

# CALIFORNIA ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS

## SKIDEMARKS

DECEMBER 2013 – VOLUME 15, NUMBER 4



## Three Tesla Model S's Burn

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# CALIFORNIA ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS

## THE BOARD BEAT

As the new year begins, I would like to share with the members my goals for 2014.

First, as always, training will be the Number 1 priority of the CAARS organization. We have already scheduled speakers and topics for each of the 2014 Quarterly Trainings.

The first quarter topic will be The Application and Analysis of Video in Collision Reconstruction with Case Studies presented by Kurt Weiss and Mark Hunt.

The second quarter topic will be Traffic Signal Light Timing and Phasing, and Case Studies presented by Mr. Larry Neumann.

The third quarter training topic will be Forensic Mapping and Laser Scanning presented by Mr. Joel Salinas. This training will be a hands-on training where Joel invites everyone to bring their own Total Station or Laser Scanner to use in some real-world practical exercises.

The Board of Directors realizes we were a little remiss in scheduling training in 2013 in a timely fashion, and have promised ourselves to improve in this area. Hence, our reasoning for the scheduling of all three quarter while still in the month of January.

Please refer to the CAARS website for updates with regard to exact dates and locations of the trainings mentioned above. Also, please save the dates of October 23, 24, and 25, which is when the 2014 Annual Conference will be held in South Lake Tahoe, California. More details on this will become available soon.

Another area that I have promised to pay closer attention to this year, is the accuracy and timeliness of the posting of ACTAR CEU's. Mr. Ken Heichman, the CAARS ACTAR Liaison, has been working diligently in order to ensure that all CAARS Training since 2009 are recognized and accepted by the ACTAR Board of Directors. We currently are completely caught up to date. In order to comply with the ACTAR Board of Directors requirements for CEU's and in order to make sure that all CAARS Training in the future is approved and posted in a timely fashion there will be some new guidelines as to how Sign-In sheets at trainings will be handled. We hope that you understand, and I am sure you will find these changes to be of no inconvenience at all. Should you have any questions with regards to your ACTAR CEU's please feel free to contact Ken or myself.

I would like to compliment Mr. Frank Owen, the newsletter editor, on the fantastic job that he has done since taking over this assignment. The newsletters are informative, current in topic, and easy to read. Should you

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I.

have any suggestions or things you would like to add to the newsletter, please let the Board of Directors know so that we can pass those along to Mr. Owen. Frank is continuously asking for input from the general members at large. I have promised Frank that the newsletters will be posted each quarter as scheduled. Please refer to the CAARS website for the current newsletter and any archived newsletters dating back to the inception of CAARS in 1998.

Finally, I would like to welcome Mr. Roman Beck to the Board of Directors. At the last conference, Roman was elected for the first time as a Director at Large. I look forward to Roman's fresh approach and new ideas that he will bring to the CAARS Board of Directors.

Jahna Beard was re-elected as Vice-Chair, Dave Cameron and John Crews were also re-elected as Directors at Large. They join Bill Focha and Sean Shimada who are currently serving terms at Directors at Large. I am fortunate to have such a great group of people to work with in leading this organization. Though at times we have our faults, please understand that we are doing the best we can to make this organization the best that it can be. We have recognized some short comings over the past couple of years and promise to do everything we can to correct those in 2014.

This organization belongs to the members, not to the Board of Directors. We are merely here to help steady the ship. Any suggestions, comments, or assistance that any of you would like to provide would be greatly appreciated. I can be contacted at any time via my email, [chairperson@ca2rs.com](mailto:chairperson@ca2rs.com).

**Regards,**

*Chris Kauderer*



## Letter from the editor

**Dear CAARS members,**

Hello CAARS members...from Switzerland! I'm on an extended trip here to do a little vacationing, yes, but also to explore some other possible collaboration with international partners in Belgium and Italy. And to improve my French. Thus you will see in this newsletter perhaps more international stories about driving, accidents, and technological developments that impact our field. It has been my experience that getting to know another country's culture, customs, laws, and politics helps you understand your own better.

Also, while here, I'm finally taking the time to learn some software (PC Crash) that I bought a while back but just never found the time to learn. Expect to see more about this and experiences with other accident reconstruction software in future issues.

A few notes on driving differences here and in the States:

The further south you go, the crazier people seem to drive. The Germans are pretty orderly, but the Italians drive wild—all over the road, sometimes not even in lanes. The Swiss are somewhere in between. They do tailgate badly on their tiny roads. I'm not sure why everyone in Switzerland is in such a hurry. Nothing's very far from anything else. So the amount of time saved by pushing so hard in traffic makes it hardly worth it. Thus, Americans seem to me to be far and away the most courteous drivers in my experience. When we stop and let people go ahead of us—i.e. cede the right-of-way—people just don't know how to take it.

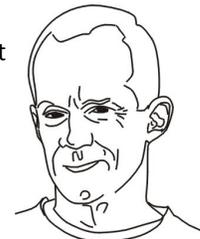
One driving habit that the Europeans have that Americans seem to have lost is passing rules and etiquette. Passing lanes and passing on the left is very much the rule and the law most places. I remember learning this when I was growing up. And you didn't find many people cruising along in the left lane, going slower than other traffic. You don't find that here. People pass and then move to the right lanes. This really opens up the road for people who do want to drive faster. It is unnerving now to drive on California freeways and have to weave right and left to go around slower traffic. When and how did this practice disappear from American freeways? Let's bring it back!

There are hardly any speed-limit signs. They are posted at the borders when you enter the country, and everyone seems to know what they are. So if you forget, you'd better drive out of the country and back in so that you can see these limits again.

If you get a ticket, you probably won't get it from a patrolman who stops you. Red-light cameras and automatic speed sensors and cameras are everywhere. In Italy on the freeways there's a system called Tutor that measures your average speed. At some point, a picture of your car's license plate is taken. Later, down the road, another picture is taken and matched with the previous one. If you cover this distance too quickly, you'll get a ticket. There is no discussion about the good of red-light cameras or privacy rights violated by red-light cameras or of their accuracy. These cameras have been in use in Europe now for two decades or so, and everyone just accepts them as a fact of life.

Google maps and the iPad have pretty much made buying maps obsolete.

Well, driving around is pretty cool, because it's like you're playing Mille Bornes every time you get behind the wheel. I'm still not sure what all those funny signs mean, but so far, no tickets nor even any scolding from policemen.



**Best wishes,**

*Frank Owen*

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# CALIFORNIA ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS

## Report from Long Beach—CAARS annual conference

The 2013 Annual CAARS Conference was held October 24 through 26 in Long Beach, California. 66 members attended the conference. Long Beach was a new venue for the CAARS Conference and it appeared that most people enjoyed the hotel and the surrounding night-life and restaurants.

Ms. Jahna Beard took care of the registration, hotel arrangements, and all other amenities. As always she did a wonderful job in making sure that everybody was comfortable and happy. The conference topic was Commercial Vehicle Investigation and Reconstruction. Mr. Bill Focha of the BOD was kind enough to be this year's Technical Chairman of the conference and arranged for all the speakers.

The conference opened up on Thursday morning with a case study done by Greg Jacobson. The case study involved a run-away truck and the subsequent investigation done by the San Mateo Police Department. The case study solicited many questions from the audience, which was a good way to open the conference and get the members awake and participating. Thursday morning also had Mr. Craig Matecki of the San Pablo Police Department reviewing all of the regulations and code enforcements for commercial vehicles here in the State of California. Craig's presentation was very thorough and included numerous examples of different violations currently seen on the roadways of California.

After a lovely buffet lunch arranged by Jahna, the members were introduced to Mr. Ron Baade who travelled all the way from Pennsylvania to share his knowledge on tractor EDR's (Event Data Recorders). Ron reviewed the basics of EDR's and showed many slides of data imaged from respective manufacturer's EDR's. Ron was very knowledgeable and was able to answer all of the questions generated by the attendees. The afternoon concluded with Mr. Bill Focha giving the review of airbrake systems. Bill's humor kept the

**Continued on following page...**

## **CAARS first-quarter training**

**Topic: The Application and Analysis of Video in Collision Reconstruction with Case Studies**

Presented by Kurt Weiss and Mark Hunt in Southern California at the Santa Ana Police Department Community Room, 60 Civic Center Plaza, Santa Ana, California.

**Northern California:** Tuesday, 28 January 2014, 0800-1700, San Jose Police Department, 1302 North 4th Street, San Jose, CA 95112

**Southern California:** Thursday, 30 January 2014, 0800-1700, Santa Ana Police Department, Community Room, 60 Civic Center Plaza, Santa Ana, CA

## **Upcoming ACTAR Examination Dates and Locations**

There are no ACTAR tests offered in the western U.S. or Canada listed on the website at the time of publishing of this newsletter. There is one listed for Texas at the end of January. Other options in the eastern U.S. are listed on the website. Go to [www.actar.org/test.html](http://www.actar.org/test.html) for additional information.





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attendees awake during the late afternoon. Bill used an airbrake board to help explain many of the components involved in an airbrake system.

At the conclusion of Bill's presentation the attendees were invited out to the parking lot where they were treated with a tractor trailer combination which was on loan from Biagi Brothers Trucking. Bill Focha and Craig Matecki were on board to answer any questions attendees might have with regards to any of the components that were visible on the Biagi Brothers tractor trailer. Thursday evening Jahna arranged for a Happy Hour for all the attendees at the hotel. There was positive feedback about the ability to network in a relaxed environment.

Friday morning opened up with Mr. John Daily who was kind enough to come all the way from Jackson Hole Wyoming. John has been a speaker at past CAARS conferences. As always, John's knowledge and sense of humor is appreciated by the CAARS members. John offers a unique perspective in the field of accident reconstruction in that he was a law enforcement officer for 20 plus years in addition to holding a Master's degree in engineering. This experience allows John to feel comfortable not only with the law enforcement community but also with the engineering community. The topic that John spoke on this year was vehicle roll overs. Those topics can be very complicated and math intensive. John did an excellent job of covering the topics while making it interesting for both the law enforcement and engineering attendees.

After a second fine lunch at the hotel, Friday afternoon included presentations by Bill Focha and Joel Salinas. Specifically they talked about how to map and determine blind spots in commercial vehicle collisions. Friday night most people went to the local establishments and enjoyed food and drink; some more than others.

Saturday morning the Annual CAARS General Membership meeting was conducted. Included in the meeting were elections to the CAARS Board of Directors. Jahna Beard was re-elected to Vice-Chair, Dave Cameron and John Crews were re-elected to their positions of Directors at Large. Roman Beck was also elected for the first time to the position of Director at Large. The conference concluded with a tractor trailer case study by Bill Focha, Joel Salinas and Toby Gloeckler.

Bill spoke about doing an inspection of a tractor trailer involved in an accident. Joel spoke about mapping damage done to the tractor trailer and other involved vehicles. Finally Toby walked the attendees through some roll-over calculations that were germane to the case study at hand.

The conference ended at approximately noon with a raffle of prizes. Craig Matecki won the grand prize of free registration to the 2014 CAARS Conference that will be in South Lake Tahoe, California.

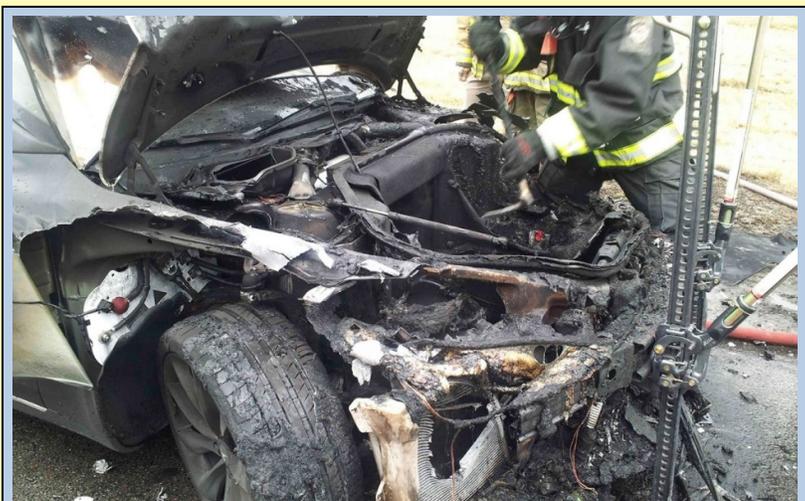
IN THE NEWS...

TESLA FIRES

## Third Tesla Model S electric car catches fire

*The blaze is the third in six weeks involving autos made by Elon Musk's Tesla, prompting concern, investigation*

**Aljazeera America, 9 November 2013**—A Tesla Model S electric car caught fire this week after hitting road debris on a Tennessee freeway, the third fire in a Model S in the past five weeks.



Tesla Model S that caught fire in Smyrna, Tenn. (Reuters)

The blaze on Wednesday afternoon near Smyrna, Tenn., engulfed the front of the car. A spokeswoman for the Tennessee Highway Patrol says the Model S ran over a tow hitch, which hit the undercarriage of the car, causing an electrical fire and "extensive damage" to the car.

The Model S undercarriage has armor plating that protects a battery pack of lithium-ion cells. Tesla said it did not yet know whether the fire involved the car's battery. Experts say that if debris punctures the shield and damages the battery, it can cause shorts and arcing that can touch off fires.

Company spokeswoman Liz Jarvis-Shean says the fire was not spontaneous. She says Tesla contact-

ed the driver, who the company said believes the car saved his life. Tesla CEO Elon Musk has said that the design of the Model S is safer than that of a car with a conventional fuel tank.

It's the second Model S blaze involving road debris. In early October, a driver near Seattle hit debris that pierced a shield and the battery pack, causing a fire. In the other fire, a driver in Mexico crashed into a concrete wall and a tree at a high speed.

See [full article](#).

## Tesla, does it burn?

**By Catherine Maussion, Liberation (Paris), 19 November 2013**—This is the question that concerns the American agency of traffic safety, after several fires in Tesla sedans. It is going to open an inquiry which could lead to a recall. The starting point of this investigation: "Recent incidents in the states of Washington and Tennessee, where fires in the batteries were started following collisions," explained the agency. Tesla, specialist in luxury electric vehicles, has

seen recently a strong enthusiasm and its stock has more than quintupled between January and October. But it has, however, lost its luster after three notable fires since October in its Model S. "Why does a fire in a Tesla that resulted in no injuries provoke so many more headlines in the media than 100,000 fires in gasoline-powered cars that kill hundreds of people each year?" asked the CEO of Tesla Tuesday on Twitter.



ANOTHER, SOBERING ANALYSIS OF TESLA FIRE INTENSITY

## Tesla Model S Fires Might Be a Big Deal—But Not For the Reasons Some Are Saying

by Justin Berkowitz, *Car and Driver*, 8 November 2013—For the third time in six weeks, it has become apparent that a Tesla Model S, somewhere, somehow, caught fire. Consequently, for the third time in six weeks, the automotive world has entered a “Tesla Cycle,” which plays out as follows:

1. News breaks that a Model S has caught fire, either via pictures posted online (LOOK! EXPENSIVE NEW CAR BURNING!) or through local reporters.
2. Tesla issues statement to the effect of “Our cars are safe. Nobody was hurt. It was just road debris/concrete wall that punctured the battery pack and caused the fire.”
3. Mainstream press picks up the story, presenting Tesla’s statement not to be alarmed without dissent, but still treating the fire as though there’s reason to be alarmed.
4. Voices of reason emerge and remind that conventional cars are loaded with gasoline and frequently catch fire—especially when they drive over sharp objects or through concrete walls as the three fiery Teslas had.
5. Tesla’s stock price takes a hit and mainstream press covers it, as though the stock wasn’t tremendously overvalued and due for some kind of correction anyway.
6. Americans become hyper-vigilant in looking for burning Teslas to photograph.

This is a fatuous little feedback loop, but it overlooks entirely the million-dollar question: *How did two Tesla Model S sedans catch fire from impacts with road debris?*

We’re not asking this because, golly gee, cars should be impervious to the occasional bit of scrap metal on the highway. (They should be, but that’s beside the point.) No, what’s confounding are the actual logistics of how two cars’ battery packs were pierced. Every Tesla Model S’s battery pack comes with what Tesla calls a “1/4-inch-thick protective metal plate” that the company now reveals is aluminum. [An earlier version of this story incorrectly presumed that the plate was made of steel. Tesla has since confirmed that the plate is aluminum.] An old rule of thumb says that alloys like aluminum are a third of the weight of equally-sized steel, but half the strength. Any machinist—one with any number of extant thumbs will do—will tell you that the rule of thumb varies tremendously based on the specific types of aluminum and steel and the way you want to measure strength. Bending and shearing are different characteristics, for example.

See [full article](#).

THE RESPONSIBILITIES OF NON-DRIVERS

## New Jersey court: Texting with a driver can get you in trouble, too

by Matt Pearce, *L.A. Times*, 29 August 2013—Can you be held responsible for an accident that happens miles away because you texted the driver?

A New Jersey appeals court panel says yes -- and its recent ruling is notable not just for trying to crack down on texting and driving, but for interpreting the way that technology has reshaped life.

On Sept. 21, 2009, Kyle Best, 18, crashed his pickup truck into a married couple riding a motorcycle after Best's truck crossed the center line on a curve. Best had been texting with an acquaintance. David and Linda Kubert both lost their left

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legs in the accident.

The Kuberts settled with Best after filing suit, but also sued Best's acquaintance, Shannon Colonna, arguing that she was "electronically present" in Best's truck by texting him, and was thus partially responsible for distracting him on the road. A lower court dismissed that claim, citing lack of evidence, and the Kuberts filed an appeal.

In a specific sense, Colonna won: The three-judge panel from the Superior Court of New Jersey's appellate division unanimously agreed Tuesday that there was insufficient evidence to determine whether Colonna was responsible for distracting Best.

But for the rest of New Jersey's texters, the court lay down a new standard of responsibility: two of the judges, with a third dissenting in part in a concurring opinion, said that texters could be held responsible in civil court for distracting a driver, provided they had a good reason to believe that the driver would actually respond.

See [full article](#).



## Accidents: The fight against road rodeos is strengthened

# Passengers will be punished as well as drivers

*They weren't at the wheel of the cars implicated in the drama of Charmilles (Geneva), but they are charged with murder. It's a first.*

**by Fabiano Citroni, 24 November 2013, Geneva, Switzerland**—A road race—at least that is what is assumed by investigators—between two vehicles. A pedestrian, the father of three children, in the wrong place at the wrong time. The death occurred 13 November

2013 in Charmilles (Geneva), just a couple of steps from the former Servette stadium. The prosecutor Adrian Holloway has questioned the two drivers and the two passengers, aged 18 to 23 years old, and has charged all four with murder. The affair is shaking public opinion. For the reason of the death of an innocent bystander but also as well because of the inculpation of the passengers, a first. How to understand this decision? An inquiry.

### **Why is it that the passengers can be inculpated?**

If a passenger is associated psychologically with the totality of the act, he can perhaps be considered as a co-author. If his role is indispensable to the commission of the act but his role remains secondary, his complicity can be restrained. This notion of "participation in the infraction" has been developed in the course of years. "In 2000, the Federal Tribunal (FT) an individual for a grave violation of the rules of traffic. This person was neither at the wheel nor a passenger. He was associated in an insurance fraud scheme consisting of causing accidents," explained Mr. Jacques Roulet, founder of the network of Swiss Romand (French Switzerland) traffic lawyers. The persons sitting next to the driver, are they conscious of their responsibility? "There is a form of ignorance," responds Mr. Robert Ayrton. "Drunken drivers often ask their passengers to take their place before the arrival of the police. But that doesn't protect either of them." A passen-

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ger can thus be found guilty of complicity for drunk driving. Three friends proved this in 1988 in the canton of Obwald.

They had drunken “coffee schnapps” for six hours before taking the road, separately. One of them had an accident. He was convicted of drunk driving. His friends were convicted for complicity in the state of drunkenness. The FT reproached them for having contributed to the commission of the infraction. “In the case of a road race, if the prosecutor thinks that the passengers wanted to participate, he can charge them with murder. This holds to a judicial point of view,” analyzes Mr. Yvan Jeanneret, professor of the Faculty of Law at the University of Neuchatel.



The drama of Charmilles was played out 13 November around 10:30 p.m. According to the Public Ministry, during an illegal race, one vehicle struck a pedestrian, age 34. This unfortunate person died on the scene of the accident.

## BICYCLES VS. CARS, MORE NEWS FROM SAN FRANCISCO

### Woman on Bike Killed by Truck Driver on Folsom: Charges Off the Table?

*Editor's note: There were two articles in the September 2013 newsletter on this topic. Here are other articles about cyclists being hit by vehicles with no charges being filed against the drivers who are at fault. The two accidents here involved right-turning trucks who collided with bicycles passing in the bike lane on the right. The December 2012 newsletter contained an article about technology being developed in Germany that would prevent just such an accident.*

**by Aaron Bialick, sf.streetsblog.org, 14 August 2013**—An unidentified 24-year-old woman was killed while bicycling on Folsom at Sixth Street this morning when she was hit by a big rig truck driver, according to SFPD and media reports.

The victim is the third bicycle rider killed in San Francisco this year, and each death has involved a truck driver. Although the driver seemed to be at fault in each case, none have faced charges.

Here are the details on this morning's crash, via [SFGate](#):

The crash happened as the truck tried to make a right turn at 7:07 a.m. at Sixth and Folsom streets, police said.

Both the bicyclist, a woman about 30 years old, and the truck driver were headed east on Folsom. When the trucker tried to turn south onto Sixth, he hit the bicyclist, said Officer Bryan Lujan.

The woman died at San Francisco General Hospital. Neither her name nor the name of the trucker has been released.

The truck driver stayed at the scene and was interviewed by police. He has not been cited. The truck was later towed away.

As police investigated the crash, the woman's crumpled blue, road-riding bicycle lay at the southwest corner of the intersection. A bike helmet was nearby.

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Police have already determined that the truck driver won't face any charges, according to a tweet from KTVU reporter Brian Flores, who also specified the victim's age at 24.

See [full article](#).

## Man on Bike Killed by Muni Bus Driver at Bryant and Divisions

A man riding a bike was killed by a Muni bus driver this morning at the intersection of Bryant, Division and 11th Streets on the southwest end of SoMa, according to media reports.

From the [SF Chronicle](#):

The crash involving a bus on the 27-Bryant line was reported at 8:44 a.m., said Mindy Talmadge, a spokeswoman for the Fire Department. She said the bicyclist, identified only as a man, was pronounced dead at the scene.

Police and Muni officials said the bus was traveling southeast on 11th Street, and collided with the bicyclist while turning right onto Bryant Street.

The intersection is under Highway 101 and is controlled by traffic lights. However, Albie Esparza, a police spokesman, said, "Its unknown at this point the dynamics of the collision."

None of the roughly three dozen passengers on the bus were injured, Esparza said.

Paul Rose, a Muni spokesman, said the male bus driver, who has about 10 years of experience, was cooperative after the crash, and will be given a toxicology test under agency protocol. The driver was not immediately identified.

See [full article](#).



Source: KTVU

## SF Police Face New Scrutiny Of How Bicycle Crashes Are Investigated

**3 October 2013, KCBS**—A long simmering debate about how San Francisco police deal with bicyclists involved in vehicle crashes has reached City Hall after complaints stemming from a fatal accident South of Market this summer.

Bicycle and pedestrian advocates were set to face-off Thursday against the San Francisco Police Department in a special hearing convened because police initially declined to cite the big rig driver who killed 24-year-old Amelie Le Moullac.

"Unfortunately that very high profile case, we think, is only the tip of the iceberg," said Leah Shahum, executive direc-

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tor of the San Francisco Bicycle Coalition.

Police later determined the driver was at fault in the crash after reviewing video of the incident located by the Bicycle Coalition.

Supervisor Scott Wiener placed the bicycle issue on the Public Safety Committee agenda because of the outcry over how Moullac's death was investigated.

See [full story](#).

## UC Study on accidents: Riding a bike in SF more dangerous than we thought

by Rob Anderson, [District 5 Diary](#), 25 October 2013—The NY Times story the previous post is based on includes this:

Dr. Rochelle Dicker, a trauma surgeon at the University of California...cares for victims of the worst bicycle injuries, people who might need surgery and often end up in intensive care. So she decided to investigate those crashes. She and her colleagues reviewed hospital and police records for 2,504 bicyclists who had been treated at San Francisco General Hospital. She expected that most of these serious injuries would involve cars; to her surprise, nearly half did not. She suspects that many cyclists with severe injuries were swerving to avoid a pedestrian or got their bike wheels caught in light-rail tracks, for example. *Cyclists wounded in crashes that did not involve a car were more than four times as likely to be hurt so badly that they were admitted to the hospital.* Yet these injuries often did not result in police reports---a frequent source of injury data---and appeared only in the hospital trauma registry. Dr. Dicker is not a cyclist, but she said, "Lots of my colleagues do not want to ride after seeing these injuries." (emphasis added)

See [full story](#).

### OPINION

## Is It O.K. to Kill Cyclists?

By Daniel Duane, [New York Times](#), 9 November 2013—EVERYBODY who knows me knows that I love cycling and that I'm also completely freaked out by it. I got into the sport for middle-aged reasons: fat; creaky knees; the delusional vanity of



Drawing: Kurt McRobert

tight shorts. Registering for a triathlon, I took my first ride in decades. Wind in my hair, smile on my face, I decided instantly that I would bike everywhere like all those beautiful hipster kids on fixies. Within minutes, however, I watched an S.U.V. hit another cyclist, and then I got my own front wheel stuck in a streetcar track, sending me to the pavement.

I made it home alive and bought a stationary bike trainer and workout DVDs with the ex-pro Robbie Ventura guiding virtual rides on Wisconsin farm roads, so that I

could sweat safely in my California basement. Then I called my buddy Russ, one of 13,500 daily bike commuters in Washington, D.C. Russ swore cycling was harmless but confessed to awakening recently in a Level 4 trauma center, having

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been hit by a car he could not remember. Still, Russ insisted I could avoid harm by assuming that every driver was “a mouth-breathing drug addict with a murderous hatred for cyclists.”

The anecdotes mounted: my wife’s childhood friend was cycling with Mom and Dad when a city truck killed her; two of my father’s law partners, maimed. I began noticing “cyclist killed” news articles, like one about Amelie Le Moullac, 24, pedaling inside a bike lane in San Francisco’s SOMA district when a truck turned right and killed her. In these articles, I found a recurring phrase: to quote from The San Francisco Chronicle story about Ms. Le Moullac, “The truck driver stayed at the scene and was not cited.”

See [full story](#).

#### ALSO THIS, FROM LONDON

## London Cyclist Fatalities Bring Calls for Truck Limits

by Stephen Castle, [New York Times](#), 19 November 2013—Public transport in London is always expensive, often crowded and sometimes unreliable, so there is no mystery about why bicycle trips here in Britain’s capital increased by around a third in the decade up to 2011.

**“Which is more dangerous? Riding a bicycle in a sophisticated, modern European capital or serving with the British Army in one of the most dangerous countries in the world?”**

But the sixth cycling fatality within two weeks has highlighted the dangers of a battle for road space that takes place morning and evening on the streets and has raised the heat on London’s mayor and prompted calls for a partial ban on trucks.

Even before the latest fatal accident, which took place Monday in Camberwell, southeast London, a commentary in The Evening Standard newspaper described the streets as a “war zone” and compared the fatal accident rate in London with deaths in the armed forces serving in Afghanistan.

“Which is more dangerous? Riding a bicycle in a sophisticated, modern European capital or serving with the British Army in one of the most dangerous countries in the world?” the newspaper asked. It turns out that 14 cyclists have died this year in London as opposed to eight soldiers in Afghanistan.

See [full story](#).

#### IN OTHER NEWS...

## U.S. highway fatalities increased in 2012

By Nat Shirley, [LeftLane](#), 14 November 2013—A new report released by the National Highway Traffic Safety Administration finds that the number of U.S. highway deaths climbed in 2012, marking the first increase since 2005.

Fatalities rose by 3.3 percent to 33,361, or 1,082 more than in 2011. About 72 percent of the increase occurred in the first quarter of the year, with pedestrians and motorcyclists accounting for the majority of those deaths.

The higher level of fatalities comes despite the fact that Americans drove roughly the same amount of miles in 2012 as

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in 2011, the NHTSA said.

"Highway deaths claim more than 30,000 lives each year and while we've made substantial progress over the past 50 years, it's clear that we have much more work to do," said U.S. Transportation Secretary Anthony Foxx. "As we look to the future, we must focus our efforts to tackle persistent and emerging issues that threaten the safety of motorists, cyclists and pedestrians across the nation."

See [full article](#).

### DISTRACTED DRIVING

## Toyota expresses concern over WiFi expansion

by **Andrew Ganz, LeftLane, 14 November 2013**—Toyota told the federal government in Washington, D.C., today that it is concerned that an expansion of the wireless spectrum for Internet use could pose a problem for in-car safety equipment.

Speaking with the House Energy and Commerce committee, Toyota research manager John Kenney said that more testing needs to be done in order to confirm that "no harmful interference will impair the safety-of-life mission for which that spectrum is allocated."

Kenney spoke in Washington alongside representatives from Cisco, Comcast and the FCC. Specifically, Toyota's concern addresses the impact of a wider WiFi spectrum on features like collision avoidance technologies. Toyota, like most other automakers, makes use of radar and camera-based technologies to scan the road ahead. The most basic systems alert drivers to potential obstacles, while more advanced systems pre-charge brakes or even automatically stop vehicles to prevent or mitigate the impact of an accident.

Speaking on the government's behalf, Nebraska Republican representative Terry Lee told the committee, "There is room for both."

See [full story](#).

### "THE NANNY STATE NOW IN CAR FORM?"

## Toyota to introduce the Driver Attention Research Vehicle in Los Angeles

By **Michael Gauthier, Word Car Fans, 13 November 2013**—Toyota has announced plans to introduce an all-new Driver Awareness Research Vehicle at the Los Angeles Auto Show.

The company declined to release pictures but said the model car was designed to "reduce driver distraction before ever putting a key in the ignition."

Besides the mysterious concept, Toyota's Director of the Collaborative



Continued on following page...



Safety Research Center will discuss "important research findings" from an MIT-Toyota partnership on driver distractions associated with voice command systems. Chuck Gulash will also unveil a "groundbreaking study" from Stanford University that shows how a driving simulator can "enhance our understanding of how drivers and cars interact as we move closer to fully automated forms of driving."

See [original story](#).

#### NEW NHTSA RULING FOR BUSES

## NHTSA announces final rule requiring seat belts on motor-coaches

**NHTSA, 20 November 2013**—The U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) today issued a final rule requiring lap and shoulder seat belts for each passenger and driver seat on new motor-coaches and other large buses. This new rule enhances the safety of these vehicles by significantly reducing the risk of fatalities and serious injuries in frontal crashes and the risk of occupant ejection in rollovers.

"Safety is our highest priority and we are committed to reducing the number of deaths and injuries on our roadways," said U.S. Transportation Secretary Anthony Foxx. "Today's rule is a significant step forward in our efforts to improve motorcoach safety."

On average, 21 motorcoach and large bus occupants are killed and 7,934 are injured annually in motor vehicle crashes, according to NHTSA data. Requiring seat belts could reduce fatalities by up to 44 percent and reduce the number of moderate to severe injuries by up to 45 percent.

"While travel on motorcoaches is overall a safe form of transportation, when accidents do occur, there is the potential for a greater number of deaths and serious injuries due to the number of occupants and high speeds at which the vehicles are traveling," said NHTSA Administrator David Strickland. "Adding seat belts to motorcoaches increases safety for all passengers and drivers, especially in the event of a rollover crash."

"Buckling up is the most effective way to prevent deaths and injuries in all vehicular crashes, including motorcoaches," said Federal Motor Carrier Safety Administrator Anne S. Ferro. "Requiring seat belts in new models is another strong step we are taking to reach an even higher level of safety for bus passengers."

See [full story](#).

#### VIDEO: WHIPLASH PROTECTION FROM EUROPE



## Euro NCAP | Whiplash Protection

**Euro NCAP, 24 September 2013**—Euro NCAP is simulating rear-end crashes to evaluate the protection that car seats offer against whiplash neck injury. Following a crash, whiplash injuries can be hard to treat and often lead to lifetime discomfort or disability. To address the high number of whiplash injuries across Europe, Euro NCAP began to assess whiplash risk of new car models in 2008. Since then, Euro NCAP recommends consumers to check whiplash scores when considering buying a new car.

See [video](#).



**VIDEO: AUTOMATIC EMERGENCY BRAKING SYSTEM FROM EUROPE**

## Euro NCAP | On the road with AEB

**Euro NCAP, 29 October 2013**—Euro NCAP released the first results of rear-end crash avoidance systems tested against the upcoming 2014 rating protocol. Real world claims data suggest that Autonomous Emergency Braking (AEB) systems can reduce rear end crashes by one quarter or more and lead to a significant reduction of injuries. As from January 2014, Euro NCAP will in its rating scheme give credit to vehicle manufacturers that equip their models with robust forward collision warning and/or automatic braking technology.

See [video](#).

**FROM THE L.A. TIMES**

## Auto safety initiative seeks to reduce driver errors

*Regulators are pushing for systems that thwart drunk drivers from starting their cars, help cars avoid collisions and prevent vehicles from starting if occupants don't buckle up.*

**By Jerry Hirsch, L.A. Times, 29 November 2013**—Regulators are pushing for systems that thwart drunk drivers from starting their cars, help cars avoid collisions and prevent vehicles from starting if occupants don't buckle up.

Auto safety regulators are pushing for new equipment to protect motorists from their biggest threat: themselves.

They're aiming to keep drunk drivers off the road with the help of onboard technology that immobilizes their cars. New vehicles may soon come with systems to help prevent collisions. And engines may not start unless occupants buckle their seat belts.

It's all part of a push by the National Highway Traffic Safety Administration to use technology to reduce traffic fatalities.

"Ninety percent of all crashes have an element of human error," NHTSA Administrator David Strickland said. "We really need to focus on what more we can do to address these risks."

Automakers for years resisted federal safety initiatives, originally objecting to seat belts, air bags and more recently making backup cameras standard equipment. But for now they are supporting NHTSA's efforts.

"It is just the right thing to do," said Heather Rosenker, a General Motors Co. spokeswoman.

See [full story](#).



**Drunk driving killed more than 10,000 people last year, about a third of traffic deaths. Above, a drunk-driving checkpoint in San Bruno, Calif. (Justin Sullivan, Getty Images / November 27, 2006)**

**L.A. AUTO SHOW**

## Distracted driving stalls app integration into cars

by Paresh Dave, L.A. Times, 20 November 2013—The push to bring technology into cars is a slow crawl for many automakers, particularly because of one wrenching issue that has come up in nearly every discussion at the L.A. Auto Show: distracted driving.

“It’s very important to get that phone in the center console and closed up,” Charles Koch, manager of new business development for American Honda Motor Co., said at the Connected Car Expo this week. But getting users to drop their smartphones means finding ways to fill dashboard screens with more apps -- maps, taking pictures and text messaging chief among them.



**A driver talks on the phone in Montpelier, Vt. (Toby Talbot / Associated Press / April 2, 2013)**

Toyota announced Wednesday the early fruits of its joint study with Microsoft into distracted driving as it prepared to show off its Driver Awareness Research Vehicle. The test vehicle uses gadgets such as Microsoft’s Kinect motion sensor and camera to study drivers while bringing information onto places such as side windows and console screens.

See [full story](#).

## Car’s safety systems are getting a whole lot smarter

*Automated safety systems are starting to have a real effect in protecting passengers and limiting accident damage, regulators and insurance industry experts say.*

By Jerry Hirsch, L.A. Times, 21 September 2013—The big, black Mercedes-Benz is going 70 on the 101 Freeway making minor steering adjustments to hold the lane. I have taken my hands off the steering wheel. A computer is driving.

After maybe 10 seconds, the steering wheel icon on the dash turns bright red, as if to say: Dude! Hands back at 10 and 2.

Forget about Google Inc.’s self-driving Toyota Prius, jammed with technology only a legion of Caltech professors can understand. Autonomous driving is already here on cars in dealer showrooms. It’s packed into the safety features on this \$100,000 flagship S550 Mercedes sedan; on the new Acura MDX sport utility that sells for half that price; and on less expensive vehicles such as the Ford Fusion, which can parallel park itself.

We’re still a long way from sending unmanned cars to the grocery store, but automated safety systems are starting to have a real effect now in protecting passengers and limiting accident damage, according to regulators and insurance industry experts.

Continued on following page...

Such systems can alert drivers to an impending rear-end collision — and slam the brakes. They can stop a vehicle from hitting a post as it backs up. They can track the speed of the car in front, adjusting to maintain a safe distance. Some warn a driver when a car is about to wander out of its lane, and steer it back on course. Another system automatically adjusts headlamps to better illuminate turns. "We think these systems can make a huge difference in saving lives," said David Strickland, chief of the National Highway Traffic Safety Administration.

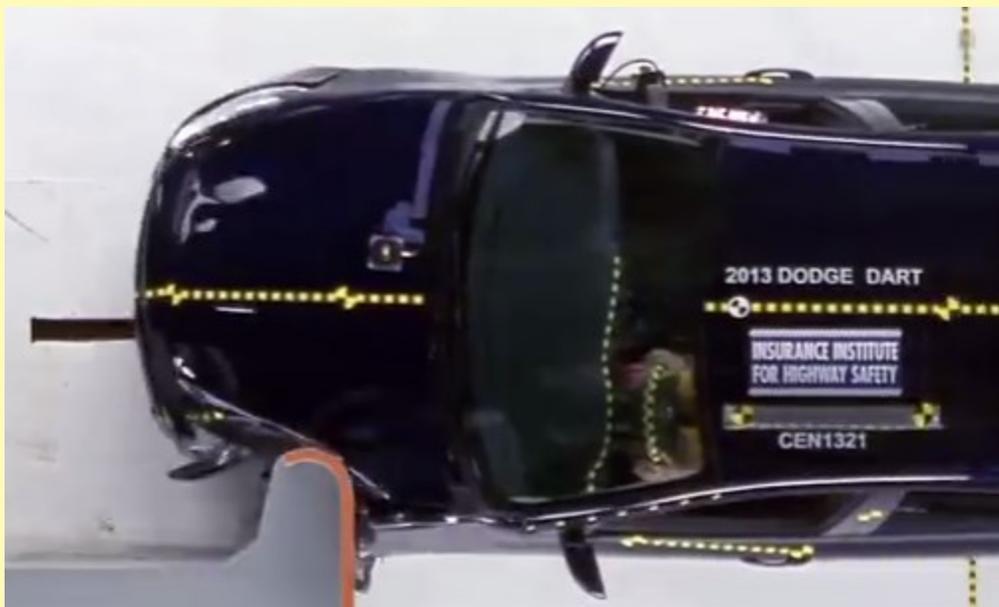
See [full article](#).

## VIDEO FROM

### Inside IIHS: Preparing for a crash test

"Inside IIHS: Preparing for a crash test" shows how engineers at the Institute's Vehicle Research Center attend to every detail to ensure a smooth crash test with results that can be easily measured and compared with other vehicles.

See [video](#).



## A SLIDE SHOW FROM POPULAR MECHANICS

### The 13 Most Dangerous Car Interiors in History

A lot of what we take for granted in the modern automobile has come along only after a great deal of trial and error—and, perhaps, neglect. Take, for instance, the humble headrest. While a headrest design was patented in 1923, the National Highway Transportation Association only passed a law that all passenger cars should have headrests in 1969—after hundreds of thousands of spine injuries as the result of whiplash. The safety belt was first put to use in horse-drawn carriages in the 1850s, but wouldn't be standard-issue in cars until the early 1960s. Sadly, many of the most basic innovations that are part of every automobile interior today came about this way. Grim, but true. These are the most dangerous car interiors—and a few that were unique for ushering in safety before it was fashionable.

See [slide show](#).



1955 Ford F-100



A BOOK REVIEW FROM THE DESK OF JOSEPH E. BADGER...

## *Criminal Justice Report Writing*

During my time as a state police sergeant and afterwards as an accident reconstructionist in the private sector, I had occasion to review hundreds of accident report narratives and the detailed results of complete involved investigations.

Owing to copious misspellings, terrible grammar, and lousy sentence structure, I nearly wept openly and wondered why, oh why, doesn't someone write a book specifically for criminal justice report writing.

No, it needn't be a complete textbook for two semesters of a high school English class nor a comprehensive collegiate course in Creative Writing. It just needed to be an easy-to-read, easy-to-understand book including such topics as Organizing a Report, Writing Effective Sentences, English Usage, and Words & Expressions to Avoid, and so on. You know, someone needs to write something titled "Criminal Justice Report Writing."

Guess what.

Someone did.

She is Jean Reynolds, Ph.D. of Winter Haven, Florida. And guess what she titled her 221-page book? *Criminal Justice Report Writing*, (Maple Leaf Press, 2013).

Exactly what the doctor ordered (pun intended). It will definitely help you with your writing skills.

The good doctor, author of several other books, aimed this one toward those who write reports after completing either simple narratives for typical accident investigations or detailed reconstructions of highly complicated crashes.

I asked Ms. Reynolds why she wrote the book (her ninth, by the way) in the first place. She said, "My interest in criminal justice began when I taught basic education to inmates at Polk Correctional Institution here in Florida. I also did staff training and development there, and I started to learn about issues that officers deal with when they write reports ... I [looked] at books for officers that were currently on the market, and soon realized that there was no practical book about communications."

Some officers – including those who know they are poor writers – ask who cares about misspellings, grammar, or sentence structure as long as the facts are correct and it gets the points across?

Keep in mind, you are not the only person who reads what you wrote. And though readers may know what you're trying to say, bad spelling and such reflects negatively not only on you as an investigator but on your agency as well.

As Dr. Reynolds reminds you, "Your reports play a vital role in the day-to-day functioning of an agency or institution ... they attest to your professionalism." She adds, "Many people both inside and outside the criminal justice system may read the reports you write, drawing conclu-

Continued on next page...



Jean Reynolds, Phd



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sions about the choices you made when you dealt with a particular situation.”

The author included a number of features to make *Criminal Justice Report Writing* useful to officers who want to improve their writing skills on their own. The book is jargon-free (no fancy grammatical terminology), and answers are provided for every exercise. There’s a pre-test with a key to chapters in the book so report writers may quickly evaluate their writing skills and design a plan for improvement. A post-test helps them assess their progress and return to topics that still need attention.

Ms. Reynolds notes that “Most [police] academies and colleges do not have time to incorporate a thorough grammar and usage review into their report-writing instruction. To assist students who need additional help with these writing skills, this book offers an extensive, jargon-free review of grammar and usage for students to study on their own. Exercises and an answer key are provided.”

Her 17-page Instructor’s Manual with lesson plans and tests is available (free) to law enforcement training officers.

Her website, [www.YourPoliceWrite.com](http://www.YourPoliceWrite.com), provides extensive resources: Instruction, sample reports, videos, podcasts, and a blog that you should find lively and engaging. Everything is free, and no registration is required. Reynolds also has a free Police Writer e-newsletter that she publishes twice a month.

Speaking of tests, the book includes two of them, a pre-test to take prior to reading the text, and a post-test to take when you’re finished to gauge how much you learned. But not to worry, the author included all the answers.

The book *Criminal Justice Report Writing* covers topics you may have slept through in English class: Comma usage, Quotation marks, Prepositions, and many common errors report writers often commit. A spelling mistake, for example, might not affect a sentence’s meaning, but it can reflect badly on the report writer. [For example, “If he makes mistakes in spelling and grammar in his report, he just as easily could have made mistakes in his investigation.”]

Dr. Reynolds gives this tip: “The chapters about Avoiding Common Errors (page 153) and Myths about Grammar (page 159) are short and readable, and they can teach you a lot about writing in a short time.” That’s good to know for those of you with short attention spans.

Many officers write their narratives in third person. *This officer arrived at the 10-50 PI and took cognizance of the area.* Such a sentence is so wrong in several ways. How many of you have written about a *car that was red in color?* Or, *with reference to the abovementioned units, numerous items of evidence were in close proximity to the victim.* Egad. The author will help you explain the situations in simpler, less verbose terms.

Go to Dr. Reynolds’ website [www.YourPoliceWrite.com](http://www.YourPoliceWrite.com) to learn more about the author, plus the site will help you sharpen your skills and find report writing podcasts. Moreover, you can take a free online report writing course.

If you have questions about her book or if you have specific questions about report writing, you may contact her at [jreynoldswrite@aol.com](mailto:jreynoldswrite@aol.com).

In conclusion, Dr. Reynolds adds, “One final thing: I included a plain-language review of professional sentence patterns for ambitious officers who might be thinking about promotions. Those sentence skills are likely to prove useful in administrative reports, official correspondence, and press releases.”

*Criminal Justice Report Writing* is available for sale at [www.Amazon.com](http://www.Amazon.com)

for \$17.96. The Kindle edition (also from Amazon) costs \$11.99. Other e-book formats are available (\$11.99) at [www.Smashwords.com](http://www.Smashwords.com). These websites feature free previews of the book.

(About the reviewer: Joseph E. Badger is an internationally known accident reconstructionist who has had over 100 articles published in such periodicals as *Law and Order* magazine, *Accident Reconstruction Journal*, *Accident Investigation Quarterly*, and others. Having retired after 20 years with the Indiana State Police, Mr. Badger resides in Bloomington, Indiana.)



# CALIFORNIA ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS

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Please note that I have attached my ad copy to fit the ad space and that I have made payment to the CAARS treasurer.

Attachment: XYZAd.jpg