



Dogwood Daze 2023 Regional Tour Rally General Instructions

Sunday April 23, 2023

1. Overview

Dogwood Daze is an Indianapolis Region SCCA Time-Speed-Distance (TSD) Regional Tour rally that will use the Richta GPS Checkpoint app system for timing and scoring. Your goal is to follow the rally route using written route instructions and arrive at each control (checkpoint) at precisely the correct time. Each rally team will be required to bring a smartphone that is equipped with the Competitor Richta GPS Checkpoint app. This app will monitor your car's location during the rally and will record your arrival time at each checkpoint. Once you have arrived at a control, the app will calculate your score for that leg and display it to you. Being a Tour rally, there are no traps of any kind on this rally.

2. Committee

Rallymaster: Charles Hanson

Chair: Wendy Harrison

Precheck: Sam Crites

3. Registration

Each entry must have two people in the car – a driver and a navigator. You are expected to drive safely and courteously and obey all road rules, including posted speed limits, at all times. Please be respectful of local residents, pedestrians, bicyclists, and other drivers. Rude or reckless driving is grounds for disqualification.

The driver will be required to show a valid driver's license at registration. Both driver and navigator must sign the SCCA waiver. Contestants under 18 years of age must present an SCCA minor release form signed by their parents or guardian.

4. Schedule

13:00 (1:00 PM) – Check-in at BP Gas Station, 4906 Kentucky Ave., Indianapolis, IN

13:45 (1:45 PM) - Competitors Mandatory Safety Meeting

14:00 (2:00 PM) + car number – Start rally.

~ 4:30 PM – Car #1 finishes rally. Squealers Barbeque in Mooresville, IN.

5. Time

Timing will be in hours, minutes, **seconds**. The Competitor Richta GPS Checkpoint app records your arrival time at each control.

There are two types of restarts: the Car Zero Time (CZT) restart and the Flying Start Truncate restart. The CZT restart is a specified time of day to which you add your car number in minutes to determine your proper restart time from that point. For example, if you are car #12 and the CZT is 3:30 pm, your restart time would be 3:42 pm. There is only one of these today; at the beginning of the Odometer Calibration Zone. Your phone should ding just *prior* to your arrival at the CZT restart point, so that your restart time is shown on the app.

A Flying Start Truncate (FST) restart allows you to restart whenever you are ready. When you are ready to start the next leg, drive up to and stop at the restart point as specified in the Route Instructions. Once you have set up (zero your trip odometer) and are ready to go, leave that point at the top of the next minute or at the next half minute (We do not recommend using the half minute because it makes the arithmetic difficult with the jogularity times). Approximately 0.1 mile beyond that restart point is a trigger point that will cause your Richta Competitor app to ding and announce your official restart time. The Richta app takes note of the exact time that you passed the trigger point and then truncates that time to the previous whole minute or half minute. **It is your responsibility to make sure that you use the restart time as specified in the Richta app for adding the jogularity times given in the instructions. That is the restart time that will be used to compute your score.** If the restart time in the app varies from the time you had planned, you must adjust to the restart time in the app. The Route Instructions will specify which type of restart to use for each section.

6. Speed and distance

All rally speeds will be in miles per hour. Once assigned, an average speed is in effect until a subsequent route instruction assigns a different average speed (CAST). All mileages associated with an intersection are taken/executed when the front wheels of the car are at one of the following in this order of precedence:

1. The white limit line at a traffic light.
2. The Stop or Yield on your right that controls your rally car.
3. The stop sign or yield sign on the road that you depart the intersection. This occurs at the point where the front wheels of your car are at the slimmest view of this stop or yield sign.

Official Mileage (OM) is the distance, in miles, from the last point of zero mileage to the specified reference or action point. Official Mileage reverts to zero at each restart point. The rally begins with an Odometer Calibration Zone designed to allow you to compare your odometer to the rallymaster's odometer, if you wish.

The course was measured to a resolution of 1/1000 of a mile with 2014 Chevrolet Cruze using a Timewise 798A odometer and two magnets mounted on the left rear undriven wheel. Tires were

inflated to 32 psi cold. The weather was sunny and dry with a temperature range of 60° to 70°.

The checkpoint locations were recorded using a Dual SkyPro XGPS 160 GPS receiver to a resolution of 0.000001°. The Dual XGPS receiver was on the dashboard in the center of the cabin of the car, as far forward as possible in order to provide the best view of the sky. It would typically report an accuracy of 1.8 meters during the process of establishing control locations.

The odometer calibration zone will contain several Time Check GPS Controls. These are identified in the Route Instructions as shown below. You will be timed, but not scored, as you pass each Time Check Control. The purpose of these is to give you multiple opportunities to compare the Richta app's arrival time algorithm to your rally clock without incurring any penalty points.


5.570 14. TIME CHECK AT "RATLIFF". (CP 3)

7. Roads

Consider any road marked as Private, Dead End, Road Closed or No Outlet to be non-existent unless the route instruction clearly instructs differently. That is, if a route instruction tells you to turn on a road that is marked "NO OUTLET", do so. Private driveways, parking lot entrances and exits, and roads that visibly end are considered non-existent except for the parking lots of the start, and the finish. Consider unpaved roads to be non-existent.

8. References

Any reference that appears in quotation marks (for example: Right after "Bridge") is a reference to words, letters or numbers on a sign. Capitalization, punctuation, and exact word spacing are irrelevant. Signs may be quoted in full or in part but always in a sequential manner as intended to be read.

Signs may also be referenced graphically. For example: . A graphic representation of a sign will not be enclosed in quotation marks in the Route Instructions. Ignore any graffiti or other disfiguration on signs. If there are multiple signs sharing a common support, the graphic representation may be of one or more than one of these signs.

Any reference that does not appear in quotation marks is a reference to a landmark. For example: 4. Right after bridge. If a reference is hard to see, the Route Instructions will include a note (for example: Look sharp) indicating that you should look even more carefully for this reference. You will not have to look behind you to see any reference.

9. Route Instructions

Each team will receive one copy of the Route Instructions approximately 15 minutes prior to their starting time. Check them for completeness and legibility before you start.

10. Route Following Rules

As you travel the rally route, apply the rules below in the order listed.

1. **Obey an emergency rally sign.** These signs will be posted in a prominent location. They will have the notation “DD” (Dogwood Daze) and important information. If you encounter an emergency sign saying “Off course”, turn around, go back and figure out where you left the rally route. Emergency signs can also be used to compensate for a missing sign or an unexpected road closure.
2. **Execute a route instruction**, even if it takes you in the same direction as rule 3.
3. **Follow the principal road.** The principal road is the obvious continuation through an intersection of the road upon which you are traveling. At some intersections this principal 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, the continuation of multiple lanes in your direction of travel (such as when you are on a limited access highway), straight as possible, etc. If the principal road is not obvious, a route instruction will be provided.

11. Controls and scoring

All timing controls will be GPS controls. This rally will utilize the Richta GPS Checkpoint app system for timing at controls. Contestants must download the Competitor Richta GPS Checkpoint app and keep this app running on their smartphone at all times during the rally. Contestants must have an active cellular data service and keep their phone connected to this service at all times during the rally in order that the scoring team can monitor the progress of the event. Contestants may not run the rally with their phone in airplane mode or otherwise disable their cellular data connection. The Richta app will monitor your car’s location using GPS and will record your arrival time at each control. The app will display your time of arrival to a resolution of one second, compute your score, and display your score to you. It will tell you if you are early or late.

If you are delayed along the rally route for any reason, you may submit a time allowance without any penalty. Hence if you are delayed due to road blockage, slow traffic, getting lost, nature call, or any other reason, do not speed to try to make up the lost time. You submit a time allowance by pressing the **TA+** button on the Richta app. The first button press creates a 10 second time allowance. The second press creates a 20 second time allowance. The third press creates a 30 second time allowance. Each additional press adds 1 minute to your time allowance up to a maximum of 19 minutes 30 seconds. Pressing the **TA-** button will remove time from your time allowance by the same increments. Your time allowance will persist until the next restart point, at which point it will reset to zero. It is the contestant’s responsibility to pay attention to the time allowance and be sure that what it shows is what you want. If you are delayed, you must submit a time allowance **BEFORE you arrive at the next control**. Once you arrive at a control, it is too late to submit a time allowance for the leg that just ended.

You are strongly advised to drive past each control at the assigned average speed. Do not stop, creep, or back up within 300 feet of any control. If you do, you run the risk of being mistimed.

The rally is divided into legs. Each leg contains multiple timed GPS controls. Each timed GPS control will be at a specified sign or landmark as described in the Route Instructions. Here is an example of how the control locations will be described:

0.946 23. RIGHT AT STOP. PAUSE 6 SECONDS. TIME: 1 Min. 31 Sec.
There will be 4 time controls (CPs) before the next NRI.
CP 6 AT "20 MPH"
CP 7 AT "GATE 8"
CP 8 AT "20 MPH"

In this example, the first control may occur at any "20 MPH" sign that is not in a Free Zone. The control is NOT necessarily at the FIRST "20 MPH" sign. You may pass several "20 MPH" signs before you get to the one that is the control. You will know that you have passed the control when the Richta app dings and announces your leg score. You will want to try to be on time at each "20 MPH" sign until the Richta app announces that you've passed CP 6. After that point, you will begin looking for a "GATE 8" sign, which, by the nature of the identification can be expected to be unique for CP 7. Again, you might pass several "20 MPH" signs before you encounter the one that is the next control – CP 8. The point is that "if you see an identifier that you are looking for, be on time as you pass it." You don't get a second chance!

None of the controls will be identified by a traditional checkpoint sign. You treat all controls just like any passage control, that is, you'll try to pass the checkpoint at precisely the correct time. Moments after you pass the control, your smartphone will sound a ringy-dingy tone and display your arrival time, your leg score, and whether you were early or late. You should continue rallying on time until you reach the next control, or the next NRI.

Timing at all controls is from the prior restart point to that control. That means that if you are late at a the first control in the leg, you'll want to either make up that lateness or take a time allowance before the next timing control. By the same token, if you are early at the first control in the leg, you'll want to slow down to compensate for that earliness before the next timing control.

Do not stop at any control. Continue rallying on time until you reach the next control in each leg until you get to the next restart point. Restart points are identified in the route instructions. You can take a couple of minutes to stop and relax at each restart point. Just don't block the restart point if some other competitor doesn't need as much time. The App will sort you out!

There is a 0.25 mile free zone after every restart point and after every execution of a Route Instruction.

Penalty points are: 1 point for each 1 second early or late at a control, up to a maximum of 120 points (2 minute) per control.

We recommend that you run the Richta Competitor app on a second phone as a back-up in case your primary phone fails to trigger at a checkpoint. Register your back-up phone as your car

number plus 100. DO NOT REGISTER IT WITH THE SAME CAR NUMBER AS YOUR PRIMARY PHONE.

If the Richta app fails to record a contestant's arrival time at a control, you will receive the average of their other non-max scores for that control unless you have a back-up phone, in which case the arrival time from your back-up phone will be used to score that checkpoint. Your back-up device may be a Wi-Fi only device.

12. Classes

Contestants should register in one of these five classes:

Class E (Equipped): There are no restrictions on calculating equipment in this Class. Typical calculating devices in this Class include: Alfa, Chronar, Timewise, and Zeron rally computers.

Class L (Limited): All distance information is derived from any of the following: the vehicle's electronic system, the vehicle's speedometer cable, or pulses generated by the movement of the vehicle (e.g. magnets mounted to the drivetrain or GPS devices). Calculating devices are limited to those that require manual entry of the distance information (e.g. Curta calculators, tables, laptop computers, electronic APPs, programmable and non-programmable electronic calculators). Readouts that continuously show the difference from either the perfect time or the perfect distance are prohibited.

Class S (Stock): Any distance information used for timing calculations must be visually acquired from the vehicle's stock, non-adjustable odometer in the stock location. Any calculating device may be used as long as the distance information from the vehicle's stock odometer is manually entered into the device. GPS odometers may be used in this Class only if their information is NOT used for any timing calculations or for any determination of earliness or lateness.

Class G (GPS): All distance information must be derived from a GPS source. Calculating devices may be any electronic device (e.g. Simple Rally Computer type APPs and a GPS-Pulser providing distance input to a Rally computer.

Class R (Rookie / Novice): Neither driver nor navigator have run more than two time-speed-distance rallies. This Class must run with the equipment limitations of Class S.

13. Glossary

Bear Right – A Turn to the right of between 10^0 and 80^0 .

Bear Left – A Turn to the left of between 10^0 and 80^0 .



Stripes – a sign like or similar to .

Free Zone – A portion of the rally route in which there are no timing controls.

BFZ – Begin Free Zone

EFZ – End Free Zone

() – Information in parentheses is provided to be helpful. This may be used to clarify a confusing situation or to provide additional assistance.

Pause – Add the specified amount of time to your travel time. **Pauses are expressed in seconds.**

Pause 10 means Pause 10 seconds.

Stop – An official octagonal stop sign **at which the rally vehicle is required to stop.**

T – An Intersection of three roads in the general shape of the capital letter T as approached from the bottom of the letter.

CZT– Car Zero Time. Add your car number, in minutes, to this time to get your restart time.

CP – Control Point. Restart points, time checks, and GPS timing controls are all CPs.

SOL – Sign on Left.

Transit Zone – A portion of the rally route in which there are no controls and in which no specific speed need be maintained. Either an exact time for passage or a restart time from the end of the transit zone will be given.

Y – an Intersection having the general shape of the letter Y as approached from the bottom of the letter.

/0.00 – Zero your odometer.

14. Speed Table (Odometer Correction Factor = 1.0)

CAST	Seconds / 0.1 mile	Seconds / 0.2 mile
28	12.9	25.7
32	11.2	22.5
33	10.9	21.8
35	10.3	20.6
38	9.5	18.9
40	9	18
41	8.8	17.6

Drive safely at all times. Don't let reading the instructions or following the course distract you from driving safely. Remember to always have fun!

15. Using the Richta app on an Android smartphone

Go to the Google Play Store on your phone and search for "Competitor Richta". Download this free app to your phone. Once downloaded, open the app. If you get a message saying "App requires location permission," you'll need to grant permission for the app to use location information from your phone. To do this, go to Settings/Apps/Competitor. Grant the permissions it requires (location). Open the app. You'll be asked to select an event. Choose "July Junket." **You'll then be asked to enter the Event Password. It is: Daze**

You'll then be asked for a car number and a password. Enter the car number you've been assigned. **Create a password for yourself** and enter it. Press "Save." Then press "Add" when it appears. Enter the names of the driver and navigator as well as the other fields. **Confirm in the lower right corner that you have version 1.25.**

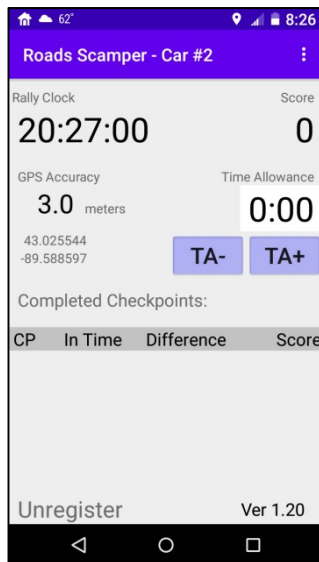
Confirm that there is a number in the GPS Accuracy field. You may have to take your phone outdoors and wait several minutes for the GPS to compute your location. 3.0 meters is a typical GPS accuracy on Android phones. If you do not have a number for GPS Accuracy, the app is not receiving any GPS locations. Check to be sure your Location service is turned on and that you have granted the app permission to use the Location service. You should see a screen that looks similar to the Android example on the next page.

16. Using the Richta app on an Apple smartphone

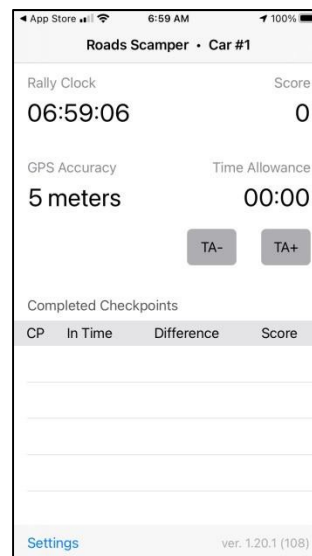
Go to the Apple App Store on your Apple smartphone and search for “Competitor Richta Checkpoint.” Download the app. There is no cost to you for this app. Open the app. Choose “July Junket”. **You’ll then be asked to enter the Event Password. It is: Daze**

Enter the car number that you have been assigned. Create a password for yourself and enter it. Press “Done.” Press “Continue.” Press “Submit Info.” Enter the names of the driver and navigator as well as the other fields. **Confirm in the lower right corner that you have version 1.2.** Confirm that there is a number in the GPS Accuracy field. You may have to take your phone outdoors and wait several minutes for the GPS to compute your location. 5 meters is a typical GPS accuracy on Apple phones. If you do not have a number for GPS Accuracy, the app is not receiving any GPS locations. Check to be sure your Location service is turned on and that you have granted the app permission to use the Location service.

You should see a screen similar to the Apple example.



Richta app on an Android smartphone



Richta app on an Apple smartphone

17. General Information for all phones about using the Richta app

The Richta Competitor app, like all GPS apps, uses a lot of battery power. Plan to keep your phone plugged in and charging during the rally, otherwise you may run out of battery. (If you start today with a fully charged phone, it should last the distance because the event is short.)

If you have previously run a rally using the Richta Competitor app, you still must go to the appropriate app store and update your Competitor app. Do not run the Competitor app using the same car number on two devices during the rally. Be sure that you have enabled roaming on your phone. You should not run any other apps on the device that is running the Richta Competitor during the rally. If you are planning to use another app during the rally, you'll need to do that on a different device. You may not run the Competitor app in airplane mode during the rally.

If you want to run the app on a second phone as a back-up, you may do so by registering the second phone with a car number that **is your assigned car number plus 100**. This backup phone can be used to report your arrival time at a control in the event that the Competitor app on your primary phone fails to trigger at a control. A backup phone may not be used to argue that it gave you a better score than your primary phone.

Leg times have been calculated to the 0.001 second and the Richta app will interpolate your arrival time at each timing control to the 0.001 second. The app then computes your error to a resolution of 0.001 second and then truncates that error to the tenth of a second.

Your phone will NOT need to have cell phone service during the rally in order for this app to work.

The app only needs location information from the GPS signals during the rally.

If the app should stop during the rally, simply pull off the road in a safe location, reopen the app and then continue to rally. Take a time allowance if necessary. The app will remember all of your arrival times and scoring information and will simply pick up where it left off. **Just be sure that you don't pass a checkpoint or a restart point while the app is not running.**

If the phone that is running the Richta Competitor app is paired via Bluetooth to your car's media system, this can cause the app to not make any sound at each restart and checkpoint. While the phone will still correctly record your arrival times, it will be disconcerting to not hear the ringy-dingy sound that announces your arrival at timing controls. You have several options:

1. Turn off your phone's Bluetooth. (This is the recommended procedure if you're not using an external GPS receiver such as the Dual Skypro).
2. Turn off your car's Bluetooth.
3. Allow your phone and your car to pair via Bluetooth. Turn on your car's media system (what we used to call the radio), select your phone as the "Source", and the ringy-dingy will play over your car's speakers. This can be helpful if someone in the car is hard of hearing.

The Richta Competitor app has a "Sound check" button. Press this button and confirm that you hear the ringy-dingy.

If some of the text on the Richta Competitor screen is overflowing off the screen and you can't read it, you should go to the Settings on your phone and reduce the Font size.

You MUST keep an eye on your device to make sure that the Richta checkpoint app is still running and is on your device's screen. If your device reverts to its home screen, then the Richta app may not sense your arrival at a checkpoint. If you encounter any trouble with downloading the app and registering your car number, please call Chuck Hanson at (317) 431 – 5228.

18. Rally clock time & the Richta Competitor app

The Richta Competitor app displays a Rally Clock. If you are running this app on an Android phone, do not be concerned about any discrepancy between the Rally Clock and official time (WWV). The Richta Competitor app on Android phones uses the time contained in each GPS location message to compute your arrival time at checkpoints. The rally clock is very close to that GPS time, but any discrepancy will not affect your recorded arrival times.

The Richta Competitor app running on an iOS (Apple) device *DOES* use the Rally Clock time to compute your arrival time at checkpoints. Therefore, if you are using an Apple device, you should compare the Richta Rally Clock time to WWV. If you are not satisfied with any discrepancy between these two, you can adjust the Rally Clock. Touch “Settings” in the lower left corner. You will see four gray buttons that allow you to create a custom offset that will adjust the Rally Clock. The Apple iOS operating system does not allow the Richta app to read the timestamp in the GPS location message (like the Android operating system does). The only time available to the Richta app on Apple devices is the device clock itself.