

**§ 23.779 Motion and effect of cockpit controls.**

Cockpit controls must be designed so that they operate in accordance with the following movement and actuation:

(a) Aerodynamic controls:

*Motion and effect*

(1) *Primary controls:*

- Aileron ..... Right (clockwise) for right wing down.
- Elevator ..... Rearward for nose up.
- Rudder ..... Right pedal forward for nose right.

(2) *Secondary controls:*

- Flaps (or auxiliary lift devices). Forward or up for flaps up or auxiliary device stowed; rearward or down for flaps down or auxiliary device deployed.
- Trim tabs (or equivalent). Switch motion or mechanical rotation of control to produce similar rotation of the airplane about an axis parallel to the axis control. Axis of roll trim control may be displaced to accommodate comfortable actuation by the pilot. For single-engine airplanes, direction of pilot's hand movement must be in the same sense as airplane response for rudder trim if only a portion of a rotational element is accessible.

(b) Powerplant and auxiliary controls:

*Motion and effect*

(1) *Powerplant controls:*

- Power (thrust) lever. Forward to increase forward thrust and rearward to increase rearward thrust.
- Propellers .. Forward to increase rpm.
- Mixture ..... Forward or upward for rich.
- Fuel ..... Forward for open.
- Carburetor, air heat or alternate air. Forward or upward for cold.
- Super-charger. Forward or upward for low blower.
- Turbosuperchargers. Forward, upward, or clockwise to increase pressure.
- Rotary controls. Clockwise from off to full on.

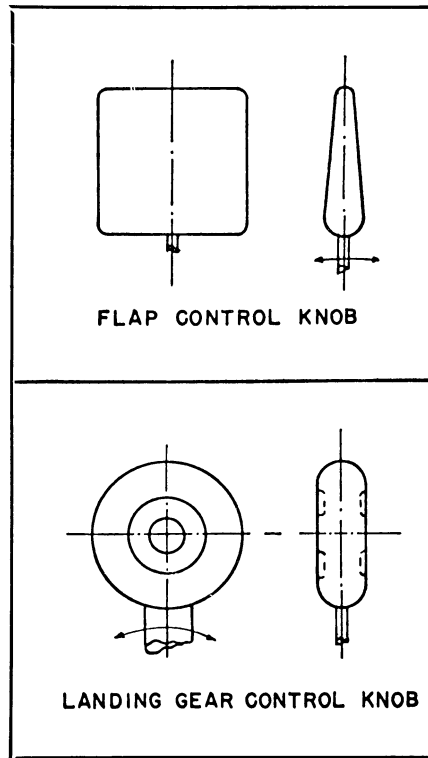
(2) *Auxiliary controls:*

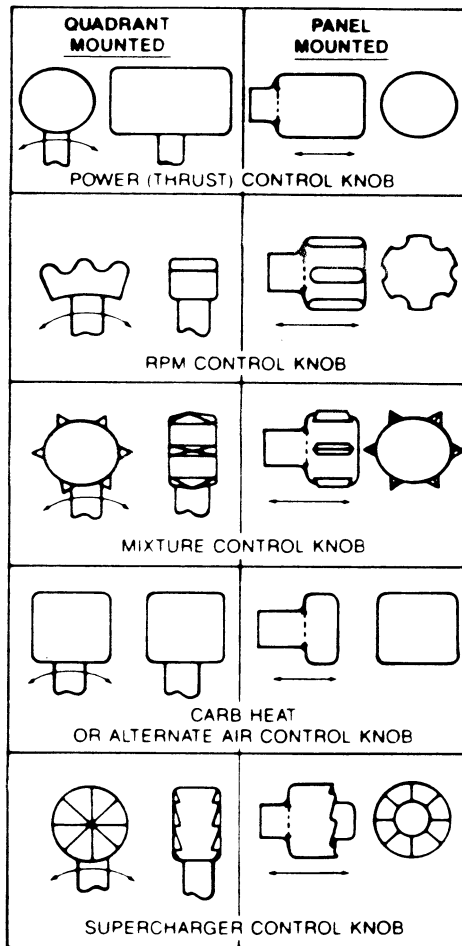
- Fuel tank selector. Right for right tanks, left for left tanks.
- Landing gear. Down to extend.
- Speed brakes. Aft to extend.

[Amdt. 23-33, 51 FR 26656, July 24, 1986, as amended by Amdt. 23-51, 61 FR 5136, Feb. 9, 1996]

**§ 23.781 Cockpit control knob shape.**

(a) Flap and landing gear control knobs must conform to the general shapes (but not necessarily the exact sizes or specific proportions) in the following figure:





(b) Powerplant control knobs must conform to the general shapes (but not necessarily the exact sizes or specific proportions) in the following figure:

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964; 30 FR 258, Jan. 9, 1965, as amended by Amdt. 23-33, 51 FR 26657, July 24, 1986]

**§ 23.783 Doors.**

(a) Each closed cabin with passenger accommodations must have at least one adequate and easily accessible external door.

(b) Passenger doors must not be located with respect to any propeller

disk or any other potential hazard so as to endanger persons using the door.

(c) Each external passenger or crew door must comply with the following requirements:

(1) There must be a means to lock and safeguard the door against inadvertent opening during flight by persons, by cargo, or as a result of mechanical failure.

(2) The door must be openable from the inside and the outside when the internal locking mechanism is in the locked position.