



AEROSPACE RECOMMENDED PRACTICE

ARP1088™**REV. C**

Issued 1970-12
Reaffirmed 2015-08
Revised 2021-06

Superseding ARP1088B

(R) Aircraft Indicating Systems Optical Performance

RATIONALE

One of the referenced documents CFR 25.1322 has dramatically changed and we need to provide guidance on the revision.

1. SCOPE

- 1.1 This ARP is intended to cover the warning, caution, and advisory indicating system required for commercial and military aerospace vehicles.
- 1.2 The purpose of this ARP is to recommend certain basic optical and lighting considerations which the design engineer should observe when designing a visual warning indicating system. It is recognized that many types of warning indicators and systems are available for the designer to use. This ARP does not recommend any specific system but outlines design and installation requirements.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of 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 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.

AS425C	Nomenclature and Abbreviations for Use on the Flight Deck
AS18012	Markings for Aircrew Station Displays, Design and Configuration of
AS25050	Colors, Aeronautical Lights and Lighting Equipment, General Requirements for
ARP4103	Flight Deck Lighting for Commercial Transport Aircraft
APR4102/4	Flight Deck Alerting System (FAS)
ARP4105	Abbreviations, Acronyms, and Terms for Use on the Flight Deck

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Documents
Document Sharing Hub

2.2 U.S. Government Documents

Copies of these documents are available online at <https://quicksearch.dla.mil>.

HANDBOOKS

JSSG documents can be obtained from ASC/ENOI, Bldg 560, 2530 Loop Road West, Wright-Patterson AFB, OH 45433-7101.

JSSG-2010-5 Joint Service Specification Guide – Crew Systems – Aircraft Lighting Handbook

SPECIFICATIONS

CFR 25.1301 Function and installation

CFR 25.1302 Installed systems and equipment for use by the flightcrew

CFR 25.1309 Equipment, systems, and installations.

CFR 23.1322 Airworthiness Standards: Normal, Utility, Acrobatic, and Commuter Category Airplanes, Warning, Caution and Advisory Lights

CFR 25.1322 Airworthiness Standards: Transport Category Airplanes, Warning, Caution and Advisory Lights

CFR 27.1322 Airworthiness Standards: Normal Category Rotorcraft, Warning, Caution and Advisory Lights

CFR 29.1322 Airworthiness Standards: Transport Category Rotorcraft, Warning, Caution and Advisory Lights

MIL-PRF-22885 Switches, Push Button, Illuminated, General Specification For

MIL-PRF-38039 Systems, Illuminated, Warning, Caution, and Advisory, General Specification For

STANDARDS

MIL-STD-411 Aircrew Station Alerting Systems

MIL-STD-1472 Human Engineering

MIL-STD-3009 Lighting, Aircraft, Night Vision Imaging System (NVIS) Compatible

3. CATEGORIES OF INDICATING SYSTEMS

3.1 Warning Indicating Systems

A Warning Indicating System is one which indicates to the pilot, or crew member, that a hazardous condition exists requiring immediate action to prevent loss of life, equipment damage, or abortion of the mission. Example: FIRE WARNING.

3.2 Caution Indicating Systems

A Caution Indicating System is one which indicates to the pilot, or crew member, that an impending dangerous condition exists. The condition will require attention but not necessarily immediate action. Example: FUEL PRESSURE LOW.

3.3 Advisory Indicating Systems

An Advisory Indicating System is one which indicates to the pilot, or crew member, a safe or normal configuration, operation of essential equipment, or otherwise attracts attention for routine awareness. Example: NAV READY.