# Time, Speed and Distance (TSD)Rally

The Parade Rally will be a TSD (time-speed-distance) rally as opposed to the gimmick or fun type rally. The Rallymaster shall design the rally so that it will provide challenge for serious rallyists, yet will contain safeguards, such as closed loops and off-course markers, to avoid losing recreational rallyists on long off-course excursions.

#### R-1. Referenced Rules

The rules referenced below apply to the rally:

- (a) Eligibility. (See G-2.1 through G-2.6.)
- (b) Protests. (See G-9)
- (c) Awards. (See G-11.1 and G-11.4)
- (d) Entrants must complete on-site Parade checkin before the event or they will not be allowed to compete. Entrant classification or classification changes must occur no later than the day before the event starts. (See G-2.4.1.)

#### R-2. Classification

Driver/navigator teams must classify themselves and the automobile correctly (See G-5.2 "Misclassification").

There will be six classes:

**R01 Equipped** - Unlimited rally equipment. This class allows for equipment that may integrate various inputs and devices for the purposes of performing calculations and providing real-time displays. Examples of such equipment includes: TimeWise, ALFA, Xeron, Terratrip, etc.

**R02 Tech Equip** – The equipment permitted for the Navigational class (R03) is allowed plus Rally Apps on cell phones, tablet, notebooks, etc. Rally computers are not allowed. Non-integrated devices such as Halda trip odometers, CURTAs, etc. are allowed in this class.

**R03 Navigational** - The equipment permitted for the Unequipped Plus classes (R04/R05) is allowed plus maps, prepared tables, mechanical slide rules, non- programmable, single memory calculators.

**R04 Unequipped Plus Two** - The equipment permitted for the Unequipped class (R06) is allowed plus factory built-in computers that display average speed. Also only vehicles from model year 1999 to 2010 are permitted in this class.

**R05 Unequipped Plus One** - The equipment permitted for the Unequipped class (R06) is allowed plus factory built-in computers that display average speed. Also only vehicles from model year 2011 to current model year are permitted in this class.

R06 Unequipped - The only rally aids permitted within the rally automobile will be simple time pieces including stop watches, pens/pencils, paper, clipboard or any device for holding the route instructions, and the original equipment speedometer/odometer, trip odometer in its original location in the automobile. (Prepared tables of any kind are not allowed in the unequipped class.) Navigational/GPS systems are allowed in this class. Only vehicles from model year 1998 and older are permitted in this class.

Contestants may not communicate with other contestants during the Rally using cellphones or two-way radios. Contestants found in violation of this rule will be disqualified.

# R-3. General Description of Rally

The rally shall be at least 3.5 hours and not exceed 4.5 hours in duration from the initiation point of the first route instruction (whether numbered or not) to the completion point of the last route instruction (whether numbered or not) that directs entrants to the place where score cards are turned in and protests are received, assuming perfect time. Unless emergency or extremely unusual conditions or situations require, only paved roads will be used for the rally. Rallyists will be notified before the start of the rally if any such condition exists. There will be at least five (5) timing controls (checkpoints) on the rally. Other pertinent information will be given in the rally general instructions.

# R-3.1.Duration of Rally

There will be a mandatory rest stop at the approximate mid-point. The computation of the duration of the rally will account for all segments of the rally, starting at the initiation point of the first route instruction (whether numbered or not) and ending at the completion point of the last route instruction (whether numbered or not) that directs contestants to the place where score cards are turned in and protests are received. The computation willinclude:

- (a) The tire warm-up and odometer check runs (if not included in official leg time)
- (b) The accumulated official time for all legs.
- (c) The accumulated allowance for all transit zones.
- (d) At least three (3) minutes per open control.
- (e) An allowance of two minutes per mile (1.6) kilometers) of on-course travel for all segments not otherwise accounted for, including the distance between each timing line and the initiation point of the next on course route instruction and the distance from the final timing line to the completion point of the last instruction. If the duration of the rally exceeds 4.5 hours, based on the above criteria, legs may be removed from scoring at the discretion of the Protest Committee. At the discretion of the Rallymaster, the rally length of 4.5 hours can be extended to allow participants travel time from the last check point, back to the location where the score cards are to be turned in. The travel time would not be considered part of the rally time maximum.

#### R-4. General Instructions

The rally general instructions (the "generals") will be made available to all entrants at least one month before the Parade.

#### R-4.1. Contents

The "generals" will contain all the rules and regulations governing the rally and all information essential to the contestants' complete understanding of the event.

- (a) Glossary of Local Terms If any terms not given in the official PCR Rally Glossary are to be used, the "generals" will include a glossary that lists and defines any such terms, abbreviation, or symbols. The official PCR Rally Glossary is in Appendix VII.
- (b) Route Instructions All route instruction types to be used will be specified and fully described (written, graphic, symbolic, and photographic). A general example of each different route instruction type will be given in the generals. An example of the format and layout of the route instructions will be given.

- (c) Usage If any course-following instructions other than numbered instructions are used, complete information will be given regarding the introduction, usage, and cancellation of such instruction.
- (d)Priorities If more than one general coursefollowing method will be used, the priorities of the methods will be stated so that the proper course can be understood when instructions conflict or direct similar action. i.e., the priorities or "main road" or route- following rules will be stated, and the priorities of any other type of unnumbered instructions will be given.
- (e)Overlap The overlap of all types of route instructions will be given.
- (f) Redundancy Any redundancy of instructions will be specified. That is, it will be clear whether or not a numbered route instruction can be executed when it directs the same action as a "main- road" or route- following rule or other unnumbered route instruction.
- (g)Distribution of Route Instructions The uniform time when route instructions will be given out will be specified if other than the minimum time. (SeeR-6.1.)
- (h)Quoted Signs The generals will specify the location of signs relative to the rally route, i.e., anywhere, left, right, etc. Also, how the signs should be read will be specified, i.e., left- toright, top-to-bottom, no letters skipped, inclusion of symbols, etc.
- (i) Landmarks A landmark is a point, object or feature, other than a sign, along the rally route. Landmarks will be indicated in the instructions by capital letters without quotation marks. Landmarks will be identified by a visible sign or be identified in the rally glossary. Landmarks and their identifying signs may be located anywhere. Signs must be readable from the direction of approach of the rally route. Unless the contestant is directed to turn toward or away from a landmark, the landmark must be visible from the direction of approach of the rally route.
- (j) Control Station Procedures, The procedures that contestants are to follow will be explained for every type of control to be used.

- Timing and Scoring The procedures in effect for the rally will be explained, Including a description of the point where time will be recorded.
- (2) Penalties A detailed schedule of penalties will be provided (i.e., penalties and for what they will be assessed.) (See R-11.2.4.)
- (k) Maximum Distance The maximum distance between "action points" shall be given.
- (I) Mileage Measurement The equipment used and the conditions existing during the measurement of the official mileages will be specified in the "generals."
- (m) Special Regulations Any other needed regulations.

#### R-4.2. Questions and Answers

Questions concerning the general instructions should be written and mailed (either through the regular postal service or by email) to the Rallymaster. The Rallymaster will respond to questions if they are received at least a week prior to the start of the Parade. Questions must be worded so that an answer of "yes", "no" or "does not apply" could be used. Responses will be solely for the purpose of clarification. Written questions and responses will be posted in or near the check-in or hospitality area for all rallyists to see, and nothing will be added or changed to posted responses.

# R-4.3. Supplementary Generals

Should a question concerning the general instructions reveal an overlooked point or problem, supplementary general instruction(s) will be issued to all entrants at check-in.

#### R-5. Time

#### R-5.1. Official Time

The official rally time will be provided by a master watch or clock, available to all contestants for reference at the start of the rally. Or will be available on the timing and scoring APP used by all contestants.

#### R-5.2. Start Time

Rally Start Times assignments will be specified in the General Instructions.

#### R-6. Route Instructions

# R-6.1. Equal Time For Study

Route instructions will be available for issue to each team at least 20 minutes before the team's start time. Instructions will be issued in an orderly manner designed to permit each team the same amount of time to study the instructions before beginning the rally.(SeeR-4.1. (g))

#### R-6.2. Identical Instructions

Identical instructions will be issued to all entrants, including non-competitive entrants. "Touring" instructions covering the rally route for those not competing for awards are forbidden.

# R-6.3. Content Of Instructions

Route instructions will identify rally action points (turns, speed changes, etc.) and provide other information, if needed, for execution of the various phases of the event. See R-4.1. (b) for information regarding other types of route (course-following) instructions.

#### R-6.3.1. Sheet Numbering.

The sheet number and total number of sheets will appear on each sheet of the route instructions (e.g., "1 of5", "2 of 5", etc.).

# R-6.3.2. Quoted Signs

Where route instructions quote signs in less than their entirety, such quotes will include a prominent portion of the signs.

# R-6.3.3. Action Point Identification.

Route instructions will not identify action points (turns, speed changes, etc.) by names or numbers on mail boxes, by numbers on utility poles, or by other similar landmarks (frequently recurring, difficult to read) unless such instructions are confirmed by mileage reference or other substantiating information. Likewise, no turns will be based solely on mileage reference.

#### R-6.3.4. Distance/Speeds.

All distances and speeds will be in both miles and miles per hour. A kilometer and kilometer per hour conversion chart is provided in Appendix VII.

#### R-7. Odometer Calibration Run

The first part of the rally will be an official odometer calibration run to allow each team to compare its odometer reading with the official mileage. The run will be at least ten (10) miles (16 kilometers) long, and the route instructions will provide adequate, official, intermediate mileage reference points. Adequate time (stipulated in the route instructions) will be allowed at the end of the run for contestants to make all necessaryodometer calibration calculations.

#### R-8. Controls

There are two categories of controls. The first is manual controls in which a contest is either timed by someone or by themselves. The other category is GPS-based timing systems in which a team uses a digital device to sense when they pass a control point. GPS timing will be covered under R-8.4. The two types of manual timing controls (checkpoints) will be the open control and the Do It Yourself Checkpoint (DIYC). The exact location of these may or may not be known to contestants before they reach it. A timing control marks the end of one leg of the rally and the beginning of the next, if any. There will be at least five (5) timing controls (checkpoints) and no more than one half of them may be one of the DIYC type. (See Appendix VII for further information.) No more than one DIYC timing control shall occur in succession without an intervening manned control. A timing control marks the end of one leg of the rally and the beginning of the next, if any.

# R-8.1. Open Controls (Manned Checkpoints)

# R-8.1.1. Location of Open Controls

Open controls will be located on the right side of the road relative to the rally route. Controls will be identified and the timing line will be visible. Open controls will be away from congested or high- traffic areas and not in or immediately after a lengthy nopassing zone nor in an area where the speed limit is less than the current assigned rally average speed.

# R-8.1.2. Leg Information

Each open control station will provide to contestants: their arrival time (time slip) plus the official mileage and the official elapsed time for the leg just completed. Also, either at the end of each leg or at the end of the entire rally, each team will be provided a log showing the official distance and time for each speed change. Each team will also receive a critique explaining the correct course and any "traps" used by the Rallymaster. If a log and critique are provided ateach control station,

the information will be for the leg just completed, plus any DIYC's since the last manned open control. If the log and critique are provided at the end of the entire rally, all legs will be included.

#### R-8.1.3. Control Departure

Each team's departure time will be assigned by the control station personnel. The departure time will be at least three minutes after the arrival time.

Extra time will not be granted for a entrant's convenience. Control station personnel will identify in writing the next route instruction to be executed and the departure speed to be used.

# R-8.1.4. Closing of Controls

Manned controls will remain open at least 30 minutes after the perfect arrival time of the last rally automobile leaving the previous control (or leaving the start -in the case of the first control) unless all automobiles are known to have cleared the control.

# R-8.2. Unmanned Timing Controls (DIYC)

#### R-8.2.1. Location of DIYC Controls

DIYC controls will be located on the right side of the road relative to the rally route. Controls will be identified either in the Route Instructions by an instruction indicating "DIYC" or by a clearly marked and easily visible sign on the right side of the rally route indicating "Rally DIYC". DIYC's will be away from congested or high-traffic areas and not in or immediately after a lengthy no-passing zone. There will be sufficient safe stopping area for at least eight (8) automobiles after the DIYC. DIYC instructions contained within the Route Instructions will refer to accurately defined signs or landmarks as a reference point for the DIYC.

# R-8.2.2. Procedures for DIYC Controls

At a DIYC, write the time you figure you should arrive (in hours, minutes and seconds), (HH:MM:SS) on the DIYC slip provided in the appropriate TIME IN location. Add exactly 3:00 minutes to this arrival time and write that time on the TIME OUT location on your DIYC slip. This is your departure time from this DIYC, beginning the next leg. Continue the rally with the following instruction. Rallyists should pull ahead several automobile lengths beyond the DIYC point, to allow room for other rallyists while completing their paper work.

Rallyists must write their arrival on the control card before entering the next manned control, or it will be scored as having missed the DIYC. DIYC times may not be changed after entering the next manned control. All times must be entered in hours, minutes and seconds.

**R-8.2.3. DIYC Control Departure** Each team should leave the DIYC at the time they entered on their control card (exactly 3:00 minutes after their arrival time). Departure speed is the indicated CAST for the DIYC instruction or previous CAST if none is given.

**R-8.2.4. DIYC Leg Information** The next (after the DIYC) timing control station must be a manned open control. This control will provide to rallyists a log showing the official distance and time for each speed change on the DIYC leg.

R-8.2.5. DIYC Example Route Instruction reads 'DIYC at "Stop Ahead". Were you to arrive at this sign at 8:46:45 (8:46AM and 45 seconds), you would write your time in (8:46:45) in the first available TIME IN space on your control cards and then write your time out (8:49:45 = 8:46:45 + 3:00 minutes) in yourfirst available TIME OUT space on your control card. Pull up a bit and then leave the DIYC point at exactly that out time.

# SAMPLE CONTROL CARD

	LEG 1	LEG2	LEG3
TIME IN	8:35;54	8:46:45	
TIME OUT	8:04:00	8:40:00	8:49:45
ELAPSED TIME	0:31:54	0:06:45	

#### R-8.3. Manned Route Controls

A manned route control may be either on-course or off- course. Automobiles arriving at such a control may receive special instructions designed to bring oncourse and off- course automobiles together again. If such controls will be used, the "generals" will include a detailed description of the procedure to be used.

# R-8.4 GPS-Based Timing Systems

GPS Timing and scoring systems use GPS-based technology to record when a contestant passes a control point. This control point can either be the start of a leg or the end of a leg. It will then calculate the score for the leg and report it immediately to the contestant. The scores are then transmitted to the rallymaster through the software. The ability for the contestant to input Time Delays in real time is part of the system. The requirements for GPS-based timing systems sits on top of the Manual Control requirements. It does not replace or change anything other than what is specially mentioned in the following sections.

# R-8.4.1 GPS-Based Control Points

Control Points at the end of a leg can either be designated in the Route Instructions or they can be undesignated checkpoints. The rally can contain both types of checkpoints. There will be at least five (5) checkpoints in the rally. Legs can start as soon as one leg ends (end time becomes start time), at a time of day (time of day plus car number), or on a flying restart (car passes a new control that starts the timing for the leg).

# R-8.4.2 GPS-Based Rally Legs

A rally segment is a series of control points in which there can be multiple checkpoints and is driven continuously. Rally segments using GPS-based timing will not be longer than 45 minutes in length, without providing a break in between segments. The break should be no less than 3 minutes. This is in addition to the mandatory rest period at the approximate midpoint of the rally.

# R-8.4.3 GPS-Based Rally Equipment

The equipment for in-car timing must be readily available and should not be limited to one operating system or brand of equipment. The contestants should be able to make sure their equipment is operational prior to the start of the rally.

#### R-9. Delay Allowances

# R-9.1. Delay Requests

Any reasonable request for a time delay will be granted. Contestants should use a time delay any time they fall behind schedule. The purpose of the time delays is to avoid speeding or dangerous driving on public roads.

#### R-9.2. Delay Amounts

Time Delay Amounts should be requested in increments of whole minutes (1:00, 2:00, 3:00, 4:00, etc.). Please use the Time Delay Request form(s) provided with your rally instructions.

# R-9.3. Submitting Delay Requests

A delay request must be written before reaching the next open control. The delay request must be presented at the first open control reached after the delay. The delay request must be presented before receiving a timing slip from that control.

#### R-9.4 GPS-Based Time Delays

Time delays will be entered into the system by the contestant as needed without regard for the reason. Timing increments will be based on the system used. The maximum amount time delay for each will be limited to the maximum amount available in the systems or 20 minutes, whichever is less.

# R-10. Competitor's Rules

Compliance with the following rules is mandatory.

- (a) Conduct/Driving. See the General Rules under G-5. "Causes for Disqualification", G-9.5.3. "Automatic Disqualifications" under "Protests" and G-6.1. "Traffic Laws". "Unsafe" driving is as determined by the event chairperson.
- (b) Driver's License and Age Every driver must be at least 18 years of age and hold a valid driver's license (See G-2, through G-2.4.).
- license (See G-2. through G-2.4.). (c) Number of People in Automobiles - Each automobile must have a driver and a navigator, both of whom are PCA members (or JPP or CAFP Parade entrants) and Parade registrants. No other passengers are allowed.
- (d) Traffic Violations Entrants may be disqualified or otherwise penalized for in-motion traffic violations.
- (e) Accident Entrants may be disqualified or otherwise penalized for being at fault in an automobile accident.
- (f) Passing Passing within sight of a control station is permissible provided the passing is neither dangerous nor illegal.
- (g) Creeping Unless permitted or required by the route instructions, stopping, within sight of a checkpoint is not permitted. Also, if an automobile is approaching so slowly that the checkpoint workers judge that the automobile is creating a traffic hazard, the workers will wave in the automobile. If the automobile does not immediately accelerate, the penalty for stopping will be imposed. No penalty will be imposed if the stop was needed for safety or legally required.
- (h) Control Station Procedures Contestants must pass the timing line for their time to be taken and stop where so instructed to receive the timing slip and other instructions (See R-8.1.2. "Leg Info" and 8.1.3. "Departure"). The procedures to be followed at control stations will be explained in the "generals".
- (i) Requests Requests are allowed to maximize the safety of the event.
- (j) Automobile Numbers Assigned automobile numbers must be in place before starting the rally.
- (k) Following Entrants may be disqualified if found following another rally automobile rather than using the general and route instructions to determine the route.
- (I) Equipment Any team found in possession of equipment not allowed in its class will be disqualified. (See R-2. for equipment allowed)
- (m) Seat Belts All vehicle occupants must wear seat belts during the rally
- (n) Pre-runs Entrants who chair, design or preview the rally course as a driver or passenger, are ineligible to compete.

#### R-11. Timing And Scoring

The computation for determining the elapsed time for each leg shall be performed by calculating the times, in minutes, between average speed changes to at least four decimal places (0.0001 minutes). Then add the successive times without rounding off until the total leg time is figured and then the total figure so reached shall be truncated to the second of 1/100<sup>th</sup> of a minute. In this final truncation. fractional parts of a unit shall be dropped. If an event uses "car zero times" (czt) or "restart times" these times are to be calculated as required above and these times are to be considered definitive times. The computation for determining the official time must be carried forward from a "restart time" or "car zero time" using the time exactly as given in the "restart/car/zero time" (using no fractional parts beyond what is shown in the "restart/car zero time").

# R-11.1 Timing

#### R-11.1.1. Measure of Arrival Time

Times of arrival at all timing controls will be taken to the nearest second and expressed in hours, minutes and seconds (HH:MM:SS).

# R-11.1.2. Missed Controls

A team physically missing one or more consecutive controls will be timed at the next control station reached. (See R-11.2.3.)

# R-11.2. Scoring

#### R-11.2.1 Leg Score

The basic penalty (score) for arrival either early or late at a control will be one point per second, up to a maximum of 300 points (5 minutes), excluding any other penalties. Being early at one timing control cannot be offset by being late at another timing control. Each leg of the rally is started with a zero error.

# **R-11.2.2. Maximum Duration for Intended Traps**The maximum duration for traps on closed loops shall be less than the maximum penalty at a control.

#### R-11.2.3. Missed Control Score and Penalty

A penalty of 1 point for each second early or late at each control shall be imposed up to a 300 point maximum (5 minutes) leg penalty or 300 points (5 minutes) for each leg involved in missing a control.

# R-11.2.4. Other Penalties

Penalties for other reasons may be imposed at the discretion of the Rallymaster, subject to the approval of the PCR Committee Chair or his designated representative. A detailed schedule of all penalties will be included in the general instructions. Possible penalties, for example, include points for entering an off-course route control, creeping in sight of a control, or entering a control from the wrong direction.

# R-11.2.5. Total Score

Each leg will be scored separately. Total score equals the sum of the leg scores plus any penalties. Errors, early and late, are cumulative. Error on one leg may not be compensated during succeeding leg(s).

#### R-11.3. Tied Scores

Ties will be broken by comparing the tied contestants' scores at each control. The team with the lower score at a given control will "win" that leg, and the team winning the most legs will be awarded the better finishing position. In the event a tie still exists, scores of tied teams will be compared by control in inverse order, and the team having the lowest score at the first control at which the scores differ will be awarded the higher finishing position in the rally. Ties will only be broken when a trophy is involved.

# R-11.4. Posting of Scores

Rallyists will be notified on or before rally day of the time and location where official scores will be posted. Individual scoring irregularities must be reported to the Rallymaster or authorized representative no later than one hour after the official scores are posted in order to resolve mathematical errors. Individual scoring errors are not protestable