

MODE 'S' TRANSPONDER ICAO 24-BIT AIRCRAFT ADDRESSES

1. Department of Civil Aviation Myanmar has become aware of incorrect 24-bit addresses being installed / hard wired on individual aircraft. This has happened not only on first installation of a Mode 'S' transponder but also when a modification has been made or following a change of State of Registry. Incorrect installation, such as setting the address to all zeros or inadvertent duplication of an address, can pose a risk to flight safety. In particular, the airborne collision avoidance system (ACAS) operates on the assumption that only a single, and therefore unique 24-bit aircraft address exists per airframe. The performance of ACAS can be seriously degraded and in some cases disabled if an incorrect or duplicate address is installed on an aircraft.
2. International Civil Aviation Organization (ICAO) has recognized that the present management methodology of aircraft 24-bit addresses presents a genuine safety hazard that needs to be addressed and suitably mitigated in any system that is to make use of the Mode S address. This notice is published to make the maintenance community aware of this issue.
3. In order to ensure that the 24-bit Mode 'S' address is installed correctly at the time of initial Myanmar Certificate of Airworthiness issue, as well as throughout the in-service life of the aircraft and at the time it leaves the Myanmar register, the following should be accomplished:
 - (a) A positive check that the correct Mode 'S' address is assigned for each transponder installed on the aircraft.
 - (b) The correct Mode 'S' address is periodically confirmed and recorded for each transponder installed on the aircraft, via a field test set at an appropriate maintenance opportunity (not to exceed a 2 year periodicity). This task should be incorporated into the Approved Maintenance Schedule or Programme.

NOTE: An allocated ICAO 24-bit address may be obtained from the Airworthiness Division of DCA, Myanmar.

 - (c) Ensure whenever the aircraft is subject to modification that the Mode 'S' address has not been changed.
 - (d) The DCA, Myanmar assigned Mode 'S' address is removed when the aircraft leaves the Myanmar register.
4. Operators are requested to review their documented procedures and update them, as appropriate, to ensure the above points are addressed. These procedures should also include a method to record that the applicable actions have been accomplished.
5. Reference should also be made to the latest issue of Airworthiness Notices T/21 which contains advice on testing criteria for Transponders.