2.a.5.	Control Dynamics (all axes) ..	±10% of time for first zero crossing and ±10 (N + 1)% of period thereafter, ±10% of amplitude of first overshoot, 20% of amplitude of 2nd and subsequent overshoots greater than 5% of initial displacement, ±1 overshoot.	Hover/Cruise, Trim On, Friction Off.	Results must be recorded for a normal control displacement in both directions in each axis.		X	X	Typically, control displacement of 25% to 50% is necessary for proper excitation. Control Dynamics for irreversible control systems may be evaluated in a ground/static condition. Additional information on control dynamics is found later in this attachment. ''N'' is the sequential period of a full cycle of oscillation.
2.a.6.	Control System Freeplay	±0.10 inches (±2.5 mm).	Ground; Static conditions; with the hydraulic system (if applicable) pressurized; supplemental hydraulic pressurization system may be used.	Record and compare results for all controls.	X	X	X	Flight Test Data for this test does not require the rotor to be engaged/turning.
2.b.	Low Airspeed Handling Qualities							
2.b.1.	Trimmed Flight Control Positions.	Torque—±3%, Pitch Attitude—±1.5°, Bank Attitude—±2°, Longitudinal Control Position—±5%. Lateral Control Position—±5%, Directional Control Position—±5%, Collective Control Position—±5%.	Translational Flight IGE—Sideward, rearward, and forward flight. Augmentation On and Off.	Record results for several airspeed increments to the translational airspeed limits and for 45 kts. forward airspeed. May be a series of snapshot tests.		X	X	
2.b.2.	Critical Azimuth	Torque—±3%, Pitch Attitude—±1.5°, Bank Attitude—±2°, Longitudinal Control Position—±5%, Lateral Control Position—±5%, Directional Control Position—±5%, Collective Control Position—±5%.	Stationary Hover. Augmentation On and Off.	Record results for three relative wind directions (including the most critical case) in the critical quadrant. May be a series of snapshot tests.		X	X	
2.b.3.	Control Response							
2.b.3.a.	Longitudinal	Pitch Rate—±10% or ±2°/sec., Pitch Attitude Change—±10% or 1.5°.	Hover Augmentation On and Off.	Record results for a step control input. The Off-axis response must show correct trend for unaugmented cases.		X	X	This is a ''short time'' test conducted in a hover, in ground effect, without entering translational flight, to provide better visual reference.