



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

June 17, 2015

STRUCTURES

Group Chairman's Factual Report

DCA15MA019

**Appendix A – Figures
(11 pages)**

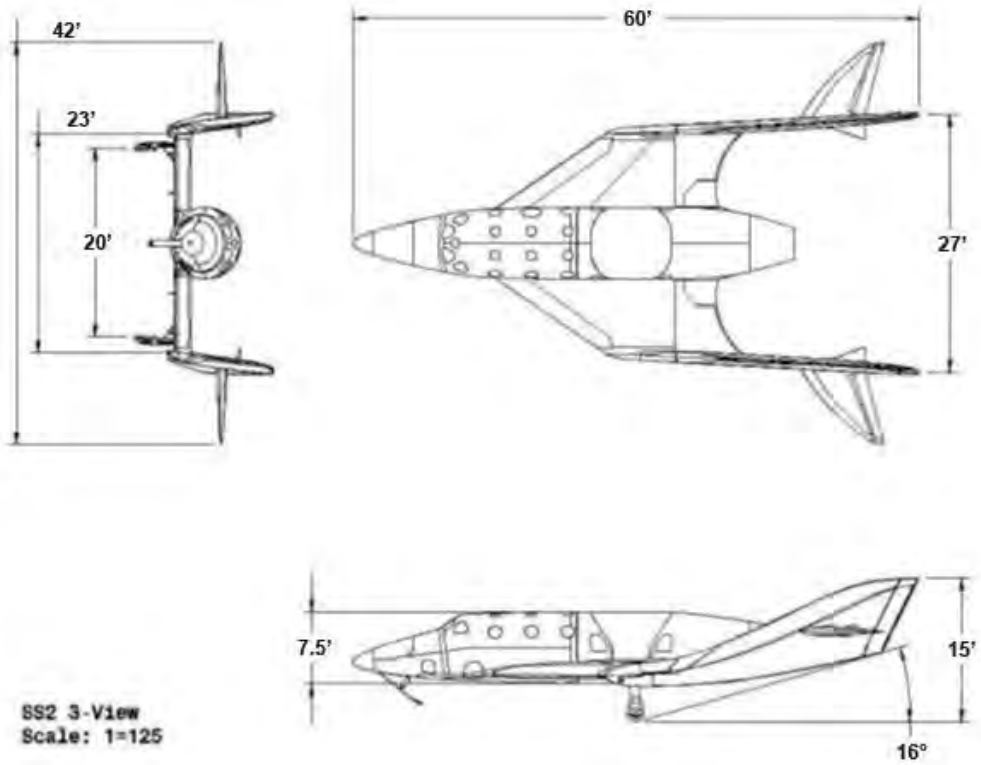


Figure 1 – SpaceShipTwo 3-view drawing in normal configuration

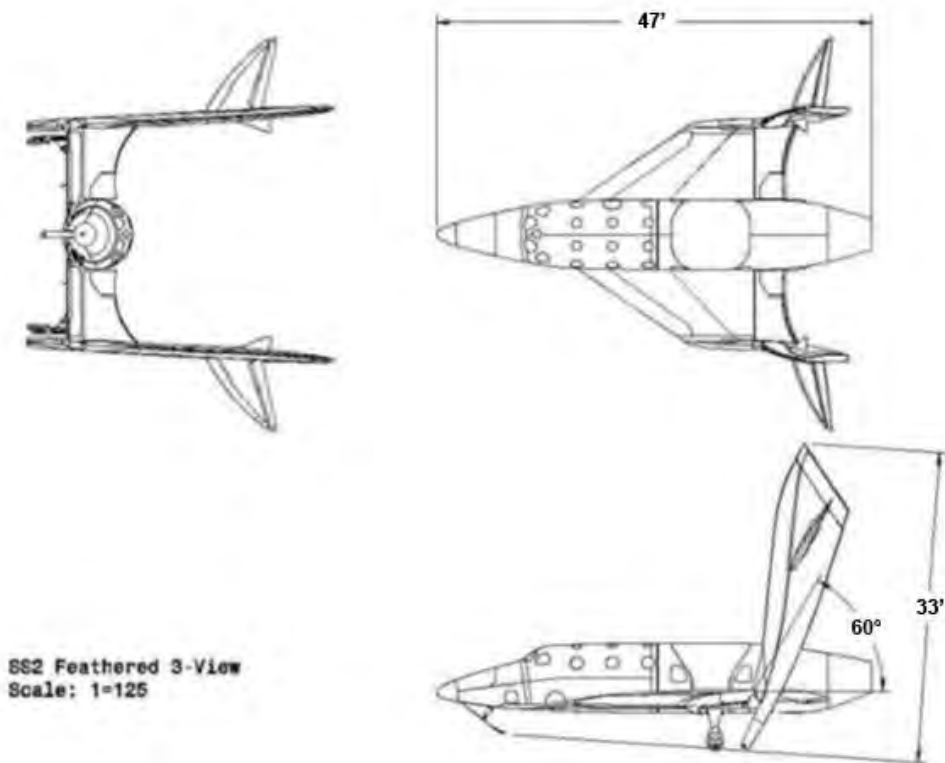


Figure 2 – SpaceShipTwo 3-view drawing in feathered configuration

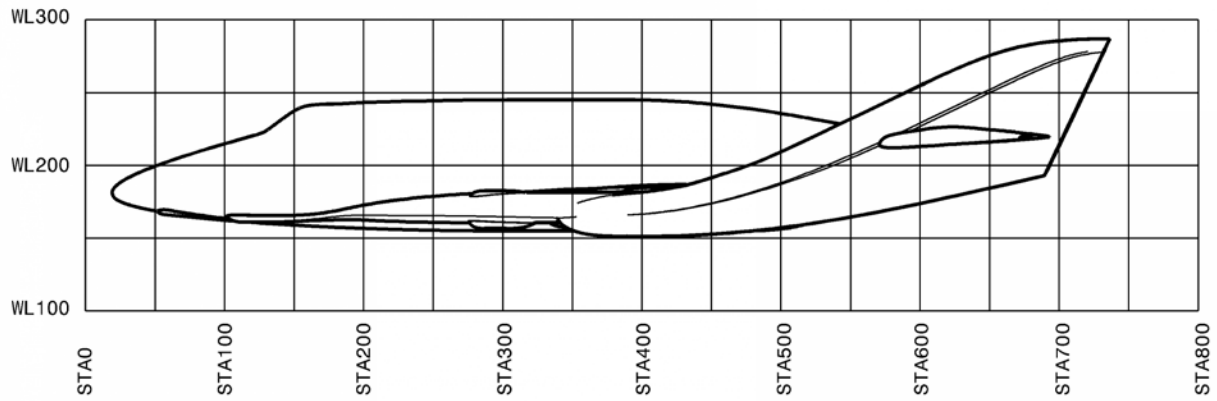


Figure 3 – SpaceShipTwo station diagram

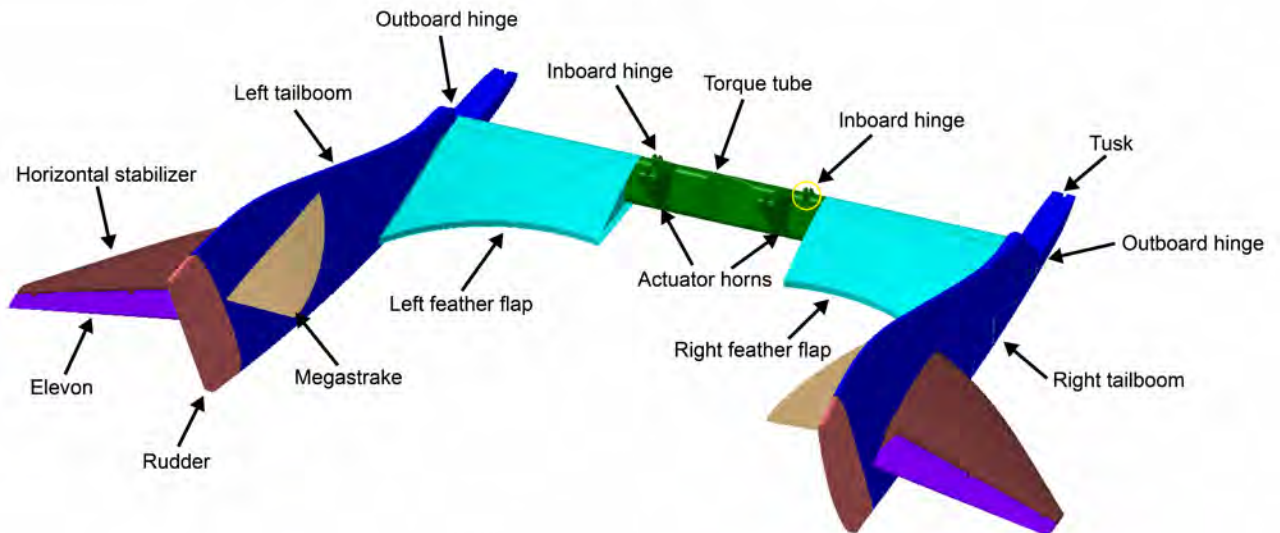


Figure 4 – Feather Flap Assembly

(b) (4)

Figure 5 – Feather Flap Internal Structure



Figure 6 – Wreckage layout



Figure 7 – Left boom wreckage



Figure 8 – Right boom wreckage

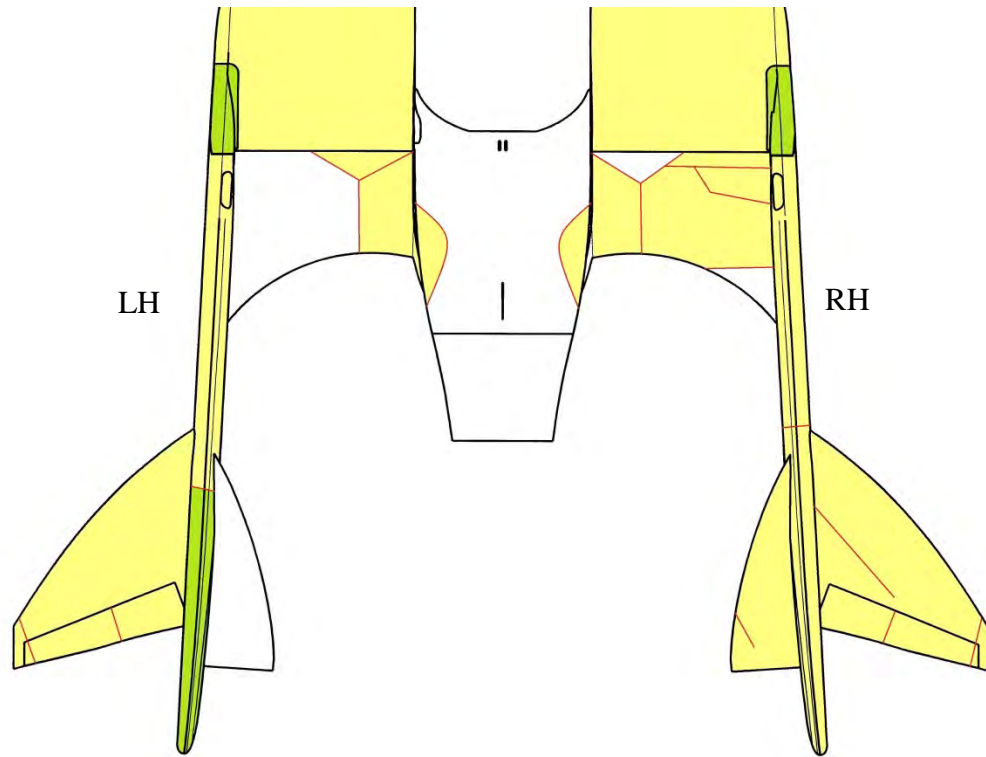


Figure 9 – Top view of recovered and identified structure from aft end of vehicle

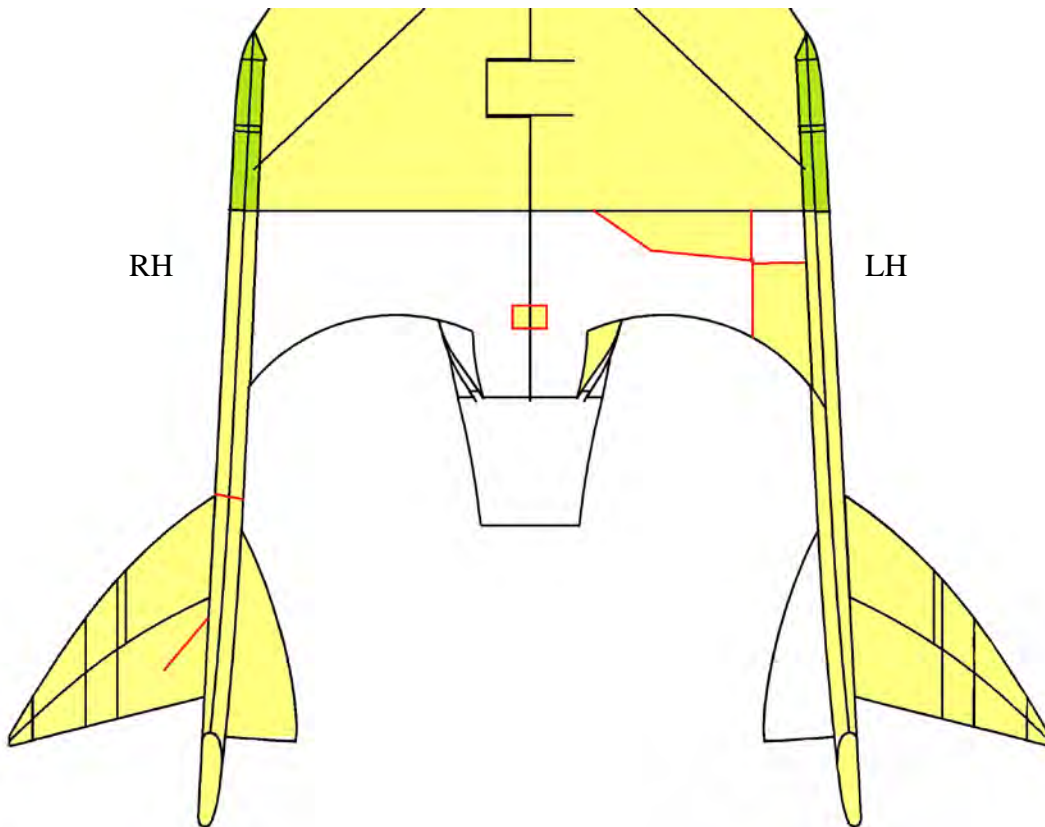


Figure 10 – Bottom view of recovered and identified structure from aft end of vehicle

(b) (4)

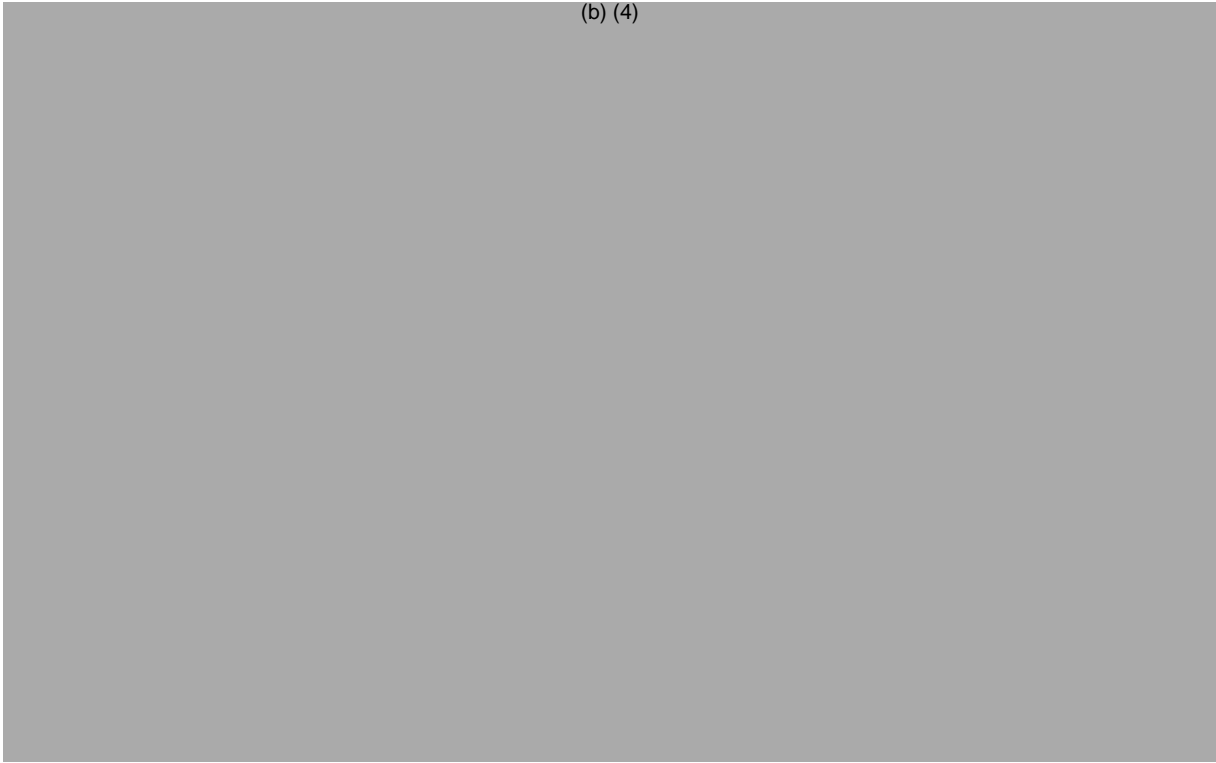


Figure 11 – Left side feather flap internal structure recovered and identified

(b) (4)



Figure 12 – Right side feather flap internal structure recovered and identified



Figure 13 – Left inboard feather flap hinge



Figure 14 – Right inboard feather flap hinge

(b) (4)

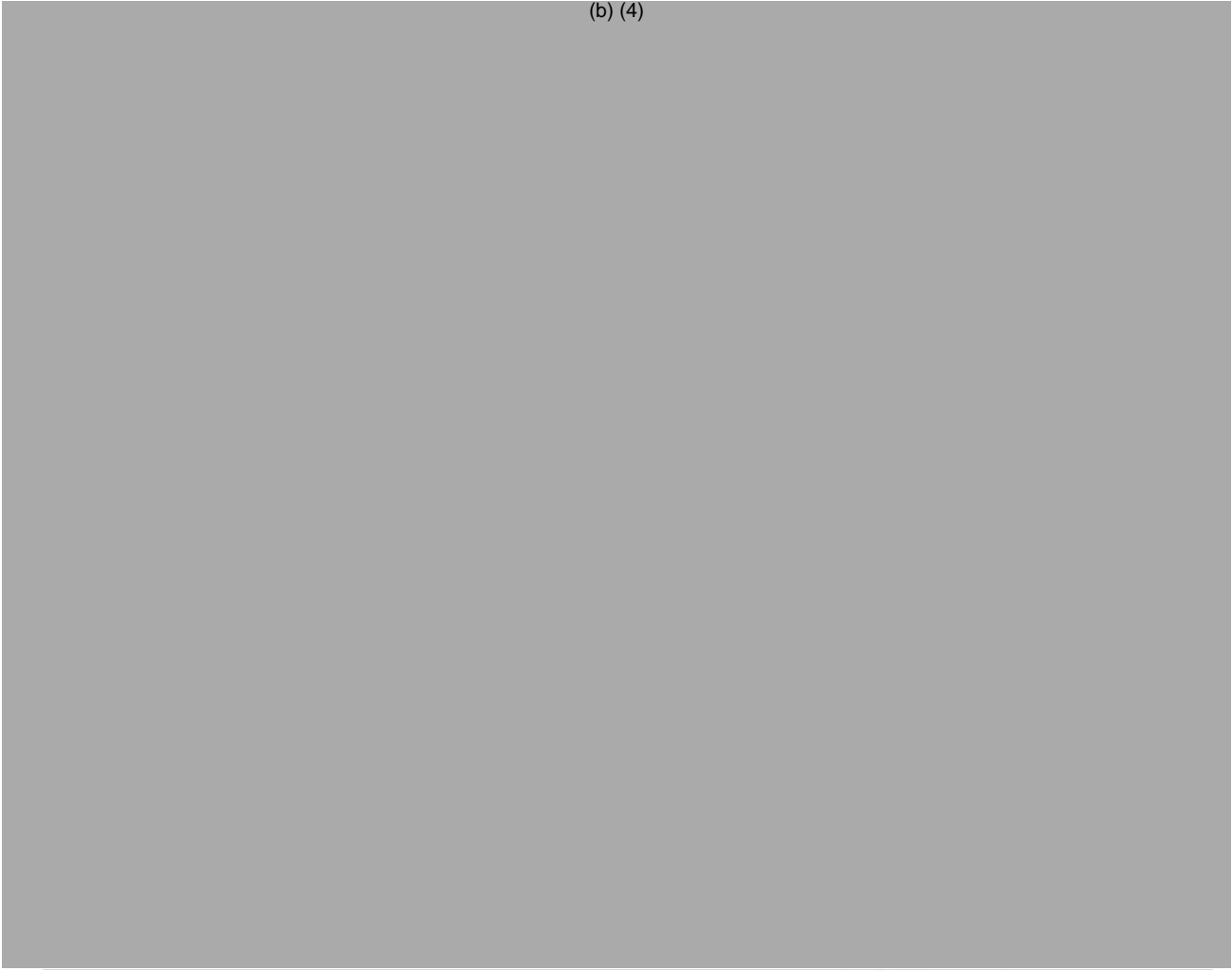


Figure 15 – Aft fuselage internal structure recovered and identified (Recovered right feather actuator not shown)

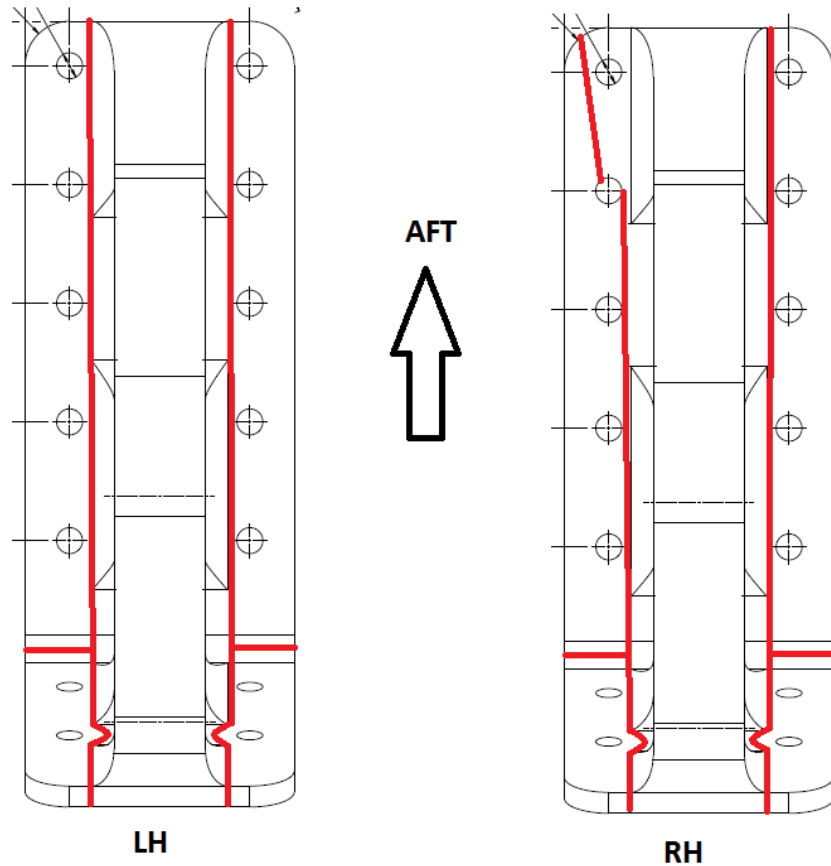


Figure 16 – Inboard Feather Flap Hinge fitting fractures (viewed looking up as installed)

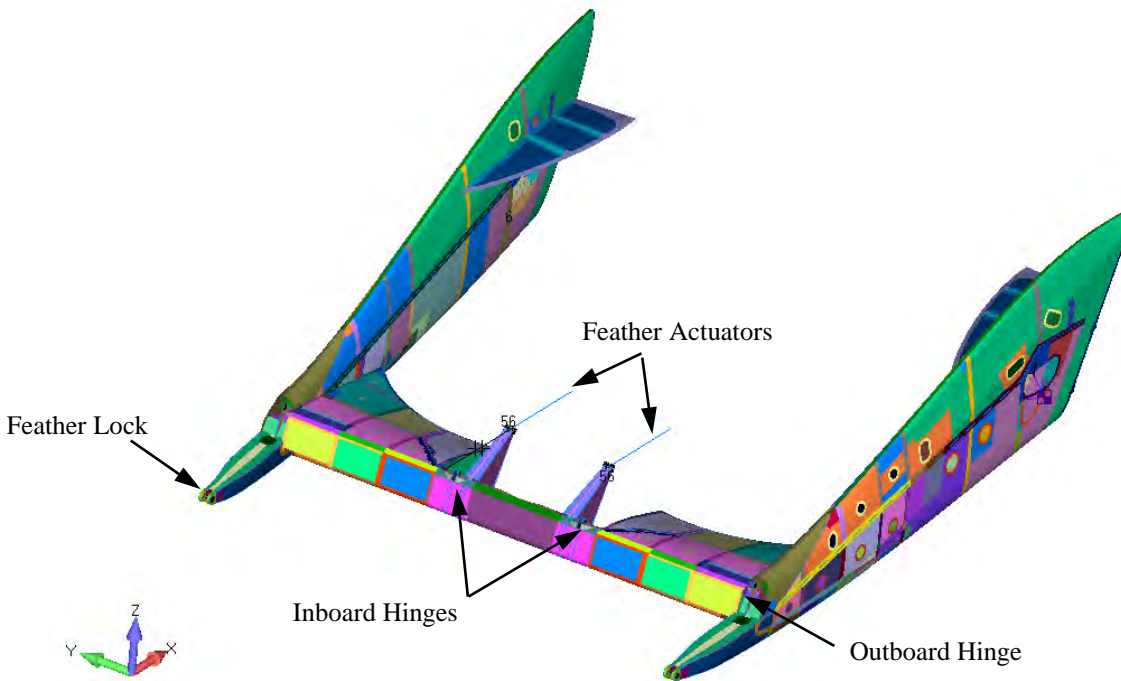


Figure 17 – Feather flap assembly finite element model

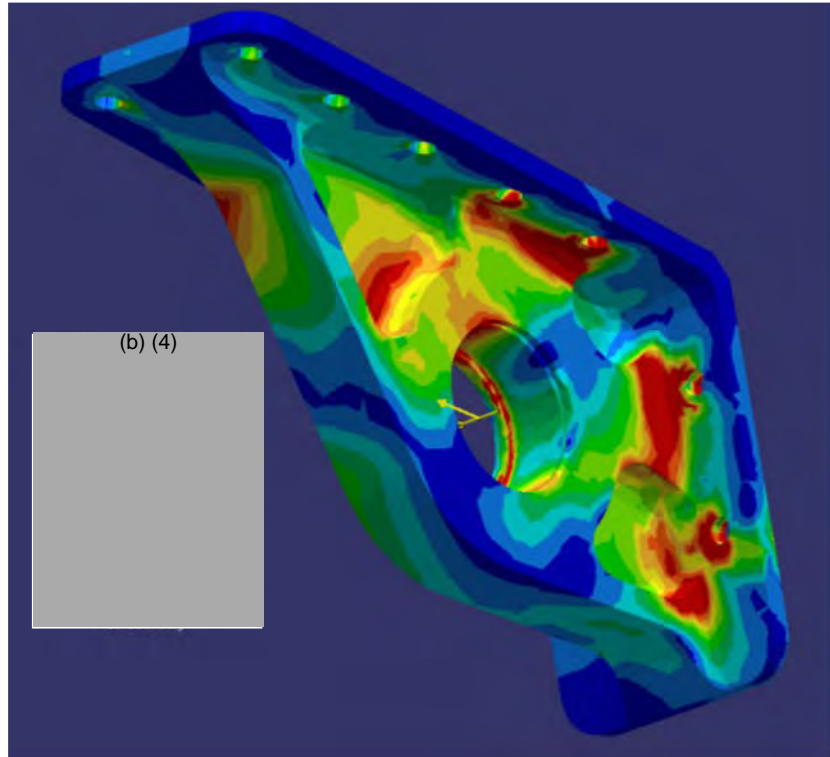


Figure 18 – Feather flap inboard hinge inboard side, Case 5, 33 deg/s

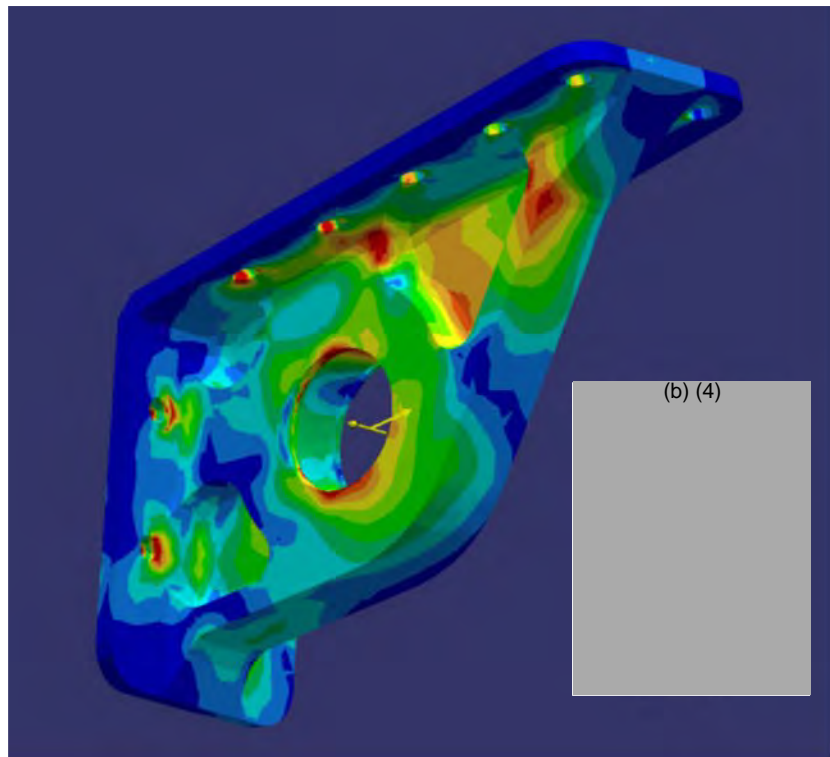


Figure 19 – Feather flap inboard hinge outboard side, Case 5, 33 deg/s

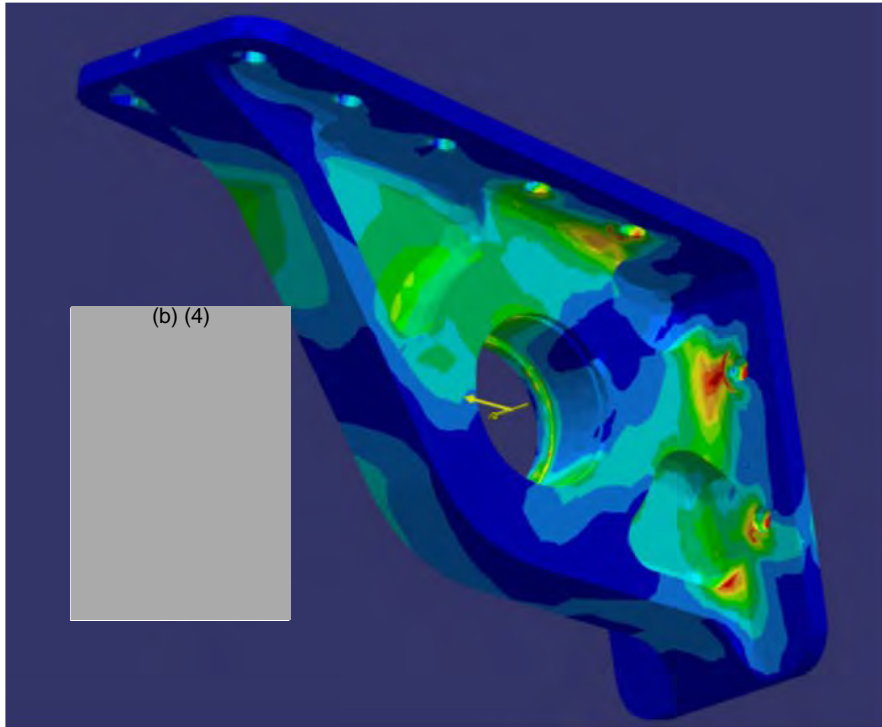


Figure 20 – Feather flap inboard hinge inboard side, Case 5, 5 deg/s

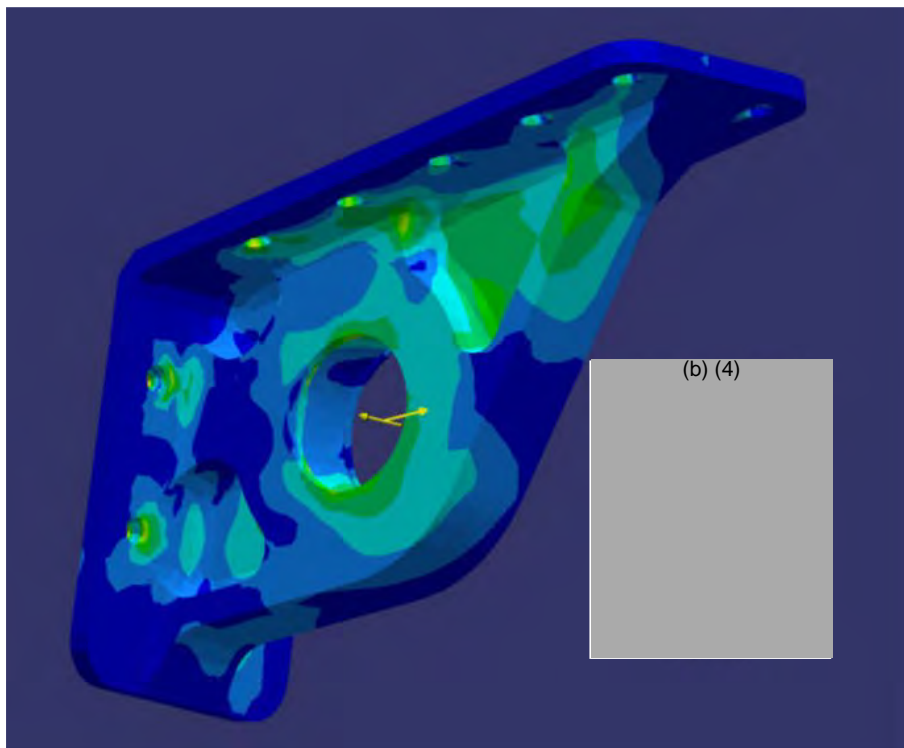


Figure 21 – Feather flap inboard hinge outboard side, Case 5, 5 deg/s