

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

AIRWORTHINESS DIRECTIVE



ABN 53 412 417 012

No. AD 2007.01 (originally AD 06/2007)

Date: 1st June 2007

Subject: **Articulated Push Rods**

Background.

A single place gyroplane had been modified to incorporate an articulated pitch/roll control system. Shortly after takeoff, the pilot noted that the controls were locked such that stick movement was not available in any direction. The out of control gyro impacted the ground heavily destroying the machine. The pilot was lucky to escape injury.

Directive.

With immediate effect, pilots and operators of gyroplanes fitted with articulated push rods are required to check the control systems and ascertain that the controls cannot become restricted or jammed in any way, taking into account the maximum likely deflection of the push rods and mast during all normal manoeuvres.

Furthermore, where bellcranks are used in any articulated control system, they must be so designed that their range of travel is limited to a maximum of 45 degrees each side of the mean position in respect to any movement measured at the bellcrank. The mean position is when the centreline between the bellcrank pivot and the bellcrank push/pull rod mount is at right angles to the push/pull rod.

Where modifications are deemed necessary, the modifications must be recorded in the Gyroplane Logbook and the work certified by an appropriately qualified TA, or a person approved by the Operations Manager.

Gyroplanes that do not comply must not be flown until satisfactory modifications are completed.

Authority: ASRA Operations Manager