



GAMA PUBLICATION NO. 15

SYMBOLIC MESSAGES

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Preface

GAMA (General Aviation Manufacturers Association) is an international trade association representing more than 85 of the world's leading manufacturers of general aviation airplanes and rotorcraft, engines, avionics, components and related services. GAMA's members also operate repair stations, fixed based operations, pilot and maintenance training facilities, and manage fleets of aircraft. GAMA fosters and advances the welfare, safety, and interests of general aviation by working with governments and the industry to promote a better understanding of the important role general aviation plays worldwide in economic growth and development. GAMA is headquartered in Washington, DC, with a European office in Brussels, Belgium. For additional information, visit GAMA's website at www.GAMA.aero.

One of GAMA's objectives is to foster the development of industry publications and best practices to enhance aviation safety through standardization. This publication was developed to provide industry with a reference containing the most commonly used symbolic messages, that have been recognized by the leading aviation regulators as acceptable means of compliance to the regulations (when required), or recognized as best practices in order to promote standardization.

Questions on interpretation and proposed changes to this publication (including requests to provide symbolic examples) should be submitted to General Aviation Manufacturers Association, Suite 801, 1400 K Street, N.W., Washington, D.C. 20005 or emailed to comments@gama.aero.

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1.0 General

The existing publications referencing aircraft interior symbolic messages have a limited number of “agency acceptable” options; often with a localized national focus. As a result, many of the symbolic placards being used in aircraft interiors are required to gain project specific acceptance for symbolic signage on a case by case basis. This practice results in multiple variations of symbols that portray a single common message, creating inconsistencies between countries, manufacturers, and aircraft fleets that can potentially decrease the passenger’s understanding of the intended message.

As any single aircraft is often expected to be operated in multiple countries, the number of written placards has increased as a result of the need for displaying instructions in multiple languages. In addition, literacy aptitudes of the passengers and cultural sensitivities may also contribute to the increased use of placards within the interior. Removing the need for numerous languages to convey a single message allows the instructions to be quickly understood by a much broader populace and eliminates variations of the same message.

1.1 Objective

The objective of this publication is to provide industry with a reference containing the most commonly used symbolic messages that have been recognized by the leading aviation regulators as acceptable means of compliance to the regulations (when required), or recognized as best practices in order to promote standardization. This industry publication aligns with the current aviation authorities’ efforts to utilize acceptable industry standards, where appropriate, and can be used in aircraft interiors without the need for additional certification approval (airworthiness approval of installations may be required). It aims to reduce the numerous variations of existing illustrations by providing an acceptable example and by providing consideration criteria for the development of new symbolic messages beyond those contained within this publication.

Symbolic message standardization is expected to enhance passenger safety and comprehension by reducing the number of written instructions through the promotion of consistent and uniform symbolic instructions. Safety enhancements and consistency can be achieved through the symbolic messages’ repetition and consistent use of color schemes, simplification of otherwise complex written instructions that may result in quicker comprehension, and by eliminating the need for language-dependent placards by the use of symbols. The combination of reducing the number of placards and providing concise instructions symbolically will result in a spatially efficient aircraft interior, allowing important safety instructions to be more readily located and satisfied.

1.2 Scope

For the purposes of this publication, a symbolic message is one that discernibly conveys its message through a generated graphical symbol, pictorial likeness to a physical object, or represents a subject by suggestion or resemblance and can be displayed on a placard or lighted or non-lighted signage. All symbols contained within this publication provide one acceptable example (not the only example) to effectively communicate the intended message.

No requirement will be established nor assumptions made that symbols absent from this publication are to follow similar processes and concepts. This publication is intended to reduce the variations of the most common instructions to passengers but is not intended to set a requirement for which all other symbolic messages must follow. Nor is this publication intended to impact any previously certified and installed messages. Manufacturers may continue to develop customized messages at their discretion; and in no way is this publication intended to limit them from doing so.

1.3 Publication Change Management

All changes to this publication will be indicated by a change bar in the left margin of the document and will remain until the next revision. Each page will also display the revision number at the top of the document in the header section. Document revisions will be tracked in the records of revisions section, while a revision status list of each page will be tracked in the list of effective pages section of this document.

1.4 Requesting Incorporation of Additional Symbolic Messages

Symbolic messages contained in this publication would typically be provided by industry such as aircraft manufacturers but could also be proposed by a regulating agency (FAA, EASA, etc.). Proposed messages will be offered on a voluntary basis along with any applicable supporting data with no compensation to be expected for their public use. The source document used to gain agency acceptance will not be included in this publication but will be kept on file at GAMA.

It is anticipated that any proposed symbolic messages to be included in this publication will be submitted to GAMA for endorsement, incorporated by document revision, and recognized in this publication's revision status by the regulating authorities. An example of recognition can be accomplished by being referenced in published guidance or acceptable means of compliance to current requirements and regulations.

2.0 General Installation Principles of Symbolic Messages

2.1 Consistency Throughout the Cabin

To help promote a comprehensive understanding of instructions within the interior of an aircraft, it is important to maintain consistency regarding color, size, orientation and viewing angles from the intended passenger.

Regarding color, it is recommended to consistently use the same color for subject matter and for positive or negative instructions. For example, if a fasten seat belt sign uses a green arrow to indicate a positive or encouraged instruction, the color green should be commonly used as a positive instruction throughout the aircraft interior. Conversely, if the color red is used as a discouraging symbol, red should be used consistently for negative connotations. Finally, if the subject of a symbol is displayed in the color gray, it is recommended to maintain the color gray when appropriate.

2.2 Use of Multiple Symbolic Messages in Close Proximity

Use of Multiple Symbols in some cases may be necessary to describe a complex message or series of instructions. When this approach is necessary, it is important to remain consistent in the symbol's structure and subject matter. The use of multiple messages in close proximity with non-related, inconsistent or conflicting guidance should be avoided. In addition, the use of multiple messages on a single placard should also be avoided.

2.3 Use of Text to Enhance Comprehensibility of Symbolic Message

In some cases, it may be necessary for a symbolic message to be accompanied by text to ensure comprehension of the intended message. In these cases, it is recommended to use the minimum amount of text necessary to complete the instruction.

3.0 Attributes of Symbolic Messages within this Publication

3.1 Remarks

Each symbolic message may or may not have information in the remarks section to identify its intended use. Types of remarks may include, but are not limited to, limitations to an installed location, position, lighted or non-lighted, intended recipients, or to provide important regulatory information regarding its use.

The symbolic messages depicted in this publication may include direction for specific locations for their use. If the message does have location-specific criteria, the message is only assumed to have been shown acceptable for that specific location and should not be assumed to be suitable in other locations.

3.2 Color

The indicated colors have been accepted on a generic basis; therefore, like colors are acceptable.

3.3 Symbolic Message Examples

Any user of this document must ensure that he or she is referencing the most current revision level. Questions on interpretations, revision status and proposed changes to this publication (including requests to provide symbolic examples) should be submitted to General Aviation Manufacturers Association, Suite 801, 1400 K Street, N.W., Washington, D.C. 20005 or emailed to comments@gama.aero.

Air Sick Bags

Remarks: None

Colors

Background: White

Symbol: Gray



Ashtray

Remarks: None

Colors

Background: White

Symbols: Gray or Black



Battery – Emergency Power Pack

Remarks: This symbol is directed primarily to maintenance personnel

Colors

Background: White

Symbol: Gray



Call Attendant - Unisex

Remarks: Symbol may also be white with a blue background

Colors

Background White

Symbol: Gray



Diaper Changing Table

Remarks: None

Colors

Background: White

Symbol: Gray



Disabled Accommodated

Remarks: None

Colors

Background: White

Symbol: Blue



Disabled Accommodated Flush

Remarks: None

Colors

Background: Blue

Symbols: White



Do Not Sit Here

Remarks: None

Colors

Background: White

Circle: Slash Red

Figure/Seat: Gray



Escape Slide Armed

Remarks: None

Colors

Background: White

Symbol: Gray



Escape Slide Disarmed

Remarks: None

Colors

Background: White

Symbol: Gray



Exit

Remarks: None

Colors

Background: White

Symbol: Green



Exit – Below Crew Rest Compartment (Running Man)

Remarks: None

Colors

Background: White

Symbol: Green



Exit – Crew Rest Compartment (Running Man)

Remarks: None

Colors

Background: White

Symbol: Green

Symbol: Green



Exit – Cross Aisle

Remarks: None

Colors

Background: White

Symbol: Green



Exit – Forward (Running Man)

Remarks: None

Colors

Background: White

Symbol: Green



Exit – Indication – Left of Door (Running Man)

Remarks: None

Colors

Background: White

Symbol: Green



Exit – Indication – Right of Door (Running Man)

Remarks: None

Colors

Background: White

Symbol: Green



Fasten Seatbelt

Remarks:

Placard and Lighted Version. Although AC25-17A includes an acceptable option using a red arrow, this publication has chosen not to include a red arrow because green arrows typically represent a positive or recommended instruction, whereas a red arrow may imply a negative instruction.

Colors

Background: White

Belt: Gray

Arrow: Green



Fasten Seatbelt While Seated

Remarks: Green arrows typically represent a positive or recommended instruction, whereas a red arrow may imply a negative instruction.

Colors

Background: White

Graphic: Gray

Arrow: Green



Fire Extinguisher

Remarks: None

Colors

Background: White

Symbol: Red



First Aid Kit

Remarks: None

Colors

Background: White

Symbol: Green



Flashlight

Remarks: None

Colors

Background: White

Symbol: Red



Full Face Smoke Mask

Remark: For use by crew in flight deck

Colors

Background: White

Symbol: Gray



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Infant Life Vest

Remarks: None

Colors

Background: White

Life Vest Outline and Person: Gray

Life Vest Body: Yellow



Lavatory

Remarks: None

Colors

Background: White

Symbol: Gray



Life Raft

Remarks: None

Colors

Background: White

Raft: Red

Waves/Person: Gray



Life Vest

Remarks: None

Colors

Background: White

Life Vest Outline and Person: Gray

Life Vest Body: Yellow



Life Vest In Center Armrest

Remarks: None

Colors

Background: White

Graphic: Gray

Arrow: Dark Gray

Life Vest: Yellow



Life Vest In Left Armrest

Remarks: None

Colors

Background: White

Graphic: Gray

Arrow: Dark Gray

Life Vest: Yellow



Life Vest In Right Armrest

Remarks: None

Colors

Background: White

Graphic: Gray

Arrow: Dark Gray

Life Vest: Yellow



Life Vest Under Seat

Remarks: None

Colors

Background: White

Graphic: Gray

Arrow: Dark Gray

Life Vest: Yellow



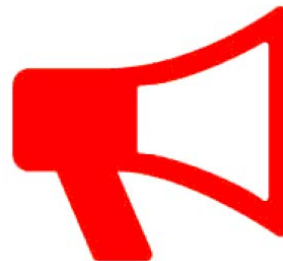
Megaphone

Remarks: None

Colors

Background: White

Symbol: Red



No Cigarette Disposal

Remarks: Amendment 25-51, effective March 6, 1980, and Airworthiness Directive (AD) 74-08-09, effective April 8, 1974, requires words for lavatories.

Colors

Background: White

Cigarette and Tray: Gray or Black

Circle/Slash: Red

**No Disposal in Toilet**

Remarks: None

Colors

Background: White

Symbol: Gray

Circle/Slash: Red

**No Smoking**

Remarks: Use whenever dimensional constraints permit. Amendment 25-51, effective March 6, 1980, and Airworthiness Directive (AD) 74-08-09, effective April 8, 1974, requires words for lavatories.

Colors

Background: White

Cigarette: Black

Circle/Slash: Red (The circle-slash should override the cigarette.)



No Smoking

Remarks: None

Colors

Background: White

Cigarette: Gray

Circle/Slash: Red

**No Smoking – Vertically Constrained**

Remarks: Vertically challenged version – square “field” not applicable. If the sign is unlit, the cigarette may appear in positive form (dark gray) or negative (white). In the negative unlit version, provide sufficient background contrast for the red circle-slash. The negative form shown is recommended for a lighted sign. Amendment 25-51, effective March 6, 1980, and Airworthiness Directive (AD) 74-08-09, effective April 8, 1974, requires words for lavatories.

Colors

The circle-slash should be red and override the background or cigarette.

**No Smoking – Vertically Constrained**

Remarks: None

Colors

Background: White

Cigarette: Gray

Circle/Slash: Red



No Stowage

Remarks: None

Colors

Background: White

Circle /Slash: Red

Luggage: Gray



No Waste Disposal

Remarks: None

Colors

Background: White

Symbol: Gray

Circle/Slash: Red



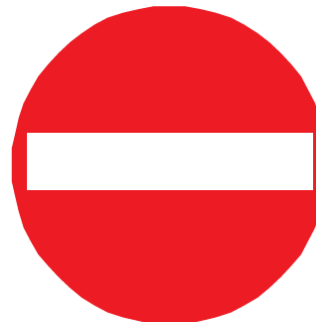
Occupied

Remarks: None

Colors

Background: White

Symbol: Red



Oxygen

Remarks: None

Colors

Background: White

Symbol: Green



Please Lock Door

Remarks: None

Colors

Background: White

Lock: Gray

Arrow: Green



Protective Glove

Remarks: None

Colors

Background: White

Gloves: Yellow

Gloves Dark Outline: Gray

Flames: Red



Reading Light

Remark: Positive or Negative forms are permissible.

Colors

Background: White

Symbol: Grey



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Return to Seat

Remarks: To be used in lighted signage exclusively. The figure and seat will be negative form (lighted – white). The arrow should always be Green on White background. Green arrows typically represent a positive or recommended instruction, whereas a red arrow may imply a negative instruction.

Colors

Background: White

Arrow: Green



Sanitary Napkins

Remarks: None

Colors

Background: White

Symbol: Gray



Slide / Raft

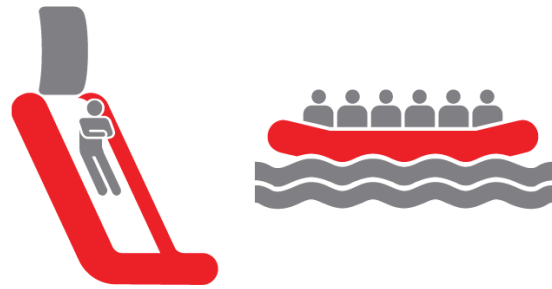
Remarks: None

Colors

Background: White

Slide/Raft: Red

Symbol: Gray



Smoke Goggles

Remarks: None

Colors

Background: White

Symbol: Gray



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Smoke Hood (PBE)

Remarks: None

Colors

Background: White

Tank: Green

Hood: Red

Smoke/Pepper dust: Gray with darker Gray

Outline



Smoking Permitted

Remarks: None

Colors

Background: White

Graphic: Gray



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Toilet Seat Covers

Remarks: None

Colors

Background: White

Graphic: Gray



Transmitter

Remarks: None

Colors

Background: White

Waves: Gray

Symbol: Red



Vacant

Remarks: None

Colors

Background: White

Symbol: Green



Waste Disposal

Remarks: None

Colors

Background: White

Symbol: Gray



4.0 Considerations for the Development of Symbolic Messages

As this publication is intended to be a reference to promote improved comprehension in symbolic messages, it also includes considerations to create new messages beyond what appears in this document to encourage the standardization of future messages. The following information provides additional consideration criteria for the development of new symbolic messages beyond those contained within this publication.

- Size, color, orientation and contrast usage should remain as consistent as possible throughout the interior of the aircraft.
- Green arrows typically represent a positive or recommended instruction, whereas red arrows may imply a negative instruction.
- Cultural, religious, or social impact should be considered before installation.
- Intended location of message and distance from observer should be taken under consideration when determining the characteristics of a symbolic message.
- Graphical symbols should be constructed with as few graphical components as possible.
- Consistency of applied symbolic message criteria should be maintained within the aircraft. Consistency can include using consistent color indications to perform an action or instruction (example – green could be used as a “good” or “safe” motion/action, whereas red could be used to the contrary).
- The use of multiple messages in close proximity for one instruction is acceptable, however; the use of multiple messages in close proximity with non-related, inconsistent or conflicting guidance should be avoided.
- The American Red Cross has advised the FAA (as stated in FAA AC25-17A Appendix 2) that the use of a red cross on a white background for indication of first aid kits is limited by international and federal law, with the exception of certain pre-1905 users, military establishments and the American Red Cross.
- The use of multiple messages on a single placard should be avoided.

5.0 Additional References

Other publications also promote standardized symbolic messages. Since there may be copyrights to consider, this GAMA publication includes links to information about other symbolic standardization documents as reference only. In many cases that document may be available for a cost, in which case the user is expected to pay all required fees to utilize that symbol.

1. Aerospace Industries Association
 - a. AIA TARC 82-89, Standards for Symbolology and Graphic Signage Aboard Commercial Aircraft, from TARC Project 211-1, August 1988.

http://global.ihs.com/doc_detail.cfm?currency_code=USD&customer_id=2125472B3A0A&oshid=2125472B3C0A&shopping_cart_id=2925583F2A4B403C415A4D5B260A&rid=AlA&country_code=US&lang_code=ENGL&item_s_key=00274866&item_key_date=140231&input_doc_number=&input_doc_title=standards%20for%20symbology&org_code=AlA%2FNAS

2. International Organization for Standardization (ISO)

- a. ISO 22727:2007 Graphical symbols – *Creation and design of public information symbols – Requirements*

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41091

- b. ISO 7001:2007 Graphical symbols *Public Information symbols*

http://www.iso.org/iso/search.htm?qt=symbol&published=on&active_tab=standards

- c. IEC 80416-1:2008 *Basic principles for graphical symbols for use on equipment – Part 1: Creation of graphical symbols for registration*

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40630

- d. ISO 9186-1:2007 Graphical symbols – *Test methods – part 1: Methods for testing comprehensibility*

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41090

- e. ISO 9186-2:2008 *Test Methods – Part 2: Method for Testing Perceptual Quality*

- f. ISO 3864-1:2011 Graphic symbols – Safety colours and safety signs – Part 1: Design principles for safety signs and safety

markings http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51021

3. Society of Automotive Engineering (SAE)

- a. ARP1384D *Passenger Safety Briefing Materials* <http://standards.sae.org/arp1384d>

- b. ARP5655 *Safety Briefings for Passengers in Exit Rows* <http://standards.sae.org/arp5655>

- c. ARP577 *Emergency Placarding – Internal and External* <http://standards.sae.org/arp577d>

- d. ARP4192 *Passenger Safety Video Briefings*

4. National Technical Information Service

- a. PB-239 352/8 *Symbol Signs. The Development of Passenger/Pedestrian Oriented Symbols for Use in Transportation-Related*

Facilities <http://www.ntis.gov/search/product.aspx?ABBR=PB239352>