDF). The secondary intent of the MB is to enhance communication and provide information to the pilot related to deicing operations.

This SAE Aerospace Standard (AS) covers message boards for DDF.

NOTE: Electronic message boards (EMB) will fall under the message board category unless specified.

#### **TABLE OF CONTENTS**

1.	SCOPE	3
1.1	Equipment Classification	3
1.2	Field of Application	
1.2.1	Applicable Airplanes	
1.2.2	Applicable Airports	
1.3	System Elements	
1.3.1	Message Boards	
1.3.2	MB Controls	
1.3.3	Alternative Applications for MBs	
2.	REFERENCES	3
2.1	Applicable Documents	
2.1.1	SAE Publications	
2.1.2	MB Manufacturers' and Operators' Documentation	
2.1.3	RTCA Publications	4
2.1.4	FAA Publications	
2.1.5	Transport Canada Publications	
2.1.6	ICAO Documents	
2.2	Definitions	
2.3	Abbreviations	

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2022 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER:

Tel: 877-606-7323 (inside USA and Canada)

For more information on this standard, visit

s/content/AS5635A/

This is a preview. Click here to purchase the full publication.

3.	GENERAL DESIGN REQUIREMENTS	6
3.1	Introduction	6
3.2	Purpose	6
3.3	Technical Requirements	6
3.3.1	Design and Selection of Materials	6
3.3.2	Workmanship	6
3.3.3	Electrical Bonding and Grounding	7
3.3.4	Manufacturer Identification	7
3.3.5	Components	7
3.3.6	Operation	7
3.4	Facility Considerations	7
3.4.1	MB Location on Bay	
3.5	Pad Lead-in and Exit Identification	7
3.5.1	Message Displays Errors	7
3.5.2	Aircraft Entry to Pad (See Figure 1)	7
3.5.3	Positioning of Aircraft on the Pad (See Figure 2)	8
3.5.4	De/Anti-Icing Information to Flight Crew (See Figures 3 and 4)	8
3.5.5	Aircraft Exit from Deicing Bay (See Figure 5)	8
3.5.6	Supplemental Information	8
3.6	Dissemination of MB Information	8
3.7	Message Board Geometry	9
3.7.1	Messaging Capabilities	10
3.7.2	Display Format	
3.7.3	Deicing Pad Identification on Message Boards	10
3.8	Safety Requirements	10
3.8.1	Design for Safety	10
3.8.2	System Malfunction Procedure	10
3.8.3	Operating Lighting Conditions	10
3.8.4	Operating Weather Conditions	11
4.	INSPECTION AND TESTING	11
5.	NOTES	12
5.1	Revision Indicator	12
Figure 1	Sample information displays: aircraft entry to pad	
Figure 2	Sample information displays: aircraft positioning	8
Figure 3	Sample information displays: radio frequency (display when AC stops)	9
Figure 4	Sample information displays: deicing information	
Figure 5	Sample information displays: aircraft exit	
Table 1		10

#### 1. SCOPE

This SAE Aerospace Standard (AS) establishes the minimum standard requirements for message boards (MBs) at designated deicing facilities.

The design of aircraft deicing facilities is covered by ARP4902.

Standards for the deicing facility management system are outside the scope of this document.

### 1.1 Equipment Classification

The MB system may incorporate additional features not addressed in this AS (such as the ability to display quantity or brand of deicing/anti-icing icing fluids). The incorporation of such additional features, which are not considered essential for system functioning, shall not compromise the system's intended purpose.

## 1.2 Field of Application

## 1.2.1 Applicable Airplanes

The MB system is applicable to all classes of aircraft using designated deicing facilities.

## 1.2.2 Applicable Airports

The message board system shall be compatible with airport ground operations operating under ICAO Standards.

# 1.3 System Elements

## 1.3.1 Message Boards

MBs display variable information that supports the deicing process; these may also include information on aircraft guidance and positioning.

#### 1.3.2 MB Controls

Control of the messages on the boards can be either manual and/or automatically operated.

Through the integration of additional tecnology, the system may be further enhanced to include resource management, data archiving, retrival, and recording.

#### 1.3.3 Alternative Applications for MBs

MB technologies may have alternative applications for airport operations (e.g., aircraft/vehicle movement instruction/information).

## REFERENCES

## 2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.