



Hoosier Byways Divisional Tour RoadRally General Instructions Saturday, September 18, 2021

Richta Competitor App Event: Indy Covered Bridge Tour Password: wendy

Adaptations to the COVID-19 situation:

- 1. Online registration on https://www.motorsportreg.com/only, no walk-ins.
- 2. You must have an SCCA hard card with an annual waiver certification or sign the paper waiver that will be in your registration packet.
- 3. Observing Indiana governor's current orders regarding COVID-19

SCCA Rally Rules

This event will be governed by the 2021SCCA Road Rally Rules (RRRs), as modified and supplemented by these general instructions. Copies of the RRRs may be obtained by downloading them from the SCCA website at www.scca.org.

NOTE: We will be using the Richta GPS Checkpoint app for timing.

It is recommended that you download and familiarize yourself with the operation of the app prior to the day of the rally. Look for "Competitor Richta GPS Checkpoints" app on Google Play Store or AppleApp.

Events Schedule:

There will be no walk-up registration on-site. All competitors must register by September 15, 2021 at 11:59 PM EDT on https://www.motorsportreg.com/site.

Saturday – 9/18/2021Tour Rally – Hoosier Byways Covered Bridge Tour: Rallymasters Wendy Harrison and Charles Hanson

12:00 PM - Registration opens

12:30 PM - First Car Receives route

12:45 PM – Mandatory Safety Meeting (call in from your car)

1:01 PM - First Car Starts

6:50 PM - First Car Finishes (Approx.)

Headquarters

There is no event headquarters for this event. We will convene at Jacks Kitchen and Exxon at the Little Point exit. It is located at Exit 51 on I - 74 on the southwest side of this interchange. Self-tech inspection will take place at this location.

Registration:

- 1. Registration must be done online by Sept. 15, 11:59 pm. No walk-up registration.
- 2. Drivers must certify that they possess a current driver's license.
- 3. Entrants must certify that the rally car is legally on the road and owned by one of the entrants or that the car is being used by the entrants with the owner's permission.
- 4. Both entrants must sign the SCCA waiver.
- 5. Entrants must submit a self-inspection form for their car.
- 6. Names of the official Observer and the Claims Committee will be in the GIs or posted at Registration.

Classes

Equipped, Limited, and Stock (E, L, S) as defined in the Road Rally Rules. There will also be a Novice class for Divisional purposes but for National purposes the novice entries will be included in Stock Class as their equipment is restricted to Stock equipment per Region and Division rules.

Awards

Awards will be presented to the top finishers in each of the equipment classes, including Novice for Divisional purposes. Trophies for the individual rallies will be issued per the following schedule:

Cars per class:

1-3 1st place only 4-5 1st and 2nd place 6 and more 1st, 2nd and 3rd place

Tie-Breaking Procedure

National points will be awarded in accordance with the RRRs. For event awards, the following tie-breaking rules shall apply:

- 1. Most legs won
- 2. Most zeros, ones, twos (etc.)
- 3. Coin toss—the lower car number is assigned "Heads."

Police Notification

The applicable Indiana State Police posts and County Sherriff's offices will be notified of the rally taking place in the areas they cover. Event participants should act accordingly.

Disqualification from Event

Anyone who is ticketed for a traffic violation while on the rally will be disqualified. Also, anyone found to be in possession of alcoholic beverages and/or illegal drugs while on the rally will be disqualified.

OVERVIEW Hoosier Byways – Covered Bridges is a Time-Speed-Distance (TSD) Divisional Tour rally presented by the Indianapolis Region SCCA 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. You will encounter approximately 150 timing controls in the approximately 145 mile rally route. Being a Tour rally, there are no traps of any kind. Approximately 40% of roads selected will be unpaved.

SCCA Tour Rule Exceptions

Numbers for Pauses and Gains are indicated in seconds. (ie., Pause 20 = Pause for 20 sec) No Call Back Mileages. No off course Stoppers.

The maximum distance between route instructions shall be 5 miles.

Route The route consists of public roads in Morgan, Owen, and Putnam Counties. (Roads do not include Dead Ends, No Outlet, Private, & Driveways not cited in the NRI, etc. However they may be noted at the start and finish of each Part) All roads can be traversed at legal speeds with normal precautions and observing traffic laws. Please keep your low-beam headlights on during the rally. Your ability to stay exactly on time will be the determining factor in winning this event.

<u>Measuring</u> The route was measured under simulated rally conditions, speeds and time of day in a 2012 Chevrolet Cruze on Nokian WR/G3 205/65R16 tires at 32 PSI (cold) utilizing a Timewise 798A (.001 mile odometer) driven off the left rear (undriven) wheel with two magnets. The roads were dry and the temperature was 75 - 85 degrees F.

Route Instructions This course can be traversed perfectly using only the mileage, speed and the direction in each instruction (NRI). The mileage is at the sign which identifies the intersection (a landmark). (Note that pre-markers are not common in Indiana.) If a sign is cited, the mileage is at the sign. Text on a sign is given in "". Signs and road names may be expressed in upper or lower case regardless of how they appear on the route.

Mileages are given to the .001 mile for all NRI's. All rally speeds will be in miles per hour. Pauses and Gains are presented in seconds, i.e., Pause 30 sec is ½ a minute (30 seconds).

Each team will receive two copies of the Route Instructions 30 minutes prior to their starting time. Check them for completeness and legibility before you start.

<u>Timing</u> Timing will be in hours, minutes, seconds, and tenths of seconds. The Competitor Richta GPS Checkpoint app records your arrival time at each control. The clock that is shown on the Richta checkpoint app is close, but is not precisely synced to the GPS time that is used to record your checkpoint arrival times. We recommend using WWV to set your rally clock as this originates from the same time standard as the GPS satellite clocks.

Restart points will be identified in the Route Instructions with either a Time-Of-Day-Restart, or as Flying Start Truncated. This CZT (Car Zero Time) is the time that the fictitious car zero should restart there. You should add your car number, in minutes, to the CZT time to get YOUR restart time. For example, if you are car #12 and the CZT is 10:30 am, your restart time would be 10:42 am. The Flying Start Truncate allows you to start when you are ready and will tell you the start time that the Richta App will use for the subsequent controls. We recommend that you start 2-3 seconds before the top of the minute that you want to use for your calculations because the non-timed control is located approximately 0.1 miles up the road. (If you start too early and get there before the top of the desired minute, the truncation will give you the previous minute plus 30 seconds. Be careful of this!) There is one location where we tell you to start 10 early because the truncating control is almost 0.25 miles down the road (to keep it from activating during the previous leg). Remember to zero your trip odometer at every restart point! (This minimizes accumulated error versus the printed mileages.)

<u>Roads</u> Consider any road marked as Private, Dead End, Road Closed or No Outlet to be non-existent. A sign reading "No Thru Trucks" does NOT make that road non-existent. Private driveways, parking lot entrances and exits, and roads that visibly end are considered non-existent except for the parking lots of the start, the finish, and the breaks.

<u>References</u> 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.

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 harder 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.

<u>Emergency Controls</u> Marked by a checkpoint sign with a large "X" across it (usually gray duct tape). These controls may be used to advise of Route Changes, Time allowances, Emergency Speeds or other.

Route Following Priorities This is a tour style event, meaning there are NO course following traps.

- 1. Obey an Emergency Control. These signs will be posted in a prominent location. They are a SCCA Checkpoint Sign with a large "X" and important information. Emergency signs can also be used to compensate for a missing sign or an unexpected road closure (pie plates).
- 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 upon a limited access highway), straight as possible, etc. If the principal road is not obvious, a route instruction will be provided.

Richta GPS Checkpoint App 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 tenth of a second, compute your score, and display your score to you. It will tell you if you are early or late.

Time allowance 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 <u>BEFORE you arrive at the next control</u>. Once you arrive at a control, it is too late to submit a time allowance for the leg that just ended.

<u>Driving the Route</u> You are strongly advised to cross the checkpoint line at the assigned average speed. Do not stop, creep, or back up within 500 feet of any control. If you do, you run the risk of being mistimed. You can think of this as an automatic creeping penalty.

GPS Controls Many GPS controls will occur at a sign that is referenced in the Route Instructions. Some controls will only be identified by an Official Mileage without any reference sign. Some controls will have neither a referenced sign nor a mileage. None of the checkpoints 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 restart point as identified in the route instructions. There will often be multiple timing controls between restart points -they will be indicated as Multi Control Zones (MCZ) in the route instructions. Timing at all controls is from the prior restart point to that control. This means that if you make a mistake (For example: Miss a speed change or a Pause), the timing error that mistake will produce will carry over multiple subsequent controls until the next restart point. You will want to pay attention to your score at each control in order to realize if you have made such an error. In that way, you have the opportunity to adjust/correct your mistake before the next control. It also means that if you are late at a timing control, 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 a timing control, you'll want to slow down to compensate for that earliness before the next timing control.

Unmarked controls function the same as marked controls except that the locations of these unmarked controls will not be identified for you. We will tell you how many there are, and over what distance. During that section, your phone will ring when you pass an unmarked control and it will display your arrival time and your score, just as it does for marked controls. In these unmarked control situations you'll try to be on time as much of the time as possible since you will have no warning of the location of any unmarked controls.

<u>Free Zones</u> There are no automatic free zones on this rally! Free zones are identified in the instructions as BFZ (<u>Begin Free Zone</u>) and continue to an instruction that contains EFZ (<u>End Free Zone</u>).

Errors If the Richta app fails to record a contestant's arrival time at a control, that contestant will receive the average of their other non-max scores for that control.

<u>Penalty points</u> are: 0.1 point for each 0.1 second early or late at a control, up to a maximum of 30 points (1/2 minute) per control. The arrival time at each control is interpolated to a resolution of 0.001 second. The ideal leg time is also calculated to a resolution of 0.001 second. The difference between the arrival time and the ideal leg time is then truncated to a 0.1 second to produce the leg score.

Glossary of Terms

Blinker A warning signal which you are obligated to obey. The blinker consists of a light or lights, usually red or yellow, operating in a fixed sequence of off and on. For rally purposes only one blinker may exist at an intersection. The blinker may or may not be operating.

Bear Right – A Turn to the right less than 90 degrees.

Bear Left –A Turn to the left of less than 90 degrees.

BFZ Begin Free Zone

BTZ Begin Transit Zone

CAST Change Average Speed To

Crossroad An intersection of exactly four roads from which a road goes left, a road goes right, and a road goes generally ahead.

CZT - Car Zero Time Indicates an out time for a fictional car number 0. A competitor adds their car number to determine their out time.

EFZ End Free Zone

ETZ End Transit Zone

DIAMOND BACK – The back side of highway caution sign such as a curve arrow. Always on your left because it is for oncoming traffic.

Free Zone A specified part of the rally route in which there are no controls. In this event, free zones include Transit Zones. No penalties will be assessed for stopping within the confines of a free zone.

Gain To gain a specified time during the passage of a specific or implied distance. The gain is subtracted from the time required at the given average speed, to traverse the leg. The distance over which a gain is active is a Free Zone.

Intersection A meeting of existent roads (without regard to route designation, surface condition, or characteristics, unless such render the road non-existent) at grade level, from which the rally vehicle could proceed in more than one direction without making a U-turn.

Left Turn to the left of 10 to 179 degrees

Left sideroad sign - sign with a vertical line and a short line on the left. It precedes approaching an intersection on the left

Left Curve Arrow sign - A black on yellow sign with an arrow on the end pointing approximately to the left. It precedes an upcoming bend in the road.

Leg The part of a rally extending from an assigned starting point (beginning of a Part or an outmarker) to the next timing control.

MCZ Multi-control zone – a part of the course where there are two or more timing opportunities.

Mailbox - **MB** A common mailbox on the edge of the road. Quoted numerical address will be found on the mailbox, or post. Frequent reference for a timing control.

Squiggle Multiple Curves arrow sign - Common twisty shaped- or jog signs with more than one curve shown and an arrow pointing up.

NRI Numbered Route Instruction

Part Any part of a rally at the beginning of which the official mileage is zero and at the end of which the official mileage ends or reverts to zero. A Part contains some number of scoring Legs.

Pause To delay a specified time at a named point or during a passage of a specific or implied distance. If no named point or distance is given, the pause should be executed at the first opportunity. The pause is added to the time required at the given average speed, to traverse the leg. The distance over which a pause is active is a Free Zone.

Right Turn to the right from 10 to 179 degrees

Right sideroad sign - sign with a vertical line and a short line on the right. It precedes approaching an intersection on the left

Right Curve Arrow sign - A black on yellow sign with an arrow on the end pointing approximately to the right. It precedes an upcoming bend in the road.

Stop Ahead A sign reading "Stop Ahead" or an Icon containing a red octagon and an up arrow that indicates there is a Stop sign approximately 0.1 Mile ahead.

sec or sec. - second(s), 1/60-th of one minute

Sideroad An intersection of exactly three (3) roads, from which a road goes to the left or to the right, but not both, and a road goes generally ahead.

STOP An official octagonal stop sign reading "STOP" at which the rally vehicle is required to stop.

Straight Proceed within plus or minus 10 degrees of directly ahead at an intersection.

T An intersection of exactly three roads having the general shape of the letter T as approached from the base by the rally car. It is not possible to execute the instruction straight at a T.

TA Time Allowance also called bought time.

TP Telephone Pole (only used to designate a timing control)

Traffic Light A fixed signal light alternating red and green (frequently including yellow as a transition between green and red) used at an intersection to regulate traffic and which controls the rally vehicle. For rally purposes, only one traffic light may exist at an intersection. A traffic light may be set to operate as a blinker, although it will not be referenced as such or may not be operating at all.

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Transit Zone A part of a rally route in which there are no timing controls (free zone) and in which no specific speed is given or need be maintained. Either the exact time for passage, and/or a restart time from the end of the transit will be given. See BTZ and ETZ

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

APPENDIX

<u>Using the Richta app on an Android smartphone</u> Contestants that compete with an Android smartphone will need to be running Android version 5.0 or above on their phone. To check this, go to Settings/About phone and scroll down to see the Android version. 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 "Indy Covered Bridge Tour". You'll then be asked to enter the Event Password. It is: wendy

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. You do not need to enter anything in the other fields. Confirm in the lower right corner that you have version 1.20.

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 .

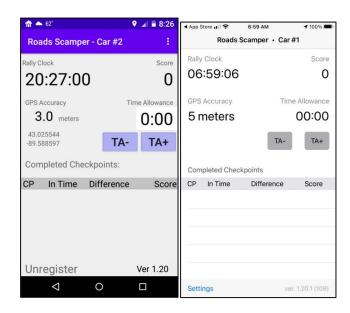
<u>Using the Richta app on an Apple smartphone</u> Go to the Apple App Store on your Apple smartphone and search for "Competitor Richta Checkpoint." Download the app. There is no cost to you for this app. Open the app. Choose "Indy Covered Bridge Tour". You'll then be asked to enter the Event Password. It is: wendy

Enter the car number that you have been assigned. Create a password for yourself and enter it. Press "Done." Press "Continue." Press "Submit Info." You do not have to enter any info in the other fields. Confirm in the lower right corner that you have version 1.20.1 (108).

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 on the next page.`

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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 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. You may not run the Competitor app on a Wi-Fi only device 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.

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.

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

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 Jim Crittenden at 970-261-2144.

On Saturday evening after Indy Covered Bridge Tour scores are finalized, you must unregister Indy Covered Bridge Tour from the Competitor app on your smartphone. You unregister on an Android phone by pressing AND HOLDING the word "Unregister" in the lower left corner. You unregister on an Apple device by pressing "Settings", and then pressing "Unregister Device".

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.