

## **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.