



AEROSPACE RECOMMENDED PRACTICE

ARP6404™

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Reaffirmed 2022-02

Superseding ARP6404

Aircraft Tire Electrical Resistance Test

RATIONALE

ARP6404 has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE

This document points to a standard ASTM test method utilized by land vehicle manufacturers and others to provide the electrical resistance of a tire. It is desired that this ASTM test method is also used with aircraft tires. This method will assure that more accurate repeatable data is provided to those in the aerospace industry who request it.

1.1 Purpose

The purpose of this ARP is to define a test procedure for determining the electrical resistance of an aircraft tire.

2. REFERENCES

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 the 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 ASTM International Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM F 1971 Standard Test Method for Electrical Resistance of Tires Under Load on the Test Bench

3. ELECTRICAL RESISTANCE TEST DEFINITION

3.1 Test Specimen

The test will be run on a new aircraft tire.

3.2 Test Parameters

The testing will be conducted per the latest issue of ASTM Designation F 1971. The recommended load and inflation pressure to be used during the testing is spelled out in Section 8 of ASTM F 1971.

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3.3 Success Criteria for the Electrical Resistance Test

The mean electrical resistance measurement of the circumferential locations tested should be less than 1×10^7 ohms maximum.