



U.S. Department
of Transportation
**Federal Aviation
Administration**

InFO

Information for Operators

InFO 11012
DATE: 5/23/11

Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info

An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

Subject: Transponder/Traffic Alert and Collision Avoidance System (TCAS) Operations While on the Airport Surface

Purpose: This InFO informs air carriers and operators of the proper transponder selections during aircraft taxi, in order to support air traffic control (ATC) ground surveillance systems as well as minimize 1090 megahertz (MHZ) frequency congestion.

Background: During recent cockpit enroute inspections, Federal Aviation Administration (FAA) Aviation Safety Inspectors (ASI) have noticed that some operating procedures direct flightcrews to select traffic advisory/resolution advisory (TA/RA) during all surface movement operations. This procedure is contrary to the FAA TCAS guidance as discussed in Advisory Circular (AC) 120-55C, Air Carrier Operational Approval and Use of TCAS II.

Discussion: TCAS II operation on the airport surface provides no safety benefit, except when approaching or taxiing onto an active runway. Routine ground operations with the transponder selected to TA-ONLY or TA/RA enables TCAS II to interrogate other aircraft at high power levels. This unnecessarily contributes to 1090 MHZ frequency congestion. Routine operation of TCAS II on the ground can degrade:

- Performance of ATC radars
- Surveillance performed by airborne TCAS II units in the vicinity of your aircraft

Operating with the transponder on (XPNDR or ON) is sufficient to ensure that aircraft are visible to ATC surface surveillance systems.

Recommended Action: Directors of safety, directors of operations, chief pilots, fractional ownership program managers, training managers, and operators of aircraft should emphasize the importance of adhering to the guidance found in AC 120-55C and the procedures listed below.

- **Departures.** Select transponder to XPNDR or ON during pushback. Select TA/RA when taking the active runway.
- **Arrivals.** Select transponder to XPNDR or ON after clearing the active runway. Select STBY or OFF per company operating procedures at the completion of the flight.

Additionally it is a good operating practice to turn TCAS on in the TA-ONLY or TA/RA mode for a short period of time before crossing an active runway to double-check for the presence of any aircraft on short final.

NOTE: It takes several seconds to display traffic when switching to TA-Only or TA/RA. The time period varies between different TCAS II equipment manufacturers. Consult your TCAS II vendor to establish the amount of time it takes to display traffic. Operators electing to implement this use of TCAS II must establish and publish procedures for the flight crew to follow.

Contact: Questions or comments regarding this InFO should be directed to Roger Sultan, Flight Technologies and Procedures Division, Future Flight Technologies Branch, AFS-430 at (202)-385-4586.