

AC 21-16

DATE 4/6/81

ADVISORY CIRCULAR



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Washington, D.C.

Subject: RADIO TECHNICAL COMMISSION FOR AERONAUTICS DOCUMENT DO-160A

1. **PURPOSE.** This advisory circular (AC) calls attention to the Radio Technical Commission for Aeronautics (RTCA) Document DO-160A, Environmental Conditions and Test Procedures for Airborne Electronic/Electrical Equipment and Instruments, and discusses how the document may be used in connection with technical standard order (TSO) authorizations.
2. **CANCELLATION.** Advisory Circular 37-3A, Radio Technical Commission for Aeronautics Document DO-160, dated March 20, 1975, is canceled.
3. **RELATED FAR SECTIONS.** FAR Part 21, Subpart O.
4. **BACKGROUND.** RTCA Document DO-160A was developed by RTCA to provide improved environmental test procedures and test conditions applicable to airborne electronic/electrical equipment and instruments. In some cases applicants for TSO authorizations may prefer to use these new procedures in lieu of those specified in a specific TSO.
5. **USE OF DO-160A PROCEDURES.** An applicant for a TSO authorization for any electronic equipment, electric equipment or instrument may use the conditions and procedures prescribed in RTCA Document No. DO-160A in lieu of the corresponding conditions and procedures specified in a TSO if it is shown that:
 - a. All conditions and procedures used are those prescribed in RTCA Document No. DO-160A.
 - b. The substitute test procedure from RTCA Document No. DO-160A provides an equivalent level of safety.
 - c. The applicant requests approval to deviate in accordance with the requirements of FAR Section 21.609.

Initiated by: AWS-130

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6. WHERE TO OBTAIN COPIES OF RTCA DOCUMENT DO-160A. Copies of DO-160A may be obtained from:

RTCA Secretariat
Suite 655
1717 H Street NW.
Washington, DC 20006



M. C. Beard
Director of Airworthiness

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