

RSA AD 04-01 R2

NON TYPE CERTIFIED AIRCRAFT AD ISSUED IN TERMS OF CAR PART 24 01.7(1)

FITMENT OF EXTERNAL SAFETY CABLES

Applicability: All weight shift aircraft manufactured by South African Civil Aviation Authority (CAA) approved manufacturing organisations including those exported and all weight shift aircraft registered in South Africa. The following aircraft types are affected: -

- All South African manufactured Production Built weight shift aircraft including: -
 - Aerotrike Cobra
 - Aerotrike Safari
 - Aerotrike Scout
 - Aerotrike Spirit II
 - Raptor
 - Windlass Trike
 - Windlass Aquilla Trike
- All other weight shift aircraft which have been South African registered as amateur built.
- Foreign manufactured weight shift aircraft which are South African registered.

Revision: ***This RSA AD 04-01 R2 supersedes RSA AD 04-01 R1 dated 10/08/2004.***

Requirement: The following is required: -

- (i) All owners of weight shift aircraft and any Approved Persons, Aircraft Maintenance Engineers and Aircraft Maintenance Organisations overseeing maintenance of weight shift aircraft are required to inspect the aircraft for any signs of cracks, elongation, corrosion or other signs of structural wear and tear on the following sections: -
 - upper pylon / hang block assembly, (it will require the removal of the pylon/ wing support bracket bolt in order to inspect the upper section of the pylon),

- lower front cables / swan hook or other attachment to keel, and
 - spreader bar tensioner / swan hook or other attachment to keel.
- (ii) external safety cables shall be installed on all weight shift aircraft in the following areas: -
- upper pylon / hang block assembly, (cable to be attached at base of pylon, around the keel tube and attached to the top of pylon),
 - lower front cables to keel, and
 - spreader bar tensioner to keel.

The fitment of these cables must be designed such that the wing does not separate with the failure of the current attachment brackets, swan hook fittings, tubes or bolts. (See guidance document FAA AC 43-13 1B for manufacture and test of cables).

Compliance:

The inspections defined in paragraph (i) shall be carried out PRIOR TO FURTHER FLIGHT and before each flight until the safety cables defined in paragraph (ii) have been fitted. Any signs of cracks, elongation, corrosion or structural wear and tear must be corrected in accordance with the manufacturers requirements prior to further flight and reported to the CAA Certification Division, Defect Reporting on the form CA 43-15, fax number +27 (0) 11 545 1462. (The form is available on the website www.caa.co.za as attachment to AIC 61.14, "Malfunction or Defect Reports") Once the required safety cables defined in paragraph (ii) have been installed, inspections shall be carried out in accordance with the manufacturer's requirements.

The fitment of the external safety cables defined in paragraph (ii) shall be carried out not later than **29 February 2005**. Modification approval must be obtained from the CAA prior to fitment for aircraft registered in South Africa. Form CA43-14 which is available on the CAA website should be used for this purpose. If the installation of the safety cables is covered by a CAA approved Service Bulletin issued by the Original Aircraft Manufacturer no application for modification approval is required. The fitment of the required safety cables must be certified in the aircraft log

books by an appropriately rated Approved Person, Aircraft Maintenance Organisation or Aircraft Maintenance Engineer. If the aircraft is already fitted with such safety cables it should still be certified in the aircraft log book that the aircraft complies with this Airworthiness Directive.

Alternate Methods

of Compliance: The Certification Division is authorised to approve alternative methods of compliance for this AD.

Background: This Directive is a result of recent weight shift aircraft fatal accidents due to wing separation of various causes. This directive mediates the affects of structural failure leading to wing separation by instituting safety inspections and requiring installation of safety cables.

This directive is issued in the interest of aviation safety.

Commissioner for Civil Aviation

Date: [Approved by the Acting Commissioner for Civil Aviation on 2004-12-20]