

Schedule 23 ATSO-1C112 — Air traffic control radar beacon system/mode select (ATCRBS/MODE S) airborne equipment

(subsection 13.2 (1), table, item 3)

1 Application

This Schedule applies to air traffic control radar beacon system/mode select (ATSRBS/MODE S) airborne equipment manufactured by an article manufacturer.

2 Definitions

In this Schedule:

ED-12 means the document called *Software considerations in Airborne Systems and Equipment Certification*, published by EUROCAE, as existing from time to time.

ED-14 means the document called *Environmental Conditions and Test Procedures for Airborne Equipment*, published by EUROCAE, as existing from time to time.

ED-73 means the document called *Minimum Operational Performance Specification for Secondary Surveillance Radar MODE S Transponders*, published by EUROCAE, as existing from time to time.

RTCA/DO-160D means the RTCA Document RTCA/DO-160D called *Environmental Conditions and Test Procedures for Airborne Equipment*, or a later version of RTCA Document No. DO-160, as existing from time to time.

RTCA/DO-160F means the RTCA Document RTCA/DO-160F called *Environmental Conditions and Test Procedures for Airborne Equipment*, or a later version of RTCA Document No. DO-160, as existing from time to time.

RTCA/DO-178C means the RTCA Document RTCA/DO-178C called *Software Considerations in Airborne Systems and Equipment Certification*, as existing from time to time.

RTCA/DO-181 means the RTCA Document RTCA/DO-181 called *Minimum Operational Performance Standards for Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Airborne Equipment*, as existing from time to time.

3 Minimum performance standard — general

- (1) The equipment must meet the requirements mentioned in:
 - (a) section 2 of RTCA/DO-181; or
 - (b) ED-73.
- (2) The equipment must have a design assurance level commensurate with its failure condition classification as “major”.

Note The concept of failure condition classification is described in the appropriate certification specification guidance material. For example, EASA AMC 25.1309.

4 Minimum performance standard — environmental test

The equipment must be tested in accordance with the test conditions mentioned in RTCA/DO-160D or ED-14.

5 Minimum performance standard — fire protection

The material used in the equipment, other than small parts (such as knobs, fasteners, seals, grommets and small electrical parts) that would not contribute significantly to the propagation of a fire, must be self-extinguishing in the event of fire.