

THE CIVIL AVIATION ACT, 1966

THE CIVIL AVIATION (AIRBORNE COLLISION AVOIDANCE SYSTEM) DIRECTIVE, 2019

In the exercise of the power delegated to the Director-General of Civil Aviation by the Minister pursuant to Section 24(1)(a) of the Civil Aviation Act, 1966 the following directives are hereby issued:-

These Directives shall augment and amplify 7.150 of Schedule 7, of the Civil Aviation Regulations, 2012 –

- (a) No person shall operate a turbine engine aeroplane of a maximum certified take-off mass in excess of 15,000 kg (33,070 lbs) or authorized to carry more than 30 passengers that is not equipped with an airborne collision avoidance system (ACAS II Version 7.1)
- (b) No person shall operate a turbine engine aeroplane with a maximum certificated takeoff mass in excess of 5,700 kg (12,500 lbs) or authorized to carry more than 19 passengers, unless it is equipped with an airborne collision avoidance system (ACAS II Version 7.1)

Dated this 21st day of January, 2019




Nari Williams-Singh, J.P.

Director General

Memo

To : Nari Williams-Singh
Director General

From : Rohan Campbell 
Deputy Director General, Regulatory Affairs

Date : 2019 January 18


Re : **Directive regarding TCAS Version 7.1**

Nari,

Attached for your review and approval is the Directive regarding TCAS Version 7.1. Supporting documentations are also attached.

The Flight Safety and Legal reviews have been completed and deemed acceptable.

Regards.

Reviewed and Approved
 Jan 21/19

J.D.
PLEASE ARRANGE TO
HAVE THIS GAZETTED
AND A COPY SENT TO
ICAO NACC OFFICE



JAN 22 2019



SCHEDULE 7.150

International Civil Aviation Organization	Organisation de l'aviation civile internationale	Organización de Aviación Civil Internacional	Международная организация гражданской авиации	منظمة الطيران المدني الدولي	国际民用 航空组织
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When replying please quote:

Ref.: NT-N1-9 — E.OSG - NACC60800

13 May 2016

To: States, Territories and International Organizations

Subject: **ACAS II (TCAS Version 7.1) Implementation**

Action

Required: **Please reply by 30 June 2016**

Sir/Madam,

Reference is made to the requirement 4.3.5.3.1 of Annex 10 – *Aeronautical Telecommunications*, Volume IV (*Surveillance and Collision Avoidance Systems*) related to the ACAS II/ TCAS 7.1 system implementation, which will be held from 1 January 2017 and described here:

4.3.5.3.1 New ACAS installations after 1 January 2014 shall monitor own aircraft's vertical rate to verify compliance with the RA sense. If non-compliance is detected, ACAS shall stop assuming compliance, and instead shall assume the observed vertical rate.

Note 1.— This overcomes the retention of an RA sense that would work only if followed. The revised vertical rate assumption is more likely to allow the logic to select the opposite sense when it is consistent with the non-complying aircraft's vertical rate.

Note 2.— Equipment complying with RTCA/DO-185 or DO-185A standards (also known as TCAS Version 6.04A or TCAS Version 7.0) do not comply with this requirement.

Note 3.— Compliance with this requirement can be achieved through the implementation of traffic alert and collision avoidance system (TCAS) Version 7.1 as specified in RTCA/DO-185B or EUROCAE/ED-143.

4.3.5.3.2 **Recommendation.**— *All ACAS should be compliant with the requirement in 4.3.5.3.1.*

4.3.5.3.3 After 1 January 2017, all ACAS units shall comply with the requirements stated in 4.3.5.3.1.

Considering the questions received from some operators regarding this implementation, we urge you to inform the implementation status of this Annex 10 mandatory requirement, including if the current regulation is implemented or in process:

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Excerpt from Annex 10, Volume IV (Surveillance and Collision Avoidance Systems)

4.3.5 Resolution advisories (RAs)

4.3.5.3.1 New ACAS installations after 1 January 2014 shall monitor own aircraft's vertical rate to verify compliance with the RA sense. If non-compliance is detected, ACAS shall stop assuming compliance, and instead shall assume the observed vertical rate.

Note 1 — This overcomes the retention of an RA sense that would work only if followed. The revised vertical rate assumption is more likely to allow the logic to select the opposite sense when it is consistent with the non-complying aircraft's vertical rate.

Note 2 — Equipment complying with RTCA/DO-185 or DO-185A standards (also known as TCAS Version 6.04A or TCAS Version 7.0) do not comply with this requirement.

Note 3 — Compliance with this requirement can be achieved through the implementation of traffic alert and collision avoidance system (TCAS) Version 7.1 as specified in RTCA/DO-185B or EUROCAE/ED-143.

4.3.5.3.2 **Recommendation** — All ACAS should be compliant with the requirement in 4.3.5.3.1.

Affected regulations in JCAR Seventh Schedule

7.150 AIRBORNE COLLISION AVOIDANCE SYSTEM (ACAS)

(a) No person may operate a turbine-engine aeroplane of a maximum certificated take-off mass in excess of 15,000kg (33,070 lbs) or authorized to carry more than 30 passengers that is not equipped with an airborne collision avoidance system **ACAS II**.

(b) After January 1, 2005, no person shall operate a turbine engine aeroplane with a maximum certificated takeoff mass in excess of 5,700 kg (12,500 lbs) or authorized to carry more than 19 passengers, unless it is equipped with an **ACAS II**.