

NOTES ON FBG POST-ACCIDENT REPAIR & RECOVERY

The aircraft functioned as claimed. It absorbed energy allowing me to survive. The aircraft impacted the ground nose low, right wing low, in a stalled condition, from an altitude of 50 -100 feet.

Seatbelts & Shoulder Harnesses

The seatbelts were installed with bolts through the lower portion of the upright longerons on the left and right side of the seat. The belts themselves passed through slots in the seat bottom. I was still in the aircraft after the crash and the belts were cut by the paramedics. The right hand attach point was damaged by the crash. The left side attach point was intact.

The shoulder harness passed through a slot in the top of the turtle deck former. This was as high as I could place the harness without adding some type of headrest. You can see in the photo that the harness rode a couple of inches lower than recommended by my Tony Bingelis.



The harness broke the plywood it passed through, though it essentially stayed in place. My two top ribs were broken, though not badly, and my collar bones were not damaged. The harness was attached to the upper longerons about 18" behind the seat back with simple two-bolt fittings and a double strand of 1/8" cable. The right hand attach point was damaged by the crash. The left side attach point was intact. We typically think of the performance of restraint systems in the context of a head-on crash. I think mine would have done ok, though raising the shoulder harness a couple of inches would be wise.

Diagonal Cabanes

I originally used the cross-wires but took good advice and welded on diagonal cabanes. I've only seen one of the diagonals, and truly have no idea where the other one is, but the one I have performed beautifully. The strut is bent but the weld at the top and the bolted attach point at the bottom worked as designed.



Wood Struts

We've debated a lot about wood struts. I've done some unintentional but very intense destructive testing. The two struts on the right side were destroyed, however, the attach fittings stayed bolted to the wood. One strut on the left is still completely intact. The other one is broken but intact.

Here are a few pictures of the right front bottom attach fitting. You'll notice that the strut is gone except where it's bolted to the fitting. This fitting took the greatest impact.





I get a kick out of the cornfield dirt in this picture.



Here's a picture of the damaged left strut. You can see some deformation about a foot from the near end. Note, however, that the bolt holes are in great shape.



General Crashworthiness

I include these pictures of the right rear landing gear/wing strut attach point as a testament to the durability of the design. It's a good example of how the aircraft fails so you don't have to.

