2023 January Jaunt Beginner's Guide

The Basics

The 3 rules of rallying:

1) Stay on the road: The driver drives, the navigator reads. Stay out of ditches.

2) Stay on route: Focus on being on the

correct road, and not missing turns

3) Stay on time: Don't worry too much about timing on your first event. See the hints below.



The rally is divided into 2 Legs, A and B. You will get a separate set of instructions for each leg, handed out a few minutes before your start time. Your Leg A start time will be your 11:30 + your car# (car 1 leaves at 11:31). Your Leg B start time will be assigned at the end of Leg A. The instructions tell you where to zero your odometer to start each leg.

Sections

Each leg is divided into sections. Zero your odometer at the start of each section. Each section has a different instruction type (see below).

Odometer Check

Section A1 includes an odometer check, where you can compare your odometer to the odometer used to lay out the rally. Divide the car distance by the rally distance to get a factor:

 $odometerfactor = cardistance \div rally distance$

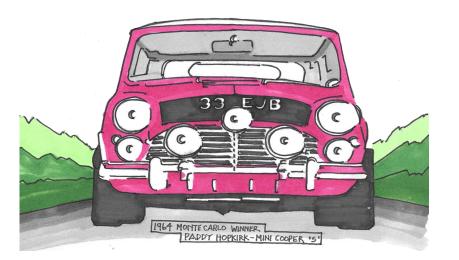
Multiply distances in the rally by the factor to convert the rally distances to what you see on your odometer. If you are close (< 1%) then you may not need to worry about this very much.

Timing

Timing instructions are included with the route-finding instructions. In addition to reading and communicating the instructions, navigators tell the drivers the speeds to travel at, and the pauses to take. For your first rally:

- Drivers should drive approximately 10% above the speeds the navigator reads out on most roads, and 5% above on highways. (Most of the time you will be driving at or just below the speed limit.)
 The percentage increase will account for slowing down for turns, and brief full stops at stop signs.
- When you have a pause, keep an eye on your watch when you reach an intersection where there is a pause, and wait out the rest of the pause on the far side of the intersection.

This will get you close to an ideal time for checkpoints (but you will probably not be exactly on time).



Checkpoints

Each section can have 0 or more checkpoints, indicated by a checkpoint board. Your time is taken when your front bumper crosses the checkpoint board. Pull past the checkpoint car and pull over to the right. Do not stop beside the checkpoint car, and do not back up in the checkpoint zone (after the board).

You need to check in at the checkpoints - your scores are based on the recorded times. You will get a sticker from the control marshal to put on your route card. Wait for your out time before leaving.

A "perfect" score at a checkpoint is "0.0", which means you arrived within the correct 6-second window at the checkpoint. You get the same penalty points for being early or late, which means that if you are late at one checkpoint you cannot "make up time" by being early at the next checkpoint.

<u>Time Allowances</u>

If you know you are late at a checkpoint you can ask for a Time Allowance (or TA) from the checkpoint worker before you get your sticker. TAs must be in half-minute increments (0.5, 1.5, 2.5 minutes, etc.), and the total of all TAs you use for the rally must be less than 19.5. The TA is like an extra pause, so it makes you not as late as you are. The first usage of a TA is free, the ones after cost 0.5 points to use.

For example, if you were held up by a train at a level crossing for 2 minutes, you can use a TA of 2.5 at the next checkpoint. But because the train only held you up by 2 minutes, you must pause for an additional 30 seconds so the TA is accurate. If you already used a TA, you may get 0.5 points for using it, but it's better than the 2.0 points you would have had for being late and not using the TA

End of Leg Checkpoint

The checkpoint at the end of each leg is special: the control marshall will ask you for your time in at the checkpoint. The simplest answer is to just say "I want now" when you check in at the control, although you could be a few minutes (= a few points) early or late.

End of Leg Checkpoint - Educated Guess

Each leg ends with an Elapsed Time section. You can check your watch at the beginning of the ET, add the ET time, and round to the nearest minute. For example, if at 15.00 km you have the instruction "Take 7:20 to reach EOS", and your watch says 5: 21:36 PM, then 5:21:36 PM + 7:20 = 5:28:56 PM, so round to 5:29 PM and ask for that time.

End of Leg Checkpoint - Precise Calculation

If you (as a navigator) can handle a little math, there is also a calculation you can do to find this time, based on the time-speed-distance formula:

$$T = \frac{D*60}{S}$$
, for time T in minutes, distance D in km and speed S in kph

Using the checkpoint out time and distance from the sticker, you need to calculate this time for every speed change segment from the last checkpoint before the finish control, and also add in the end of leg elapsed time.

For example, CP distance is 10.00, out time is 5:15 PM. Your instructions have a CAS 45 at a distance before the checkpoint, and the ET example above is used ("15.00 Take 7:20 to reach EOS"). You need distance and speed to use the formula above:

- Distance = 15.00 10.00, since we are only getting the time for the rally segment between the CP and ET.
- Speed = 45 kph
- Time = $T = \frac{(15-10)*60}{45} = \frac{300}{45} = 6.67 minutes$ for this segment.
- From 15.00, you are to take 7:20 (7 mins 20 secs) = 7.33 minutes

Use the hours at the checkpoint, and add all of the minutes together: minutes of the out time at the checkpoint + the speed segment + the ET segment:

15 + 6.67 + 7.33 = 29 minutes, so ask for 5:29 PM as the time in.

Instruction Types

These are some common instruction types used for route-finding. Any other instruction types will be explained in the section description in the rally instructions.

Note on Distances

Instructions are usually given with distances measured from the start of section ("accumulative" distances). Some sections may use non-accumulative distances (interval distances, between intersections or instructions). Add up these non-accumulative distances ahead of time (or as you go) so they work the same as accumulative distances.

Abbreviations

Here are some standard abbreviations which may be used on this event:

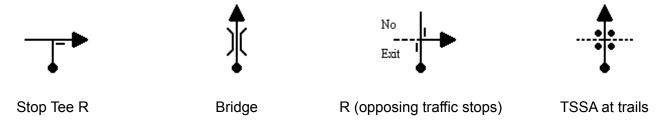
SA	Straight Ahead	Stop	Stop (not abbreviated)	
L	. Turn left R Turn		Turn right	
TS	Traffic signals	Tee	Tee (not abbreviated)	
RRX	Railway crossing	Yield	Yield (not abbreviated)	
Α	Acute B Bear		Bear	
Ν	North	S	South	
Е	East	W	West	
QZ	Quiet zone	BQZ	Begin quiet zone	
EQZ	End quiet zone	CAS	Commence average speed	
SOS	Start of section	EOS	End of section	
ET	Elapsed time	hwy	Highway	
h	Hour(s)	km(s)	Kilometre(s)	
min(s)	Minute(s)	kph	Kilometres per hour	
TC	Traffic Circle	ORT	Oncoming Rally Traffic	

Abbreviations may be combined, e.g., TSSA = Traffic Signals Straight Ahead.

These instructions are presented with a distance. E.g.,

Tulips

Tulips are an overhead view of an intersection. Some examples:



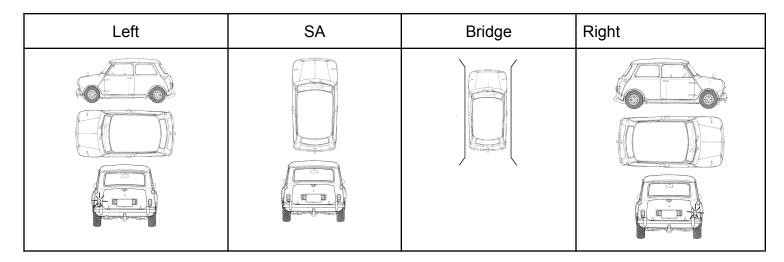
Clock Faces

Given a digital time, draw the hands on an analog clock. Enter the clock by the hour hand, and leave by the minute hand.

Distance	Digital Time	Clock Face	Equivalent Tulip Examples
0.00	6:45	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	→ OR → OR →
1.00	12:30	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	→ OR → OR →

Shapes Pointing to (or Indicating) the Direction to Turn

Turn the direction the Mini is pointing, or the direction it is signalling:



The Story

The instructions are encoded into a story. Look for keywords "left", "right", etc. Street names may not be obvious until you actually get to the intersection - they're hints to help you make sure you're on route.

Example: It was only the 5th but it sure felt like 20 was right around the corner (0.00), clicking along at 54. Mr. Woodburn was a lefty from wayback (0.52). He was a straight ahead bleeding heart from Golf Club days (2.60). His buddy, Mr. Guyatt, a crook from the old hood, had a great plan, even though he had gone straight (4.70).

Translates to: 0.00 Right from 5th Line onto 20th SR, CAS 54

0.52 Left onto Woodburn 2.60 SA at Golf Club Rd 4.70 SA At Guyatt

Straight-Line Segments

The instruction set includes a description for this instruction type (similar to this description). Each time a new type of straight-line segment is introduced the equivalent tulip is given so you can use substitution to figure out which way to turn later on in the section. But here is the full explanation.

A straight line map is like a tulip where your path through the intersection is pulled into a straight line, and all other roads hang off of the straight line - they are "dropped" from your path, so that's how you read the instruction. For example:

The backwards "K" looking image on the left is the straight line path that corresponds to the tulip with the right turn next to it. You read this as "drop two roads on the left", describing the roads you don't take.

Dropping a single road is a little tricky, as the straight-line path can match different intersection types. For example, "drop a road on the left" has a straight line path that corresponds to 3 possible tulips:

$$-$$
 = $-$ OR $-$ OR

Waffle

Waffle! Instructions are shown in a grid, linked by non-accumulative distances. Choose the correct instructions based on the distances between intersections, following a path through the "waffle". Use each instruction once. The correct path through the waffle is highlighted in **bold**.

Will work out to this (when adding up distances:)
$$0.00 = 0.00 \text{ Stop R} +0.32 = 1.72 \text{ L} +0.20 = 0.20 \text{ Bridge} +1.98 = 3.70 \text{ R} +1.20 = 1.40 \text{ SA}$$