



AEROSPACE RECOMMENDED PRACTICE

ARP731™

REV. C

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Superseding ARP731B

(R) General Requirements for Application of Vapor Cycle
Refrigeration Systems for Aircraft

RATIONALE

ARP731C has been reaffirmed to comply with the SAE five-year review policy.

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1. SCOPE:

The purpose of this SAE Aerospace Recommended Practice (ARP) is to establish recommendations for the design, installation and testing of air vehicle vapor cycle refrigeration systems. These recommendations are representative of the refrigerant cycles.

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.

ARP85	Air Conditioning Systems for Subsonic Airplanes
ARP292	Air Conditioning Systems for Helicopters
ARP987	Control of Excess Humidity in Avionics
AIR1168/3	SAE Aerospace Applied Thermodynamic Manual, Section 3: Aerothermodynamic Systems Engineering and Design

2.1.2 U.S. Government Publications: Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

A-A-58060	Fluorocarbons and Other Refrigerants, Department of Defense, Washington, DC, September 3, 1996
VV-L-825C	Lubricating Oil, Refrigerant Compressor, Uninhibited, Department of Defense, Washington, DC, March 18, 1997
MIL-STD-461E	Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment, Department of Defense, Washington, DC, August 20, 1999
MIL-STD-704E	Aircraft Electric Power Characteristics, Department of Defense, Washington, DC, November 15, 1991
MIL-STD-810F	Environmental Engineering Consideration and Laboratory Test, Department of Defense, Washington, DC, January 1, 2000
MIL-HDBK-310	Global Climatic Data for Developing Military Products, Department of Defense, Washington, DC, June 23, 1997 (supersedes MIL-STD-210)
MIL-HDBK-454	General Guidelines For Electronic Equipment, Department of Defense, Washington, DC, April 28, 1995, Notice 1, May 28, 1997 (supersedes MIL-STD-454M)