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Aerothermodynamic Test Instrumentation and Measurement

RATIONALE

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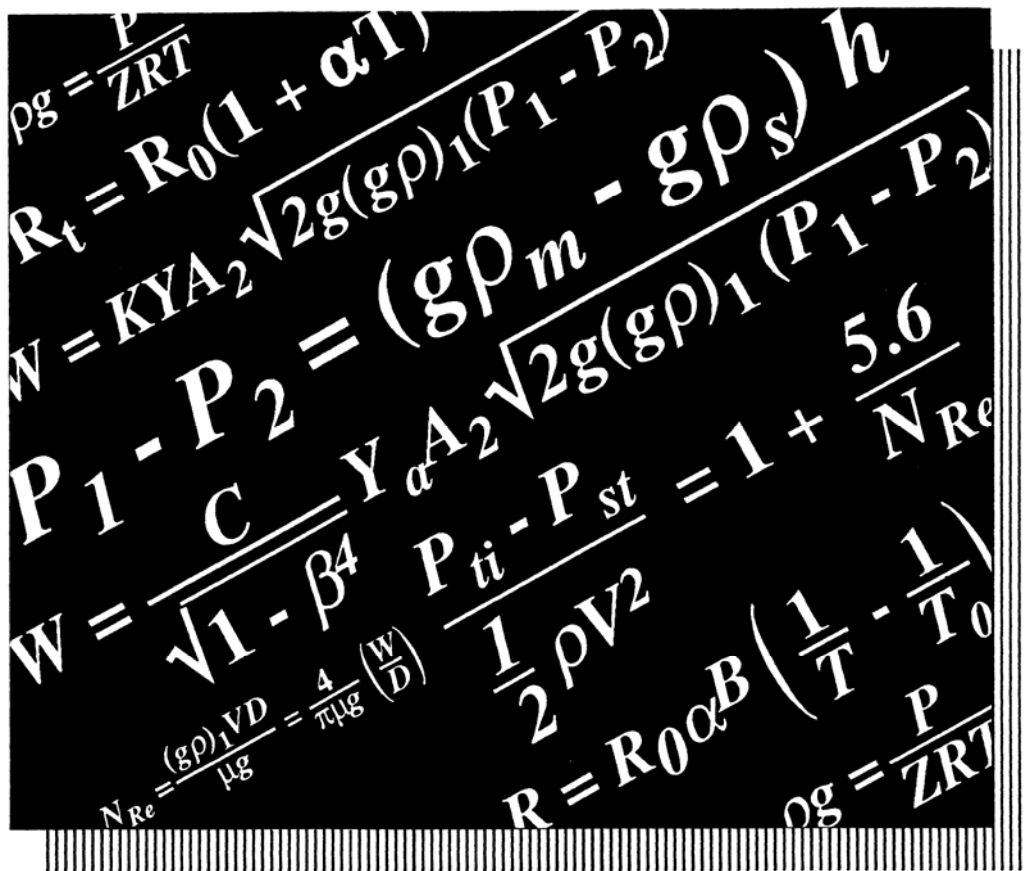
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Aerothermodynamic Test Instrumentation and Measurement

AIR1168/5



SAE Aerospace Applied Thermodynamics Manual

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PREFACE

This document is one of 14 Aerospace Information Reports (AIR) of the Third Edition of the SAE Aerospace Applied Thermodynamics Manual. The manual provides a reference source for thermodynamics, aerodynamics, fluid dynamics, heat transfer, and properties of materials for the aerospace industry. Procedures and equations commonly used for aerospace applications of these technologies are included.

In the Third Edition, no attempt was made to update material from the Second Edition nor were SI units added. However, all identified errata were corrected and incorporated and original figure numbering was retained, insofar as possible.

The SAE AC-9B Subcommittee originally created the SAE Aerospace Applied Thermodynamics Manual and, for the Third Edition, used a new format consisting of AIR1168/1 through AIR1168/10. AIR1168/11 through AIR1168/14 were created by the SAE SC-9 Committee.

The AIRs comprising the Third Edition are shown below. Applicable sections of the Second Edition are shown parenthetically in the third column.

| | | |
|-----------|--|---------------|
| AIR1168/1 | Thermodynamics of Incompressible and Compressible Fluid Flow | (1A,1B) |
| AIR1168/2 | Heat and Mass Transfer and Air-Water Mixtures | (1C,1D,1E) |
| AIR1168/3 | Aerothermodynamic Systems Engineering and Design | (3A,3B,3C,3D) |
| AIR1168/4 | Ice, Rain, Fog, and Frost Protection | (3F) |