§ 27.672 Stability augmentation, automatic, and power-operated systems.

(b) Each element of each flight control system must be designed, or distinctively and permanently marked, to minimize the probability of any incorrect assembly that could result in the malfunction of the system.

§ 27.673 Primary flight control.

Primary flight controls are those used by the pilot for immediate control of pitch, roll, yaw, and vertical motion of the rotorcraft.

[Amdt. 27–21, 49 FR 44434, Nov. 6, 1984]

§ 27.674 Interconnected controls.

Each primary flight control system must provide for safe flight and landing and operate independently after a malfunction, failure, or jam of any auxiliary interconnected control.

[Amdt. 27–26, 55 FR 8001, Mar. 6, 1990]

§ 27.675 Stops.

(a) Each control system must have stops that positively limit the range of motion of the pilot’s controls.

(b) Each stop must be located in the system so that the range of travel of its control is not appreciably affected by—

(1) Wear;
(2) Slackness; or
(3) Takeup adjustments.

(c) Each stop must be able to withstand the loads corresponding to the design conditions for the system.

(d) For each main rotor blade—

(1) Stops that are appropriate to the blade design must be provided to limit travel of the blade about its hinge points; and
(2) There must be means to keep the blade from hitting the droop stops during any operation other than starting and stopping the rotor.

[Sects. 313(a), 601, 603, 604, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, 1424), sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c))]

§ 27.679 Control system locks.

If there is a device to lock the control system with the rotorcraft on the ground or water, there must be means to—

(a) Give unmistakable warning to the pilot when the lock is engaged; and

(b) Prevent the lock from engaging in flight.