CHAPTER - 7

LOW LEVEL FLYING

General

1. **Introduction**. Low flying is defined as any flying within 2,000 ft of the ground except for the purpose of taking off or landing. Modern operational techniques necessitate low flying by most types of aircraft in support of ground forces to penetrate radar defenses.

2. **Purpose**. Low level navigation missions may be carried out by L 410 UVP-E20 aircraft under the following occasions;

   a. Training.

   b. Tactical requirements.

   c. Search and rescue/Recce mission

3. **Authorization**. OC/Flight commander is to authorize the mission with specific minimum height. AGL.

4. **Public Nuisance**. Low flying by noisy and high speed aircraft such as the L 410 UVP-E20 causes considerable annoyance to the public. Flights should not be made below the height necessary to achieve the object of the exercise.

5. **Altimeter Settings**. On ground QFE is to be set in the altimeter. The regional QNH with altimeter correction is to be set if a climb to safety height becomes necessary.

6. **Height Restrictions**. Height restrictions as per AIP and AFM 60-1 to be adhered to at all time unless otherwise any specific requirement is imposed by Air HQ.

7. **Radio Altimeter**. Minimum height will be set on the radio altimeter.

8. **Speed**. A constant ground speed of 150 Kts is to be maintained for low level Navigator mission.

Preparation Before Flight.

9. **Route Selection**. Route has to be selected after considering following factors:

   a. Clear of known ground obstructions.

   b. Not through restricted airspace.

   c. Not over populated and build up areas.

10. **Selection of map**. The half million topographical map will be used. The half million are useful for pre flight study of significant features.

11. **Marking the Map**. Map is to be prepared as per the Annex 'A' to this chapter.

12. **Preflight Briefing**. Before a low level flight begins, the crew must be given a clear brief on the task, any restrictions enroute and flying limitations is to be observed. In particular the minimum height to be maintained and the minimum visibility below which they must abandon the low level phase of the flight are to be specifically mentioned. The crew should build up a mental picture of the route and should be aware of check points before take off.

13. **Weather Minima**. Weather forecast of the entire route is to be obtained from local met office. The visibility must be more than 5 Km and cloud not more than 2 Octas at or below 1000' AGL.

During Flight.

14. **Safety Height**. In any emergency or requirement safety climb height is 2000 ft AGL.

15. **Weather**. It is possible to detour around an area of Low cloud provided that it is of limited extent. If there appears to be no way round the cloud, climb to a safety height and obtain radar or Air Traffic Control.

16. **Fuel and Other Checks**. Every after 10 minutes fuel quantity and pressure will be checked by CP and Captain must acknowledge. To compare with planned and actual fuel left Co-Pilot should check the fuel at each turning point and calculate the mission fuel requirement.

17. **Turning Point Drills**. Turning point drills remain same as of medium level Navigator missions. Emphasis will be given for quickest possible safe turn to the next leg (up to 30° of bank). During turning one pilot will remain exclusively with the controls and lookout and other will carry out the checks.

18. **Emergency**. During low level flight, emergencies call for the prompt actions. When an emergency arises at low level the probability is that less time will be available for thinking and actions than at height. During low level frequent emergencies are:

a. Bird Hit.

b. Collision.

c. Unsure of Position.

NOTE: Actions are to be taken as per the FOB.

ANNEX 'A' TO
CHAPTER -7