

# SMART DRIVING CARS

<http://smartdrivingcar.com/TragicLoss-070116>

Friday, July 1, 2016

## **TESLA** [A Tragic Loss](#)

Blog, June 30, "We learned yesterday evening that NHTSA is opening a preliminary evaluation into the performance of Autopilot during a recent fatal crash that occurred in a Model S. This is the first known fatality in just over 130 million miles where Autopilot was activated...

The customer who died in this crash had a loving family and we are beyond saddened by their loss. He was a friend to Tesla and the broader EV community, a person who spent his life focused on innovation and the promise of technology and who believed strongly in Tesla's mission. We would like to extend our deepest sympathies to his family and friends." [Read more](#) *I also wish to extend my deepest and sincerest sympathies and condolences to his family and friends. Alain*

**The  
New York  
Times**

## [Self-Driving Tesla Was Involved in Fatal Crash, U.S. Says](#)

B. Vlasic & N. Boudette, June 30. "Federal regulators, who are in the early stages of setting guidelines for autonomous vehicles, have opened a formal investigation into the incident, which occurred on May 7 in Williston, Fla ....said preliminary reports indicated that the crash occurred when a tractor-trailer made a left turn in front of the Tesla, and the car failed to apply the brakes.

Florida Highway Patrol identified him as Joshua Brown, 40, of Canton, Ohio. He was a Navy veteran who owned a technology consulting firm...." [Read more](#) *Hmmm...Thank you NYT for providing more information on [Joshua Brown](#).*

*What is interesting here is that failure is being attributed to the AutoPilot aspects rather than the Automated Collision Avoidance (ACA) aspects of the car. Yes, ACA is a building block of AutoPilot, but it is a system that is supposed to be on **all the time** and can not, and should not, be disabled by the driver. (Similar to the anti-lock mechanism in brakes and electronic stability*

control. The information made available so far does NOT implicate AutoPilot's driverless "Summoning", lane changing function, nor lane centering functions. It's Intelligent Cruise Control at some point was challenged, but probable failure may lie in the ACA (which one would like to think is on all the time). To date ACA systems have unfortunately over-promised and under-delivered. All one need to do is to look at the videos in [slide 9 of David Zuby's presentation](#) at last week's I-95 CC AV Conference. The manufacturer-selected settings for these systems are too timidly set in the trade-off between "false-alarm" and "crash anyway". They also need to be improved, ( which is true of all technology developments). We fail, we learn, we fix , we improve. (We certainly don't do what GM did with the [ignition switch issue](#) .). Zuby's following slides highlight that these first generation ACAs do deliver some crash avoidance value but they should, and very likely can, work much better. What I haven't seen published is information on highway deaths involving vehicles that had ACA. There must be many. It may well be that this accident is another one of those and not one in which the Sunday Supplement vision of "Self-driving" is to blame just because it happened to be on at crash time. (It is likely that [EgyptAir 804's](#) autopilot was on when it began to fall out of the sky on May 19; however, it is not likely that its autopilot played a significant role in its crash.)

A couple other things: We have all expected this day to come because we know that nothing is perfect. I am sure that Tesla and Google and everyone else in this field have developed, rehearsed and practiced contingency plans associated with this kind of event. It surprises me that Tesla's plan would be one to wait nearly 2 month and follow rather than lead some announcement by some public agency. It may be that Tesla doesn't correlate this crash with "self-driving" but with something else so it didn't fit into the contingency. Don't know (it doesn't really matter anyway, just surprised.).

The other thing is: why is NHTSA doing the formal investigation? (We know the textbook answer!) and not NTSB (NTSB has experience in investigating transportation crashes that involve "autoPilots" and "blackBoxes", both of which are involved in this case.) or some new public entity (there are arguments that can be made that have "Self-driving" and "Driverless" as new "modes" that deserve their own public oversight as is afforded to aviation, pipelines, railroads, trucks, ...)

Finally, we have had many tragedies, learned from them, fixed things and achieved the benefits that we sought. This does not reach the levels of the [Apollo 1](#) and [Challenger](#) tragedies nor require that intensive of an investigation. The [Amtrak 188 Philadelphia Derailment](#) comes closer. This case certainly deserves as intense of an investigation as was made there (without the conclusion "[throwing the train engineer under the bus](#)".) Alain



## [Survey: New Yorkers and Californians Ready for Autonomous Cars; Texas and Pennsylvania Residents Skeptical](#)

Press release, June 29, "Nine out of ten New Yorkers and 86 percent of residents in California feel that autonomous cars could make life easier, according to Volvo Cars' Future of Driving survey, the largest online consumer conversation about autonomous driving to date with nearly 50,000 responses worldwide.

Residents in Pennsylvania, Illinois and Texas are less convinced than the average consumer about the safety benefits of autonomous driving. Only about half (52 percent) of Illinois respondents would trust an autonomous car to make decisions about safety, 10 percent less than the national average. Similarly, only 62 percent of Pennsylvanians think that having more autonomous cars on the road will eliminate traffic accidents versus a national average of 68 percent, and 60 percent of Texans believe autonomous cars could keep their family safer compared to 69 percent of people across the nation.... "[Read more](#) *Hmmm...Also go to <https://www.futureofdriving.com/> to participate in the survey.*" *Alain*

## **STREETSBLOG** [6 Principles to Make Self-Driving Cars Work for Cities, Not Against Them](#)

A. Schmitt, June 24 "Self-driving cars are coming, and maybe sooner than we think. But the question of how they will shape cities is still wide open. Could they lead to less traffic and parking as people stop owning cars and start sharing them? More sprawl as car travel becomes less of a hassle? More freedom to walk and bike on city streets, or less?... a statement of policy recommendations to guide the deployment of autonomous cars in cities [[PDF](#)]...." [Read more](#) *Hmmm...Good recommendations, but they need to also extend 'Self-driving' to 'Driverless'.* *Alain*

**here**

## [HERE, automotive companies move forward on car-to-cloud data standard](#)

Press release, June 29, "– HERE... today announced a significant step forward in efforts to drive a global standard for vehicle-to-cloud data –HERE has now submitted the design for a universal data format called SENSORIS to ERTICO – ITS Europe, the European public/private partnership for intelligent transport systems, which has agreed to continue as an Innovation Platform to evolve it into a standardized interface specification for use broadly across the automotive industry...

HERE believes that pooling analogous vehicle data from millions of vehicles will be a key enabler for highly and fully automated driving, ensuring that each vehicle has a near real-time view of road conditions and hazards that can lead to better driving decisions "..."[Read more](#)  
*Hmmm...Big issue is who becomes "Big Brother" in this "Nineteen Eighty-Four". Alain*

## Some other thoughts that deserve your attention

### **SFGATE** [Uber, Lyft could get new overseer in California](#)

C. Said, June 27, "...Now the state is considering having the California State Transportation Agency take over implementation and enforcement of those rules, as well as crafting new ones...."[Read more](#) *Hmmm...???? More bureaucracy :-(. Alain*

#### On the More Technical Side

<http://orfe.princeton.edu/~alaink/SmartDrivingCars/Papers/>

## Half-baked stuff that probably doesn't deserve your time:

### **Forbes** [Uber Reportedly Shopping Hyundai For Self-Driving Fleet](#)

D. Newcomb, June 19, "...Now, according to Maeil Business News Korea, Uber wants to partner with Hyundai on the development of self-driving technology in the automaker's home country, and is also poised to place an order for a huge number of Hyundai vehicles. ..." [Read more](#)  
*Hmmm...Uber need "Driverless" not "Self-Driving" BIG difference. Why are they wasting their time???? Some other game is being played. Alain*

### **ShanghaiDaily.com** [Baidu to produce driverless cars in five years](#)

Tianjin, June 27, "Search engine giant Baidu plans to mass-produce driverless cars in five years, said company president Zhang Yaquin on Monday..." [Read more](#) *Hmmm...Either poor translation or Zang Yaquin doesn't appreciate the the capabilities needed for "Driverless". He must mean "Self-driving". Alain*

## Calendar of Upcoming Events:



[ITE + ARRB Present Driverless Vehicles: Progress in the U.S. and Australia Webinar](#)

[My Slides](#)

Thursday, June 30, 2016,  
6:00 PM - 7:30 PM (UTC-5:00) Eastern Time (US & Canada)