

# Observer Table Top Exercise LA#2

## Creeping Line Search, LA Sectional

Observer Trainee \_\_\_\_\_ (Print Name) Date \_\_\_\_\_

Instructor \_\_\_\_\_ (Print Name)

### Objective

The objective of this exercise is to have the Observer Trainee learn how to plan a Creeping Line search mission. This can be done with or without using a plotter and E6B computer as the Trainee prefers.

### Procedure

This exercise may be completed with an Instructor leading a group of Trainees through it or by individual trainees on their own. The Observer Trainee may be able to plan this mission with a minimum of help. However, it is a teaching tool and if necessary, step-by-step instructions shall be given. Additional training is always welcomed. All courses and bearings shall be plotted on a sectional chart. A Mission Pilot or Mission Observer must sign and date this exercise sheet, after reviewing the chart for correctness. The Trainee shall retain this sheet as proof of the training being accomplished. The answers to the questions may be found on the reverse of this sheet.

### Materials Needed

The trainee will need an appropriate sectional chart (does not need to be current), pencil, scratch paper, straight edge or navigation plotter and E6B (optional). An Instructor shall have a navigation plotter and E6B.

### Scenario

Your aircrew is about to depart from Paso Robles Airport (35° 40'N, 120° 37'W) for the Mission Base at Bakersfield's Meadows Airport (35° 26'N, 119° 03' W). Your pilot has called the Mission Base for clearance and has been given a mission to be flown enroute to the Mission Base. You are to conduct a Creeping Line search. The search object is a yellow Piper Cub, N12345. Search altitude shall not be below 1,000 feet AGL and the expected search visibility is 3 miles. Winds are calm and the pilot plans to fly the search at 90 Kts. Mission Base wants you to enter the area at the northwest corner and attain a minimum 50% POD in the least amount of time. Before you take off, Mission Base wants the pilot to call with your estimated times for ETD, search area entry and exit, and ETA to the Mission Base. A 10:00 AM local departure is planned.

### Specifics

- Plot the Creeping Line search area:  
35° 53.5'N      35° 56'N      35° 43.5'N      35° 46'N  
120° 28'W      120° 24.5'W      120° 19'W      120° 15.5'W
- What is the magnetic course to the northwest corner of the search area from Paso Robles Airport?
- What is the estimated search area entry time if the average speed to the area is 100 Kts?
- What should the track line spacing be according to the POD Chart?
- Plot the Creeping Line track lines in the search area remembering to keep the aircraft's turns in the search area. The turn needs to start ½ NM before the area boundary to stay within the area and will take 1 minute. The first track line will be the northern boundary. How many track lines are there?
- Which seat should the Scanner sit in?
- How might you identify each turn point?
- What are the magnetic courses of the track lines?
- What is the width of the area?
- What will be the time for each track leg including the turn?
- What is the estimated exit time from the search area?
- What is the magnetic course from the search area's southeast exit point to the Mission Base?
- What is the Mission Base ETA if a 155 Kts speed is maintained to the base?

## **Answers**

1. The area runs NNW to SSE from roughly Parkfield to Cholame.
2. 015° MC (030° TC -15° variation)
3. 10:09 AM (15NM @100Kts = 9 minutes)
4. 1 NM for the fewest track lines and still obtain 50% POD.
5. 13 track lines.
6. Left side. The Observer will cover the area on the first leg and thereafter both Scanner and Observer will cover alternate areas.
7. Data for each track leg's start and end point using visual, VOR or GPS reference should be written down. The GPS can be programmed for a Creeping Line search.
8. 035° and 215° MC (050° and 230° TC - 15° variation)
9. 4 NM.
10. 3 minutes. (4 NM - ½ NM at each end of track = 3 NM @ 90 Kts = 2 minutes + 1 minute turn)
11. 10:48 AM (13 tracks at 3 minutes = 39 minutes)
12. 103° MC. (118° TC - 15° variation)
13. 11:12 AM (62 NM @ 155 Kts = 24 Minutes)

Your answers may be slightly different which is OK. Any major difference indicates an error. Redo the question.