## 2019 Parade Rally School



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## Today!

- Learn what makes a Rally a Rally.
- Learn the lingo! "CAST" etc.
- Learn how to "Follow the Course".
- Answer Questions.
- Get ready to have Fun!



# 1. Introduction. What is a Rally?







## A Rally is a Game!



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## Every game needs instructions so you know how on how to play it.





A Rally is no different!

It needs Rules too!



## The General Instructions

"The rules we use to play the game"

# The General Instructions contains the rules and instructions to participate in the Rally.

## To begin . . .

### What is a time-speed-distance (TSD) Rally?

A TSD rally is not a race; rather it is a contest in which a team consisting of a driver and a navigator combine driving, observational, mathematical, and communicative skills (as well as patience) in the negotiation of a prescribed road course at prescribed speeds. The main objective is to stay on course following a set of route instructions that each team receives before the start of the rally. The route instructions define what route to follow and what average speeds to maintain. Rally scores are determined by timing the arrival of each rally car at points along the rally route and comparing the times against the official rally time. These timing points are called CHECKPOINTS (aka controls).

## Time - Speed - Distance

We calculate mathematically the exact time required to drive a prescribed distance at a specified speed.

Mileage divided by speed times 60

i.e. 2 miles / 30 mph \* 60 = 4 minutes



## Object of the Rally

To arrive at checkpoints in the exact amount of time, neither early nor late.

Penalties are earned for every second you are either early or late into a checkpoint.

Rallys are measured in seconds.



## TRAP RALLY

The Rally Master designs the rally to try and trap the contestant into deviating from the perfect route and coming into a check point either early or late incurring a time penalty. (This is what makes it fun for the Rally Master) It is not the intent of the Rally Master to get you lost.

The object of the Rally Team is to stay on course and not to get trapped!



## **Time-Speed-Distance**

Key ingredients of a TSD Rally:

- A specific route with <u>distance</u> measured from point to point.
- An assigned average <u>speed</u> for each segment of the route.
- Computed official travel <u>time</u> based on the distances and speeds.

TSD rally scoring is based on time, BUT . . .

Being on time doesn't matter if you're off course. .

#### **COMPUTED TRAVEL TIME**

#### **Point to Point Time:**

 $\frac{\text{Distance in Miles X 60}}{\text{Speed in MPH}} = \frac{\text{Travel Time}}{\text{in Minutes}}$ 

#### **Total Time:**

Point A to Point B Time

- + Point B to Point C Time
- + Point C to Point D Time
- + Point D to Point E Time
- + Point E to Point F Time
- + Point F to Point G Time

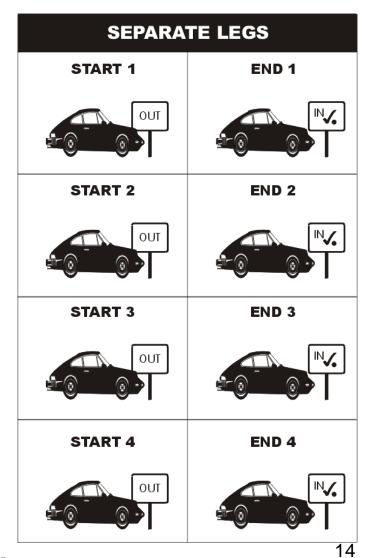
=Total Time

## Structure of a TSD Rally

Each leg of a TSD Rally is like a separate little rally with its own beginning and ending. Each leg is scored separately, which means that errors on one leg have no effect on subsequent legs.

Each leg is a fresh start. Don't let a mistake ruin the rest of your rally. Relax. Keep your priorities straight:

- Stay safe
- Be nice to your partner
- Have fun.



## 2. The ODO Check

## The Odo Check

#### **ODOMETER CHECK:**

The odometer check will give you a chance to calibrate your rally car odometer with the Official Rally Mileage (ORM) shown in the left margin of the route instructions. To calculate the factor by which your ODO differs from the ORM, use the following formula:

#### FACTOR = YOUR ODO READING / ORM

To change a given ORM to what your ODO should read, multiply the ORM by this factor. To change your ODO reading to the ORM, divide your ODO reading by this factor. More simply, if your ODO reading is greater than the ORM, drive faster than the specified CAST. If your reading is less, drive slower.

MORE = Drive a little Faster LESS = Drive a little Slower

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## First Leg Includes Odometer Calibration

#### **FIRST LEG OF A T-S-D RALLY**

#### 1. START

Leave on time if you can. DO NOT BLOCK the Marker!



## 2. ODOMETER CALIBRATION

Restart, on time, at end of Transit Zone.



## 3. ROUTE WITH PRESCRIBED SPEEDS



#### 4. CHECKPOINT

Leg ends at the timing line.



#### SUBSEQUENT LEGS OF A T-S-D RALLY

#### 1. START

Leave on time if you can. DO NOT BLOCK the Marker!



#### 2. ROUTE WITH PRESCRIBED SPEEDS

Use odometer calibration factor as needed.



#### 3. CHECKPOINT

Leg ends at the timing line.



## 2. What do I need to bring?

## Things to Bring to A Rally

- Clipboard
- Post-it notes
- Pencils
- Watch with Sweep Second Hand
- A DIGITAL watch is best
- Scotch Tape
- Highlighter
- Sense of Humor!



## To Start . . .

- 1. Show up at the starting point of the rally 25 minutes prior to your start time.
- 2. Make sure you are wearing your Parade Badges.
- 3. Your instructions will be given out exactly 20 minutes before your start time.
- 4. Double check your scoring envelope to make sure you have a complete set of Route Instructions, DIYC slips, Time Delay Slips and a Score Card.
- 5. You may then leave the start line at any time.



## Set your Clocks to the Official Rally time!

(Rally times unless noted are given in seconds.)



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## 4. Instructions

## **Basic Concept of a Rally**

As you drive down the road, at every opportunity that presents to change direction, a decision needs to be made as to the direction to take.

Together, the various types of instructions tell you exactly what to do at every intersection.



## **CAST**

- Change Average Speed To (CAST)
- It is the "Speed" component of Time Speed Distance.
- The most important thing to do is stay on course.
- Drive approx. 10% over the CAST to make up for delays, stop signs, curves, etc.
- Don't always ask your Navigator what the CAST is (. . . Boy, they get upset.)
- Post-it Notes on the steering wheel work really well!



## **Course Directions**

#### **COURSE DIRECTIONS:**

The rally route is determined by the highest application of the following (1=highest, 5=lowest):

- 1) SI Special Instructions, singular or plural
- 2) SGI Supplemental Instructions, singular or plural
- 3) GI General Instructions, singular or plural
- 4) RI Route Instructions, singular or plural
- 5) MRR "Main Road" Rules, singular or plural
- 1) SI (Special Instructions): SI may be contained in the control slips that the rally car will receive at each Checkpoint or attached to the General Instructions (GI). SI on Check Point Slips become active immediately and remains active until they are completely executed or cancelled by another SI. SI may specify pauses, cancel, add, change, or delete RI, change the applicable MRR, begin transit or free zones or be rally course directing. SI may overlap RI or other SI. SIs are different from RI in that they do not have to be executed in the numerical order listed. If a SI requires more than one action, execute each action in the sequence given and unless instructed otherwise, they must be executed whenever possible. Please read them carefully.
- 2) SGI (Supplemental General Instructions): Should a change or clarification need to be made to the General Instructions, Supplemental General Instructions will be issued to all entrants at registration.



#### **COURSE DIRECTIONS**

The rally route is determined by the highest application of the following (1=highest, 5=lowest)

- 1. SI Special Instructions
- 2. SGI Supplemental Instructions
- 3. GI General Instructions
- 4. RI Route Instructions
- 5. MRR "Main Road Rules"



## **Route Instructions**

- Two types of Route Instructions.
- Numbered Route Instructions (N.R.I.)
- Lettered Route Instructions (L.R.I.)

## What they look like!

RI#	Distance	TEXT INSTRUCTION				
90		Pause 1.0 at CEMETERY.  a. CAST 47 [75.2] at "Stephensen".  b. CAST 48 [64] at "Larson".				
91		CAST 35 [56] at "Speed Limit 35".				
92		Bear Left after "Millbrook Campground". (may appear redundantFOLLOW THE LINED ROAD - NORTH HILL).  a. CAST 33 [52.8] at "North Hill Barn".  b. At "Cross Road" Pause 15 seconds.				
93		Left at STOP (242) and CAST 45 [72].				
94		"Speed Limit 40" CAST 40 [64].				
95		Right on JAY PEAK RD and CAST 20 [32].				
96		"Slow Intersection Ahead" and watch for oncoming traffic for next 0.75 miles [1.20 km] later.				
97		Left into the undergound parking lot. (the same place we started from).				



## **Numbered Route Instructions (N.R.I.)**

- Every N.R.I. must be completed!
- Performed in Numerical Order!
- Must totally complete N.R.I. before moving on to next N.R.I.
- Must be performed as soon as they can.



# Lettered Route Instructions (L.R.I.)

- L.R.I. may or may not be completed.
- L.R.I become active as soon as the preceding N.R.I is completed.
- L.R.I become inactive as soon as the next N.R.I. can be completed.
- Not all L.R.I. need to be done. As soon as one L.R.I is complete the preceding L.R.I. becomes inactive.

## Lettered Route Instruction cont'd

- 47. Left on ELIZ. SCALES MD. CAST 54.
- 48. Left after 2<sup>nd</sup> EBY'S MILL (Hwy 20) or Left on GEORGETOWN. CAST 34.
- a. CAST 10 at "Weight Limit 3 Tons".
- b. CAST 25 at "Welcome to Elizabeth".
- 49. Right at Y-T (follow Illinois Rte 20).
- 50. CAST 55 at "55".

- •Must complete N.R.I 48.
- •Then you are looking to complete a., b. or 49.

(Hint - Always ask yourself, is their any reason why I should not do a Lettered Route Instruction.)



## **Course Following Rules**

The rally route follows the **Main Road** unless a Route Instruction taking you in a different direction can be executed. The **Main Road** can be determined by the highest application of the **COURSE FOLLOWING RULES** presented.

#### **Course Following Rules**

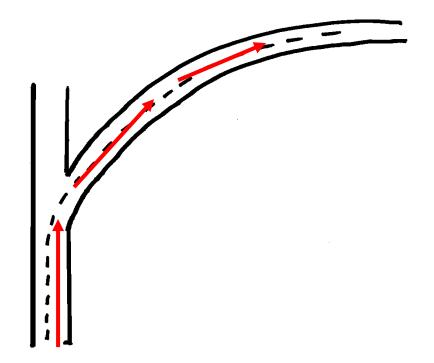
- 1. Follow the Lined Road ---- <u>if instructed!!</u>
- 2. Straight as Possible



## **FOLLOW THE CENTER LINE**

- Must be instructed!!!
- Else you go straight unless you are instructed at an intersection to do otherwise.

#### Follow the Center line



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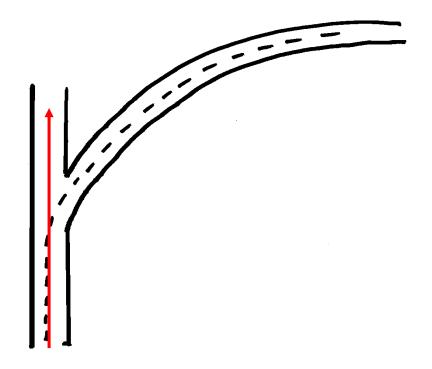
## Straight as Possible

- The Rule you follow most often. If you come to an intersection and you can not complete an instruction, you go straight as possible.
- Sometimes it's not always that easy to see!

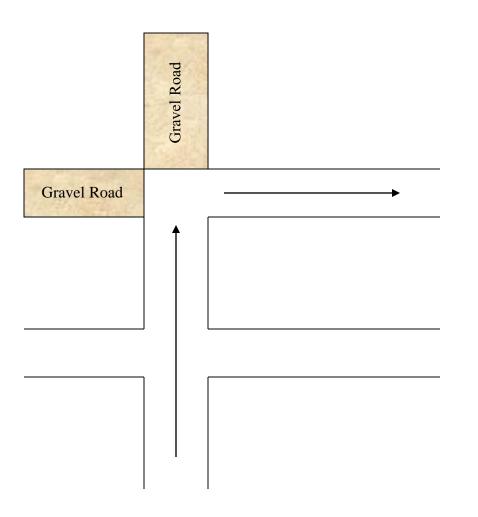
Important!
------------

1	Ev	very time you have a chance to
	chan	ge directions, you have to apply
	a	n a rule. The lowest priority is
		Straight as possible.
]		
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J		
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It also doesn't mean following the road you are on!



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Straight as Possible
Does not necessarily
mean going straight
ahead!

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### Types of Instructions

- Observational.
- Change Direction.
- Change Speed.
- Do Something For a Period of Time or Distance.
- Also, combinations of any of the above.
- And, Or, After & Until



#### Observational

- Observation is Execution
- Can be a Sign, Landmark or Road
- Signs are always in Quote Marks
- Landmarks are always Identified by a sign

### Observational Examples

- 24. SMITH
- 25. "Blackhawk"
- 26. "Forest" (Sign Reading in Part)
- 27. "Bridge"

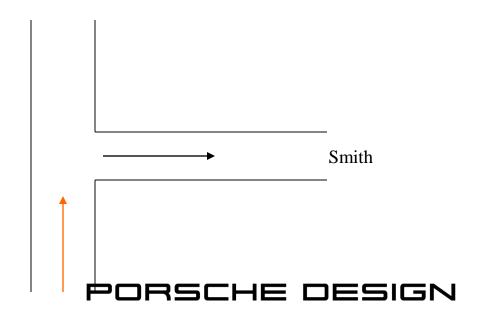


# Change Direction

- Causes you to change direction from the Main Road Rules.
- Overrides Main Road Rules

## Change Direction Examples

- 34. Right 1st Opp.
- 35. Right.
- 36. Turn on SMITH.



# Change Speed

- CAST = Change Average Speed To
- Establishes the Average Speed to be maintained over the section of the rally.
- It does not take in to account slowing down for turns, stop signs, traffic, etc.
- Is always set below or at the posted speed limits.
- CASTs are shown in MPH [KPH].



# Change Speed Examples

- 32. CAST 24
- 33. Decrease CAST by 5
- 34. CAST 22 at SMITH

# Do Something For a Period of Time or Distance.

- Has you do something for a given period of time or distance.
- Important! Must complete Instruction before moving on to next instruction.

# Do Something For a Period of Time or Distance. Example

- 8. Pause 1.0 Minutes at Stop.
- 9. Watch for DEER for next 1.5 miles.
- 10. Increase CAST by 5 for next 2 miles.
- 11. Decrease CAST by 100% for 0.75 Minutes and then Increase CAST by 100% for 1.25 Minutes then CAST 45.

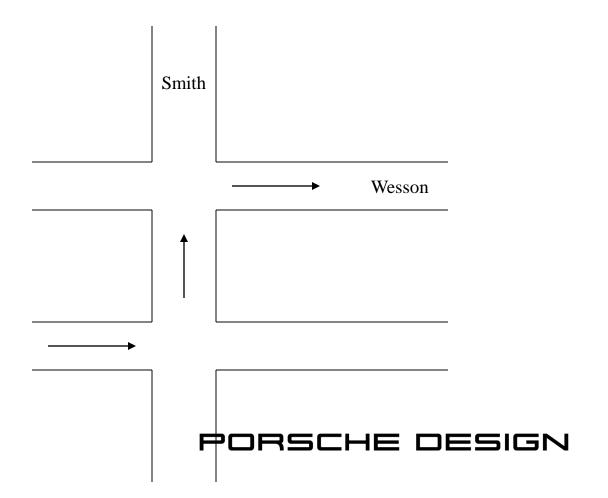
#### Combination Instructions

- And Do both parts working left to right.
- Or Do only which ever side you can execute first. Remember ! An or asks you to do one of two separate instructions.
- After Do something after completing something else. Multiply afters can be strung together.
- Until Do something until you can do something else.



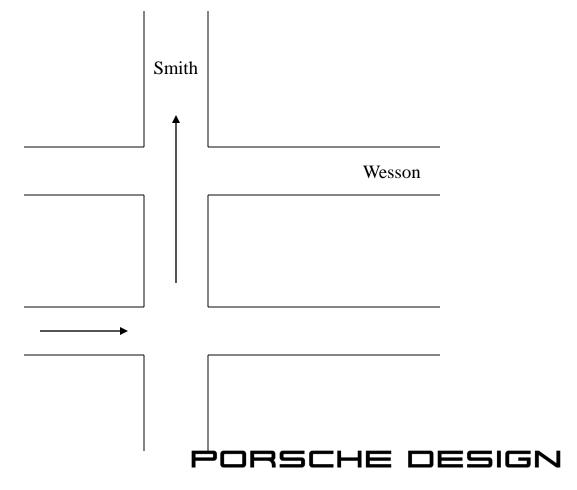
#### "And" Instructions

21. Left on SMITH and Right on WESSON.



#### "And" Instructions

21. Left on SMITH and WESSON.



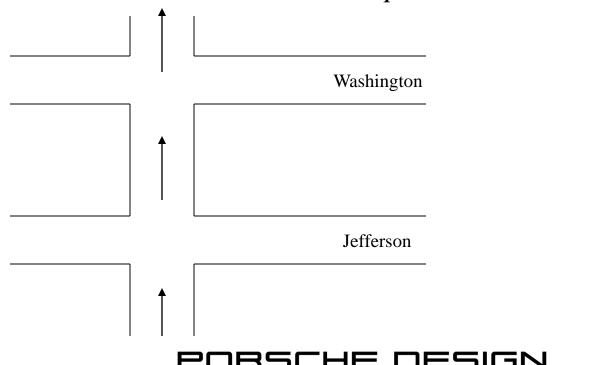
- 23. Right on SMITH
- 24. WESSON
- 23. Right on SMITH or WESSON
- 23. SMITH or Right on WESSON

- 33. Left on WASHINGTON or Right on JEFFERSON
- 33. Left on WASHINGTON or Right on JEFFERSON

You have to chose between two separate instructions! Washington Jefferson

- 33. Left on WASHINGTON or JEFFERSON
- 33. Left on WASHINGTON or JEFFERSON

You have to chose between two separate instructions!



Tip for Navigators with Or Instructions!

Read the second part of the instruction first!

33. Left on WASHINGTON or JEFFERSON

becomes

33. JEFFERSON or Left on WASHINGTON



## **Special Instructions**

It is *very important* to read the Special Instructions on the checkpoint slips. Special Instructions might cancel instructions that have not been completed or might add instructions to be performed.



# 5. Signs and LANDMARKS

# Signs

- Signs are always referenced in Quotes.
- Signs may be quoted in full or in part.
- Spelling must exact.
- Signs may be to the right or to the left or in front of you, but you will never have to turn around to read one.

## Signs

#### YOU CAN NEVER TURN ON A SIGN!

- 29. Left on RIVER or right on "Smith".
  - a. Right on "Adams".
  - b. Pause 1.0 Minutes at "Cemetary"

#### ALWAYS CHECK SPELLING!

# Quoted Sign



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#### LANDMARKS

- Must always be identified by a sign.
- A road can be a landmark.
- Landmarks will be identified in the route instructions with CAPITAL LETTERS.

Some signs are put up to help you get back on course!

PCA

You are Off Course!

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#### Roundabouts

ROUNDABOUT: A roundabout is a type of circular intersection or junction in which road traffic flows almost continuously in one direction around a central island. The fundamental principle of modern roundabouts is that entering drivers yield to traffic within the roundabout without the use of traffic signals. At an uninstructed ROUNDABOUT, the route would be straight as if the central island was not present. ROUNDABOUTS are identified with a sign such as:



#### Roundabouts



The route would be straight as if the central island was not present.

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#### 6. Check Points

# Checkpoints







# 2 Types of Check Points

- Do-It-Yourself Checkpoints
   (DYIC)
- 2. Manned Check Points.

# Do-It-Yourself Checkpoints (DYIC)

- The DIYC location will be clearly marked.
- Do not block the sign.
- Note and Record your Time In on the correct DIYC Control slip.
- Your Out Time is exactly 3 minutes after your in time.
- Turn your original DIYC slip at next manned check point.



# DIYC Control Slip

TIME IN	::	Copy to Score Card Box J Car	Car#		
Scoring Team Only	;;	Penalties		DIAC	
	::	_ Rally 2016 J	ay Peak, VT	TIME	
Write your arrival time at the DIYC in the TIME IN space.				OUT	;
Your TIME OUT is exactly 3 minutes later, write in the grey box & on scorecard in Box N.				Next	(hours:min:seconds)
Hand this slip in at the next manned checkpoint & place NCR copy in your envelope.				Leg	(3 minutes after TIME IN)

# What Happens at the Manned Checkpoint

- Enter the checkpoint at the CAST.
- You will be clocked as you past the Checkpoint
- Drive past the Checkpoint workers, slow down and pull safely over to the side of the road.
- DO NOT STOP BESIDE THE CHECKPOINT!
- Do not block any other cars entering or leaving the checkpoint.
- The checkpoint workers assign you an out time.
- They will note whether you entered the checkpoint the
- They will assign Penalty Points for creeping, stopping or

correct way.

unsafe behavior.

### What to Do at a Checkpoint

- STAY in your vehicle. We will bring you a checkpoint slip.
- TURN IN TIME DELAYS AND DIYC SLIPS BEFORE RECEIVING YOUR CHECK POINT SLIP.
- Read your checkpoint slip.

### What not to do at a Checkpoint

- Do not talk to the Checkpoint workers about the rally. It can get very busy at a checkpoint; please do not distract them. They do not know about the course.
- Do not park in an area that might block their view of the road.

## **Checkpoint Slips**

- The Checkpoint slip contains very important information!
- Your Car Number Make sure it's your sheet
- The Checkpoint Number (Some times it's not always the one you think it is.)
- Your In Time, Your Out Time, Official Leg Time and Official Mileage
- It notes what Route instruction you should be working on and the CAST for the start of the next leg.
- Where the out marker is located.
- It contains a critique of the leg.

# 7. Time Delays

## Time Delays

- Delay Allowances are used to promote safety. You should never have to speed to make up time.
   Delay Allowances can be requested for any reason.
- Must be requested in whole Minutes.
- The original must be presented prior to receiving check point control slips.
- Are non-refundable!!

# Time Delay Request

Time Delay Request:	Amount of Time Requested:	:00 Minutes								
On Leg #:	(Requests should be made in whole minutes)									
Car Number:	Received at Control#:									
	2016 Parade Jay Peak, VT									

2 slips are supplied.

Any piece of paper can be used as long as all the needed information is supplied.



# 8. Traps

# Traps

- How the Rallymaster has FUN.
- Deviate from the Rally Course or Rally Time.
- Not meant to get any one lost.
- Will always try to Loop you back on course.
- Most traps you are not even aware of until you have read the critique.

# Different Type of Traps

- Navigational
- Timing
- Confidence
- Paperwork

The best way to learn the various traps is falling for them and then learning from them!

# 9. Scoring

# Scoring

- Score cards must be turned in within an hour of finishing the rally.
- Score cards will be turned in at the Hospitality Center.
- Helpers will be there to help you complete your calculations.
- Turn in your scorecard, time delays requests and DYIC control slips in your scoring envelope.
- Make sure a contact number is put on the envelope.

# Scoring

#### PORSCHE PARADE 2018 TSD RALLY

Car No: Class:					_ Driver	:														
2			Leg '	1 (DIYC)		Le	eg 2		Leg 3	(DIYC)		L	eg 4		Leg 5	(DIYC)		L	eg 6	
Line 1	TIME IN (Finish Leg)	Α	:	:	D	:	:	G	:	:	J	:	:	М	:	:	P	:	:	
Line 2	TIME OUT (Start Leg)	В	i	:	E	1	:	н	i	1	К	•	:	N	i	:	Q	1	:	
Line 3	ELAPSED TIME (Line 1 minus Line 2)		:	•		:	٠		:	:		:	:		:	:		:	:	
Line 4	OFFICIAL TIME (from critique slip)	С	:		F	:		1	:	:	L	:	:	О	:	:	R	:	:	
Line 5	DIFFERENCE (see * below)		•			:	:		:	;		:	;		:	:		:	:	
Line 6	TIME DELAY ALLOWANCE (if any)		:	: 00		:	: 00		:	: 00		:	: 00		ŧ	: 00		:	: 00	Total Points (Sum of Row 7)
Line 7	POINTS (see ** below)																			

<sup>\*</sup> Any protests regarding the TSD rally must be filed at that time/location with the Protest Committee.



<sup>\*</sup> Subtract the smaller of line 3 or line 4 from the larger.

<sup>\*\*</sup> Points is the number of seconds difference less any time delay. Maximum Points is 300 (5 min = 300 seconds).

<sup>\*</sup> All of your checkpoint Timing Slips, DYIC Slips & Delay Slips are to be placed in your scoring envelope.

<sup>\*</sup> Fill out your Score Card and hand in both the Score Card & Scoring Envelope to Rally Scoring within 60 minutes of your Time In at the last control. A copy of your Score Card will be given to you at Rally Scoring.

# 10. A more detailed look in to rallying!

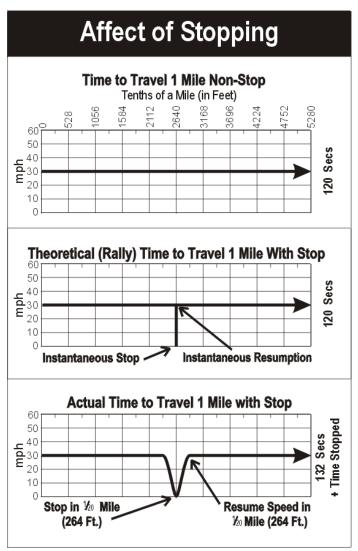
## **Average Speed**

Route instructions include assigned average speeds (aka CASTs).

Many things can reduce average speed, typically:

- Slowing for a curve, bad pavement, or traffic
- Stopping for traffic lights, stop signs, or traffic

Driving at the CAST but failing to compensate for slow-downs will cause the rally car to be late.

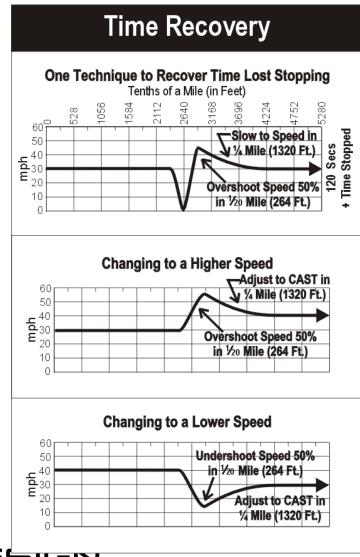




## **Speed Compensation**

At 30 mph, it takes roughly 15 seconds to gently stop, look both ways, and gently resume speed. Unless the instructions allow a pause to compensate for stops, the rally driver will need to make up for this lost time.

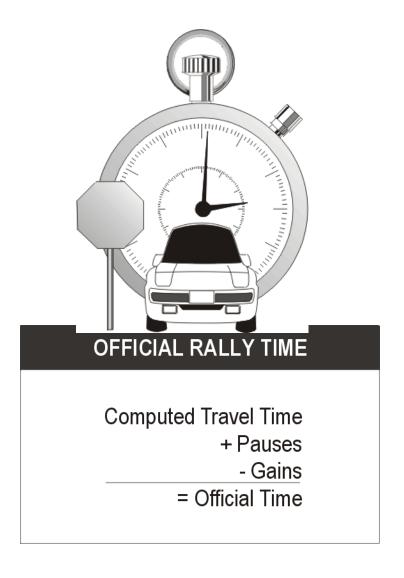
When changing to a higher CAST, overshoot the CAST briefly then back off to the correct speed. When changing to a lower CAST, briefly slow too much then increase to the correct speed.



## **Pauses**

Sometimes the rallymaster builds in compensations for predictable delays. For instance a 15-second (.25 minute) pause is about the right amount of time for dealing with a STOP sign. You'll use about 15 seconds just stopping, looking both ways, and resuming speed.

Remember this: If the instructions call for a 15-second pause at STOPs, don't wait the full 15 seconds between stopping and starting. You'll be late.



## **Division of Labor**

#### **DRIVER TASKS**

- Drive safely.
- 2. Drive at the assigned speed and try to stay on time.
- 3. Look for signs and landmarks.
- 4. Assist interpretation of instructions.

"RIGHT" IS A TURN.

- 5. Supply odometer readings as necessary.
- Verify/echo what you hear Navigator say.

#### **NAVIGATOR TASKS**

- Read aloud and verbally distinguish between signs and landmarks.
- 2. Interpret instructions as needed.
- 3. Help look for signs and landmarks.
- Handle paperwork and check off completed instructions.
- Silently read ahead at least one instruction in case the next action point comes up quickly
- When things are happening slowly, remind driver what CAST to be driving and what to look for.

#### **DRIVER OR NAVIGATOR:**

"CORRECT" IS AFFIRMATION.

1. Handle timepiece

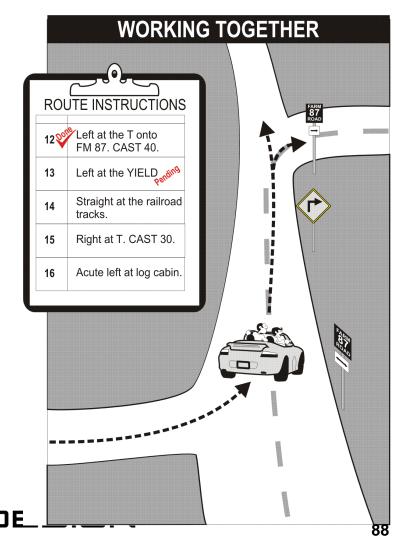
2. Calibrate mileages and speeds

## **Successful Rally Team**

A successful rally team reads and follows instructions carefully, is very observant, and keeps a sense of perspective.

Remember that you are playing a game on public roads. Be careful what you risk in pursuit of a trophy:

- Stay safe
- Be nice to your partner
- Relax and have fun!



## **Check Your Head!**

#### **Comprehend This:**

- 1. Together, the various types of instructions tell you exactly what to do at every intersection.
- 2. Every leg is a new beginning.
- 3. On-time doesn't matter if you are off-course.

#### **Keep Your Priorities Straight:**

- 1. Stay safe
- 2. Be nice to your partner
- 3. Relax and have fun Rally is a Game!

# It's Time to Rally!

Have FUN!!