

TABLE C1A—MINIMUM SIMULATOR REQUIREMENTS—Continued

Entry No.	QPS requirements	Simulator levels			Information
		B	C	D	Notes
6.c.	<p>The simulator must provide a continuous visual field-of-view of at least 146° horizontally and 36° vertically per pilot seat. Both pilot seat visual systems must be operable simultaneously. Horizontal field-of-view is centered on the zero degree azimuth line relative to the aircraft fuselage. 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.</p> <p>An SOC must explain the geometry of the installation. Capability for a field-of-view in excess of the minimum is not required for qualification at Level C. However, where specific tasks require extended fields of view beyond the 146° by 36° (e.g., to accommodate the use of "chin windows" where the accommodation is either integral with or separate from the primary visual system display), then the extended fields of view must be provided. When considering the installation and use of augmented fields of view, the sponsor must meet with the NSPM to determine the training, testing, checking, and experience tasks for which the augmented field-of-view capability may be required.</p> <p>An SOC is required.</p>		X		<p>Optimization of the vertical field-of-view may be considered with respect to the specific helicopter flight deck cut-off angle. The sponsor may request the NSPM to evaluate the FFS for specific authorization(s) for the following:</p> <ol style="list-style-type: none"> (1) Specific areas within the database needing higher resolution to support landings, take-offs and ground cushion exercises and training away from a heliport, including elevated heliport, helidecks and confined areas. (2) For cross-country flights, sufficient scene details to allow for ground to map navigation over a sector length equal to 30 minutes at an average cruise speed. (3) For offshore airborne radar approaches (ARA), harmonized visual/radar representations of installations.
6.d.	<p>The simulator must provide a continuous visual field-of-view of at least 176° horizontally and 56° vertically per pilot seat. Both pilot seat visual systems must be operable simultaneously. Horizontal field-of-view is centered on the zero degree azimuth line relative to the aircraft fuselage. 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. Capability for a field-of-view in excess of the minimum is not required for qualification at Level D. However, where specific tasks require extended fields of view beyond the 176° by 56° (e.g., to accommodate the use of "chin windows" where the accommodation is either integral with or separate from the primary visual system display), then the extended fields of view must be provided. When considering the installation and use of augmented fields of view, the sponsor must meet with the NSPM to determine the training, testing, checking, and experience tasks for which the augmented field-of-view capability may be required.</p> <p>An SOC is required.</p>			X	<p>Optimization of the vertical field-of-view may be considered with respect to the specific helicopter flight deck cut-off angle. The sponsor may request the NSPM to evaluate the FFS for specific authorization(s) for the following:</p> <ol style="list-style-type: none"> (1) Specific areas within the database needing higher resolution to support landings, take-offs and ground cushion exercises and training away from a heliport, including elevated heliport, helidecks and confined areas. (2) For cross-country flights, sufficient scene details to allow for ground to map navigation over a sector length equal to 30 minutes at an average cruise speed. (3) For offshore airborne radar approaches (ARA), harmonized visual/radar representations of installations.
6.e.	The visual system must be free from optical discontinuities and artifacts that create non-realistic cues.	X	X	X	Nonrealistic cues might include image "swimming" and image "roll-off," that may lead a pilot to make incorrect assessments of speed, acceleration and/or situational awareness.