

§ 4b.606 Equipment, systems, and installations---(a) Functioning and reliability. All equipment, systems, and installations the functioning of which is necessary in showing compliance with the regulations in this subchapter shall be designed and installed to insure that they will perform their intended functions reliably under all reasonably foreseeable operating conditions.

(b) Hazards. All equipment, systems, and installations shall be designed to safeguard against hazards to the airplane in the event of their malfunctioning or failure.

(c) Power supply. Where an installation the functioning of which is necessary in showing compliance with the regulations of this subchapter requires a power supply, such installation shall be considered an essential load on the power supply, and the power sources and the systems shall be capable of supplying the following power loads in probable operating combinations and for probable durations:

(1) All loads connected to the system with the system functioning normally;

(2) All essential loads after failure of any one prime mover, power converter, or energy storage device;

(3) All essential loads after failure of any one engine on two- or three-engine airplanes, or after failure of any two engines on four-or-more-engine airplanes.