



BASIC "How To" OF A FUN RALLY:

1. TOOLS TO BRING:

- a. Fine Liner Koki Pens (Black / Blue / Purple)
- b. Fine Line Koki Pen Red to mark your photographs on the map
- c. Protractor to measure your headings
- d. Ruler (NM & mm) / Pencil / Pens / Eraser
- e. Digital Time Clock x 2
- f. Prestik to stick your photos to the dashboard
- g. Scissors

2. WHAT YOU WILL BE GIVEN:

- a. A4 size Map to the Scale of 1:250,000
- b. Time Sheet advising times to arrive at each CP in HH:MM:SS (ignore the HH)
- c. Minute Marker to be folded to your nominated speed
- d. Photos Sheets with CP photos on the left and En Route Photos on the right
- e. Answer sheet to fill out your answers for the debrief on your return

3. The Map will be marked with the following:

- a. SP – Start Point
- b. CP 1,2 ... - Check Point 1,2 etc
- c. FP – Finish Point

4. Each CP will be joined sequentially with a track line. This line does NOT penetrate the CP circle so as not to obliterate any crucial information close to the CP

5. **TIMES AT CHECKPOINTS:** Transcribe the time (MM:SS) from your timesheet at each CP onto your map to the side of the CP in the direction of flight. (Ignore the HH) Place a rectangular box around the time and highlight it in orange (this is for easy identification of the time you are expected to fly over the CP)

6. Fold your Minute Marker to your nominated speed (under the numbers)

7. **DRAWING UP MINUTE MARKERS:** Place the Minute Marker onto the Map and mark off the Minute lines from the SP to CP1. Mark the lines to the right of track so as not to obliterate any visual references on the map from the pilots' Left hand window. The Black lines indicate the full minute and the red dotted lines indicate the 30 second mark. If your time at the SP is 11:00, and your time at CP1 is 17:15, this means the time for this leg is 6mins & 15 secs. Your minute marker should finish half way between the black line and the red dotted line at CP1. When you start the second leg, your Minute Marker must start at the same place you left off (15secs) and continue until the allocated time for CP2. **DO NOT START EACH LEG FROM 00:00.** Continue marking the minutes sequentially until the FP.

8. **MARKING HEADINGS:** To mark your headings, place your protractor on the map aligning it with the Due North lines on the map. Add the variation for the area (eg Rand Airport is 17.5W) to the True Track to get your Magnetic Track. Place your Magnetic Track on the right hand side of the track in the direction of flight and draw a teardrop / triangle around it to indicate the direction of flight. Highlight each teardrop in green to differentiate it from the time box.

9. **FLYING A FEATURE:** One leg will require that you do not fly a straight line, but follow the Railway line, River, or Road. The time at the CP after this will have been corrected for the longer distance. Estimate your minute markers working backwards.

10. **HIGHLIGHTING FEATURES ON THE MAP:** Highlighting features helps to easily differentiate them and use them as navigational tools eg

- a. Orange – stations
- b. Blue – Trig Beacons
- c. Green – Mines
- d. Yellow – Power Lines
- e. Pink – Landing strips

11. **SETTING YOUR CLOCKS :** There will be a Master Clock set to GPS time. Ensure that you set your owns clocks to the Master before take off.

12. **GPS LOGGERS:** Each a/c will be given a GPS Logger to fly with. Ensure that you switch it on at least 15 minutes before your allocated start time. If possible take two GPS's in case one bombs out. This will log

your track, time, speed, altitude etc. It will be downloaded onto computer at the end of the route and results will be drawn from each logger.

13. **STARTING TIMES:** Each a/c will be allocated a start time 3 – 5 minutes apart. Ensure your clocks have been set to the Master Clock. Rallies will be flown on local time. You will be given a take Off time and an “Overhead Start” time. This could be anything from 5 – 10 mins to give you sufficient time to get to the start and settle down ahead of crossing the start line.
 14. **GETTING TO THE START:** Extend your first leg backwards from the start, then plot a course from Take off to about 2 mins before the start. Intercept at this point and then line up in the direction of flight for the first leg and get yourself well trimmed and settled ready to cross the start line. If you are early, you can do a 360 before crossing the start line. **KEEP A GOOD LOOKOUT FOR OTHER A/C**
 15. **CROSSING EACH CP:** Each CP has a gate 1nm either side of track at 90 degrees to the outbound leg. You **MUST** cross within this corridor in the direction of flight.
 16. **TIME OVER EACH CP:** For Fun Rallies, you have 30 seconds either side of your allocated time to cross the SP, and 15 seconds either side for each CP & FP. Your Minute Markers will keep you on the correct time so continually cross check your position against the minutes to determine whether you are early or late.
 17. **PHOTOGRAPHS OF CP:** Each CP will have a photograph. **BE WARNED.....**these may or may not be correct and they can be taken from any direction, so are not necessarily in the direction of flight. You will be asked to mark on your answer sheet whether the picture you have been given is in fact correct or incorrect. Look out for distinguishing features rather than the big picture such as “Crossroads”. The picture could be taken of the wrong crossroad and will therefore be a “No”
 18. **PHOTOGRAPHS EN ROUTE:** Each leg will have one photograph taken on it. You need to correctly identify the photograph and then mark it clearly in RED KOKI on your map. If you are unsure of you position, then look for other features or check your time. You are given a 10mm allowance to plot your photo.
 19. **ALTITUDE:** The optimum altitude is between 800 & 1200. Too low and it is difficult to navigate, too high and your margin for error on timing increases.
 20. **ANSWER SHEET:** You must fill in the following on your answer sheet:
 - a. CP photos Yes / No
 - b. Enroute Photos : Distance in mm or Nm from the previous CP
 21. **LANDING:** You will aim to land as close to the White Line as possible. High Penalties will be incurred for landing short of the line and lesser penalties for landing after the line. (This will be dealt with under a separate heading)
 22. **DON'TS:** Once you have passed over the Start line you **MAY NOT** turn more than 90 degrees to track or do a 360 degree turn. Always keep a good look out for other a/c
- IF YOU GET LOST:** Hold your heading until your allocated time at the CP, then turn onto the next heading. Eventually something will match the map.

Good Luck
Mary de Klerk