



## Airworthiness Information Leaflet

### Vans RV-6 & RV-6A



## Inspection for Cracking in Tailplane Front Spar as per Vans SB 14-01-31

**Applicability:** All Vans RV-6 and RV-6A Aircraft operating on an LAA administered Permit to Fly.

**Compliance by:** Before the next flight after the effective date of LAA MOD/181A/002 issue 1 and at each subsequent permit renewal Inspection.

**Background:** Cracks in the forward spar of the tailplane (horizontal stabilizer) have been found emanating from the stress relief notch at the inboard end of the spar flanges in both US and UK examples. Vans Aircraft have issued a Service Bulletin (SB 14-01-31) requiring a 'before next flight' and, subsequently, annual inspection of this area of concern and, should cracks be found, incorporated a repair scheme which strengthens the area using Vans-supplied doubler plates.

On receiving notification of the Vans Bulletin the LAA issued an Airworthiness Alert (LAA/AWA/14/02) highly recommending to owners that this inspection of primary aircraft structure be carried out before the next flight and asked owners to report any cracking discovered to LAA Engineering as soon as possible; as a result of this initial check three LAA aircraft have been found with cracks.

Owners should be aware that, whilst the inspection part of this Service Bulletin is straightforward, the fitment of the doubler plates, or even just dressing-out a smaller crack, will require a high degree of sheet-metalworking skill and shouldn't be attempted by the novice; the area of concern is class one primary structure.

This Airworthiness Information Leaflet serves to mandate the inspection requirement of Vans SB 14-01-31 and, with some conditions, accepts the factory repair scheme as being a method by which an affected aircraft can be brought back to an airworthy state.

Note 1. For LAA administered aircraft the inspection remains an Annual requirement even if the Vans repair schedule is incorporated.

Note 2. SB 14-01-31 is available from [www.vansaircraft.com/public/service.htm](http://www.vansaircraft.com/public/service.htm) or <http://www.lightaircraftassociation.co.uk/> (see Airworthiness Alerts).

**Actions Required:** Carry out the inspection of the tailplane's forward spar in accordance with Vans SB 14-01-31. Should a crack be found LAA Engineering must be informed and the following rules regarding repair will apply:

1. If the crack extends no more than 1/8" (c. 3 mm) from the edge of the relief notch (when present), the notch can be increased in size to 'dress-out' the crack as per Vans SB 14-01-31 (Pg. 6). If no relief notch is present, one can be added to remove cracking.
2. If the crack extends more than 1. above then the Vans repair may be used provided that the crack tip doesn't extend behind the main rib's (HS-405) flange. (See SB 14-01-31, Pg. 3 - 20)
3. If the crack tip extends underneath the main rib (HS-405) flange then the individual repair scheme must be approved by LAA Engineering.

**Certification:** The Inspection and, should it be necessary, any subsequent repair must be completed to the satisfaction of a suitably qualified LAA Inspector.

Worksheets and log book entries must be raised and signed confirming compliance with LAA MOD/181A/002 issue 1, noting, where appropriate, the degree of cracking found and repairs completed.

LAA Airworthiness Information Leaflet Classifications  
 Classification A - Considered Mandatory by the LAA  
 Classification B - Recommended by the LAA  
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