

## Entry 8 White Deposition

### DEPOSITION SUMMARY OF LYNN WHITE

My name is Lynn White and I am a 48-year-old automotive design engineer. I received my bachelor's degree in automotive engineering from Wayne State University in Detroit, Michigan and thereafter went to work for General Motors as a product engineer. I spent 12 years with GM, working on a variety of different projects, including accelerator control mechanisms, safety engineering, including air bags, finishing my career at GM in structural failure analysis. Thereafter, I worked for ten years for the GM subsidiary Fisher Body Corporation. During this time, I continued on with various structural aspects of automotive design. After 22 years within the General Motors family, I moved to Los Angeles, California where I was employed by a forensic failure analysis engineering firm. Most of my work for the failure analysis firm involved the defense of crashworthiness cases. I was paid a yearly salary of \$325,000, with benefits and performance incentives on top of this. The work was quite demanding and labor intensive, but I enjoy forensics.

Since that time, I have started my own firm. I do not have information on what I made over the last year. While my gross receipts were more than when I worked for the failure analysis firm, so are my expenses. However, it is my expectation that I will be substantially better paid as an expert in charge of my own consulting firm than in previous employments.

I consider American made cars safer than many imports, particularly the cheaper Asian models. These cheaper Asian vehicles have less steel, structural strength and engineering in them than their American counterparts. I have given speeches at various industry conferences on this, developing a bit of a reputation as a "Pro American" automotive engineer. However, all of this is based on solid research. You get what you pay for. The cheaper imports just don't have the crashworthiness and the strength of the American models.

I was asked by Jamner County to look into the effect that the design of the Suzuki SUV might have had in the single car rollover accident that led to the death of Terry O'Brien. I was given extensive information to review in this case, including police reports, highway maintenance data and photographs. I have also had the opportunity to personally inspect the Suzuki involved in this case.

The police photos, with spray painted marks on the roadway, showed where the front tire left the pavement as well as where the yaw began, and the right side tires re-entered the roadway.

The drop-off of the pavement does not appear to have affected the steering input entered by the driver at the re-entry point. The vehicle's right front tire comes up to the pavement fairly directly with no sign of a "tire scrub" mark on the inside of the tire, which is a scuff mark made by contact between the tire and the pavement edge. This is critical. The right front tire climbed the edge of the pavement in a distance of 1-2 feet, which is very short.

The direction of the tire marks indicate a rather large velocity back toward the road. The driver is already making a steer to the right at this point, trying to correct the counterclockwise yaw of the vehicle. At this point, the driver is no longer trying to overcome the resistance to the drop-off.

Looking at the tire marks, I would estimate that the vehicle was going somewhere between 44 and 51 m.p.h. However, this is too fast for a road construction area. Though this is basic common sense, not attributable to any expertise on my part, any reasonable driver knows they need to slow down in a road construction area.

Given my experience as an accident reconstructionist and my experience in training in the dynamics of vehicles, after using various computer models of vehicles in simulations of other rollover accidents, I have reached the following opinions in this case:

1. The vehicle's design did play a significant role, much more than any roadway condition. Had the vehicle been designed to be more stable, the accident probably would not have happened.
2. Like many cheaper Asian import automobiles, this vehicle's structure was not adequate for retaining an occupant in the vehicle or separating them from the ground. The vehicle does not appear to have particularly strong A-pillars, and it has no C-pillars or a roll bar at the rear.
3. This vehicle is subject to over steering, even in a simple maneuver with only one steer like the J-turn required in this case. It is much more susceptible to loss of control in emergency situations such as this accident.

In summary, the fault in this case is not attributable to Jamner County, but rather the strategies and choices of the driver, as well as the design flaws in the vehicle.

I will admit that it is well known that a segment of the population has a tendency to try to steer out of trouble in a situation like this rather than to brake. The driver in this case did try to steer back onto the road, which is somewhat predictable when tires drop off the edge of the roadway like this. I also will agree that there is much highway safety literature concerning road construction that abrupt lane edges during road construction or repair can be hazardous. However, in this case, this was a road that was familiar to the decedent.