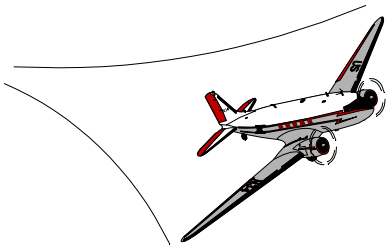
SPECIAL AIRWORTHINESS INFORMATION BULLETIN



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AIRCRAFT CERTIFICATION SERVICE
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The purpose of this Special Airworthiness Information Bulletin (SAIB) is to provide safety information on Ayres S2R aircraft.

Background:

The FAA is aware of a problem on Ayres S2R aircraft that is not being corrected during normal routine inspections. This problem is only applicable to those Models of the S2R equipped with the fabric covered empennage. The FAA was informed that the clevis pins securing the lower flying wires of the horizontal stabilizer are experiencing a high level of wear. The attach plate that forms the lower attach point for the flying wires is also wearing. These parts are identified in the Ayres illustrated parts catalog as follows:

Figure No.	Part No.	Description
2-21-9	MS20392-3-15	Clevis Pin
2-21-9	MS20392-4-17	Clevis Pin
2-38-20	10232-1	Plate - Flying wire attach

Ayres maintenance manual requires inspection of the empennage brace wire terminal ends every 100 hours. However, the inspection guide in the maintenance manual does not appear to specifically call out an inspection of the clevis pin to attach plate or give a specific maximum wear tolerance. The entry for checking the "safety of the clevis pins" could be construed as a visual check of the cotter pin. "Check units for tightness" could be interpreted in a number of ways.

The worn parts were detected by an aircraft maintenance facility specializing in the maintenance and repair of agricultural aircraft. The clevis pin was noted to be about 50 percent worn through on S2R models at 5000 hours with 600 horsepower reciprocating engines and 2500 hours with turbine engines.

Recommendation:

The FAA highly encourages you to inspect the clevis pin and flying wire attach plate for wear. The clevis pin should be replaced when the wear exceeds 15 percent of the original shank diameter and the plate should be replaced when the hole elongation exceeds 25 percent of the original hole diameter.

For Further Information Contact:

Brian Hancock, Project Officer, FAA, Small Airplane Directorate, 1201 Walnut, Suite 900, Kansas City, Missouri 64106; telephone: (816) 426-6932; facsimile: (816) 426-2169.

Marvin Wilson, Vice President Product Support, Ayres Corporation, P.O. Box 3090, Albany, Georgia 31706-3090; telephone: (912) 883-1440; facsimile: (912) 439-9790.