

LAA/AWA/20/21
17th November 2020

Aeroprakt A22, A22-L, A22-LS & A22-L2 Foxbat Aircraft

Inspection of the Attachment of the Nose Undercarriage Leg Support Block

During the pre-flight inspection of an Aeroprakt A22 Foxbat, the pilot noticed that the propeller's trailing edge was nearly touching the lower engine cowl.

Further investigation revealed that the firewall had buckled at a point where the firewall meets the cockpit floor; this structural failure had allowed the engine mount frame to drop slightly.

One contributing factor in this failure event, was that the two rivets securing the nose undercarriage support block to the aircraft's floor, had failed.

The manufacturer's assembly drawings for the earlier Foxbat variants show that four rivets are required in this assembly. Later examples of the type may use three 3/16" aircraft quality bolts in place of the four rivets.

It is thought that this part had been supplied as a replacement when carrying out a previous repair with only two of the four reference holes drilled, perhaps to allow the same part to be used for both riveted and bolted connections.

LAA Engineering has issued an Airworthiness Information Leaflet (LAA/MOD/317/003 Issue 1) requiring owners to check their aircraft to ensure that either four rivets or three 3/16" (AN3-3A) bolts, nyloc nuts and washers attach the nose undercarriage support block to the fuselage floor.

LAA/MOD/317/003 Issue 1 may be downloaded [HERE](#).

This failure was discussed in the November 2020 Safety Spot, an on-line copy of this document may be downloaded [HERE](#).



The owner of the Foxbat shown in the picture above noticed that the trailing edge of the propeller was very close indeed to the lower engine cowling, emphasising, perhaps, the great importance of a thorough pre-flight inspection.



Further investigation revealed that the engine mount frame had moved because an essential structural element elsewhere had failed. Notice in the picture that both the rivets holding the nose undercarriage support block had broken. This block should have been held in place by four rivets and, because there were only two fitted, it failed under load far sooner than it was designed to.