

July 7, 2009

Dear Zodiac owners and pilots,

While I am obviously pleased with the results of the recent Ground Vibration Tests (GVT) which have allowed us to eliminate flutter as a design concern for the CH 601 XL and CH 650, I am at the moment looking at two different areas for possible measures that could help us all improve the track record of CH 601 XL design: There are people issues and there are airplane issues. We need to continue addressing how builders and pilots work on and operate their aircraft (how they apply tolerances and respect limits); and I am also taking a more in-depth look at the aircraft's basic structure.

Having specially conceived and designed light aircraft for plans/kit-builders for over three decades, reminding and helping homebuilders to follow the drawings while assembling their aircraft is not something that is new to me. Today, however, I am seeing more and more owners and pilots operating my designs who have not built the aircraft they are flying. This has been the case in the majority of the serious accidents of the last few years. This suggests more emphasis needs to be placed on helping owners/pilots who have not built their planes to know the design better: How it should be built as well as flown.

As part of this effort, a new and in-depth aircraft check list has been developed for the Zodiac. The items on this list should be verified before the very first flight of any new Zodiac; this same list can be used by new owners when inspecting a pre-built aircraft. Since a fair number of aircraft already in service appear to be modified and/or out of compliance with my drawings, I am urging all owners to perform this condition inspection as a precautionary measure on their completed aircraft. The more pilots know about their airplane, the better!

In addition to items on a typical pre-flight inspection, the following seven items should be routinely checked before each flight in a Zodiac. Thankfully, most points only take a few seconds to check. Where applicable, these items should be added to the flight manual / pilot operating handbook (POH) and/or to the annual inspection checklist for the aircraft:

1. Check all control cable tensions by hand. If in doubt about the cables being properly tensioned, check them with a calibrated cable tension gauge. If necessary, adjust the cable tension to the proper values. If unsure, get a licensed mechanic to check or adjust the cables. Do not fly with control cables that are too loose or too tight.
2. Check for free play in the aileron control system. When holding the control stick stationary, beyond minor flexing, there should be no free play in the system when gently pushing up or down on the aileron trailing edges. Note that if the ailerons are not locked when the aircraft is parked outside, wind can damage the system. Do not fly with loose, sloppy or damaged controls.
3. Check the flaps for positive firm contact with the flap stops when in the "up" (retracted) position. Both flaps must be firmly against the flap stops at the wings and be free of play in the "up" position. Check for movement by gently pushing up and down on the flap trailing edges. Note that the flap system can get damaged if the flaps are stepped on. Do not fly with loose or damaged flaps.
4. When placing luggage/items in the wing lockers, baggage area behind seats, or in other places, check that it is well secured before take-off. Do not fly with loose luggage or other items in the aircraft.
5. Make sure the colored arcs on your ASI all properly indicate the correct speed limits (CAS). Incorrect markings could cause you to unintentionally exceed aircraft limitations. Before flying your aircraft, know all the flight limitations including VA. I recommend that you mark VA on

your airspeed indicator (or panel). Remember that all aircraft limitations should be included in your flight manual (POH).

6. Check that your canopy closes and latches properly on both sides. If in doubt, add a secondary latching system as recommended by the Australian CAA. If your canopy does open in flight, keep your hands on the controls, lower your speed to approximately 60 knots, keep flying the aircraft and land as soon as practicable. Do not try to close the canopy in flight: Fly the aircraft!
7. “Self checkout” is not recommended. Before flying the aircraft, make sure that you have been properly checked out and that you are familiar with all flight limitations and the handling characteristics (feel and responsiveness) of the controls. Remember that, as with any light aircraft, if you encounter unexpected turbulence while cruising, ride it out rather than fight it – and slow down!

REMINDER TO PILOTS: Always get to know a new aircraft you plan to fly before taking the controls (this applies to any aircraft). A thorough condition inspection of the aircraft is essential; learn the operating limitations from the POH (and respect them); and get properly checked out to be familiar with the aircraft’s handling qualities. Remember that any aircraft flown through excessive turbulence or subjected to excessive loads should be thoroughly checked afterward for possible damage.

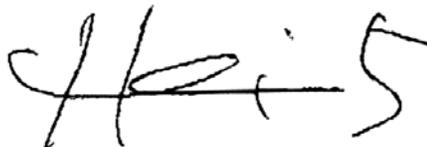
There are many hundreds of Zodiacs flying – many of which have logged hundreds and even thousands of hours over numerous years of trouble-free operation – yet we have also seen a number of accidents that cannot be readily explained. Experts continue to consider the wide range of factors related to these accidents, searching for answers and looking for solutions. Today, as a precautionary measure, I am recommending the adoption of operating limits for the LSA aircraft which, in the interim, will help insure that it will be operated well below its limitations. For now, I am asking all Zodiac CH 601 XL owners to respect these five straight-forward limitations (which are in line with the German DAeC’s restrictions):

1. The aircraft should comply with all Service Bulletins/Service Letters etc. issued by Zenair.
2. The aircraft should have a current Weight and Balance, and should be within limits.
3. Reduce aircraft VNE to 140 MPH.
4. Reduce aircraft gross weight to 1,255 pounds (i.e. no baggage).
5. Your POH and an instrument placard should reflect these limits for the time being.

In closing, rest assured that I am committed to proposing sensible solutions very shortly. In fact, I have every reason to believe that these temporary limitations will all soon be lifted again. I will continue to work with aviation authorities from around the world to help ensure that my designs are built, maintained and operated safely. I, along with Zenair, Zenith Aircraft Co. and many others, want to ensure that Zodiac builders, owners and pilots everywhere will continue to enjoy building and flying their aircraft for years to come.

Thank you for your patience with this long process and please, continue to fly safely!

Sincerely,

A handwritten signature in black ink, appearing to read "Heintz", with a stylized flourish at the end.

Chris Heintz