Safety Regulation Group

Certification and Approvals Department

31 October 2005

Our Ref 9/97/CtAw/30

LETTER TO OWNERS/OPERATORS NO 2846 BEECH BONANZA H35 CRACKING OF FORWARD SPAR LOWER BOOM FITTING ON THE WING

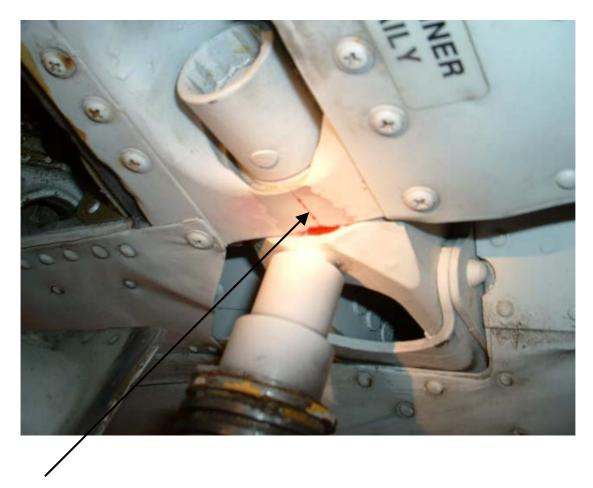
The UK Civil Aviation Authority has been informed by a UK maintenance organisation of a crack in the forward spar lower boom fitting on the wing. The location can be seen on the photograph on page 2. The crack extends the length of the fitting in this area and is about one third of the thickness of the fitting. The manufacturer of the aircraft has been informed and they have stated that this is the first reported finding of such a crack on the type.

On disassembly of the wing attachment, it was discovered that the radius washer beneath the nut had been installed in the reverse orientation. Witness marks remain on the fitting and these are close to the crack location. Detailed metallurgical examination of the fitting will be needed to determine the cause of the cracking.

The cracking as discovered on this aircraft has not identified an immediate risk to flight safety. At present there is a concern as confirmation of the cause of the cracking is still awaited and there are other aircraft in the UK fleet at significantly higher cycles than the subject aircraft. For the moment however, the CAA is not proposing or requesting (from others) the issuance of an airworthiness directive. However due the criticality of this joint to the structural integrity of the aircraft, the CAA has determined it to be prudent to issue this LTO and to request that owner/operators of this type of aircraft arrange for this area to be inspected at the earliest convenient opportunity.

Owners/operators should report any inspection findings to the manufacturer Raytheon and to the CAA through the Mandatory Occurrence Reporting scheme.

Enquiries regarding this LTO should be referred to Andrew Sanderson (Telephone number 01293 573530) or at the address below:



Crack

View looking up on the forward spar lower boom fitting on the wing. The crack being identified by the dye penetrant witness marking.

Tracy Hannay (Mrs)
Airworthiness Directive Co-ordinator