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Clues in GM crashes easy to miss

Driver error assumed, not a design flaw

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DETROIT -- At the time, many of the crashes now tied to faulty General Motors ignition switches looked like the predictable consequences of drunken driving, speeding or inattentiveness late at night. Some were a violent and tragic combination of all three.

Police say they had no clear reason to suspect anything was amiss with the cars. They had seen plenty of crashes in which airbags didn't deploy, for a variety of reasons. Teams of investigators hired by the National Highway Traffic Safety Administration to examine three of the crashes noted that the ignition was in "accessory" mode, but that oddity seemed to ring few alarm bells on its own.

"I wish these crashes were as simple as they appear to be," David Friedman, NHTSA's acting administrator, told members Congress investigating the recall this month. "I wish the connection was as direct as we now know it is."

Documents and interviews with police and victims' families suggest that mistakes and bad decisions made by some of the drivers may have helped mask the existence of a defect to those outside GM who were not in a position to see a pattern develop.

Some family members long suspected a flaw in the car, but with scant proof beyond undeployed airbags and a refusal to believe their loved one was at fault.

In some of the crashes, GM's acknowledgement of a defect now offers a possible explanation for why the driver lost control.

But it's also conceivable that a driver could lose control for reasons unrelated to performance of the switch -- after which jostling of the ignition could render the airbags inoperable and take away the protection they would have provided upon impact. Accident investigators and reconstruction experts say airbags can make a big difference in frontal crashes, because the crumple zone often prevents serious damage to the passenger compartment.

All crashes linked to the recall were frontal-impact but with no airbag deployment.

Not wearing seat belts

Another factor muddying detection of the potential cause was that more than half of the 13 people whose deaths GM has linked to the recall were not wearing seat belts, according to data in the government's Fatality Analysis Reporting System and research by *Automotive News*.

In four crashes that caused six deaths, the driver determined to be at fault was legally drunk. In three crashes, the car was reported to be going roughly 40 mph over the speed limit either at impact or in the moments before.

GM says the ignition switch slipping out of the “run” position deactivates the airbags in a crash and disables features such as power steering and power brakes. Seat belts also may not lock properly if the ignition cuts off.

“The airbag typically does a lot in preventing head and chest injuries,” said Alan Cantor, an engineer specializing in crashworthiness analysis and founder of ARCCA, a Philadelphia-based forensic-engineering firm. “Even at the higher level crashes, the airbag can do quite a bit, even for the unbelted.”

Of the 12 fatalities identified by *Automotive News* -- details of one death are still unknown -- none of those killed was ejected from the car, and none of the crashes involved the car rolling onto its roof. Crash reports indicate many of the victims were most severely injured in the head, chest or abdomen, generally by hitting the steering wheel, windshield or instrument panel.

According to the Insurance Institute for Highway Safety, frontal airbags reduce driver deaths in frontal crashes by 29 percent and reduce deaths of front passengers at least 13 years old by 32 percent. The institute says studies show working airbags reduce unbelted occupant deaths by 34 percent vs. a 21 percent reduction in fatalities for people properly wearing a seat belt.

The one fatality that GM specifically referenced in two recall timelines filed with NHTSA is 16-year-old Amber Marie Rose, who crashed her 2005 Chevrolet Cobalt into trees at the end of a Maryland cul-de-sac. The accident sounded relatively routine when first mentioned in the Washington Post two days later.

The article listed Rose’s death after the details of two other area traffic fatalities that weekend, and it said alcohol and speed were factors in the 3:40 a.m. crash.

Likewise, a possible explanation for a crash that killed two teenagers the following year in Wisconsin was the fact that the 17-year-old driver had only a learner’s permit and was not accompanied by a licensed adult, as required.

Those were two of the four fatal crashes that NHTSA knew of in September 2007, when it considered opening an investigation into airbag nondeployments in the Cobalt and Saturn Ion, according to documents turned over to a U.S. House of Representatives committee. NHTSA, which also had received 29 complaints and 14 field reports of stalling by that time, decided not to pursue the matter further.

Lawsuits filed

Meanwhile, GM already had faced litigation over three of the four crashes, eventually settling each of the cases. (A wrongful-death suit related to the Wisconsin crash was filed just last month.)

Two of the crashes occurred in 2004, the same year GM engineers reported that the Saturn Ion’s ignition could be accidentally turned off by a driver’s knee. No one witnessed either crash, and GM has said the Ion’s black box was designed in such a way that crashes are not recorded if the ignition is off.

Rhonda Erickson, whose 25-year-old son, Gene Mikale Erickson, died Nov. 15, 2004, when an Ion driven by his girlfriend hit a tree, said she never understood until now why the airbags didn’t work.

“They could never prove why the airbags didn’t come out,” she said. “If the airbags had come out, I’m thinking it would have saved his life.”

Cobalt crashes in October 2007 and September 2008 killed three more people, but in both cases there were factors that distracted attention from failed airbags. Both cars were reported to be speeding, and evidence suggested the driver in the 2007 crash, which happened in a suburb of Cleveland, might have suffered a seizure.

Police who investigated the September 2008 crash, which killed two 19-year-old friends in southwestern Michigan, did not highlight any indication of trouble with the car in their report. The car drove off a wet,

curving road into a tree, and blood tests identified a blood-alcohol level of 0.12 percent -- well above the 0.08 limit for those of legal drinking age -- and THC in his system, according to the police report.

GM’s legal staff opened files on both crashes soon afterward, according to a lawsuit filed last month in a federal court in San Francisco. Three weeks after the Michigan crash -- but unknown to the victims’ families until now -- a private investigator hired by GM contacted police seeking data on it.

The Michigan and Ohio crashes were among 15 fatal Cobalt accidents that GM reported to NHTSA through September 2008. But they were among the only three of those crashes for which NHTSA did not request additional details, according to records obtained and posted online by the Center for Auto Safety in Washington.

Missed curve

Ivan Grondona doesn't blame GM for causing the crash that hospitalized him for a week in December 2008. Grondona admits he was tired after an all-day shift as a pharmacy technician in central Florida, when he missed a curve in his 6-month-old Cobalt at 1 a.m. and crashed into a mailbox, fence and palm tree. He wasn't wearing his seat belt, and police attributed the crash to careless driving.

"The airbags didn't deploy, and my head went through the windshield," Grondona said last week.

Grondona, who was 19 at the time and still has scars on his face, explored suing GM but never did so. He said medical care cost him about $10,000.

He said he had no other problems with the car and did not recall the engine shutting off during the crash. But GM downloaded the black-box data and found that the ignition was in "accessory" mode, according to the San Francisco lawsuit, in which Grondona is not a plaintiff.

GM reported Grondona's injury to NHTSA in the first quarter of 2009, making the incident one of 35 crashes it has linked to the recall.

Grondona said he didn't know about any of that, and that he had not heard about the recall when contacted by *Automotive News*.

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