

**ETSO-C168***ED Decision 2020/011/R (applicable from 25.7.2020)***AVIATION VISUAL DISTRESS SIGNALS****1 Applicability**

This ETSO provides the requirements which aviation visual distress signals that are designed and manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

**2 Procedures****2.1 General**

The applicable procedures are detailed in CS-ETSO, Subpart A.

**2.2 Specific**

None.

**3 Technical Conditions****3.1 Basic****3.1.1 Minimum Performance Standard**

For handheld, high-intensity, stroboscopic light sources that can be added to aviation survival kits to supplement pyrotechnic devices, the standards are those provided in SAE International's Aerospace Standard AS5134A, Aviation Distress Signal, dated 27 September 2007.

**3.1.2 Environmental Standard**

See CS-ETSO, Subpart A, paragraph 2.1.

**3.1.3 Software**

See CS-ETSO, Subpart A, paragraph 2.2.

**3.1.4 Airborne Electronic Hardware**

See CS-ETSO, Subpart A, paragraph 2.3.

**3.2 Specific****3.2.1 Failure Condition Classification**

See CS-ETSO, Subpart A, paragraph 2.4.

### 3.2.2 Others

These light sources must:

- eliminate the significant potential equipment and personnel hazards that are posed by untrained personnel using pyrotechnics in inflatable life rafts; and
- provide an equivalent level of safety to pyrotechnics that aid in locating and rescuing aviation accident survivors.

## 4 Marking

### 4.1 General

See CS-ETSO, Subpart A, paragraph 1.2.

### 4.2 Specific

None.

## 5 Availability of Referenced Documents

See CS-ETSO, Subpart A, paragraph 3.

[Amdt ETSO/16]

**ETSO-C170**

ED Decision 2012/009/R (applicable from 5.7.2012)

**HIGH FREQUENCY (HF) RADIO COMMUNICATIONS TRANSCEIVER EQUIPMENT OPERATING WITHIN THE RADIO FREQUENCY 1.5 TO 30 MEGAHERTZ****1 Applicability**

This ETSO gives the requirements which High Frequency (HF) Radio Communications Transceiver Equipment Operating Within the Radio Frequency 1.5 to 30 Megahertz that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

This ETSO cancels ETSO-C31d “High Frequency (HF) Radio Communications Transmitting Equipment Operating within the Radio Frequency Range 1.5-30 Megahertz” and ETSO-C32d “High Frequency (HF) Radio Communications Receiving Equipment Operating within the Radio Frequency Range 1.5-30 Megahertz”.

**2 Procedures****2.1 General**

Applicable procedures are detailed in CS-ETSO [Subpart A](#).

**2.2 Specific**

None.

**3 Technical Conditions****3.1 Basic****3.1.1 Minimum Performance Standard**

Standards set forth in the Radio Technical Commission for Aeronautics (RTCA) Document DO-163, Minimum Operational Performance Standards - Airborne HF Radio Communications Transmitting and Receiving Equipment Operating within the Radio-Frequency Range of 1.5 to 30 MHz, dated 09/03/1976.

**3.1.2 Environmental Standard**

See CS-ETSO [Subpart A](#) paragraph 2.1.

**3.1.3 Computer Software**

See CS-ETSO [Subpart A](#) paragraph 2.2.

**3.1.4 Electronic Hardware Qualification**

See CS-ETSO [Subpart A](#) paragraph 2.3.

**3.2 Specific****3.2.1 Failure Condition Classification**

See CS-ETSO [Subpart A](#) paragraph 2.4.

Failure of the function defined in paragraph 3.1.1 of this ETSO has been determined to be a minor failure condition.