



AIRWORTHINESS ALERT

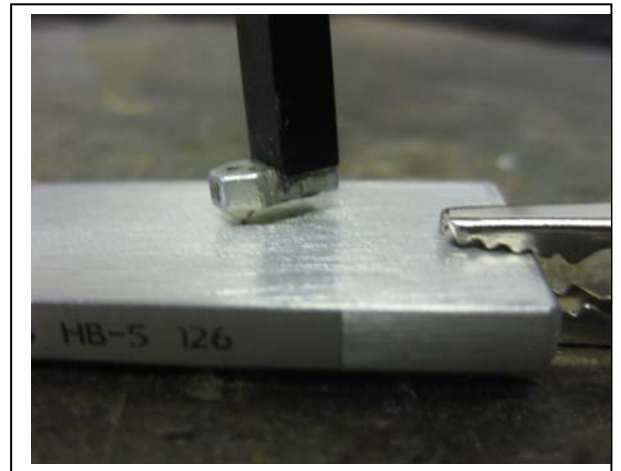
ENGINEERING NEWS – UPDATE

SUBJECT: EVEKTOR EUROSTAR – Spar tests accepted by CAA.

DATE: 12TH March 2010

Following concerns raised late last year about variations in the strength of the materials used in manufacturing the Eurostar's wing spars, and the subsequent issuance of a Mandatory Permit Directive (MPD No. 2009-010) limiting the type's maximum speed, the LAA are pleased to announce that the UK CAA has, at a meeting at Gatwick yesterday, agreed Evektor's inspection programme.

The programme involves the introduction of comprehensive in-house material acceptance checks on each of the critical extruded aluminium wing spar components in the Evektor factory, before the spars are built up, to verify that each piece of material meets the design's original strength criteria. These tests are in addition to the checks already carried out by the material manufacturers themselves.



For the existing fleet of over seven hundred Eurostars worldwide, the spar material strength of each aircraft is being spot-checked at the four most critical locations by a combination of hardness and conductivity measurements carried out by Evektor-trained personnel. Of over a hundred sets of wings tested to date throughout Europe, around fifteen percent have had to have the wing spar material replaced because the material was marginally below the minimum acceptable strength figure.

Since this issue came to light, Eurostar owners are being required to operate within a reduced 3g flight envelope, as mandated by the CAA MPD issued late last year. CAA will shortly issue a revised MPD which will remove these restrictions from aircraft using either new-build wings or those whose wings have passed the spot check tests, and also extend the deadline for completing the tests into early next year.

This successful result follows a great deal of investigation work by Evektor, UK agents Cosmik Aviation, LAA and BMAA, including visits by LAA Chief Engineer Francis Donaldson to a UK-based aluminium extruder and to the aluminium foundry and extruder in Poland where some of the affected Eurostar parts were made, to compare production techniques and quality control procedures. This was combined with a visit to the Evektor factory in the Czech Republic to review the proposed material tests and spar cap replacement method.

Eurostar owners will receive details of the arrangements for wing testing from Cosmik directly.