TABLE C1A—MINIMUM SIMULATOR REQUIREMENTS—Continued

Entry No.	QPS requirements	Simulator levels			Information
	General simulator requirements	B	C	D	Notes
3.d.	The simulator must provide pilot controls with control forces and control travel that correspond to the simulated helicopter. The simulator must also react in the same manner as the helicopter under the same flight conditions.	X	X	X	
3.e.	Simulator control feel dynamics must replicate the helicopter simulated. This must be determined by comparing a recording of the control feel dynamics of the simulator to helicopter measurements. For initial and upgrade evaluations, the control dynamic characteristics must be measured and recorded directly from the flight deck controls, and must be accomplished in takeoff, cruise, and landing conditions and configurations.		X	X	
4.	**Instructor/Evaluator Facilities**				
4.a.	In addition to the flight crewmember stations, the simulator must have at least two suitable seats for the instructor/check airman and FAA inspector. These seats must provide adequate vision to the pilot's panel and forward windows. All seats other than flight crew seats need not represent those found in the helicopter but must be adequately secured to the floor and equipped with similar positive restraint devices.	X	X	X	The NSPM will consider alternatives to this standard for additional seats based on unique flight deck configurations.
4.b.	The simulator must have controls that enable the instructor/evaluator to control all required system variables and insert all abnormal or emergency conditions into the simulated helicopter systems as described in the sponsor's FAA-approved training program, or as described in the relevant operating manual as appropriate.	X	X	X	
4.c.	The simulator must have instructor controls for all environmental effects expected to be available at the IOS; e.g., clouds, visibility, icing, precipitation, temperature, storm cells, and wind speed and direction.	X	X	X	
4.d.	The simulator must provide the instructor or evaluator the ability to present ground and air hazards.		X	X	For example, another aircraft crossing the active runway and converging airborne traffic.
4.e.	The simulator must provide the instructor or evaluator the ability to present the effect of re-circulating dust, water vapor, or snow conditions that develop as a result of rotor downwash.		X	X	This is a selectable condition that is not required for all operations on or near the surface.
5.	**Motion System**				
5.a.	The simulator must have motion (force) cues perceptible to the pilot that are representative of the motion in a helicopter.	X	X	X	For example, touchdown cues should be a function of the rate of descent (RoD) of the simulated helicopter.
5.b.	The simulator must have a motion (force cueing) system with a minimum of three degrees of freedom (at least pitch, roll, and heave). An SOC is required.	X			