COMMONWEALTH OF AUSTRALIA DEPARTMENT OF TRANSPORT

AIR TRANSPORT GROUP

AIRWORTHINESS ADVISORY NOTICE

GFA/AN24/GENERAL 3

Glider Types Affected: All Types.

Subject: AIRWORTHINESS SAFETY

DAMAGE TO BEARINGS IN CONTROL SYSTEMS WHILE TRAILERING.

This Advisory Notice should be brought to the notice of all Glider Pilots.

DAMAGE TO BEARINGS IN CONTROL SYSTEMS WHILE TRAILERING.

There have been a number of instances reported of damage to the bearings of the aileron actuator in 201 and 201B Libelles and of the flap and aileron actuators in Slingsby T-59 Kestrels. It is probable that similar damage could be occuring in other types of gliders with similar control systems. This damage has in most cases been evident as brinnelling of the ball bearings but in at least one case complete collapse of a bearing has occurred.

The evidence of bearing damage shows up as free play in the control surface in a particular position which is reduced when the control surface is moved to a different position. In the case of a collapsed bearing, excessive free play will occur in all positions of the control surface. In either case it will be necessary to replace the ball bearings.

In the cases of bearing damage investigated so far it appears that the prime cause of damage has resulted from trailering with inadequate support for the wings and inadequate springing of the trailer or excessive speed on rough roads.

During daily inspections a check should be made for actuator bearing damage, but remember that due to the small chord of the control surfaces the air loads are relatively low, so ensure that you don't do more harm than good by applying excessive force.

Douglas Lyon.

CHIEF TECHNICAL OFFICER AIRWORTHINESS. GLIDING FEDERATION OF AUSTRALIA.

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