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	
				CCA: Test in Normal and Non-normal control states.				
2.c.9.a.	Phugoid Dynamics.	±10% of period. ±10% of time to one half or double amplitude or ±0.02 of damping ratio.	Cruise.	Test must include three full cycles or that necessary to determine time to one half or double amplitude, whichever is less. **CCA:** Test in non-normal control mode.		**X**	**X**	
2.c.9.b.	Phugoid Dynamics.	±10% period, Representative damping.	Cruise.	The test must include whichever is less of the following: Three full cycles (six overshoots after the input is completed), or the number of cycles sufficient to determine representative damping. **CCA:** Test in non-normal control mode.	**X**			
2.c.10	Short Period Dynamics.	±1.5° pitch angle or ±2°/s pitch rate. ±0.1 g normal acceleration	Cruise.	**CCA:** (Level 7 FTD) Test in normal and non-normal control mode. (Level 6 FTD) Test in non-normal control mode.		**X**	**X**	
2.c.11.	**(Reserved)**							
2.d.	**Lateral Directional Tests.**							
	Power setting is that required for level flight unless otherwise specified.							
2.d.1.	Minimum control speed, air (V_{mca}) or landing (V_{mcl}), per applicable airworthiness requirement or low speed engine-inoperative handling characteristics in the air.	±3 kt airspeed.	Takeoff or Landing (whichever is most critical in the airplane).	Takeoff thrust must be set on the operating engine(s). Time history or snapshot data may be used. **CCA**: Test in normal or non-normal control state, as applicable.			**X**	Minimum speed may be defined by a performance or control limit which prevents demonstration of V_{mca} or V_{mcl} in the conventional manner.
2.d.2.	Roll Response (Rate).	±2°/s or ±10% of roll rate.	Cruise, and Approach or Landing.	Test with normal roll control displacement (approximately one-third of maximum roll controller travel).	**X**	**X**	**X**	