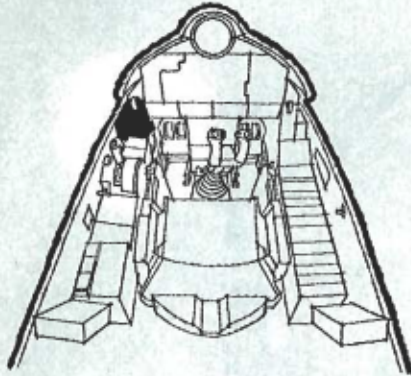


landing gear controls



21828

Figure 1-24

retract the gear with the normal control handle in the UP or DOWN position. To insure positive operation after take-off, the gear emergency-up button must be held depressed until the gear completely retracts. If the gear is retracted with the button while airborne with the gear handle in the DOWN position, it will be necessary to cycle the gear handle to the UP position and return to DOWN position to extend the gear. After emergency gear extension has been accomplished, the emergency-up button will be inoperative until the landing gear emergency extension handle is pushed in. In the event of ground safety switch malfunction, the emergency-up button may be used to retract the gear when airborne. The emergency-up button receives power from the 28-volt dc essential bus.

LANDING GEAR EMERGENCY EXTENSION HANDLE

The landing gear emergency extension handle (figure 1-24), suspended below the left side of the instrument panel, is used to pneumatically extend the landing gear in the event of secondary hydraulic system failure or electrical system failure or malfunction. The handle is placarded "Emer Gear Release-Pull" on early airplanes* and "Emer Gear Release-Unlock-Pull" on later airplanes**. An arrow indicates the necessity to pull down and out on later airplanes. Pulling the handle out fully (approximately two inches) mechanically opens a pneumatic shutoff valve to supply high-pressure pneumatic system air to the wheel well door and landing gear actuating cylinders which will open the doors and extend the gear. A spring clip is installed on early airplanes at the base of the handle to lock the handle in the fully extended position. On later airplanes the handle locks automatically in the fully extended position. The emergency extension handle will extend the landing gear regardless of the position of the normal landing gear handle. There are no provisions for retracting the gear after extension by the emergency systems.

LANDING GEAR POSITION INDICATORS

Three landing gear position indicators (5, figure 1-4), located on the left side of the instrument panel, show the position of the main and nose landing gear. When one of the indicators reads "UP," the respective gear and door are up and locked. Each indicator displays a symbolized wheel when the respective gear is down and locked. When there is no electrical power or the gear is in an unlocked position, the indicator displays parallel red and yellow stripes. On some airplanes† the landing gear position indicators are replaced by three green lights. These lights illuminate only when the corresponding gear is down and locked. Power to the landing gear indicators and lights is supplied by the 28-volt dc essential bus.

LANDING GEAR WARNING LIGHT AND TEST BUTTON

A red warning light, located within the wheel-shaped knob on the landing gear handle (figure 1-24) will illuminate at any time the landing gear is not in the position selected by the landing gear handle. The light will also illuminate when the landing gear is not down and locked at an altitude of 13,500 (± 1000) feet climbing or 9500 (± 1000) feet descending, if the throttle is retarded below FULL MIL POWER position, and the airspeed is less than 250 (± 14) KIAS on some airplanes and 210 (± 10) KIAS on other airplanes‡. The warning light is automatically dimmed when the instrument panel lights are on if the thunderstorm lights are off. On airplanes that have the three green landing gear indicator lights†, a

*AF 53-1791 thru 56-972.

**AF 56-973 & on.

†Airplanes modified by TCTO 1F-102-728.

‡AF 57-770 & on.