

TABLE C1A—MINIMUM SIMULATOR REQUIREMENTS—Continued

Entry No.	QPS requirements	Simulator levels			Information
		B	C	D	
	General simulator requirements				Notes
5.c. ....	The simulator must have a motion (force cueing) system that produces cues at least equivalent to those of a six-degrees-of-freedom, synergistic platform motion system (i.e., pitch, roll, yaw, heave, sway, and surge). An SOC is required.		X	X	
5.d. ....	The simulator must provide for the recording of the motion system response time. An SOC is required.	X	X	X	
5.e. ....	The simulator must provide motion effects programming to include the following: (1) Runway rumble, oleo deflections, effects of ground speed, uneven runway, characteristics. (2) Buffets due to transverse flow effects. (3) Buffet during extension and retraction of landing gear. (4) Buffet due to retreating blade stall. (5) Buffet due to vortex ring (settling with power). (6) Representative cues resulting from touchdown. (7) High speed rotor vibrations. (8) Tire failure dynamics ..... (9) Engine malfunction and engine damage (10) Airframe ground strike (11) Motion vibrations that result from atmospheric disturbances.	X	X	X	
			X	X	
				X	For air turbulence, general purpose disturbance models are acceptable if, when used, they produce test results that approximate demonstrable flight test data.
5.f. ....	The simulator must provide characteristic motion vibrations that result from operation of the helicopter (for example, retreating blade stall, extended landing gear, settling with power) in so far as vibration marks an event or helicopter state, which can be sensed in the flight deck.			X	The simulator should be programmed and instrumented in such a manner that the characteristic buffet modes can be measured and compared to helicopter data.
6. ....	<b>Visual System</b> .....				Additional horizontal field-of-view capability may be added at the sponsor's discretion provided the minimum field-of-view is retained.
6.a. ....	The simulator must have a visual system providing an out-of-the-flight deck view.	X	X	X	
6.b. ....	The simulator must provide a continuous field-of-view of at least 75° horizontally and 30° vertically per pilot seat. Both pilot seat visual systems must be operable simultaneously. The minimum horizontal field-of-view coverage must be plus and minus one-half (½) of the minimum continuous field-of-view requirement, centered on the zero degree azimuth line relative to the aircraft fuselage. An SOC must explain the geometry of the installation. An SOC is required.	X			