



Names of Group Members

Name and Address of Group or Unit

Expedition Route Card

Day of the Week _____ Date _____ Day of Venture (1st, 2nd, etc.) _____

Phone: _____

Place with Grid Reference	Direction or bearing as required	Distance in Kilometers	Time Estimated	Height Climbed (in Meters)	Extra Time Estimated	Estimated Time of Arrival	Time for Stops, Meals, etc.	Total Time for Leg	Departure Time for Next Checkpoint	Planned Setting Out Time	Actual Setting Out Time	Estimated Average Travel Speed (km/ph)	Expedition Reference Number
START: GR:													
TO: GR:										Details of Route to be Followed			Alternate Route Plan
TO: GR:													
TO: GR:													
TO: GR:													
TO: GR:													
TO: GR:													
TO: GR:													
TO: GR:													
TO: GR:													
Totals						X			X	Supervisor's Name Location, Phone			

Notes: 1. Use a new Route Card(s) for each day of the expedition. 2. Alternate Route - write in details of alternate route to take in case of hazard or impassable terrain. 3. Plan to stop for rests and meals at end of legs. Estimate times for meals, exploring, etc., and include on route card.

Expedition Route Card Instructions

Planned Setting Out Time

Write down the 24-hour clock time that you plan on beginning the day's journey.

Actual Setting Out Time

Write in the time that you actually begin walking. If there is a discrepancy between the Planned and Actual Setting Out Times then it will be necessary to mentally adjust all planned Arrival and Departure Times.

Estimated Average Travel Speed

The default value is 3.0 km/h. If, through experience, you know that the team walks slower/faster than this, a different estimated speed should be entered.

Place with Grid Reference

Start – The starting location (A village or landmark)

GR – The 6-figure Grid Reference of the location

To – The destination of each leg of the journey. All of the information in the row tells a team how to arrive at this destination.

Direction or Bearing as Required

- Place the compass on the map with the edge of the base plate along the road in the direction that the road leaves the checkpoint.
- Turn the azimuth ring so that the orienting arrow is pointed toward north on the map (toward the top).
- Read the bearing.

It may be necessary to take more than one bearing for each leg. If the route passes through intersections, uses more than one road and/or dramatically changes direction it is helpful to have the bearings.

Cardinal directions should also be recorded.

A proper entry in this column would read: SW 220°, N 20°.

Distance in Kilometers

- Use a piece of string to trace the route from the previous checkpoint to the destination.
- Pull it taut along a horizontal gridline of the map and count the number of boxes the string covers. Include a 1/10th decimal estimation if necessary.
- The number of boxes is equal to the number of kilometers.

Time Estimated

Use the *Estimated Average Travel Speed* and the *Distance* in the following formula:

$$\frac{60}{\text{Estimated Average Travel Speed (km/h)}} \times \text{Distance (km)} = \text{Time Estimated (min)}$$

Height Climbed (meters)

- Determine the elevation of the start of the leg. This is your 'zero point'.
- Trace the route. Each time you cross a contour line determine if the route has gone up or down.
- If the route has gone up, add 20 to the current total (the contour lines are in increments of 20 meters*). If the route has gone down or crossed the same contour, add 0.
- Continue to the end of the leg and record the cumulative total.
- Repeat the process for each leg.

*In some areas (usually coastal) the contours may be drawn as dashed lines. These "intermediate contours" represent an elevation change of 10 meters.

Please Note: Exact measurements on this section are not as important as understanding the general tendency of the route. Trying to determine if the height climbed is 100m or 120m is less important than understanding that the route goes uphill and is quite steep.

Extra Time Estimated

Use the *Height Climbed* (box --) to determine the *Extra Time Estimated* with the formula:

$$\frac{\text{Height Climbed (m)}}{10} = \text{Extra Time Estimated (min)}$$

Estimated Time of Arrival

Time Estimated (min) + Extra Time (min) + Start Time (clock) = Estimated Time of Arrival (clock)

Start Time is either the *Planned Setting Out Time* (first row) or the *Time of Departure to Next CP* (all other rows).

Calculating time can be challenging.

An example calculation:

$$40 \text{ min} + 10 \text{ min} + 12:40 = 13:30$$

One way of calculating time is to think in terms of 1 hour blocks of time and add or subtract as necessary:

40 minutes + 10 minutes = 50 minutes, which is the same as **1 hour – 10 minutes**.

12:40 + 1 hour = 13:40 and 13:40 – 10 minutes = 13:30 which is the correct time.

Time for Stops, Meals, Etc.

Consider how far you just walked, how much climbing was involved and the time of day (lunch time?) and record the amount of time you will sit at the checkpoint before carrying on. The minimum value for this column is 5 minutes.

Total Time for Leg

A leg begins when you start walking and ends when you start walking the following leg. Therefore, the formula to figure the Total Time for Leg is:

$$\text{Time Estimated (min)} + \text{Extra Time (min)} + \text{Time for Stops (min)} = \text{Total Time for Leg (min)}$$

Time of Departure to Next CP

$$\text{Total Time for Leg (min)} + \text{Previous Time of Departure (clock)} = \text{Time of Departure (clock)}$$

Details of Route to be Followed

Write a brief description of the route. The more detailed the description, the more helpful it will be on route. An average entry for this box may look like this:

Follow main road N 1 km

Follow minor road E then S 1.5 km

Follow dirt track NE 300m to CP2

Alternate Routes

List an alternate route between CP's should the planned route be un-passable. It may occur that there are no alternate routes between CP's in which case 'N/A' may be entered.

Totals

The totals of each column should be entered in the bottom row. It should be checked that the final Estimated Time of Arrival is equal to the cumulative Total Time for Leg value added to the Planned Setting out Time