## Road Rally 101 - Getting Started

By Scott Harvey

What is a Road Rally and why should I care? Simply put, a Road Rally is a test of skill and precision created by a rally organizer, often referred to as a Rallymaster. This test is laid out on public roads and is intended to challenge teams of competitors (rallyists) composed of drivers and navigators. The goal of the rallyists is to travel the route laid out and to do it as closely as possible to what the Rallymaster intended. Along the route there will be a number of checkpoints (controls) where the teams will be scored on how closely they are matching this intent. There is always a perfect arrival time for each car at each control. Penalty points are scored for arriving early and for arriving late. Ideally, the competitors want to arrive exactly on-time at all of the controls. Arriving exactly on-time will net the team a perfect zero. As you might now imagine, low scores are better than high scores in rallies. Some have drawn the analogy to golf. I'd say, yes – but much less boring than golf.

So why should you care? That's a good question. There are many answers. There are probably as many answers as there are rallyists. For some, it is simply a good excuse for driving around on some back-roads. For the navigators there is the challenge of "solving" the mathematical equations while being bounced around in a moving car and simultaneously keeping their driver on course and on-time. For the drivers there is the challenge of piloting their vehicle through potentially difficult road conditions and around twisting turns and still arriving at the controls on-time. For both there is the challenge of working together as a team and performing their respective tasks to the best of their abilities. All the while there is the competition aspect of how well each team performs with respect to the other competitors in their class. Plus there is the challenge presented by the Rallymaster; whether it is the calculations or the roads selected (or both). There is also a third member of each team – the vehicle. There are many competitors that take great pride in preparing their vehicle to give their team an edge over their competition.

Getting started. The type of vehicle and its level of preparation is not critical. All that is really needed is a desire to accept the challenge of the sport and to understand that there is a great deal of information to digest. Going in with the thought of winning right from the start is a guaranteed recipe for disappointment. It takes a long time to get good at this game and it takes a lot of learning. Much of this comes at the cost of learning from mistakes. This document and the series of documents to follow are intended to give the aspiring rallyist a basic understanding of some of the terms, concepts, and yes, rules of the game. Each document can be taken in steps to help in the progression of experience gained. Numbers will be somewhat arbitrarily assigned to each document similar to the way college courses are numbered. Smaller numbers signify lower levels along the "learning curve". This initial primer is called *Road Rally 101 – Getting Started*.

So let's start at the beginning and see if we can get the beginner started. Here are some basics to get you to your first rally and hopefully keep you from exploding from information overload.

- 1. Two important rules.
  - a) **Rule number one: rallying is fun**. If you remember this you will have fun. If you find you are not having fun, you may be doing something wrong.
  - b) **The second #1 rule is: ask questions**. This is especially important if you find you are not following rule number one.

- 2. You need a few basics to get started in rallying.
  - a) A vehicle. This can be your daily driver. Be sure it is well maintained and suitable for use on unpaved roads. There is a safety inspection before each rally be sure the vehicle is legal for use on public highways and all safety equipment is functioning properly. Vehicle registration and insurance will be checked before the rally, as will the driver's operator license. All occupants must wear their seatbelts at all times while the car is moving. Particular attention should be given to tires. Many rallies are run on roads that vary in surface structure. Roads may be loose gravel, sandy, muddy, snowy or ice covered. Typically, a good snow tire is a nice compromise for most road conditions even in the summer.
  - b) **Two people**. You need someone to drive and someone to sit in the other seat the **navigator** (sometimes called co-driver). The **driver** has the easy job. They need to listen to the instructions delivered by the navigator and follow them. The navigator is responsible for describing the instructions to the driver. This is usually broken down in to two very basic elements: speed and direction.
  - c) **Simple equipment**. **A watch (or small clock)** that read seconds, **pens, markers, a clipboard** and an interior map light (for night rallies). A simple four-function **calculator** will also be handy for making basic calculations. Auxiliary lighting on the car can also be helpful for rallies that run after dark.
- 3. **Find a rally in your area**. Make sure you and your partner (and the vehicle) can all be there at the same time and for the duration. Pre-register in advance if possible. Obtain a copy of the **General Instructions** if available and review them in advance of the rally. There are many different types of rallies. (This document, and the ones to follow, will focus primarily on the type of rally most commonly run by the Detroit Region SCCA. It is known as a TSD (Time, Speed, Distance) or Tour Rally). The General Instructions will provide information about the format of the rally and many useful bits of information relevant to the rally. Much of the information contained in the General Instructions will be very similar or identical from one rally to the next. However each rally is different. Additionally, each rally organizer (or organizing group) has their own way of presenting a rally. You may find a particular organizer or club that put on rallies that you really enjoy and others that maybe are not to your tastes. It usually takes a number of events to realize which are which and why.
- 4. On the day of the rally make sure you have all of the basics listed above. Also make sure the gas tank is full and that the windows are clean (plenty of windshield washer fluid).
- 5. Get to the start location of the rally (headquarters) and get registered early. Obtain the **Route Instructions** and go through them. Make sure all pages are present and in the proper sequence. You might want to mark or highlight important items such as speeds and instructions that are close to each other (0.2 miles or less). The Route Instructions define all the actions (turns, etc.) that need to be taken and the speeds to drive to get through the rally. If followed exactly as the Rallymaster intended, one could expect to get very good scores. We will take this up in more detail in later chapters.
- 6. This is a good time to **find a "friend".** There are usually plenty of experienced competitors at rallies that are willing to offer help or advice. Don't be afraid to **ask questions** and learn more. Your friend can help to explain how the route instructions are formatted and what may be the more important items. There is a lot involved in rallying and it takes many rallies worth of experience to get good at it. Asking for help is a great way to shorten that long learning period.
- 7. As mentioned in the opening, your progress is measured by your arrival time at **checkpoints**. These checkpoints are usually not known to the competitors until surprise there is a bright

- orange checkpoint sign as you come around a turn! You want to find all of the checkpoints along the route and try to get to them as close to your ideal time as possible.
- 8. For the first time out it is best to concentrate on course following. This is just as it sounds follow the course exactly as described by the route instructions. Before we get to the course, there are a few matters we need to tend to:
  - a) Set your watch(es) or clock(s) to **official rally time**. There should always be a clock available at or near the registration desk with "official rally time". This is set to the true time of day for the time zone you will run in. All rally time will be based on this.
  - b) Determine **your start time**. This will be one of the first instructions in your set of RIs (Route Instructions). It usually will say something like: "Start at a specific location at some time (let's use 12:00) plus car number". This means that if you are car number 15 you will begin the rally at 12:15 from the location described.
  - c) There is always an **odometer calibration** portion at the very beginning of the rally. This is used to allow the competitors to "tune" (if possible) the vehicle's odometer to match that of the mileage used by the Rallymaster. To start with, you will likely have only the vehicle's odometer or trip-meter for measuring distance.
  - d) Zero the trip-meter where the instructions indicate, especially at the beginning of the odometer calibration zone. Follow the instructions to get to the end of the odometer calibration zone. [Tip: make a note of the odometer mileage at several mileaged instructions during the calibration run to get a better idea of how far off your odometer is from that of the route instructions] Once at the end of the odometer calibration zone be sure to record the odometer reading in the route instructions next to the rally mileage. This **measured distance** will be the basis for determining the odometer correction factor your vehicle will need to match the **route distance** as shown in the route instructions.

Okay. Now you have found a rally. You and your partner have gone over the Route Instructions and have asked for a little help from the some of the veterans. You have even set your clock to match rally time and have somehow found yourselves at the end of the odometer calibration section. Now what?

The next few chapters will help you to work out some simple math problems to understand the odometer factor and then how to follow the route. But first – let's talk about safety.

## Road Rally 102 – Let's Play Safe

- Rallies are run on public roads all rules of the road apply
- There are other people using the roads
- You will pass through populated areas
- Safety regulations
- Safe speeds, Pauses, Out Markers, Checkpoints
- Common sense
- Time Allowance (T/A)

## Road Rally 105 - Determining Your Odometer Factor

- NRI Numbered Route Instruction
- Route Mileage (mileages in the Route Instructions)
- CAST Change Average Speed To
- Odometer Correction Factor (Factor)
- Factor = measured mileage/route mileage