

Test Card - Longitudinal Stability

Date: Pilot: CG:
 Pressure Altitude Temperature:
 Trim Airspeed: Weight:

Clean Configuration

Task	Pull/Push Required	Airspeed
Pull to 10% less		
Pull to 20% less		
Release Slowly	Record new trim speed <small>AA</small>	
Push to 10% more		
Push to 20% more		
Release Slowly	Record new trim speed <small>AA</small>	

Full Flap Configuration

Task	Pull/Push Required	Airspeed
Pull to 10% less		
Pull to 20% less		
Release Slowly	Record new trim speed <small>AA</small>	
Push to 10% more		
Push to 20% more		
Release Slowly	Record new trim speed <small>AA</small>	

After releasing the control force the aircraft should stabilize within 10% of the original trim airspeed. This should be the case for the entire speed envelope.

Note: A professional test pilot would collect data such as the rate of change of tail lift with respect to aircraft lift and from this data would plot the neutral point. The neutral point corresponds to a centre of gravity far enough aft that would cause neutral stability. All aircraft are certified with the furthest aft centre of gravity ahead of the neutral point. The flight testing and mathematical reduction for neutral point are beyond the scope of Flight Test Checklist.