

Safety Information Bulletin

Airworthiness – Operations

SIB No.: 2013-11R1

Issued: 20 January 2020

Subject: ACAS II – Manoeuvres Based on Visual Acquisition of Traffic

Revision:

This SIB revises EASA SIB 2013-11 dated 19 July 2013.

Ref. Publications:

Standardised European Rules of Air SERA.11014.

Applicability:

All aircraft equipped with Airborne Collision Avoidance System (ACAS) II, also referred to as Traffic Alert and Collision Avoidance System (TCAS) II, installed.

Description:

The Agency has identified that some Aircraft Flight Manuals (AFM) and Aircraft/Equipment Operating Manuals (AOM) relating to ACAS II do not provide adequate information on the use of the procedure to maintain safe separation from nearby aircraft.

In some cases, the flight crew may interpret the available information provided in the Manual(s) as authorisation to disregard an ACAS “Resolution Advisory” (RA) based on their visual perception of the situation.

The current Standardised European Rules of Air SERA.11014 provide the operational rules for ACAS II and require immediate flight crew response to an RA, unless doing so would jeopardise the safety of the aircraft. These rules are applicable within all airspace classes and all meteorological conditions (i.e. Visual Meteorological Conditions and Instrument Meteorological Conditions). Whenever an ACAS II equipment is installed and operated, the crew shall comply with SERA.11014.

The most important single factor affecting the performance of ACAS II is the timely response of the flight crew to RAs. Disregarding an RA instruction will decrease the safety level provided by the ACAS II/TCAS II system, as visually acquired traffic may not be the same traffic causing an RA. The visual perception of an encounter may be misleading.

EASA will monitor the situation and may consider taking further actions as deemed appropriate.

Recommendation(s):

EASA recommends holders of an EASA approved or validated design for ACAS II installation:

- To ensure AFMs provide the following additional information:

This is information only. Recommendations are not mandatory.



“When an RA occurs, the pilot flying shall respond immediately to RA displays and aural alerts, manoeuvring as indicated, unless doing so would jeopardize the safe operation of the aircraft.”

- To review existing AFMs and supplements containing ACAS II information to identify whether credit is given to visual acquisition of the traffic by the flight crew, which may be in contradiction with the RA visual and aural alerts.
- To update any AFMs and supplements to ensure that no credit is given to visual acquisition of the traffic, by the flight crew, which may be in contradiction with the RA visual and aural alerts.
- To report to EASA any incorrect AFMs and supplements, containing information on flight crew’s visual acquisition of traffic, which may be in contradiction with RA visual and aural alerts.

Note: EASA AMC 20-15 (Airworthiness Certification Considerations for the Airborne Collision Avoidance System (ACAS II) with optional Hybrid Surveillance) will be updated to reflect the contents of this SIB.

Additionally, with reference to SERA.11014, EASA recommends to the aircraft manufacturers, EASA Part 21 Design Organisations and aircraft operators:

- To ensure AOMs provide the following additional information:
“When an RA occurs, the pilot flying shall respond immediately to RA displays and aural alerts, manoeuvring as indicated, unless doing so would jeopardize the safe operation of the aircraft.
Note: Visually acquired traffic may not be the same traffic causing an RA. The visual perception of an encounter may be misleading, particularly at night.”
- To review existing AOMs containing ACAS II information to identify whether credit is given to visual acquisition of the traffic by the flight crew, which may be in contradiction with the RA visual and aural alerts.
- To update any AOMs to ensure that no credit is given to visual acquisition of the traffic by the flight crew, which may be in contradiction with the RA visual and aural alerts.

Finally, EASA recommends to competent authorities to make this SIB available to their inspecting staff in order to raise awareness.

Contact(s):

For further information or to report incorrect AFM procedures contact the EASA Programming and Continued Airworthiness Information Section, Certification Directorate, E-mail:

ADs@easa.europa.eu

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