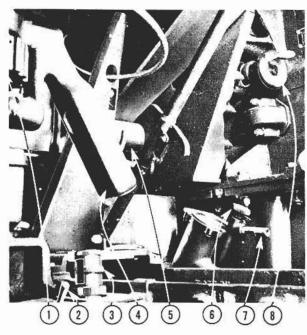
switches are connected in parallel so that either switch can be used to fire the guns. Deadman switches, one on each grip, are connected in parallel so that the gunner can operate the turret when either hand rests on a grip. The deadman switch is provided so that the power circuits of the turret will be opened and all turret motion and firing of guns will be stopped when the gunner's hands are removed from the grips.



KEY TO FIGURE 51

- RANGE KNOB
- 5. DEADMAN SWITCH
- 2. TROUBLE LIGHT SWITCH 6. OXYGEN FLOW CONTROL
- 3. TROUBLE LIGHT
- 7. OXYGEN MASK FITTING
- 4. HAND GRIP
- 8. ELEVATION HANDCRANK

Figure 51 - Upper Turret Interior

2. PREFLIGHT CHECK.

- a. Allow hydraulic units and sight to warm up at least 5 minutes before take-off.
 - b. Engage power clutches.
- c. See that hand cranks are disengaged. (Do not disengage until after power clutches have been engaged.)
 - d. Feed ammunition just up to the guns.
 - e. Move main gun switch to "ON" position.

- f. Place sight switch in "ON" position.
- g. Close deadman switches on handgrips.
- h. Check response of azimuth and elevation mechanisms by manipulating the handgrips.
- i. Turn range knob and observe that reticles move in response.
- j. Adjust reticle light to approximately the desired brilliance.

3. TURRET OPERATION.

- a. Charge guns by pulling each handle twice.
- b. Turn on gun selector switches.
- c. When target is sighted, set in target dimension on sight.
- d. Turn hand controls so that reticles frame the target.
 - e. Adjust range knob until reticles frame the target.
 - Press either firing switch.
- g. After ammunition has been used, charge guns at least twice to clear out live shells.
- h. When the turret is not being used, turn it so that the guns point aft and are parallel to the center line of the airplane.
- i. In event of powerfailure, the turret may be controlled by the azimuth and elevation hand cranks. It is not possible to track a target with the hand cranks, but they may be used for approximate positioning of the turret and guns.
 - j. To use the hand cranks:

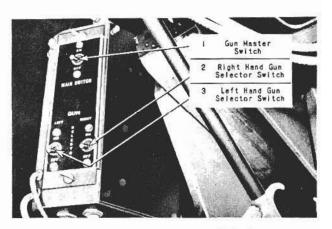


Figure 52 - Upper Turret Switches