

Ten Habits

Keep the Monster Caged!



Using the Dynamics of
Zone Control

F r e d e r i k R . M o t t o l a

Ten Habits
Keep the Monster Caged!

Using the Dynamics of
Zone Control

by

Frederik R. Mottola

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P.O. Box 98 • Cheshire, CT 06410

www.NIDB.org

Office 203 272-9391

www.SkidMonster.com

e-mail: info@NIDB.org

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When the key is put into the ignition, the car is like a tamed animal, ready to obey the driver's every command. However, without proper management of vision, motion control, and space, it can quickly turn into a monster. The trick is to know what makes the car turn into a monster, how to prevent it, and how to keep the monster caged.

"Caged" means "with constraints, to hold back, to have limitations."



Drivers need to know when to hold back the power of the vehicle and how to determine when it is at its limitation. This is the problem! Drivers don't always know the limitations of the vehicle, the limitations of the roadway, or their own limitations. It is very common to be at the edge of the limitations without having any negative consequences. The driver may do something that is not safe, but nothing happens. The driver gets positive feedback for wrongful behavior. When this happens frequently, it leads to bad habits.

Then, it's merely a matter of time and circumstance before the monster breaks out of the cage. It doesn't take any skill for a driver to speed while entering a curve, resulting in the car careening off the edge of the road and embedding itself into a tree. However, it takes considerable skills to constrain the power of the vehicle. If a driver fails to keep the monster caged it becomes difficult — sometimes impossible — to get it back into a controlled state.

No one wakes up believing that it is the start of the last day of their life. Yet, for more than 40,000 people each year, life ends on America's roadways. And each year, over 250,000 human beings have their quality of life drastically altered by permanent disabilities sustained during a car crash. These crashes are caused not only by teen drivers — they are caused by doctors, teachers, ministers, mothers, fathers, truck drivers, police officers, race car drivers, your friends, your relatives, drivers of all ages and of all educational backgrounds. The majority are good people who were suddenly confronted with a monstrous situation that was beyond their control.



A crash can be classified into one of these categories:

- The driver failed to have situational awareness to detect the potential crash.
- The limitation of the vehicle's traction control was exceeded.
- The driver failed to effectively use the vehicle's controls.
- The driver failed to detect and correct for others' wrongful actions.
- The driver performed a willful act of endangerment to oneself and to others.

No driver training system will be able to prevent crashes from a driver intent on performing without regard to the consequences. Nothing short of a series of psychological consultations will help that individual. However, for drivers that want to stay out of crashes this book will help evaluate their driving style and serve as a guide to the development of the empowering skills of the Zone Control System — skills that will give them a lifetime of crash free driving!

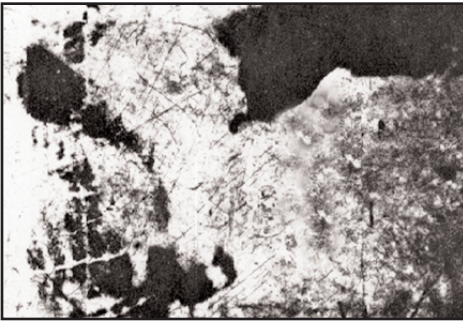
Introduction to the Zone Control System

Two skills that all drivers must have command of are vision control and traction control. All stressful driving situations and all crashes result from a failure in vision usage, a mismanagement of traction, or from the inability to control both vision and traction. Without traction control the car cannot accelerate, cannot brake, and cannot be steered. Without proper use of vision the driver cannot steer the vehicle, nor control traction.

Effective use of vision is the most important skill for a driver to acquire.

For effective vision to occur the eyes and the mind need to work together. The mind tells the eyes what it is looking at. If the eyes are not looking at the right place, at the right moment, then everything that the mind knows is never put into action. On the other hand, the eyes could look at something without the mind understanding what is being seen. For example, look at this photo.

Do you see this picture with your mind or with your eyes?



This picture is of a familiar subject that you have seen many times.

Look at this picture from all different angles. If you clearly see a familiar object you are seeing it with your mind. After a minute or two, look at the bottom of page 55 to find out what it actually is. Then, come back to this page to see it by having the mind tell the eyes what to look for.

Notice after looking at the picture on page 55 how clear this photo becomes. Once you were able to get rid of the clutter within the photo, it was easier to see the subject matter. The Zone Control System removes the clutter from a driving situation to make it easy for the mind to tell the eyes what to look for. There are many distractions that clutter the driver's attention. Many times the driver is seeing a situation but not putting effective meaning into how it can affect vehicle control. With the Zone Control System, the driver is continuously evaluating the condition of the Path-Of-Travel the vehicle is intended to occupy. When there is something that blocks the driver's view of the intended Path-Of-Travel, then it creates a closed zone.

A **closed zone** is space that cannot be entered. **Closed zones are caused by LOS-POT blockages.** A LOS-POT is a blockage to the driver's Line-Of-Sight that can or does affect control of the Path-Of-Travel. When a closed zone is detected the driver is able to make an adjustment in speed control, lane positioning, or communication to prevent unnecessary acceleration, and to gain the best space management.

Examples of LOS-POT Closed Zones:

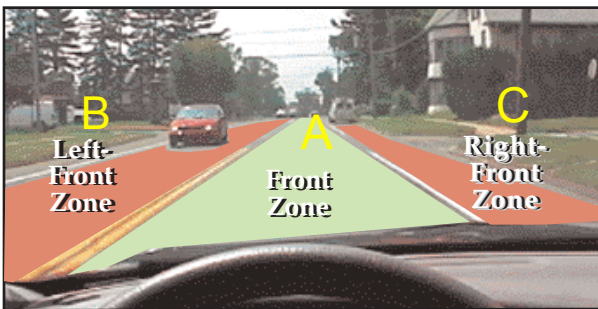
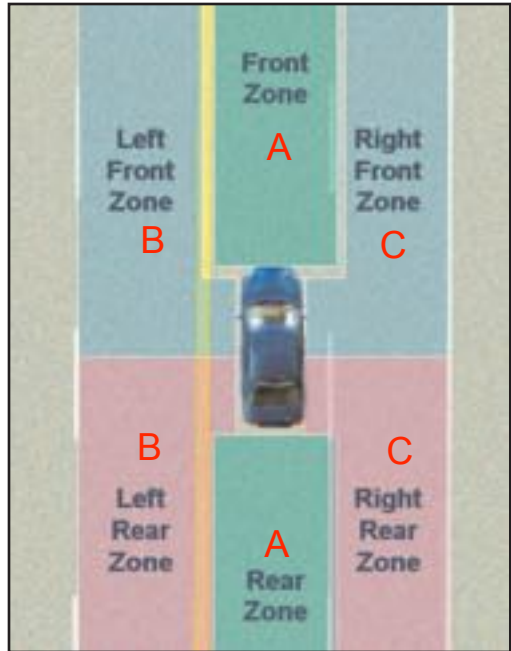
- A red traffic light is a closed front zone POT.
- A hillcrest is a closed front zone LOS.
- A parked car to the right side is a closed right-front zone LOS-POT.
- A bicyclist to the right side is a closed right-front zone POT.
- Oncoming traffic is a closed left-front zone POT.
- A truck following closely is a closed rear zone LOS-POT.

Introduction to the Zone Control System

We cannot see everything in a traffic situation at one time. The number one reason given by drivers after a crash is, "I didn't see it!" Therefore, to remove traffic clutter and to know where to look, and what to look for, the driving environment is organized into six Zones.

Six Zone Locations

- The **Front Zone** is the space in your lane to the front of your vehicle.
- The **Left-front Zone** is space to the left-front of your vehicle, one lane wide.
- The **Right-front Zone** is space to the right-front of your vehicle, one lane wide.
- The **Rear Zone** is the space in your lane to the rear of your vehicle.
- The **Left-rear Zone** and the **Right-rear Zone** are to the rear sides of your vehicle.



In this photo, the Front Zone is open. The Left-Front Zone is closed by the double yellow line and by the oncoming car. The Right-Front Zone is changed by the intersection and closed by the parked truck.

Zones are either Open, Closed, or Changed

1. **OPEN ZONE:** There is space to operate without a blockage to the LOS-POT (Line-Of-Sight and/or Path-Of-Travel)
2. **CLOSED ZONE:** The zone is not available for your POT and/or there is a blockage to your LOS.
3. **CHANGED ZONE:** A worsening zone condition. It is an open zone changed to a closed LOS-POT, or a closed zone that has an additional change.

Introduction to the Zone Control System

Get the best Speed Control, Lane Position, and Communication

There are three things you can do with a vehicle to control it: make a choice in speed selection, make a choice in lane positioning, and send or receive communications. The choices for each are listed below. For any given situation there is a best choice for speed selection and a best lane position option. And, there are ways to send or receive communications that will make situations better or worse.

Get The Best: Speed Control Lane Position Communication

Speed Control Options

After making an evaluation of the zone conditions, you have five options for speed control. One of these five choices is the best option.

1. Keep the Same Speed
2. Decelerate
3. Off Gas - Cover Brake
4. Off Gas - Apply Brake
5. Increase Speed

Communication Options

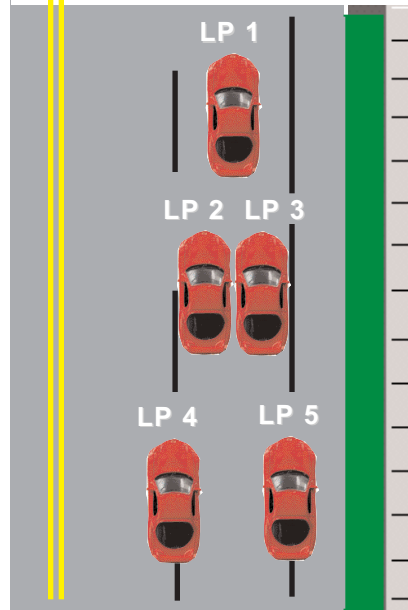
Effective use of the communication process can eliminate surprises. Here are seven common methods.

1. Signal Lights
2. Headlights
3. Brake Lights
4. Horn Usage
5. Hands, Arm, Head Movements
6. Speed of Vehicles
7. Lane Position

Your view is from the driver's seat. You are traveling at 30 mph. There is a red signal light and stopped traffic. It is a "closed front zone." There is nothing to be gained by continuing to accelerate! Off Gas-Apply Brake is the best choice.



Lane Position Options



Lane Positions 1, 2, and 3 are most frequently used. LP4 or LP5 are used as a temporary straddle, such as while lane changing.

Introduction to the Zone Control System

What makes the Zone Control System effective is the relationship between the zones for management of space and the principles that guide how and when to make adjustments in speed, lane position, and communication. There are only a few principles but they apply to thousands of situations. Therefore, the same sequence of actions is repeated over and over, which leads to effective Zone Control habit development.

Two Zone Control principles state:

- **“When the front zone is closed, adjust speed to gain an open zone.”**
- **“Check the rear zone before, during, and after braking.”**

Most likely a driver’s braking habit is formed by chance. Some drivers will blindly follow the vehicle ahead without regard to conditions. So, the driver of the vehicle ahead, an unknown person, is making the decision as to when the driver of the following vehicle should begin braking. Most drivers learned that a red traffic light means stop. The law requires drivers to merely stop, not to reduce energy in a timely manner. Therefore, most drivers continue to accelerate into a red light because they get no feedback that an error was made. However, when we see the red traffic light as a “closed front zone” we can take a logical approach to space management, using as much, or as little, energy as needed. It saves wear and tear on the vehicle, saves money on fuel, helps reduce pollution to our environment, and reduces stress as well by minimizing the amount of time we are stopped at the traffic light. And, when we catch ourselves continuing to accelerate into a closed zone, we realize that it was an error. Consequently, we are able to make mistakes and learn from them on a daily basis while performing in a safer manner than most drivers.

Checking the rearview mirror when you see a closed front zone will help to eliminate one of the most dangerous situations — being rear-ended while braking, or while stopped at a traffic light. When you have this habit you are giving yourself the maximum opportunity to reduce the risk from the traffic to your rear. The faster the traffic flow, the greater the risk. Such a risk occurs on freeways when there is a construction site, or other reason that causes the traffic to come to a stop. Without checking the rearview mirror, it is like backing up blindfolded at 70 mph.

Here’s the real benefit for using the Zone Control System. If you see the red traffic light as a “closed front zone” and learn how to manage it effectively, then the exact same technique can be used for hundreds of other situations that cause “closed front zones”, such as: the traffic stopped for construction ahead, a stopped delivery vehicle, a car backing out of a driveway, a stopped school bus, a pedestrian crossing the street, a vehicle stopped to make a left turn, etc. Because they all are treated as “closed front zones” you get many opportunities to have repetition of your performance. It is the repetitions that allow for habit development. Do it frequently and after a while you are doing it automatically. So, which is a better thing to do without thought — keep accelerating into a closed zone, or take all the unnecessary energy out and control the rear zone when confronted with a closed zone?

Zone Control will help you

• **FIND • SOLVE • CONTROL**
LOS-POT Blockages to best manage the accumulation of risk factors generated by the driver, the vehicle, and the roadway.

How Do Risk Factors Affect You?

Risk factors are generated by the Vehicle, the Driver and the Roadway Environment. All three components add to the chance of a crash occurring. The more risk factors present at one time, the greater the likelihood that a crash will occur. To give you an idea of this I would like for you to do an activity. On a separate piece of paper write any four numbers from 1-62, another four numbers from 63-150 and a third group from 151-223 to give you a total of twelve numbers. Listed on pages 56 to 58 are 223 risk factors. Go to those pages to see which risk factors correspond to your selected numbers, and to receive additional directions. Then come back here.

Changing a Habit Is Like Taming a Monster!

One's style of driving is developed over a period of time through many influences. Usually drivers don't realize all of the factors that influence their style of driving. How many of the 12 selected risk factors could be present while you are driving?

We are creatures of habit. Developing good habits is more difficult when they are to replace bad habits. If we happen to have a habit that is contrary to what is recommended in this book, then it will take some effort to get rid of the old habit. It's like taming a monster that resides within us. When we attempt to change a habit there is an internal resistance that acts like a monster telling us to keep the old habit. This makes it difficult to bring about change.

To develop or change habits it takes practice over a long period of time.

Research on brain development shows a significant outcome that occurs when practice of specific behaviors is frequently repeated. The repetitions create a change in the brain that allows an individual to perform quickly and accurately without any thought. The behavior must be practiced at least eight times to learn correct performance, and performed many times to change the old habit. For practice to be effective, one needs a clear concept of when performance is okay and when it is not. Truly good drivers need a plan — a plan on how to develop habits that yield low risk, intelligent driving.

We will begin to build ten habits and their set of behaviors, one habit at a time. If you already have the good habit, that is great! If not, practice the habit until it takes place automatically and feels comfortable to you.

For Positive Habit Development To Occur:

1. First you need to know what to do and have the desire to do it.
2. Demonstrate that you are capable of doing it.
3. Overcome internal resistance and tame the monster of bad habit.
4. Be able to know when it is correctly or incorrectly performed.
5. Practice doing it correctly, with thought, at least 28 times.
6. Do it correctly without thought.

Take a Personal Inventory

Directions: Make two copies of this inventory. It will be most beneficial if you take the inventory at this time and again 4 weeks after you finish reading this book and practicing the behaviors into habit. You can then compare your scores.

Use the following rating:

Place a number from 10 to 0 on the line next to each item to best reflect your performance and understanding of the item.

10 = 100% of the time I do it 0= 0% or not sure what it means

1. Driver-Vehicle Readiness

- Safety Belts On, Head Restraints Up
- Doors Locked, Windows Up
- Headlights On during daytime
- Butt In Seating Position
- Never drive while tired
- Never drive while intoxicated
- Never drive while distracted

2. See Clear Path Before Moving

- See intended path of travel is clear
- Turn head before steering wheel

3. Keep the Car in Balance

- Make smooth starts, stops, steering
- Keep the car in balance

4. Use Reference Points

- Judge car to curb/lines within 3-6"
- Judge sides and front to intersection

5. Do LOS-POT Searching

- Search to the Target Area
- Evaluate Targeting Path for LOS-POT
- Detect LOS-POT blockage
- Check other related zones
- Re-evaluate 4-sec. danger zone

6. Turn Decisions into Actions

- Solve LOS-POT while 12 secs. away
- Get the best speed control
- Never speed 10 mph over limit

6. (continued)

- Never speed 20 mph over limit
- Never speed 30 mph over limit
- Get the best lane positioning
- Give and get best communications
- Make adjustments 4 seconds away
- Aware of Stopping Distance

7. Control the Intersection

- Identify LOS blockage
- See clear zones before entering
- With a red light, time open arrival
- With stopped traffic, time arrival

8. Get Rear Zone Control

- When braking, check mirrors
- Before moving to either side, check mirror and blind spot
- When backing, check all mirrors

9. Control With a Front Vehicle

- Close in on vehicles gradually
- Keep 4 seconds following time
- Stop behind vehicle to see rear tires

10. Be Courteous to Others

- Be courteous to others
- Never drive aggressively
- Help other drivers out
- Send timely communications
- Know what others communicate

Total your points. Although all items are not equal, the higher the total score (420 maximum), the less risk. Evaluate all items that are a 7 or lower. How many of those items can you develop into a better performance after reading this book and practicing? After 4 weeks, take a second inventory. Compare your total scores and see the improvement made on each item.