



AEROSPACE RECOMMENDED PRACTICE

ARP1384™

REV. E

Issued 1976-08
Revised 2023-06

Superseding ARP1384D

(R) Passenger Safety Information System

RATIONALE

This SAE Aerospace Recommended Practice (ARP) is intended to provide comprehensive reference and background information pertaining to the Passenger Safety Information System (PSIS). This document provides the relevant and important safety information in a single document by incorporating and subsequently cancelling SAE documents ARP4771 Recommended Brace Positions, ARP5655 Safety Briefings for Passengers in Exit Rows, and ARP6239 Demonstration Emergency Equipment.

TABLE OF CONTENTS

1.	SCOPE.....	3
1.1	Purpose.....	3
2.	REFERENCES.....	3
2.1	Applicable Documents	3
2.1.1	SAE Publications.....	3
2.1.2	ANSI Accredited Publications	4
2.1.3	Code of Federal Regulations (CFR) Publications	4
2.1.4	EASA Publications	4
2.1.5	FAA Publications	4
2.1.6	ICAO Publications	5
2.1.7	National Transportation Safety Board (NTSB) Publications	5
2.1.8	Transport Canada Publications.....	5
2.1.9	Transportation Safety Board of Canada (TSB) Publications	5
2.1.10	Other Publications.....	5
2.2	Related Publications	6
2.3	Definitions	6
2.4	Mandating and Recommending Words.....	7
3.	GENERAL CONSIDERATIONS AND REQUIREMENTS.....	7
3.1	Operator Considerations and Requirements	7
3.2	Cabin Crew Member Procedures.....	7
3.3	PSIS Content	8
3.4	Presentation Style	8
3.4.1	Simplicity and Familiarity.....	8
3.4.2	Directing and Holding Passengers' Attention	8
3.4.3	Primarily Pictorial	8
3.4.4	Languages	8
3.4.5	Passengers with Limitations	8

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 © 2023 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:

Full document details: SAE ARP1384E

For more information on this standard, visit
<https://www.sae.org/standards/content/ARP1384>

Documents

Document Sharing Hub

3.4.6	Competing Presentations.....	9
4.	MINIMUM REQUIREMENTS.....	9
4.1	Equipment Used for Demonstration Purposes.....	9
4.1.1	Demonstration Life Preservers.....	9
4.1.2	Demonstration Oxygen Masks.....	10
4.1.3	Aircraft Equipment Used for Demonstration Purposes.....	10
4.1.4	Seat Belt Extenders.....	10
4.1.5	Passenger Safety Information Briefing Card (SBC).....	10
4.1.6	Stowage of Demonstration Equipment.....	10
4.2	Exit Seating.....	10
4.3	Passenger Restraints.....	12
4.3.1	Adult Restraint Systems.....	12
4.3.2	Child/Infant Restraint Systems.....	12
4.4	Oxygen Masks.....	12
4.5	Brace for Impact Positions.....	12
4.6	Flotation Means.....	14
4.7	Passenger Exits.....	14
4.8	Exit Path Marking System.....	15
4.9	Emergency Exit Operation.....	15
4.10	Emergency Evacuation.....	15
4.10.1	Emergency Descent Assisting Devices.....	15
4.10.2	Inflatable Escape Slides.....	15
4.10.3	Alternate Descent Assisting Means.....	15
4.11	Escape Routes.....	15
4.11.1	Deplaning Away from an Airport.....	15
4.11.2	Deplaning onto the Airport Tarmac.....	15
4.12	Extended Overwater Flights.....	15
4.13	Aircraft without Cabin Crew Members.....	16
5.	PRESENTATION REQUIREMENTS SPECIFIC TO THE PASSENGER SAFETY INFORMATION BRIEFING CARD.....	16
5.1	SBC Content and Design.....	16
5.2	SBCs should include:.....	16
5.3	Briefing Design and Location.....	17
5.4	Competing Materials.....	17
6.	PRESENTATION REQUIREMENTS SPECIFIC TO PASSENGER SAFETY VIDEO BRIEFINGS.....	17
6.1	Video Location.....	17
6.2	Actor Clothing.....	18
7.	PRESENTATION REQUIREMENTS SPECIFIC TO ORAL BRIEFINGS.....	18
7.1	Method.....	18
7.2	Special Oral Passenger Briefing.....	18
7.2.1	Cabin Preparation for an Emergency Landing.....	18
8.	NOTES.....	19
8.1	Revision Indicator.....	19
APPENDIX A	SIZE OF SMALLEST IMPORTANT ELEMENTS ON A TELEVISION SCREEN.....	20
Figure 1	Passenger brace for impact positions.....	13

1. SCOPE

These recommendations are to aid the international air transport industry by identifying a standard, minimum amount of safety instructions and procedures that should be provided in the PSIS. Aircraft operators are encouraged to customize the PSIS to their own operations. This document also provides recommendations for:

- a. Passenger safety information briefings and associated materials,
- b. Demonstration emergency equipment,
- c. Ensuring passenger suitability for those seated in exit seats,
- d. The standardization of safety briefings for passengers seated at exits who may be responsible for opening exits on transport aircraft during an emergency, and
- e. A standardized protective brace position to reduce the severity of injury during severe turbulence, rapid deceleration, or a sudden impact.

In addition, these recommendations pertain to briefings on aircraft on which the cabin crew would conduct the exit seat briefing, and to briefings on aircraft without cabin crew, on which pilots would conduct the briefing.

1.1 Purpose

The purpose of this ARP is to assist airlines, as well as corporate and private operators, in (1) producing passenger safety information briefing cards (SBCs) and passenger safety videos and oral briefings (the PSIS), (2) demonstration of emergency equipment, (3) ensuring exit seats are occupied by suitable passengers, and (4) enhancing protective brace position protocol. This information will reinforce and expand passenger knowledge of the safety equipment and procedures designed for passengers in emergencies.

2. 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.

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.

ARP997	Installation and Stowage Provisions for Emergency Equipment in the Transport Aircraft Passenger Cabin
ARP1354	Individual Inflatable Life Preservers
ARP4740	Safety Considerations - Smoking in Lavatories of Transport Aircraft
ARP4771	Recommended Brace Positions
ARP5655	Safety Briefings for Passengers in Exit Rows
ARP6239	Demonstration Emergency Equipment
AS5276/1	Performance Standard for Child Restraint Systems in Transport Category Airplanes

2.1.2 ANSI Accredited Publications

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

ANSI Z535.3-2022 Criteria for Safety Symbols. National Electrical Manufacturers Association.

2.1.3 Code of Federal Regulations (CFR) Publications

Available from the United States Government Printing Office, 732 North Capitol Street, NW, Washington, DC 20401, Tel: 202-512-1800, www.gpo.gov.

- 14 CFR 25.813 Emergency exit access
- 14 CFR 121.571 Briefing passengers before take-off
- 14 CFR 121.573 Briefing passengers: Extended overwater operations
- 14 CFR 121.585 and 135.129 Exit seating
- 14 CFR 125.327 and 135.117 Briefing of passengers before flight

2.1.4 EASA Publications

Available from European Aviation Safety Agency, Konrad-Adenauer-Ufer 3, D-50668 Cologne, Germany (for visitors and for mail over 1 kg) and Postfach 10 12 53, D-50452 Cologne, Germany (for mail 1 kg or less); Tel: +49 221 8999 000, www.easa.europa.eu.

- AMC1 CAT.OP.MPA.165 Passenger seating, Emergency exit seating
- AMC1 CAT.OP.MPA.170 Passenger briefing
- AMC2 CAT.OP.MPA.165 Passenger seating, Access to emergency exits
- GM1 CAT.OP.MPA.165 Passenger seating, Direct access
- GM2 CAT.OP.MPA.165 Passenger seating, Emergency exit seating

2.1.5 FAA Publications

Available from Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591, Tel: 866-835-5322, www.faa.gov.

- Advisory Circular (AC) 91-62 Use of Child Seats in Aircraft
- Advisory Circular (AC) 121-24D Passenger Safety Information Briefing and Briefing Cards
- Advisory Circular (AC) 121-29 Carry-On Baggage
- DOT/FAA/AM-15/17 Effect of Passenger Position on Crash Injury Risk in Transport-Category Aircraft
- Flight Standards Information Management System (FSIMS) Order 8900.1, Volume 3, Chapter 33, Section 6, Paragraph 3572 – Exit Seating Program

2.1.6 ICAO Publications

Available from International Civil Aviation Organization, 999 University Street, Montreal, Quebec H3C 5H7, Canada, Tel: +1 514-954-8219, <http://www.icao.int/>.

ICAO Doc 10086 Manual on Information and Instructions for Passenger Safety

2.1.7 National Transportation Safety Board (NTSB) Publications

Available from NTSB Headquarters, 490 L'Enfant Plaza, SW, Washington, DC 20594, Tel: 202-314-6000, www.nts.gov.

NTSB/SS-85/09 Safety Study – Airline Passenger Safety Education: A Review of Methods Used to Present Safety Information

NTSB/SS-00/01 Safety Study – Emergency Evacuation of Commercial Aircraft.

NTSB Recommendation A-10-81, Require operators to provide information about life lines, if the aircraft is equipped with them, to passengers to ensure that the life lines can be quickly and effectively retrieved and used.

NTSB Recommendation A-10-82, Require operators be equipped with flotation seat cushions and life vests for each occupant on all flights, regardless of the route.

NTSB Recommendation A-10-83, Require operators to brief passengers on all flotation equipment installed on an aircraft, including a full demonstration of correct life vest retrieval and donning procedures, before all flights, regardless of route.

NTSB Recommendation A-10-86, Require operators to implement creative, effective methods of overcoming passengers' inattention and providing them with safety information.

NTSB Safety Study. (1985). Airline passenger safety education: A review of methods used to present safety information.

2.1.8 Transport Canada Publications

Transport Canada documents are available from Transport Canada, Tower C, Place de Ville, 330 Sparks Street, Ottawa, Ontario K1A 0N5, Tel: 1-800-305-2059, www.tc.gc.ca.

Canadian Aviation Regulations § 705.43, 704.34 Briefing of Passengers

Flight Attendant Training Standard TP 12296, 7.2 Passenger Briefing Drills

Advisory Circular (AC) 700-014 Passenger Seating Requirements and Accessible Air Transportation

Advisory Circular (AC) 700-036 Brace for Impact Positions for all Aircraft Occupants

2.1.9 Transportation Safety Board of Canada (TSB) Publications

Available from TSB, 200 Promenade du Portage, Hull, Quebec K1A 1K8, Tel: 1-819-387-3557, www.tsb.gc.ca.

SA9501 A Safety Study of Evacuations of Large, Passenger-Carrying Aircraft

2.1.10 Other Publications

King, D.F. (1988). *Report on the accident to Boeing 737-236 series 1, G-BGJL at Manchester International Airport on 22 August 1985*. Aircraft accident report 8/88.

Chittum, C.B., and Lyne, P.J. (1991). *The effects of passenger briefing on recall and utilization of safety-related information by adult passengers* (Technical Paper AAM-630-91-3). FAA Civil Aerospace Medical Institute.

Cobbett, A.M., Liston P., and Muir, H. (2001). *An investigation into methods of briefing passengers at Type III exits* (Technical Paper 2001/6). Civil Aviation Authority.

FSF Editorial Staff (2004). Crew efforts help passengers comprehend safety information. *Flight Safety Foundation, Cabin Crew Safety*. (November-December 2004), 39(6).

Grandjean, E. (1987). Design of VDT workstations. In G. Salvendy (Ed.), *Handbook of human factors*. Wiley, 1359–1397, ISBN 0-471-88015-9.

Gerwick, W. (2003). Taking exit row seating seriously. *Journal of Air Law & Commerce*, 68, 449-473.

FSF Editorial Staff (2001). Many passengers in exit seats benefit from additional briefings. *Flight Safety Foundation, Cabin Crew Safety* (May-June 2001), 36(3).

McLean, G.A., Corbett C.L., Larcher, K.G., McDown, J.R. et al. (2002). *Access-to-egress I: Interactive effects of factors that control the emergency evacuation of naïve passengers through the transport airplane type-III overwing exit* (Technical Report DOT/FAA/AM-02/16). FAA Civil Aerospace Medical Institute.

Parkinson, S.E. and Muir, H. (1995). The effect of training, overtraining and transfer of training on passenger performance in a simulated aircraft emergency [Paper presentation]. Southern California Safety Institute 12th Annual International Cabin Safety Symposium, Torrance, CA.

Wogalter, M.S., Laughery, K.R., and Mayhorn, C.B. (2012). Warnings and hazards communications. In G. Salvendy (Ed.), *Handbook of human factors and ergonomics* (4th ed.). Wiley, 868-894.

2.2 Related Publications

The following publication is for information purposes only and is not a required part of this SAE Technical Report.

Chandler, R.F. (1998). *Brace for impact. Positions*. In Proceedings of the Fifth Annual International Aircraft Cabin Safety Symposium, Cosponsored by the University of Southern California, the FAA (Western Pacific Region), and the Southern California Safety Institute.

2.3 Definitions

BRIEFING MATERIALS: This term refers to the Passenger Safety Information Briefing Card and any presented or demonstrated version (i.e., oral, video, audio) of the Passenger Safety Information System (PSIS).

CABIN CREW MEMBER: A crew member, other than a flight crew member, who has been assigned duties to be performed in the interest of the passengers in a passenger-carrying aircraft.

CHILD: A person who has had their second birthday but is younger than 12 years old.

CREW MEMBER: A person assigned to perform duty in an aircraft during flight time.

DEMONSTRATION ONLY EQUIPMENT: Equipment used solely for demonstration purposes, used as part of preflight safety briefings.

EXIT SEAT: Each seat facing the passageway from the center aisle to the exit that passengers would have to pass to gain access to an exit.

FLIGHT CREW MEMBER: A crew member who has been assigned to act as pilot or flight engineer of an aircraft during flight time.

INFANT: A person who has not reached their second birthday.