



# Meadows Race Team Passenger Van Driver Training Manual

## **Qualifications for all drivers**

- I. Must be over 22 years of age
- 2. Must have a valid U.S. driver's license
- 3. Must have minimum five years driving experience
- 4. Willingness to drive
- 5. Must complete all required trainings
- 6. Must be approved by the Insurance Company prior to driving

If you meet these initial qualifications then we can proceed with the training.

### **Introduction**

Vehicle operation is the most dangerous activity MRT Coaches will



### participate in.

Unless the driver perceives the inherent risk, it is difficult to motivate the necessary changes in driving habits.

According to the American Association of State Highway and Transportation Officials: One in every 90 kids born today will die violently in a motor vehicle crash and 70 of every 100 will be injured in a highway crash at some point in their lives. Recent national safety warnings have been issued regarding the safety concerns surrounding 15 passenger vans. Driving therefore becomes even more hazardous when instructors operate these top heavy, large vehicles. It is important to know that research available on 10-15 passenger vans shows that when a crash occurs the driver fails to recognize a problem or does not have the necessary time or space to effectively solve the problem. Speeding is the primary reducer of available time and thus the major cause for crashes. Because MRT is committed to the highest levels of safety it is important to note we understand that failure of the driver to take the necessary actions to prevent a crash is not an "accident". Crashes happen because of driver error. MRT is committed to prevent crashes occurring due to improper vehicle operation, such as aggressive driving, speeding and failure to recognize traffic problems.

### What is a passenger van?

That is the first question we must ask to initiate our training. A passenger van is obviously a vehicle that transports many passengers but we need a more in-depth description.

- Driving a passenger van is a challenging and dangerous task for anyone to take on.
- It is more difficult to operate because of the high center of gravity, the size of the vehicle and limited visibility.
- Only experienced drivers should be able to operate passenger vans.
- The van requires your utmost attention when in operation and recognition of your duties as a driver to transport individuals safely from point A to B.

This manual will give you valuable information and take you through numerous scenarios to help you become a safe and reliable van driver.

### **Purpose**

With a more stringent training process for certifying driver, it is the programs hope that we can assist all drivers in becoming more proficient in the perception of traffic situations, implementation of low risk habits and the development of risk prevention driving techniques thereby eliminating accidents, creating a safe environment for our members, guests and staff and increase our risk management of the passenger van.

### Van Emergency Procedures



The following procedures will be followed in the event of a van emergency.

The MRT Program Director or Board President will handle all emergencies related to the vans.

Program Director Cell – 541-490-9104

Board President Cell – 971-506-2337

### Routine tire or dead battery emergencies:

All MRT van drivers will be trained to handle two types of routine problems.

If the van is disabled due to a problem with a tire or a problem with the battery the driver is instructed to call a local towing company. Our insurance covers towing (AAA does not insure companies only individuals - if you have AAA personally you can use that service). Each van has an emergency information card located in the center console or in the storage container. If you need to be towed please contact a towing company or call the insurance company so they can reference an approved provider. Then the driver will call the Program Director on their cell. The driver will simply notify the Program Director that they are experiencing a routine van problem, give them their location and let them know that roadside assistance has been contacted and the estimated return time.

### Stranded vehicle or group:

If the van emergency relates to a stranded group due to an injured or ill driver, a more serious mechanical problem with the van, poor or dangerous weather conditions, etc. the following procedure will be followed:

The van driver or someone else on the trip will call the Program Director or Board President if the PD cannot be reached.

The following are possible solutions to a stranded group

### **Emergency van drivers:**

MRT insurance allows for additional drivers to temporarily drive the van in an emergency situation. Regular drivers need to be cleared and approved by our insurance carrier.

### Private transportation:



In the event that a rental van or emergency driver is unavailable the driver can call a private cab company and have them retrieve the stranded group.

We can also have athletes arrange rides with other MRT families. Please seek approval from parents prior to this as much as reasonably possible.

In both cases please be sure to have the exact location of the group. Also, be sure the group leaves the van locked and as secure as possible.

### Van accident:

In the event of an accident involving the MRT vans where there are no injuries and the van can be driven, the van drivers are instructed to first call the Program Director that there has been an accident. Drivers are instructed to then fill out the van accident sheet located in the van accident envelope located in the center console of each van. Drivers are instructed to take photos of all property damaged as well as the surrounding area. As soon as the driver returns they must get the completed accident form and photos to the Program Director.

In the event of a more serious accident where someone may be injured, the van driver is instructed to call 911 first. After a call to 911 has been placed, a call must be placed to the Program Director. As in the case with a non-injury accident, the driver, (or passenger if the driver is disabled), should fill out the van accident form.

MRT drivers has three major responsibilities:

- I. Assessing the safety of all members of the group including all details regarding anyone transported to a hospital and providing some means of transportation to those who are able to return home.
- 2. Notifying the Program Director of a serious accident immediately.
- 3. Follow up with detailed reports and file an accident report with the proper authorities if needed. Some police departments will only file reports that meet a financial damage threshold. Please ask them and they will guide you.

### **CHECKING OUT AND RETURNING VANS**

- 1. Perform vehicle safety checks and meet groups in vans.
- 2. Check your gas level; if below <sup>3</sup>/<sub>4</sub> please add fuel.
- 3. Secure van by checking that all doors and windows are closed and locked.
- 4. Clean the van for the next user



### VAN CHARACTERISTICS

Due to the high center of gravity (COG) the passenger vans have a higher propensity for rollover accidents. This is especially true for vans with roof racks and those with loaded roof racks. As you might realize, driving a van is different from your normal automobile. There are several techniques to help you eliminate the possibility of a rollover accident. The more people in the vehicle the higher the center of gravity (COG). Adding occupants increases the risk of rollover by 9-12 percent, per occupant. The odds of rollover for a passenger van increase more than 400 percent when fully loaded compared with a driver traveling alone.

### 1. Keeping a slower rate of speed when operating the vehicle.

- When entering curves, driving fast can shift the vehicle's COG significantly. SLOW DOWN and drive the appropriate speed. Look for signs. If the sign states 25 mph on the exit, then follow the rules of the road.
- Posted speed limits are the determined safest speed in an average vehicle with good road conditions. Vans are not average vehicles so exceeding the speed limit is not permitted due to the immediate risk.

### 2. Be Careful Driving down from Night Training

Roads that were dry usually become iced over after dark
Wet roads can become treacherous requiring slow speeds and caution
Van do not react as well going down hill because the momentum is harder to control

### 3. Avoid sharp jolting turns.

• Sharp turns create an out of balance vehicle. Sharp turns plus high speeds equal rollover accidents. Whether you're changing lanes or slightly adjusting you must always turn easy and slowly. If you run off the side of the road, simply decrease acceleration and slowly turn the vehicle back on the roadway.

### 4. Loading and weight distribution.

• The loading of the van behind the rear wheels (whether with gear or people) can have a dramatic effect on the steering and maneuvering of the van. A heavy load behind the rear wheels has a tendency to lift the front end and thereby limit the contact of the steering wheels. Always check your passengers prior to driving to ensure they are not all pushed to the rear. This is also a good opportunity to announce: "We are now leaving. Please make sure you are wearing your seatbelts".

### 5. Strategies for last minute turns.

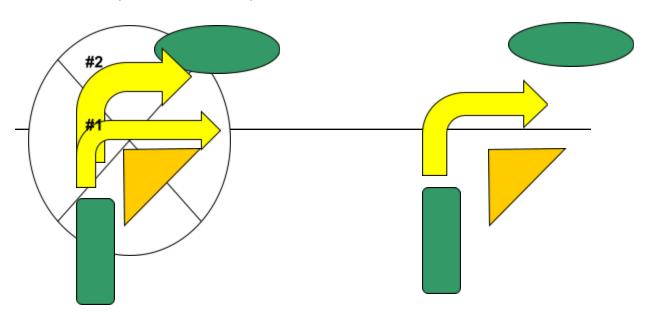
• A last minute turn can greatly increase the chance for an accident. Inertia and shifting loads can contribute to an accident. It is better to miss the turn and go around the



block or take the next exit. You have a greater opportunity to prevent an accident by making safer choices than recover vehicle control from a poor choice.

### **HANDLING CHARACTERISTICS**

1. Passenger vans are longer and wider than your normal automobile. Special care is needed to operate the vans safely.



# Example A Example B

- **A.** This example shows two improper turns.
- #I Shows turning too sharply and impacting the curb or other property to the right side of the vehicle.
- #2 Shows taking the turn too wide possibly impacting any objects to the driver's side of the vehicle.
- **B.** This example shows a proper, wide arching turn, allowing for good clearance on all sides.
- I. With the added length of the vehicle drivers must take a wider arching turn to prevent any collisions with objects.
- 2. The length of the vehicle requires more time to get through the intersection than your normal automobile.



- 3. Vans weigh 9000lbs unloaded. When you add people and equipment you could be driving a vehicle that weighs around 12,000lbs. That is a lot of weight. This weight creates further issues that require our attention.
  - Longer stopping distances. With the added weight we need more time to stop the vehicle. As a general rule six eight seconds stopping distance is advisable.
  - Why six seconds is critical: At 55 miles per hour the vehicle travels 80 feet per second, good reaction time is <sup>3</sup>/<sub>4</sub> 1 <sup>1</sup>/<sub>2</sub> seconds = approx. 60-120ft. The stopping distance recorded for the Ford E-350 12 passenger van is 270 feet of braking distance. Add a half second for reaction, road conditions, brake conditions = 40 feet. You will need a minimum of 310 feet in an empty van with lightning fast reaction time. Add a few occupants and a fraction of a second reacting and it becomes an estimated 400 feet to safely stop the van. 400 feet at 80 feet per second is 5 seconds minimum stopping distance.
  - ABS Brakes. Anti-lock braking system. All vans have ABS brakes which create a more stable breaking system. When using ABS brakes for a sudden stop, keep constant pressure on them, you will feel it kicking back on you. Don't worry, that is normal.
  - Momentum is huge. When going downhill the mass of the vehicle will cause you to pick up speed at a high rate. You may have to "Ride" the brakes to control your momentum down the hill. An alternative method to slow the vehicle is to shift down; special care is needed in shifting down. Gear damage can occur if done incorrectly. Shifting down is recommended in winter conditions.

### PASSENGER SAFE MANEUVERING TIPS

- Be a defensive driver. Be a courteous and safe driver and give other drivers the "right of way".
- Start with your mirrors. They are a critical component that will aid you in seeing
  your surrounding environment. You will find that the rear view mirror is quite
  useless and your side mirrors must be set to the correct level. If you need assistance
  in adjustments or "blind spot" recognition, remember to use passengers to assist
  you.
- Familiarize yourself with the operations of all the van mechanisms (i.e. know where your lights, hazard lights and windshield wiper controls are).



- Know your route and have your co-pilot guide you. Before every trip check your route so you are familiar with it. The less you have to think about and do the more you can concentrate on driving. Plan ahead; never just get in the van and drive.
   Creating an alternative route to your destination is advisable.
- Give a verbal seat belt check. Let everyone know that you require seat belts for their own safety.
- Make an announcement prior to travel that no rough housing, horseplay or other distractions are permissible while the vehicle is in motion.
- Know your weather conditions and prepare for the worst.
- Prevent "Road RunOff". This is when the vehicle veers to one side or the other off the road. This occurs by various means, including inattentive driving, distraction, wind shear, high-speed etc.
- If run off occurs: take your foot off the gas and gradually ease the vehicle back on to the roadway. DO NOT OVERCORRECT OR SLAM ON THE BRAKES.
- Drive the appropriate speed. Speed must be kept at the posted speed limit or below.
- Do not drive while tired or impaired.
- On freeway travel, ruts in the road and wind shear will push your vehicle left and right. Remember that small gradual corrections are needed to keep you vehicle centered in your lane.
- When making lane changes or merging into traffic be aware of several things:
  - Make a clear indication with your signal.
  - Use the merge lane as intended; do not cut in too early.
  - Speed up or slow down to fit into the flow of traffic.
- Always practice **Targeting.** Targeting is looking out as far ahead as possible to
  create a target path. This helps to develop a systematic search process of the
  intended path of travel. Giving the driver time to search and plan driving moves far in
  advance. If you are aware of what is going on three cars ahead of you it will give you
  the opportunity to make driving adjustments before the car directly ahead of you
  has.
- Your ability to continuously perceive what is occurring in traffic situations will allow you to make easy, early correction.



### **Perception**

Whether perceived or not, when a vehicle is in motion there is always danger. Your perception of traffic situations is the most important part of maintaining safety. To avoid a crash, a driver must first perceive the risks. Perceived risks can be anything; a dumpster on the side of the road in a residential area, for instance. This may not seem dangerous since dumpsters are not likely to move but on a narrower roadway with the increased likelihood of pedestrian traffic there is a good chance someone could step out from behind it. If you perceive this danger you can make the necessary adjustments (i.e. slowing down and watching for anything that could enter the roadway). It is not enough to be aware of the posted speed limits, as they do not take into account possible traffic conditions. To maintain your safety and the safety of all passengers it is critical you are vigilant in perceiving potential danger with adequate time to make necessary adjustments.

### **Group Management**

As the driver you are responsible for maintaining a safe driving environment inside the vehicle. If the group is getting too loud or behaving in any way that you feel compromises your ability to maintain safety you are required to stop and take steps to make sure you are as safe as possible.

As the driver you are also responsible for making sure that all participants on a trip make it back from the trip. Do a headcount at the beginning of the trip and prior to returning.

### Parking - BACK IT IN AS MUCH AS POSSIBLE

Yes, you should back the van into parking spaces as much as possible. While usually less than 1% of the total drive time is spent backing it can account for more than 50% of possible vehicle damage. The reason most backing accidents occur is because the driver cannot effectively see to the rear of the vehicle. By backing as soon as you reach a designated parking area you are able to visually inspect it immediately for possible obstructions.

Vans are much longer than a standard vehicle. With the steering coming from the front wheels you will have to back up quite a ways before you are able to input steering direction when pulled in nose first. With the front end at the front of the space you can pull out a small distance and then make turns, giving you much more room to maneuver the van. This will also give you the best line of sight as you maneuver the van. One of the top reported costs to insurance companies is from two car accidents with parked



cars. Due to the increased size of the vans it is important you are comfortable backing into parking spaces and practice it on every trip.

### Three step solution to backing into any space!

Narrow spaces

- 1) Half way up
- 2) Out at 45 degree
- 3) Reverse in a tight curving turn into the space

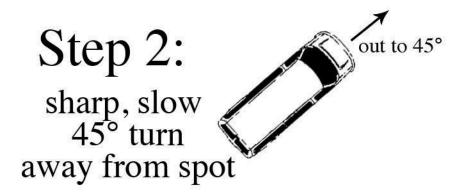
### Wide Spaces

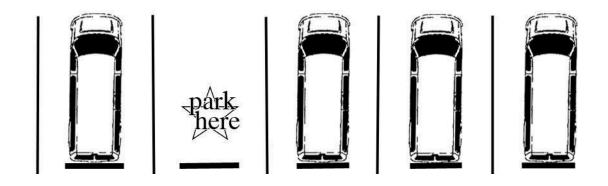
- 3/4 up
- 2) Out at 45 degrees
- 3) Reverse in a tight curving turn into the space.

This will make perfect sense when put into practice.

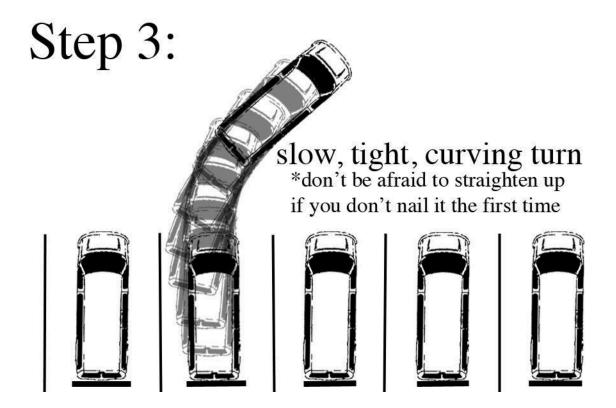
# Step 1: Line B-pillar with parking spot (1/2 for smaller spots) 3/4 for larger spots)











Once you have reviewed this document, please complete the Van Test Here:

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