# Introduction

DE students often ask, "what does it take to get promoted to the next run group?" The information that follows describes some of the basic expectations for each promotion. But a number of caveats apply:

- First, and most importantly, each driver is different with varying levels of past experience, natural ability, focus on improvement and willingness to learn from instruction. As a result, some drivers "move up" much faster than others. Others move up more slowly than others. This is normal in all sports and is especially critical for DE where safety is of paramount importance.
- Run group promotion is determined primarily by input from your instructors. That
  information is captured in DrivingEvals after each event. At the same time, one
  instructor's input is not enough: we look for consistent feedback. If you feel that your
  driving needs another assessment, please feel free to ask an event's Chief Instructor to
  have another instructor and/or a Chief Instructor ride with you. Promotions from White to
  Black almost always include one or more Chief Instructor rides and feedback.
- Drivers who are impatient to move up may be focused on the wrong thing. Driving on track requires mental focus, car control techniques (including smoothness and consistency), "forward" vision, track awareness (including managing traffic, observing flags) and courtesy. As a result, drivers who concentrate on technique, as opposed to speed, progress faster.
- What follows are general criteria that do not capture all aspects of on track driving. They capture many important points but cannot possibly address every individual situation.

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### Driver Education Run Group Advancement Criteria

# **Driving in the Green Run Group**

The green run group include drivers on the track for the first time and others who have attended one, two or several DE events. The emphasis is on navigating the track safely and on learning the basics of high performance track driving.

Listed here are some, but by no means all, of the skills you can expect to learn in the Green run group.

- Why a "learning mindset" and focus on technique is required vs. a "go-fast" mindset.
- How to be properly seated in your car for maximum control and comfort.
- How to adjust side mirrors to eliminate blind spots.
- Which electronic driving aids to turn on (e.g. PSM) and off (e.g. autonomous braking, lane keeping)
- Basic track reference points: e.g. Turn In, Apex, Track Out; and driving terms: e.g. release (brakes), unwind (steering).
- Track procedures including staging areas, pits and pit out, blend lines (to safely enter and exit the track).
- The proper signal to tell a car behind to pass; also to enter the pits.
- Which sections of the track can be used for passing ("passing zones") and which side to pass on.
- Where flag stations are on the track and when to look at them.
- Which flags are most important and what to do in response.
- Where to look when driving on track.
- How to drive the proper line and why line consistency is important.
- When to brake for each corner and when to release the brakes.
- Why smooth use of steering, gas and brakes is important on track.

# **Advancement from Green to Yellow Run Group**

Drivers new to DE can expect to spend several events in the Green Run group with, or under, observation by an instructor. However, at some events Green and Yellow are combined; at other events, the mix of students may cause an otherwise Green group student to temporarily be moved to Yellow.

To be considered for permanent advancement to the Yellow Run Group, the student must demonstrate that they:

- Exhibit a positive and safe attitude consistent with NNJR's DE philosophy including a learning mindset rather than a "go fast" mindset
- Are familiar with and follow track and NNJR rules described in the Track Pack and drivers' meeting, and ensure their guests follow the rules
- Display full knowledge of NNJR safety procedures, flags, and driving terminology
  - Enter the track using event rules for paddock, staging, pit-out, blend line, etc.
  - Properly exit the track (e.g., pit-in signal, pit-in, traffic flow from pit lane to paddock)
  - Obey traffic rules, speed limits, and parking restrictions in the paddock and pits
  - Know all corner numbers/names and are familiar with the track map
- Are seated properly and adjust side mirrors to eliminate blind spots
- Leave any stability management system ON (e.g. PSM)
- Disable electronic driver aids that should NOT be used on the track (e.g., lane-keep assist, autonomous emergency braking)
- Look "through the corners" and well down track
- Drive the line as taught with reasonable consistency
- Have an awareness of flag stations and flag meanings, see most flags displayed
- Have appropriate reaction to "on track" situations
- Keep a safe distance from other cars
- Handle all aspects of passing and being passed in a safe, courteous manner
  - Anticipate when a pass might occur and coordinate it safely
  - Describe designated passing zones and protocols (e.g. mandatory side)
  - Signal correctly to allow faster cars to pass on right or left
  - Execute safe passes in designated zones when giving or receiving a point-by
- Provide smooth inputs for car control (steering, braking, and shifting)
- Have reasonably consistent braking points and turn-in speeds
- · Complete downshifts without significant upset to the car
- Drive at an appropriate speed for the run group
- Can identify major mistakes and self-correct

### **Advancement from Yellow to Blue Run Group**

Drivers in Yellow are expected to refine their driving skills, increase their confidence and judgment, and learn the next level of techniques (such as heel and toe, etc.) before being promoted to Blue. Normally, a Yellow student should expect to spend a significant number of events in the Yellow Run group with, or under, observation by an instructor.

To be considered for the Blue Run Group, the driver must demonstrate that they:

- Exhibit through their actions a complete understanding of track safety
- Have a planned goal(s) for each event and on track session
- Have lap recall able to remember/discuss specific areas for improvement immediately after a run group session
  - Describe their on-track experiences in terms of location on the track (e.g., turn number, phase of the turn) when talking with their instructor
  - Relate skills discussed in the classroom to their on-track experiences
- Use ocular vision to properly and safely negotiate corners
  - Spend most of their time looking well ahead of the car, along the desired line
  - Keep their visual focus well ahead of any cars that are close in front, while maintaining awareness of them
  - Use glances, peripheral vision, and mirrors to maintain awareness of other cars and situations on or near the track
- Drive each lap confidently and consistently on-line
  - Drive a good line, smoothly connecting all reference points, with minimal lapto-lap variations of turn-in, apex and track-out points
  - Use all the track at turn-in, apex, and track-out, except at turns where their instructor has indicated otherwise
- Deliberately deviate from the standard line when necessary (late pass, rain line, etc.)
- Exhibit patience, courtesy and maturity when following slower vehicles
- Maintain awareness of traffic behind and around their vehicle, using regular mirror scans and peripheral vision
  - Demonstrate good judgment with regard to waving off an offered point-by
- Maintain pace and composure while giving point-bys in designated passing zones
- Show good judgment when encountering unexpected events (debris, incidents, etc.)
- Notice ALL flags displayed on track during a session, especially when driving in traffic, and respond properly to each flag
  - Can state the meaning of all flags used at the event and describe what they should do in response to each flag
- Exhibit smoothness in steering, acceleration, braking and (especially) brake release
- Understand the benefits of heel and toe and are able to make smooth downshifts
- At the braking point, squeeze the brakes on quickly and smoothly
- Use threshold, medium, or brush braking at different corners, as appropriate
- In corners, are consistently one of the faster, yet fully under-control, drivers in the yellow run group
- Understand basic problems such as over/understeer, and how to correct them
  - Recognize when they are going to run out of pavement at corner exit, and put two wheels off or drive straight off the track in a safe, controlled manner
  - Are capable of recognizing how close the car is to its cornering potential
- Know when PSM and/or other electronic systems are being activated by their driving
- Recognize when they are fatigued, come off track immediately, and call it a day if necessary



### Advancement from Blue to White Run Group

Drivers in Blue are expected to be capable of driving comfortably at a White run group pace. The primary purpose of the Blue run group is to help a driver get accustomed to the White run group with the assistance of their instructor. The instructor is not expecting to focus on the basics, but rather fine-tuning advice. Under normal circumstances, a Blue student should expect to spend only a small number of events in the Blue Run group with, or under, observation by an instructor.

To be considered for advancement to the White Run Group, the driver must demonstrate that they:

- Have a driving record and attitude consistent with NNJR's DE Philosophy
- Keep notes about which skills they are executing well, which they are working on, and how the latter skills are changing through focused practice
- •
- Look "through" all turns, including turns with limited sight lines, mentally visualizing the path their car will take
- Find and use their own visual reference points, both on and off the track
- Notice changes in track surface conditions due to vehicle fluids, weather, debris, wildlife, etc. and respond appropriately
- Scan run-off areas so they can be included in their avoidance/action plans
- Drive the line consistently, using the full track
  - Recognize small driving errors and make corrections in real time
  - Mentally note errors while on track, without dwelling on them or being distracted by them
- Are no longer dependent on "turn in," "apex," or "track out" cones
- See ALL flags displayed on track during a session, especially when driving in traffic
  - Check each flag station at the earliest place on track where the station is visible
  - Detect situations far ahead on the track (incidents, flags, traffic) when track layout makes that possible
- Detect situations far ahead on the track (incidents, flags, traffic) when track layout makes that possible
- Automatically use proper hand signals and sound judgment during all passing situations, and demonstrate courtesy to other drivers
- Calmly deal with speed differentials within their run group
  - Set up passing scenarios ahead of time for safe and effective presentation and execution
- Brake and accelerate very smoothly, including smooth brake release
  - Release brakes gradually, with some release beyond turn-in point (trail braking) as needed to help the car turn and utilize more of the car's grip
- Have mastered "heel and toe"
  - Downshift using heel-and-toe technique, with only small variations in braking pressure and no sudden weight shift when the clutch is released
- Demonstrate competent car control and recovery skills when needed
  - Recognize when they are unsure of a solution to a handling or performance issue and seek guidance from reliable sources
- Do not rely on PSM or other electronic aids except in emergency situations
- Recognize when they are becoming overly focused on speed or competing with other cars (i.e., experiencing "red mist") and reorient their driving toward learning and safety

# Advancement from White to Black Run Group

#### From the NNJR Chief Instructors:

"In our advanced run groups we expect absolutely top tier driving (including proper line, driving knowledge, courtesy, common sense, good attitude, situational awareness, appropriate pace for your vehicle) in BOTH upper run groups (Black and Red). If a driver doesn't have these prerequisites, they shouldn't be in either black or red run groups."

Please note that this statement does *not* include lap times or any other indication of how fast a driver is. Technique, safety, courtesy and attitude are what matter.

Drivers in the Black Run Group are expected to be expert in all the driving skills taught by NNJR and be capable of driving safely in an "expanded passing" group. A Black run group driver should be indistinguishable from the average driver in the Red Run Group. In fact, some Black run group drivers are Instructors who choose to drive in Black to balance run group car counts or because they feel more comfortable with Black run group speeds ("fast") vs. Red run group speeds ("faster"). White run group drivers seeking advancement to Black need to recognize that while they may be driving almost as fast as drivers in the Black run group, there is another driving dimension to master, and that is judgment, which can only be obtained through "seat time". Therefore under normal circumstances, drivers should expect to drive in the White group for at least one to two seasons and often more; especially if the driver does a limited number of events each season.

To be considered for advancement to the Black Run Group, drivers must demonstrate that they:

- Are comfortable and capable of driving in an "expanded passing" session. See "Expanded Passing Courtesy and Expectations" on the NNJR website.
- Do not exhibit aggressive driving habits: see "Aggressive Driving" on the NNJR website.
- Always drive in a non-aggressive manner and are respectful and courteous to other drivers, including
  - Give prompt pass signals with enough lead time that the overtaking car does not have to slow to their speed
  - Do not drive on the bumper of slower cars and avoid other aggressive behaviors
- Keep notes about which skills they are executing well, which they are working on, and how the latter skills are changing through focused practice
  - Accurately identify the strengths and weaknesses in their own driving performance, and prioritize areas on which to work that will produce the greatest improvements in driving performance
- Use a broad set of tools to measure and improve their performance, including instructors, video and data acquisition systems, coaches, etc.
- Perform reconnaissance of a track to build knowledge of line-related track features, runoff areas, access roads, barriers, and corner-worker stations, recording the results on a track map
- Demonstrate expert vision skills by looking well ahead, continuously scanning downtrack for emerging information
  - Maintain appropriate focus on reference points, scanning of mirrors, and awareness of flags and safety situations when driving close to other cars
- Drive the line flawlessly and effortlessly without placing themselves or others at risk
  - Alter their line when and where necessary
  - Experiment with small adjustments in their line (e.g., turning slightly earlier or slightly later) and observe the effect on corner and/or section exit speed

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- Identify high-risk areas of the track (e.g., bumps, dips, surface material changes) and adjust driving style to manage the overall risks
- Adjust speed, braking, corner entry, and exit in response to weather or surface changes
   Can demonstrate the "rain line" and understand the concepts of that line
- Can handle other cars being very close behind and in front, without losing focus
  - Anticipate passing situations and accomplish the pass with minimal speed adjustments and minimal time driving side by side
- Infer the situation on track from any flag or sequence of flags, and be prepared to execute a safe response
- Provide very smooth inputs at all speeds
  - Adjust the timing and rate of release of brake pedal pressure in small increments to fine-tune entry speed and car rotation
  - Make planned steering inputs more rapidly or more gradually (faster or slower hands) to improve grip and increase speed potential
  - Downshift using heel-and-toe, with negligible brake pressure variation and no perceptible weight shift when the clutch is released
  - Use small changes in the throttle to adjust the balance and direction of the car in a turn (i.e., throttle steer)
- Understand and can carry considerable momentum through corners
- Drive at a pace appropriate for the run group and are approaching the limits of their car

# **Criteria for NNJR Instructors**

The NNJR Chief Instructors continuously observe and identify advanced drivers with the potential to become DE instructors based upon their behavior on and off the track, their ability to communicate, and their driving skills.

Candidates are observed prior to being invited to the "Instructor Watch List" as the first step toward becoming an instructor. Most drivers spend at least one to two seasons in the Black (or perhaps Red) run group before being invited to the watch list and often more.

Examples of the characteristics and abilities we are looking for in potential instructors include:

#### Personality and Character traits

- A "student first" attitude
- · Willingness to continuously improve their own driving and instructing skills
- Excellent communications and interpersonal skills
- Treatment of all drivers as peers and with respect
- Willingness to commit to a reasonable number of NNJR DE events each season (at least four)
- Recognition that people learn in different ways
- A mature attitude within the DE environment maintains composure on and off track

#### Instructor Driving Skills

- Demonstrates continuous and total awareness of driving environment
- Drives the line effortlessly and consistently with perfect turn-in, apex and track-out points lap after lap
- Demonstrates ability to communicate while driving at Black and/or Red Run Group speed
- Knows the limitations of their car, consistently drives within that limit
- · Anticipates and recognizes potential problems with other drivers and cars
- Reacts instantly to abnormal/undesirable car movements