

REPORT TYPE:
[ ] INITIAL REPORT
[X] SUPPLEMENTAL

DISTRIBUTION: [ ] GHQ Criminal [ ] GHQ F W [X] GHQ Patrol
[ ] ID Documents [ ] ID Prints [ ] District [ ] Explosives
[ ] Lab [X] DA: Lane County
[X] Other Lane County ME, ODOT Reg 2 Dist 5, ODOT Accident Data Unit
Oakridge Police Department

INCIDENT# [CAD#]
SP09-4436133

ASSOCIATED OSP #s/

OTHER AGENCY #s/

OFFENSE/ORS/ Fatal Motor Vehicle Collision

Ocr/ 1 Col Lane Stat/ COMP

STATUS/ ACTI - OPEN/ACTIVE INVESTIGATIO CLOS/A - CLOSED BY ADULT ARREST CLOS/J - CLOSED BY JUVENILE ARREST
COMP - CLOSED SERVICE COMPLET INAC - OPEN/INACTIVE/NO FURTHER INVESTIGATION UNFD - CLOSED UNFOUNDED
NODA - NO PROSECUTION BY DA OTH - OFFENDER DECEASED RFSE - VICTIM REFUSED PROSECUTION

DES

ADDITIONAL OFFENSES/

MDT

Ocr/ Col Stat/

MCT

Ocr/ Col Stat/

SOR

LEAD/ORIG AGENCY OSP-Oakridge

DATE/TIME REPORTED TO OSP 10/12/2009 3:48 PM

RPT DATE/TIME/ 10/12/2009

OCCUR'd DATE/TIME 10/12/2009 3:48 PM

HITS

IF SUPPLEMENTAL: DATE/TIME OF ORIGINAL REPORT/

ORIGINAL SUBJECT OF REPORT/

Polygraph

SUBJECT OF THIS REPORT/ Collision Reconstruction

AES

(ADDITIONAL VICTIMS: [ ] YES [ ] NO)
(CO-DEFENDANTS: [ ] YES [ ] NO)

CCFU

LOCATION

OF INCIDENT/ SR 58 and Crestview Street, Oakridge

COUNTY/ Lane

Misc Flag

LOCATION TYPE (Premises)/ Public Highway

METHOD OF ENTRY/ n/a

Misc Flag

TOTAL LOSS/ \$0.00

(list for each appropriate offense)

TOTAL DAMAGE/ \$0.00

DOMESTIC VIOLENCE? [ ] YES

THEFT BY COMPUTER? [ ] YES

OTHER DE (For Field Office Use)

GANG INVOLVEMENT? [ ] YES describe

BIAS MOTIVATION? [ ] YES describe

OSP DE Date/Initial

WEAPON USED? [ ] YES describe

UNDER INFLUENCE OF: [ ] UNKNOWN

Alcohol? [ ] YES and/or Drugs? [ ] YES describe

The below-named subject is presently a runaway/missing person and I certify that I am the parent, legal guardian, or reporting party.

UCR OK Date/Initial

Subject/ (Print ONLY) Last, First Middle Reporting Party/ (Print ONLY) Last, First Middle

Signature/ Signature Date/

REPORTING OFFICER/ Blaine Hlebechuk, Sr. Trooper

DPSST#/ 24641 DATE/ 01/06/2010

STN/ OSP-Springfield

ASSGN 200

APPROVED/ By Reon

DATE/

**INCIDENT #:** 09-436133

**REPORT SUBJECT:** COLLISION RECONSTRUCTION

**REFER:** To all reports under this case number.

**LOCATION:** State Route 58 (SR) and Crestview St. (CS) MP 35.48, Oakridge, Lane County, Oregon.

**OPERATORS:** #1): SPALINGER, VIRGINIA LAYTON (Deceased)  
DOB/ 08-26-1918, ODL/ [REDACTED]

#2): MILLER, DANIEL CLIFFORD  
DOB/ 04-27-1982, ODL/ [REDACTED]

**VEHICLES:** #1): 1965, Ford, Thunderbird, 2-door, blue  
OR LIC/ DAZ 380, VIN/ [REDACTED]

#2): 1998, Ford, Crown Victoria, 4-door, white w/ police markings  
and overhead emergency lights  
OR LIC/ E209212, VIN/ [REDACTED]

**MENTIONED  
POLICE:**

Sergeant LANG HINKLE, Scene Supervisor  
Sr. Trooper DUSTY SPRAGUE, Initial Reporting Officer  
Sr. Trooper ERIC SHERMERHORN, Assisting Officer  
OSP-Oakridge

Sr. Trooper JEFFREY WILLIS, Assisting Reconstructionist  
OSP-Roseburg

LOUIS GOMEZ, Chief  
Oakridge Police Department

**SUMMARY:**

On 10-12-2009 at 3:48PM, a two vehicle angle collision occurred on State Route 58 within the intersection of Crestview Street. The collision occurred as an eastbound 1965 Ford Thunderbird operated by VIRGINIA SPALINGER executed a left turn into the path of a westbound 1998 Ford Crown Victoria police car. SPALINGER was transported to Riverbend Hospital where she succumbed to injuries sustained during the collision.

**ACTION TAKEN:**

On 10-12-2009 at about 4:29PM, I was dispatched by radio to the report of a motor vehicle collision involving an Oakridge police car. I received additional information concerning the collision from dispatch via phone. Dispatch advised the operator of the second involved vehicle was not expected to survive.

I arrived at around 5:30PM and met with Sgt. Hinkle and Sr. Trooper Sprague. They updated me on the information known about the collision thus far.

I took photographs of the scene using a digital camera. The images were later downloaded to a CD-R and will be kept in evidence at the Springfield Patrol Office of the Oregon State Police.

I inspected the seat belts for signs of wear. I also checked the tail lamp bulb filaments for signs of hot shock on each vehicle.

I located and marked scene evidence with paint. I used a Leica T1610 total measuring station to document scene evidence. Later the data was downloaded and used to construct the attached scale diagram.

At about 9:30 PM I conducted two skid tests in the west bound B-lane utilizing a Vericom VC 2000 accelerometer to test the coefficient of friction for the roadway.

During the initial investigation I learned that the security camera at Ray's Food Place, a grocery store located at the northeast corner of the intersection, video taped the collision. Sr. Trooper Sprague and I contacted the store's manager and reviewed the video. After watching the video I confirmed that we would be able to obtain a copy of the video.

On 10/21/2009 I met with Flo Hoskinson from City County Insurance Services. She provided a copy of the video from the grocery store which had been stored on a CD-R. A copy of the video will be maintained with the case file at the Springfield Office of the Oregon State Police.

On 10/26/2009 at 5:00 PM I spoke with Clark Deichler, Attorney for the Spalinger family. Deichler gave consent to allow measurements to be taken.

On 10/27/2009 Sr. Trooper Jeff Willis and I went to W and J towing in Oakridge where the two vehicles were being stored. We took detailed vehicle perimeter and crush measurements from both vehicles. Sr. Trooper Willis took photographs detailing the points measured. These photos were later downloaded and were stored at the Springfield Patrol Office.

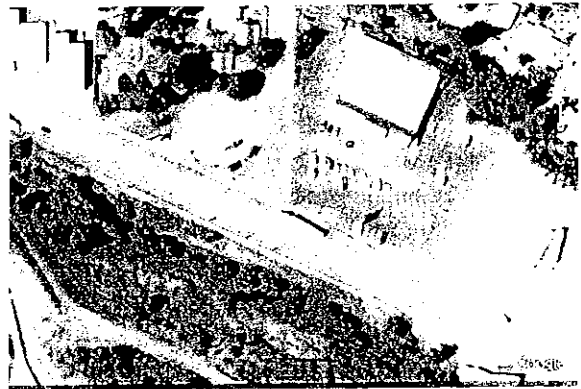
On 11/02/2009 I obtained circumference measurements of the traffic light pole struck by Vehicle #2. The measurements were given to Sr. Trooper Willis in the event he determined a crush analysis could be performed.

#### ROADWAY DESCRIPTION:

State Route 58 at the intersection of Crestview Street is a four lane east/west primary roadway constructed of asphalt pavement in travel polished condition. Crestview is a north south roadway that proceeds to the north from the intersection with State Route 58.

At the intersection there is a left turn lane for eastbound traffic on State Route 58 to turn north onto Crestview Street.

The striping is standard configuration with solid yellow painted lines dividing the east and westbound travel lanes on SR 58. The eastbound B-lane is bordered by a metal guardrail; the westbound B lane is bordered by concrete curbing.

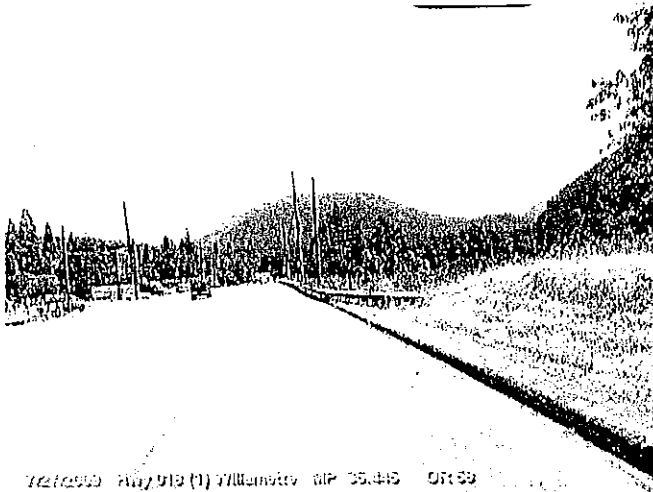


For westbound traffic the A-lane is approximately 12 ½ feet in width while the B-lane is approximately 14 ½ feet in width. Eastbound traffic lanes are 12 feet for the A-lane and 15 feet for the B-lane. The eastbound left turn lane is approximately 10 feet width.

The left turn lane is controlled by a green arrow, a yellow flashing arrow, or a red light depending on the traffic flow.

The roadway is posted at 35 mph. The pavement was dry and free of defects. The collision occurred during the hours of daylight. The roadway grade at the collision site is level with negligible crown.

Traveling eastbound on State Route 58 there is approximately 730 feet of minimum clear visibility to the east to observe oncoming traffic flow. The pictures below depict the minimum sight distance. The eastbound photograph was taken from mile point 35.445 approximately 315 feet prior to the intersection with Crestview Street. Continuing to the intersection, the distance of unobstructed view remains consistent. It is possible for an attentive driver to see greater than this distance. A downgrade and slight left to right curve in the roadway begins to restrict the visibility of oncoming vehicles beyond this distance. *(The photos were obtained from the Oregon Department of Transportation Digital Video Log).*



(Eastbound view from B-lane)



(Westbound view from B-lane)

#### ROADWAY EVIDENCE:

The roadway evidence is described as traveling east to west beginning at the area of impact, which is located within the intersection in line with the westbound center line.

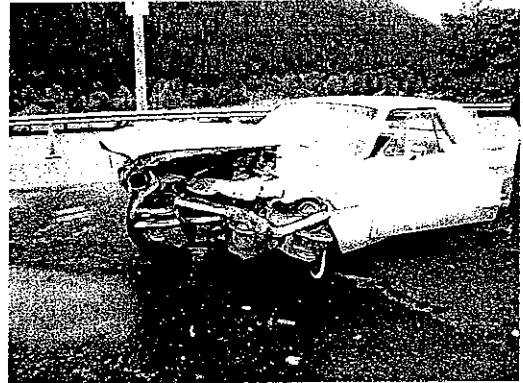
- No physical evidence is observed prior to the area of impact, which is defined by a series of tire scuff marks created by the two vehicles and a metal scrape mark created by Vehicle #2. Of these marks one mark created by the right front tire of Vehicle #1 exhibits a counterclockwise rotation. This mark is relatively wide and has longitudinal striations created as the vehicle rotated and the tire moved laterally across the asphalt pavement post impact. This mark is approximately 8 feet in length.
- Also within the area of impact (AOI) is a narrow tire scuff mark created by the deflated left front tire of Vehicle #2. The mark also has a directional component that shows the vehicle was redirected from left to right at impact. The mark is about 9 feet in length and then changes to a metal scrape mark that continues for an additional 14 feet. *(The narrow tire scuff mark was not mapped and is approximated in the diagram based on photographic evidence).*
- A metal scrape mark approximately 2 feet in length parallels the tire scuff mark created by Vehicle #2. The mark begins within the area of impact and leads towards the final uncontrolled rest position of Vehicle #2.



- A metal scrape mark about 4.5 feet in length beginning about 15 feet west of the AOI. This mark parallels the metal gouge mark created by the left front wheel of Vehicle #2. This mark was created as the undercarriage scraped along the pavement post impact.
- Vehicle #2 came to an uncontrolled final rest against a traffic light pole at the northwest corner of the intersection facing predominately southwest.
- An additional tire scuff mark with overlapping vehicle fluids is also observed. The mark begins at the area of impact and is approximately 18 feet in length. This mark also has a counterclockwise rotation and is attributed to the left front tire of Vehicle #1.
- Three additional tire yaw marks beginning approximately 16 feet northwest of the area of impact lead towards the final uncontrolled rest position of Vehicle #2. The longest of these marks is approximately 22 feet in length. The marks display a counterclockwise rotation.
- Radiator fluids expelled from Vehicle #1 are observed within the westbound travel lanes approximately 22 feet from the area of impact. The fluids were dispersed as the vehicle was rotating prior to coming to an uncontrolled final rest and are additional evidence that the vehicle rotated counterclockwise post impact.
- Vehicle #1 came to final uncontrolled rest facing predominately east.

#### VEHICLE DESCRIPTION AND EVIDENCE:

Vehicle #1 is a 1965 Ford Thunderbird 2-door sedan, light blue in color. The curb weight for the vehicle is 4,470 pounds. This weight was obtained from two internet sources for classic car specifications. The adjusted weight for the vehicle allowing for the operator is 4,630 pounds. The vehicle is equipped with Goodyear Regatta size P216 75R16 tires. The tires are in good condition.

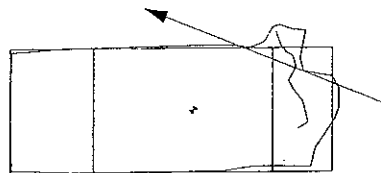


This vehicle exhibited the following contact damage:

- Extensive contact damage across the width of the front of the vehicle. The damage penetration is greatest at the left front corner where the left front wheel was pushed rearward due to crush.
- The steering wheel is bent as a result of contact with the decedent.

Induced damage due to buckling is visible on the left side just behind the driver's door. A small area on the left rear quarter panel level with the drivers door latch was buckled inward.

The Principle Direction of Force (PDOF) for the impact traveled from the center left half of the front bumper to the area behind the left front wheel. The eccentric impact induced a rapid counter-clockwise rotation of the vehicle around its yaw axis.

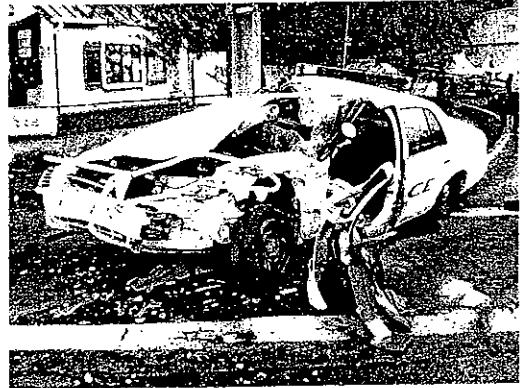


### Restraint System Examination:

- This vehicle is not equipped with air bags. The occupant restraints are comprised of lap belts only. The belt is manually adjustable and does not retract. Stretching of the nylon fiber belt is visible. Additionally the stitching on one end of the factory label sewn to the safety belt adjacent to the clasp was ripped and the label hanging loose. The evidence suggests the seatbelt was being worn at the time of the collision.

I inspected the tail lamp bulbs on this vehicle and observed no signs of hot shock on the brake lamp filaments. I did observe the left turn signal filament displayed signs of hot shock. This suggests the filament was incandescent when subjected to a sudden outside force.

Vehicle #2 is a 1998 Ford Crown Victoria police package 4-door sedan. This vehicle is equipped with a 4.6 liter V-8 engine and an automatic transmission. The vehicle is equipped with Federal Formoza FD size 225 60R16 98V tires. The tires appeared in good condition.

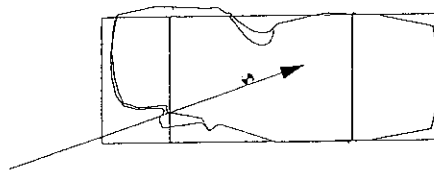


The vehicle's weight was determined in the following manner. A 2001 Ford Crown Victoria police package sedan equipped in the same manner as Vehicle #2 was weighed and found to be 4,465 pounds. An internet check revealed that a 1998 Crown Victoria Police package sedan weighs 34 pounds less than a 2001 of the same model. The adjusted weight allowing for the operator is approximately 4,666 pounds.

The vehicle is equipped with overhead lights that display red and blue lights when activated. The vehicle is also equipped with a siren.

For the initial impact contact crush damage is present beginning at the center of the front bumper and extending to the driver's side door. The damage penetration is deepest at the left front corner. The left front wheel rim was damaged due to impact and the tire deflated. The left front suspension assembly was damaged, and the vehicle frame in contact with the pavement.

The PDOF for the initial impact traveled from the area of the left front corner toward the area of the right rear corner. The impact was slightly eccentric to the vehicle's center of mass and induced a gradual counter-clockwise rotation.



Induced damage in the form of buckling was observed:

- Along the engine hood
- Across the roof
- The windshield shattered as a result of the buckling.

Additional contact damage:

- Secondary contact damage is present on the passenger side of the vehicle where it impacted with the traffic light pole. The contact damage centered on the passenger side front door.

The Principal Direction of Force (PDOF) for this second impact traveled from the center area of the right front passenger door toward the left rear passenger door. This impact was eccentric to the vehicle's center of mass.



Restraint System Examination:

- The vehicle's frontal airbags deployed during the collision.
- I inspected the driver's safety belt and observed signs of stretching (loading) in the polyester web material of the belt in the extended worn position. As a result it was determined the seat belt was being worn at the time of the collision.

Emergency equipment installed:

- The vehicle was equipped with an overhead light bar that when activated displayed red and blue lights to the front and rear. The light bar was controlled by a 4 stage toggle switch.
- The vehicle was equipped with a siren.

Fire personnel state that upon arriving they shut the sirens and emergency lights off on the vehicle. As a result an examination of the affected light switches was not performed.

I inspected the brake lamp filaments and the filaments appeared normal.

#### OCCUPANT KINETICS AND INJURY:

Operator #1 was utilizing a lap belt when the collision occurred. She suffered blunt force trauma injuries as a result of her vehicle rapidly decelerating and rotating beneath her continued forward momentum. Gross deformation of the steering wheel suggests she impacted with the steering wheel during the collision. Injuries included a flail chest. Her driver's license specifies a restriction requiring corrective lenses to be worn. Her eyeglasses were observed lying on the passenger side floor board of the vehicle by Justin Mock of the Oakridge Fire Department. It is likely that she was wearing the glasses at the time of the collision and they came off due to collision forces.

Operator #2 was utilizing a lap and shoulder belt and the driver side airbag deployed. He suffered blunt force trauma injuries, contusions and lacerations as a result of the rapid deceleration of the vehicle beneath his continued forward momentum and vehicle components intruded into his seating position.

#### SKID TESTS:

I performed two skid tests the night of the collision within the westbound B-lane just to the west of the intersection. The roadway conditions were the same as those that existed at the time of the collision. The ambient temperature had dropped approximately 10 degrees. The vehicle used was a 2006 Ford Crown Victoria police package patrol car with the ABS system deactivated. The values were obtained with a VC 2000 accelerometer.

The two skid tests resulted in values of 0.726 and 0.715. These values are within 5% of one another. The lower of the two skid tests (0.715) will be used for the purpose of speed calculations as needed.

#### SPEED CALCULATIONS:

A Conservation of Linear Momentum analysis was considered to determine the pre-impact speeds of the Thunderbird and Crown Victoria. A rigorous analysis was problematic due to the lack of pre-impact roadway evidence necessary to accurately determine vehicle orientation at initial impact.

A Conservation of Energy analysis with crush was considered to determine the pre-impact speeds of the Thunderbird and Crown Victoria. A rigorous analysis was again problematic due to the need for the Conservation of Linear Momentum equations to be included in the analysis in order to solve the resulting equations simultaneously.

In the course of considering speed calculation methods and applicability, information was collected including

- Post-crash vehicle perimeters and crush profiles
- Impacted traffic light pole *circumference* measurements (average of 40.5 inches)
- Vehicle Year and Model Interchange List (Sisters and Clones) Domestic and Import Makes 1974 – 2009 information for select Ford Crown Victoria vehicle years
- 1998 – 2002 Ford Crown Victoria frontal A, B, and G stiffness coefficients
- 1992 – 1997 Ford Crown Victoria side A, B, and G stiffness coefficients (NHTSA side impact tests do not exist for 1998 – 2002 Ford Crown Victoria vehicle years).

#### STATEMENTS:

Sr. Trooper Sprague interviewed several witnesses at the scene prior to my arrival. He took the following substantive statements.

**Eric Olsen** witnessed the crash. He gave the following statement in substance: Eric was operating an Oakridge City Maintenance truck. He was driving eastbound behind unit #1 when it moved over into the left turn lane. He saw unit #2 traveling westbound with its emergency lights and siren on and he noticed that some eastbound traffic was yielding to the patrol car. Unit #1 turned left in front of unit #2 just as unit #2 entered the intersection. Unit #2 veered slightly to the right in an avoiding maneuver just before impact. Both vehicles collided in the middle of the intersection. Eric said that unit #2 was traveling fast, as if he was going to an emergency call. He said that the two eastbound lanes had a green light but he is not sure about the left turn lane or the westbound lanes.

**Justin Mock** witnessed the crash. He gave the following statement in substance: Justin was operating and Oakridge Fire Department Ambulance. He was driving eastbound two cars behind unit #1. Unit #1 moved into the left turn lane at the intersection of Crestview Street. Justin saw unit #2 traveling westbound, about a hundred feet before the intersection, with the lights and siren on. He noticed that some eastbound traffic was yielding to the patrol car. Just as unit #2 entered the intersection, at the east end, unit #1 attempted to turn left from the west end of the intersection. Unit #1 turned left directly in front of unit #2 and both vehicles collided in the middle of the intersection. Justin stopped the ambulance and advised dispatch of the collision. When Justin reached the patrol car the lights and siren were still on. He turned them off. He said that the eastbound traffic signals were green but he is unsure of the left turn lane signal.

**Matthew Seckler** was seated in the front passenger seat of the ambulance with Justin Mock. His statement was almost identical to Justin's. When Justin stopped the ambulance Matthew immediately started patient assessment and treatment.

**Linda Irish** witnessed the crash. She gave the following statement in substance: Linda was driving eastbound behind unit #1. She entered the left turn lane just as unit #1 began to turn left. Suddenly unit #1 collided with unit #2 in the middle of the intersection. Unit #1 bounced back toward her and unit #2 slid sideways into the signal pole. Linda did not see unit #2 prior to the crash but she said that the emergency lights and siren were on at the time of impact. Linda said the traffic signals for the eastbound lanes had just changed from red to green. The traffic signal for the left turn lane was flashing yellow.

**Alan Peterson** witnessed the crash. He gave the following statement in substance: Alan was driving westbound on SR 58 entering the city of Oakridge. Unit #2 pulled onto the highway, in front of Alan, from where it had been sitting near the Arbor Inn Motel. Unit #2 drove in the right lane for a short distance and then moved into the fast lane. The emergency lights came on and the patrol car sped up very quickly. Alan assumed that the officer was responding to an emergency call. Unit #2 was about 600 feet in front of Alan when it entered the intersection. Alan saw unit #1 at the east end of the intersection. Unit #1 moved into oncoming traffic as if it had just passed the ambulance. Unit #1 veered directly into the path of unit #2. Both vehicles collided in the middle of the intersection. Unit #2 made a slight avoiding maneuver to the right just before impact. Alan said that he thinks that the westbound traffic signal was green but he is not sure.

**Dadra Henry** witnessed the crash. She gave the following statement in substance: Dadra was standing near the west entrance to Ray's Sentry when she heard the police siren and looked toward the highway. She saw unit #2 traveling very fast westbound a few hundred feet before the intersection. The emergency lights and siren were on. Unit #2 entered the intersection just as unit #1 attempted to turn left onto Crestview Street from the eastbound lanes. Unit #1 turned directly in front of unit #2 and both vehicles collided in the middle of the intersection. Dadra said that the westbound traffic signal was green when unit #2 entered the intersection.

**Terri Berling** witnessed the crash. She gave the following statement in substance: Terri was standing near the west entrance to Ray's Sentry when she heard the police siren and looked toward the highway. When she saw unit #2 it was traveling westbound about two car lengths from the intersection. It was moving "pretty fast" with the emergency lights and siren on. Unit #1 turned left in front of unit #2 and the vehicles collided in the middle of the intersection. Terri did not notice what color the traffic signal was.

**Ardine Cameron** witnessed the crash. She gave the following statement in substance: Ardine was on her bicycle in the middle of the Ray's sentry parking lot. She heard the police siren and looked down the highway in time to see unit #2 about 600 to 800 feet from the intersection. Unit #2 was westbound near the Moose Lodge with the emergency lights and siren on. It was traveling fast as if it was responding to an emergency call. Unit #2 entered the intersection at the same time that unit #1 was turning left onto Crestview Street. Both vehicles collided in the middle of the intersection.

**Melissa Terral** witnessed the crash. She gave the following statement in substance: Melissa was standing near the east entrance to Ray's Sentry when she heard the police siren and looked toward the highway. Melissa said that unit #2 was moving fast, westbound, near the intersection with the emergency lights on. Unit #1 was moving eastbound and turned left in front of unit #2. Both vehicles collided in the middle of the intersection.

**Marcia Brown** witnessed the crash. She gave the following statement in substance: Marcia was standing near the east entrance to Ray's Sentry when she heard the police siren and looked toward the highway. She didn't see the police car at first because traffic in the parking lot blocked her view. Then the police car came into view a hundred feet or so from the intersection. It was going westbound, "really fast" with the lights and siren on. Out of the corner of her eye she saw unit #1 turning left onto Crestview in front of unit #2. Unit #2 didn't even have time to slow down before the crash. Marcia wasn't sure what color the traffic signal was but she assumed that the police car had a green light.

**Travis Bane** witnessed the crash. He gave the following statement in substance: Travis was standing in the parking lot at Burt's Bait-N-Stuff, one block west of the intersection. He saw unit #1 traveling eastbound as it moved into the left turn lane. Unit #1 was going "really fast" and it "cut the corner really early" as it turned onto Crestview Street. Unit #2 was going westbound through the intersection at the same time. Both vehicles collided in the middle of the intersection. Travis didn't see unit #2 coming but he heard the siren just before the collision.

He said that he didn't notice what color the traffic signal was but he assumed that unit #1 had a green light because it was going so fast.

**Mackenzie Bowerman** contacted me the day after the crash and gave the following statement in substance: Mackenzie said that he did not see the crash but he heard the collision and he thought that the news report was inaccurate. Mackenzie was inside the shop at Willamette Mountain Mercantile, one block east of the intersection. He heard the impact of the crash but he doesn't remember hearing any police siren before the crash as the news reported. Immediately after the collision there was a siren that Mackenzie assumed must have belonged to the ambulance.

Detective Ashenfelter interviewed **Daniel Miller** on November 12, 2009. He took an in substance statement which included the following:

*He does not remember much about the day of the crash or the days around it due to his injuries in the crash. He knew his shift was 7:00 AM to 7:00 PM. He remembered stopping at Les Schwab to visit with a friend earlier in the day and then setting up to work traffic. He had set up to check speeds at the Cascade West Tow company parking lot. The next thing he remembers is hearing the helicopter and then waking up in the hospital. He does not remember going after any speeders and does not remember the crash.*

#### **VEHICLE DYNAMICS:**

Vehicle #1 entered the intersection and began to turn left onto Crestview Street when it impacted with Vehicle #2. The eccentric impact induced a counter-clockwise rotation. The vehicle rotated approximately 360 degrees while traveling to the west before coming to a final uncontrolled rest in the westbound travel lanes astride the center line facing predominantly east.

Initially, Vehicle #2 was parked at the Cascade West Tow company parking lot to check vehicle speeds for traffic enforcement. Subsequently, Vehicle #2 was traveling westbound with vehicle emergency lights and siren activated when Vehicle #1 initiated a left turn into its path. Operator #2 input right steering prior to impact. The two vehicles collided causing Vehicle #2 to rotate counter-clockwise approximately 45 degrees while traveling to the northwest impacting the concrete curb and a traffic light pole on the passenger side. Vehicle #2 came to final uncontrolled rest astride the concrete curb facing predominantly southwest.

#### **ATTACHMENTS:**

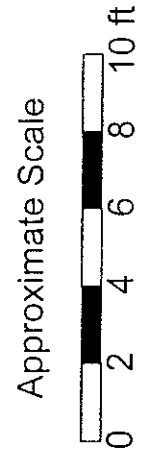
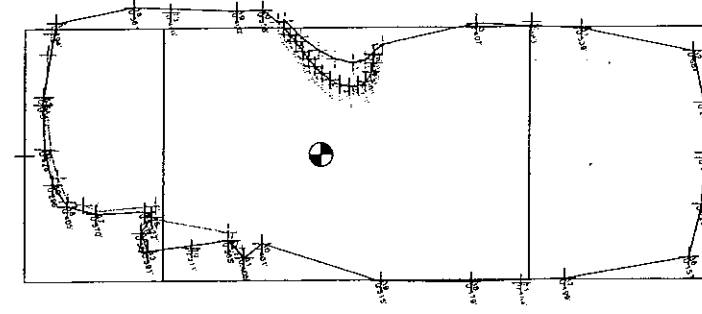
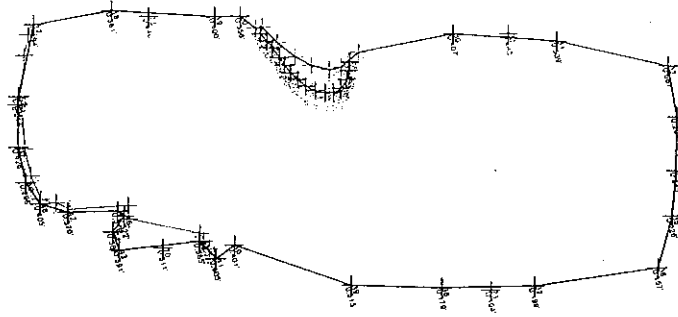
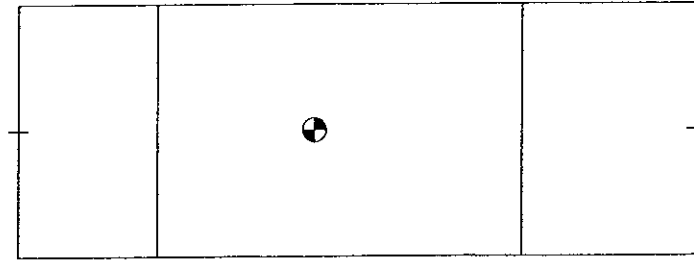
- Post-collision scale diagram
- Thunderbird perimeter and crush profile mapping
- Crown Victoria perimeter and crush profile mapping
- Crown Victoria crush analysis measurements diagram
- 1998 – 2002 Ford Crown Victoria frontal A, B, and G stiffness coefficients
- 1992 – 1997 Ford Crown Victoria side A, B, and G stiffness coefficients

#### **CONCLUSION:**

Operator #1 is solely responsible for this collision having violated the following Oregon Revised Statutes:

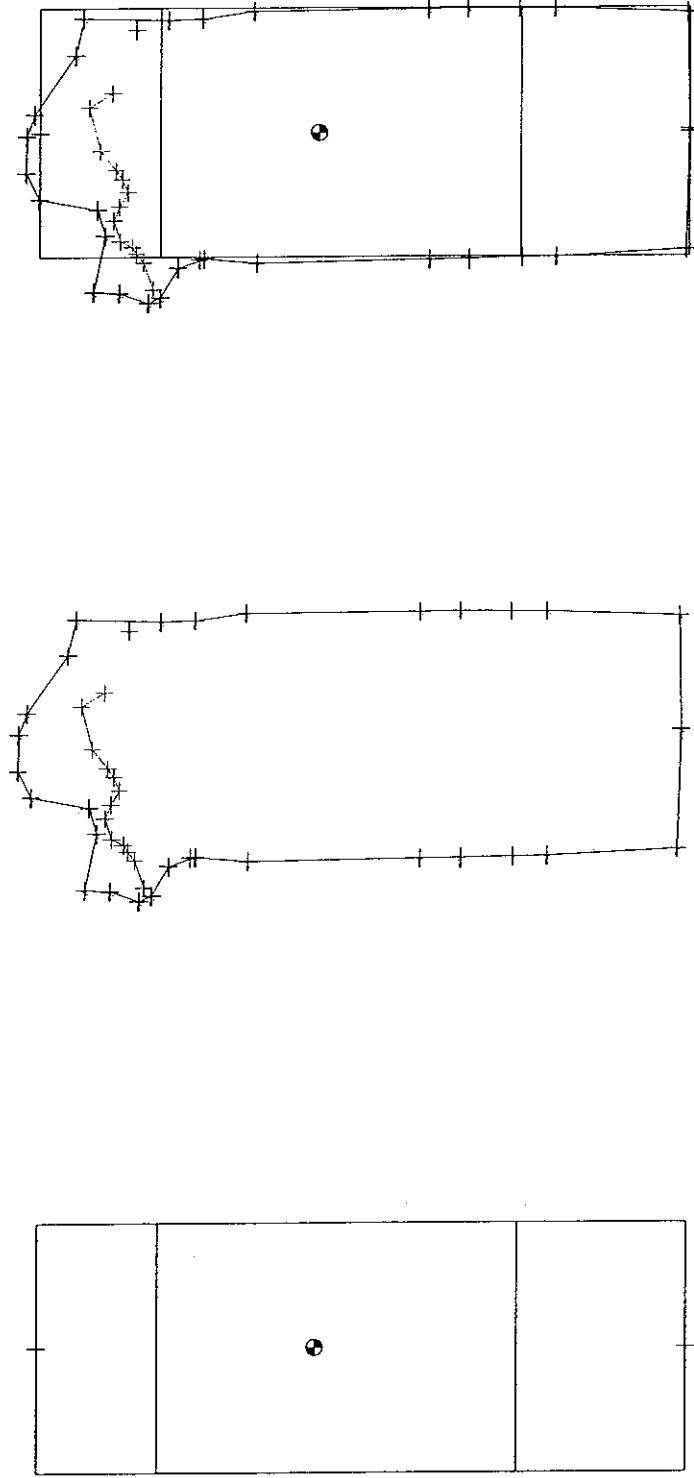
- ORS 811.145 Failure to yield to emergency vehicle.

1998 Ford Crown Victoria Police Interceptor, 4dr, sedan  
 Perimeter w/o Push Bumper and Crush Profile  
 SP 09-436133



- Notes:
1. Undamaged vehicle specifications from Expert Autostats
  2. Vehicle perimeter (black) mapped w/ TMS and prism pole
  3. Frontal crush at bumper (red) mapped w/ TMS in reflectorless mode
  4. Passenger side crush at rocker panel (green) mapped w/ TMS and prism pole
  5. Passenger side crush on door (purple) mapped w/ TMS in reflectorless mode

1965 Ford Thunderbird, 2dr, coupe  
Perimeter w/ Offset Hood and Crush Profile  
SP 09-436133

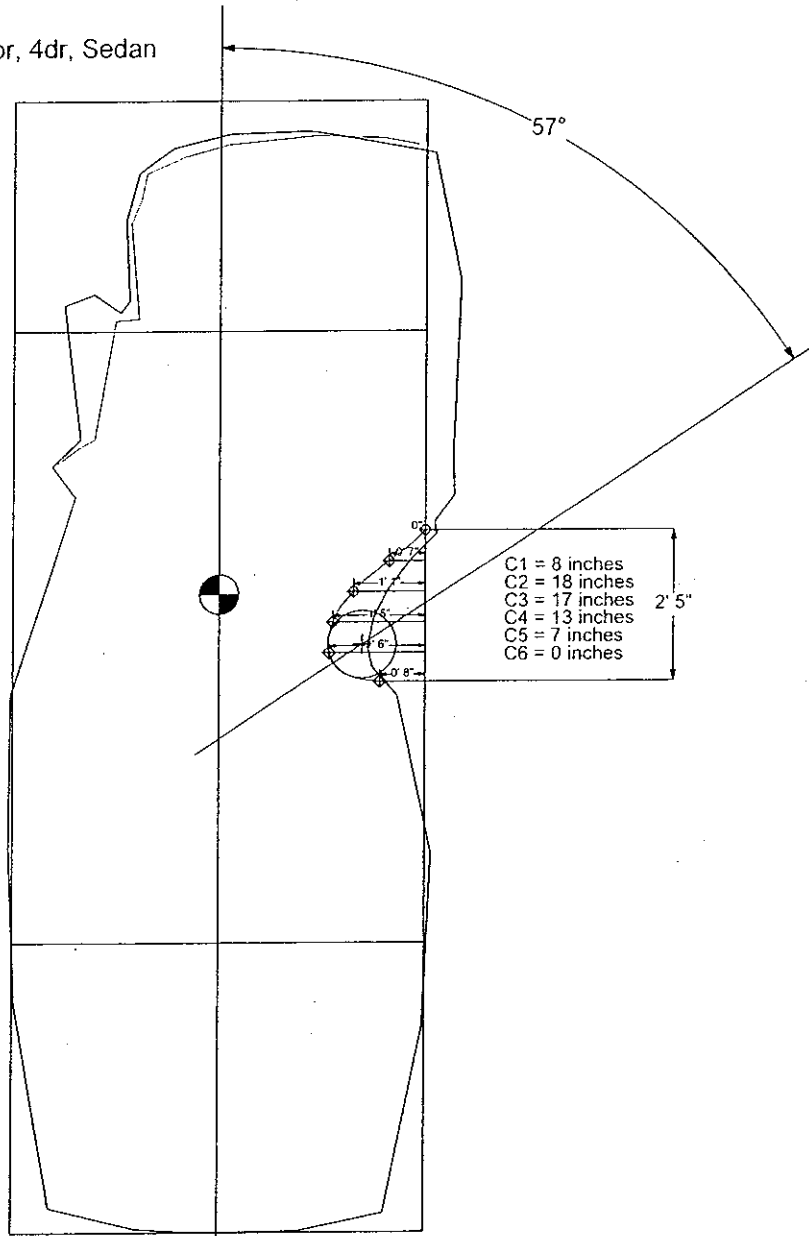


Approximate Scale



- Notes:
1. Undamage vehicle specifications from Expert Autostats
  2. Vehicle (blue) perimeter mapped w/ TMS and prism pole
  3. Frontal crush at bumper (red) mapped w/ TMS in reflectorless mode

1998 Ford Crown Victoria Police Interceptor, 4dr, Sedan  
Crush Analysis Measurements  
SP 09-436133



**4N6XPRT StifCalcs™**  
**Available Test Results**  
**Side Impact Test Summary**  
**Report Filter Settings**

Year Range : 1992 - 1997  
 Make : FORD  
 Model : CROWN VICTORIA

Test Number	Vehicle Info	No Damage Speed (mph)	Average Crush (inch)	KE Speed (mph)	Vehicle Indent Stiffness Values			Crush Factor (Average Crush)
					A	B	G	
Test Type : Side								
2481	1997 FORD CROWN VICTORIA FOUR DOOR SEDAN	2.0	10.5	24.2	76.2	80.3	36.2	22.2
2490	1997 FORD CROWN VICTORIA FOUR DOOR SEDAN	2.0	5.5	21.1	133.4	230.5	38.6	32.3
	<b>Side Averages</b>				104.8	155.4	35.3	27.3
	<b>Side Minimums</b>				76.2	80.3	36.2	22.2
	<b>Side Maximums</b>				133.4	230.5	38.6	32.3
	<b>Side Standard Deviations</b>				40.4	106.2	106.3	7.1

**4N6XPRT StifCalcs™**  
**Available Test Results**  
**Frontal Impact Test Summary**  
**Report Filter Settings**

Year Range : 1998 - 2002  
 Make : FORD  
 Model : CROWN VICTORIA

Test Number	Vehicle Info	No Damage Speed (mph)	Average Crush (inch)	Closing Speed (mph)	Vehicle Width Stiffness Values			Crush Factor (Average Crush)
					A	B	G	
<b>Test Type : Front</b>								
2764	1998 FORD CROWN VICTORIA FOUR DOOR SEDAN	5.0	28.6	35.3	242.3	51.2	572.7	17.4
3077	1999 FORD CROWN VICTORIA FOUR DOOR SEDAN	5.0	13.1	24.6	338.1	100.9	566.2	18.4
3103	1999 FORD CROWN VICTORIA FOUR DOOR SEDAN	5.0	27	29.3	205.9	37	572.7	12.7
3614	2001 FORD CROWN VICTORIA FOUR DOOR SEDAN	5.0	18.6	35	400.2	129.2	619.9	26.4
	<b>Front Averages</b>				296.6	79.6	552.9	18.7
	<b>Front Minimums</b>				205.9	37	572.9	12.7
	<b>Front Maximums</b>				400.2	129.2	619.8	26.4
	<b>Front Standard Deviations</b>				88.8	43	57.8	5.7