

Continuing Airworthiness Notice – 27-003



Zenith and Zenair CH601 Aircraft Series Safety Recommendation

20 April 2009

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

All Zenith and Zenair CH601 series aircraft

Purpose:

This Continuing Airworthiness Notice (CAN) is to advise operators of Zenith and Zenair CH601 series aircraft that there have been six in-flight structural breakups of Zodiac CH601 XL aircraft since 2006. It appears that aerodynamic flutter is the likely cause of four of the USA accidents and at least two accidents in Europe. The aircraft manufacturer believes flight control flutter will not occur if the control cables are correctly adjusted. Zenair Europe on behalf of Zenair Ltd issued SB No. ZE-2008-01 dated 28 October 2008 requiring the inspection of all control cables for correct tension to prevent aerodynamic flutter.

Background:

The Civil Aviation Authority of the Netherlands issued Emergency Airworthiness Directive NL-2008-003 on 24 October 2008 grounding all Zodiac CH601 XL aircraft (both factory and homebuilt) as an interim measure pending their investigation of a fatal accident on 14 September 2008, in which it appears the wing broke up in flight.

Since the issue of the Netherlands AD the National Transport Safety Board (NTSB) issued urgent Safety Recommendation A-09-30, dated 14 April 2009 addressed to the Federal Aviation Administration (FAA) requesting the grounding of all Zodiac CH601 XL aircraft in the USA due to six in-flight structural breakups since 2006. The FAA are looking into concerns about all versions of the Zodiac CH601 XL aircraft and have no immediate plans to call for the aircraft to be grounded citing the aircraft manufacturer has already told operators to inspect aileron control cable tensions.

The aircraft manufacturer believes aerodynamic flutter will not occur if the control cables are correctly tensioned and has issued SB No. ZE-2008-01 dated 28 October 2008 requiring the inspection of all control cable for correct tension. They have also posted a letter on <http://www.zenithair.com/> from the designer that relates to the in-flight breakups.

Recommendation:

The CAA will continue to monitor the situation closely but in the interim we advise owners of Zenith and Zenair CH601 series aircraft to exercise all possible caution in the operation of their aircraft. In particular the CAA recommends you observe the following:

- Avoid flight in severe turbulence
- Avoid high speeds and/or severe manoeuvres
- Aerobatics, if permitted for your aircraft, should not be attempted.

Inspection of the control cables in accordance with Zenair Europe SB No. ZE-2008-01 is strongly recommended.

Although the Netherlands AD is not yet mandatory in New Zealand, the Civil Aviation Authority is in contact with the FAA and the Netherlands Authority, and a NZ AD may be issued in the near future. In the interim we wish to draw your attention to the Netherlands AD, the NTSB urgent Safety Recommendation and the SB issued by Zenair Ltd. We recommend you review these documents which are available from <http://www.zenithair.com/>

Enquiries:

All other enquires regarding this CAN should be made to:

Jack Stanton
Team Leader Continuing Airworthiness
Email: stantonj@caa.govt.nz
Phone: 04 560 9664