

Demonstration of the auto-correction system:

This demo was done in class by a model previously built by Madhav to explain how the control surfaces would try to correct their angular orientations/positions (if they were moving through a fluid) whenever they were changed.

Using the ideas discussed in 'flight dynamics' the model was able to demonstrate, where servos may be placed to fulfill the desired motion of the control surface(s) they are attached to.

This is a picture showing how the ailerons were controlled:

As you can see, the front most servo is responsible for moving the ailerons in a way that would cause the craft to perform a rolling manoeuvre. As the servo turns, it causes one aileron to move up and the other to move down.

For the back (elevator and rudder), the same idea applies; the servo is attached to the control surface using a wire to pull and push causing a torque on the control surface it is attached to.

