

Realistic Online Training Programs



Figure 1

ISDA announces an upcoming series of online EP/Secure Transportation training programs produced by the International Security Driver Association (ISDA).

The online programs will combine the science of driving with sophisticated animated computer graphics. This combination of science and animation can analyze, with incredible accuracy, the performance of a vehicle driving through various security and accident avoidance scenarios.

The online training programs will take advantage of the advancements made in applying the laws of physics to advanced animation. We will have the ability to virtually drive a variety of vehicles through a variety of scenarios. We will have the capability of changing the vehicle's characteristics, such as suspension, front or rear-wheel drive, tire pressures, varying payloads – change Center

of Gravity height, including adding or removing ESC.

We will virtually drive a vehicle through an ambush scenario and vary tire pressure, vehicle payload, suspension settings, driver reaction time, speed, vehicle handling capability.

As an example, these are photos taken from the ISDA Vehicle Dynamics For Secure Transportation Online Program.

From the photo (fig 1), a vehicle is driving up to the intersection, and a truck pulls out in front of him.



Figure 2

At the moment the driver sees the blocking vehicle, we can look at the state of the vehicle. At the decision point;

The weight diagram located on the right shows us that the total weight of the vehicle is 4678 pounds, (the sum of all four numbers). Looking at the front of the vehicle, of the 4678 pounds - 24% is on the front left, 25% on the front right - 26% on the back left 25% on the back right. Keep in mind that we are looking at the front of the vehicle.

On the bottom right is the speedometer, indicating we are traveling at the rate of 44 MPH.

In the second picture(fig 2), the vehicle is driving around the truck. The driver moves the vehicle away from the truck with these results.

In less than a second driver and vehicle now has .89 G's pushing on the center of gravity of the vehicle you can find that number by looking on the left-hand side at the friction circle (red square) the .89 represents the amount of G's pushing on the center of gravity of the vehicle in the first picture the amount of G's pushing on the center of gravity as it's going straight is very low at .01 GS.

The result is that the driver makes it around the truck.