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Environmental Test Procedures
Airborne Radio Equipment
(Amended)

RTCA DO-60
April 13, 1954

Prepared by: SC-37
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FOREWORD

This report, initially prepared by RTCA Special Committee 37, was accepted by the Executive Committee of the Radio Technical Commission for Aeronautics under date of March 11, 1952. It thereby became an official paper of RTCA and was distributed as Paper 50-52/DO-44.

Under date of April 13, 1954, the Executive Committee accepted certain amendments of Paper 50-52/DO-44 formulated by its Special Committee 58. Accordingly, the amended "Environmental Test Procedures - Airborne Radio Equipment" becomes an official RTCA paper and is distributed as such.

The RTCA is a cooperative association of all United States Government-Industry aeronautical telecommunication agencies. It conducts studies of aeronautical telecommunication problems and related matters. Its objective is the resolution of such problems by mutual agreement of its member agencies. Its findings are in the nature of recommendations to all United States organizations concerned.

The RTCA is not an official agency of the United States Government. Its recommendations, therefore, may not be regarded as statements of official government policy unless so enunciated by the government agency, or agencies, having statutory jurisdiction in the matters to which the recommendations relate.

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INTRODUCTION

This report sets forth Environmental Test Procedures applicable to airborne radio equipment. The purpose of these tests is to provide a laboratory means of determining the reliability of the equipment by evaluating its performance under conditions representative of those which may be encountered in actual aeronautical operations.

The formulation of these Test Procedures was undertaken by the RTCA at the request of the Civil Aeronautics Administration for application in connection with the approval of airborne radio equipment. Civil Air Regulations currently in effect as of the date of this report require the installation of approved radio equipment only in scheduled air carrier aircraft. However, in that the objective of these Environmental Test Procedures is the improvement of the reliability of airborne radio equipment under actual service operating conditions, it is the recommendation of RTCA that they be considered for application in all future developments of such equipment.

The original report of SC37, Paper 50-52/DO-44, was amended on April 13, 1954, by adding test procedures to cover:

a. Equipment designed for installation in locations where the ambient temperature is maintained within the temperature range of -10°C to 40°C.

b. Operation of the equipment throughout the temperature range for which it is designed.

c. Equipment designed to operate from a 12 - 14 v DC primary power source.

Additionally, paragraph 1 of the GENERAL REQUIREMENTS section of Paper 50-52/DO-44 was amended by listing papers which supersede, in part, those listed in the original report.