

APPENDIX**PROCEDURES FOR AIR NAVIGATION SERVICES — AIRCRAFT OPERATIONS,
VOLUME I — FLIGHT PROCEDURES (PANS-OPS, DOC 8168)****Part VIII
SECONDARY SURVEILLANCE RADAR (SSR)
TRANSPONDER OPERATING PROCEDURES****CHAPTER 3
OPERATION OF ACAS EQUIPMENT****3.1 GENERAL**

3.1.1 Airborne collision avoidance system (ACAS) indications shall be used by pilots in the avoidance of potential collisions, enhancement of situational awareness, and the active search for, and visual acquisition of, conflicting traffic.

3.1.2 Nothing in the procedures specified in 3.2 hereunder shall prevent pilots-in-command from exercising their best judgement and full authority in the choice of the best course of action to resolve a traffic conflict or avert a potential collision.

Note 1.— The ability of ACAS to fulfil its role of assisting pilots in the avoidance of potential collisions is dependent on the correct and timely response by pilots to ACAS indications. Operational experience has shown that the correct response by pilots is dependent on the effectiveness of initial and recurrent training in ACAS procedures.

Note 2.— ACAS II Training Guidelines for Pilots are provided in Attachment A to Part VIII.

3.2 USE OF ACAS INDICATIONS

The indications generated by ACAS shall be used by pilots in conformity with the following safety considerations:

- a) pilots shall not manoeuvre their aircraft in response to traffic advisories (TAs) only;

Note 1.— TAs are intended to alert pilots to the possibility of a resolution advisory (RA), to enhance situational awareness, and to assist in visual acquisition of conflicting traffic. . However, visually acquired traffic may not be the same traffic causing a TA. Visual perception of an encounter may be misleading, particularly at night.

Note 2.— The above restriction in the use of TAs is due to the limited bearing accuracy and to the difficulty in interpreting altitude rate from displayed traffic information.

- b) on receipt of a TA, pilots shall use all available information to prepare for appropriate action if an RA occurs;
- c) in the event of an RA pilots shall:
 - 1) respond immediately by following the RA as indicated, unless doing so would jeopardize the safety of the aeroplane;

Note 1.— Stall warning, windshear, and ground proximity warning system alerts have precedence over ACAS.

Note 2.— Visually acquired traffic may not be the same traffic causing an RA. Visual perception of an encounter may be misleading, particularly at night.

- 2) follow the RA even if there is a conflict between the RA and an air traffic control (ATC) instruction to manoeuvre;
- 3) not manoeuvre in the opposite sense to an RA.

Note.— In the case of an ACAS-ACAS coordinated encounter, the RAs complement each other in order to reduce the potential for collision. Manoeuvres, or lack of manoeuvres, that result in vertical rates opposite to the sense of an RA could result in a collision with the threat aircraft.

- 4) as soon as possible, as permitted by flight crew workload, notify the appropriate ATC unit of the RA, including the direction of any deviation from the current air traffic control instruction or clearance;

Note.— Unless informed by the pilot, ATC does not know when ACAS issues RAs. It is possible for ATC to issue instructions that are unknowingly contrary to ACAS RA indications. Therefore, it is important that ATC be notified when an ATC instruction or clearance is not being followed because it conflicts with an RA.

- 5) promptly comply with any modified RAs;
- 6) limit the alterations of the flight path to the minimum extent necessary to comply with the RAs;
- 7) promptly return to the terms of the ATC instruction or clearance when the conflict is resolved; and
- 8) notify ATC when returning to the current clearance.

Note.— Procedures in regard to ACAS-equipped aircraft and the phraseology to be used for the notification of manoeuvres in response to a resolution advisory are contained in the PANS-ATM (Doc 4444), Chapters 15 and 12 respectively.

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