



# ***Great Race 101***

## ***What Rookies Need to Know***

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APRIL 26, 2023

JANET AND STEVE HEDKE



# *Agenda*

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- Welcome and Housekeeping – Steve & Janet Hedke and Ken Spencer
- Announcements – Jeff Stumb
- Preparation before you leave
- The Roles of the Driver and Navigator
- Arrival and Activities in St. Augustine
- A Day in the Life of a Great Race team
- Sample Course Instructions
- Special Circumstances
- Questions



# *Welcome and Housekeeping*



# *What is the Great Race?*



- A time-speed endurance and precision driving rally for vintage cars
- An annual family reunion of a community of car lovers and adventurers
- An opportunity to see the best of America via scenic backroads and small towns
- The potential to earn awards, recognition, respect, and maybe some cash
- The most fun you can have in an old car





# *Announcements*

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# *Preparation Before You Leave*

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# Choose and Prepare Your Car



# *Choose and Prepare Your Car*



- TimeWise Speedometer
- Tires
- Maintenance
- Spare parts
- Testing (performance chart)
- Decal application







# *The Roles of the Driver and Navigator*

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# *Driving 101*

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## *Key Skills and Requirements for Success*

- Maintain **exact** speed
- Consistent acceleration, braking and turns
- Don't second-guess the navigator
- Visualize the course ahead
- Communicate, communicate, communicate
- Make sure you're physically prepared
- Win and lose as a TEAM

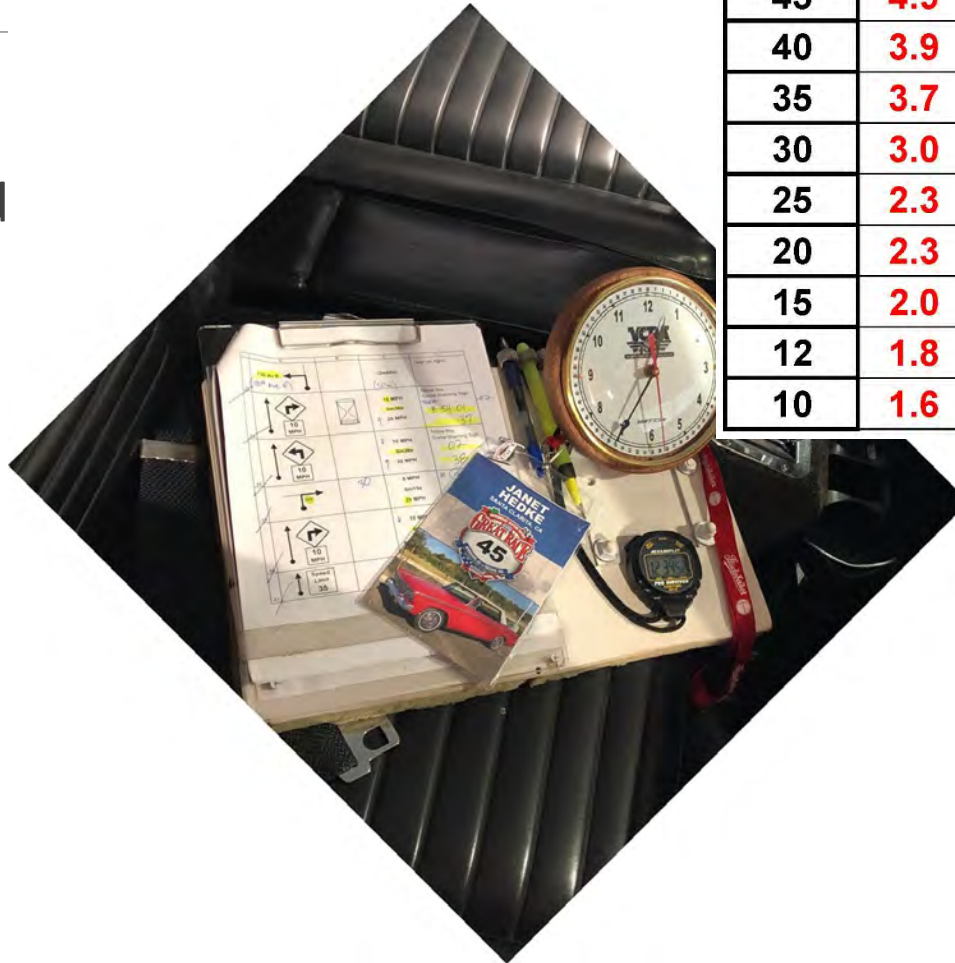


# Navigating 101



## Equipment

- Lapboard/clipboard
- Time of day clock
- Pens/highlighters
- Stopwatch
- Performance chart
- Start Order
- Route Instructions



Speed	Dec	Acc	S/G	T@15	T@20
50	5.5	7.3	12.8	7.5	5.9
48	5.3	6.9	12.2	6.8	5.2
45	4.9	6.3	11.2	5.9	4.3
40	3.9	5.7	9.6	4.4	3.3
35	3.7	4.4	8.1	2.8	1.8
30	3.0	3.5	6.5	1.6	0.9
25	2.3	2.9	5.2	0.7	+0.3
20	2.3	2.0	4.3	+0.3	+0.9
15	2.0	1.2	3.2	+0.9	N/A
12	1.8	0.8	2.6	N/A	N/A
10	1.6	0.5	2.1	N/A	N/A







# Route Instructions

	A	B	C	D
40			PDT  40 MPH 1m30s 45 MPH 1m20s 50 MPH	
41			40 MPH	
42			35 MPH	2nd
43			45 MPH	
44			30 MPH 3m00s 45 MPH	
45			30 MPH	

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Page 6 of 22      Friday, June 28, 2019



	A	B	C	D
40			PDT <sup>+19</sup>  40 MPH 1m30s ✓ 45 MPH 1m20s ✓ 50 MPH	9:34:00 -26 35:36 36:56
41		Maine boys turned in front of 45	40 MPH ↓	1/2 speed 30s
42		15 2.2 17.2	35 MPH out	2nd  4.87 -1.5 out may not be blinking
43			45 MPH ↑	
44			30 MPH 3m00s 45 MPH ↑	9:59:18 02:18
45			30 MPH ↓	

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Page 6 of 22      Friday, June 28, 2019



# *Driver/Navigator Communication*

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Make sure you have a consistent terminology between you!





# *Great Race Etiquette*

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- Spectators and fans
- Press
- Other racers
  - ✓ Support and encouragement
  - ✓ Awareness of division, competition level
  - ✓ Start and restart positions
  - ✓ Position on course relative to others



# *Speedometer Calibration*

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- **Follow installation instructions from TimeWise:** Attach two small magnets to the left front wheel with JB Weld (*also recommend putting magnets on your spare*), fabricate a bracket to hold the electronic pickup, mount the speedometer for viewing by the driver, and connect to a power source.
- **Initial calibration:** With tires fully inflated, measure 5 rotations of the wheel on the ground. Total inches to nearest tenth (disregard decimal) is your factor to enter on the back of your Timewise using a small screwdriver to adjust the dials. ***Mark top and bottom of the back side!***

**Note:** Appendix C of Rookie Handbook provides more details on how to do the initial calibration and the following two methods for making adjustments.



# *Speedometer Adjustments*

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- **Correction and adjustment using a calculator** *(not allowed during race)*
  - ✓ Run the measured mile as many times as necessary to lock it in
  - ✓ If you are **early** you need to **increase** your factor
  - ✓ If you are **late** you need to **decrease** your factor
  - ✓ Convert your actual and the correct times into seconds
  - ✓ **Correct time / Actual time x Factor = New Factor**
  
- **Adjustment during the race** *(after or during speedo calibration section of course instructions)*
  - ✓ Divide your initial speedometer factor by 3600. This will give the number of “clicks” the speedometer must be changed for each second per hour that you are early or late. **Write this down**, either on your performance chart or on the back of your speedometer.
  - ✓ Convert your early or late time into seconds per hour, multiply by your single click factor
  - ✓ Increase or decrease your factor by this number of clicks





# *Creating a Performance Chart*

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- Find a straight section of road about a half mile long with little or no traffic. You will also need a way to turn around safely near each end of the course.
- You will be traversing this course at different speeds ranging from 15 to 50 mph and making frequent stops.
- A course that takes about 40 seconds to traverse at 50 mph is about right. Mark each end of the course with a visible marker. An orange traffic cone or a stick with a flag will work. You may want to use a shorter course for the lower speed runs to save time.
- Run the course at speeds of 15, 20, 25, 30, 35, 40, 45 and 50 mph. Make at least 4 runs at each speed and record the times. Run the course in both directions. You need at least 4 runs to get a good average time. If you have a lot of variation, make more runs.
- Once you have a good average time on this course at each speed, **this becomes your base.** Now, you need to determine your time lost when you accelerate from a stop to each speed, come to a stop from each speed, and make a turn from each speed.



# *Creating a Performance Chart*

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- **Acceleration:** Start from a stop at the beginning of your course and accelerate to speeds of 15, 20, 25, 30, 35, 40, 45 and 50 mph. Make at least 4 runs at each speed and record the times when you reach the end of the course. Determine the average of all runs at each speed and subtract it from your base time at each speed.
- **Stop-and-Go:** Enter the course at each speed, then when your navigator tells you to stop, do an immediate stop-and-go to resume your speed. If your course is long enough, do two or three stop-and-gos. Make at least 4 runs at each speed and record the times. Divide your time loss by the number of stop-and-gos. Subtract it from your base time to determine your stop-and-go loss at each speed.
- **Deceleration:** Now that you have your stop-and-go and acceleration numbers, simply subtract your time loss for acceleration from your time loss for a stop-and-go and you'll have your deceleration loss at each speed.
- **Turns:** This is just to give you a ballpark number to work with. We recommend that you slow down to 15 mph at every turn for consistency. Enter the course at each speed, then when your navigator tells you, brake quickly to 15 and then resume your speed. If your course is long enough, do it two or three times. Make at least 4 runs at each speed and record the times. Divide your time loss by the number of times you slowed to 15. Subtract it from your base time to determine your turn loss at each speed.

# Sample Charts

Speed	Acc	Dec	Stop/Go	Turn@15	Turn@20	+10%(x10s)
50	7.3	5.5	12.8	7.5	5.9	55.0
45	6.3	4.9	11.2	5.9	4.3	50
40	5.7	3.9	9.6	4.4	3.3	52.8
35	4.4	3.7	8.1	2.8	1.8	38.5
30	3.5	3.0	6.5	1.6	0.9	33
25	2.9	2.3	5.2	0.7	+0.3	27.5
20	2.0	2.3	4.3	+0.3	+0.9	22
15	1.2	2.0	3.2	+0.9	N/A	16.5
10	0.5	1.6	2.1	N/A	N/A	11



# Pause time at 15-second stop - out speed

15-second stop - in speed

	50	48	45	40	35	30	25	20	15	12	10
50	8.6	9.0	9.1	9.5	10.2	10.5	10.7	11.0	11.3	11.6	11.8
48	8.3	8.7	8.8	9.2	9.9	10.2	10.4	10.7	11.0	11.3	11.5
45	8.8	9.2	9.3	9.7	10.4	10.7	10.9	11.2	11.5	11.8	12.0
40	9.0	9.4	9.5	9.9	10.6	10.9	11.1	11.4	11.7	12.0	12.2
35	8.9	9.3	9.4	9.8	10.5	10.8	11.0	11.3	11.6	11.9	12.1
30	9.6	10.0	10.1	10.5	11.2	11.5	11.7	12.0	12.3	12.6	12.8
25	9.8	10.2	10.3	10.7	11.4	11.7	11.9	12.2	12.5	12.8	13.0
20	9.8	10.2	10.3	10.7	11.4	11.7	11.9	12.2	12.5	12.8	13.0
15	10.2	10.6	10.7	11.1	11.8	12.1	12.3	12.6	12.9	13.2	13.4
12	10.3	10.7	10.8	11.2	11.9	12.2	12.4	12.7	13.0	13.3	13.5
10	10.3	10.7	10.8	11.2	11.9	12.2	12.4	12.7	13.0	13.3	13.5
50	48	45	40	35	30	25	20	15	12	10	

Dec	Acc	S/G
3.0	3.4	6.4
3.3	3.0	6.3
2.8	2.9	5.7
2.6	2.5	5.1
2.7	1.8	4.5
2.0	1.5	3.5
1.8	1.3	3.1
1.8	1.0	2.8
1.4	0.7	2.1
1.3	0.4	1.7
1.3	0.2	1.5

## Turn at 15 - out speed

Turn at 15 - in speed

	50	48	45	40	35	30	25	20	15	25/25 4.1s
50	4.4	4.3	3.8	3.1	2.6	2.3	1.8	1.5	1.5	0.65
48	4.3	4.2	3.7	3.1	2.5	2.2	1.7	1.4	1.4	0.63
45	4.1	4.0	3.5	2.8	2.3	2.0	1.5	1.2	1.2	0.61
40	3.8	3.6	3.2	2.5	2.0	1.6	1.2	0.8	0.8	0.56
35	3.5	3.4	2.9	2.1	1.7	1.4	0.9	0.6	0.6	0.5
30	3.3	3.2	2.7	2.1	1.5	1.2	0.7	0.4	0.4	0.42
25	3.1	3.0	2.5	1.8	1.3	1.0	0.5	0.2	0.2	0.3
20	2.9	2.8	2.3	1.7	1.1	0.8	0.3	0.0	0.0	0.2
15	2.9	2.8	2.3	1.7	1.1	0.8	0.3	0.0	0.0	0.15
50	48	45	40	35	30	25	20	15	10	

## Time Correction

+10% (x10s)	+20% (x2s)	+50% (x3s)
55	60	75
52.8	57.6	72
49.5	54	67.5
44	48	60
38.5	42	52.5
33	36	45
27.5	30	37.5
22	24	30
16.5	18	22.5
11.0	12	15.0

## RIGHT turn at 20 - out speed

Turn at 20 - in speed

	50	48	45	40	35	30	25	20	25/25 3.4s	
50	3.7	3.6	3.1	2.6	2.0	1.7	1.2	1.2	50	0.65
48	3.6	3.5	3.0	2.5	2.0	1.6	1.2	1.2	48	0.63
45	3.4	3.3	2.8	2.3	1.7	1.4	0.9	0.9	45	0.61
40	3.1	3.0	2.5	2.0	1.5	1.1	0.7	0.7	40	0.56
35	2.9	2.7	2.3	1.6	1.2	0.9	0.4	0.4	35	0.5
30	2.7	2.6	2.1	1.6	1.0	0.7	0.2	0.2	30	0.42
25	2.5	2.3	1.9	1.3	0.8	0.5	0.0	0.0	25	0.3
20	2.5	2.3	1.9	1.3	0.8	0.5	0.0	0.0	20	
50	48	45	40	35	30	25	20			

\*Right turn 20-20= +1.0s

## LEFT turn at 20 - out speed

Turn at 20 - in speed

	50	48	45	40	35	30	25	20	25/25 3.4s	
50	4.0	3.9	3.3	2.9	2.1	1.9	1.3	1.3	50	0.65
48	3.9	3.8	3.2	2.8	2.1	1.8	1.3	1.3	48	0.63
45	3.6	3.5	2.9	2.5	1.8	1.5	1.0	1.0	45	0.61
40	3.4	3.3	2.7	2.3	1.6	1.3	0.8	0.8	40	0.56
35	3.1	2.9	2.3	1.8	1.2	0.9	0.4	0.4	35	0.5
30	2.9	2.8	2.2	1.8	1.1	0.8	0.3	0.3	30	0.42
25	2.7	2.5	1.9	1.5	0.8	0.5	0.0	0.0	25	0.3
20	2.7	2.5	1.9	1.5	0.8	0.5	0.0	0.0	20	
50	48	45	40	35	30	25	20			

\*Left turn 20-20= +0.9s

## Speedo Calibration

Sec/hr error x factor / 3600

1 sec = 1.36 clicks

3 sec = 4 clicks

late: set backward

early: set forward

\*Right turn 20-20= +1.0s

\*Left turn 20-20= +0.9s



# *What to Pack*

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- Expect all kinds of weather – from hot and humid to cold, rainy and maybe even snow!
- If you're in an open car, sun protection and rain gear is essential.
- Make sure you have drinking water in a cooler *inside* your car. Replenish it each day.
- Digital camera! The navigator may want to take pictures and your cell phone will not be allowed while you're on the clock.
- Great Race sells merchandise. Bring fewer shirts than you think you need. They will provide each driver and navigator with an event t-shirt and hat. Host towns might even give you shirts.
- If you have a support crew to do your laundry, great! You can pack less. If not, one creative team has suggested you buy cheap underwear and throw it away each night!! We've even seen a team bring one set of clothes and wash them in the hotel sink every night. *Don't be that team.*
- There will be lots of stops at gas stations with mini-marts if you need to pick up essentials and you'll see lots of Wal-Marts and auto parts stores at the lunch and overnight stops.
- Car parts – only pack in your car what you can fix or replace on the side of the road. If you have a support vehicle, you can pack more for overnight repairs if needed. There is a sweep vehicle at the end of the field that will bring you to the finish if you break beyond what you can fix.





# *Arrival and Activities in St. Augustine*

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# *Arriving in St. Augustine*

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- **Wednesday** – Teams arrive, possible host town special events
  - ✓ Great opportunity to meet with your veteran mentor team
- **Thursday** – Registration and vehicle inspection according to schedule
  - ✓ Pick up Great Race-provided official t-shirts and hats, opportunity to purchase additional merchandise
  - ✓ Measured mile speedometer calibration
  - ✓ Conversations in the parking lot – meet your fellow racers!
  - ✓ Official welcome dinner for all race teams, staff and support crews
- **Friday** – Mandatory meeting for all teams
  - ✓ Rally School in two parts – Rallymaster John Classen and Rookie School
  - ✓ Trophy Run Practice Rally (order of start generally determined by registration order)
  - ✓ Awards ceremony, celebration dinner
- **Saturday** – **Race begins!**
  - ✓ Depart for start location from hotel in race order
  - ✓ Cars will be on display for a couple hours before the Opening Ceremony and Official Start



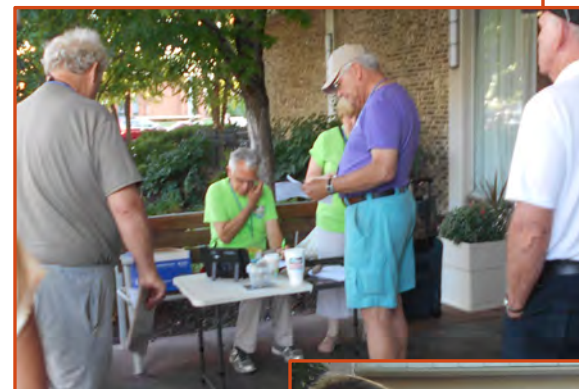
# *A Day in the Life of a Great Race Team*

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# Before Your Day Starts

- You will know the race start time the previous day
- You will know your starting position the previous day
- Your start time is the race start plus your start position
- You will know where to pick up your instructions
- Determine your start time (the night before)
- Breakfast, check out, car prep
- Set clock and stopwatch
- Pick up course instructions 30 min before your start time
- Watch for *emergency* instructions
- Mark up your course instructions (at hotel or in car)



Pickup @ Chattanooga at 8:44 am

HEPPLINGS MOTOR NEWS GREAT RACE 2017 Printed: Jun 25 2017 13:58  
 START ORDER FOR STAGE 3 - STAGE START TIME: 9:00:00  
 CHATTANOOGA, TN TO BOWLING GREEN, KY - MONDAY, JUNE 26, 2017

POS	CAR#	DIV	YEAR	SCVR	MARQUE	COLOR	TEAM
38	E 1964				Chevrolet Nova	Blue	G & J Martin
119	SR 1961				MGA	Green	S & H Slaughter
140	X 1953				Pontiac Chieftain	Green/White	Murfreesboro TN
63	S 1968				Chevrolet Camaro	White	M & T Lewis
75	SR 1960				Plymouth Fury	Black	Buchanan/Powell
35	G 1935				Ford 3 Window Coupe	Red	Gardner/Hastert
40	SR 1960				Studebaker Hawk	Cream	Myers/Cough/Chatraw
126	S 1935				Ford Coupe	Black	W & C Vick
7	E 1966				Ford Mustang	White	E & B Kaplan
26	S 1936				Packard 1208	Cream	Breault/Keeny
66	E 1932				Ford Cabriolet	Red	Knowles/Gentry
58	E 1930				Ford Roadster	Black	R Fredette/Caudle
48	X 1963				Jaguar E Type	Silver/Blue	Overmyer/Fayard
45	E 1964 1967				Studebaker Daytona	Red/White	S & J Hedke
65	SR 1963				Dodge Dart	White	D & G Gentry
8	S 1972				Mercedes 350SLC	Silver	Langsdorff/McKelvie
19	E 1932				Ford Speedster	Red/White/Blue	Hull/Stahl
89	E 1969				Mercedes 280SL	Silver	Haverty/Dusey
29	E 1937 1938				Ford Coupe	Grey	R & N Schneider
50	S 1957				Chevrolet 150	Silver/White	Booth/Kandel
44	E 1966				Ford Mustang	Blue	Hammer/Ferguson
55	S 1955				Chevrolet BelAir	Silver/White	Trindle/Roskey
68	E 1973				Jensen Interceptor	Blue	J & H Nawojczyk
60	E 1940				Chevrolet Master	Black	J & S Hudson
22	E 1927 2017				Ford Model T Spdstr	Black	B & B Green
31	E 1931				Auburn Speedster	Green	C & J Caldwell
51	E 1916				Hudson Super Six	Yellow	O & B Epple
83	E 1935				Ford Coupe	Navy	B & I Deering
4	E 1932				Ford Victoria	Purple	Reeder/Stone
79	SR 1955				Peerless Speedster	Green	Klinger/Reckow
2	E 1937				Ford Tudor Sedan	Black/Red	Jameson/Socquet
24	E 1937 1957				Ford Roadster	Black/Red	Graf/Bell
100	E 1929				Chevrolet Model A	Yellow	Rubright/Jenkins
117	E 1955 1967				Chevrolet BelAir	Maroon/White	Merrill/Duncan
80	X 1967				Pontiac GTO	Red	M & S Gilson
							M & T Stahl
							Goertz/Schoensee
							M & D Sharp
							B & D Stahl
							Takes/Ito
							Prescott/McDorr
							Menneto/Parizo
							Habetz/Began
							Reiman/Brungardt
							Brittlingham/McKone
							Clarkson/Kyle
							J & L Goodie
							Weaver/Jongorius
							Corey/Kasson
							Tullian/Reese FL
							Hopper/Sellenrick
							Inser Racing Museum
							Foster/Watson
							LaMountain/Sacramone
							Street/Barfield
							Searing/Masak
							Harpenau/Kucera
							L & J Feeney
							S & S Greene
							B & C Croker
							Blue/Wise
							J & C Layzell
							J & Z Hausmann

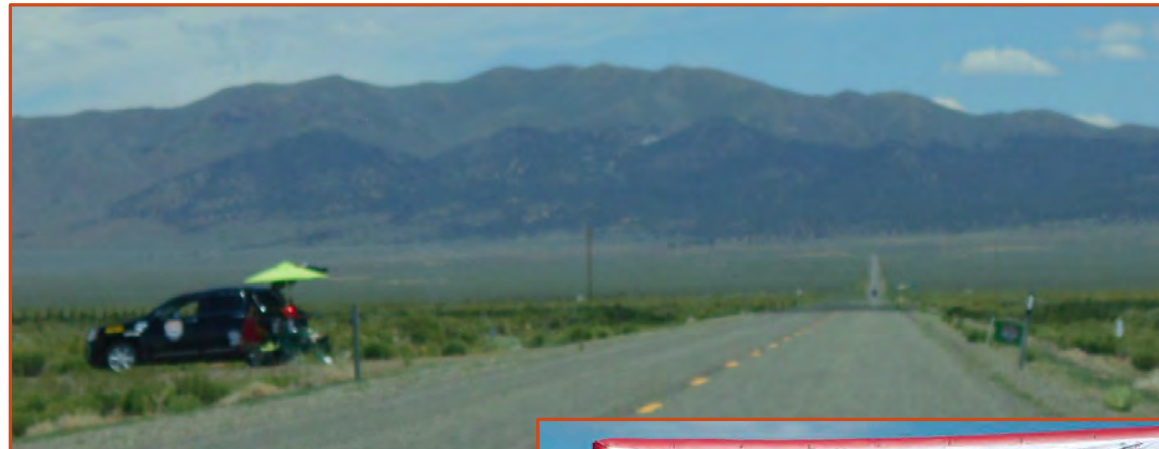
POSITION





# *On the Road to the Finish*

- Depart hotel within your 30-minute window
- Speedo calibration run/what to do with the result
- Start point – verify to your order of start
- Checkpoints, fuel and restroom stops
- Lunch stop in host town
- More instructions, checkpoints and rest stops off clock
- Finish
- Park ferme and dinner
- Check into hotel
- Next day prep (car repairs, start time, etc.)
- Support crews
  - ✓ Separate instructions
  - ✓ Proceed to next overnight location
  - ✓ Not on race route
  - ✓ Not at pit stops or lunch
  - ✓ Attend park ferme and dinner





# *Sample Course Instructions*

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# *But First – The Four Ss for Success*

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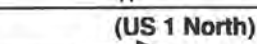


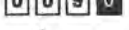

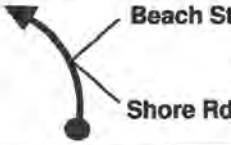
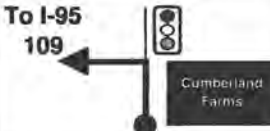

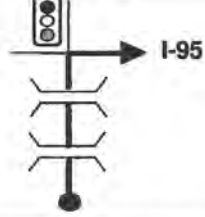
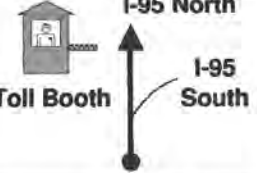
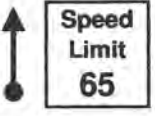
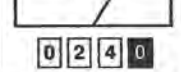
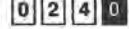


**Safety First** – No score is worth putting yourselves, another racer, or a spectator in danger. Drive safely at all times and if an unsafe situation arises, safety is more important than the race. You can usually make up any lost time or use a time allowance for unsafe conditions.

**Start on Time** - First, your clock must be calibrated with the clock used by the race officials. Second, you must actually start at the indicated place and time. Use your Order of Start to confirm you are in the right slot compared to cars in front of and behind you.

**Stay on Course** - Focus on the instruction you are working on and the next instruction. Be sure the driver knows what is coming up next in case the navigator has their head down doing calculations or checking times. You must complete all of one instruction before moving to the next instruction.

**Stay on Time** - Execute each maneuver consistently and in accordance with your performance charts. This also means being able to make up for errors and losses to be on the correct time at each check point.

	A	B	C	D
1	  <b>Ogunquit Playhouse</b>	 	 <b>16m00s</b>	You may encounter Support Vehicles without penalty today in Ogunquit and on the Tire Warm-up
2		APPROX. 9 MILES TO INSTRUCTION #6	TAKES APPROX. 16 MIN. TO INSTRUCTION #6	the Official Start tomorrow morning is on Beach St
3				5th 
4				turn into middle lane
5			<b>(1m30s)</b> APPROX. 1 MIN. 30 SEC. FROM #5 TO #6	comes very quick--use rightmost toll booth <b>\$1.50</b>
6		 	<b>50 MPH</b> <b>29m00s</b> 0m00.0s	<b>SPEEDOMETER CHECK</b> ... IS AT 50 MPH; TAKES APPROX. 29 MIN. AND IS 24 MILES START STOPWATCH AT THIS SIGN.

➤ **Route Instructions are in three sections:**

- ✓ Tire warm up
- ✓ Speedometer calibration
- ✓ Sequential timed instructions











➤ **Four columns:**

- ✓ A: Description of road, signage, intersections
- ✓ B: What section you are in (tire warm up, speedo calibration, on clock, transit, gas stop)
- ✓ C: Speed and timing
- ✓ D: Special instructions or course notes

➤ **Page numbers:**

- ✓ Make sure to check all pages are there before you leave the table














	A	B	C	D
7	 <div>Kennebunk Kennebunkport</div>		<div>4m03.4s ← INTERVAL TIME</div> <div>4m03.4s ← CUMULATIVE TIME</div>	
8	<div>Eastern Trail</div> 		<div>3m16.3s</div> <div>7m19.7s</div>	sign on left
9	<div>Kennebunk River</div> 		<div>1m10.7s</div> <div>8m30.4s</div>	
10	 <div>Biddeford</div>		<div>2m30.4s</div> <div>11m00.8s</div>	
11	 <div>University of New England</div>		<div>1m54.4s</div> <div>12m55.2s</div>	
12	 <div>Saco Old Orchard Beach</div>		<div>2m53.3s</div> <div>15m48.5s</div>	sign overhead
13	 <div>Freeport</div>		<div>4m00.8s</div> <div>19m49.3s</div>	
14	 <div>Go Maine</div>		<div>2m13.4s</div> <div>22m02.7s</div>	
15	 <div>Scarborough</div>		<div>1m45.1s</div> <div>23m47.8s</div>	(sign on right)
16	 <div>Casco Bay Region</div>		<div>2m10.9s</div> <div>25m58.7s</div>	

- Interval lets you know how long until the next sign
- Cumulative time will correspond to your stopwatch
- Hit split time (never stop!) and write down total elapsed time in margin
- Keep track of cumulative early or late times in margin at each sign
- Watch for steady progression of early/late times
- In case of traffic or stopwatch error, you can always start new at the next sign.

	A	B	C	D
17	<p>Auburn Lewiston Augusta</p>		<div>2m23.3s</div> <div>28m22.0s</div>	stay on I-95
18	<p>Payne Rd 1/2 Mile</p>		<div>0m21.2s</div> <div>28m43.2s</div> <div>55m00s</div>	comes quick ASSUME YOUR ACTUAL TIME IS 28M47.3S. YOU ARE 4.1 SEC. LATE SEE APPENDIX "C" FOR HOW TO ADJUST YOUR SPEEDOMETER.
19	<p>Exit 45</p>	END OF SPEEDO CHECK. BEGIN TRANSIT OF APPROX. 5 MILES & TAKES 55 MIN. TO GET TO INSTRUCTION #26		
20	<p>Maine Mall Rd Exit</p>			1st exit
21	<p>(Maine Mall Rd)</p>	no-host 	(10m00s)	food court inside the mall Cracker Barrel  additional food ahead
22	<p>Gorham Tim Hortons</p>		(8m00s)	Tim Hortons to the right (off-course): McDonald's Burger King Pizza Hut/WingStreet ahead (off-course): Wendy's

- Watch for turn/exit instructions at end of calibration, don't make calculations until you're stopped
- Once you're in a good place (gas station, parking lot, in line for your start) determine what your early/late results from the calibration would be over an hour and adjust your speedometer accordingly. Or, know how many seconds you need to correct and how often throughout the day.

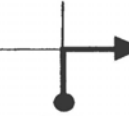
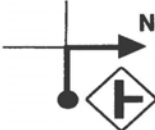
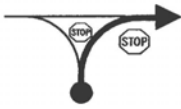

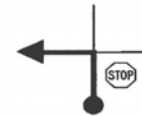


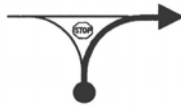
	A	B	C	D
23	 Cummings			2nd 
24			(3m00s)	Subway on right (look sharp)
25	 Bridges Dr		(0m30s)	look sharp
26			EDT  20 MPH	limited parking TIME-OF-DAY RESTART A.S.P. #42 LEAVES AT 2:22:00 (1:40 + 42 = 2:22)
27			0 MPH <del>0m15s</del> P10.2 35 MPH	PLANNED PAUSE TIMES ARE FROM CLOCK ON "STOP & GO" (P=PAUSE)
28			30 MPH	CHANGE SPEED AT THE SIGN.
29	 Beech Ridge		0 MPH <del>0m15s</del> P10.2 30 MPH	
30	 Broadturn Rd STOP LIGHT		0 MPH <del>0m15s</del> P9.5 35 MPH	

### ➤ Marking Your Route Instructions:

- ✓ Actual start time
- ✓ Time loss for stops and turns
- ✓ Highlight warnings or odd instructions

35

WHEN INSTRUCTIONS ARE  
RECEIVED, WRITE SPEED FROM  
PRECEEDING PAGE HERE








	A	B	C	D
31	 Burnham		30 MPH -2.9	SEE CAR CALIBRATION CHART FOR "LOST TIME" ON A 35 MPH "IN" AND A 30 MPH "OUT" TURN.
32	 Nonesuch Rd		20 MPH -1.5	AT THE SIGN DROP TO THE SPEED OF 20 MPH AND THEN TURN (LOST TIME ON A 20-20 TURN)
33			0 MPH <del>0m15s</del> P10.9 30 MPH	
34			0 MPH <del>0m15s</del> P10.2 30 MPH	
35			0 MPH <del>0m15s</del> P8.2 40 MPH	
36	 Hearn Rd		35 MPH -4	look sharp (LOST TIME ON A 40-35 TURN)
37	 Ash Swamp		0 MPH <del>0m15s</del> P10.1 30 MPH	
38			0 MPH <del>0m15s</del> P10.2 30 MPH	

➤ Marking Your Route  
Instructions:

- ✓ Carry over speed from previous page











30

	A	B	C	D
39			20 MPH	
40			20	WHEN INSTRUCTIONS RECEIVED, WRITE THE SPEED IN ALL SECTIONS WHERE IT IS MISSING.
41			25 MPH -1	comes quick-- look very sharp
42			0 MPH <del>0m15s</del> p12.4 20 MPH	
43			25 MPH -1	comes very quick
44			20 MPH	
45			0 MPH <del>0m15s</del> p12.5 20 MPH	
(46)	COMES QUICK			

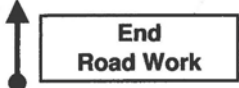

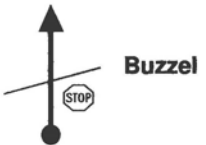

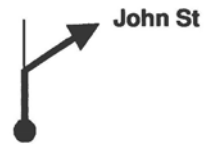

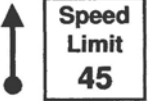

## ➤ Marking Your Route Instructions:

- ✓ Enter previous speed in box where none is shown as a reminder there is no change here
- ✓ Watch for “comes quick” or “comes very quick” at the top of a page and write it at the bottom of the previous page!

	A	B	C	D
46			20 1m39s 30 MPH	comes quick HOLD SPEED AT THE SIGN. START STOPWATCH AND HOLD 20 MPH FOR 1 MIN. 39 SEC. THEN GO TO 30 MPH.
47			0 MPH 0m15s P 9.5 35 MPH	
48			0 MPH 0m15s P 9.4 35 MPH	
49			30 MPH (-2.9)	
50			25 MPH 1m12s 30 MPH	
51			0 MPH 0m15s P 8.6 40 MPH	possible construction zone
52			35 MPH (-4)	after 
(53)	COMES QUICK			

## ➤ Marking Your Route Instructions:

- ✓ Delayed speed change – use clock or stopwatch
- ✓ You may wish to write down start and finish times for longer intervals over a minute

	A	B	C	D
53			35	comes quick
54			25 MPH -1.8	look sharp
55			0 MPH <del>0m15s</del> P10.8 30 MPH	
56			0 MPH <del>0m15s</del> P11.8 20 MPH	
57			20 -.5	1st paved road-- look sharp
58			0 MPH <del>0m15s</del> P10.9 30 MPH	
59			35 MPH	
60			30 MPH -2.9	look sharp

30

	A	B	C	D
61	 Frost Rd		20 MPH -1.2	look sharp-- small black-on-white sign
62	 STOP		0 MPH 0m15s p12 25 MPH	
63	 STOP		0 MPH 0m15s p12.4 20 MPH	
64	 (Kennebunk Pond)	BEGIN TIMED TRANSIT OF APPROX. 10 MILES TAKE EXACTLY 30 MIN.	25 MPH -1	comes very quick
65	 Stop Ahead	 0100	ENTER EXACT ARRIVAL TIME → 30m00s ENTER EXACT DEPARTURE TIME →	<div> <div></div> <div></div> <div></div> <div></div> </div> <div>+ 30:00</div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div>TRANSFER THIS TIME TO</div> <div>INSTRUCTION #70</div>
66	 111			
67	 US 202 4	 Gulf gas	(10m00s)	2nd Gulf gas

- **Start of Transit:**
- ✓ Critical to write down arrival time/start stopwatch at transit sign
- ✓ Add given transit time to your arrival time and carry to the end of the transit. This will be your restart time.














	A	B	C	D
68			(2m00s)	Citgo McDonald's/Shell
69			(0m20s)	
70			20 MPH	 EXACT DEPARTURE TIME AT THIS SIGN (FROM INSTRUCTION #65)
71			25 MPH -1	
72			20 MPH -.6	sign may be twisted
73			20 -.5	
74			20 -.5	

### ➤ End of Transit:

- ✓ Times in parentheses are time to the start point
- ✓ Start at the exact time (less acceleration) you wrote down
- ✓ Double and triple-check your time
- ✓ Confirm you are in the right place and time by checking your order of start and seeing what other cars are there and when they leave








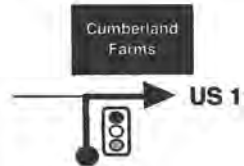
20				
	A	B	C	D
75			0 MPH 0m15s <del>P12</del> 25 MPH	
76			0 MPH 0m15s <del>P12.4</del> 20 MPH	
77		THERE WILL BE NO CHECK POINTS BETWEEN	0 MPH 0m15s <del>P10.9</del> 30 MPH	
78		THESE INSTRUCTIONS (#76 TO #80)	0 MPH 0m15s <del>P8.6</del> 40 MPH	
79	 Sam Allen		25 MPH -2.2	look sharp-- 1st named road
80			0 MPH 0m15s <del>P10.8</del> 30 MPH	
81			0 MPH 0m15s <del>P10.2</del> 30 MPH	

### ➤ Maze:

- ✓ A sequence of turns, may be quick, usually at slow speeds
- ✓ Take one instruction at a time and complete it
- ✓ Cross it off when done
- ✓ Do not get distracted by other race cars you may see going other directions

### ➤ No Camera Zone:





- ✓ There may be an instruction where you are likely to lose time so there will not be a checkpoint. You will have time to make up your loss.

	A	B	C	D
82			0 MPH 0m15s <i>P10.2</i> 30 MPH	
83			0 MPH 0m15s <i>P7.5</i> 45 MPH	
84			 30m00s	END OF TIMED SECTION
85			APPROX. 9 MILES AND 30 MIN. TO GET TO THE OBSERVATION CHECKPOINT — INSTRUCTION #88	Shell additional fuel ahead
86		<div> Reception and Hagerty Trophy Run Awards this evening at the Beachmere Inn, 62 Beachmere Pl, from 6:30:00 to 8:00:00. There is no parking at the Beachmere Inn. You must walk or take the shuttle between your hotel and the Beachmere Inn.  Overnight race car parking is at the hotels. </div>		Cumberland Farms gas Irving/Circle K gas Mobil Sunoco  Do not go to your hotel until after you have been to the Observation Checkpoint at the finish line.  Gibbs gas Gulf gas

- **Off the Clock**
  - ✓ Drive any safe speed!
  - ✓ Follow instructions to the finish gate
- **Information Box #1**

Lets you know what to expect that evening:

  - ✓ Information on host dinner/activities
  - ✓ How long you must stay at the parc fermé.
  - ✓ Parking information at the hotels

	A	B	C	D
87				the Official Start tomorrow morning is on Beach St
88				stop at Observation Checkpoint
89	<div> <p>Stage 1 tomorrow: Ogunquit, Maine, to Lowell, Massachusetts</p> <p>Receive course instructions this afternoon at the finish of the Hagerty Trophy Run</p> <p>Breakfast available: at the Ogunquit River Inn &amp; Suites starting at 6:30:00; at the Ogunquit Resort Motel starting at 6:30:00; at the Meadowmere Resort starting at 6:30:00; at the Beachmere Inn starting at 6:30:00; at the Colonial Inn starting at 6:30:00; at the Mariner Resort Motel starting at 7:00:00</p> <p>To reach the Start, a distance of 1/2 mile, leave the intersection of US 1 and Beach St in start position order at 0m30s intervals starting at 8:30:00 (example: start position 53 leaves at 8:56:30).</p> <p>Official Start Time: 10:00:00</p> <p>First Refueling Stop: 135 miles</p> <p>Toll: \$3</p> </div> 			

## ➤ Information Box #2

Lets you know what to expect the following day:

- ✓ Start time (add your start order, then subtract 30 minutes so you know when to pick up your course instructions)
- ✓ Which hotel will be handing out course instructions
- ✓ Whether you need to refuel that night
- ✓ Any tolls you need to have cash for
- ✓ There will be additional instructions to get to all of the hotels following the parc fermé.





# *Special Situations*

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# *Time Allowances*

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- **Sometimes you will lose time due to circumstances beyond your control, such as**
  - ✓ Slow-moving vehicles in front of you (such as farm vehicles or school buses) that you cannot pass.
  - ✓ Construction area or traffic
  - ✓ Delayed by cross traffic at an intersection
  - ✓ Caught by a train at a railway crossing
- **Don't panic**
  - ✓ Lose or make up time to make sure your total time loss is in even 10-second increments.
  - ✓ Make up whatever time you can **safely**. For the rest of it, submit a time delay listing the leg, instruction number, and time lost.
- **Don't cheat**
  - ✓ You can't file a time allowance for your own course mistakes or mechanical difficulties



# *Making Up Time*

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- **Use the ten-percent rule**
  - ✓ Determine how many seconds you are late (for example after a turn)
  - ✓ When the navigator tells you, go to a speed 10% faster than the assigned speed (30>33, 40>44, 50>55 etc).
  - ✓ You will remain at the 10% over speed for 10 times the number of seconds you are late. If you lost 5 seconds, go 10% over for 50 seconds, then drop back to the assigned speed.
  - ✓ If you lost 30 seconds, you'll have to hold 10% over for 5 minutes. Many times that will be at just one speed, but you may see speed changes during that time. Just go to 10% over the next speed.
- **This also works when you need to lose time (rare)**
  - ✓ If you have to leave a stop early if cross traffic is coming, or speed up to pass a slow vehicle, you may be a few seconds early and need to lose time. Simply drive 10% slower than the assigned speed for 10 times the number of seconds you are early.
- **Use all of the information available to you – may involve “hacking”**



# *When You're Lost*

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- **Sometimes you just blow it and miss a turn or instruction**
  - ✓ If you are driving at a speed that doesn't correspond with the road, you may be wrong
  - ✓ If you encounter a stop sign and none is on your course instruction, you may be wrong
  - ✓ If you are on a long straight road and can't see the car in front of or behind you...
- **Decide *as a team* that you need to go back**
  - ✓ Turn around safely and go back to the last part of the course you were sure of. If you see the car that's behind you coming toward you, turn back around and you can get back in your place pretty easily. You weren't wrong after all.
  - ✓ Once you identify where you got off course, drive at safe speeds and look for other race vehicles. Use your order of start to see how many cars are now in front of you that you will need to pass - SAFELY.
  - ✓ If you see a checkpoint, drop to the assigned speed ASAP and stay where you are.

***Rookies drop your six worst legs in Stages 1-7 - don't get discouraged when you have a bad one!***





*Questions?*

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*Thank You!*  
See you in St. Augustine!

