

Damage repair after incident 20240306

On March 6 we had an incident with the Sonex PH-AWX. The wheel flipped over during landing. Fortunately no further damage to propeller and engine.



Investigation revealed that a bolt in the left wheel strut was broken and the hole was bulged out due to extreme shimmy.



The right leg was still 'intact' but also showed elongated holes. The bolt was also impacted and was collapsing.

The vibration (wheel shimmy) during landing made the axle assembly rotate around the gear leg resulting in elongated holes and damaged bolts.

After careful consideration, it was decided to thicken the tube and place an extra bolt.

The repair was carried out in accordance with AC-43-13-1B, chapter 4.92 (repair by welded sleeve) and 4.102 (landing gear repair).

The elongated holes were first welded shut and a sleeve was welded over the tube. The original hole in the gear leg was also a bit too large and a bit damaged. So after aligning and assembly an extra hole was machined with a tight fit for the bolt. Placing an extra bolt also will make it fail saver.

Every annual inspection the bolts will be checked and replaced if worn.

