Safety Regulation Group
Engineering Department – Avionics & Electrical Systems

19 February 2007

Our Ref 9/97/CtAw/337

LETTER TO OWNER/OPERATORS NO 2972
NARCO AT150 TRANSPONDER
COMPLIANCE WITH FAA AD 2004-08-16

CAA, EASA and NATS are investigating incidents of erroneous Mode C (altitude) reporting from aircraft equipped with the Narco AT150 Mode A/C Transponder. The incorrect Mode C interrogation replies provide false altitude data to Air Traffic Control, Airborne Collision Avoidance Systems (ACAS) and Traffic Advisory Systems (TAS) leading to the loss of aircraft airspace separation control and to the potential for mid-air collision.

A unit that exhibited this defect was removed from an aircraft and returned to the manufacturer for test and analysis. The manufacturer advised that the unit had not had Narco Avionics Inc. Service Bulletin (SB) No AT150 No 6 embodied. This SB corrects a failure mode that leads to improper Mode C response to interrogation and is effectively mandated by FAA Airworthiness Directive (AD) 2004-08-16. This AD was effective from 01 June 2004 and has a compliance period of six months from the effective date.

The current investigation has not yet concluded that the failure mode corrected by SB No 6 is the same one causing the recently reported events. However it is evident that the AD has not been complied with on all affected units.

Maintenance organisations are requested to advise owners and operators of aircraft equipped with Narco Avionics AT150 Mode A/C Transponders to ensure compliance with FAA AD 2004-08-16 and to confirm that an appropriate entry has been made in the aircraft maintenance records as well as the appropriate section of the Aircraft Log Book (CAP 398).

Enquiries regarding this LTO should be referred to Mark Bonnick, Engineering Department at the address below:

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