



AEROSPACE RECOMMENDED PRACTICE

ARP4084™**REV. B**

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Reaffirmed 2021-09

Superseding ARP4084A

(R) Aircraft Ground Service Connections Locations and Type

RATIONALE

ARP4084B has been reaffirmed to comply with the SAE five-year review policy.

FOREWORD

In this document, the minimum essential criteria are identified by the use of the key word “shall”. Other recommended criteria are identified by the key word “should” and, while not mandatory, are considered to be of primary importance in providing serviceable, economical and practical aircraft ground service connections layouts particularly for the use of fixed equipment (underground or mounted on passenger boarding bridges).

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1. SCOPE

1.1 Purpose

The purpose of this SAE Aerospace Recommended Practice (ARP) is to standardize locations of aircraft ground service connections to accommodate the trend toward fixed systems, which use the passenger boarding bridge and/or underground “pop-up” or pit systems as a source of utilities. It must be recognized that, in standardizing the locations of the aircraft service connections, they must continue to be served efficiently in those instances where mobile ground support equipment is used. There is an ever increasing number of fixed installations for aircraft servicing. The objectives to be met by standardizing the locations of the aircraft service connections are the following:

- 1.1.1 Reduce ramp congestion and equipment interference around the aircraft, and minimize the chance of aircraft damage from ground support equipment.
- 1.1.2 Allow for optimization of ground services, both fixed and mobile, specifically 400 Hz electric power, preconditioned air for cabin conditioning, pneumatic power for jet engine start, potable water, lavatory service (draining, flushing), aircraft refueling, and interphone (headset) connections.
- 1.1.3 Standardize the locations of the service points around the aircraft to allow airport planners and facility engineers to design their fixed servicing systems to serve all aircraft easily and efficiently, as well as to provide additional standards and parameters for mobile equipment that connects to the aircraft.

1.2 Field of Application

- 1.2.1 This document limits itself to the seven different services mentioned in 1.1.2. It has focused on these aircraft services because:
 - a. These connections are those most frequently used during aircraft operation.
 - b. In terms of economic benefits, they have the greatest impact through improved efficiency.
- 1.2.2 This document is intended to apply to any new type of main line commercial transport aircraft designed or built after its original publication.
- 1.2.3 In addition, it is recommended that any substantially modified new derivative aircraft type in the same category (derived from a previously existing type) should, insofar as technically and economically practical, meet the requirements of this document, if specified in the aircraft type specification established between the airline(s) and the manufacturer.

2. 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 SAE Publications

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

AIR1589 Aircraft Damage Caused by Ground Support Equipment

AS90362 Connector, Receptacle, External Electric Power, Aircraft, 115/200 Volt, 400 Hertz