

THE GLIDING FEDERATION OF AUSTRALIA INC.

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ELEVATOR HINGE PIN FAILURE IS-28B2 & IS-28M2.

30 January 2008

An Australian club has found a broken elevator hinge pin in the left elevator of their IS-28B2 glider. On closer inspection the hinge pin in the right elevator was also found to be cracked. The hinge pins in question are the inner ones which also serve as a locating pin for the elevator connecting yoke which couples the left & right elevator root ribs together during rigging and transmits the drive from the elevator push rod. It is not possible to detect the failure unless the tailplanes are in the folded position and the connecting yoke separated from the elevator root ribs. The attached sheet shows photos of the damaged components.

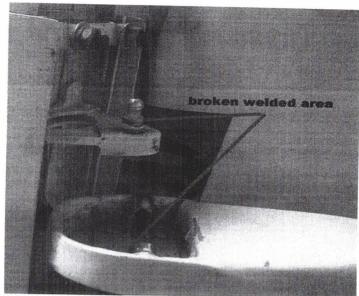
BEFORE FURTHER FLIGHT:- Derig the tailplanes and move the yoke aside. Thoroughly clean the area around the pins & inspect the flange area of the pin for cracks with a X10 magnifying glass. A digital camera set at high resolution & image viewing on a computer screen using the magnifying tool is also an effective inspection technique.

If a crack is found the aircraft may continue in service provided the crack does not extend for more than 25% of the pin circumference. If cracks longer than this are found the aircraft should be grounded and this office contacted for further advice.

Please complete details of your aircraft and findings on the tear off strip below & return to the GFA secretariat by 21 Feb 2008 if possible.

John G Viney.

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DISTRIBUTION: REGISTERED OPERATORS, CTC,CTOA, RTO,A'S, GFA WEB PAGE.	
Aircraft VH Serial No C of A No. G	
No of launches% or no. of winch launches % or	no. of aerobatic flights
* No cracks / Cracks were found in this aircraft (cross out as require	ed)
If cracks are found please contact me on the number below, or given where I can reach you during business hours. Can you email me a di	ve me your name & a contact number igital pic?
Thank you.	
YOUR NAMECON John G Viney,	TTACT
Senior Technical Officer, Airworthiness. (03 9379-7411)	email: stoair@sec.gfa.org.au



Left Elevator hinge & root area showing Hinge Pin completely detached from bracket on root rib



Left hinge pin failure area



Right elevator hinge pin showing cracking around 40% of circumference