400 Seventh Street, S.W.
Washington, D.C. 20590

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***

TRANSPORTATION SCIENCES CENTER
ACCIDENT RESEARCH GROUP

Calspan SRL Corporation
Buffalo, New York 14225

CALSPAN REMOTE AIR BAG FATALITY INVESTIGATION

CALSPAN CASE NO. 94-32

VEHICLE - 1993 FORD CROWN VICTORIA LX

LOCATION - STATE OF [redacted]

CRASH DATE - [redacted] 1994

Contract No. DTNH22-94-D-07058

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

TECHNICAL REPORT STANDARD TITLE PAGE

1. *Report No.* 94-32	2. *Government Accession No.*	3. *Recipient's Catalog No.*	
4. *Title and Subtitle* Calspan Remote Air Bag Fatality Investigation Vehicle #1 - 1993 Ford Crown Victoria LX Location - State of [redacted]		5. *Report Date*: [redacted], 1996 6. *Performing Organization Code*	
7. *Author(s)* Accident Research Group		8. *Performing Organization Report No.*	
9. *Performing Organization Name and Address* Transportation Sciences Center Accident Research Group Calspan Corporation P.O. Box 400 Buffalo, New York 14225		10. *Work Unit No.* [redacted] 11. *Contract or Grant No.* DTNH22-94-D-07058	
12. *Sponsoring Agency Name and Address* U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590		13. *Type of Report and Period Covered* Technical Report Crash Date [redacted] 1994 14. *Sponsoring Agency Code*	
15. *Supplementary Notes* Remote investigation of a single vehicle crash that resulted in a fatality of the driver.			
16. *Abstract* A single vehicle crash involving a 1993 Ford Crown Victoria LX equipped with a dual front air bag system departed the right side of a two lane undivided unlighted roadway during night time hours. The weather condition at the time of the crash was raining. The vehicle traveled down an embankment and rolled over at least six quarter turns coming to the final rest position (FRP) on its roof. The air bag system did not deploy during the crash. The 47 year old male driver sustained fatal injuries which included: bilateral periorbital bruising and abrasions on both sides of face in the area of the cheeks; comminuted fractures of the maxillae and nasal bones; comminuted fracture of the entire calvarium; comminuted fracture of the entire anterior cranial fossa; and the cranial cavity was exposed with decomposing brain matter extruding from it. These injuries were attributed to contact with the ground during the rollover sequence which may have resulted from being partially ejected through the left front window.. The driver was found by rescue suspended by his manual lap and shoulder belt. The unrestrained right front occupant, a twenty year female, was not injured in the crash.			
17. *Key Words* Single vehicle crash Vehicle ran off roadway Vehicle rollover Partial ejection Fatal head injuries (AIS-6) Nondeployed Supplemental Restraint System (SRS)		18. *Distribution Statement* General Public	
19. *Security Classif. (of this report)* Unclassified	20. *Security Classif. (of this page)* Unclassified	21. *No. of Pages*	22. *Price*

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CALSPAN REMOTE AIR BAG FATALITY INVESTIGATION

CALSPAN CASE NO. 94-32

VEHICLE - 1993 FORD CROWN VICTORIA LX

LOCATION - STATE OF GEORGIA

CRASH DATE - [redacted]1994

This investigation was initiated in response to a notification received from the National Highway Traffic Safety Administration (NHTSA) that the driver of a 1993 Ford Crown Victoria LX was fatally injured when his vehicle left the roadway, traveled down an embankment, and overturned, coming to rest on its roof. The focus of the investigation was to determine if the air bag system should have deployed the dual air bags and if the deployment would have mitigated the severity of the driver's injuries. The sources of information in this case investigation were limited to police reported data and an autopsy report.

SUMMARY

A single vehicle run-off roadway crash occurred in [redacted], 1994 during the nighttime hours on an unlighted rural two lane, left curve, undivided roadway in [redacted]. A 1993 Ford Crown Victoria LX (Vehicle #1), equipped with a dual air bag Supplemental Restraint System (SRS), was traveling south in the rain on a recently resurfaced asphalt state roadway. The driver failed to negotiate a left curve and departed the right side of the roadway. Vehicle #1 traveled down an embankment and rolled over coming to the final rest position (FRP) on its roof.

The 47 year old male driver was reportedly wearing the manual 3-point lap and shoulder belt restraint system at the time of the crash. He sustained severe head injuries and was pronounced dead at the scene. He was subsequently transported to a local medical facility where an autopsy was preformed.

A twenty year old female relative sitting in the right front passenger seat was unrestrained at the time of the crash and was not injured. She indicated to the police that the vehicle was traveling at an estimated travel speed of 48 kph (30 mph) prior to the crash.

The police report indicated the roadway had a "defective shoulder" which may have been the result of resurfacing activity. It was likely Vehicle #1 drifted off the right roadway edge onto the shoulder surface which may have been at a lower height. This may have been a contributing factor to the roadway departure.

The vehicle traveled down the embankment and according to the police accident report rolled over in a clockwise direction. The exact number of quarter turns was not reported by the police, however, the vehicle came to rest on its roof. The injuries to the driver's head, particularly the comminution of the entire calvaria with many bony fragments missing above the level of the eyebrows suggested that the driver's upper torso may have been partially ejected during the rollover sequence and that his head may have contacted the ground. The police reported that the driver was suspended by restraint belt at the FRP.

Given the police reported a clockwise rollover configuration, Vehicle #1 would have had to complete at least three quarter rolls in order for the driver to have contacted the ground with his head. The vehicle would have executed at least six quarter turns in order to have come to rest on its roof.

Rescue personnel responded to the crash in approximately 15 minutes. He was pronounced dead at the scene. He was taken to a local medical center where it arrived approximately 1.2 hours after the crash. The body was found to be a suitable candidate for tissue donation and as per the protocol for tissue donation. A complete autopsy was performed. The driver suffered multiple injuries of the head and face which included: bilateral periorbital bruising and abrasions on both sides of face in the area of the cheeks; comminuted fractures of the maxillae and nasal bones; comminuted fracture of the entire calvarium; comminuted fracture of the entire anterior cranial fossa; and the cranial cavity was exposed with decomposing brain matter extruding from it.

CRASH DATA	
Location:	Two lane undivided state route
State:	State of [redacted]
Area/Type:	Rural
Investigating Police Agency:	State Police
Accident type:	Single vehicle run-off road and rolled over
Air Bag Vehicle Driver Injury Severity:	Fatal (AIS-6, maximum)
AMBIENCE	
Viewing Conditions:	Nighttime, unlighted
Weather:	Rain
Road Surface:	Wet
HIGHWAY	
Type:	State route

Number of Lanes:	2
Width:	6.4 m (21.0 ft)
Surface:	Asphalt/Recently resurfaced
Median:	None
Edge:	Defective shoulders Down sloped embankment
Vertical Alignment:	Grade, direction unknown (police report did not list grade characteristic as being positive or negative)
Horizontal Alignment:	Curve to left
TRAFFIC CONTROLS	
Signals:	Unknown
Signs:	Unknown
Markings:	No marking for defective shoulder condition No passing zone
Speed Limit:	72 kph (45 mph)
VEHICLE #1 DESCRIPTION	
Description:	1993 Ford Crown Victoria LX, 4 door sedan
V.I.N.:	2FALP74W2PX (Serial # omitted)
Color:	White
Engine:	4.6L EFI V8
Active Restraints:	3-point lap and shoulder belt systems, inertia activated locking retractors with continuous loop belt webbing through the latch plate, center front lap belt, 3-point lap and shoulder belts in the outboard rear seat positions, and center rear lap belt.
Passive Restraints:	Driver and passenger side air bag Supplemental Restraint System (SRS) which did not deploy as a result of the crash.
Defects:	Unknown
Tow Status:	Towed due to damage

VEHICLE DATA

The vehicle was a 1993 Ford Crown Victoria LX which was owned by a local private auto rental company. The vehicle identification number (VIN) was 2FALP74W2PX (serial # omitted). The vehicle was equipped with a 3-point lap and shoulder belt system in the front and rear outboard seated positions and lap belts in both front and rear center seats. The vehicle was was also equipped with a driver and passenger side air bag SRS.

The air bag system reportedly did not deploy during the crash. It was assumed that given the lateral rollover sequence there was insufficient longitudinal deceleration force generated during the crash required to actuated the SRS system. The nondeployment of the air bags appeared to be consistent with the anticipated function of the SRS during a rollover event.

DRIVER #1 DATA

The driver of the vehicle was a 47 year old male who was approximately 173 cm (5'8") tall and had an estimated weight of 72 kg (160 lbs). He was a well developed and well nourished appearing male with no evidence of any significant natural disease processes. His occupation was listed as an entrepreneur.

CRASH DATA

Pre-crash

The driver of the vehicle was a 47 year old male who was wearing the manual 3-point lap and shoulder belt restraint. The 20 year old female (relative) seated in the right front passenger was not wearing the belt restraint. They were traveling in a southbound direction on a two-lane, two-way undivided, unlighted roadway. It was nighttime and raining. They were reportedly traveling at approximately 48 kph (30 mph) which was slower than the posted speed limit of 72 kph (45 mph). The terrain was hilly and the road character of the crash scene was reported as "curve on grade". The roadway had recently been resurfaced and the shoulder was reported as defective. There were no warnings posted to indicate that the shoulder was defective. At the crash scene the roadway curved to the left with a down sloped embankment adjacent to the right side shoulder.

Crash

The vehicle departed the travel lane onto the right shoulder at the point where the roadway curved to the left. It traveled down the embankment and rolled over in a clockwise direction at least six quarter turns. It came to the final rest position on it's roof. The SRS did not deploy during the crash.

During the rollover sequence, the driver's upper torso may have been partially ejected through the left front side window with his head contacting the ground surface. This conclusion was drawn from the massive injury pattern described in the autopsy report to the driver's head.

The possibility of roof contact being a contributor to the severity of the driver's head injuries from roof collapse during the crash sequence was considered. However, the driver did not sustain any related vertebral neck injury (e.g., compression fracture of the cervical vertebrae, etc.) which would have undoubtedly occurred had the roof exerted a vertical load on the driver's head. His reported injuries were confined to lesions of the head and face.

Post crash

The driver died at the crash scene as a result of his injuries. He was taken to a local medical center where he was found to be a suitable candidate for tissue donation. The nature of his injuries indicate that he was probably partially ejected from the vehicle. The female passenger was not seriously injured. The vehicle was removed from the scene by a wrecking company.

DRIVER#1 INJURY DATA

DRIVER INJURIES	INJURY SEVERITY (AIS-90)	INJURY SOURCE
Head crush: The entire calvarium is comminuted and many of the bony fragments above the level of the eyebrows are missing. The entire anterior cranial fossa is comminuted. The cranial cavity is exposed and decomposing brain matter extrudes from it.	113000.60	Possible ground contact
Bilateral periorbital bruising and abrasions on both sides of face in the area of the cheeks: abrasion right cheek abrasion left cheek periorbital bruise right periorbital bruise left	 290202.11 290202.12 297402.11 297402.12	 Possible ground contact
Maxillae bones comminuted	250800.23	Possible ground contact
Nasal bones comminuted	251004.24	Possible ground contact

MOTOR VEHICLE ACCIDENT REPORT

Date: [redacted]94 | Day Of Week: Sun M T W Th F S | Time: 2136 | Off. Arrived: 2213 | County: WHITE | Total Number Of: Vehicles 1, Injuries 1, Fatalities 1 | Inside City Of: | Date Rec. By DPS:

Road of Occurrence: [redacted] (1 Interstate 2 Lowest St. Rt. 3 Co. Road 4 City St.) At Its Intersection With: (1 Interstate 2 Lowest St. Rt. 3 Co. Road 4 City St.)

Not At Its Intersection But .9 (Miles / Feet) 1 North 2 South 3 East 4 West Of: [redacted]

And Continuing In the Direction Checked Above The Next Reference Point Is [redacted] (1 Interstate 2 Lowest St. Rt. 3 Co. Road 4 City St. 5 Co. Line)

Corrected Report: Yes ☐ No ☐

Suppl. To Original: Yes ☐ No ☐

Driver 1

Driver #: 1 | Ped ☐

Last Name: [redacted] | First: [redacted] | Middle: [redacted]

Address: [redacted]

City: [redacted] | State: [redacted] | Zip: [redacted] | DOB: [redacted]46

Driver's License No.: [redacted] | Class: C | State: GA | ☒ Male ☐ Female

Posted Speed: 45 | Insurance Co.: [redacted] | Policy No.: [redacted]

Year: 1993 | Make: FORD | Model: CROWN VICTORIA | Telephone No.:

VIN: 2FALP74W2PE[redacted] | Vehicle Color: WHITE

Tag #: [redacted] | State: GA | County: [redacted] | Year: 1994

Trailer Tag # | State | County | Year

☐ Same as Driver | Owner's Last Name: [redacted] AUTO RENTAL OF | First | Middle: [redacted]

Address: [redacted]

City: [redacted] | State | Zip: [redacted]

Removed By: WRECKER | ☐ Request ☒ Ust

Alcohol Test 1	Type 4	Results PEND.	Drug Test 1	Type 4	Results PEND.
Driver Condition 2	Direction of Travel 2	Vision Obscured 1	Contributing Factors 8 10		
Vehicle Condition 1	Vehicle Maneuver 5	Pedestrian Maneuver			
Most Harmful Event 1	Vehicle Class 1	Vehicle Type 1			
Traffic Control 6	Device Inoperative? ☐ Yes ☒ No				

Driver 2

Driver #: | Ped ☐

Last Name | First | Middle

Address

City | State | Zip | DOB

Driver's License No. | Class | State | ☐ Male ☐ Female

Posted Speed | Insurance Co. | Policy No.

Year | Make | Model | Telephone No.

VIN | Vehicle Color

Tag # | State | County | Year

Trailer Tag # | State | County | Year

☐ Same as Driver | Owner's Last Name | First | Middle

Address

City | State | Zip

Removed By | ☐ Request ☐ Ust

Alcohol Test	Type	Results	Drug Test	Type	Results
Driver Condition	Direction of Travel	Vision Obscured	Contributing Factors		
Vehicle Condition	Vehicle Maneuver	Pedestrian Maneuver			
Most Harmful Event	Vehicle Class	Vehicle Type			
Traffic Control	Device Inoperative? ☐ Yes ☐ No				

Injured Taken To: [redacted] MEDICAL CENTER | By: [redacted] EMS

EMS Notified Time: 2129 | EMS Arrival Time: 2142 | Hospital Arrival Time: 2249

Photos Taken: ☐ Yes ☒ No By:

Report By: [redacted] | Department: [redacted] | Report Date: [redacted]94 | Checked By: [redacted] | Date Checked: [redacted]94

Address: [redacted] | City: [redacted] | State: [redacted] | Zip Code: [redacted] | Telephone No.: [redacted]

DPS MICROFILM NUMBER (DO NOT WRITE IN THIS SPACE)

COMMERCIAL VEHICLES ONLY

Carrier Name / Vehicle #

Address

City | State | Zip

Number of Axles	G.V.W.R.	Fed. Reportable 1 ☐ Yes 2 ☐ No	Cargo Body Type
Vehicle Config.	I.C.C.M.C. #	U.S. D.O.T. #	Interstate ☐ Intrastate ☐

C.D.L.? 1 ☐ Yes 2 ☐ No | C.D.L. Suspended? 1 ☐ Yes 2 ☐ No

Vehicle Placarded? 1 ☐ Yes 2 ☐ No | Hazardous Materials Released? 1 ☐ Yes 2 ☐ No

If YES, Name or 4 Digit Number from Diamond or Box: | 1 Digit Number from Bottom of Diamond:

— Ran Off Road — Down Hill Runaway — Cargo Loss Or Shift — Separation of Units

COMMERCIAL VEHICLES ONLY

Carrier Name / Vehicle #

Address

City | State | Zip

Number of Axles	G.V.W.R.	Fed. Reportable 1 ☐ Yes 2 ☐ No	Cargo Body Type
Vehicle Config.	I.C.C.M.C. #	U.S. D.O.T. #	Interstate ☐ Intrastate ☐

C.D.L.? 1 ☐ Yes 2 ☐ No | C.D.L. Suspended? 1 ☐ Yes 2 ☐ No

Vehicle Placarded? 1 ☐ Yes 2 ☐ No | Hazardous Materials Released? 1 ☐ Yes 2 ☐ No

If YES, Name or 4 Digit Number from Diamond or Box: | 1 Digit Number from Bottom of Diamond:

— Ran Off Road — Down Hill Runaway — Cargo Loss On Shift — Separation of Units

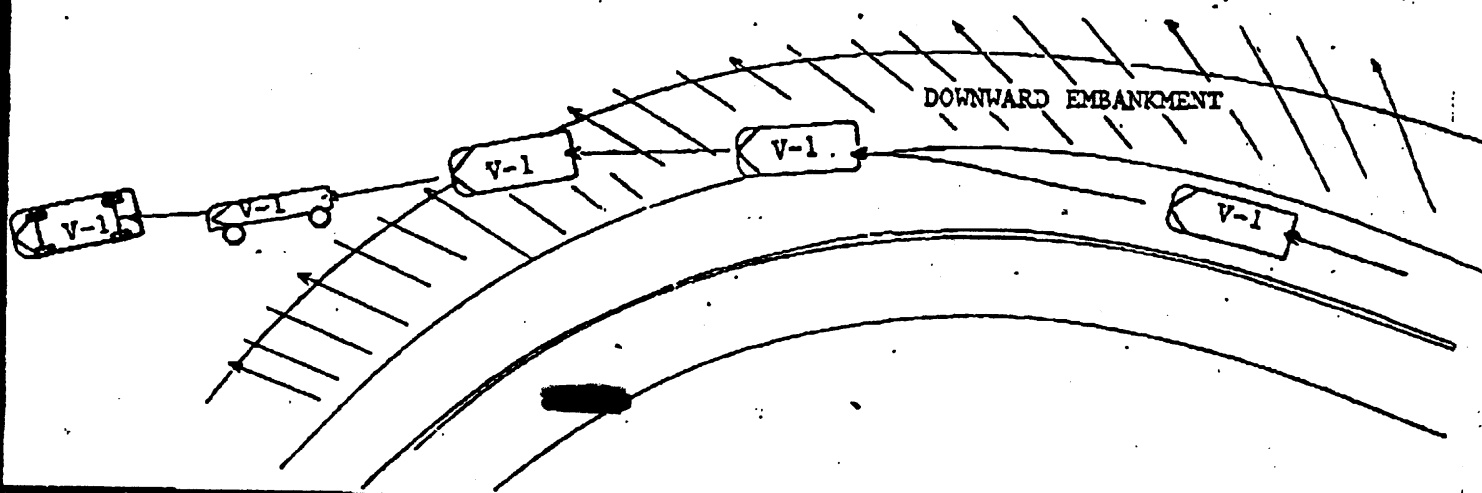
REMARKS

PAGE 2 OF 2

VEHICLE #1 WAS TRAVELING SOUTH ON [redacted] BEFORE LEAVING THE ROADWAY ONTO THE WEST ROAD SHOULDER. VEHICLE #1 THEN TRAVELED DOWN AN EMBANKMENT AND OVERTURNED, COMING TO FINAL REST ON ITS TOP.

INDICATE ON THIS DIAGRAM WHAT HAPPENED

INDICATE NORTH



Accident Investigation Site? ☐ Yes ☐ No Site Number:	CITATIONS - VEHICLE # 1: NONE	CITATIONS - VEHICLE #:

First Harmful Event	Traffic-Way Flow	Weather	Surface Cond.	Light Condition	Manner Of Collision	Location At Area Of Impact	Road Comp.	Road Defects	Road Character
1	1	3	2	5	6	3	2	2	5

	VEH. # 1	VEH. #
Number of Occupants	2	
Point Of Initial Contact	00	
Damage To Vehicles	4	

SKID DISTANCE BEFORE IMPACT: NONE VEH. 1 / VEH. — AFTER: NONE VEH. 1 / VEH. — Width Of Road: 21'

Damage Other Than Vehicle: Owner:

Occupants — Driver # 1 Or Pedestrian # — Driver # Or Pedestrian #

Last Name	First	Address	City	State	Zip	AGE	SEX	VEH NO.	POS.	INJURY	TAKEN FOR TREAT.	EJECT	SAFETY EQUIP.	EXTRIC.	AIR BAG
[redacted]										1	1	2	3	1	2
[redacted]						20	F	1	3	4	1	1	0	1	0

MAIL TO: DEPARTMENT OF PUBLIC SAFETY, ACCIDENT REPORTING UNIT, P.O. BOX

TYPE OR PRINT IN PERMANENT BLACK OR BLUE-BLACK INK

DECEASED

PARENTS

INFORMANT

DISPOSITION

CAUSE OF DEATH

CERTIFIER

REGISTRAR

1. DECEDENT'S NAME (First, Middle, Last)	[redacted]
1b. IF DECEDENT IS FEMALE, ENTER MAIDEN LAST NAME	
2. SEX	MALE
3. DATE OF DEATH (Mo., Day, Year)	[redacted]1994
4. RACE (White, Black, Amer. Indian, etc.) (Specify)	WHITE
5. ORIGIN OF DECEDENT (Mexican, Puerto Rican, Cuban, etc.) (Specify)	AMERICAN
6. DATE OF BIRTH (Mo., Day, Year)	[redacted],1946
7a. AGE (Last Birthday) (Years)	47
7b. UNDER 1 YEAR (Mos.) / UNDER 1 DAY (Days / Hours / Mins.)	
8. COUNTY OF DEATH	[redacted]
9a. CITY, TOWN or LOCATION OF DEATH	[redacted]
9b. HOSPITAL OR OTHER INSTITUTION NAME (If not in either, give street and No.)	[redacted] MEDICAL CENTER
9c. IF HOSPITAL OR INST. (Indicate DOA, OP, LTR, Ann. Inpatient) (Specify)	DOA
10. STATE AND COUNTY OF BIRTH (If born in U.S.A.)	[redacted]
10b. CITIZEN OF WHAT COUNTRY	U.S.A.
11. MARRIED, NEVER MARRIED, WIDOWED, DIVORCED (Specify)	NEVER MARRIED
12. SPOUSE (If married or widowed, give spouse's name—if wife, give maiden name)	N/A
13. WAS DECEDENT EVER IN U.S. ARMED FORCES (Yes or No)	NO
14. SOCIAL SECURITY NUMBER	[redacted]
15a. USUAL OCCUPATION (Give kind of work done during most of working life, even if retired)	ENTREPRENEUR
15b. KIND OF INDUSTRY OR BUSINESS	COMMUNICATIONS
16a. RESIDENCE – STATE	NC
16b. COUNTY	[redacted]
16c. CITY, TOWN or LOCATION	[redacted]
16d. STREET AND NUMBER	[redacted]
16e. INSIDE CITY LIMITS? (Yes or No)	NO
17. FATHER'S NAME (First, Middle, Last)	[redacted]
18. MOTHER'S MAIDEN NAME (First, Middle, Last)	[redacted]
19a. INFORMANT'S NAME (First, Middle, Last)	[redacted]
19b. MAILING ADDRESS (Street, R.F.D. No., City or Town, State, Zip)	[redacted]
19c. RELATIONSHIP	FATHER
20a. BURIAL, CREMATION, REMOVAL (Specify)	CREMATION
20b. DISPOSITION DATE (Mo., Day, Year)	[redacted]-1994
20c. CEMETERY OR CREMATORY NAME	[redacted] CREMATORY
20d. LOCATION (City or Town, State, Zip, County)	[redacted]
21a. FUNERAL DIRECTOR (Signature)	[redacted]
21b. LOC. REG. LICENSE NO.	[redacted]
21c. NAME AND ADDRESS OF FACILITY (Street, R.F.D. No., City or Town, State, Zip)	[redacted]
21d. EST. LICENSE NO.	[redacted]
21e. EMBALMER (Signature)	NOT EMBALMED
21f. EMBALMER LICENSE NO.	

22. CONDITIONS, IF ANY, WHICH GAVE RISE TO IMMEDIATE CAUSE STATING THE UNDERLYING CAUSE LAST

PART I (Enter only one cause per line for A, B, and C)

a. IMMEDIATE CAUSE: BLUNT HEAD TRAUMA — Approximate interval between onset and death

Due to, or as a consequence of:

b. — Approximate interval between onset and death

Due to, or as a consequence of:

c. — Approximate interval between onset and death

PART II 24. OTHER SIGNIFICANT CONDITIONS – conditions contributing to death but not related to cause given in Part I(a). (If female, indicate if pregnant or birth occurred within 90 days of death.)

25a. AUTOPSY (Yes or No)	YES
25b. IF YES, WERE FINDINGS CONSIDERED IN DETERMINING CAUSE OF DEATH? (Yes or No)	YES
26a. WAS OPERATION PERFORMED? (Yes or No)	NO
26b. DATE OF OPERATION (Mo., Day, Year)	
26c. CONDITIONS FOR WHICH OPERATION WAS PERFORMED (Specify)	
27. ACCIDENT, SUICIDE, HOMICIDE, UNDETERMINED (Specify)	ACCIDENT
28a. DATE OF INJURY (Mo., Day, Year)	[redacted]-1994
28b. DESCRIBE HOW INJURY OCCURRED	Single Vehicle Accident
28c. HOUR OF INJURY	9:30 P.M.
28d. INJURY AT WORK? (Yes or No)	No
28e. PLACE OF INJURY (Home, Farm, Street, Factory, Office, Etc.) (Specify)	[redacted]
28f. LOCATION (Street, R.F.D. No., City or Town, State, Zip, County)	[redacted]

To Be Completed by CERTIFYING PHYSICIAN ONLY

29a. To the best of my knowledge, death occurred at the time, date and place and due to the cause(s) stated. (Signature and Title)

29b. DATE SIGNED (Mo., Day, Year)

29c. HOUR OF DEATH

29d. NAME OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER

To Be Completed by MEDICAL EXAMINER OR CORONER ONLY

30a. On the basis of examination and/or investigation, in my opinion death occurred at the time, date and place and due to the cause(s) stated. (Signature and Title) [redacted]

30b. DATE SIGNED [redacted]1994

30c. HOUR OF DEATH 9:30 P M

30d. DATE PRONOUNCED DEAD (Mo., Day, Year) ON [redacted]1994

30e. HOUR PRONOUNCED DEAD AT 12:30AM

TYPE OR PRINT

31a. NAME AND TITLE OF CERTIFIER (Physician, Medical Examiner, or Coroner) [redacted]

31b. ADDRESS OF CERTIFIER (Street, R.F.D. No., City or Town, State, Zip) [redacted]

32a. REGISTRAR (Signature) [redacted]

32b. DATE RECEIVED BY REGISTRAR (Mo., Day, Year) [redacted]94

03 (Rev. 4-88) GEORGIA DEPA[redacted] VITAL RECORDS SERVICE

DO NOT FOLD THIS CERTIFICATE

"CERTIFICATE OF RECORD"

This is an exact copy of the Death Certificate received for filing in [redacted] County, Georgia.

Local Custodian [redacted] Signed [redacted] Custodian Office

Date [redacted]/94 [redacted] County, Georgia

TRAFFIC-WAY FLOW
1 Two-way Trafficway
With No Physical Separation
2 Two-way Trafficway
With A Physical Separation
3 Two-way Trafficway
With A Physical Barrier
4 One-way Trafficway

WEATHER
1 Clear 6 Blast
2 Cloudy 8 Fog
3 Rain 7 Other
4 Snow

SURFACE CONDITION
1 Dry 4 Icy
2 Wet 8 Other
3 Snowy

LIGHT CONDITION
1 Daylight 4 Dark - Lighted
2 Dusk 5 Dark - Not Lighted
3 Dawn

MANNER OF COLLISION
1 Angle
2 Head On
3 Rear End
4 Sideswipe - Same Direction
5 Sideswipe - Opposite Direction
6 Not A Collision With A Motor Vehicle

LOCATION AT AREA OF IMPACT
1 On Roadway 4 Median
2 On Shoulder 5 Ramp
3 Off Roadway 6 Gore

ROAD COMPOSITION
1 Concrete 4 Dirt
2 Black Top 5 Gravel
3 Tar And Gravel 6 Other

CONTRIBUTING ROAD DEFECTS
1 No Defects
2 Defective Shoulders
3 Holes, Deep Ruts, Bumps
4 Loose Material On Surface
5 Water Standing
6 Road Under Construction
7 Running Water
8 Other

ROAD CHARACTER
1 Straight And Level
2 Straight On Grade
3 Straight On Hillcrest
4 Curve And Level
5 Curve On Grade
6 Curve On Hillcrest

DAMAGE TO VEHICLE
1 None 4 Extensive
2 Slight 5 Fire Present
3 Moderate

AGE
00 - Up To One Year
01 - 97 Actual Age
98 - Ninety-eight Or Older
99 - Unknown

SEX
M - Male
F - Female

INJURY CODE
0 Not Injured 3 Serious
1 Killed 3 Visible
4 Complaint

TAKEN FOR TREATMENT 1-Yes 2- No

EJECTION
1 Not Ejected 3 Totally Ejected
2 Trapped 4 Partially Ejected

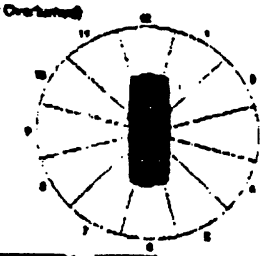
SAFETY EQUIPMENT
0 None Used
1 Shoulder Belt
2 Lap Belt
3 Lap And Shoulder Belt
4 Child Safety Seat (Properly Used)
5 Child Safety Seat (Improperly Used)
6 Motorcycle Helmet
7 Bicycle Helmet
8 Unknown

EXTRICATION (EQUIPMENT USED)
1 - Yes 2 - No

AIR BAG FUNCTION
0 No Air Bag In Vehicle
1 Deployed Air Bag
2 Non-Deployed Air Bag

SEATING POSITION
(Use "P" for Pedestrians)

POINTS OF INITIAL CONTACT
(Use 00 For Overturns)



ALCOHOL AND/OR DRUG TEST GIVEN
1 - Yes 2 - No 3 - Refused

TYPE TEST
1-Blood 2-Breath 3-Urine 4-Other

DRIVER CONDITION
1 Not Drinking 6 U.I. Alcohol & Drugs
2 Not Known If U.I.
3 Drinking, Not Impaired 7 Physical Impairment
4 U.I. Alcohol 8 Apparently Full Asleep
5 U.I. Drugs

DIRECTION OF TRAVEL
1-North 2-South 3-East 4-West

VISION OBSCURED BY
1 Not Obscured 6 Trees, Bushes
2 Headlights 8 Rain, Snow, Ice On Windshield
3 Sunlight
4 Parked Vehicle 7 Other

VEHICLE CONDITION
1 No Known Defects 5 Steering Failure
2 Tire Failure 6 Slick Tires
3 Brake Failure 7 Other
4 Improper Lights

VEHICLE MANEUVER
1 Turning Left 9 Passing
2 Turning Right 10 Negotiating A Curve
3 Making U-turn
4 Stopped 11 Entering/Leaving Parking
5 Straight
6 Changing Lanes 12 Entering/Leaving Driveway
7 Backing
8 Parked

PEDESTRIAN MANEUVER
1 Crossing, Not At Crosswalk 6 Other Working In Road
7 Playing In Roadway
2 Crossing At Crosswalk 8 Standing In Roadway
3 Walking With Traffic 9 On Roadway
4 Walking Against Traffic 10 Other
5 Pushing Or Working On Vehicle

FIRST HARMFUL EVENT/MOST HARMFUL EVENT
NON-COLLISION
1 Overturn 4 Jackknife
2 Fire/Explosion 5 Other Non Collision
3 Immersion

COLLISION WITH OBJECT NOT FIXED
8 Pedestrian 11 Motor Vehicle In Motion
7 Pedalcycle 12 Motor Vehicle In Motion - In Other Roadway
8 Railway Train
9 Animal 13 Other Object (Not Fixed)
10 Parked Motor Veh. 14 Deer

COLLISION WITH FIXED OBJECT
15 Impact Attenuator 24 Luminaire/Light Support
16 Bridge Pier/Abutment 25 Utility Pole
17 Bridge Parapet End 26 Other Post
18 Bridge Rail 27 Culvert
19 Guardrail Face 28 Curb
20 Guardrail End 29 Ditch
21 Median Barrier 30 Embankment
22 Highway Traffic Sign Post 31 Fence
32 Mailbox
33 Tree
23 Overhead Sign Support 34 Other Fixed Object

CONTRIBUTING FACTORS
1 No Contributing Factors
2 D.U.I.
3 Following Too Close
4 Failed To Yield
5 Exceeding Speed Limit
6 Disregard Stop Sign/Signal
7 Wrong Side Of Road
8 Weather Conditions
9 Improper Passing
10 Driver Lost Control
11 Changed Lanes Improperly
12 Object Or Animal
13 Improper Turn
14 Parked Improperly
15 Mechanical Or Vehicle Failure
16 Surface Defects
17 Inadequate Clearance
18 Improper Backing
19 No Signal/Improper Signal
20 Driver Condition
21 Driverless Vehicle
22 Too Fast For Conditions
23 Improper Passing Of School Bus
24 Disregard Police Officer
25 Distracted
26 Other

VEHICLE CLASS
1 Privately Owned 6 Military
2 Police 7 Commercial
3 Fire Veh (For
4 School Acc. Reporting
5 Other Govt. Purposes Only)
Owned 8 Other

VEHICLE TYPE
1 Passenger Car 14 Truck Towing House Trailer
2 Pickup Truck
3 Truck Tractor (Bobtail) 15 Ambulance
4 Tractor/Trailer 16 Motorized Recreational Vehicle
5 Tractor W/Twin Trailers
6 Logging Truck 17 Motorcycle, Scooter, Minibike
7 Logging Tractor/Trailer
8 Single Unit Truck 18 Moped
9 Panel Truck 19 Pedalcycle, Bicycle
10 Van 20 Farm or Const. Equip.
11 Utility Passenger Veh. 21 All Terrain Vehicle
12 Vehicle With Trailer 22 Other
13 Bus

TRAFFIC CONTROL
1 No Control Present 5 Stop Or Yield Sign
2 Traffic Signal 6 No Passing Zone
3 RR Signal/Sign 7 Lanes
4 Warning Sign 8 Other

CARGO BODY TYPE
1 Van (Enc. Box) 4 Dump 7 Cargo Tanker
2 Auto Carrier 5 Garbage/Refuse 8 Concrete Mixer
3 Bus 6 Flatbed 9 Other

VEHICLE CONFIGURATION
1 Bus (Seating For More Than 16 Passengers)
2 Single Unit Truck: 2 Axles
3 Single Unit Truck: 3 Or More Axles
4 Truck/Trailer
5 Truck Tractor (Bobtail)
6 Tractor/Trailer
7 Tractor With Twin Trailers
8 Unknown Heavy Truck (Cannot Classify)

Rec [redacted] 94

[redacted]

[redacted]

[redacted]

Forensic, Anatomic, & Clinical Pathology

INFORMATION AVAILABLE AT TIME OF AUTOPSY:

This 47-year-old white male was the driver of a motor vehicle that crashed. He sustained severe head injuries and was dead at the scene. Further information regarding this incident can be found in the investigative report filed in the [redacted] County Sheriff's Office.

He was found to be a suitable candidate for tissue donation by the staff of [redacted] of Georgia. As per the protocol for tissue donation, a complete autopsy is performed afterward. This examination takes place in the [redacted] County Morgue on Wednesday, [redacted] 1994, commencing at 8:00 p.m.

EXTERNAL EXAMINATION OF THE BODY:

The body is brought to the morgue in a white plastic disaster bag and is otherwise unclad.

No jewelry or medical devices are seen on the remains.

ALL INJURIES WILL BE DESCRIBED IN A SEPARATE SECTION.

This is the body of a white male that measures approximately 68" in length and has an estimated weight of 160 pounds. Rigor mortis is generalized and well developed. Livor mortis is dorsal and fixed. No other external decompositional changes are seen. The overall appearance is that of a well-developed and well-nourished-appearing adult white male consistent with the given age of 47 years.

The head hair is dark brown, caked with blood, curly, and averages about 3" in length. The irides are brown. Assessment of conjunctival petechiae is not possible. There is no scleral icterus. Blood drains from both external auditory canals and the nares. The decedent has natural teeth in average repair. No foreign bodies are found in the mouth or the pharynx. The face demonstrates a dark brown mustache.

The neck is symmetrical and shows no external evidence of injury.

Examination of the chest, abdomen, and back reveals no identifying features.

Extending between the tops of the shoulders and the backs of the wrists are recently-sutured surgical incisions, each measuring approximately 25" in length. The fingernails are closely trimmed and intact. No evidence of parenteral drug abuse of the upper extremities.

Extending between the lateral aspect of the hips to the tops of the feet are recently-sutured surgical incisions, each measuring approximately 36" in length.

The external genitalia are those of a circumcised adult male with descended testes.

The skin of the body from the neck to the feet has been painted with a yellow iodine solution.

DESCRIPTION OF INJURIES:

Head:

There is marked bilateral periorbital bruising and abrasions on both sides of the face in the area of the cheeks. The maxillae and nasal bones are comminuted. The entire calvarium is comminuted and many of the bony fragments above the level of the eyebrows are missing. In addition, the cranial cavity is exposed and decomposing brain matter extrudes from it.

The remaining brain tissue weighs 1090 grams. There is pulpefaction of the frontal lobes. No evidence of subdural, epidural, or subarachnoid hemorrhage is seen. Coronal sectioning through the cerebral hemispheres reveals an intact cortical gray ribbon, and no evidence of contusion, intraparenchymal hemorrhage, infarct, or neoplasm. The substantia nigra is normally pigmented and no brain stem hemorrhages are seen. The cerebellar sections are nonrevealing. The dura is reflected from the base of the skull, and the entire anterior cranial fossa is comminuted.

REMAINING INTERNAL EXAMINATION OF THE BODY:

Neck:

The skin of the neck is dissected up to the angle of the jaw, and there are no signs of soft-tissue trauma to the lateral neck compartments or the major airways. The hyoid bone, thyroid cartilage, and cervical spine are intact. No obstructing foreign

bodies are found in the trachea. The thyroid gland shows no gross pathology.

Chest and Abdomen:

The skin of the chest and abdomen is opened with a Y-shaped incision which shows no soft-tissue trauma to this area. The bony thorax is intact. Physiologic amounts of clear yellow fluid are found in the thoracic and abdominal cavities and the pericardial sac.

The thoracic and abdominal organs are examined in situ and then removed by the Virchow technique. Individual organ examinations are as follows:

Heart:

The 400 gram morphologically unremarkable heart shows a few focal areas of minor atherosclerotic narrowing of the coronary arteries. No thrombi are found in these vessels. The myocardium exhibits no signs of acute or healed infarct. There are no valvular abnormalities. The major vessels arise from the minimally atherosclerotic aorta in their expected locations.

Lungs:

The right lung weighs 500 grams and the left lung 400 grams. Both exhibit slight dependent congestion. No endobronchial lesions, emboli, or consolidation is seen.

Urinary Tract:

The kidneys weigh 160 grams each. The capsules strip readily. The cortices and medullae are distinct. The parenchyma is pale. The collecting systems are patent from the calyces to the dilated urinary bladder which contains about 100 cc of cloudy, dark yellow urine. The urinary bladder is free of neoplasia. Sectioning of the prostate gland reveals no gross abnormalities.

Gastrointestinal Tract:

The stomach and esophagus are free of mucosal ulcerations and empty. The remainder of the intestines are opened from the duodenum to the rectum and show no signs of ulceration, neoplasm, or infarct. No gross abnormalities of the vermiform appendix are seen.

The 1500-gram liver has an intact capsule and slightly softened parenchyma. The gallbladder contains a few cc of bile. The extrahepatic biliary tree is patent.

Spleen:

The 120-gram spleen has an intact capsule and "dry" parenchyma.

Pancreas and Adrenal Glands:

No abnormalities are found.

Lymphatic System:

There is no significant lymphadenopathy at any point.

Axial Skeleton:

No traumatic or arthritic deformities are noted. A section of vertebral bone is grossly normal.

MICROSCOPIC DESCRIPTION:

Heart: A sections of the coronary artery shows minimal atherosclerotic change. The myocardium is free of inflammation, fibrosis, and infarct changes.

Lungs: No inflammation or neoplasm is seen.

Kidneys: No significant glomerular, tubular, vascular, or interstitial pathology is found.

Liver: The hepatic architecture is preserved. No hepatitis is seen.

Pancreas: There is severe postmortem autolysis but, as best can be determined, no microscopic abnormalities are observed.

Adrenal Glands: No signs of cortical lipid depletion or medullary hemorrhage are found.

Thyroid Gland: The follicular epithelium is active. No inflammation is seen.

Spleen: The sinusoids are relatively devoid of blood. The white pulp is benign.

Lymph Node: Marked fatty replacement is seen. Primary and secondary neoplasm are not found. There are active germinal centers.

Vertebral Bone: The bone marrow is approximately 50 percent cellular. Orderly maturation of the erythroid and myeloid series is seen.

Brain: The meninges are clear. Sections of the generic cortex and cerebellum show no significant histopathology.

SUMMARY OF FINDINGS:

1. Blunt head trauma resulting in:

   A. Multiple facial abrasions.

   B. Bilateral periorbital bruising.

   C. Multiple facial fractures.

   D. Extensive comminution of the calvarium.

   E. Pulpefaction of the frontal lobes of the brain.

   F. Comminution of the anterior cranial fossa.

2. No evidence of any significant natural disease processes.

3. Status post harvesting of selected tissues and the eyes.

OTHER PROCEDURES:

1. Blood and urine for toxicology.

2. Documentary photographs are taken.

3. Sectioned organs are forwarded with the remains.

CAUSE OF DEATH:

Blunt head trauma.

MANNER OF DEATH:

Accident.

COMMENT:

This 47-year-old white male was involved in a single vehicle car accident. He sustained massive head injuries.

The autopsy revealed the above-described head trauma. No evidence of neoplasia or infections infectious disease processes was found.

GTG/bjb

Dictated: [redacted]/94
Transcribed: [redacted]/94
Finalized: [redacted]/94