

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		
should be repeated if major modifications and/or repairs are made to the control loading system. Such a permanent installation could be used without any time being lost for the installation of external devices. Static and dynamic flight control tests should be accomplished at the same feet or impact pressures as the validation data where applicable. Note 3 — (Level 7 FTD only) FTD static control testing from the second set of pilot controls is only required if both sets of controls are not mechanically interconnected on the FTD. A rationale is required from the data provider if a single set of data is applicable to both sides. If controls are mechanically interconnected in the FTD, a single set of tests is sufficient.									
2.a.1.a.	Pitch controller position versus force and surface position calibration.	±0.9 daN (2 lbF) breakout. ±2.2 daN (5 lbF) or ±10% of force. ±2° elevator angle.	Ground.	Record results for an uninterrupted control sweep to the stops.		X	X	Test results should be validated with in-flight data from tests such as longitudinal static stability, stalls, etc.	
2.a.1.b.	Pitch controller position versus force	±0.9 daN (2 lbF) breakout. ±2.2 daN (5 lbF) or ±10% of force.	As determined by sponsor	Record results during initial qualification evaluation for an uninterrupted control sweep to the stops. The recorded tolerances apply to subsequent comparisons on continuing qualification evaluations.	X			Applicable only on continuing qualification evaluations. The intent is to design the control feel for Level 5 to be able to manually fly an instrument approach, and not to compare results to flight test or other such data.	
2.a.2.a.	Roll controller position versus force and surface position calibration.	±0.9 daN (2 lbF) breakout. ±1.3 daN (3 lbF) or ±10% of force. ±2° aileron angle.	Ground.	Record results for an uninterrupted control sweep to the stops.		X	X	Test results should be validated with in-flight data from tests such as engine-out trims, steady state side-slips, etc.	
2.a.2.b.	Roll controller position versus force	±0.9 daN (2 lbF) breakout. ±1.3 daN (3 lbF) or ±10% of force. ±3° spoiler angle.	As determined by sponsor	Record results during initial qualification evaluation for an uninterrupted control sweep to the stops. The recorded tolerances apply to subsequent comparisons on continuing qualification evaluations.	X			Applicable only on continuing qualification evaluations. The intent is to design the control feel for Level 5 to be able to manually fly an instrument approach, and not to compare results to flight test or other such data.	