



Collision Reconstruction Report

STATE OF MAINE

Maine State Police Approved		HR No.	HR-2016-055
April 14, 2016		Case No.	16-005442
Reconstructionist (Rank, First Name, Last Name)		Department	
DET SGT Andrew Booth		Bath Police Dept.	
Department Address		Phone Number	
250 Water St. Bath, ME 04530		207-443-5563	
Investigating Officer (Rank, First Name, Last Name)		Department	
PTL Rick Ross		Bath PD	
		Phone Number	
		207-443-5563	
Date and Time of Incident	Date and Time Contacted	Date and Time Arrived	
4/4/16 1436hrs	4/4/16 1436hrs	4/4/16 1438hrs	
Route or Street	City or Town	County	
Leeman Hwy Viaduct		Sagadahoc	
Photo's <input checked="" type="checkbox"/>	By Whom: Booth	Photo's Can Be Obtain At: Bath PD	
Type of Incident			
<input checked="" type="checkbox"/> Motor Vehicle	<input type="checkbox"/> Fatal	<input checked="" type="checkbox"/> Personal Injury	<input type="checkbox"/> Property Damage
<input type="checkbox"/> Commercial Vehicle	<input type="checkbox"/> Crime Scene	<input type="checkbox"/> Other (specify)	
Team Members Present			
Personnel:	Function		
1. DET SGT Andrew Booth	Reconstruction		
2.			
3.			
4.			
Type Reconstruction 1: Scene Evaluation 2. 3. Other:			
	Year	Make	Model
Vehicle #1:	2003	Mercury	Mountaineer
Vehicle #2:	2001	Ford	F150
Vehicle #3:			
Vehicle #4:			
Notes: Unit 1 lost control due to icy roadway then crashed through guardrail and off viaduct (overpass) Leeman Hwy Bath. Landed on Unit 2 on lower portion of Leeman Hwy.			
Court Action:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Charges:	n/a
Name(s):	Melissa Medina		
Date:	Reconstruction Specialist (Signature)	Status:	Approved (SARS)
4/6/16	Andrew Booth	CLOSED	Spc. Michael P Pion

MAINE STATE POLICE

Integrity-Fairness-Compassion-Excellence

COLLISION RECONSTRUCTION

PROGRESS REPORT

Maine State Police
Approved

STATE OF MAINE

April 14, 2016

HR No. HR-2016-055

Case No. 16-005442

Reconstructionist:	Rank	FName	MI	LName
		Detective	Sergeant	Andrew M. Booth
Primary Investigator:	Rank	FName	MI	LName
		Patrolman	Richard	Ross

Troop / Dept:
Bath PD

Troop / Dept:
Bath PD

Assistant Senior Crash
Reconstruction
Specialist

SYNOPSIS: On 4/4/16 at around 1436hrs Unit 1, a 2003 Mercury Mountaineer, driven by Melissa Medina of Windham and occupied by her 12 yo son, were headed southbound on RT 1 (Leeman Hwy viaduct) overpass. Medina lost control due to icy road conditions and started to fishtail into the northbound lane, then back into the southbound lane, striking the guardrail apparently almost head-on, causing the vehicle to flip over the guardrail and plummet straight down on top of Unit 2, a 2011 Ford F-150 occupied by the driver, Roy Ordway, of Bath. Unit 1's roof impacted the bed of the pickup. Unit 1's occupants suffered serious injury. Unit 2's driver was uninjured.

PERSONS INVOLVED:

Unit 1

Operator: Melissa Medina, Windham, ME 04062

Passenger: Matthew Medina

Unit 2

Operator: Roy Ordway, Bath, ME 04530

Passenger: N/A

INJURIES:

Unit 1, Melissa Medina:

Unit 1, Matthew Medina:

Unit 2, Roy Ordway:

VEHICLE INFORMATION AND DAMAGE:

Unit 1: Green 2003 Mercury Mountaineer ME PC 8227VC, VIN 4M2ZU66K23UJ03967 (RWD only, no AWD/4WD)

Noted Damage: Total loss. Damage centered on roof due to impact with Unit 2 (roof-down impact)

Tire Information: Tires were in good shape (mud and snow) with adequate tread.

Date: _____

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Tire	Make	Type		Maine State Police		Air Pressure (psi)	Tread Depth (32's)	Comments
				Size Approved				
				April 14, 2016				
LF	Mirada	Crosstour SLX	245/70R16	107S M&S		flat	6/32	Rim damage, puncture
RF	Mirada	Crosstour SLX	245/70R16	107S M&S		flat	6/32	Rim damage, puncture
RR	Mirada	Crosstour SLX	245/70R16	107S M&S		full	6/32	good condition
LR	Mirada	Crosstour SLX	245/70R16	107S M&S		full	6/32	Good condition



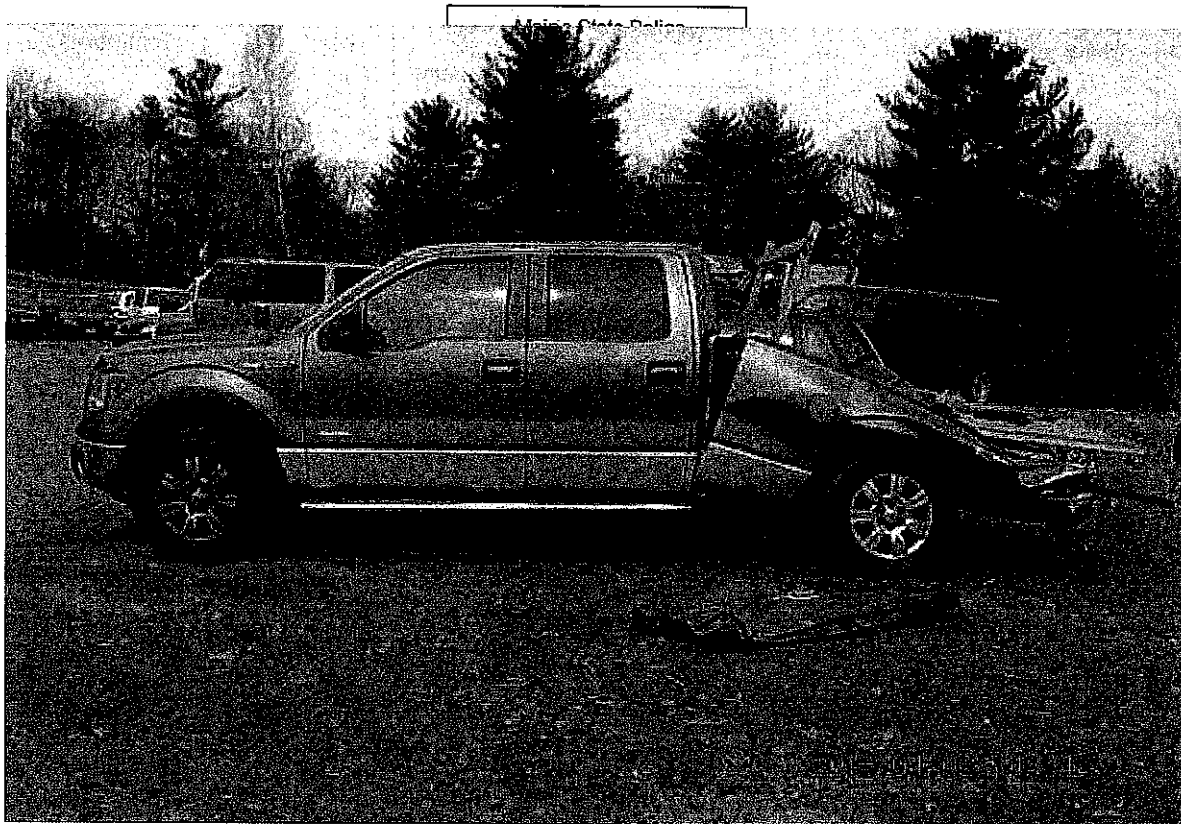
Unit 2: Gray 2011 Ford F-150, ME PC 5291TQ, VIN 1FTFW1ET1BFL68704

Noted Damage: vertical crush damage to pickup bed

Tire Info: N/A

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Approved By: _____



TRAFFIC AND HIGHWAY CONDITIONS: The viaduct on RT 1 (Leeman Hwy in Bath) is an overpass that connects RT 1 with the Sagadahoc Bridge over the Kennebec River. It is a two lane concrete covered roadway divided by a double yellow line, white fog lines on the shoulder, and with 2'10" guardrails (concrete and aluminum) on each side. Traffic was moderate to heavy (2:30pm on a workday). The roadway was reportedly covered in a thin sheet of black ice due to weather conditions. Salt trucks were out but had not yet treated the viaduct. The speed limit is posted 35mph. Road conditions appear to have contributed to the crash.

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Looking southbound. Tire marks indicate Unit 1 had been swerving in both lanes, then off right shoulder (north side of viaduct).

WEATHER CONDITIONS: The temperature was in the 20's, with light falling snow for much of the afternoon, and some areas seeing freezing rain. Motorists and responding officers reported black ice on the viaduct. Weather conditions appear to have contributed to the crash.

LIGHT CONDITIONS: Visibility was adequate, with cloudy skies, overcast, and lightly falling snow. Light conditions do not appear to have contributed to the crash.

DETAILS OF INVESTIGATION:

On 4/4/16 at 1436hrs, Bath Police and Fire units responded to a 911 call about a vehicle that had plunged off the viaduct landing on top of another vehicle. I responded

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with these units and arrived on scene within a few minutes. I saw Bath Fire and EMS personnel working to extricate the occupants of an upside down, crushed, SUV (Unit 1) that was on top of the pickup bed, portion of a Ford F-150 (Unit 2), while other personnel tried to stabilize the two vehicles. Once the vehicles were separated to allow for extrication, two occupants (mother Melissa Medina and son Matthew Medina) were pulled out of the wrecked SUV and transported to the hospital. The driver of the Ford F-150, Roy Ordway, appeared unhurt.

In a tree near the vehicles were portions of the viaduct guardrail hanging, stuck in the branches, as well as other pieces lying on the ground near some vehicle debris. Bath Police personnel took charge of diverting traffic, which included BIW shift change traffic, around the scene. Det. Brunelle (Bath PD) and I took photos of the lower crash scene, then I went up to take pictures of the viaduct (the actual time was 1500hrs when I took these pictures, not 1400hrs as recorded on my digital photos—I had not adjusted for daylight savings time). My first observation on the viaduct was that it was covered in a thin layer of snow. Deputy Mark Anderson of Sagadahoc County Sheriff's Office had been the first officer up on the viaduct to secure the scene, which was eventually blocked off at both ends of the viaduct by two Maine DOT salt trucks (they'd been out salting but hadn't yet covered the viaduct). Deputy Anderson said the viaduct was covered in black ice when he first got there, but by the time I went up (24 minutes after the crash) the road was just wet and somewhat slippery.

I saw tire marks in the snow that Deputy Anderson said lined up with the broken guardrails. There were a couple other sets crossing the center line, but these appeared to have been caused by vehicles avoiding the scene. These marks were intermittent and disappeared at spots, prohibiting me from taking any type of usable measurements but did appear to be yaw-type marks, as if the vehicle had been "fish-tailing." The marks only showed in the thin snow and not on the cement road covering of the viaduct. The tire marks leading from the broken guardrail appeared to have been swerving in the road, and tracing them back, I could see that they originated in the southbound lane, then crossed into the oncoming northbound lane, appear to have scraped/struck the southern curb (northbound lane right side) then veered back across the center line, into

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the southbound lane once again, and into the guardrail at a somewhat sharp angle, not quite perpendicular, but a direct approach rather than a glancing sidelong strike. A large section (approx. 50') of guardrail was taken out. The guardrail consisted of a cement portion then an aluminum guardrail bolted into the cement. The total height of the guardrail was approximately 2'10" (measured with a fiberglass tape measure). Half of this was cement, the upper half, the guardrail. At the lower portion was a small curb, prior to the cement wall that the guardrail bolted into. This curb was only a few inches wide and long. I did not see any debris on the viaduct that could have led to the crash.

I took photos and spoke to DOT personnel who were waiting to salt the road. They treated the road and eventually opened both lanes back up. I returned to the lower scene and took more photos, assisted with traffic, consulted with supervisors, and watched as tow trucks came to remove the vehicles.

The top half of Unit 1 been flattened. I did see fresh scrapes and gouges in both of the front tire rims of Unit 1, indicating that they at some point hit a curb. There appeared to be some damage to the front right corner, but most of the damage was centered on a direct upside down fall, landing on its roof. Airbags had been deployed. Unit 2's rear half portion, the bed portion, also indicated a downward crush.



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RECONSTRUCTION ANALYSIS:

It appeared to me that Unit 1 had lost control due to ice and crashed at a too-sharp angle into the guardrail, in a high center-of-mass SUV, into a less than 3' guardrail, causing it to flip up over the guardrail and fall vertically down on top of the Ford F-150. By landing on the bed of this truck, I believed this absorbed most of the impact forces allowing the occupants of Unit 1 to survive. While on scene, there were

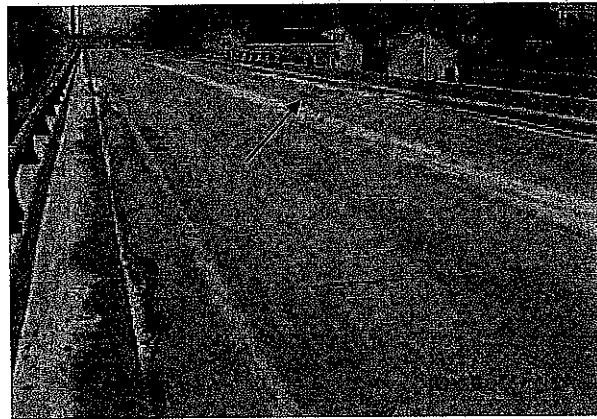
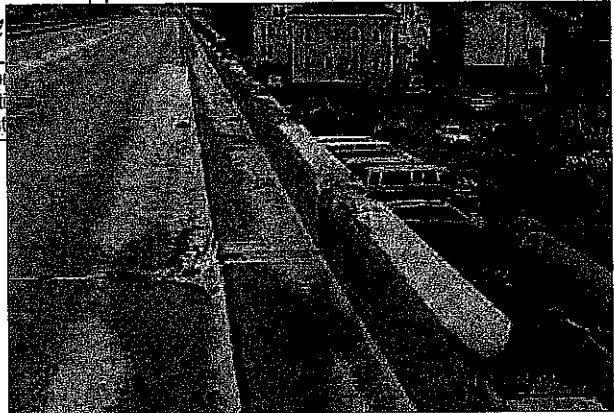
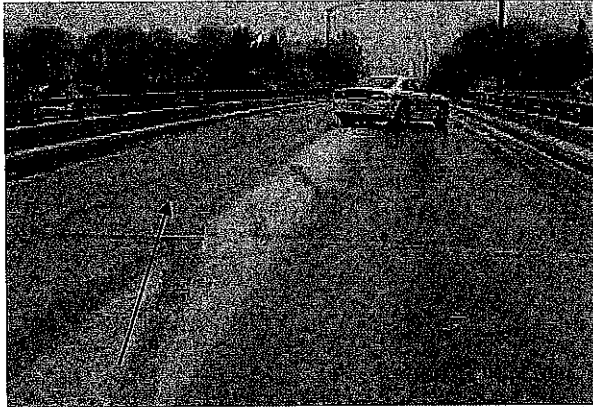
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no witnesses to the pre-crash viaduct portion of this crash, only the fall off the viaduct and onto the Ford.

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After clearing from the crash, Bath PD press release asked for witnesses. I spoke to several on 4/5/16 who reported seeing Unit 1 lose control due to the icy road and cross the center line into the northbound lane, then back into the southbound lane, into the guardrail. Witnesses say Unit 1 flipped up over the guardrail and almost balanced enough to stay on the viaduct, but momentum carried it over so it fell vertically down off the guardrail, but landing on its roof. Witnesses confirmed that the viaduct was covered in ice. One witness, Ray Dalton of Wiscasset (882-9931), said he was in front of Unit 1 as they came off the bridge and drove onto the viaduct, southbound. Dalton said he started to feel his rear-wheels slipping, but maintained control, but said he automatically looked into his rearview mirror to see Unit 1 fishtailing, then crash into the guardrail and flipped up over it. Dalton said he thought for a moment Unit 1 would remain balanced

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on the viaduct, but it didn't. Another witness, Doug Nelson, an employee at BIW, said he'd been looking out his window (BIW engineering building south of viaduct) at the snow and heard something or saw something that made him look at see the underside of Unit 1 going over the guardrail, also saying it almost balanced on the viaduct. He said he saw Deputy Anderson stop traffic and exit his cruiser, slipping on the ground due to the ice. Another witness, Bill Hanson of Alna (350-2524), said he'd been a few cars ahead of Unit 1 and confirmed that the roadway was icy but that traffic speed was not excessive, rather, slower than normal due to the ice. All these reports verify that Unit 1 had lost control due to ice and crashed into the guardrail, flipping over it. A witness to the lower portion of the crash, Susan Cunio of Bath, (751-3554), said she was at the light at Washington and Leeman Hwy and saw pieces of the guardrail come crashing down, then Unit 1 falling vertically down to land on its roof on Unit 2.

PTL Ross and I were also able to speak to the driver, Melissa Medina, via a phone call to her in the hospital. Medina said she lost control due to ice, was not distracted, speeding, or using her cell phone. She said her son was in the front passenger seat, both wearing seatbelts. She described her injuries, as well as her sons, but said she couldn't remember anything after losing control to waking up in the ambulance.

CONCLUSIONS AND OPINION OF INVESTIGATOR:

It appears, based upon the visual physical evidence, and witness and driver accounts, that Medina (Unit 1) was driving too fast for conditions (unexpected ice), which consisted of the viaduct freezing over before the bridge and road itself, due to weather conditions at the time. Medina lost control on the ice and crashed into and then over the guardrail. I have no evidence to support excessive speed, driver inattention, or intent to crash. It is reasonable to believe that their injuries would have been much more serious had they crashed onto the asphalt and not Ordway's pickup truck, which was able to absorb and support some of the energy in the crash.

ENCLOSURES:

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Date: _____

Approved By: _____



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