# Beginners Guide to TSD (Time Speed Distance) RoadRally

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## Types of TSD Road Rallies

- Tour
  - Designed so you will not get lost
  - No tricks!!
  - Challenge is to stay on time
- Course
  - Need to use logic and observation to follow the route
  - You might get off course
  - Designed with "traps"
  - Challenge is twofold
    - Follow the course
    - Stay on time

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## RoadRally Basics

- Need a driver and a navigator
- General Instructions
  - Usually distributed ahead of the event
  - Gives the basic rules for that particular rally
  - Be sure to read and understand them
    - Ask questions
- Route Instructions
  - Given the day of the event
- Road Rally Rules – only for non-regional events

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## Equipment Used

- Clipboard
- Timing device
  - displays seconds or 1/100th of a minute
- Odometer
- Phone App(s)
- Pens/pencils/highlighters/sticky notes

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## Basics of Staying on Time

- Average speed given in route instructions
- Average speed will likely change many times
  - CAST (Change Average Speed To)
- Rallymaster knows mathematically the time to travel the distance to the checkpoint
- Your score is determined by how close you are to "perfect" time

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## How Do I Stay "On Time"

- Seat of the Pants – recommended for 1st rally
  - Travel a few mph above CAST to make up for starts/stops and curves
  - Pull over and count off any pauses in the route instructions
  - If you get delayed, count off the delay as soon as you stop, then pull over to make the delay an even ½ minute and take a time allowance
  - Adjust the "few mph" above based on how early/late you arrive at the control

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## How Do I Stay "On Time"

- Calculations – not recommended for 1st rally
  - Calculate when to arrive at certain points
  - To do this we need to know how many minutes it should take us to get to a certain mileage and compare it to how long it actually took and then adjust our progress accordingly.

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## Registering for the Event

- Oftentimes done online
- Choose your class
  - Stock (includes "Seat of the Pants")
  - Limited
  - Equipped
- Don't be afraid to ask questions

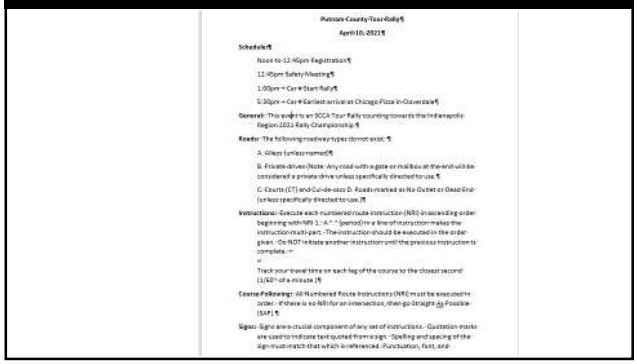
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## Before the event

- Read and understand the General Instructions
- Ask questions
  - Should be in yes/no format
  - Ask at least week prior to event

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## Sample General Instructions



Putnam County Tour Rally

April 10, 2021

**Schedule:**

Noon to 12:45pm Registration

12:45pm Safety Meeting

1:00pm = Car # Start Rally

5:30pm = Car # Earliest arrival at Chicago Pizza in Cloverdale

**General:** This event is an SCCA Tour Rally counting towards the Indianapolis Region 2021 Rally Championship.

**Roads:** The following roadway types do not exist:

A. Alleys (unless named)

B. Private drives (Note: Any road with a gate or mailbox at the end will be considered a private drive unless specifically directed to use.)

C. Courts (CT) and Cul-de-sacs D. Roads marked as No Outlet or Dead End (unless specifically directed to use.)

**Instructions:** Execute each numbered route instruction (NRI) in ascending order beginning with NRI 1. A "." (period) in a line of instruction makes the instruction multi-part. The instruction should be executed in the order given. Do NOT initiate another instruction until the previous instruction is complete.

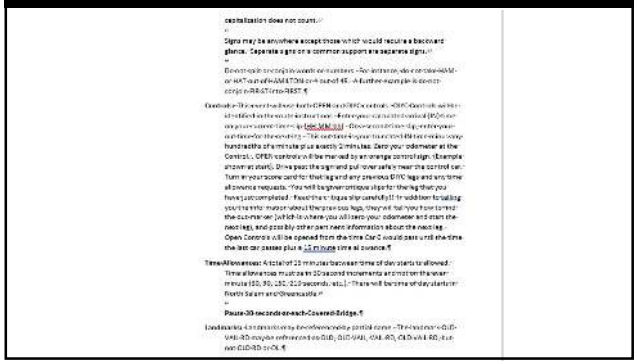
Track your travel time on each leg of the course to the closest second (1/60th of a minute.)

**Course Following:** All Numbered Route Instructions (NRI) must be executed in order. If there is no NRI for an intersection, then go Straight As Possible (SAP).

**Signs:** Signs are a crucial component of any set of instructions. Quotation marks are used to indicate text quoted from a sign. Spelling and spacing of the sign must match that which is referenced. Punctuation, font, and

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## Sample General Instructions



capitalization does not count.

Signs may be anywhere except those which would require a backward glance. Separate signs on a common support are separate signs.

Execute each instruction in words or numbers. For instance, do not write "AM" or "AT" out of "AMATOM or it out of 45. A further example is do not write "RIGHT into "RGT."

Controls: There are two basic forms of OPEN and DYC controls. OPEN Controls will be identified in the route instructions. Before your car is the control (PC) or on your scorecard (e.g. Lee MM 93). Open controls require you to record your time for the control. The control opens 2 minutes before your scheduled time and closes 2 minutes after your scheduled time. Enter your odometer at the Control. OPEN controls will be marked by an orange control sign. (Example shown at start). Drive past the sign and pull over safely near the control car. Turn in your score card for that leg and any previous DYC legs and any time allowance requests. You will be given a unique slip for the leg that you have just completed. Read the slip slip carefully!! In addition to telling you the info. you provided the previous legs, they will tell you how to find the sum answer (what to share you will need your odometer and start the next leg), and possibly other pertinent information about the next leg. Open Controls will be opened from the time Car 0 would pass until the time the last car passes plus a 15 minute time allowance.

Time Allowances: A total of 10 minutes between time of day starts is allowed. Time allowances must be in 30 second increments and must be the even minute (:00, :30, :02, :32 seconds, etc.). There will be time of day starts in Fourth Saturn and Greencastle.

Pause 30 seconds on each Covered Bridge.

Landmarks: Landmarks are not to be considered as control zones. The distance (OLD-VAL-RD maybe referenced as OLD, OLD-VAL, OAL-RD, OLD-VAL RD, but not OLD RD or OL.

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## Sample General Instructions



Scoring: LOW SCORE WINS. You will be given 1 point for each second (1/60 of a minute) early or late to or check point up to a maximum of 60. Ties will be broken on the basis of the most zeros, followed by the most ones, etc.

Glossary

ACUTE-LEFT - A left turn of greater than 90 degrees

ACUTE-RIGHT - A right turn of greater than 90 degrees

AT-In the vicinity of for actions which direct a course travel. When referencing a sign, it means the intersection that the sign defines or controls.

AFTER - Past, in the direction of travel, the reference object.

BEAR - A turn in the direction indicated of more than 10, and less than 90 degrees

BEFORE - In sight of and with sufficient opportunity prior to the referenced.

COVERED BRIDGE - A structure that has a roof and walls to keep precipitation off the roadway, and which conveys the road that you are driving on over some obstruction.

CROSSROAD - An intersection of exactly 4 roadways, where a road goes generally ahead and another goes to the left and another to the right.

DYC Do It Yourself Control (Zero your odometer)

INST # - Instruction or Numbered Route Instruction (N.R.I.)

INTERSECTION - Any meeting of existing roadways at grade level from which the rally vehicle could proceed in more than one direction without making a U-turn.

LANDMARK - A physical object, such as a roadway, traffic light or a building.

NRI - Numbered Route Instruction

SIDEROAD - An intersection of exactly 3 roads where a road goes generally ahead and another goes to the left or the right, but not both.

T - An intersection of three roadways such that there is a roadway to your right and to your left and past which you cannot longer proceed ahead upon the roadway on which you are traveling.

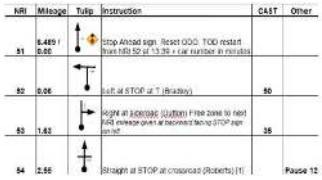
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## Day of the Event

- Registration
  - Arrive on time
- Safety Meeting
- Route Instructions
- Starting the Rally

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## Sample Route Instructions



| NRI | Mileage | Tulip | Instruction | CAST | Other |
|---|---|---|---|---|---|
| 51 | 0.489 / 0.00 | | Stop Ahead sign. Reset ODO. TOD restart from NRI 50 at 13:39 + car number in minutes | | |
| 52 | 0.06 | | Left at STOP at T (Bradley) | 50 | |
| 53 | 1.63 | | Right at a crossing. (Option: Free zone to next NRI mileage given at backward facing STOP sign on left | 35 | |
| 54 | 2.55 | | Straight at STOP at crossroad (Roberts) (1) | | Pause 12 |

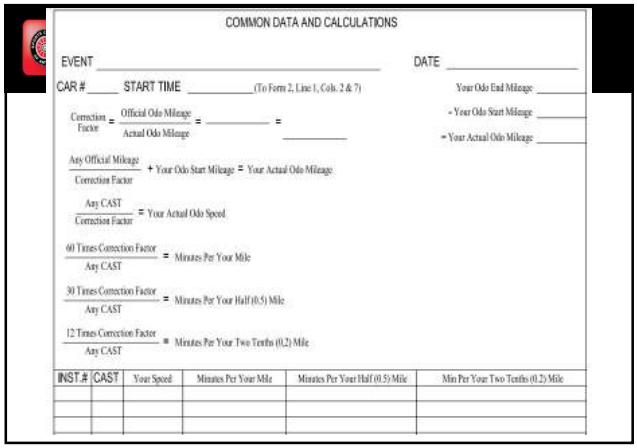


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## A Basic Rally

- Tire warm up/odometer check
- After that
  - Following the instructions
  - Checkpoints
  - Time Allowances – minute increments only on the ½ minute
  - Critique sheet
  - Start next leg
  - Control (time allowance, critique sheet)
  - Start next leg, etc

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COMMON DATA AND CALCULATIONS

EVENT _____ DATE _____

CAR # _____ START TIME _____ (To Form 2, Line 1, Cols. 2 & 7)

Your Odo End Mileage _____

Correction Factor = Official Odo Mileage / Actual Odo Mileage = _____ = _____

- Your Odo Start Mileage _____

= Your Actual Odo Mileage _____

Any Official Mileage / Correction Factor + Your Odo Start Mileage = Your Actual Odo Mileage

Any CAST / Correction Factor = Your Actual Odo Speed

60 Times Correction Factor / Any CAST = Minutes Per Your Mile

30 Times Correction Factor / Any CAST = Minutes Per Your Half (0.5) Mile

12 Times Correction Factor / Any CAST = Minutes Per Your Two Tenths (0.2) Mile

| INST.# | CAST | Your Speed | Minutes Per Your Mile | Minutes Per Your Half (0.5) Mile | Min Per Your Two Tenths (0.2) Mile |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

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## Running a Leg

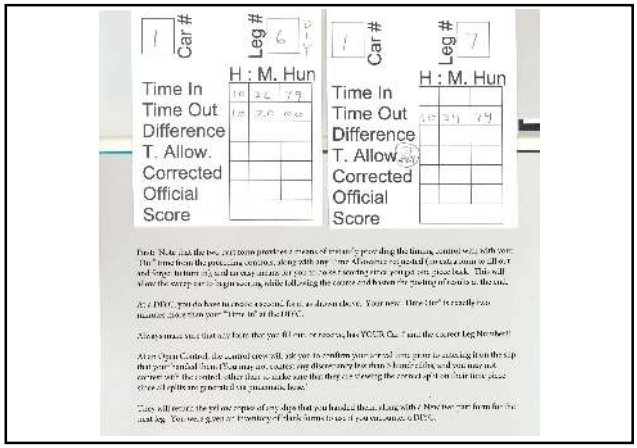
- Leave at the time given in the route instructions (or given to you by the control worker or GPS app)
- Stay on time
- Calculate any time allowances
- Stay at the appropriate CAST while crossing the timing line

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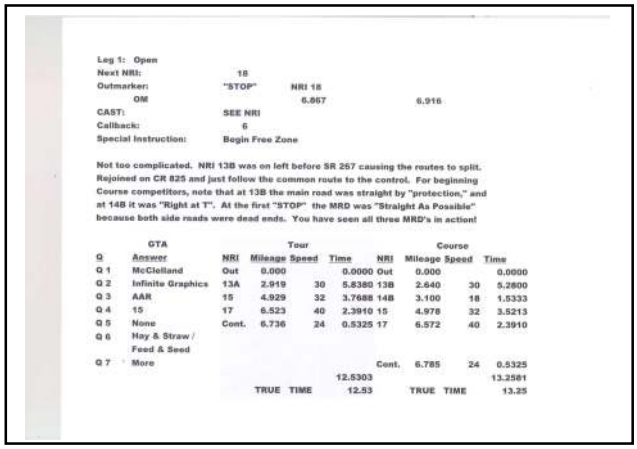
## Control

- GPS Controls
  - Time Allowance must be entered into the app before you get to the timing point.
  - App will tell you how early/late you were
- Open Controls
  - Give Time Allowance slip to the Control worker before they hand you a critique sheet
  - You will be handed a critique sheet
- DIYC Controls
  - Calculate what time you should have arrived and use that as your IN time. If you need a Time Allowance, take it on the next leg.
  - You should always "zero" a DIYC Control.

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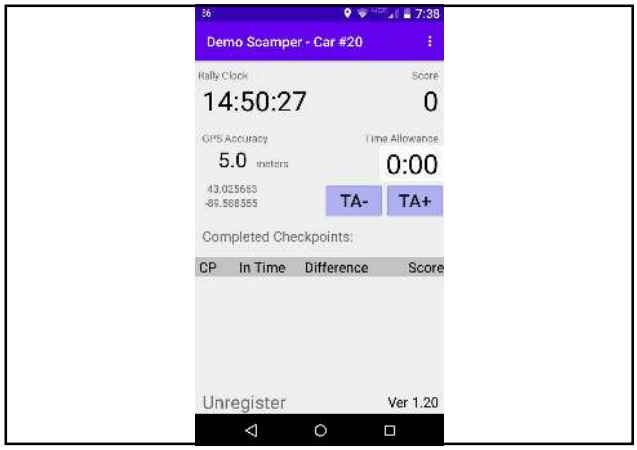


Leg 1: Open
Next NRI: 18
Outmarker: "STOP" NRI 18
OM 6.867 6.916
CAST: SEE NRI
Callback: 6
Special Instruction: Begin Free Zone

Not too complicated. NRI 13B was on left before SR 267 causing the routes to split. Rejoined on CR 825 and just follow the common route to the control. For beginning Course competitors, note that at 13B the main road was straight by "protection," and at 14B it was "Right at T". At the first "STOP" the MRD was "Straight As Possible" because both side roads were dead ends. You have seen all three MRD's in action!

| | GTA | | Tour | | | | Course | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Q | Answer | NRI | Mileage | Speed | Time | NRI | Mileage | Speed | Time |
| Q 1 | McClelland | Out | 0.000 | | 0.0000 | Out | 0.000 | | 0.0000 |
| Q 2 | Infinite Graphics | 13A | 2.919 | 30 | 5.8380 | 13B | 2.640 | 30 | 5.2800 |
| Q 3 | AAR | 15 | 4.929 | 32 | 3.7688 | 14B | 3.100 | 18 | 1.5333 |
| Q 4 | 15 | 17 | 6.523 | 40 | 2.3910 | 15 | 4.978 | 32 | 3.5213 |
| Q 5 | None | Cont. | 6.736 | 24 | 0.5325 | 17 | 6.572 | 40 | 2.3910 |
| Q 6 | Hay & Straw / Feed & Seed | | | | | | | | |
| Q 7 | More | | | | | Cont. | 6.785 | 24 | 0.5325 |
| | | | | | 12.5303 | | | | 13.2581 |
| | | TRUE | TIME | | 12.53 | TRUE | TIME | | 13.25 |

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## Repeat

- Go to the outmarker indicated on the critique sheet or in the route instructions.
- Leave at the correct time
- Stay on time
- Calculate any time allowances
- Stay at the appropriate CAST while crossing the timing line
- REPEAT

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## Remember to have fun!!

- If too stressful, try simplifying.
- Maybe run Seat of Pants for a leg or two
- Take a Time Allowance and get ice cream
- Remember, it takes time to get the hang of it
- Go easy on yourself
  - This is new and takes time to learn
  - Set easily obtainable goals for yourself

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## After the Event

- Talk to other rallyists
- Share stories
- Ask questions
- Look forward to the next event

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**Additional information can be found at:**

https://www.scca.com/pages/road-rally

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