

NNJR “Trackside Classroom”

Lightning 1, April 23-24, 2022



Disclaimer

The techniques shown here have been compiled from experienced sources believed to be reliable and to represent the best current opinions on driving on track. But they are advisory only. Driving at speed at Lightning, or any other track, requires skill, judgment and experience. These techniques assume the reader has high performance driving knowledge and applies them as applicable to their level of driving experience.

High-performance driving can be very dangerous, carries inherent risks and may result in injury or death. NNJR and PCA make no warranty, guarantee or representations as to the absolute correctness or sufficiency of any representation contained herein. Nor can it be assumed that all acceptable safety measures are contained herein or that other or additional measures may not be required under particular or exceptional conditions or circumstances.

NNJR How to Go Faster...Safely



1. Consistent Baseline
2. Change (improve) one thing
 - Incremental, not dramatic
3. Practice until change becomes baseline
 - Always include Go/No Go
4. Don't forget Situational Awareness
5. Repeat



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- Best Execution of Fundamental Skills
- Consistency in speed, car placement, control input speed and amplitude
- Practice deliberately, add speed incrementally
- Balance risk versus reward
- Overtaking car ALWAYS responsible for safe pass

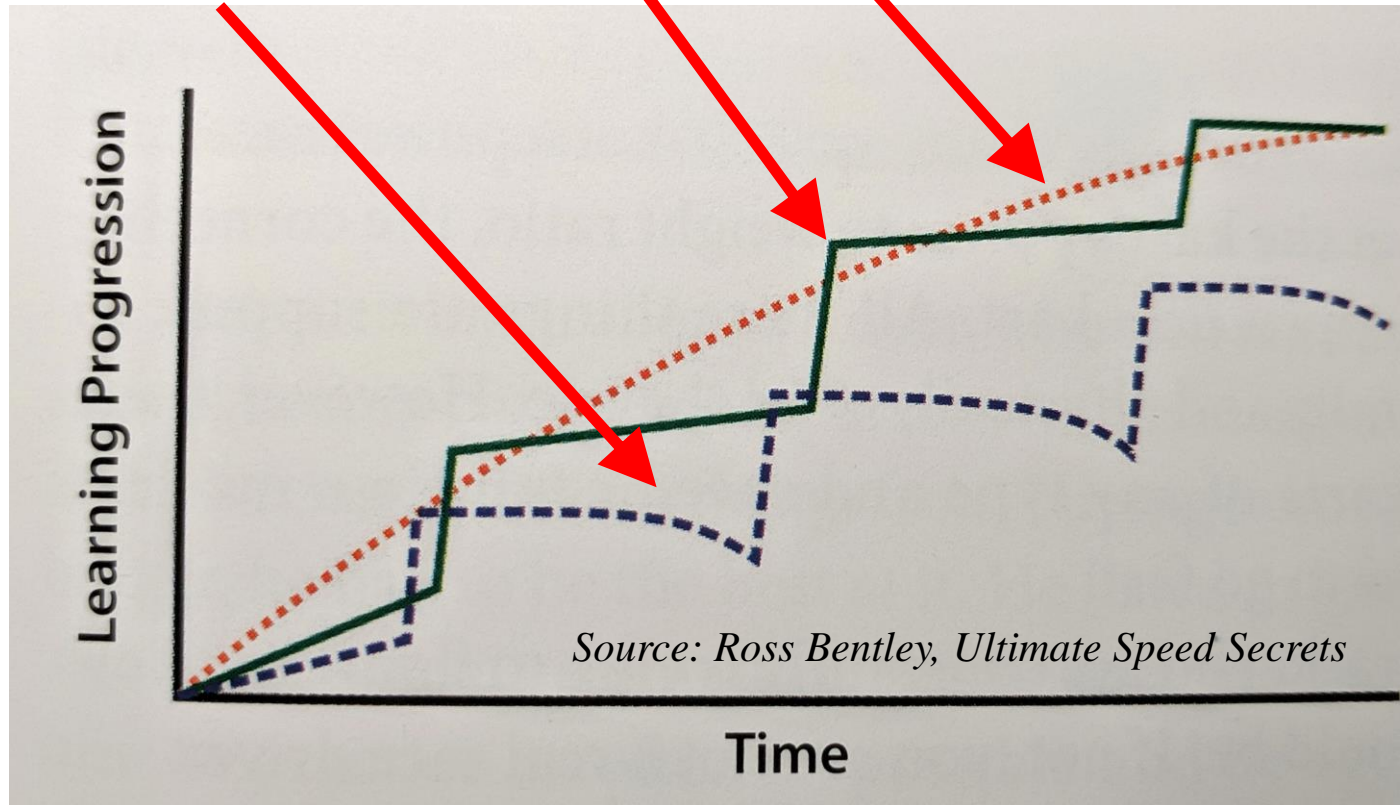


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NNJR How Do We Improve?



- Theoretical “Learning Curve”
- Typical Learning Pattern
- Avoid “Plateau”



- Minimal variance in Reference Points
- Same “sight picture” lap after lap for each corner
- Car feels and behaves the same

- How to Measure?
 - Lap time?
 - Segment times
 - Video
 - Index each corner



NNJR What Do I Change?



Low Hanging Fruit

- Sooner to Wide Open Throttle

Hardest Part

- Corner Entry Speed

Priority

1. Line
2. Corner Exit
3. Corner Entry
4. Late Braking



- Turn 7 Exit
 - How soon do I get to the gas?
 - How soon is my foot on the floor?
 - Risk factor? Low to Medium
- Turn 1 Exit
 - How soon do I get to the gas?
 - How soon is my foot on the floor?
 - Risk factor? High

- Turn 7 Entry
 - What is my speed at Turn In?
 - Can I increase it (slightly) without affecting TAP and WOT?
 - Risk factor? Medium
- Turn 1 Entry
 - What is my speed at Turn In? At brake release?
 - Can I increase it (slightly) without affecting TAP and WOT?
 - Risk factor? High

NNJR Importance of Consistency



- The NUMBER ONE best execution of fundamental skills is driving consistency during on-track sessions
- Lateral car position, braking force, entry speed
- Work on corner exit before corner entry
- Develop a “go/no-go” system
- IF the car is out of position or not on the correct trajectory, “no-go” on the next control input

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- “Go/No-Go” is a simple assessment that every driver should develop to prevent incidents
- Big mistakes are the result of lots of little ones accumulating without recognition and mitigation
- “Go/No-Go” works for car path, vehicle speed, approaching traffic and recovering from driver errors
- Constant evaluation to “go” on the next control input or pass, i.e. “no-go” and recover

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NNJR Situational Awareness



- How far ahead do you look? See?
 - How soon can you see each flag station?
- How wide is your vision?
 - Pull off, run off spots
 - Where is there “room”
- How sensitive are your senses?
 - Oil, antifreeze
- How well do you know yourself?
 - Consistent or inconsistent?
 - Focused or distracted?
 - Bothered by traffic?
 - Drive “within yourself” vs. “red mist”





- Do you have an out?
 - Two cars behind but you only see one?
 - Fast car approaching while you chase your friend?
 - Yellow flag pops out when you just pulled out to pass?
- Common Mistakes
 - Failure to identify or anticipate track situations
 - Lack of traffic awareness
 - Poorly timed passes or passing signals
- Needs to be part of Consistency!



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- Most common opportunities for improvement
- Trying to go too fast in the slow parts
- Inconsistent braking performance
- Throttle on too early, “waiting” to finish the corner
- Sloppy car placement as speed increases



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