AEROSPACE RECOMMENDED PRACTICE

ARP573™ REV. E

Issued 1959-02
Revised 2001-10
Reaffirmed 2012-10
Stabilized 2022-08

Superseding ARP573D

Silver, Copper, and Nickel Alloy Brazed Joints for Aerospace Propulsion Systems

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

STABILIZED NOTICE

This document has been declared “STABILIZED” by SAE G-3, Aerospace Couplings, Fittings, Hose, Tubing Assemblies Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/ARP573E/

1. SCOPE:

   This recommended practice covers design requirements for silver, copper and nickel brazed joints, primarily for tube connections, for aerospace propulsion systems. The environmental conditions stated herein, and those given in the applicable AMS specifications, provide the limitations of this ARP.

2. PURPOSE:

   This ARP provides data for silver, copper, and nickel alloy brazed joints, based on sound engineering principles currently used throughout the aerospace propulsion systems industry, and provides a recommended practice for appropriate design configurations, engine and propeller standard utility parts, as applicable, and other propulsion systems components.

2.1 It further establishes a common standard practice for swaged tubing and a common standard for the inside diameter of the mating part of fittings for either silver, copper or nickel brazed joints. The purpose of establishing a common inside diameter for brazing applications is to facilitate manufacturing and to reduce the cost of related parts.

3. GENERAL REQUIREMENTS:

3.1 Applicable Specifications:

The AMS specifications mentioned herein should be complied with in all respects.

3.2 Material and Workmanship:

3.2.1 Materials: Materials should be of a quality which experience and tests have demonstrated to be suitable and dependable for aerospace propulsion systems.