

TABLE C2A—FULL FLIGHT SIMULATOR (FFS) OBJECTIVE TESTS—Continued

QPS requirements								Information	
Test		Tolerance(s)	Flight condition	Test details	Simulator level			Notes	
Entry No.	Title				B	C	D		
3.f.1.	Vibrations—to include 1/Rev and n/Rev vibrations (where “n” is the number of main rotor blades).	+ 3db to –6db or ±10% of nominal vibration level in flight cruise and correct trend (see comment).	(a) On ground (idle); (b) In flight	Characteristic vibrations include those that result from operation of the helicopter (for example, high airspeed, retreating blade stall, extended landing gear, vortex ring or settling with power) in so far as vibration marks an event or helicopter state, which can be sensed in the flight deck. [See Table C1A, table entries 5.e. and 5.f.]			X	Correct trend refers to a comparison of vibration amplitudes between different maneuvers; e.g., if the 1/ rev vibration amplitude in the helicopter is higher during steady state turns than in level flight this increasing trend should be demonstrated in the simulator. Additional examples of vibrations may include: (a) Low & High speed transition to and from hover; (b) Level flight; (c) Climb and descent (including vertical climb; (d) Auto-rotation; (e) Steady Turns.	
3.f.2.	Buffet—Test against recorded results for characteristic buffet motion that can be sensed in the flight deck.	+ 3db to –6db or ±10% of nominal vibration level in flight cruise and correct trend (see comment).	On ground and in flight.	Characteristic buffets include those that result from operation of the helicopter (for example, high airspeed, retreating blade stall, extended landing gear, vortex ring or settling with power) in so far as a buffet marks an event or helicopter state, which can be sensed in the flight deck. [See Table C1A, table entries 5.e. and 5.f.]			X	The recorded test results for characteristic buffets should allow the checking of relative amplitude for different frequencies. For atmospheric disturbance, general purpose models are acceptable which approximate demonstrable flight test data.	
4. Visual System									
4.a.	Visual System Response Time: (Choose either test 4.a.1. or 4.a.2. to satisfy test 4.a., Visual System Response Time Test. This test is also sufficient for motion system response timing and flight deck instrument response timing.)								
4.a.1.	Latency								