

ERA17FA339
Verbiage and Pictures from NTSB Materials Laboratory

9/28/2017
Umatilla, FL
Hickox Andy Gyroplane, N152AH
ERA17FA339

Two pieces of a fractured main rotor blade were examined in the NTSB Material Laboratory. The blade consisted of an aluminum main spar with a composite airfoil wrapped around the spar. Visual examination revealed a highly textured matte gray fracture surface consistent with an overstress separation. No indications of preexisting cracking such as fatigue or corrosion were noted at the fracture. The adjacent portions of the spar and skin were deformed and cracked indicating nearly 90 degrees of blade bending when the spar separation occurred.

Three images are attached to this email. One showing the two blade pieces as-received (IMG_0216) a second (IMG_0221) showing a close up of the fracture area and a third (IMG_0220) with the fracture faces in close proximity depicting the amount of deformation and blade bending that was present at the time of the spar fracture.

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Figure 1: NTSB Photograph IMG_0216



Figure 2: NTSB Photograph IMG_0221

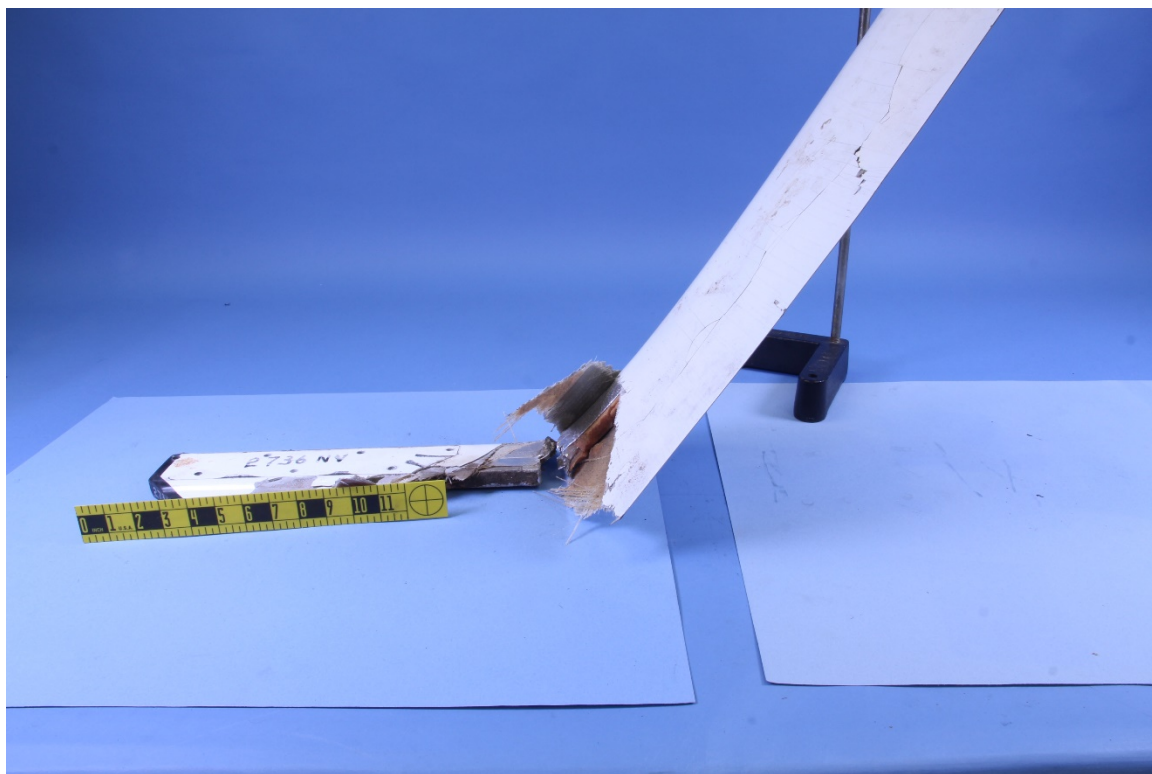


Figure 3: NTSB Photograph IMG_0220