

2. OPERATIONAL EQUIPMENT

a. CENTRAL CONTROL PANEL AND PEDESTAL.

(1) WING FLAP AND LANDING GEAR CONTROLS. - The wing flap motor is controlled by a toggle switch. The time required to lower the flaps at 147 mph is between 15 and 30 seconds.

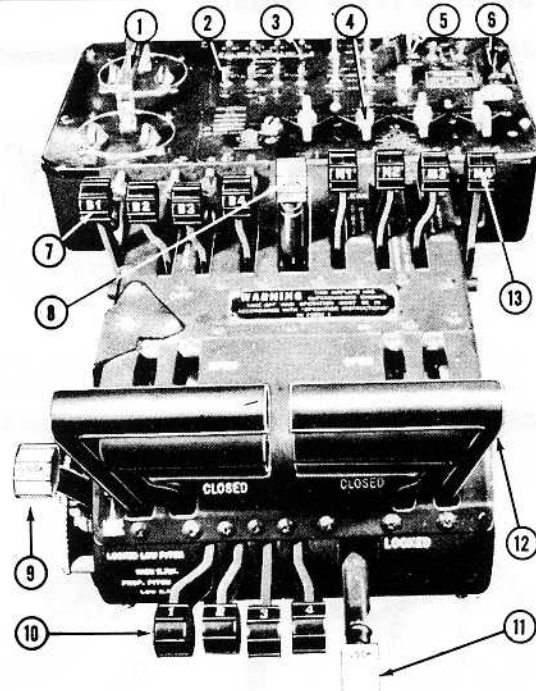
WARNING

In returning the flap control switches from "DOWN" to "OFF," be sure the toggle switch is not allowed to snap to "UP," resulting in immediate retraction of the flaps.

(2) The main landing wheels and tail wheel are operated simultaneously by a toggle switch. A hinged guard prevents accidental moving of the switch to the "UP" position. Warning that the landing gear is not fully extended is given by a green indicator lamp failing to light, and by a horn which sounds if any throttle is closed.

(3) COWL FLAP VALVES. - Cowl flaps are operated by four valves, each valve controlling the flaps on one nacelle. The valve must be turned to "LOCKED" when the desired position of the flaps is reached. Slight "cracking" of the control valve will result in relatively slow travel of the flaps when close adjustment is desired.

(4) FUEL BOOST CONTROLS. - The fuel boost pumps, operated by four toggle switches, provide fuel



KEY TO FIGURE 21

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| 1. IGNITION SWITCHES | 8. TURBO AND MIXTURE CONTROL LOCK |
| 2. FUEL BOOST PUMP SWITCHES | 9. THROTTLE CONTROL LOCK |
| 3. FUEL SHUT-OFF VALVE SWITCHES | 10. PROPELLER PITCH CONTROLS |
| 4. COWL FLAP CONTROL VALVES | 11. PROPELLER PITCH CONTROL LOCK |
| 5. LANDING GEAR SWITCH | 12. THROTTLE CONTROLS |
| 6. WING FLAP SWITCH | 13. MIXTURE CONTROLS |
| 7. TURBO SUPERCHARGER CONTROLS | |

Figure 21 - Control Panel and Pedestal

pressure for starting engines and for maximum power, and also prevent vaporization in the lines to engine-driven pumps due to hot fuel or high altitudes. Booster pressure at the No. 3 nacelle fuel strainer also supplies fuel to the priming system.