

VIREO / Day12 / Flight25

TEST: Closed-loop control law validation. Right elevon stuck at 5 deg trailing-edge up. First autoland using single surface controller.

RESULT: Good flight for control law validation.

EVENTS:

1. Second flight for single surface (SS) controller. This SS controller operated only the left elevon. The right elevon was held fixed at its trim position, which is equal to the elevator trim position.
2. The SS controller tracked roll angle and commanded the left elevon appropriately.
3. The throttle was controlled by the TE-only controller.
4. Performed a box route.
5. The winds were high, but the aircraft managed to steer through.
6. We performed an aborted autoland in bravo mode. This was the first aborted autoland using a single surface controller.