



AEROSPACE RECOMMENDED PRACTICE

ARP4102™/3

Issued	1988-07
Reaffirmed	2017-01

Flight Deck Tire Pressure Monitoring System (TPMS)

RATIONALE

ARP4102/3 has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE:

1.1 This document recommends design criteria for a Flight Deck Tire Pressure Monitoring System. The requirements arise from operational experience of incidents, which have led to considerable damage to aircraft systems and structures caused by tire debris and wheel fragments.

2. REFERENCES:

2.1 Documentation:

This annex should be used in conjunction with the ARP4102 Core Document. The following documents may also be applicable:

- SAE S-7 ARP4101, Flight Deck Layout and Facilities
- SAE S-7 ARP4102/4, Flight Deck Alerting System
- SAE S-7 ARP4105, Nomenclature and Abbreviations for Use on the Flight Deck

3. OPERATIONAL REQUIREMENTS:

3.1 General:

- 3.1.1 The system shall provide signals to an alerting system (or tire pressure indicating system) in order to warn of abnormal pressure.
- 3.1.2 The system shall function properly in all environmental conditions expected to be encountered by the aircraft.
- 3.1.3 The system shall function while the aircraft is on the ground and in flight.
- 3.1.4 The system shall provide a very low probability of undetected critical pressure.
- 3.1.5 The system shall require minimum crew attention.

SAE Technical Standards Board 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 © 2017 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)
 Tel: +1 724-776-4970 (outside USA)
 Fax: 724-776-0790
 Email: CustomerService@sae.org
 http://www.sae.org

SAE WEB ADDRESS:

**SAE values your input. To provide feedback on this
 Technical Report, please visit
<http://standards.sae.org/ARP4102/3>**