

BMW CCA OKTOBERFEST 2019

SHELL TSD RALLY

General Instructions



The **2019 Shell Oktoberfest TSD Rally** has three **TSD legs** following a very brief tire warm-up and an odometer check section of at least ten miles, after which ample time is provided to calculate odometer calibration factors and mark up your route instructions. The tire warm-up begins at the exit of the Hyatt Garage; the odometer check section begins at a white line at the signal where North Church merges with US Highway 29.

There is ample time provided at the end of the odometer check section for rallyist to perform and necessary calculations before zeroing their odometers and beginning the first TSD leg, where competitors are expected to maintain a sequence of assigned average speeds throughout the leg. Passage times are calculated from the start of each TSD leg to one or more checkpoints, where penalty points for early or late arrival are determined for each team.

The **2019 Shell Oktoberfest TSD Rally** may be characterized as a **touring rally**; there are no course-following puzzles, although calculating correct passage times may provide a challenge to the math-averse.

These General Instructions shall apply in all cases where they are not superseded by supplementary instructions.

Registration: The official start of the **2019 Shell Oktoberfest TSD Rally** is **1:00 p.m.** on Wednesday, October 16, from the Hyatt garage. However, **rally registration** will be open by **noon** in the Hyatt lobby unless a change is posted in the Oktoberfest registration center. 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).

Time: An official time-of-day clock will be provided at the opening of rally registration. Departure from the Hyatt is free once teams have registered and received their packets containing rally instructions and other materials. Time-of-day notations in the route instructions will be given in conventional clock form—hours, minutes, and seconds separated by a colon. Any **pauses**—additions of time to the time calculated from given speeds and distance—will be given in seconds.

Timing: Cars passing timing controls on the **2019 Shell Oktoberfest TSD Rally** will be timed to the truncated whole second; calculated perfect times are likewise truncated. Cars are timed from the beginning point of a TSD leg to one or more controls at which passing cars are timed. These are **closed timing controls**; competitors do not stop at these controls, although they may be identified by an official checkpoint sign on the right side of the rally route. Controls will be open five minutes before the scheduled arrival of the first competitor and may close ten minutes after the scheduled arrival time of the last competitor.

Scoring: **One penalty point per second** early or late from calculated perfect time at timing controls; maximum penalty score of 30 seconds per control. 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 scores of one point, and so on. In the case of identical points totals, 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.

Speed: Assigned **average speeds** are given in whole-number miles per hour. The abbreviations CAS (Commence Average Speed) and CAST (Change Average Speed To) may be used interchangeably in the route instructions. **No assigned speed will exceed the posted speed limit.** In order to discourage excessive speeds, pauses may be given in places where a delay is anticipated. In locations where traffic flow may exceed posted limits, **free zones** may be defined; within a free zone, there will be **no timing controls**. Competitors will be given the location of the end of each free zone; they are expected to continue calculating perfect time, pausing or slowing toward the end of the free zone in order to let any accumulated “early time” to run down to the perfect calculated time again.

Perfect Time Adjustments: In order to eliminate any temptation to speed in order to make up for lost time, rally organizers have devised various methods of adjusting the perfect calculated time for one or more rally cars. Basically, the perfect time of a late-running car can *adjusted* by the addition of half-minute increments, first 30 seconds, then 1½ minutes, then 2½, and so on. Since rallyists are often required to *declare* these additions to perfect time, in some venues they came to be called *time declarations*, or *time decs*.

Since rally cars usually travel an ideal one minute apart, it is easy to see why *perfect time adjustments* require a half minute added to any whole minutes; if a crew added whole minutes to their perfect time, they would find themselves occupying another car’s perfect time. (This also occurs when Car A, for example, adds 2½ minutes, putting them half a minute behind Car C, and Car B adds 1½ minutes, putting them, too, half a minute behind Car C. In this case, either Car A or Car B would simply add another whole minute to their PTA, putting them half a minute behind Car D).

Because many rallyists, especially novices, have some difficulties with Perfect Time Adjustments, some years ago Ohio’s Greg Lester developed an Excel scoring worksheet that used the Lookup function to compute ideal Perfect Time Adjustments based on rallyists’ raw scores at each control. This resulted in the best possible scores for each rally crew, whether they full understood the workings of time adjustments or not—and it reduced the workload of the scoring crews, as well as eliminating the need for workers to collect written PTAs or time decs.

In this raly, **perfect time adjustments** will be applied **automatically** to any car’s lateness during the scoring process, so there is nothing to be gained from speeding. Although assigned speeds are always at or below posted speed limits, there may be roads on which maintaining even such a speed may be challenging; when in doubt, slow to your safe comfort level and let the automatic Perfect Time Adjustment do its work.

Distance: The 2019 Shell Oktoberfest TSD Rally has been measured by a TimeWise 798A rally computer driven by an unpowered wheel and measuring to the thousandth of a mile; subsequent measurements have been consistent within a few thousandths of a mile. Raw measurements have been **rounded to hundredths**; mileages in the route instructions are given in

hundredths, and all time calculations are based on these numbers. Mileages given at intersections and STOP signs are taken at the white line marking that location.

Rally roads: This rally is conducted on paved public roads. Unless specifically indicated by route instructions, roads marked *dead end*, *private*, *closed*, or *no outlet* will not be considered as rally roads. Should a route instruction not apply at an intersection, follow the principal road—the obvious continuation through an intersection of the road upon which you are traveling. At some intersections this road may be determined by pavement surface continuity, a curve-warning sign, the center line on the pavement, the placement of a stop sign or a yield sign, or the continuation of multiple lanes in your direction of travel.

Competition classes: The following competition classes will be used in the Oktoberfest 2019 Shell TSD Rally:

- **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 (such as TimeWise 798A and Alfa Elite "A-Box" rally computers).
- **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 (such as TimeWise 547 and Alfa Pro "B-Box" odometers), and/or an aftermarket GPS device. 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 original-equipment odometers and speedometers, on-board computers, factory-supplied navigation systems, and any four-function calculator with a single memory.

Disqualification: Any competitor cited, or given a written warning, by a law enforcement agency for any moving violation shall automatically be disqualified from the event. Any competitor deemed by the rallymaster or other rally officials to have committed any of the following offenses 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
- Unsportsmanlike conduct: No team shall use two-way radio, cell phones, or other electronic communications to better its position in the rally.

Instructions: 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 received the instructions. **Written route instructions (RIs)** guide competitors through the rally course; each 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. (some route instructions require only the observation of a sign or landmark.) Instructions may change the assigned speed or require a departure from the principal road at an intersection, or both. 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.

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 route instruction may be considered. Speed changes executed in turns are to be executed at the STOP or YIELD line, or the apex of the turn if a STOP or YIELD does not control your car.

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 be defined in the glossary of these general instructions.

- 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 and punctuation. **Street-name signs** are considered to be identifiers of the street, and they are generally not given in quotes.
- 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. Any misspellings or other typographical errors in the **2019 Shell Oktoberfest TSD Rally** instructions to the are to be ignored as the understandable errors of highly stressed rally workers.
- Signs used as references may be on the right, or overhead; signs on the left should be identified with the initials **SOL** for Sign On Left.

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.

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.

AT: “In the vicinity of” for actions that direct a course of travel; “even with” for other actions, including speed changes, landmark references, mileage, pauses, etc.

BEAR: Turn in the indicated direction from ten to eighty degrees.

BEFORE: In sight of and prior to the referenced navigational aid.

BFZ: Begin Free Zone

BLINKER: an INTERSECTION controlled by a warning signal which the contestant is obliged to obey.

CAS: Commence Average Speed

CAST: Change Average Speed To

CROSSROAD: an INTERSECTION of exactly four roads from which a road goes to the left, a road goes to the right, and a road goes generally ahead.

EFZ: End Free Zone

FREE ZONE: a specified section of the timed rally route in which there are no timing controls.

HISTORICAL MARKER: A plaque along the road referencing some historical location or event that might be of interest.

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

JOG: a turn in the direction indicated at a STOP followed by a turn in the opposite direction.

L, LEFT, LT: a turn to the left of approximately ninety degrees.

PAUSE: To delay a specified time at a named point.

PAVED: A road having a hard surface such as concrete, brick, cobblestone, macadam, etc.

PTA: Perfect Time Adjustment. See *Appendix A, Perfect Time Adjustment*.

R, RIGHT, RT: a turn to the right of approximately ninety degrees.

STOP: An InTERSECTION at which the rally vehicle is obliged to stop.

STRAIGHT, S, STRAIGHT AS POSSIBLE, SAP: an INTERSECTION at which cars are to proceed as straight as possible (usually within about ten degrees of directly ahead).

T: An INTERSECTION of exactly three roads having the general shape of the letter T as approached from the base by the contestant. It is not possible to execute the instruction STRAIGHT AT T.

SIGNAL: an INTERSECTION controlled by a fixed signal light used to regulate traffic and which controls the rally vehicle.

TURN: an INTERSECTION at which rallyists deviate from the main rally route. A TURN instruction cannot be executed if the instruction *STRAIGHT* would take the contestant the same way.

ZERO: An instruction to reset odometer to zero (0.0 or 0.00 or 0.000).

APPENDIX B: MINUTES-PER-MILE FACTORS

To figure out how long it takes to go one mile at any given speed, divide 60 by that speed. Here are the minutes-per-mile factors up to 60 mph to five decimal places.

Speed	Minutes per mile		
1	60.00000	31	1.93548
2	30.00000	32	1.87500
3	20.00000	33	1.81818
4	15.00000	34	1.76471
5	12.00000	35	1.71429
6	10.00000	36	1.66667
7	8.57143	37	1.62162
8	7.50000	38	1.57895
9	6.66667	39	1.53846
10	6.00000	40	1.50000
11	5.45455	41	1.46341
12	5.00000	42	1.42857
13	4.61538	43	1.39535
14	4.28571	44	1.36364
15	4.00000	45	1.33333
16	3.75000	46	1.30435
17	3.52941	47	1.27660
18	3.33333	48	1.25000
19	3.15789	49	1.22449
20	3.00000	50	1.20000
21	2.85714	51	1.17647
22	2.72727	52	1.15385
23	2.60870	53	1.13208
24	2.50000	54	1.11111
25	2.40000	55	1.09091
26	2.30769	56	1.07143
27	2.22222	57	1.05263
28	2.14286	58	1.03448
29	2.06897	59	1.01695
30	2.00000	60	1.00000