# INFORMATION Redacted PURSUANT TO THE FREEDOM OF



U.S. Department of Transportation

**National Highway Traffic Safety** Administration

# NFORMATION ACT (FOIA), 5 U.S.C., 552(B)(6) ODI RESUME

Investigation: EA07-010

Prompted By: PE07-016, Consumer Complaints

Date Opened: 08/08/2007 Date Closed: 10/11/2007

Principal Investigator: Scott Yon

Subject: Unwanted Acceleration, Floor Mat

Manufacturer: Toyota Motor Corporation

Products: MY 2002 - 2008 Lexus ES350 and Toyota Camry

Population: 55,000 (estimated)

Problem Description: The accessory all weather floor mat can entrap the throttle pedal.

# **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	Total		
Complaints:	26	31	49		
Crashes/Fires:	7	7	10		
Injury Incidents:	8	6	8		
# Injuries:	11	6	13		
Fatality Incidents:	1	0	1		
# Fatalities:	1	0	1		
Other:	35*	4*	39		

Description of Other: \*ODI: Reports from VRTC Survey, MFR: Related Warranty Claims

Action: This Investigation is closed. Recall 07E-082

Engineer: D. Scott Yon Solve (0/15/07)
Div. Chief: Jeffrey L. Quandt

Office Dir.: Kathleen C. DeMeter

Date: <u>10/11/2007</u>

Date: 10/11/2007 Date: 10/11/2007

Summary: The driver side floor mat will not interfere with the throttle pedal if properly secured using the retaining hooks provided by Toyota. However, if the all weather mat is unsecured and moves forward from its intended position it can entrap the throttle pedal at the fully open position after it has been depressed. This can happen regardless of whether or not another mat (carpet) is underneath.

When this occurs, some operators react by applying the brake pedal multiple times, depleting the braking system's (vacuum based) power assist. Stopping the vehicle with unassisted braking while the throttle is fully open requires significant pedal force, which some operators did not, or were unable to, apply for the required duration. Continued driving in this condition results in overheated brakes, which further diminishes the braking effectiveness. Some operators attempted to turn the vehicle off by depressing the engine control button, however they were unaware the button had to be depressed for three seconds to stop the engine when the vehicle is in motion; this functionality was not explained adequately in the owner's manual.

In ODI interviews owners reported they were unaware the all weather mat had the potential to interfere with the throttle pedal, advising that this was never properly explained given the significant hazard it represented. Owners reported several explanations for why the mat was unsecured, including that the vehicle was delivered in this condition (most common reason), or that they had (unwittingly) installed the mat themselves, or that another party, such as a car wash attendant, had disturbed the mat without the owner's knowledge. One consumer reported that their vehicle was delivered without the retaining devices installed.

In a September 26, 2007 letter to NHTSA, Toyota indicated that they would conduct a safety recall to replace the all weather mat with a redesigned mat. According to Toyota, the new mat design will reduce the potential for mat interference with the throttle pedal.

The population noted above represents the number of subject mats that have been sold in the United States. Since Toyota cannot identify which vehicles may have the subject mats, they will send a letter to all registered owners of the subject vehicles (estimated 750k) advising them of the concern and remedy. A copy of that letter will be posted on NHTSA's web site under Recall 07E-082; it contains a description of the condition and the actions an operator should take in the event throttle entrapment occurs while driving.

The fatality incident noted above occurred in July 2007 and was investigated by NHTSA's Special Crash Investigations office. It has not been reported on a Vehicle Owner Questionnaire. The operator reportedly traveled at speeds in excess of 100 mph for an estimated eight miles on an interstate in California before it struck two other vehicles. One of the struck vehicles and the subject vehicle caught fire. The occupant of the struck vehicle did not evacuate and died at the scene. The subject vehicle driver suffered a broken bone. The California Highway Patrol is investigating the incident also.

ODI did not issue an Information Request letter during this investigation. The Toyota reports noted above were reported during Preliminary Evaluation, (PE) 07-016 and are current through April 2007 for MY 2007 Lexus ES350 only. ODI does not have field experience data from Toyota for Camry vehicles.

Throttle entrapment due to improperly installed floor mats could be a concern in all vehicles. Therefore, drivers should always ensure their floor mats are properly and safely installed. This includes original equipment mats (carpet and accessory) and especially aftermarket mats. Operators of vehicles with engine control buttons should also ensure they fully understand the button's functionality.



U.S. Department of Transportation

# Memorandum

Vehicle Research and Test Center P.O. Box B37 East Liberty, Ohio 43319 (937) 666-4511

**National Highway Traffic Safety** 

Administration

Date: APR 3 0 2008

Subject:

FINAL REPORT: "2007 Lexus ES-350 Unintended

Acceleration"

From:

Reply to NVS-310

Director, Vehicle Research and Test Center

Attn. Of:

NVS-210

To: Kathleen DeMeter

Director, Office of Defects Investigation

Attached are four (4) copies of the subject report. This completes the requirements for this program.

Attachment: Final Report

Get it together! SAFETY BELTS SAVE LIVES

AUTO SAFETY HOTLINE (800) 424-9393 Wash, D.C. Area 366-0123

# VRTC MEMORANDUM REPORT EA07-010 VRTC-DCD-7113

#### 2007 Lexus ES-350 Unintended Acceleration

## 1.0 Introduction

This program was performed at the Vehicle Research and Test Center (VRTC) at the request of the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration. ODI opened an Engineering Analysis (EA07-010) on 2007 Lexus ES-350 vehicles to investigate reports of unintended acceleration.

# 2.0 Objectives

- **2.1** Determine whether reported incidents of unintended acceleration were caused by a vehicle system malfunction or mechanical interference;
- 2.2 Understand and document the effects of unintended acceleration as they impact controllability of the vehicle;
- **2.3** Document potential difficulties experienced by the operator while attempting to regain control of the vehicle.

# 3.0 Project Tasks

# 3.1 <u>Dynamic Instrumented Vehicle Testing</u>

The Vehicle Research and Test Center obtained a Lexus ES-350 for testing (see Figure 1). The vehicle was fully instrumented to monitor and acquire data relating to yaw rate, speed, acceleration, deceleration, brake pedal effort, brake line hydraulic pressure, brake pad temperature, engine vacuum, brake booster vacuum, throttle plate position, and accelerator pedal position. Multiple electrical signals were introduced into the electrical system to test the robustness of the electronics against single point failures due to electrical interference. The system proved to have multiple redundancies and showed no vulnerabilities to electrical signal activities. Magnetic fields were introduced in proximity to the throttle body and accelerator pedal potentiometers and did result in an increase in engine revolutions per minute (RPM) of up to approximately 1,000 RPM, similar to a cold-idle engine RPM level. Mechanical interferences at the throttle body caused the engine to shut down. Mechanical interferences at the accelerator

pedal revealed that the one-piece, non-articulating accelerator pedal assembly was easily entrapped in the groove of the rubber all-weather floor mat (Figures 2 and 3) if the rubber mat was not properly secured with at least one of the two retaining hooks (Figure 4). In many observed ES-350's, the rubber mats were stacked on top of the existing carpeted floor mats, which prevented attachment of the rubber mats and facilitated the interference failure mode. A warning is embossed on the front of the floor mat that reads "Do not place on top of existing floor mats". Very few owners interviewed were able to find or read this warning (see Figure 5).

## 3.2 Owner Surveys

To comprehend the statistical significance of the probability for this event to occur, a survey was sent to a sample size of 1986 registered owners of a 2007 Lexus ES-350 requesting information regarding episodes of unintended acceleration. NHTSA received 600 responses for an overall response rate of 30.2%. Fifty-nine owners stated they experienced unintended acceleration. Thirty-five of those responding also reported that their vehicles were equipped with rubber Lexus all-weather floor mats and several commented that the incident occurred when the accelerator had become trapped in a groove in the floor mat. Interviews with owners revealed that many had unsecured rubber floor mats in place at the time of the unintended acceleration event, which included in some cases unsecured rubber floor mats placed over existing Lexus carpeted mats.

# 3.3 Analysis of the Effects of Unintended Acceleration on Vehicle Control

The safety consequences of an unsecured rubber floor mat trapping the accelerator pedal with the vehicle in gear can be severe. With the engine throttle plate open, the vacuum power assist of the braking system cannot be replenished and the effectiveness of the brakes is reduced significantly. During trapped throttle acceleration testing, several methods to defeat acceleration proved effective but not necessarily intuitive. These methods included:

**3.3.1** Application of the brake - Significant brake pedal force in excess of 150 pounds was required to stop the vehicle, compared to 30 pounds required when the vehicle is operating normally. Stopping distances increased from less than 200 feet to more than 1,000 feet.

- 3.3.2 Turning off the ignition In place of an ignition key, the ES-350 uses an ignition button that removes the ability to instantaneously shut off the engine in the event of an emergency while the vehicle is in motion (see Figure 6). It was found that depressing and holding the button will eventually turn off the engine after three seconds. Through the survey it was learned that the button delay operation is not widely known by owners and because of this, drivers found themselves unable to turn off the engine when the vehicle was in motion. The owner's manual makes general mention of the operation, but there is no indication of the three second hold requirement.
- 3.3.3 Placing the vehicle in Neutral Many owners complained that the neutral gear position in the gated shift pattern was not immediately obvious, leading to unsuccessful attempts to disengage the engine from the drive wheels. On the labeled shift diagram located on the console, the Neutral "N" marking is in closest proximity to the "Sport" mode upshift gate (see Figure 7).
- 3.3.4 Activation of Electronic Stability Control (ESC) It was discovered that if an emergency maneuver is executed that activates the Electronic Stability Control, such as steering around a sharp curve while traveling at an excessive speed, the electronic throttle is temporarily electronically closed by the vehicle control module regardless of the accelerator pedal position. With the throttle plate closed, vacuum quickly returns to the brake booster and provides a significant increase in braking capability (see Figure 8). Additionally, ESC has the capability to automatically apply hydraulic pressure to the service brakes to aid in slowing the vehicle. When the emergency maneuver is concluded however, the ESC system returns to a passive state, and the throttle again returns to an open condition leading to further unwanted acceleration.

# 4.0 Summary

- Mechanical interferences at the accelerator pedal revealed that the accelerator pedal
  assembly was easily entrapped in the groove of the rubber all-weather floor mat if the
  rubber mat was not properly secured with at least one of the two retaining hooks.
- A survey was sent to 1986 registered owners of a 2007 Lexus ES-350 requesting information regarding episodes of unintended acceleration. Of the 600 people that responded, 59 stated that they experienced unintended acceleration and 35 complained of pedal interference with the Lexus rubber all-weather floor mats.
- With the engine throttle plate open, the vacuum power assist of the braking system cannot be replenished and the effectiveness of the brakes is reduced significantly.
  - o Brake pedal force in excess of 150 pounds was required to stop the vehicle, compared to 30 pounds required when the vehicle is operating normally.
  - o ESC activation may restore vacuum to the brake booster, providing a significant increase in braking capability, but only until ESC activity ceases.
- The owner survey indicated the 3 second delay in the operation of the ignition button is not widely known by owners and because of this, drivers found themselves unable to turn off the engine when the vehicle was in motion.
- Many owners complained that the neutral gear position in the gated shift pattern was not immediately obvious, leading to unsuccessful attempts to disengage the engine from the drive wheels.



**Figure 1 – 2007 Lexus ES-350** 



Figure 2 – Lexus All-weather Floor Mat with Retaining Hook Holes at the Bottom



Figure 3 – Accelerator Pedal Trapped at Full Throttle by Unsecured Rubber Floor Mat



Figure 4 – Floor Mat Retaining Clip and Carpet Receiving Eyelet

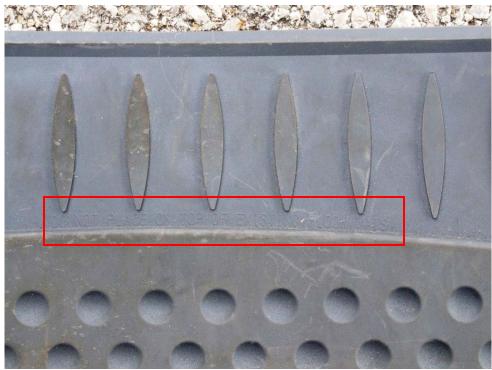


Figure 5 – Embossed Warning On Floor Mat States "Do Not Place On Top of Existing Floor Mats"



Figure 6 - Push Button Ignition Replaces Conventional Key



Figure 7 – Shift Gate with Diagram

# **Lexus ES350 Performance Test**

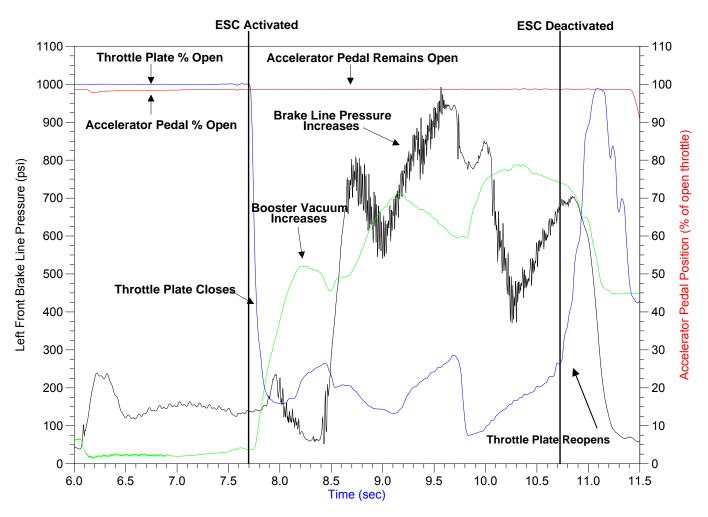


Figure 8 – Data Acquired from Lexus During Testing Indicates Engine Throttle is Overridden During ESC



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# ODI RESUME

Investigation: PE 04-021

Prompted By: Consumer Complaints, Petition Request DP04-004

Date Opened: 03/03/2004 Principal Investigator: Scott You Subject: Throttle Control System

Manufacturer: Toyota Motor Sales, USA, Inc.

Products: MY 2002 - 2003 Toyota Camry, Camry Solara and Lexus ES300

Population: 1,010,000 (Estimated)

Problem Description: Complainants allege that the throttle control system fails to properly control engine

speed resulting in vehicle surge.

#### FAILURE REPORT SUMMARY

•	ODI	Manufacturer	Total
Complaints:	37	tbd	37
Crashes/Fires:	30	tbd.	30
Injury Incidents:	4	tbd	4
# Injuries:	5	tbd	5
Fatality Incidents:	0	tbd	0
# Fatalities:	0	tbd	0
Other*:	0_	tbd	0

\*Description Of Other:

Action: A Preliminary Evaluation has been opened.

188ya 2(4/04 Engineer: <u>D. Scott You</u>

Date: 03/03/2004 Div. Chief: Jeffrey L. Quandt Date: 03/03/2004 Office Dir.: Kathleen C. DeMeter Date: 03/03/2004

Summary: Crashes noted above varied from minor to significant and may have involved other vehicles and or building structures. One of the noted injuries was serious; it occurred when a pedestrian was struck by a vehicle which allegedly surged forward unexpectedly. The Lexus models were the subject of a Defect Petition, see DP04-003 for further details.

The subject vehicles are manufactured with an electronic throttle control system that uses sensors at the accelerator pedal to indicate pedal position (throttle demand). An electronic control unit (ECU) interprets the signals of the pedal sensors and then controls the position of the throttle valve (TV) in the throttle body (TB). The ECU also monitors the TV's position via sensors in the TB.

Complainants allege that the vehicle may suddenly and unexpectedly surge or accelerate, stating that the condition is generally of short duration when it occurs. Some reports allege the condition has occurred intermittently on multiple occasions. It may occur during slow speed vehicle maneuvers (where the brake pedal is being used to control vehicle speed) and/or after shifting the transmission and/or at higher speeds under cruise control operation. In most cases, the brake system was reportedly functional and could be used to control the vehicle when the condition occurred.

ODI is opening this Preliminary Evaluation to determine the manufacturer failure report counts and to investigate if the throttle control system could be the cause of vehicle surge or unwanted acceleration.

# PE04 – 021; Toyota Throttle Control

# 37 VOQs - ODI Numbers

763094, 6900639, 8001010, 8004502, 8013543, 8013908, 8015215, 8017143, 8022453, 10002266, 10002533, 10003476, 10003640, 10003939, 10008367, 10008754, 10015971, 10017187, 10019875, 10023329, 10024048, 10024313, 10025068, 10026392, 10026512, 10032815, 10038103, 10039916, 10045644, 10045944, 10048030, 10053774, 10055375, 10055820, 10056060, 10056117, 10056537



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# **ODI RESUME**

Investigation: PE07-016 Date Opened: 03/29/2007

Principal Investigator: Scott Yon Subject: Accessory Floor Mat

Manufacturer: Toyota Motor Corporation

Products: MY 2007 Lexus ES350 Population: 80,000 (estimated)

Problem Description: The accessory floor mat interferes with the throttle pedal

# FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	5		
Crashes/Fires:	3		
Injury Incidents:	3		
# Injuries:	7		
Fatality Incidents:	0		
# Fatalities:	0		

Action: Open a Preliminary Evaluation

Engineer: <u>D. Scott Yon</u>

Div. Chief: <u>Jeffrey L. Quandt</u>
Office Dir.: <u>Kathleen C. DeMeter</u>

- 3(25/07

Date: 03/29/2007 Date: 03/29/2007

Date: 03/29/2007

Summary: The subject vehicles come equipped with a standard floor mat made from a carpeted material. Two plastic hooks that are secured to the vehicle flooring are used to retain the mat in its proper position. The vehicle manufacturer also supplies an optional equipment winter floor mat made from a rubberized material (only a portion of the subject vehicles contain winter mats). The hooks used for mat retention will only secure one floor mat at a time, either the winter mat or the carpet mat. The winter mat contains a written statement warning "Do not place on top of existing floor mats." Consumers interviewed by ODI have indicated that the warning was not discernable. If the driver side winter mat is placed (unsecured) on top of the carpet mat it may interfere with the throttle pedal preventing it from returning to the closed position after application and thus increasing the risk of a vehicle crash. A Preliminary Evaluation has been opened to investigate this issue.

# U.S. Department of Transportation National Highway Traffic Safety Administration

# Memorandum

Subject: Complaint Update

Date: March 23, 2004

From: Scott Yon

To: File for PE04-021, Toyota Throttle Control

This memo serves to update ODI's analysis of consumer complaints for relevance to the specific throttle control issues that are being investigated in PE04-021. Since opening the investigation March 3<sup>rd</sup>, 2004, the Office of Defects Investigation (ODI) has conducted detailed interviews of complainants identified in the opening resume to gather specific information concerning the failure incident(s) that are alleged in each instance. Information collected in ODI's interviews indicated that some of the complaints that were counted in the opening resume were not related to the throttle control issue that is under investigation. This memo identifies the complaints that are considered relevant to PE04-021. ODI also used the interviews to make arrangements for inspections of vehicles of interest where possible. ODI will be continuing in this effort over the coming weeks.

This investigation concerns the electronic throttle control system in model year 2002 and 2003 Toyota Camry, Camry Solara, and Lexus ES300 passenger cars (subject vehicles). Unlike most passenger cars, where the accelerator pedal uses mechanical linkages to control engine speed and power, the subject vehicles use an electronic throttle control system. Sensors at the accelerator pedal indicate pedal position (throttle demand) and an electronic control unit (ECU) interprets the pedal sensor signal to open or close the engine's throttle valve.

ODI has opened this investigation based on owner reports alleging that: A) an engine speed increase occurred without pressing on the accelerator pedal or, B) the engine speed failed to decrease when the accelerator pedal was no longer being depressed. In either event, ODI's position is that if such a failure were to occur the driver would be able to control or stop vehicle movement by pressing on the brake pedal. However, in certain close-quarters driving situations (such as parking), should the subject vehicle throttle control system open the throttle valve without driver intent, the resultant vehicle surge could result in a momentary loss of vehicle control. In some instances, a crash may then result when the driver is unable to react in time to apply the brakes effectively. Longer duration incidents involving uncontrollable acceleration where brake pedal application allegedly had no affect are not within the scope of this

investigation. Accordingly, based on the information gathered from complainant interviews, ODI is revising the number of pertinent VOQs to 11, of which 5 reports involve a vehicle crash. No injuries have been identified. A list of the pertinent VOQ numbers is included as an attachment to this memo.

One of the VOQs that have been removed (ODI 10056117) involved a serious injury that occurred after the vehicle went through a car wash. In this incident, the vehicle's transmission was placed in neutral so that a conveyor/roller could pull the vehicle through the car wash while the operator remained in the vehicle (ODI notes that the functionality of the shift interlock system would not require application of the brake pedal to move the shifter from neutral to drive). During ODI's interview, the vehicle operator mentioned that their foot was not squarely on the brake pedal when the transmission was engaged and that it subsequently slipped off and may have inadvertently struck the throttle. ODI also removed two sets of duplicate VOQs (10002266 duplicate of 10003640, 10019875 duplicate of 10025068) and one VOQ that was included by error (10056537). The other VOQs were removed because ODI does not currently consider them to be the result of a throttle control failure; they may be reconsidered should new information warrant.

ODI is regularly monitoring incoming VOQs for relevance to this investigation and where appropriate will be interviewing these complainants. Any VOQ deemed to be pertinent to the investigation will be added on an ongoing basis.

PE04 – 021; Toyota Throttle Control, March 22, 2004

11 VOQs – ODI Numbers

6900639, 8004502, 8013543, 8013908, 8015215, 10008367, 10026392, 10026512, 10045944, 10053774, 10055375



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National Highway Traffic Safety Administration

# **ODI RESUME**

Investigation: PE 08-039

Date Opened:06/25/2008Date Closed:10/27/2008Investigator:Kyle BowkerReviewer:Jeffrey L. Quandt

**Approver:** Kathleen C. DeMeter

Subject: ACCELERATOR PEDAL-FLOOR MAT INTERFERENCE

## MANUFACTURER & PRODUCT INFORMATION

Manufacturer: MACNEIL AUTOMOTIVE PRODUCTS LIMITED

Products: WEATHERTECH "ALL-WEATHER FLOOR MATS" AND "FLOORLINERS"

Population: Confidential

Problem Description: UNDER CERTAIN CONDITIONS, AFTERMARKET WEATHERTECH "ALL-WEATHER

FLOOR MATS" AND/OR "FLOORLINERS" MAY INTERFERE WITH THE ACCELERATOR PEDAL, RESULTING IN UNWANTED ACCELERATION.

#### **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	Total	
Complaints:	4	8	12	
Crashes/Fires:	0	0	0	
Injury Incidents:	0	0	0	
Fatality Incidents:	0	0	0	

#### **ACTION / SUMMARY INFORMATION**

Action: THIS PRELIMINARY EVALUATION HAS BEEN CLOSED.

#### Summary:

THE OFFICE OF DEFECTS INVESTIGATION (ODI) IS AWARE OF 12 REPORTS SINCE 2005 THAT ALLEGE UNWANTED ACCELERATION ON A VARIETY OF DIFFERENT MODEL YEAR 2006 AND 2007 VEHICLES (FORD MUSTANG; CHEVROLET COBALT; GMC SIERRA 2500; ACURA MDX; HONDA RIDGELINE; HYUNDAI AZERA AND SANTA FE; AND TOYOTA 4RUNNER, AVALON, CAMRY, AND TUNDRA) EQUIPPED WITH A VARIETY OF DIFFERENT AFTERMARKET WEATHERTECH BRAND "ALL-WEATHER FLOOR MATS" AND "FLOORLINER" FLOOR COVERINGS MANUFACTURED BY MACNEIL. NONE OF THE VEHICLE/MAT COMBINATIONS HAD MORE THAN ONE COMPLAINT. NONE OF THE COMPLAINTS ALLEGED ANY CRASHES OR INJURIES.

WEATHERTECH BRAND "ALL-WEATHER FLOOR MATS" ARE A FLAT-PATTERN FLOOR COVERING MADE OF A FLEXIBLE RUBBER MATERIAL THAT HAVE DEEPLY SCULPTED CHANNELS DESIGNED TO TRAP MOISTURE AND DEBRIS. WHILE THEY ARE NOT CUSTOMIZED TO FIT ANY PARTICULAR MAKE OR MODEL VEHICLE, MACNEIL RECOMMENDS ANY ONE OF APPROXIMATELY 80 DIFFERENT SHAPED DESIGNS FOR EACH SPECIFIC MAKE, MODEL AND MODEL YEAR VEHICLE BASED ON ITS OWN BEST FIT CRITERIA. "ALL-WEATHER FLOOR MATS" UTILIZE A NIBBED BACKING AND/OR A RIDGED NON-SKID PATTERN TO LIMIT MOVEMENT BETWEEN THE MAT AND THE VEHICLE FLOOR BOARD.

WEATHERTECH ALSO SELLS "FLOORLINERS," WHICH ARE RIGID PLASTIC FLOOR COVERINGS THAT ARE CONTOURED TO FIT SPECIFIC MAKE, MODEL, AND MODEL YEAR VEHICLES. "FLOORLINERS" APPEAR TO RELY PRIMARILY ON THEIR FORM FITTING SHAPE TO LIMIT MOVEMENT BETWEEN THE MAT AND THE VEHICLE FLOOR BOARD. HOWEVER, MACNEIL DOES WARN CONSUMERS, "IF SO EQUIPPED, PLEASE BE SURE TO USE ANY RETENTION DEVICES SUPPLIED WITH VEHICLE MATS."

IN GENERAL, VARIOUS VEHICLE, MAT AND USE FACTORS CAN CONTRIBUTE TO THE POTENTIAL FOR FLOOR MAT INTERFERENCE WITH ACCELERATOR PEDAL TRAVEL. VEHICLE FACTORS CAN INCLUDE PEDAL AND FLOOR PAN DESIGN. MAT FACTORS CAN INCLUDE THICKNESS AND GEOMETRY, PARTICULARLY AFFECTING THE ORIENTATION OF THE LEADING EDGE IN THE VICINITY OF THE ACCELERATOR PEDAL. USE FACTORS THAT HAVE BEEN OBSERVED IN INTERFERENCE INCIDENTS

Investigation: PE 08-039 Close Resume Page 1 of 2

INCLUDE FAILURE TO REMOVE ORIGINAL FLOOR MATS WHEN INSTALLING NEW MATS (I.E., "STACKED" FLOOR MATS), INSTALLING PASSENGER SIDE MATS ON THE DRIVER'S SIDE, INSTALLING MATS IN AN IMPROPER ORIENTATION (E.G., BACKWARDS, UPSIDE DOWN), AND FAILURE TO USE RETENTION DEVICES. ODI HAS NOT IDENTIFIED A SAFETY-RELATED DEFECT TREND AT THIS TIME WITH ANY PARTICULAR APPLICATIONS OF WEATHERTECH BRAND "ALL-WEATHER FLOOR MATS" AND/OR "FLOORLINER" FLOOR COVERINGS AND FURTHER USE OF AGENCY RESOURCES DOES NOT APPEAR TO BE WARRANTED. ACCORDINGLY, THIS INVESTIGATION IS CLOSED. THE CLOSING OF THIS INVESTIGATION DOES NOT CONSTITUTE A FINDING BY NHTSA THAT A SAFETY-RELATED DEFECT DOES NOT EXIST. THE AGENCY WILL TAKE FURTHER ACTION IF WARRANTED BY THE CIRCUMSTANCES.

# DP09-001 S. COMPLAINT

# McHenry, Stephen (NHTSA)

From: Collins, Bill (NHTSA)

Sent: Thursday, September 10, 2009 11:42 AM

To: Quandt, Jeff (NHTSA); Yon, Scott (NHTSA); McHenry, Stephen (NHTSA)

Cc: Stoltzfus, Duane CTR (NHTSA); Willke, Don (NHTSA)
Subject: Calculation of lateral accel for alternate Santee route

The question has been asked about why the driver exited the freeway when he could have taken the ramp to Route 52. I measure a 1,000 foot radius from Google. The ES-350 has shown lateral grip to 0.75-0.80g (use 0.78g). The answer is that the car couldn't have made it unless ESC could effectively activate (the brakes were damaged). He might have been slowed though as he slid along the curved barrier.

A= V^2/r 0.78\*32.2f/s^2=V^2/1000 feet Sqrt(25116ft^2/s^2) =V 158 ft/s = 107 mph

@120 mph, he would have required: 120mph = 176 ft/s 30.96ft/s^2/32.2ft/s^2 = 0.96g

If there was no traffic...









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Related Terms: Chula Vista, El Cajon, La Jolla, Mission Gorge, Santee



# CHP releases 911 call in officer's fiery crash

By <u>Debbi Baker</u> Union-Tribune Staff Writer

3:30 p.m. September 10, 2009

#### **Audio**

Hear the 911 call. Warning: Graphic content.

SAN DIEGO – A harrowing 911 call made by a passenger in a fated Lexus that crashed seconds later and killed four people Aug. 28 was released Thursday by the California Highway Patrol.

In the 50-second tape, crash victim Chris Lastrella begins by telling the dispatcher: "We're in a Lexus ... we're going north (state Route) 125 and our accelerator is stuck."

The dispatcher asks where they are passing, and Lastrella is heard asking someone in the car where they are. He exclaims: "We're going 120 (mph)! Mission Gorge! We're in trouble – we can't – there's no brakes, MissionGorge ... end freeway half mile."

The dispatcher asks if they can turn the car off.

Lastrella doesn't answer and says repeatedly: "We are now approaching the intersection, we're approaching the intersection,"

The last sounds heard on the tape are someone saying "hold on" and "pray." Lastrella says: "Oh shoot ... oh ... oh" Then a woman screams.

Killed in the crash were CHP officer Mark Saylor and his wife Cleofe who were both 45, their 13-year-old daughter Mahala, and Lastrella, 38, who was Cleofe Saylor's brother. All four lived in Chula Vista.

A preliminary investigation into its cause has indicated the accelerator may have become entrapped by a rubber floor mat, sheriff's Sgt. Scott Hill said.

The car was a loaner from Bob Baker Lexus El Cajon.

Hill did not know if Saylor tried to shift the vehicle into neutral or turn it off – actions safety experts say may have been impossible if the car was experiencing a malfunction. The shut-off button on the car must be held for three seconds to turn the car off, experts said.

Dave Ezratty, vice president of Bob Baker Lexus El Cajon, said Wednesday that the dealer was refraining from commenting until the investigation into the accident is completed.

Investigators with the Nation Highway Safety Transportation Administration looked at the vehicle last week. Spokesman Ray Tyson said the agency got involved because of a 2007 recall involving after-market "all-weather" floor mats, including the Lexus ES 350.

The mats could slip if not properly installed and entrap the gas pedal, causing sudden acceleration.

The recall was intended to remedy the safety issue, Tyson said. Their investigation will determine whether there may be another safety defect that needs to be looked into, the spokesman said.

The sedan was traveling north on state Route 125 at 6:30 p.m in Santee when it entered the intersection at Mission Gorge Road and hit the rear of a Ford Explorer. The speeding Lexus went over a curb and through a fence and hit an embankment before becoming airborne, officials said.

The car hit the dirt in the San Diego River basin and rolled several times before bursting into flames. Officials with the Medical Examiner's office said all four died on impact of blunt force trauma.

Mark Saylor was a 20-year-veteran with the CHP assigned to the San Diego Area Field Office on Pacific Highway. As part of his job, he conducted safety inspections on tow trucks, armored trucks and ambulances.

Cleofe Saylor was a molecular biologist and senior research associate at Ambrax in La Jolla where she was involved in developing drug therapies for cancer and other diseases. Their daughter was about to start high school at Mater Dei Catholic High School in Chula Vista and was a soccer team captain.

Chris Lastrella coached basketball and worked as an enrollment adviser at Ashford University in San Diego.

**Debbi Baker**: (619) 293-1710;

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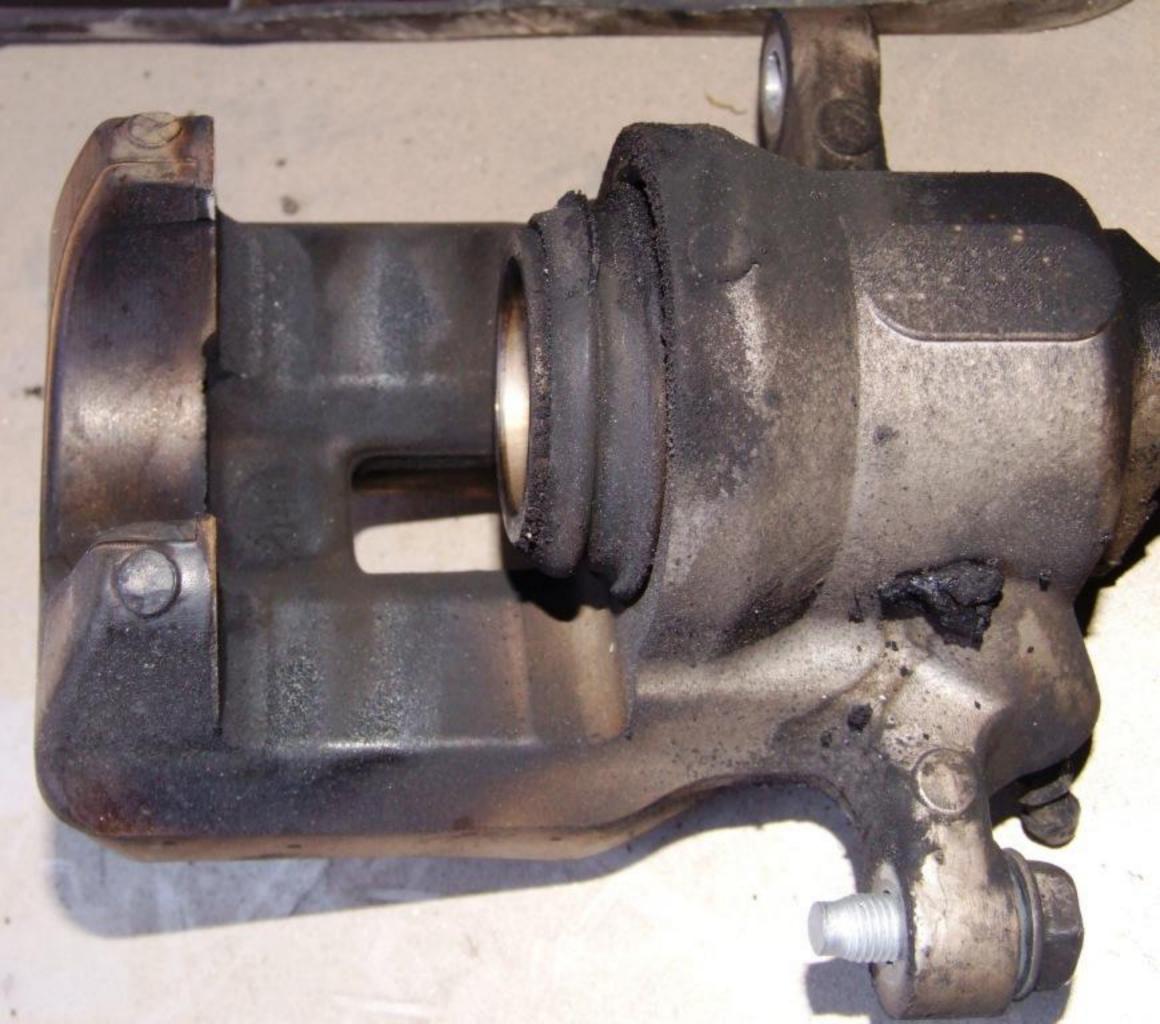
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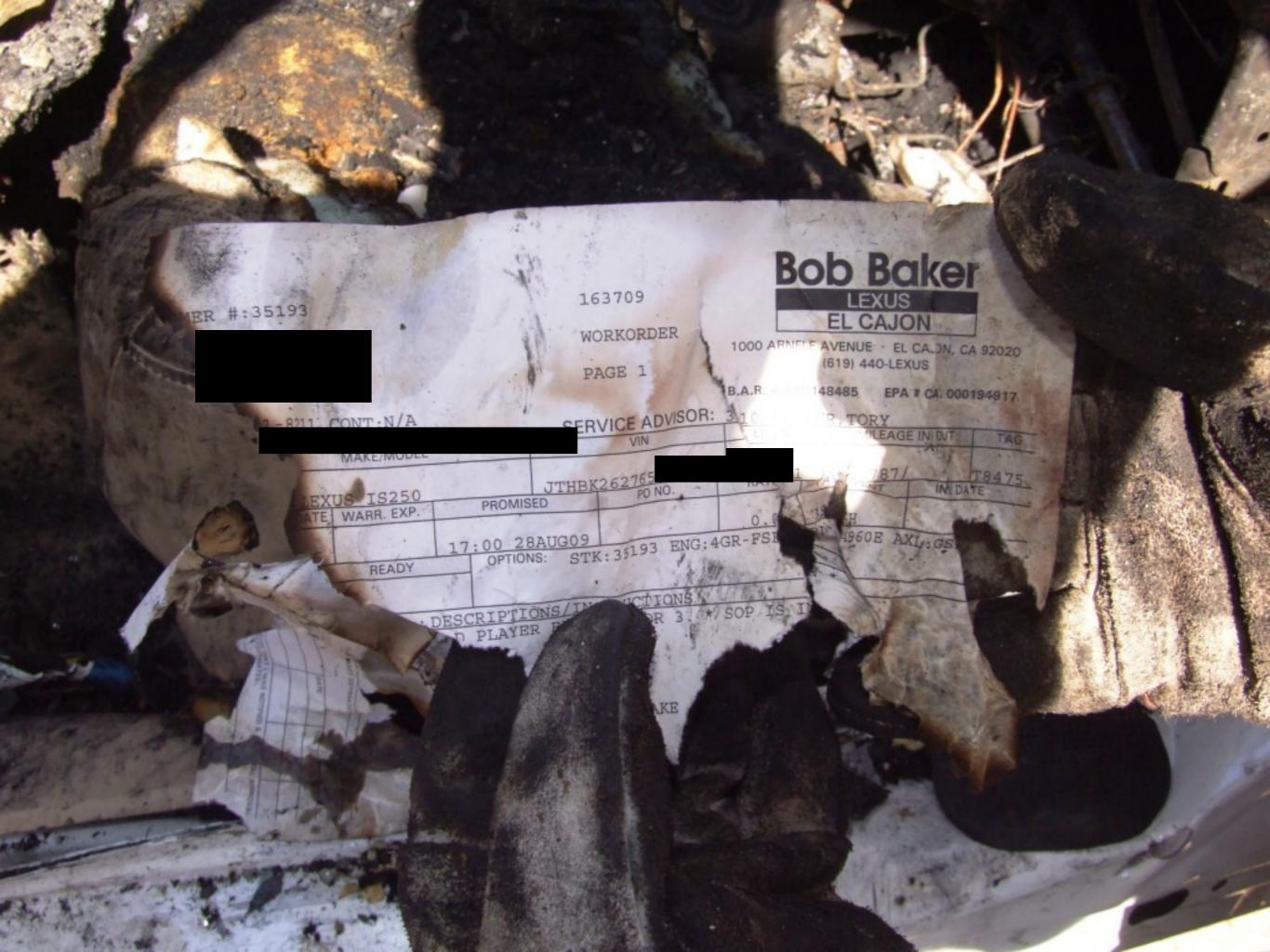














# Howell, Rosa (NHTSA)

From: Collins, Bill (NHTSA)

Sent: Thursday, December 10, 2009 4:00 PM

**To:** McHenry, Stephen (NHTSA); Quandt, Jeff (NHTSA); Yon, Scott (NHTSA)

**Subject:** FW: Saylor narrative.doc

From: Hill, Scott D. [mailto:Scott.Hill1@sdsheriff.org]

Sent: Thursday, December 10, 2009 2:50 PM

**To:** Collins, Bill (NHTSA); 'Bill Collins' **Subject:** narrative.doc

#### **FACTS:**

#### **Notification:**

On 08-28-09 at 1837 hours, I was working as traffic enforcement unit 51T4B in the city of Santee. I received a call (S7740359) of a fatal injury collision at the intersection of Mission Gorge Road and SR 125. I arrived on scene at approximately 1840 hours. All times, speeds, and measurements are approximate and were obtained with the assistance of the California Highway Patrol's (CHP) Multidisciplinary Accident Investigation Team (MAIT). A GPS coordinate system was used to obtain the area(s) of impact (AOI).

#### **Scene Description:**

The collision occurred on Mission Gorge Road at the intersection with State Route 125 North. Mission Gorge Road is a major six lane divided asphalt roadway. There are three eastbound and three westbound lanes, separated by a raised concrete center median. Mission Gorge Road runs east and west and is a major, heavily traveled thoroughfare through the city of Santee.

Westbound Mission Gorge Road at the intersection has two left turn lanes for vehicles entering southbound onto SR 125. SR 125 meets Mission Gorge Road and forms a "T" intersection, which has three southbound lanes. On the terminating northbound lanes of SR 125 there are two dedicated left turn lanes and two dedicated right turn lanes.

To the north of the intersection is an open, river bottom influenced field (San Diego River). The open field area is bordered on its southern portion by a short fence constructed of wooden posts. Immediately to the north of the wooden fence is a raised dirt burm. The back side of the burm declines onto a large plateau. The plateau in turn declines onto the river bottom itself. The river bottom at the time of this incident contained no water from the San Diego River.

The speed limit on Mission Gorge Road is posted at 40 MPH. The roadway is traveled and worn. The three phase overhanging traffic lights controlling the intersection were unobstructed and functional. There is an active construction site over SR 125 on both the east and west side of the freeway. The site involves an overpass across SR 125 that is a continuation of SR 52 east and westbound. There were no construction workers present. At the time of this collision, approximately 1837 hours, it was daylight and transitioning to dusk. The weather was clear and the sun setting in the west. The roadway was dry.

# **Parties:** ), was located in the driver seat of V1. D1 Driver. (D1 was identified as the driver of V1 by Medical Examiner Investigator James Buckley (#14). D1 was later identified as an Officer with the California Highway Patrol (CHP). I body from the driver's seat of V1. Investigator was present when Investigator Buckley removed D1 Buckley retrieved a California Driver's License from V1, in the area of the driver's seat. Investigator Buckley identified the driver as . According to Investigator Buckley's preliminary assessment at the had extensive blunt force injuries throughout his body, with extensive full body burns. scene, D1 By way of information received via CHP sources and Officer B. Pennings (Information Officer for CHP), the other occupants of V1 were believed to be D1 s wife. , brother in law, , and . I was informed a positive identification would only be possible at a later date, pending the results from an autopsy. This information will be encompassed in Investigator Buckley's report. (**09-01739**) was removed from V1 at about 0035 hours. was found in the front passenger seat. A preliminary finding at the scene from Investigator Buckley suggested succumbed to extensive blunt force injuries. Formal cause of death and identification would be revealed at a later date post autopsy. Passenger, (**09-01741**) was removed from V1 at about 0035 hours. was found in the right rear passenger seat. A preliminary finding at the scene from Investigator Buckley suggested succumbed to extensive blunt force injuries. Formal cause of death and identification would be revealed at a later date post autopsy. (**09-01740**) was removed from V1 at 0104 hours. Passenger, was found in the left rear passenger seat. A preliminary finding at the scene from Investigator Buckley suggested extensive blunt force injuries. Formal cause of death and identification would be revealed at a later date post autopsy. V1, a white 2009 Lexus ES350 (6DRT323), was located on its wheels, and fully engulfed in flame. Fire Department personnel arrived and extinguished the fire. Fire Personnel later confirmed there were four occupants inside and presumed deceased. V1 was at its uncontrolled point of rest in the open river bottom, approximately 154 feet north of Mission Gorge Road. It sustained major damage throughout, with the greatest area of intrusion at the entire front end and roof area.

Due to the fire, V1 sustained a great amount of burn damage over most of its interior and exterior. Any mechanical affects that may have been present were not identified at that time. It was later deemed the restraint system to V1 was intact, functioning, and engaged per reports from the ME, Santee Fire Department, and CHP MAIT units. Due to the burn damage to V1, the airbags that deployed could not be seen. The airbag containment system appeared to have engaged at impact.

**Driver,** (D2 ), was identified with his valid California Driver's License. D2 was contacted at the time and location of the collision scene. I observed D2

as he was seated in the driver seat of his 1983 Ford Explorer (V2), with his seat belt engaged and intact.

was transported to Sharp Memorial Hospital by Santee Fire Department, Medic #5 (FD). D2 was treated for soft tissue damage to his right shoulder and the back of his head. He was released from the hospital on 08-30-09.
V2, a red 1983 Ford Explorer ), was located at its uncontrolled point of rest, on its wheels, within the north western portion of the intersection of Mission Gorge Road and SR 125. V2 sustained major damage, with the right rear area having the greatest amount of intrusion. Incidental damage included the buckling of the entire frame due to the force of impact. The air bags had not deployed, and the restraint system to V2 was in full function and intact.
STATEMENTS:
OPINIONS AND CONLCLUSIONS:
INVESTIGATION:
In an attempt to determine the events that transpired before the collision, I spoke to Sergeant Mentink (13425) of CHP. Sergeant Mentink is one of D1 supervisors. Sergeant Mentink told me D1 most recent assignment was a long of the way to soccer function before the collision occurred. Officer Concepcion said this was the family's usual practice for a Friday evening.  At the time of this investigation, I had not spoken to family members of D1 supervisors. Sergeant Mentink and an attorney for the family, John Gomez, advised it would be too upsetting and unnecessary. I was advised the immediate families lived both out of town and out of the state, and had no pertinent information to provide.

#### **Physical Evidence**

A supplemental report by CHP's MAIT investigators includes the factual diagram portion of this report. This report consists of a dynamics diagram, an environment diagram, a scene diagram, and physical evidence diagram.

The physical evidence at the scene of the collision includes 39 points of evidence. These points are documented on the "Physical Evidence Descriptions" portion of MAIT's supplemental.

Using the Accident Reconstruction Pro computer program, I used a time and distance calculation to obtain a minimum speed for V1. I used the recorded 911 call from CHP to get a time of approximately 16 seconds from a known landmark (vocalized by Passenger ) to the initial area of impact. Using the 16 second time frame, I obtained a minimum speed of 112.8 MPH.

I used incremental calculations from 12 seconds to 16 seconds to the initial area of impact. Through these calculations I determined a range of between 112.8 MPH to 150.0 MPH for a minimum speed of V1. The calculations are attached to this report.

The Event Data Recorder (EDR) was recovered from V1. The EDR sustained damage due to collision and the subsequent vehicle fire. It is currently in Sheriff's evidence at the Santee Patrol station. On 11/30/09, Detective Duran transported the EDR to Los Angeles where Toyota technicians examined it for data. They were unable to retrieve any data and suggested the EDR be sent to Japan for further examination.

### **Other Factual Information:**

This investigation is a cooperative effort with the San Diego Sheriff's Department (SDSD) as the lead investigating agency. Other agencies include CHP's MAIT units (Scott Parent #16159, Justin Snider #15406, and Kevin Hearst #A08219), the Office of The Medical Examiner (ME, Investigator Buckley #14), and the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA, Investigator Stephen McHenry and Federal Engineer William Collins). Supplemental reports from these supporting agencies are attached to this investigation.

Deputy Moeller (2838) assisted with a blood draw. Deputy Collier (1519) assisted with scene control and witness statements. Deputy Burkhart (1870) assisted with scene control, scene documentation, witness statements, and digital images. Sergeant Goldberg (1110) assisted with supervision of the scene. Deputy Tucker (6963) assisted with scene control and containment. Deputy Knowles (4856) assisted with evidence collection and scene control. Corporal Spears (5632) assisted with scene control and witness statements. Sergeant Hill (1186) assisted with witness statements, and scene supervision. Please see their attached Deputy's Reports (DR) documenting their involvement.

Captain B. Eldridge (FD) assisted by providing audio evidence. The CD documents 911 calls to the FD's communications center. The CD was placed into Sheriff's evidence at the Santee Patrol Station.

#### **Investigation (cont.):**

On 08-28-09 at about 1835 hours, I was on patrol in the city of Santee. At about 1837 hours, I was monitoring the air when I heard a call of a grass fire in the field near Mission Gorge and State Route 125 North. Seconds later, it was dispatched there may be a car in the field. Believing there may have been a collision; I asked SDSD dispatch to put me on the radio call.

On the way, it was dispatched there may be at least one person inside the vehicle. At that point I advised I would be en route via a Code 3 emergency response. Additionally I was advised law enforcement was already on scene. Deputies from the SDSD began arriving on scene at about 1839 hours. I arrived at approximately 1840 hours.

When I arrived I saw a very thick and dark cloud of smoke in the open field/ river bottom area just north of Mission Gorge Road, where it intersects with SR 125 N. Deputy Moeller and I arrived at the same time and ran into the field in the direction of the smoke.

Corporal Spears, who arrived seconds before me, advised us there were four inside the burning vehicle. Deputy Moeller and I continued into the field and found a vehicle (V1) fully engulfed in flames. I could see at least one person in the right rear passenger seat, partially ejected from the back seat. Given the severity of the scene I

witnessed, and the extent of vehicle damage, I believed the occupant I saw had not survived. I attempted to locate a plate on V1 because at this point it was still not formally identified. I was unable to locate a plate.

Deputy Burkhart arrived immediately after I did and began photographing the collision scene. Deputies Moeller, Knowles, and I began to check the field area for the possibility that bodies may have been ejected. None were found. I began telling civilians around V1 to immediately leave the field. I attempted to leave the area and found I was almost surrounded by fire.

As I assessed my surroundings for safe way out of the field, I could see vehicle parts scattered a great distance around V1. I later learned the debris field around V1 was greater than 80 feet in diameter. At about 1844 hours, the FD (units 4, 26, 34, 5S, and medic unit 5) arrived. FD units were able to assist me in finding a safe path from the brush fire for myself, civilians in the immediate area, and Deputy Moeller.

I notified Sergeant Hill and Lieutenant Bolwerk and advised them of the magnitude of the incident.. At about 1845 hours, I requested assistance with documentation and reconstruction of what I now considered a major collision scene. Deputy Burkhart

coordinated an air support unit to photograph the scene. Sergeant Goldberg arrived to oversee operations until Sergeant Hill arrived.

Deputies, Tucker, Collier, Knowles, Moeller and Corporal Spears all began to gather information concerning potential witnesses. They obtained contact information from witnesses then released them from the scene. At that time, witnesses were advising V1 was a white Lexus seen speeding in excess of 100 MPH while it was on SR 125 N.

Corporal Spears contacted a witness	s, (off duty)	Corporal Spears gathered
information to contact	at a later date.	was said to be one of the first
witnesses on scene and attempted to	s of V1. statement is documented on	
a DR by Sergeant Hill.		

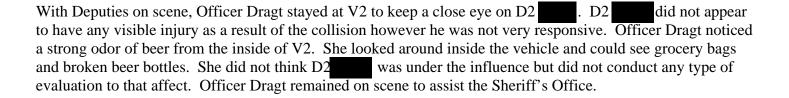
I contacted a unit from the San Diego Police Department, Officer J. Dragt (6168) who was the first law enforcement unit on scene. Officer Dragt had been standing by with the driver (D2) of a Ford Explorer (V2) that had been hit by V1 before it landed in the field. The following is Officer Dragt's statement:

#### Statement of witness, Officer Julie Dragt (SDPD #6168):

Officer Dragt was contacted at the time and location of the collision. Officer Dragt was the first law enforcement official on scene. Officer Dragt was on her way back to her beat from Las Colinas Detention Facility when she noticed smoke and flames in the area of the San Diego river bottom to the north.

Officer Dragt was west bound on Mission Gorge Road, in the number one left turn lane for south bound SR 125. Ahead of her in the intersection she noticed an SUV (V2) with major rear end damage. Officer Dragt began to think the fire she observed could possibly be related to the collision.

Officer Dragt pulled over to see if she could lend assistance to the driver of V2. As she located and attended to the driver (D2 , she was being flagged by people on scene that there was a vehicle in the river bottom (V1). By this time, Deputies from the SDSD began arriving. Officer Dragt assisted Deputies in clearing witnesses from the area of immediate hazard near the river bottom. It was then she received additional information from witnesses that there were people inside V1 and that they were all deceased.



# **Investigation (cont.):**

I approached V2 which was in the intersection of Mission Gorge Road and the off ramp from SR 125 N. I found D2, seated in the driver seat of V2. There was a strong odor of beer inside V2 and I could see broken bottles of beer inside. It appeared D2 had been grocery shopping as there were other food items scattered within V2. D2 was conscious but not responsive and appeared to be in shock. Medics from unit #5 began to prepare D2 for transport to Sharp Memorial Hospital. At that time I left Officer Dragt and Medic 5 to attend to D2

At about 1848 hours, Community Service Officer's Wieboldt (3187), Bradfield (6249), Bumbar (3368), and Weaver (7042) took control of Mission Gorge Road and shut it down to all east and west bound traffic. The Officer's shut down Mission Gorge Road from Fanita Drive to about a quarter of a mile west of SR 125. All traffic from SR 125 was diverted east bound, and all east bound traffic west of the intersection was diverted onto SR 125 S.

At 1850 hours, the FD advised V1 was occupied by four passengers, all confirmed deceased. At this time units from the California Highway Patrol (CHP) arrived in response to a 911 call they received moments before the collision. The 911 caller was said to be an occupant of V1 and was reporting speeds in excess of 100 MPH because of a stuck accelerator. CHP units and I discussed the jurisdiction of the collision. It was determined the collision occurred in Sheriff's jurisdiction. CHP remained to assist. I was later provided a copy of the 911 recording. It has been placed into Sheriff's evidence at the Santee Patrol Station.

At 1856 hours, SDPD air support "ABLE" arrived and began photo documentation of the scene from above and to check the area for possible ejected victims. Ultimately, no other victims outside V1 were found. At about 1909 hours, Deputy Knowles stated he found the license plate of V1 in the debris field. Dispatch was advised of the plate information and informed units on scene V1 was a 2009 Lexus sedan registered to Bob Baker Lexus. Deputy Knowles was instructed to go to the dealership at 1000 Arnele Avenue in the City of El Cajon to determine who the driver of V1 was.

At approximately 1919 hours, D2 was transported to Sharp Memorial Hospital by Medic 5. Because of the odor of beer inside V2, I asked for a phlebotomist to meet D2 at the hospital for a blood draw. Deputy Moeller agreed to oversee the blood draw and followed D2 to the hospital.

Investigator Burton (23) from the San Diego County Medical Examiner's Office arrived at 1930 hours to begin the extrication process of the occupants of V1. Because the scene documentation had not yet begun, Investigator Burton was told to return later.

Nurse Robinson (852) of American Forensic Nurses met Deputy Moeller at the hospital. Nurse Robinson drew two samples of D2 Pretty's blood at 2008 hours. Deputy Moeller's Deputy's Report documents his

involvement. Deputy Moeller recorded his involvement with D2 Pretty. The audio CD was placed into Sheriff's evidence at the Santee Patrol Station.

Deputy Knowles returned to the collision scene from Bob Baker Lexus at about 2009 hours. Deputy Knowles informed me the driver of V1 (D1) was a CHP Officer, Mark Saylor. D1 Saylor had earlier been loaned V1 by the dealership. CHP Officer's on scene were notified. Deputy Knowles' DR documents his involvement in this investigation.

At 2018 hours, a "sig alert" was put into place in response to the road closures in the area. Sergeant Hill and Lieutenant Bolwerk arrived on scene and were briefed on the incident thus far. At 2059 hours, I was advised by Deputy Moeller that he placed D2 Pretty's blood sample into the evidence refrigerator at Las Colinas Detention Facility in Santee.

At 2121 hours, Sergeant Budwine from CHP arrived on scene and was aware D1 Saylor was a CHP Officer. Because of the multiple fatality aspect, Sgt. Hill requested the assistance from the CHP's Multidisciplinary Accident Investigation Team (MAIT). It was later determined they would be handling the scene documentation, via their GPS generated factual diagramming system. MAIT arrived at 2133 hours and began their documentation. MAIT's report will be attached to this investigation and placed into Sheriff's evidence.

Investigator Buckley (14) from the Medical Examiner's Office (ME) arrived on scene at 2142 hours. Deputy Wallace (4579) and Officer Wieboldt assisted at approximately 2148 hours, by placing spot light equipment to illuminate the scene. In an effort to allow the MAIT team to accurately depict the scene, Investigator Buckley agreed to wait before he and the FD began the extrication process of the occupants of V1.

As the investigation progressed, I was advised a witness to the collision was on scene and wanted to give me a statement. At about 2230 hours, I met with Witness Corie A. Heller. The following is her statement:

# Statement of (witness), was contacted the night of the collision, at about 2230 hours. She initially observed V1 while she was stopped at a red light on Mission Gorge Road. Witness went home but returned to the scene a few hours later to give a witness statement. was stopped on Mission Gorge Road in the east bound number two lane. She was first in line and stopped at a red light. Witness thought the light for the left turn lane from SR 125 N for west bound Mission Gorge Road turned green because she saw a red Ford Explorer (V2) beginning a left turn. Witness remembered V2 was the only vehicle in the left turn lanes. noticed a "white blur" (V1). That was V2 advanced toward the middle of the intersection when Witness when she saw this "white blur" slam into the rear of V2. Witness could not say how fast V1 was traveling but said, "It was as fast as I've ever seen a car go". She said as V2 was pushed farther into the intersection, she saw V1 "go up in the air" then disappear.

Witness heard an explosion then saw fire. She recalled the fire seemed to die down, but there was a lot of smoke in the field to the north. When she looked back at V2 she did not see anyone inside it. Witness was extremely shaken by what she had just seen and said she just wanted to go home to her kids. She came back later because she thought her statement may be important.

# **Investigation (cont.):**

MAIT units advised me I could inform the ME's Office, they could begin the extrication process. Investigator Buckley began at 2356 hours. I was present when Investigator Buckley began taking the bodies from V1. Personnel from the FD advised the driver side seat belt was intact, engaged, and appeared functional. D1 was removed from the driver's seat of V1 on 08-29-09 at 0022 hours (09-01737). D1 Saylor was identified by Investigator Buckley with the California Driver License and CHP ID card he found in V1. Investigator Buckley found the wallet partially melted into the driver seat underneath D1 Saylor.

Investigator Buckley made the preliminary determination that all occupants of V1 had extensive blunt force injuries to their bodies. Additionally, extensive thermal injury occurred with all four occupants. Investigator Buckley's Investigative Report documents specific detail regarding time of death, trauma, and means of identification of all occupants. Investigator Buckley determined the time of death for the occupants of V1 to be at 1839 hours. The official ME's report has been placed into Sheriff's evidence.

Just after the extrication process, Sergeant Hill and Lieutenant Bolwerk made their final survey and assessment of the scene. Sergeant Hill left Santee Traffic Investigators and MAIT to continue and ultimately finalize scene processing.

At the request of the MAIT team, Miller's Towing arrived to take both V1 and V2 from the scene at approximately 0350 hours. MAIT requested possession of the vehicles pending the completion of their investigation. MAIT units continued their investigation by taking photos and collecting physical evidence from the scene. At about 0400 hours, MAIT's portion of the scene documentation was complete.

Santee Public Works employees were notified at approximately 0420 hours, to assist with clearing Mission Gorge Road to allow for through traffic. Additionally, Santee Patrol units and Santee Senior Volunteer units volunteered to assist with equipment pick up and transport back to Santee Station 50. At about 0520 hours, Mission Gorge was cleared for normal traffic.

#### **Investigation (cont.) 08-29-09:**

D2 was first contacted at the time and location of the collision. No statement was obtained at that time as D2 was transported by Santee Medic 5 to Sharp Memorial Hospital.

was contacted later that evening (08-28-09) by Deputy Moeller (2838) at Sharp Memorial Hospital. was able to communicate to Deputy Moeller where he was coming from before the collision occurred. At that time, D2 Pretty could not recall much about the collision. Deputy Moeller's Deputy's Report (DR) is attached to this report. See his DR for more information. I obtained the following statement from D2 Pretty at Sharp Memorial Hospital:

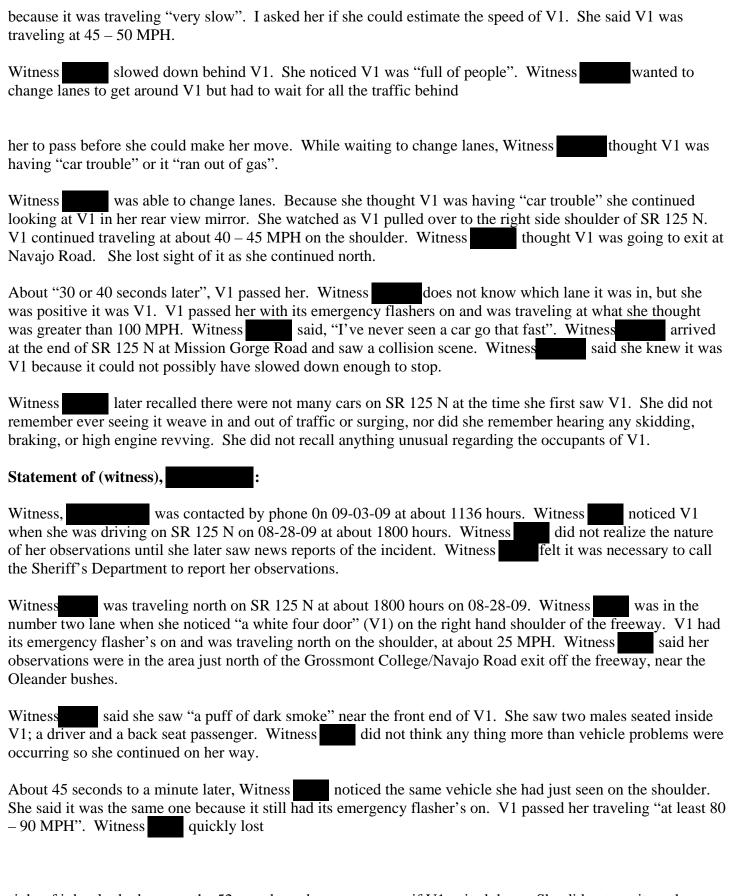
# Statement of driver, (D2):

I contacted D2 on 08-29-09 at about 2030 hours, at Sharp Memorial Hospital. On 08-28-09 at about 1830 hours, D2 was traveling north on SR 125. He arrived at the end of SR 125 N and entered the number one left turn lane for west bound Mission Gorge Road. D2 was stopped at the red light.

told me he was surprised by the fact there was little traffic as he was stopped and waiting for his light to turn green. He was the only vehicle in the turn lanes, and there was little traffic in front of him or near him.  D2 light turned green and he slowly began his left turn. D2 later recalled the impact he felt was that of V1 hitting his vehicle. He remembered nothing after the collision.
did not know where V1 came from but thought it was behind him. The only thing significant to D2 was that the traffic was so light at the time. I asked D2 if he remembered talking to Deputy Moeller the previous evening. He said he did and remembered consenting to a blood draw. I asked him if he knew why I had Deputy Moeller take blood evidence from him.
said he did not know why his blood was drawn. I told him when I contacted him at the scene; there were broken bottles of "Newcastle" beer in his vehicle (V2). I told him the odor of beer was very strong. D2 laughed and told me he rarely drinks. He had just purchased the beer for a friend's birthday party the following day. D2 said he had not had anything to drink that night and said he had just been grocery shopping on the way home from work.
Investigation (cont.):
D2 asked me to contact Miller's Towing so he would be able to retrieve personal property from V2. I told him I would do that for him, and when he was ready, he could meet me and I would return his CDL to him.
was released from Sharp Memorial Hospital on 08-30-09. Nurse Leslie informed me D2 was seen and treated by Dr. Frey. D2 had no fractures as a result of the collision, and sustained predominately soft tissue damage. He had pain in his left shoulder, and to the left side of the back of his head.
Staff at Sharp Memorial Hospital informed me only time would dictate any further or future impact this collision will have on D2 . Attached to this report is a Medical Records Release form signed by D2 . D2 has given the San Diego Sheriff's Department, permission to access his medical records for purposes of this investigation. The form was placed into Sheriff's evidence.
On 08-31-09, D2 came to the Santee Patrol Station to pick up his CDL. Community Service Officer Clevenger (0920) located the CDL and retuned it to him. A report from the San Diego Sheriff's Crime Lab indicated D2 should be blood sample revealed there was no indication of alcohol in his system. Alcohol was not a factor in D2 involvement in this incident and will not be pursued as such in this investigation.
I obtained the names and contact information of potential witnesses from Deputies who assisted the night of the collision. These witnesses either saw V1 on SR 125 N just before the collision, or saw the actual collision occur at the end of SR 125 where it intersects with Mission Gorge Road. On 09-02-09, I began interviewing these witnesses by phone. Their statements are as follows:
Statement of (witness),
Witness , was contacted at the time and location of the collision. She gave a statement to Deputy Collier (1519). Witness told Deputy Collier she saw a white Lexus (V1) "surging as if it was out of gas". See Deputy Collier's DR attached to this report. I contacted Witness Sarrow by phone on 09-02-09 at 1745 hours. The following is her statement:
Witness was north bound on SR 125 at about 1830 hours. She was in the number one ("fast lane") near

noticed V1

Grossmont College Drive when she noticed "a white Lexus" (V1) in front of her. Witness



sight of it but looked over at the 52 west bound on ramp to see if V1 exited there. She did not see it on the on ramp.

Witness arrived at the end of 125 N and noticed an SUV (V2), and what she said was a brush fire. She turned west bound on Mission Gorge Road to see if there was anyone inside V2. Witness did not see anyone inside V2. She left the scene at that point.

The following Monday (08-31-09) while she was at work, and later from news reports, she wondered whether her observations were related to the fatal collision the news was reporting. While watching the news she saw a "white car" that looked like the one she had seen on the freeway a couple days before. Witness called Detective Drake (SDSD #0961) to report her statement. After I contacted her, Witness realized what she had witnessed that day.

I asked Witness what she noticed about V1 while it was on the freeway. She did not notice it swerving or weaving. She did not notice brake lights but said the emergency flashers were on. She did not notice any tire screeching, engine acceleration noise, nor did she notice any lunging or bucking while in motion. She said V1 was traveling at a high rate of speed when it passed her. The only other thing she thought was unusual at the time was that there did not seem to be a lot of traffic given the time of day.

# **Investigation (cont.):**

Additional phone interviews were conducted by Deputy Burkhart on 09-02-09. Deputy Burkhart spoke to Witnesses . All three witnesses reported seeing V1 at the terminus of SR 125 N. All three witnesses saw the collision occur. Deputy Burkhart's DR documents his interviews.

On 09-03-09 at approximately 1230 hours, Sergeant Hill and I, along with MAIT Officers Parent, Snider, Hearst, NHTSA representatives, William Collins and Stephen McHenry, went to Miller's Towing to inspect V1. Reports from NHTSA and MAIT document specific findings regarding V1. Additionally, Sergeant Hill's DR regarding his involvement in the inspection will be included with my report. Photos of V1 incident to this inspection are in Sheriff's evidence.

At the time of this meeting, Officer's Parent and Snider gave me an audio CD copy of CHP's 911 recording of the events that occurred while V1 was in motion and terminated with the collision. Passenger Chris Lastrella can be heard communicating with the CHP's communication center. This is where Passenger Lastrella makes the statement about V1's accelerator being stuck. The CD was placed into Sheriff's evidence at the Santee Patrol Station.

V1 sustained catastrophic damage from severe frontal impact, roof impact, side impact and fire damage. The Event Data Recorder (EDR) was recovered from V1 by Sergeant Hill. And later placed into Sheriff's evidence at the Santee Patrol Station.

Upon inspection of the driver side floor board, an all weather floor mat (AWFM) was found intact and sustained relatively little damage from the vehicle fire. The AWFM was removed from V1. The AWFM had the two manufactured holes present at the bottom of the mat. These holes are placed to accommodate two plastic retaining clips. In removing the mat, it was discovered the retaining clips were not secured to the mat. The mat appeared to have been pushed forward. Whether this was incident to the impact, or whether it was in that condition before impact was not determined.

The right side plastic retaining clip was secured to the floor board by a metal grommet, but again, not to the mat. The left side retaining clip was found loose, and underneath the AWFM. The AWFM is a Lexus product,

but not specific to V1, an ES350 sedan. The part number stamped on the mat (PT 48050 PT908-48060 Front Driver>TPF<170), as indicated in both MAIT's and NHTSA's reports, states the mat is made for a Lexus RX400H SUV.

When the AWFM was removed, it was discovered the accelerator pedal had melted and fused to the upper right hand corner of the mat. The pedal and mat were removed from V1 at the same time. The pedal is a rigid, one piece, plastic form. The main pivot point of the pedal was operational, smooth, and unencumbered in its motion. The AWFM originally removed from V1 is in Sheriff's evidence at the Santee Patrol Station. It should be noted the driver side seat belt was intact and engaged.

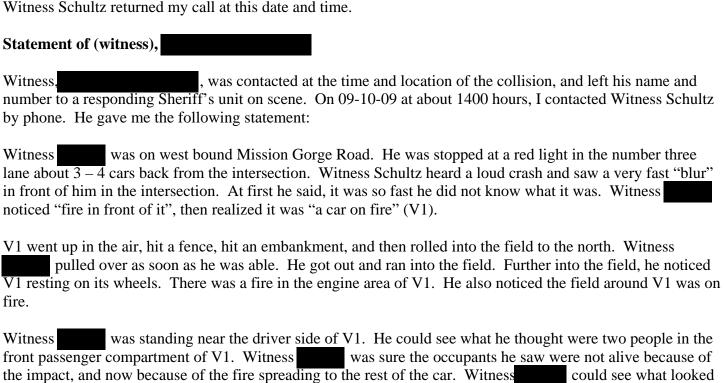
The left front wheel and suspension were torn from V1 upon impact. Consequently, the wheel assembly sustained no fire damage. V1's rotors showed signs they were heated and discolored. The surfaces were rough with deposits from brake pad material. The rotors showed signs of oxidation consistent with extended and endured braking. The brake pads were rough, melted and bubbled. The brake calipers were also discolored from the heat of aggressive braking.

CHP Motor Carrier Specialist Kevin Hearst (MAIT) made the preliminary assessment that these were signs indicative of constant and endured braking and not fire damage. Officer Hearst conducted an additional, more thorough inspection of the brakes, rotors, pads, calipers, and wheel assemblies at a later date. His final report documents this extensively.

### **Investigation (cont.):**

On 09-10-09 at approximately 1400 hours, I obtained a statement from Witness Lawrence M. Schultz. Witness Schultz was on scene the day of the collision. I originally

attempted to contact Witness Schultz on 09-05-09 by phone. I was unable to contact him and left a message. Witness Schultz returned my call at this date and time.



like a larger than normal "hand" where the windshield should be. He thought he could see "a man's face" near what was left of the windshield.

Witness said there was another person in the front passenger seat. He said there was no way to get access to the car because of the fire and the damage to V1. He said a female Deputy was yelling for him to get away from V1. Witness knew there was nothing he could do. He left the area and waited to talk to responding Deputies.

### **Investigation (cont.):**

On 09-17-09 at approximately 1415 hours, Sergeant Hill and I met with staff at the Bob Baker Toyota/Lexus dealership at 1000 Arnele St. in El Cajon. I met with Vice President and General Manager David Ezratty and Service Advisor Joshua Kinghorn. Through these individuals, I learned the general procedure concerning Lexus loaner vehicles.

A brand new Lexus arrives at a given date and time to the dealership and is designated a "loaner car". The arrival of a loaner is documented as received on a Memorandum Invoice. A car will be used as a loaner car for one year. After one year it will be sold as a used car. The loaner car originally comes in with new carpet style mats. The carpet

style mats are not installed inside the vehicle but kept in the trunk at the time of delivery. The carpet mats are stored pending the sale of the loaner vehicle as a used car. At that time, the carpet mats are included with the vehicle.

While the car is being used as a loaner, rubber all weather floor mats (AWFM) previously stored at the dealership, are placed in the car. The AWFM's are vehicle specific. There are AWFM's for the Lexus ES350 sedans and the Lexus SUV's. The mat specific to the vehicle is installed in the corresponding car. I was advised the mats are never intermixed.

I learned the following about the Lexus ES350, detailing practices, customer complaint, and maintenance protocol, procedures for checking loaner vehicles in and out to customers, and in and out of service:

#### Loaner vehicle check in/out process:

This can be done both during business hours and after hours. Upon the return of a loaner car, the customer gives the keys to the Receptionist (There are only two Receptionist's; one during business hours, and one after hours). The Detail Specialist's check with the Receptionist and find out which car needs to be detailed.

If this is done during business hours, the Detail Specialist will service each car per a "Cleaning/Maintaining Loaner Cars" list of eight specific procedures. The list is followed on a case by case basis. For example, if the car comes in clean and free of debris, it may not necessarily receive all eight procedures on the list. The process varies according to what condition the vehicle is retuned in.

While the vehicle is being detailed, the all weather floor mats (AWFM) usually remain in the car and are vacuumed in place. The AWFM's may be removed if soiled, but then they are returned and clipped into place.

If the loaner car is checked in after hours, the customer gives the keys to the after hours Receptionist. The Receptionist places the keys in a lock box. The Receptionist checks a hard copy file of invoices filed by customer name. The invoice is later matched with the computer invoice and filed the next day by the Service Advisor under his or her name.

The Detail Specialist maintains an after hours physical listing of the cars that had been returned. The loaner car is logged as checked in via a "Loaner Car Check In "sheet. The Detail Specialist writes in the date, time, odometer reading, fuel level and his or her name on the sheet.

The following day, the Service Advisor matches the physical list generated by the Detail Specialist to a computer generated list. Any car unaccounted for is found in a specific location employees refer to as "the wall". If a vehicle is placed by "the wall", it suggests service is needed.

The only employee responsible for checking out a loaner vehicle is the Service Advisor. The Receptionist only checks in the loaner cars. Consequently, after hours transactions do not involve the checking out of loaner cars. This must be accomplished during business hours. When a loaner car is checked out, the computer is checked for the customer's reservation. A Service Advisor gets the "smart" key (remote key fob), and if the customer is unfamiliar, may conduct a customer tutorial concerning operation of the push button ignition and key fob.

In the event of a customer complaint regarding a loaner car, the Receptionist informs the Service Advisor during business hours. If a complaint is received after hours, the Receptionist writes a note to the Service Advisor. I was informed on that day, employees had not to this date, ever received any complaints regarding Lexus loaner cars. Please see the following statements from Vice President David Ezratty, Service Advisor Joshua Kinghorn, after hours Receptionist Jessica Martin-Dunleavy, and Detail Specialist Octaviano Garcia Jr.:

# Statements of (witnesses) at Bob Baker Toyota/Lexus:

# Witness,

Witness was contacted at Bob Baker Lexus on 09-17-09. Witness is the Vice President of Bob Baker Lexus. Witness Ezratty informed me a brand new Lexus is delivered to the dealership with carpet floor mats in the trunk. They get put away so they don't get dirty. All weather floor mats are then placed in the vehicle. The all weather mats for that make and model, which are stored in the detailing department, are placed in the vehicle.

Witness Ezratty told me they do not mix and match the all weather mats. He stated a mat for a Lexus SUV would not have been implemented in a sedan. In fact, he explained, the SUV mat would not fit in a sedan. The retaining clips that keep the mat from slipping only match the corresponding mat. Witness Ezratty was confident they always put the right mat into the right vehicle.

I asked Witness Ezratty about the procedure for the detailing of loaner vehicles. He explained it depends on what the vehicle needs and what condition it is in when a customer returns it. If the customer for example, only had it a few hours, it may receive a quick vacuum and be released back into the fleet. If the customer has had it for several days, it may receive a full detail, which may include removal of the all weather floor mats. Witness Ezratty referred me to his Detail Specialist, Octaviano Garcia for specifics on what detailing V1 received.

# Witness,

Witness Kinghorn was contacted on 09-17-09 at Bob Baker Lexus. Witness Kinghorn is a Service Advisor at the dealership. Witness Kinghorn explained that one of his duties is to check the loaner vehicles out to customers. Between himself, the Lot Attendant, and the Service Consultant, a tutorial on the operation of the loaner is conducted. The instruction includes the operation of the "smart key" and the push button ignition.

I asked Witness Kinghorn about the procedure for fielding customer complaints if one were to arise. Witness Kinghorn said a complaint about any of the loaner vehicles is rare if not non existent. In the instance of a complaint however, the customer would most likely inform the Receptionist who should inform him. If he is not on duty, the cashier would write him a note and place it in his mailbox for inspection the following day. Witness Kinghorn advised me he had not ever received any complaints about V1.

#### Witness, Jessica Martin-Dunleavy

Witness Martin-Dunleavy was contacted on 09-17-09 at the Bob Baker Lexus dealership. Witness Martin-Dunleavy works as the evening Cashier/Receptionist in the Parts and Service Department. Her hours are from 1600 – 1900 Monday through Friday.

Witness Martin-Dunleavy's responsibilities include the checking in of Lexus loaner vehicle after hours. In the instance a customer has had a problem with a loaner vehicle; Witness Martin-Dunleavy would let the Sales Manager know. In the three months Witness Martin-Dunleavy has worked at Bob Baker Lexus, she had never received a complaint about any loaner vehicle.

#### Witness Octaviano Garcia Jr.

Witness Garcia was contacted on 09-17-09 at the Bob Baker Lexus dealership. Witness Garcia is a Detail Specialist and has been so for about a year. Witness Garcia remembered when V1 was returned on 08-27-09.

One of Witness Garcia's responsibilities includes checking the loaner vehicles for damage and detailing the vehicle. The detail always includes at the very least, vacuuming the all weather floor mats. If they are especially soiled, Witness Garcia will remove and clean the mats. When this is necessary, he always makes sure the plastic clips are secured to the grommets on the floor mats. Additionally, he makes sure the clips are attached to the mats.

Witness Garcia remembered washing V1. He said the mats just needed vacuuming. He did not have to remove the mats. Witness Garcia explained to me the extra diligence involved in making sure the mats are properly installed. He explained this is a must due

to the 2007 recall of the all weather floor mats. Witness Garcia was positive he has never received a complaint about the ES350 in question.

# **Investigation (continued):**

After going over loaner car procedures and interviewing employees, I was escorted to the area D1 Saylor's personal vehicle was being stored. D1 personal vehicle is a 2006 Lexus IS250 (5UIW211). As referenced by work order #163709, the IS250 was being serviced for a CD player "rear error", a parking brake readjustment, and intermittent problems with dash and interior console lighting issues.

The IS250 has a "sport mode" gear shift system. Additionally, the IS250 has a paddle shifting system mounted on the steering wheel. This allows the driver to change gears both on the center console area and from the steering wheel. The ES350 does not have the paddle shift feature.

Both models however, have the push button ignition system. D1 IS250 had an owner's manual in the glove box. It went into detail about the push button ignition and went so far as to explain the need to hold it for 3 seconds to cut the engine while the car is in gear. The manual recommends that doing this may cause an accident as the brakes and power steering may be affected.

While at the dealership, Sergeant Hill and I looked at a new ES350 sedan. The sedan had a vehicle specific AWFM in place on the driver side floor board. Upon closer inspection, it appeared the pedal would not interfere with the vehicle specific mat. Upon manipulation of the pedal, it cleared the AWFM every time it wasdepressed.

Sgt. Hill asked for and was provided an AWFM for the Lexus RX400 SUV, the same type of mat found in the driver side floor board of V1. Sgt. Hill removed the AWFM already inside the ES350 and replaced it with the SUV AWFM. We found that not only did the mat fit the entire floor board, but the clips and grommets also line up with the holes on the AWFM. Sgt. Hill was able to attach the mat to the clips on the floor board.

Upon visual inspection of the SUV AWFM inside the ES350, we could see the mat filled the entire floor board area. Sgt. Hill and I were able to see that the pedal would likely come into contact with the AWFM when depressed. Sgt. Hill manipulated the pedal by hand. Each time he depressed the pedal, it became trapped on one of the edges of the AWFM. Not only did the pedal become trapped in the SUV mat, but it remained trapped. Sergeant Hill took photos of our findings. A CD of these photos is in Sheriff's evidence at the Santee Patrol Station. I concluded my investigation and interview of employees at Bob Baker Toyota/Lexus.

By reviewing paper work provide to me by Witnesses Ezratty and Kinghorn, I later learned the following about V1's history with Bob Baker Toyota/Lexus:

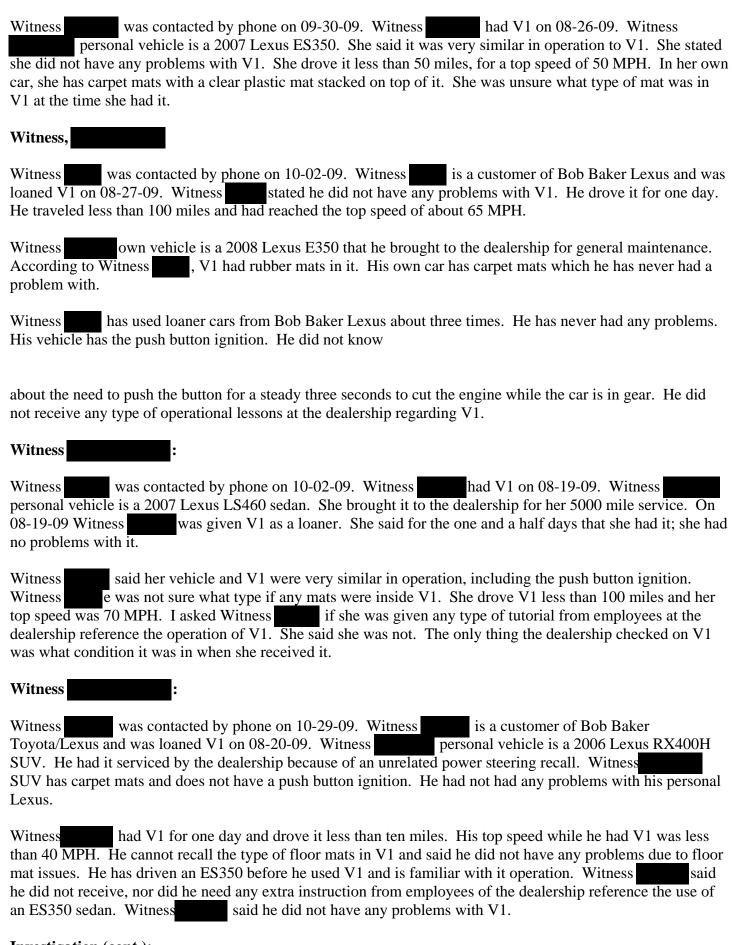
V1 was a model 9000A 2009 Lexus ES350 four door sedan produced on 09-09-08. Bob Baker Toyota/Lexus at 1000 Arnele Avenue in El Cajon, CA received V1 on 10-13-08. The dealership designated V1 as unit #167 as can be seen on the invoices, work orders, and check in log. On 10-15-08, V1 received a new car detail, and a pre delivery service per work order #153700.

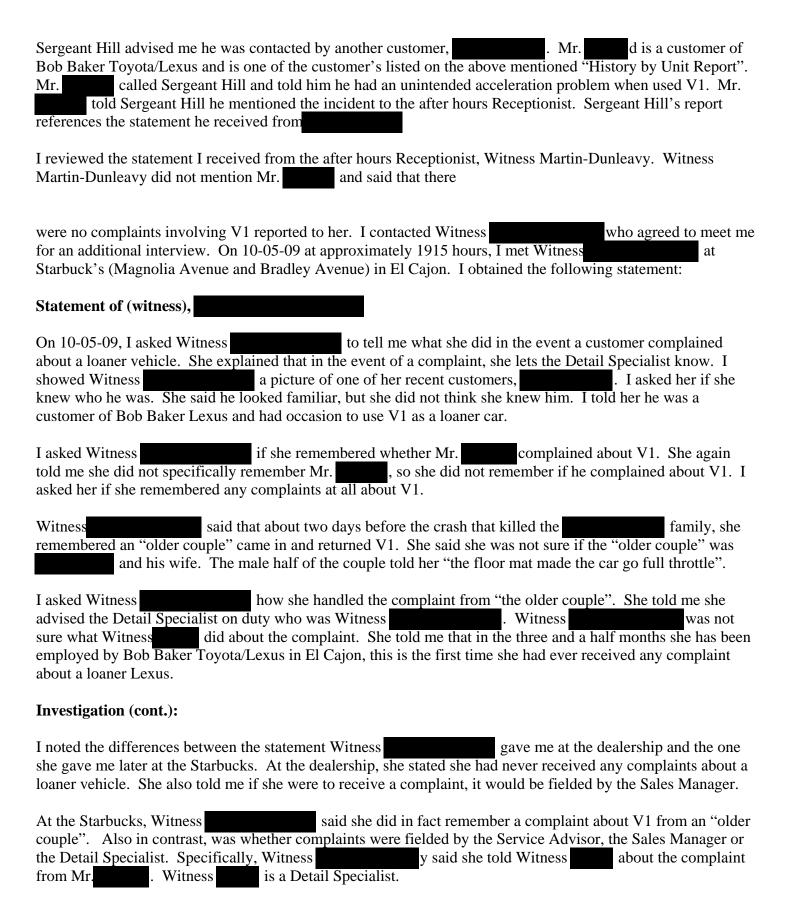
On 02-26-09, V1 received its personalized settings per invoice #157801. On 04-29-09 and 04-30-09, V1 received a 5000 mile service, a wheel alignment, and center console maintenance per invoice #159761. On 06-09-09, V1 was treated for odor control per invoice #160988.

Included in this report is a reservation agreement #23372 which documents D1 Saylor's reservation of V1 on 08-28-09 at 0930 hours. Additionally, there is a Rental Agreement that documents D1 Saylor's contract as having received V1 at 0935 hours. All Bob Baker Toyota/Lexus paperwork mentioned in this investigation is in Sheriff's evidence.

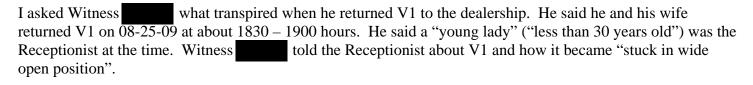
Among the paperwork I received from Bob Baker Toyota/Lexus, was a "History by Unit Report" documenting the last 14 customers to use V1 before D1 Saylor. The report spans the time frame between 06-29-09 to 08-28-09. I later conducted phone interviews of the following customers: Hanan Nisan, Marie Dearden, Delores Clague, and Wayne Lawyer. The customer statements are as follows:

TT70.	
Witness	:





On 10-7-09 at approximately 1530 hours, I contacted Witness d by phone. Witness me the following statement:
Statement of (witness)
Witness was a customer of Bob Baker Lexus in El Cajon on $08-24-09$ . Witness explained he owns a $2006$ Lexus IS250 that was being serviced for a routine maintenance check. While he waited for his car's service, he had occasion to use V1 as a loaner. He had V1 for two days $(08-24-09-08-25-09)$ and put approximately $80-100$ miles on it. The top speed he achieved with V1 was between $80-85$ MPH.
Witness told me about an incident he had regarding V1. He was on the Poway Road on-ramp to Interstate 15 North. As he was merging onto the freeway, he saw a truck nearby and accelerated "briskly" to get in front of it. Witness got onto the freeway, and once in front of the truck, let his foot off the accelerator. V1 kept accelerating on its own, to about $80-85$ MPH.
Witness stepped on the brakes and tried to lift up on the accelerator with his right foot. He was attempting to access the shoulder of the freeway, and still applying the brakes, was able to slow V1 to about 50 – 60 MPH. While he was slowing, he pushed the ignition button "a few times" and was not able to turn the engine off. He also "popped the throttle" with his foot to see if he could get it to clear itself. None of this worked. V1 kept moving at an uncontrolled and high rate of speed.
Witness kept on the brakes, slowing V1 to $25 - 30$ MPH and pulled over to the shoulder. He was able to then place V1 into neutral with the gear shift. When he did this, the engine made a very loud whining, racing sound. Witness was able to stop V1.
Witness looked down at his feet and saw the accelerator was stuck underneath the floor mat. He was able to pull it up with his foot, and said he had to apply a significant amount of pressure to do so. He then reached down and pulled the mat back and away from the accelerator. The mat was pushed forward. Witness did not think it was clipped because he was able to move the mat. After clearing the mat, he continued driving with no other problems.
I asked Witness to tell me about his own car, and how familiar he was with the Lexus product. He has never had any problems with his own Lexus. Witness said he has a "sport shift" in his car that he neve uses. I asked him if sport mode could easily be confused for normal mode. He said he did not think so because it is a deliberate effort to have to pull the shifter to the left to activate.
Witness has never had all weather floor mats in his own car. I asked him if he thought the mats in V1 were the mats specific to the ES350. He told me he did not know, but that the mats were "a big heavy rubber mat" in place "to protect the car better".
I asked Witness about his use of the push button ignition when he tried to cut the engine of V1. He explained he pushed the button in a series of intermittent successions. I asked him if he ever pushed and held the ignition to turn off V1. He said he did not. I asked him if he was aware of the practice of holding the button for at least three seconds to cut the engine while the car is in gear. He said he was not.
As far as his braking of V1, Witness explained he did not "pump" the brakes. He used steady constant pressure and was able to slow V1. He said he pressed hard and steady and ultimately was able to stop V1.



Witness said he got the impression either the Receptionist did not understand him or just did not know what he meant. He said at that point it made him "anxious" because he felt the matter was important. Witness explained to the Receptionist, "I think the mat caused it" and told her "you need to tell someone".

Witness said the Receptionist told him to tell the Detail Specialist when his own car was returned to him. He said he remembered retrieving his personal vehicle from a male "lot attendant" but could not describe him. Witness Bernard did not tell this other male employee what he told the Receptionist. He assumed the Receptionist would let someone know.

# **Investigation (cont.):**

V1 and V2 were both towed and held in the yard at Miller's Towing, 1402 Pioneer Way in El Cajon, Ca. V1 and V2 were towed at the request of MAIT investigators. At the request of MAIT, I arranged for V1 to be towed by the San Diego Sheriff's Crime Lab, from Miller's Towing to the San Diego Sheriff's evidence yard (.43, 1840 Weld Boulevard, El Cajon, Ca.). This transaction took place on 09-25-09. V1 is currently in the Sheriff's evidence yard, and will be released pending the completion of this investigation.

The title to V2 was released to Miller's Towing by D2 Pretty; in lieu of the balance he owed on V2 (\$1,389.33). On 09-25-09, Miller's Towing received a check for the balance owed from The Gomez Law Firm. The Gomez Law Firm represents the family members

of the families. Miller's Towing released V2 to the Gomez Law Firm.

#### **Summary:**

On 08-28-09 at approximately 1835 hours, D1 was driving V1, a white 2009 Lexus ES350 sedan, on loan from Bob Baker Toyota/Lexus. D1 was traveling north on SR 125, with his wife, front seat passenger daughter or in the right side back seat, and brother in law , in the left side back seat.

On SR 125 N, in the area of the Grossmont College/Navajo Road exit, witnesses observed V1 exhibiting what was described as some type of car trouble. According to these witnesses, V1 was at times traveling slower than the flow of traffic while on the freeway, or pulled over to the right hand (east) shoulder. While on the shoulder, V1 was proceeding straight at slower than normal freeway speeds. In other instances, V1 had what was noted as smoke or flames emanating from the front end and underside of V1.

Witnesses stated they saw V1 a second time, after seeing it pulled off to the shoulder. These sightings vary from seconds to a minute later on SR 125 N. When V1 was observed again, it was seen traveling at a high rate of speed. Witnesses estimated speed in excess of 90 MPH. Once it reached the end of SR 125 N, V1 collided with V2 within the intersection of SR 125 and Mission Gorge Road. V2 was in the number one left turn lane in position to make a left turn onto west bound Mission Gorge Road. V2 was just beginning its left turn and was slowly accelerating forward before and during impact with V1.

V2 continued its now uncontrolled movement north, spun completely around, and came to its uncontrolled point of rest. Ultimately, V2 rested facing west with a northern orientation, in the North West portion of the intersection.

Concurrently, and post impact with V2, V1 continued north across the intersection. The impact with V2 did little to diminish its high rate of speed, as witnesses estimated speeds in the area of 100 MPH. One witnesses stated V1 actually appeared to accelerate post impact with V2. V1 became briefly airborne when its wheels lost contact with Mission Gorge Road, and continued north until the right front tire hit the north curb. With this impact, the right rear tire followed, and also struck the north curb.

V1 again elevated and still traveling north, struck a wooden post and rail fence. Immediately after striking the wooden fence, V1 slammed into a raised dirt embankment. V1 was facing North West on impact, the front end and right front corner taking the full force of the impact. According to the ME's report, this is most likely what caused the fatal injuries to all four occupants of V1.

V1 came off the embankment and became airborne again. The front end facing west, V1 continued north until it landed on its left side, on a sloping decline into the river bed. V1 bounced and became airborne again until it landed on its wheels in the brushy area of the river bed. V1 was facing west when it came to its uncontrolled point of rest on 08-28-09, at approximately 1837 hours. Witnesses stated V1 exploded however is unknown how the fire started. The likely scenario is the intense heat generated by the over burdened braking system caused the field and V1 to catch fire. The brush fire and subsequent vehicle fire was extinguished by the efforts of the Santee Fire Department.

# **Medical Examiner's Report:**

A copy of the ME Investigative and Autopsy Report's has been placed into Sheriff's evidence at the Santee Patrol station. The ME cites the manner of death as "accident" and the cause of death as "blunt impact injuries" for all four occupants of V1. Although the occupants had extensive thermal injury, fire most likely was not a factor in this fatality. All occupants were conclusively identified via dental comparison.

# **Area(s) of Impact (AOI):**

There are seven areas of impact obtained by MAIT, using a GPS coordinate system. The AOI's were determined by physical evidence, damage sustained by V1 and V2, and vehicle dynamics analysis. The measurements are documented using Survey Data Points, which were converted into feet for purposes of this investigation. Refer to MAIT's investigative report for further detail.

AOI #1 (V1 vs. V2) - 8.7' north of the north edge of the cross gutter and 62' west of the east curb line of 125 N.

AOI #2 (left front wheel assembly of V1 vs. the north curb of Mission Gorge Road) -0' on the north curb of Mission Gorge Road and 85.5' west of the east curb line of 125 N.

AOI #3 (right front wheel of V1 vs. the north curb of Mission Gorge Road) -0' on the north curb of Mission Gorge Road and 68.3' west of the east curb line of 125 N.

AOI #4 (right rear wheel of V1 vs. north curb of Mission Gorge Road) -0' on the north curb of Mission Gorge Road and 63.4' west of the east curb line of 125 N.

AOI #5 (V1 vs. wooden fence) – 40' north of the north curb line of Mission Gorge Road and 73.2' west of the east curb line of 125 N.

AOI #6 (V1 vs. dirt embankment) – 44.3' north of the north curb line of Mission Gorge Road and 74.2' west of the east curb line of 125 N.

AOI #7 (V1 vs. the descending dirt river bed ground) -103.6 north of the north curb line of Mission Gorge Road and 65.3' west of the east curb line of 125 N.

#### **Intoxication Narrative:**

A blood sample was drawn from D2 at Sharp Memorial Hospital. The blood was drawn incident to the strong odor of alcohol inside V2 upon initial contact with D2 Pretty. Field coordination tests were not performed due to D2 medical status. The blood draw resulted in a .00 % BAC for D2 DUI was not a factor in this incident. Refer to the American Forensic Nurses Request for Service form for information concerning the blood draw. The form is both attached to this report, with the original copy in Sheriff's evidence at the Santee Patrol station.

According to the ME's report, drugs or alcohol were not a factor for any of the occupants of V1.

#### Cause:

A Lexus all weather rubber floor mat (part # 48050 PT908 – 48060 Front Driver>TPF<170") is a part specific to a 2005 – 2009 Lexus RX400H sport utility vehicle. Incident to a post collision vehicle inspection of V1 (a white 2009 Lexus ES350, CA license plate 6DRT323, Vin #JTHBJ46G792 ), a rubber mat with the above mentioned characteristics, was found in the driver side floor board of V1.

V1 is a loaner vehicle registered to Bob Baker Toyota/Lexus, 1000 Arnele Avenue, in El Cajon California. At some point, the RX400H all weather mat was placed in V1 at the above mentioned dealership. Because this mat was not a part specific to the vehicle it was installed in, it caused a sudden unintended acceleration event.

This occurred due to the following events:

The accelerator pedal became trapped either in the grooves of the mat or underneath it, causing V1 to reach speeds greater than 100 MPH.

The size of the mat with relation to the size of the floor board, did not allow room for easy manipulation to clear the pedal (the SUV mat is much larger than the sedan mat).

The plastic retaining clips were not attached, which could allow for the mat to be forced forward, and apply further pressure on the accelerator pedal.

The following associated factors occurred:

The vehicle was not equipped with a key that would other wise allow for manual emergency shut off. The push button ignition feature had no emergency instantaneous shut off capability. It is unknown, however unlikely that D1 knew of the 3 second delay to shut V1 off while in gear.

As evidenced in the inspection of V1, the brakes most likely failed due to over burdened, excessive, and prolonged application at high speed. There is also the possibility of prior brake wear damage caused when witness Bernard had a heavy, sustained braking event.

As a whole, these events combined to cause V1 to become a runaway vehicle. Per witness statements, and time/distance speed calculations, V1 traveled at greater than 100 MPH as it reached the end of SR 125 N. D1 simply ran out of time and options. Therefore, the cause of this collision is excessive speed due to the improper mat placement. The combined events were beyond the control of D1 Saylor regardless of what he did or did not do.

Due to the catastrophic damage to V1, other avenues of unintended acceleration could not be explored. Beyond the all weather floor mat, other and/or additional factors causing a sudden unintended acceleration event (re: electrical, mechanical, or computer generated) should be ruled out. However, the obtainable evidence and witness statements indicate the unintended acceleration was caused by the accelerator becoming trapped in the floormat.

At this time it cannot be determined what gear the automatic transmission was engaged in prior to impact. At the time MAIT conducted their inspection of V1, the transmission indicated the attached lever was all the way in the rearward position. As indicated in exemplar testing, this is indicative of V1's shift lever in the "drive" position.

V1 initially impacted V2, and then the dirt embankment. As expressed in MAIT's analysis, this type of impact would generate force consistent with front to rear energy. This type of energy would force the shift lever forward, not backward. It is not likely the impact with V2 and the embankment would have forced the lever into drive. However the lever could have been forced post impact by an occupant of V1.

### **Opinions and Conclusions:**

In September of 2009, Toyota Motor Corporation ordered a recall of 3.8 million of their vehicles in the United States regarding their all weather rubber floor mats. In November of 2009, Toyota Motor Corporation began the process of replacing or reconfiguring the accelerator pedals of 4 million Toyota/Lexus vehicles.

The National Highway Traffic Safety Administration in conjunction with Toyota Motor Corporation should continue to research the use and design of the all weather rubber floor mat application in their vehicles. Toyota Motor Corporation should also research the possibility alternate systems installed in their vehicles may be responsible for this or other sudden unintended acceleration events.

In the interest of public safety, Bob Baker Toyota/Lexus, at 1000 Arnele Avenue in El Cajon California, should review their procedures for the following:

Proper installation of equipment specific to certain vehicles

Communication between consumers and the appropriate staff with regard to customer complaints

The means by which customers are informed of emergency operation of loaner and new vehicles. This should extend beyond what is indicated in the owner's manual alone.

The means by which customers and staff are kept apprised of recall events and safety bulletins

### **RECOMMENDATION:**

Representatives from the El Cajon Office of the District Attorney were consulted on this case. The possibility of criminal issues concerning this investigation was discussed. The District Attorney's Office was of the opinion that while this case may rise to the level of civil responsibility, criminal prosecution will not be considered at this time.

# **TOYOTA**TOYOTA MOTOR NORTH AMERICA, INC.

Jul 6/11/07

TEL: (202) 775-1700 FAX: (202) 463-8513

June 11, 2007

Mr. Jeffrey Quandt, Chief Vehicle Control Division (NVS-213, Rm W48-312) NHTSA, Office of Defects Investigation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: NVS-213dsy; PE07-016

Dear Mr. Quandt:

This letter is being sent in response to your April 5, 2007 letter regarding PE07-016. Enclosed you will find the complete response and a CD-ROM with the attachments. Two copies of these materials are being provided for your convenience.

Please note that portions of "Attachment Response 6-1" and "Attachment Response 9-1" are identified as confidential and a request for confidential treatment has been made to the Office of Chief Counsel. Copies of the attachments with all confidential information removed are included in hard copy with this response. Copies of the attachments with the confidential information included have been sent to the Office of Chief Counsel. Should you have any questions about this response, please contact Mr. Chris Santucci of my staff at (202) 775-1707.

Sincerely,

Chris Tinto

Vice President

TOYOTA MOTOR NORTH AMERICA, INC.

CT:cs Enclosure

- 1. State, by model and model year, the number of subject vehicles Toyota has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Toyota, state the following:
  - a. Vehicle identification number (VIN);
  - b. Whether the vehicle was supplied by Toyota with the subject component (i.e., the vehicle was ordered with Port of Entry installed all-weather mats);
  - c. Date of manufacture;
  - d. Date warranty coverage commenced; and
  - e. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

## Response 1

The number of MY 2007 Lexus ES350 vehicles Toyota has manufactured for sale or lease in the United States is 98,454 units.

In addition, detailed information for each vehicle is provided electronically on CD-ROM, in Microsoft Access 2000 format entitled "PRODUCTION DATA(PE07-016).mdb" stored in the folder "Attachment-Response 1".

- 2. State the number of each of the following, received by Toyota, or of which Toyota is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
  - d. Property damage claims;
  - e. Third-party arbitration proceedings where Toyota is or was a party to the arbitration; and
  - f. Lawsuits, both pending and closed, in which Toyota is or was a defendant or codefendant.

For subparts "a" through "d," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Toyota's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

# Response 2

- a. Using the counting methodology described in your question, there are 43 consumer complaint reports that may relate to the alleged defect in the subject vehicles. Since some customers complained more than once about the same incident, the total number of unique vehicles in the consumer complaints is 38. This includes 4 vehicles which are duplicated with the NHTSA VOQs attached to the inquiry letter. In addition, for 2 of the 38 reported vehicles, neither of which reported any accident, injury and fatality, there are associated legal related claims.
- b. There is no field report that may relate to the alleged defect in the subject vehicles.
- c. Toyota has received 8 legal related claims involving a crash, which may relate to the alleged defect in the subject vehicles. 5 of these crash incidents alleged an injury had occurred. In addition, within the consumer complaints, 3 unique incidents have been reported where a crash was alleged to have occurred. Some of those legal related claims and customer complaints are duplicated with each other and the NHTSA VOQs.
  - There are no reports alleging that a fatality had occurred.
- d. Toyota has received 8 property damage claims that may relate to the alleged defect in the subject vehicles. All of these claims are duplicated with the legal related claims involving a crash.
- e. There are no third party arbitration proceedings where Toyota is or was a party to the arbitration.
- f. There are no lawsuits that may relate to alleged defect, in which Toyota is or was a defendant or codefendant.

The total count of the unique incidents for each item, which may relate to the alleged defect in the subject vehicles, is provided electronically on CD-ROM in Microsoft Excel 2000 format entitled "Total Number.xls" stored in the folder "Attachment-Response 2".

- 3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
  - a. Toyota's file number or other identifier used;
  - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
  - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's make, model and model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;
  - h. Report or claim date;

- i. Weather the vehicle was inspected by Toyota as a result of the incident;
- i. Number of floor mats installed in the driver's footwell;
- k. Type(s) of mat(s) installed in the driver's footwell (none, carpet, rubber/all-weather, both carpet and rubber, unknown, etc.);
- 1. Manufacturer of mat(s) installed in driver's footwell (Toyota, aftermarket, unknown, etc.);
- m. Person/entity who installed the driver's side floor mat (dealer, owner, unknown, etc.);
- n. Whether the driver's side floor mat is alleged to be the cause of the incident;
- o. Whether Toyota has determined the driver's side floor mat was the cause of the incident;
- p. Whether a crash is alleged;
- q. Whether property damage is alleged;
- r. Number of alleged injuries, if any; and
- s. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

# Response 3

The information for each item (complaint, report, claim, notice, or matter) is provided electronically on CD-ROM, in Microsoft Access 2000 format entitled "REQUEST NUMBER TWO DATA(PE07-016).mdb" stored in the folder "Attachment-Response 3".

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Toyota used for organizing the documents.

### Response 4

A list of the consumer complaints and documents related to the legal related claims are all provided electronically on CD-ROM in Microsoft Excel 2000 and PDF format stored in the folder "Attachment-Response 4."

(The list of the consumer complaints is stored in sub-folder "Consumer Complaint." Copies of the documents for the legal related claims are stored in the sub-folder "Legal related claims".)

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Toyota to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Toyota's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

#### Response 5

Toyota has received a total of 6 warranty claims that may relate to the alleged defect in the subject vehicles. There are no goodwill or extended warranty claims that have been paid by Toyota to date that relate to, or may relate to, the alleged defect in the subject vehicles.

The detailed information for each warranty claim is provided electronically on CD-ROM, in Microsoft Access 2000 format entitled "WARRANTY DATA(PE07-016).mdb" stored in the folder "Attachment-Response 5".

6. Describe in detail the search criteria used by Toyota to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by Toyota on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Toyota offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

#### Response 6

The search criteria used by Toyota to identify the claims is the following:

Toyota searched the warranty database for those claims that replaced any of the parts identified in Microsoft Excel file entitled "Search Criteria, Operation & Problem Codes.xls" stored in the folder "Attachment-Response 6" on CD-ROM. Toyota then reviewed the claim comments to determine if the claims may be related to the alleged defect. In addition, a list of all labor operations, labor operation descriptions, problem codes and problem code descriptions identified in these warranty claims are also provided in the same Microsoft Excel file described above.

A copy of the "Warranty and Services Guide" booklet, which contains the details of the terms that Toyota offers for new vehicle warranty coverage on the subject vehicles, is provided electronically on CD-ROM, in PDF format entitled "2007 Lexus Sedan WSG.pdf" stored in the folder "Attachment-Response 6".

There are some extended warranty coverage options that Toyota offered for purchase with the subject vehicles. Detailed information about these options is also provided in PDF format entitled "Extended Warranty Option.pdf" stored in the folder "Attachment-Response 6".

The number of subject vehicles that are covered under each such extended warranty options, by option, is provided as "Attachment-Response 6-1" in hard copy only. Please note that this "Attachment-Response 6-1" contains trade secret and commercial information, therefore, Toyota believes that this document must be afforded confidential treatment. A request for confidential treatment of this document has been sent to the Office of Chief Counsel. A public version of this document is included with this response.

7. Produce copies of all service, warranty, service parts, and other documents that relate to, or may relate to, the subject component, the retail sale of the subject component, or the alleged defect in the subject vehicles, that Toyota has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Toyota is planning to issue within the next 120 days.