Inspection and Repair of S-LSA Revo WSC aircraft S/N 000554 (Registration: N611TX)

SD-1004 (Revision 2)

Evolution Trikes April 12, 2011 Status: Mandatory

Background:

It has been brought to Evolution Trikes attention that a Revo model aircraft that is a Special Light Sport Aircraft (S-LSA) was involved in an accident in Maryland, USA in late 2010. This aircraft has been repaired without factory authorization. This safety directive clarifies how S-LSA aircraft are required to be maintained per FAA regulations and in compliance with the maintenance manual (MIP) to maintain ASTM compliance.

To maintain its ASTM compliance the aircraft is required to follow procedures in the maintenance manual by authorized personnel. Since the aircraft was damaged and the repairs are in excess of what the maintenance manual allows. The aircraft no longer meets the MIP and 14CFR§§91.327 and as such this aircraft is no longer ASTM compliant.

In absence of required guidance in the MIP a Letter of Authorization is required.

In addition to the airframe and wing and engine has separate required inspection and need to be performed in accordance with the components manufacturer's maintenance instructions.

Scope:

The following serial numbers of the Revo weight-shift-control aircraft are affected by this safety directive:

000554

This revision overrides previous versions of this safety directive.

Authorized Persons:

An A&P or a certified Repair Station as authorized by the manufacturer.

Tools and Articles Required:

Various general hand tools and specialized aircraft manufacturer tooling to inspect and maintain and re-assemble the complete aircraft as approved by Evolution Trikes.

Compliance:

Compliance is mandatory and is required before the next flight. In absence of a repair without parts approved by Evolution Trikes, this aircraft compliance with the ASTM standards cannot be determined. Repairs and modifications and parts need to be inspected and approved by Evolution Trikes at its facility at Zephyrhills Municipal Airport.

Testing:

This aircraft is required to follow the ground and flight testing guidelines as outlined in Evolution Trikes Quality Assurance system.

Logbook Entry:

Aircraft maintenance records should have the following entry, dated and signed with mechanic's certificate number (if applicable) once the requirements of this safety directive have been accomplished:

"Safety directive 1004 has been complied with per the manufacturer's instructions and is in compliance with ASTM standards."