

CHAPTER - 14

RECCE MISSION

Introduction

1. L 410 UVP-E20 aircraft is a computer aircraft designed to perform transportation of passengers and limit loads. However, due its low level flying capability and availability resources for accurate navigation, the aircraft may be best utilized for limited scale visual recce missions with observer on board. The recce mission would be carried out within 100 NM around the departure airfield with full fuel. Recce missions are to be carried out for training, exercise or operational requirements.

Authority

2. All missions are to be carried out with the approval of Air HQ (Dte of Air Operations) except the approved training syllabus.

Mission Requirement

3. In case of Recce mission, in addition to the normal preparation and requirements given in AP-3456 the followings are to be included in the mission requirements:

a. **Land Recce**

- (1) VHF communication.
- (2) Observed with binoculars.
- (3) Portable camera.
- (4) Signaling equipments.

b. **Sea Recce**

- (1) VHF communications.
- (2) Observe with binoculars.
- (3) Portable camera.
- (4) Mae West (in case of Sea Recce).
- (5) Personal survival packs.
- (6) Signaling equipments.

Crew qualification

4. All operating crews must have valid category 'C' except for the U/T crew in case the mission is undertaken for the purpose of training. The observers must be briefed prior to the mission about possible targets and scenario.

Weather

5. Min weather conditions during SAR mission:
- a. Surface visibility must be more than 3 KM.
 - b. Cloud not more than 2 octas below operating height.

Fuel

6. Aircraft is to be refueled to its full capacity unless otherwise specified.

Operating Height

7. Minimum operating height under the above mentioned weather is restricted to 1000 ft AGL/MSL. In case of no cloud below the operating height the minimum height over the land and sea are restricted to 500 ft AGL and 700 ft MSL respectively.

Operating hours

8. Recce missions are to be undertaken only during the period commencing from half an hour after official sunrise to half an hour before official sunset.

Operating speed and Duration of mission.

9. Normal operating speed for Recce mission is 140 Kts. Nevertheless the operating speed may vary within 135-150 kts (IAS) in case of changed mission profiles. Recce missions are to be discontinued whenever fuel quantity drops to the fuel required for RTB fuel plus 300 kgs.

Use of TCAS

10. TCAS of the L 410 UVP-E20 aircraft may be used for detecting the airborne targets if feasible.

Recce Area

11. For training Recce mission over the sea, the distance from the coast is limited up to 15 NM.

12. Recce pattern remains as search pattern of AP 3456 J, part-3, Sec 1, chap 2. Type of pattern will depend on the weather, terrain and mission requirements.

Co-ordination with other Agencies

13. All exercises and operational missions are to be carried out in co-ordination with ACOC/ASOC/ Bangladesh Navy/Bangladesh Army. During the execution of recce mission the Avon troops position are to be available in and around the recce area. Both ways R/T communications between the own troops/coordinating forces are to be maintained.

Crew duties

14. Prior to any search missions under mentioned procedures are to be followed:

a. **Captain is to**

- (1) Obtain detail information about the scenarios from the OC Operations wing/Recce coordinators.
- (2) Determine the area of Recce and specify the Recce pattern in consultation with the coordinator agency.
- (3) Finally brief the Recce crew about the incident, target and total plan of actions.

b. **Co-Pilot is to.**

- (1) Collect the Met report/weather forecast of the base and the area of incident; and in case of sea recce collect the pre hand sea state information (wind speed & direction etc) through the Recce coordinator.
- (2) Collect large scale map with recce area drawn in it.
- (3) Collect the latest NOTAM available for the areas around the recce point.
- (4) Brief about the weather conditions, area and pattern of recce.
- (5) Ensure the readiness of recce aircraft and aircrew along with mission requisites.
- (6) Collect specific Recce/radar frequency for easy communication between recce aircraft and rescue unit.
- (7) Incase of sea Recce missions; ensure that proper liaison is made with naval ships and units along with the coast line.

d. **Load Master.** Load master is to check availability of the mission requisites physically and ensures its positioning in the aircraft.

e. **Observer.** Following are the duties:

- (1) To recce/locate the missing objects/targets/enemy forces.
- (2) To pin point the object in reference to Clock code for direction and approximate distance.
- (3) To keep a sharp look out for enemy or intruder in a patrol mission.

- (4) To help the captain by giving the name and color of the ship whenever possible.
- (5) To ensure the essential recce requisites are on board.

Emergencies

15. The possible emergencies during a Recce mission may be as following:

- a. **One Engine failure.** Take actions as per the check list. Discontinue the recce and RTB.
- b. **Both Engine failure.** If over land, force land as per set procedure. If over sea considering the high tans distance from the shore a quick decision must be taken whether to make a force landing on the sea shore or ditching in the sea.
- c. **Ditching.** In case of ditching the actions are as per the check list and the flight manual.
- d. **Unsure of position.** In case of unsure of position discontinue recce & climb up to safety height, determine the position with the help of the navigator aids. Once sure of position the captain is to decide whether to resume recce or discontinue depending on the situation. Otherwise contact BAF radar/recce coordinator and follow their instructions.
- e. **Survival at sea.** The instructions of land/sea survival booklet must be followed. The load master must check availability of the book in survival kits.

NOTE: 1. No sea and mountain Recce is to be carried out at night.

- 2. Radio altimeter is to be kept on to the minimum operating height during the mission.
- 3. All persons on board are to wear mea west over the sea.
- 4. Throughout the mission a positive R/T contact has to be ensured with other Recce agencies.
- 5. From the beginning of the mission a positive radar contact has to be made and time to time cross checking of positions are to be ensured.
- 6. After the mission, a after mission report has to be raised and submitted to Air HQ (Dte of Air Operations)