2.c.3.a.	Long-Term Response.	±10% of calculated period, ±10% of time to ½ or double amplitude, or ±0.02 of damping ratio.For non-periodic responses, the time history must be matched within ±3° pitch; and ±5 kts airspeed over a 20 sec period following release of the controls.	Cruise Augmentation On and Off.	For periodic responses, record results for three full cycles (6 overshoots after input completed) or that sufficient to determine time to ½ or double amplitude, whichever is less. The test may be terminated prior to 20 sec. if the test pilot determines that the results are becoming uncontrollably divergent.	X	X	X	The response may be unrepeatable throughout the stated time for certain helicopters. In these cases, the test should show at least that a divergence is identifiable. For example: Displacing the cyclic for a given time normally excites this test or until a given pitch attitude is achieved and then return the cyclic to the original position. For non-periodic responses, results should show the same convergent or divergent character as the flight test data.
2.c.3.b.	Short-Term Response.	±1.5° Pitch or ±2°/sec. Pitch Rate. ±0.1 g Normal Acceleration.	Cruise or Climb. Augmentation On and Off.	Record results for at least two airspeeds.	X	X	X	A control doublet inserted at the natural frequency of the aircraft normally excites this test. However, while input doublets are preferred over pulse inputs for Augmentation-Off tests, for Augmentation-On tests, when the short-term response exhibits 1st-order or deadbeat characteristics, longitudinal pulse inputs may produce a more coherent response.
2.c.4.	Maneuvering Stability.	Longitudinal Control Position—±10% of change from trim or ±0.25 in. (6.3 mm) or Longitudinal Control Forces—±0.5 lb. (0.223 daN) or ±10%.	Cruise or Climb. Augmentation On and Off.	Record results for at least two airspeeds at 30°–45° roll angle. The force may be shown as a cross plot for irreversible systems. May be a series of snapshot tests.	X	X	X	
2.d.	Lateral and Directional Handling Qualities							
2.d.1.	Control Response							