# BMW Car Club of America TSD Rally Events

BMW CCA RALLY STRUCTURES AND STANDARDS	. 2
Purpose	. 2
Framework and philosophy	. 2
Overall rally structure and standards	. 2
Rally General Instructions	. 3
Procedures and process	. 5
Preparation	5
Registration Categories of competition Safety	. 5
Written Route Instructions	5
Precedence Execution of written route instructions Redundant instructions Impossibility Signs and Landmarks Intersections	.7 .7 .7 .7
Timing controls (checkpoints)	9
Open timing controls Closed timing controls	
Other route controls	10
Appendix A: Glossary 1	11
Appendix B: Course-Following Rallies1	15
Main Road Rules: Priorities for determining the proper rally route	15
Appendix C: Determining Out Times At Open Controls 1	17

# **BMW CCA RALLY STRUCTURES AND STANDARDS**

## PURPOSE

These TSD rally general instructions are designed to provide a framework for the use of BMW CCA chapters in presenting road-rally events to their members; this set of suggested standards and uniform general instructions may be used in their entirety or supplemented by rules specific to individual Chapter events. Unless superseded by event-specific supplemental instructions (commonly known as "supps"), these instructions, procedures, and definitions are designed to govern time-speed-distance (TSD) road rallies sanctioned by the BMW Car Club of America.

#### FRAMEWORK AND PHILOSOPHY

The term *car rally* covers numerous activities, from all-out speed contests like the World Rally Championship to the "gimmick" rallies in which winners are determined by luck. More challenging are

#### **OVERALL RALLY STRUCTURE AND STANDARDS**

A *road rally* is a time-speed-distance motoring event requiring navigation skills as well as driving ability. Competitors follow a common route over public roads according to a set of precise written route instructions, keeping to assigned legal speeds; success is measured by one or more timing controls where competitors are assessed penalties for being early or late from calculated perfect time, or for being off the designated rally course.

A rally is usually divided into several *sections*, each of which may include one or more *transit zones* (or transits), where competitors are given a substantial block of time in which to get from one point to another at their own pace; and *TSD legs*, in which competitors are expected to maintain precise average speeds throughout the leg. Specific, exact times are calculated from the start of each TSD leg to one or more *timing controls*, or checkpoints, where penalty points for early or late arrival are determined for each team. Because cars are timed from one control to the next, any time early or late at one timing control (checkpoint) cannot be made up in subsequent legs; finding any timing control (checkpoint) puts a team "back on time."

Besides the mathematical calculation necessary to stay on time, many rallies require the ability to determine the proper rally route according to the principles and definitions contained in rally General Instructions or in supplementary instructions distributed at any particular event.

Time-speed-distance (TSD) rallies can also be divided into two general types: *challenge* and *touring* rallies. Challenge rallies may be further divided into two types, "trap" rallies—in which rallyists are challenged to properly calculate their arrival times at various locations, and "course-following" rallies, in which staying on the correct rally route while maintaining an assigned speed can be a challenge.

The following standards and structures allow the construction of successful time-speeddistance rallies. Course-following rallies require reference to Main Road rules (Appendix B).

A *touring rally* may be thought of as a course-following rally without the pitfalls of trying to stay on the correct route. The primary object of designing a touring rally is to prevent competitors from going-off course, although it may provide a mild challenge in calculating perfect time. A touring rally will provide mileage at every rally instruction regardless of Main Road rules, whereas a course-following rally may provide few, if any, official mileages.

## **RALLY GENERAL INSTRUCTIONS**

These General Instructions apply in all cases where they are not superseded by supplementary instructions.

**Time:** An official time-of-day clock will be provided at least one-half hour before the official start of the rally. Any time-of-day notations in the route instructions or supplemental instructions may be given in conventional clock form—hours, minutes, and seconds separated by colons (e.g. *Commence odometer leg at 7:35:15 plus your car number)*—or in decimal time format (in which 7:35:15 would be written 7:35.25). All other references to time used in calculations will be given in decimal minutes, such as *Pause 1.75* to indicate a pause of one minute and forty-five seconds.

Average speeds: All average speeds shall give due consideration to the road and driving conditions at the time the event is to be held. No speeds higher than the prevailing posted speed limit may assigned at any point in the rally.

**Distance and duration:** Official rally mileage should be within 1% of true statute miles and should be measured with a hundredth-reading odometer to an accuracy of at least 1/100th of a mile, and all mileages provided in the route instructions given to the hundredth-mile. Competitors will not be required to determine official mileage to greater precision than 0.10 (one-tenth) mile in order to follow the correct course. Chapter rallies of the "Friday nighter" variety will usually take about 2-4 hours to complete and may be 25-100 miles long. Longer "day" rallies or marathon events should run no more than four hours without a break of at least half an hour.

**Rally roads:** Rallies are conducted on public roads at legal speeds. Unless specifically indicated by route instructions, roads marked *dead end, private, closed,* or *no outlet,* roads designated as circles or courts, roads onto which rally traffic cannot legally turn, or paved or unpaved parking lots will not be considered as rally roads. Physical obstacles (e.g., curbs, ditches, and raised traffic islands) can serve to define a rally road.

**Overall route design:** Because rallies are driving events, the rally route should be chosen to provide the maximum recreational enjoyment to the participants, taking into consideration such elements as scenery, challenging roads, and interesting destinations. Areas to avoid include residential neighborhoods, high-traffic areas, and other congested routes. Rallies should be designed to provide a pleasant drive for those uninterested in the competitive aspects, while maintaining high standards of accuracy for competitive entrants.

**Mileage check (odometer calibration):** Each event will include after its start a clearly defined odometer check for the purpose of allowing each car's odometer to be compared to the official course-measuring odometer. The odometer check will be at least ten (10) miles long and contain intermediate mileage reference points. The odometer check will be free of timing controls (checkpoints) or route controls.

**Control (checkpoint) placement:** No timing control or checkpoint will be located within .20 miles (two-tenths of a mile) of the start of a TSD leg, or within .20 miles (two-tenths of a mile) of any signal, stop, or yield sign controlling rally traffic, or within .20 miles (two-tenths of a mile) following a change-average-speed instruction.

**Timing and scoring:** Unless otherwise specified in a particular event's supplemental instructions, competitors in BMW CCA events will be timed to the truncated second or hundredth-minute; calculated perfect times will be likewise truncated. Each post-control restart time at the leg out-marker will be based on the arrival time at the control plus a minimum of at least one full minute of "dead time" to reach the out-marker, plus any additional time assigned by the timing control (checkpoint) crew. Time-of-day starts or restarts will always commence at the beginning of a minute.

Timing controls or checkpoints will be open five minutes before the scheduled arrival time of the first competitor and may close ten minutes after the scheduled arrival time of the last competitor.

**Time declarations:** To avoid speeding to make up time lost for unavoidable delay, competitors may make a declaration of lost time, adjusting their correct time-of-arrival at the next timing control; this procedure is sometimes referred to as "buying time." Lost time adjustments must be requested in whole minutes (including zero) plus one half minute (e.g., 0.50, 1.50, 2.50, 3.50, etc.). The declaration must be submitted in writing at the next open control prior to receipt of perfect leg time. The declaration may be submitted in writing to a designated rally official or deduced automatically in certain scoring systems.

**Penalties and restrictions:** Unless otherwise specified in supplemental instructions, the following points structure will be applied in BMW CCA rallies:

**One penalty point per second** early or late from calculated perfect time at any timing control. A maximum, such as one-half minute in penalty points, may be set for points incurred at any one timing control for being *early* or *late*. Other penalty points may be assessed for:

Entering or passing an off-course control: one-quarter minute

Failing to pass or enter an on-course control: one-quarter minute

Entering and checking in to a control from the wrong direction: one-quarter minute

Stopping within view of control personnel, except for reasons of safety: one-quarter minute (these penalties are at the determination and discretion of timing-control personnel and may not be appealed)

Missing a timing control: one minute

Finishing positions are based on the lowest numerical score. Ties will be broken by awarding the higher position to the competitor with the most zero scores at timing controls, then ones, and so on. In the case of identical points totals and identical numbers of individual penalties, the higher position will be awarded by comparing the scores at the first timing control, then the second, and so on; the higher place is awarded to the competitor with the lowest score at the earliest point at which the scores differ.

Any competitor deemed by the rallymaster or other rally officials to have committed one of the following offenses, or cited or given a written warning by a law enforcement agency for any moving violation, shall automatically be disqualified from the event:

driving while intoxicated or under the influence of drugs;

consuming alcoholic beverages while participating;

exceeding the legal speed limit;

dangerous or reckless driving.

No car in a CCA rally shall use two-way radio, cell phones, or other electronic communications to better its position in the rally.

## Preparation

## Registration

Rally registration will be open for at least one hour before the official start of any event; All competitors, passengers, and control workers must sign the appropriate CCA insurance waiver(s). Minors (under 18) may require a special waiver signed by their guardian(s).

## **Categories of competition**

Unless otherwise specified in supplemental instructions, the following competition classes will be used in BMW CCA rallies:

**Class A:** Competitors, regardless of experience level, using a computing device capable of calculating perfect elapsed time based on input from the vehicle's odometer (i.e. "A-Box" rally computers such as TimeWise and Alfa).

**Class B:** Competitors, regardless of experience level, using a computing device which has no direct interface with the vehicle, an auxiliary odometer which cannot compute time based on speed and mileage, and/or an aftermarket GPS device. "B-Box" odometers, laptop and tablet computers, Curta calculators, and aftermarket GPS devices—such as Garmin or TomTom—are found in Class B.

**Class C:** All other competitors. This is the "seat-of-the-pants" class, restricted to originalequipment odometers and speedometers, on-board computers, factory-supplied navigation systems, and any four-function calculator with a single memory.

In addition, Novice awards may be presented within each class to beginning rallyists.

## Safety

Competitors must present themselves and their vehicles in safe, roadworthy condition. Contestants must drive in a safe manner throughout the event. Contestants observed driving recklessly or in a manner which may imperil the safety of occupants of their own vehicle, other participants, or the public will be subject to disqualification from the event in progress and may be refused entry to subsequent event(s). Any contestant cited or given written warning by a recognized law-enforcement agency for a moving violation during the course of the event will be automatically disqualified. Participants and passenger(s) are required to wear seatbelts for the duration of the event.

## Written Route Instructions

## Precedence

**Emergency Instructions** take precedence over all other instructions. Whenever emergency instructions are used, one member of the rally team must sign an acknowledgment that they have been given the instructions.

**Checkpoint slips:** Instructions on open timing-control checkpoint slips must be executed immediately at the timing control (checkpoint) or at a point or time specified in the instruction.

Written route instructions (RIs): Each written route instruction in the RIs which guide competitors through the rally course consists of a command to execute some action which will affect their route or timing and an indication of when or where that instruction is to be executed. Instructions may change the assigned speed, or require a departure from the main road at an intersection, or both. An instruction may require execution at a specific point or call for action to be taken over a certain time or distance. Instructions are carefully written to include terms specifically defined in the **glossary** (Appendix A) of these general instructions; those terms have exact, specific meanings when used in written route instructions. Text within parentheses (such as this) is supplied as clarifying comments only; any action suggested within parentheses, while probably helpful, is not mandatory.

There are three types of written route instructions.

**Numbered route instructions** are to be executed in ascending numerical order. Each numbered route instruction is executed at its first possible action point and completed in its entirety before any part of the next numbered or lettered route instruction may be considered. However, while all written route instructions are independent of each other, and each must be completed prior to the execution of the next, distances provided for the completion of **add time (pause)** or **subtract time (gain)** time-adjustment instructions such as *Pause 1.50 during the next 6.88 miles* may overlap one or more subsequent instructions. Rallies which do not follow this exception—that is, which require the completed passage of time as well as distance before the next instruction can be considered—must so indicate in their supplemental instructions with a phrase such as "no time overlap."

Each numbered route instruction may contain one or more executable instructions; those to be performed at that point must be separated by commas and/or the word **and**. Any instruction to be executed at a subsequent point, but before another NRI, must be separated by semi-colons and/or the word **then**.

Lettered route instructions are to be executed in alphabetical order. A lettered route instruction should be executed at the first possible action point following the completion of the previous numbered route instruction, but may be superseded—although not canceled—by subsequent numbered route instructions. Each lettered route instruction may contain one or more executable instructions; those to be performed at that point must be separated by commas and/or the word and. Any instruction to be executed at a subsequent point, but before another NRI, must be separated by semi-colons and/or the word then.

**Notes** are repeatable route instructions introduced into the rally from time to time, and which are in effect from their introduction until canceled. Notes are provided in the Supplemental Instructions for an event. Action must be taken as directed each time the appropriate action point is encountered. Notes **supersede but do not cancel** numbered or lettered route instructions; while commonly independent of any other instructions, they may overlap or coincide with numbered or lettered route instructions and other notes. Canceling a note does not cancel its associated speed. Notes requiring a departure from the Main Road are subject to the priorities listed in Appendix B.

In addition to written route instructions, **Alpine** instructions (also known as **tulips**) may be used to direct the route. An alpine instruction is a diagram drawn to represent an intersection or group of intersections as closely as possible. A dot or a ball indicates the point from which the competitor enters the intersection(s) and an arrowhead indicates the road on which the intersection(s) is(are) to be exited. If more than one legal route exists at the intersection(s), the shortest legal route through the intersection(s) is to be taken. Speed changes associated with alpine instructions are to be executed at the first intersection in the diagram. If a reference point is part of the instruction, its location is noted in the alpine diagram. Alpine instructions are subject to the order of precedence in Appendix B.

#### **Execution of written route instructions**

**Reference points and action points:** A **reference point** is a point which can be located by the rallyist and used to determine immediate or subsequent actions or calculations. Reference points include intersections, given mileages, signs, and landmarks (see *signs and landmarks*).

- A. A reference point consists of a specific given mileage, or a sign or landmark at one point in the rally course; the same landmark may comprise several reference points during the rally.
- B. A reference point marking the beginning of a route instruction will occur at a mileage greater than that of the action point marking the end of the previous route instruction.
- C. Each reference point in a sequence (e.g. *Left after second "BRIDGE"*) must occur at a mileage greater than that of the previous reference point in the sequence.
- D. The same reference point will not be used for two consecutively numbered route instructions.
- E. Route instructions which are accompanied by official mileage must be executed at that mileage regardless of reference points or landmarks.
- F. Speed changes executed in turns are to be executed the beginning of the turn.

A route instruction can only be executed at one of two points: at an intersection where the route instruction directs competitors off the main road, or at the indicated point where they are to take some action—such as a speed change or pause (add time)—but where no change of direction is specified in the route instruction. This point where a route instruction is to be executed is the **action point**. The location of the action point may or may not coincide with the location of the reference point; for example, in the instruction *Left after "Toshiba"* the sign reading "Toshiba" is the **reference point** and the intersection where the left turn is executed is the **action point**.

#### **Redundant instructions**

A written route instruction which would duplicate the action ordinarily taken at an intersection according to the Main Road Rules (see Appendix B) determining the **main road** is said to be **redundant**; it cannot be executed at that intersection. A written route instruction can only be applied—or "used up—at an intersection even though it takes the rallyist on the same route as the Main Road if it is identified as redundant by the abbreviation **MBCU** (May Be Considered Unnecessary), or unless a specific mileage is given for the instruction, or both. See the Main Road Rules.

#### Impossibility

Since each route instruction is to be completed in its entirety before subsequent instructions may be addressed, the route instructions will not contain any instruction which cannot be executed **unless** it is the unused side of an **OR** instruction, or unless it is identified as an **ITIS** instruction, or unless this rule is specifically superseded by a statement in the supplemental instructions. (See glossary entries for ITIS and OR for a more thorough explanation of their application.) This rule does not apply to extraneous instructions which follow the end of a leg, whose purpose is to obscure the location of the leg-ending control.

#### **Signs and Landmarks**

A sign is any object at any one point on the rally route on which words, letter, numbers, and/or symbols are written, printed, painted, embossed, inscribed, or otherwise marked. A **landmark** is an identifiable object, building, or geographical feature found at any one point on the rally route. All referenced landmarks must be accompanied by an official mileage, have a

legible identifying sign or label (which may be temporary, unlike signs used as references), or be defined in the glossary of these general instructions or in the glossary of the event's supplemental instructions.

- A. Street signs: Conventional street signs, stop signs, and yield signs are <u>not considered to</u> <u>be signs</u> and will not be placed in quoted form. Street signs may be found on the left or right without specific indication in the route instructions. Abbreviations or variations of prefixes and suffixes and capitalization and punctuation are to be disregarded on conventional street signs.
- B. House numbers, utility pole identification letters and/or numbers, mailboxes and newspaper boxes, graffiti, political posters, signs on vehicles, and signs on the roadway itself will not be used unless specifically identified in the route instructions.
- C. Signs will be identified in route instructions by enclosing the reference in quotation marks ("like this"). Quoted signs will appear **exactly** as represented in route instructions with respect to spelling, punctuation, and case, and may or may not include graphic symbols. The words "stop" and "yield" when in quotes will not refer to official stop or yield signs but may refer to signs affixed to the same pole as a regulatory stop or yield sign.
- D. All or any prominent part of a sign may be quoted; however, no intervening words, letters, numerals, or symbols will be skipped, split, combined, or re-ordered. Hyphens and dashes are considered integral parts of words, letters, and numerals. Signs are read from left to right, top to bottom, or in the sequence presented on the sign.
- E. Signs used as references may be on the left, right, or overhead; but signs other than those appearing directly ahead or on the right—which may be approximately perpendicular to your line of travel, approximately facing you, or at any angle in between—must be so identified. Exceptions will be specifically described in the supplemental event instructions. Speed-control signs will be used only when they control the rally road.
- F. Subsequent signs or landmarks in a sequential series must have a mileage higher than previous signs or landmarks in the series; e.g., in the instruction *Left after second* "*Julius*" the first "Julius" sign must be encountered at a lower mileage than the second one. Since specific signs and landmarks are integral with their mileage, the same "Julius" sign in the example could be both the first and second reference if the rally looped around to pass the sign a second time.

**Note:** Since the rules for signs are so specific and exact, rallymasters are advised to state in the supplementary instructions of any particular rally if any elements of these rules will NOT be used to determine proper rally actions; otherwise, competitors are to understand that any differences between the written reference and an actual sign (e.g. missing punctuation, spelling discrepancies, or capitalization) render the sign ineligible as a reference.

#### Intersections

Each junction of existing roads at grade level from which an exit via either of two or more legal rally roads is possible without a U-turn constitutes a separate intersection or route possibility (see glossary).

**U-Turns:** No uninstructed U-turn(s) will be necessary to follow the rally course. The road used to enter an intersection should never be considered as a possibility when determining the Main Road.

## Timing controls (checkpoints)

A TSD rally may feature open or closed timing controls—commonly called checkpoints—in the TSD sections, with each control defining the completion of a leg. In a rally featuring open controls, competitors will stop at each control, identified by an official control sign (which will be displayed at registration) on the right side of the rally route. Competitors do not stop at closed or "drive by" controls, where workers time each car as it passes. Unless otherwise indicated in Supplemental Instructions, BMW CCA TSD rallies will use closed timing controls.

#### **Open timing controls**

Check-in procedures: Rallyists are to drive past the control sign, which serves as the official "in" marker, and proceed past the timing control (usually a worker's vehicle), where they are to park out of the way of following traffic. One member of the rally team is to return on foot to the control to submit the time card (plus a "bought-time" request, if necessary) and receive their arrival and departure times. Then the team will proceed to the end point of the leg (called the out-marker; this may coincide with the control itself or be farther along the rally route), where they will begin the next leg.

Checkpoint slips: Open controls may issue checkpoint slips to provide information to assist rallyists in verifying their status. This information includes:

The number of the control

Official mileage at the control

The car number of the arriving competitor

The arrival time (the "in" time)

The official calculated time it should have taken to reach that control from a previous point (target time)

The time allowed to reach the end point of the leg ("dead" time) or the time-of-day at that point

Any additional time ("add time" or pause) assigned by the control crew.

Any additional penalty points assessed by this control

The numbered route instruction to be followed at the out-marker

Any additional information necessary to reach the out-marker

Any additional instructions to be executed before or after reaching the out-marker

**Pause**: Each competitor will have at least one full minute of time at the end of each leg before beginning the next one; this time may or may not be taken while at the open control. The "out" time from the control, or the "start time" for the subsequent leg, may be assigned by control personnel or automatically calculated from the "in" time. These procedures must be clearly indicated in the supplemental instructions to the rally.

#### **Closed timing controls**

Unless otherwise indicated in Supplemental Instructions, BMW CCA TSD rallies will use closed timing controls. Pause time of at least one whole minute must be provided between closed controls within a multi-leg section or at the beginning of each new leg following a single closed control. Since all closed-controls in a multi-control leg are timed from the same start, to minimize "double jeopardy," the minimum pause between closed controls will increase by half a minute for each control in such sections; i.e., a minimum pause of one minute between the first and second controls, 1.5 minutes between the second and third, and so on.

Ideally, a rally leg will contain one control and a time-of-day restart at the end of the leg.

## Other route controls

Competitors are to stop at all route controls indicated by an official route-control sign located on the right side of the road on which they are traveling. Emergency route-control signs will be displayed at registration; other route controls may display specific control signs.

Route controls may be located on the rally course or off ("on course controls" and "off course controls"). There may or may not be a penalty assigned for arrival at an off-course control; if there is a penalty, it will be noted in the supplementary instructions for that event.

At a route control, competitors may receive supplementary instructions which must be executed before returning to the route instructions. Route controls may be encountered in any section of the rally except for the odometer check and will follow the same procedures for pause time as other open controls.

## **APPENDIX A: GLOSSARY**

The words and abbreviations listed below have the following definitions when they appear in route instructions—capitalized or not—unless they are in quotation marks (""). All other words are understood to have their common dictionary definitions.

ACTION POINT: The point at which a route instruction can be executed

ADD TIME: Extra time to be included in TSD calculations; the same as pause

API: After previous instruction; after the most recently executed route instruction

**AFTER:** The first INTERSECTION beyond the referenced sign or landmark at which the instruction can be executed

**AT:** In the immediate vicinity of a referenced sign or landmark

**BEFORE:** The last INTERSECTION prior to the referenced sign or landmark at which the instruction can be executed

**BLINKER:** An INTERSECTION controlled by a conventional traffic caution or stop blinker(s), capable of operating as a blinker(s) only. May be off.

**BOGEY TIME:** The calculated time of arrival of Car Zero at a given point in the rally, also known as Car Zero time

**CAR ZERO:** The theoretical "phantom car" used to determine rally starting times and bogey times; if an official start time is given as 6:00, then the first actual rallyist, Car #1, would start at 6:01.

**CROSSROAD:** A crossing of two legal rally roads. A CROSSROAD is an INTERSECTION and the roads may cross at any angle.

**CSD:** Change average speed down

CAST: Change average speed to (sometimes CAS)

**CSU:** Change average speed up

**DEAD TIME:** Time between a control's in-time and the subsequent leg's start time is considered "dead" time and is absorbed as a transit between the control and the out mark

**DEAD MILEAGE, DEAD MILES:** Mileage between a control and the following outmarker is considered "dead" mileage and is not used in calculating time

**DEVIATION:** Used in some venues to mean DEPARTURE

**DEPARTURE:** A change in course off the MAIN ROAD (see L, LEFT, R, RIGHT, S, TURN) at an INTERSECTION. Route instructions may contain more than one DEPARTURE.

**DYS, DIYS: Do-it-yourself** time control. Upon encountering a DYS reference, rallyists record their arrival time on their scorecard as their "in" or "end leg" time. The "out time" or next "start leg" time is recorded as that time plus two (2.00) minutes unless other procedures are provided in event supplements.

## END TIME, END LEG TIME: see in time

FOLLOW: A Main Road option below Onto

**GAIN:** To make up a specified time during a specified distance; the gain time is subtracted from the time required at the given speed to traverse the specified distance. The specified distance in which a gain is operative will be free of timing controls (checkpoints) or route controls.

## HTS: Hard to see

INTERSECTION: Any meeting or crossing of two or more legal rally roads from which

the rally vehicle could proceed in more than one direction without U-turning.

**IN TIME**: Arrival time at a timing control

**ITIS:** If There Is Such. Rallyists execute an ITIS instruction only if they encounter its ACTION POINT before they come to the ACTION POINT of the next (by number) numbered route instruction; in that case, they delete the ITIS instruction.

L, LEFT: Left DEPARTURE of any angle off the MAIN ROAD.

**LEG**: A portion of the rally in which time can be calculated from a given starting time to arrival at one or more timing controls

MAIN ROAD: See Section 3.

**MBCU:** May Be Considered Unnecessary. Redundant instructions must be identified, either by mileage or the abbreviation **MBCU**; rallyists are to execute an instruction labeled MBCU even though it may not direct them off the MAIN ROAD.

**NOTE:** A written route instruction which is introduced at some point during a rally and which must be repeated at every indicated point until it is cancelled; see <u>Notes</u> under Written Route Instructions.

NRI: Numbered route instruction

**OBSERVE:** To visually note and pass a sign or landmark

**OFFICIAL MILEAGE:** The mileage provided by the rallymaster in the RIs. All TSD calculations are based on official mileage.

**OFFICIAL TIME:** The time-of-day provided by the rallymaster before the start of the rally. Whenever possible, official US time services such as WWV or WWVH will provide the time source, but in any case, all TSD calculations are based on official time.

**ON, ONTO:** The topmost Main Road priority; see Appendix B.

**OPP, OPPORTUNITY:** A possible change in route; an OPPORTUNITY involves a DEPARTURE via a paved road and/or one which is named and/or numbered as indicated by sign(s) at the INTERSECTION. (Anything is possible, but it takes pavement or a sign to make an opportunity.)

**OR:** An OR instruction provides a choice of instructions separated by the word "OR." One of the given instructions—but not both—will be executed. The first **reference point** encountered determines which side of the OR instruction is to be executed. If both possibilities of an OR instruction have the same reference point, execution is determined by the ACTION POINT which is located first.

**OUT MARK, OUT CONE, OUT MARKER:** The point at which rallyists commence a new TSD leg. The out mark may be the same as the "in" mark of the control or it may be some distance from the control; in either case, out time (subsequent leg start time) commences at the out mark. Rallyists may be instructed to zero their odometers at the out mark or note its official mileage.

**OUT TIME**: Recorded time to leave a timing control or begin a new leg; may be derived from in-time or assigned by control personnel

**PAUSE:** A time allowance to be included in the calculated leg time. A PAUSE does not cancel a speed change or void a route instruction.

**POSSIBILITY, POSS:** A DEPARTURE which requires an instruction

RALLY MILES, RALLY MILEAGE: See official mileage

**RALLY TIME:** See *official time* 

**R, RIGHT:** Right DEPARTURE of any angle off the MAIN ROAD.

**REDUNDANT:** A written route instruction which directs rallyists through an intersection on the same route they would follow according to the Main Road rules is said to be *redundant*, as it is an unnecessary instruction; therefore the written route instruction cannot be applied at that point but must apply to a *subsequent* intersection. Redundant instructions, however, may be used to direct rally traffic through intersections where the Main Road may not be clear. *When instructions are to be executed at a point of redundancy, their official mileage will be provided, and/or they will be labeled MBCU (see MBCU).* 

**S, STRAIGHT:** A DEPARTURE from the MAIN ROAD made by proceeding straight at an INTERSECTION

**SECTION:** A portion of the rally containing one or more TSD legs. Sections begin at a specified time-of-day and usually end with a time break; day rallies will often have morning and afternoon sections separated by a lunch break.

**SIDE ROAD, SIDEROAD:** An INTERSECTION at which the contestant can TURN in only one direction

**SIGNAL:** An INTERSECTION controlled by multi-light traffic signal(s) which may be operating as BLINKER(s) or may be off

#### SOL: Sign on left

## START TIME, START LEG TIME: see out time

**STOP:** An INTERSECTION on the MAIN ROAD with an official highway stop sign at which the contestant would be legally obliged to stop

SUBTRACT TIME: Time to be removed from TSD calculations; the same as gain

**T:** An INTERSECTION having the shape of the letter T as approached from the base. It is not possible to execute the instruction S (straight) at a T.

**TIME ALLOWANCE, TIME DECLARATION, TIME ADJUSTMENT:** Additional time added by a rallyist during a TSD leg to account for delays; these declarations are made for X number of whole minutes plus thirty seconds (X may equal zero). If there is a penalty for the use of time declarations, it must be indicated in event supplements.

**TRUNCATED:** A truncated number is one that has been shortened by *dropping* excess digits instead of *rounding*; e.g. 34.75 seconds would round up to 35, but would be truncated to 34 seconds.

**THROUGH ROAD, THROUGH ROUTE:** A term used in some venues to mean the same thing as Main Road

TOWARD: A Main Road priority below Onto

**TRANSIT:** A part of the rally in which no timing controls (checkpoints) or route controls are located and for which there is no stated average speed. Route instructions apply, but rallyists may leave the route for rest or refueling stops. Time allowed in TRANSIT zones is included in the total time for the leg. A transit will end with a given or calculable time of day.

**TURN:** A DEPARTURE from the MAIN ROAD in the only direction possible. A TURN instruction cannot be executed if the instruction S (straight) would take the contestant the same way.

**Y:** An INTERSECTION having the shape of the letter Y as approached from the base. It is not possible to execute the instruction S (straight) at a Y.

**YIELD:** An INTERSECTION on the MAIN ROAD with an official highway yield sign at which the contestant would be legally required to yield

**ZERO:** Transitive verb: an instruction to reset rally odometers to zero. Noun: a desirable leg score.

ZERO CAR: See car zero

#### **APPENDIX B: COURSE-FOLLOWING RALLIES**

#### Main Road Rules: Priorities for determining the proper rally route

The entire structure of a course-following TSD rally rests on the concept of *a single Main Road*—that is, the proper route to be traveled automatically by rally traffic in the absence of a countermanding written route instruction—*which exists at every intersection*. (Rallyists should review the precise definition of INTERSECTION in order to properly understand this section.) The successful rallyist will apply a descending order of priorities to determine the **Main Road** at each intersection encountered during a rally, and follow that Main Road *except* when a written route instruction can be applied *which causes a departure from the Main Road*. It is important to understand that under most circumstances, unless the written route instruction *countermands* the Main Road, the written instruction cannot be applied at that intersection, and the rallyist is to follow the Main Road and continue searching for the correct opportunity to apply the written route instruction.

To determine the Main Road of any intersection, an order-of-precedence priority must define a *single road* leaving the intersection (excluding the road from which the intersection is entered; unless specifically directed to do so, rallyists will never make a U-turn). The **Main Road** at each intersection is found by applying the priorities in Appendix B, fitting them one at a time in descending order until the Main Road is determined; if the criteria of any priority leave two or more possible exits to the intersection, then that priority must be discarded and the next priority considered in turn.

To find the Main Road leaving an intersection, rallyists first apply the top priority; if it does not determine a single route, they apply the next lower priority, continuing until the Main Road is determined.

#### MAIN ROAD PRIORITIES

**ONTO:** An **onto condition** is created when competitors are placed onto a particular road by a route instruction using the words ONTO, ON, or FOLLOW, directing them to follow a road by name, number, or letter. (An *onto condition* is canceled by a subsequent numbered route instruction containing a *departure.*) Once the onto condition exists, the **Main Road** is the named road they were placed onto, as identified by signs visible at each intersection, *as long* as *there is only one such possibility;* if more than one choice remains, or if an unmarked intersection is encountered, or the road designation changes or ends, this priority will not work, and rallyists must determine the **Main Road** by applying the remaining priorities. This may put them off the named road; but until it is canceled by a subsequent numbered route instruction containing a departure, the **onto condition** is still in effect as the highest priority in determining the **Main Road**. Therefore if the named, numbered, or lettered road is re-encountered *prior to execution of a subsequent numbered route instruction containing a departure,* rallyists are to *return* to that named, numbered, or lettered road—provided it is the only possible named road.

All prefixes and suffixes to the named **onto** road should be disregarded unless they are specifically included in the route instructions; i.e., *Right onto Acme* would make **Acme** Lane, West **Acme** Boulevard, and North **Acme** Avenue all eligible Main Road possibilities under the **onto** priority. But the instruction *Right onto West Acme* could apply to **West Acme** Lane, **West Acme** Street, and so on, but *not* to Acme Lane.

Once an **onto** condition is in place, the *direction* of the departure in the onto instruction is no longer used in determining priority. For example, if *Right onto Acme* put rallyists on Acme Road, followed by an intersection with a right-hand side road, Acme Boulevard, there are two "Acme possibilities" (assuming there is a sign at the intersection identifying

both Acme Road and Acme Boulevard); there is no reason to prefer the one on the right (even though the original **onto** instruction called for a right turn), so applying the **onto** priority will not work, and the rallyist must descend to the next priority.

**TOWARD:** Rallyists are directed TOWARD a landmark if the route instruction uses the word TOWARD to direct them to follow signs pointing to that landmark. Once the rallyist is directed toward a landmark, the Main Road is the road going in the direction of that landmark as indicated by signs. Rallyists ignore abbreviations and intervening words, letters, numerals, or symbols once they are **toward** the landmark (e.g., if instructed R TOWARD PORTLAND, then a right-turn sign reading "PTLD 17" should be followed). Rallyists remain in a TOWARD condition, heading toward a landmark, until they execute a subsequent numbered route instruction containing a DEPARTURE.

**PROTECTION:** When one road has no stop or yield signs and intersecting roads have them, the first road is said to be *protected*. The **Main Road** from the intersection is the only possible rally road **without a stop or yield sign** on it; it has protection from other traffic. Competitors are required to recognize (possibly from the back side) stop and/or yield signs. If more than one such road remains, this priority cannot be applied, as it does not determine a single Main Road.

**ROAD ARROWS:** The **Main Road** is the route indicated by permanent highwaydepartment black-on-yellow road arrows, applied according to the intentions of the highway department. If more than one such road remains, this priority cannot be applied, as it does not determine a single Main Road.

**SIMILAR SURFACE:** The Main Road is the road with a road surface most similar to that on which you entered the intersection, distinguishing only between paved and unpaved surfaces. If more than one such road remains, this priority cannot be applied, as it does not determine a single Main Road.

**STRAIGHT AS POSSIBLE:** The Main Road is the one which enables you to continue straight or as nearly straight as possible. If a change of direction of greater than 45 degrees is required, or more than one choice remains, this priority cannot be applied, as it does not determine a single Main Road.

LEFT-MOST: The Main Road is the left-most road leaving the intersection.

Once the rallyist has determined the single Main Road at any intersection, the written route instruction is applied if it deviates from the Main Road. If the written route instruction coincides with the Main Road, then it does not apply at that intersection unless its given official mileage matches the intersection's location or unless it is labeled MBCU to indicate an executable redundant instruction.

## **APPENDIX C: DETERMINING OUT TIMES AT OPEN CONTROLS**

Most leg start times are derived from the in-time at the previous control. They are usually thought of as "out times" from the control because that is where they are assigned, but they may actually refer to a marker some distance from the control. The **assigned out** method requires the attention of control personnel; its advantage is that it allows control workers to spread out a bunched-up field by assigning specific out times. In no case, however, should these times be closer than thirty seconds apart.

The two "dead time" methods are used in rallies where out-markers lie at various distances from the controls; one control may need a greater time to get to the out marker than another.

The "plus two" methods are ideal for rallies in which each control's out-marker is in close proximity to the control.

**Assigned out:** Competitors are given an assigned time-of-day at which to restart the rally from the out-marker. This time is recorded on each competitor's scorecard by control personnel. There must be at least one whole minute between arrival and out times.

Adding the dead: Competitors determine their proper "out" (restart) time at a control's outmarker by adding a uniform "dead" time for that control—in whole minutes—plus any "add time" assigned by the control crew to their arrival time; for example, if a team had an arrival time of 11:04:15, a "dead" time of 5, and an "add time" of 1, the official time to begin the next leg from the out-marker (the end point of the current leg and the starting point for the following leg) would be 11:04:15, plus 5, plus 1, or 11:10:15.

Adding the dead to the top of the minute: Competitors determine their proper "out" (restart) time at a control's out-marker by adding the specific "dead" time for that control and any "add time" assigned by the control crew to the next whole minute of their whole arrival minute; for example, if a team had an actual arrival time of 11:04:15, a "dead" time of 5, and an "add time" of 1, the official time to begin the next leg from the out-marker (the end point of the current leg and the starting point for the following leg) would be 11:05:00, plus 5, plus 1, or 11:11:00. Note that all out times from out-markers or controls occur at the top-of-the-minute mark.

**Plus two:** Competitors determine their proper "out" (or restart) time from a control by adding two whole minutes, plus any "add time" assigned by the control crew, to their arrival minute; thus, if the control slip showed an arrival time of 11:04:45 and an "add time" of 3, the official time-of-departure to leave the control (the end of the current section and the starting point for the following section) would be 11:04:45 plus 2, plus 3, or 11:09:45.

**Plus two, top-of-the-minute:** Competitors determine their proper "out" (or restart) time from a control by adding two whole minutes, plus any "add time" assigned by the control crew, to the top of the next minute of their arrival minute; thus, if the control slip showed an arrival time of 11:04:45 and an "add time" of 3, the official time-of-departure to leave the control (the end of the current section and the starting point for the following section) would be 11:05:00 plus 2, plus 3, or 11:10:00. Note that the arrival seconds (or hundredths) are ignored and all out times from out-markers or controls occur at the top-of-the-minute mark.