



# AEROSPACE RECOMMENDED PRACTICE

**ARP5311™**

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Aerospace-Interface Definition for Mechanical Actuation Subsystems

## RATIONALE

ARP5311 has been reaffirmed to comply with the SAE five-year review policy.

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## 1. SCOPE:

This SAE Aerospace Recommended Practice (ARP) defines all the relevant issues that affect the generation of an Interface Control Document for Mechanical Actuation Sub-Systems. It is intended to provide to all parties involved with the generation of Mechanical Actuation Sub-Systems, a definition of documentation, drawings, reports and design parameters required to assure a successful development of mechanical actuation sub-systems for Aerospace-Military and Commercial applications.

### 1.1 Purpose:

This ARP is intended as a guide, in the preparation of interface requirements, for Mechanical Actuation Subsystems used in Aerospace-Military and Commercial applications. This document focuses on mechanical actuation subsystems to position control surfaces, weapon systems, cargo bay doors and other similar mechanisms, in response to manual or automatic power control system inputs. Detail requirements necessary to completely define the mechanical subsystem interfaces, whether in a Procurement Specification and/or a separate Interface Document, are the responsibility of the procuring agency.

## 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, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AS1241	Fire Resistant Phosphate Ester Hydraulic Fluid For Aircraft
ARP1383	Impulse Testing of Hydraulic Actuators, Valves, Pressure Containers and Similar Fluid System Components
AIR4922	Primary Flight Control Systems Hydraulic Actuation System Interface Definition
ARP4058	Actuators: Mechanical, Geared Rotary, General Specification For
AS4059	Aerospace - Cleanliness Classification for Hydraulic Fluids
ARP4255	Electrical Actuation Systems for Aerospace and Other Applications
ARP4386	Terminology and Definitions for Aerospace Fluid Power Actuation, and Control Technologies
ARP4761	Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment, SAE, 1996-12
ARP4895	Aerospace - Flight Control Actuator Displacement - Method for Collection Of Duty Cycle Data
SAE J2333	Ship Systems and Equipment-Hydraulic Systems-Filter Selection Parameters