§61.31

Except as provided in paragraph (f)(2) of this section, no person may act as pilot in command of a high-performance airplane (an airplane with an engine of more than 200 horsepower), unless the person has—

- (i) Received and logged ground and flight training from an authorized instructor in a high-performance airplane, or in a full flight simulator or flight training device that is representative of a high-performance airplane, and has been found proficient in the operation and systems of the airplane; and
- (ii) Received a one-time endorsement in the pilot's logbook from an authorized instructor who certifies the person is proficient to operate a high-performance airplane.
- (2) The training and endorsement required by paragraph (f)(1) of this section is not required if—
- (i) The person has logged flight time as pilot in command of a high-performance airplane, or in a full flight simulator or flight training device that is representative of a high-performance airplane prior to August 4, 1997; or
- (ii) The person has received ground and flight training under an approved training program and has satisfactorily completed a competency check under §135.293 of this chapter in a high performance airplane, or in a full flight simulator or flight training device that is representative of a high performance airplane which must be documented in the pilot's logbook or training record.
- (g) Additional training required for operating pressurized aircraft capable of operating at high altitudes. (1) Except as provided in paragraph (g)(3) of this section, no person may act as pilot in command of a pressurized aircraft (an aircraft that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL), unless that person has received and logged ground training from an authorized instructor and obtained an endorsement in the person's logbook or training record from an authorized instructor who certifies the person has satisfactorily accomplished the ground training. The ground training must include at least the following subjects:
- (i) High-altitude aerodynamics and meteorology;

- (ii) Respiration;
- (iii) Effects, symptoms, and causes of hypoxia and any other high-altitude sickness;
- (iv) Duration of consciousness without supplemental oxygen;
- (v) Effects of prolonged usage of supplemental oxygen;
- (vi) Causes and effects of gas expansion and gas bubble formation;
- (vii) Preventive measures for eliminating gas expansion, gas bubble formation, and high-altitude sickness;
- (viii) Physical phenomena and incidents of decompression; and
- (ix) Any other physiological aspects of high-altitude flight.
- (2) Except as provided in paragraph (g)(3) of this section, no person may act as pilot in command of a pressurized aircraft unless that person has received and logged training from an authorized instructor in a pressurized aircraft, or in a full flight simulator or flight training device that is representative of a pressurized aircraft, and obtained an endorsement in the person's logbook or training record from an authorized instructor who found the person proficient in the operation of a pressurized aircraft. The flight training must include at least the following subjects:
- (i) Normal cruise flight operations while operating above 25,000 feet MSL;
- (ii) Proper emergency procedures for simulated rapid decompression without actually depressurizing the aircraft; and
 - (iii) Emergency descent procedures.
- (3) The training and endorsement required by paragraphs (g)(1) and (g)(2) of this section are not required if that person can document satisfactory accomplishment of any of the following in a pressurized aircraft, or in a full flight simulator or flight training device that is representative of a pressurized aircraft:
- (i) Serving as pilot in command before April 15, 1991;
- (ii) Completing a pilot proficiency check for a pilot certificate or rating before April 15, 1991;
- (iii) Completing an official pilot-incommand check conducted by the military services of the United States; or
- (iv) Completing a pilot-in-command proficiency check under part 121, 125, or 135 of this chapter conducted by the