

Table B2C - Alternative Data Source for FTD Level 5			
Small, Multi-Engine (Reciprocating) Airplane			
QPS REQUIREMENT			
The performance parameters in this table must be used to program the FTD if flight test data is not used to program the FTD.			
Applicable Test		Authorized Performance Range	
Entry Number	Title and Procedure		
	(a) Landing configuration.	60 - 90 knots; ± 5 degree of bank.	
	(b) Clean configuration.	Landing configuration speed + 10 - 20%.	
2.c.9.b.	Phugoid dynamics.	Must have a phugoid with a period of 30 - 60 seconds. May not reach $\frac{1}{2}$ or double amplitude in less than 2 cycles.	
2.d.	Lateral Directional Tests.		
2.d.2.	Roll response. Roll rate must be measured through at least 30 degree of roll. Aileron control must be deflected $1/3$ (33.3 percent) of maximum travel.	Must have a roll rate of 4- 25 degree /second.	
2.d.4.c.	Spiral stability. Cruise configuration and normal cruise airspeed. Establish a 20 degree – 30 degree bank. When stabilized, neutralize the aileron control and release. Must be completed in both directions of turn.	Initial bank angle (± 5 degree) after 20 seconds.	
2.d.6.b.	Rudder response. Use 25 percent of maximum rudder deflection. (Applicable to approach or landing configuration.)	3 - 6 degree /second yaw rate.	
2.d.8.	Steady state sideslip. Use 50 percent rudder deflection. (Applicable to approach and landing configurations.)	2 - 10 degree of bank; 4 - 10 degrees of sideslip; and 2 - 10 degree of aileron.	
6.	FTD System Response Time.		
6.a.	Flight deck instrument systems response to an abrupt pilot controller input. One test is required in each axis (pitch, roll, yaw).	300 milliseconds or less.	