



AEROSPACE INFORMATION REPORT

AIR6552™/3

Issued 2016-05
Reaffirmed 2020-12

Network End-to-End Data Link
Evaluation System Transceiver Health Monitoring

RATIONALE

To assure mission readiness there is a need for a robust optical performance monitoring system capable of detecting, localizing, and isolating impairments as well as assisting in failure prediction of the physical layer of a fiber optic network. Transceiver health monitoring can provide real-time information about the physical, electrical, and optical characteristics.

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Documents

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1. SCOPE

This document establishes methods to obtain, store, and access data about the health of a fiber optic network using commercial sensors located in or near the transceiver. This document is intended for: Managers, Engineers, Contracting Officers, Third Party Maintenance Agencies, and Quality Assurance.

2. REFERENCES

The documents listed in 2.1 are referenced in this document. The documents listed in 2.2 are provided for information purposes only and do not form a part of the requirements of this document.

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.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS8472 Specification for Diagnostic Monitoring Interface for Optical Transceivers

2.2 Related Publications

The following documents are provided for reference only and do not form requirements for this specification.

2.2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AIR6031 Fiber Optic Cleaning

ARP5602 A Guideline for Aerospace Platform Fiber Optic Training and Awareness Education

AS5675 Characterization and Requirements for New Aerospace Fiber Optic Cable Assemblies - Jumpers, End Face Geometry, Link Loss Measurement, and Inspection

ARP5061 Guidelines for Testing and Support of Aerospace, Fiber Optic, Inter-Connect Systems

2.2.2 ANSI Accredited Publications

Copies of these documents are available online at <http://webstore.ansi.org>.

ANSI Z136.1-2007 American National Standard for Safe Use of Lasers

ANSI/TIA-440-B-2004 Fiber Optic Terminology