Table B2A - Flight Training Device (FTD) Objective Tests								
QPS REQUIREMENTS								INFORMATION
Test		Tolerance	Flight Conditions	Test Details	FTD Level			Notes
Entry Number	Title				5	6	7	
2.b.	**Dynamic Control Tests.**							
	Note.— Tests 2.b.1, 2.b.2 and 2.b.3 are not applicable for FTDs where the control forces are completely generated within the airplane controller unit installed in the FTD. Power setting may be that required for level flight unless otherwise specified. See paragraph 4 of Appendix A, Attachment 2.							
2.b.1.	Pitch Control.	**For underdamped systems**: $T(P_0)$ ±10% of P_0 or ±0.05 s. $T(P_1)$ ±20% of P_1 or ±0.05 s. $T(P_2)$ ±30% of P_2 or ±0.05 s. $T(P_n)$ ±10*(n+1)% of P_n or ±0.05 s. $T(A_n)$ ±10% of A_{max}, where A_{max} is the largest amplitude or ±0.5% of the total control travel (stop to stop). $T(A_d)$ ±5% of A_d = residual band or ±0.5% of the maximum control travel = residual band. ±1 significant overshoots (minimum of 1 significant overshoot). Steady state position	Takeoff, Cruise, and Landing.	Data must be for normal control displacements in both directions (approximately 25% to 50% of full throw or approximately 25% to 50% of maximum allowable pitch controller deflection for flight conditions limited by the maneuvering load envelope). Tolerances apply against the absolute values of each period (considered independently).			**X**	n = the sequential period of a full oscillation. Refer to paragraph 4 of Appendix A, Attachment 2 for additional information. For overdamped and critically damped systems, see Figure A2B of Appendix A for an illustration of the reference measurement.