

## OFFICE OF THE DISTRICT ATTORNEY SANJOAQUIN COUNTY

#### HOMICIDE & GANG VIOLENCE SUPPRESSION UNIT

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### **MEMORANDUM**

TO:

NICK OBLIGACION,

CHIEF OF POLICE

MANTECA POLICE DEPARTMENT

FROM:

MARK OTT

DEPUTY DISTRICT ATTORNEY

SAN JOAQUIN COUNTY

DATE:

December 10, 2012

SUBJECT:

INVESTIGATION OF THE FATAL SHOOTING OF ERNEST MANUEL

DUENEZ ON JUNE 8, 2011 AT 242 FLORES AVENUE, CITY OF

MANTECA; MPD 11-14975

Pursuant to the provisions of the San Joaquin County Officer-Involved Critical Incident Protocol, effective August 1, 1994, the responsibility of the Office of the District Attorney is to review the facts and determine what, if any, criminal charges should be filed whenever there is an officer-involved fatality or life threatening incident.

This memorandum reviews the death of Ernest Manuel Duenez (8/15/76) which occurred on June 8, 2011. The investigation was jointly conducted by the San Joaquin County District Attorney's Investigation Unit, the Manteca Police Department and the California Department of Justice.

#### CASE SUMMARY

On June 8, 2011, officers of the Manteca Police Department were looking for Ernest Manuel Duenez, a Parolee at Large (PAL) and a primary suspect in an earlier domestic disturbance. Duenez was known to be located in the back "jump seat" of a blue Nissan extended cab pickup truck, armed with a throwing knife. The truck was associated with the address of 242 Flores Avenue, Manteca. Manteca Police Officer John Moody, in full standard uniform and in a marked police unit, positioned himself north of the Flores address in order to wait for the blue pickup. At approximately 6:45 p.m., Officer Moody observed a blue pickup pull up and park on the lawn of 242 Flores Ave. Officer Moody pulled in behind the pickup, initiated his light bar, and approached the vehicle. Officer Moody observed Duenez in the back "jump seat" of the pickup. After ordering Duenez to

not move four times, Duenez attempted to get out of the pickup. As he was standing on the floorboard of the pickup with his left hand on the right passenger door and his left hand on the roof of the pickup, he turned toward Officer Moody. In his right hand, Duenez had an 8-inch, fixed blade knife (blade is approximately 4 inches long). Officer Moody fired 13 rounds from his department-issued firearm at Duenez. Duenez is struck and dies. The incident was captured on Officer Moody's in car video/audio unit.

### **INVESTIGATION STATEMENTS**

It should be noted that interviews of all witnesses were completed by investigators of both the Manteca Police Department and San Joaquin County District Attorney's Office, Bureau of Investigations and were recorded.

Dispatch Log No. 1: On June 8, 2011 at 06:05 hours, officers of the Manteca Police Department responded to 491 Ribier Court on a call of a suspicious person being in a room above the garage of the residence. Office Avakian responded to that call. Upon contact with the reporting party, Officer Avakian was made aware that Ernest Duenez was suspected of taking a sword and sticking it into screen of the residence. Officers of the Manteca Police Department began looking for Duenez and were made aware that he was a Parolee at Large (PAL), as of June 3, 2011. It should be noted that the PAL notice indicated that Duenez was considered armed and dangerous.

**Dispatch Log No. 2**: On June 8, 2011 at 17:18 hours, a reporting party, Tom White, located near the intersection of Pillsbury Rd. and Woodward Ave., Manteca, called the Manteca Police Department due to a domestic disturbance. A second reporting party, Michael Henry called police as well. It was reported and aired on MPD dispatch that a man involved in the disturbance has a knife on him, and that he is known to carry a handgun. This information is confirmed by the MPD dispatch log 11-14968. It should be noted that no police report was generated by this call as the parties were not present at the time that MPD responded to this area.

**Michael Henry:** Michael Henry stated that he has known Duenez for the previous six months. Henry stated that on June 8, 2011, Duenez' wife, Whitney Duenez had come over to his residence on Pillsbury. Whitney was very angry and accusing Duenez of infidelity. Henry indicated that he has seen Duenez punch Whitney several times in the past, even as recently as the previous week. He indicated that Whitney has run over his mail box during previous altercations. Believing that the situation would escalate, Henry called the MPD. On this occasion, he stated he did not see any physical altercation. However, when Henry was attempting to disperse the two, Henry stated that Duenez slapped Whitney in the back of the head. Duenez and Whitney left as police sirens were approaching. Henry indicated to police that he had seen Duenez with a black handled throwing knife.

After police left, Duenez returned to the Henry residence in a blue pick-up truck. He arrived to collect some personal items. Henry indicated to Duenez that the MPD were looking for him. Duenez left in the back "jump seat" of the blue pickup truck. Before leaving, Duenez dropped and then picked up the black-handled throwing knife. Henry called MPD. He told the MPD dispatcher the make, model and license plate number of the truck and that when Duenez had left, he was in possession of the knife. It should be noted that the knife that was recovered in the bed of the pickup light blue pickup truck was identified by Henry as the knife that "looked like the knife that I handed Duenez".

Officer John Moody: Officer Moody stated that on June 8, 2011, he started his shift as a patrol officer in standard uniform, with standard one-person, marked patrol unit at 11:30a.m. He stated that upon starting his shift, he was made aware that Ernest Duenez was a PAL and that he was considered armed and dangerous. Officer Moody indicated that he was aware of Duenez' past and thought that he might be involved in criminal street gangs. Various attempts were made throughout the day to locate Duenez, without success. In the late afternoon, Moody was made aware that there was a domestic disturbance involving Duenez on Pillsbury Road and that Duenez was armed with a knife (see above). Moody was made aware through dispatch that Duenez was last seen lying down in the back "jump seat" of a light blue pickup truck that was being driven by an older Hispanic male with an older Hispanic female as the passenger.

Officer Moody stationed his vehicle north of 242 Flores (the residence of Whitney Duenez) to determine if the pickup would arrive at that location. Officer Moody observed the pickup travel west on North Street, turn south on Flores Avenue and pull into the residence of 242 Flores Ave. Moody activated his overhead lights. Moody saw a head pop up from the 'jump seat' of the pickup and begin to exit the right passenger door. Moody stated that he initially had his departmental-issued weapon out, but that he began to holster it because he believed that Duenez would engage in a hand to hand struggle. As Duenez had one foot on the ground, and one foot inside the truck, Moody indicated that Duenez turned toward him and had a knife in one of his hands. Moody indicated that he believed that Duenez would either charge him with the knife or throw the knife at him. Moody indicated that he was afraid for his safety so he fired on Duenez until the threat was no longer present. Moody indicated he recalled that he had received training that a suspect with a knife could cover twenty one feet of distance in three seconds. Officer Moody indicated that he was well within twenty one foot of Duenez.

In-Dash Video/Audio Camera: Officer Moody's marked patrol unit has an in-car video which captured this event. The video data captured by this recorder was submitted to Forensic Video Solutions (FVS), an internationally recognized forensic video expert/consultant. FVS was specifically tasked with determining the actions of both Officer Moody and Ernest Duenez prior to, during, and immediately after the shooting, the timing and placement of all shots fired, and to track location of items removed from Duenez. That analysis was completed by FVS on November 26, 2012 and their report was provided to the Office of the District Attorney. The report is entitled "Critical Incident/Protocol; Shooting Death of Ernest Duenez, Jr. June 8, 2011, Manteca Police Department 11-14975" and is

herein referred to as the FVS Report. The FVS Report is incorporated into this memo in its entirety. In addition, this memorandum incorporates 6 still frame photographs taken from the FVS Report which focus on the knife in Duenez' hand. The FVS Report details a millisecond by millisecond account of the actions of both Officer Moody and Ernest Duenez.

The video shows Officer Moody pulling up behind the pickup in which Duenez was riding in the back "jumpseat" in front of the 242 Flores Ave. The front passenger door of the pickup is opened and Officer Moody yells, "Hands up". Duenez then rises up though the open passenger door, while Office Moody yells, "Hands up, Ernie". As Duenez moves toward the open passenger door, Officer Moody once again yells, "Don't you move". Officer Moody then moves toward the pickup. Continuing to move toward the pickup, Officer Moody yells a fourth time, "Ernie, don't you move or I'll shoot you". The video shows that Officer Moody is off-screen, yet his shadow can be seen on the tailgate of the pickup. Officer Moody has his gun drawn. As Duenez is continuing to move out of the passenger door of the pickup, Officer Moody is coming around the front of his patrol unit (now in camera view), while attempting to holster his weapon. Officer Moody yells yet again, "Hands up". Duenez then is seen getting his torso out of the pickup. Officer Moody then retrieves his weapon. At this point (18:42:50:733) a knife can be seen in Duenez' right hand. Officer Moody yells "Now".

Duenez has braced his right hand on the cab of the pickup and his left hand on the window frame of the opened right passenger door of the pickup. A knife is clearly visible in the right hand of Duenez. A knife sheath is clearly visible on the waist of Duenez. At 18:42:51:233, Officer Moody commands "Drop the knife now". Duenez then jumps to the ground, and turns his body toward the pickup. Duenez reaches forward and downward with his left hand. Officer Moody fires shot No. 1 at 18:42:52:000. Duenez does not react. Officer Moody fires all shots in a period of 4.233 seconds. Seven of the shots appear to be correlated with strikes to Duenez (See FVS Report, Pg. 5). It should be noted that due to the video examiner's lack of medical training, he was only able to opine that shots "likely" or "possibly" hit Duenez (See FVS Report Pg. 33). Three shots appear to completely miss Duenez. Video analysis was unable to correlate four shots to any particular placement.

It is the opinion of the FVS Report that Duenez had a knife in this right hand as he got out of the pickup. As shot No. 3 is fired, it appears to hit Duenez, and the knife falls toward the back of the pickup. It should be noted that a knife was found at the back of the pickup bed. That knife was consistent with the knife observed in the video and also had Duenez' DNA on it.

Rudolpho Camarena (Driver of the blue pick-up): Mr. Camarena was interviewed on June 8 at 2350 hours. He indicated that he casually knew Duenez for approximately one month prior to the shooting. On the date in question, he picked agreed to drive Duenez to an unknown destination and that his wife went along to pick up some dish soap. He drove Duenez to the Pilsbury address to pick up some tools and then take him to the Flores address. Upon parking on the lawn, Camarena immediately noticed that a police

officer had pulled up behind him and was ordering them to get their hands up. Duenez starting moving like he wanted to get out of the truck. Duenez was in the back seat and pushed the seat forward pinning Camarena's wife against the dash board. Camarena indicated that he questioned Duenez on his actions, to which Duenez responded "I don't care, I got to get out". Camarena stated that he warned Duenez that he would be shot if he did not listen to the officer. As Duenez exited the truck, Camarena heard shots and was fearful because his wife was in close proximity to Duenez. Camarena did not see anything in the hands of Duenez. Camarena stated that if Duenez had sat down, the officer wouldn't have shot him.

Camarena indicated that while on Pilsbury, Henry had warned Duenez that the police were looking for him. Camarena indicated that he remembered that Henry handed Duenez a knife and that it dropped. The knife was black in color. He did not see where Duenez put the knife.

On October 5, 2011, detectives of the Manteca Police Department re-initiated contact with Camarena for the purpose of obtaining a DNA reference sample to be used later in the DNA comparison of a knife recovered in the bed of the blue pick-up. Camarena stated that he had been contacted by the civil attorney who is representing the family of Duenez and that he would not provide a DNA sample absent a court order. Camarena eventually provided a DNA reference sample absent a court order. However, during this encounter, Camarena indicated that while on Pilsbury, Henry did not hand the knife to Duenez, but instead threw the knife into the bed of the blue pick-up truck.

Margarita Camarena Blanco (Right front passenger of blue pick-up): Blanco indicated that she went with Camarena and Duenez. As the pick-up pulled into the Flores address, Camarena stated to Duenez that the police were behind them. She looked back and saw a marked unit with emergency lights on. She stated that she was pinned against the dashboard as Duenez was attempting to exit the pick-up. She warned Duenez several times to stop, and she felt that it was dangerous for Duenez to be exiting. She heard the police yelling, but does not recall what was being said. She ducked her head as shots were being fired. She indicated that to her, it appeared as if Duenez was attempting to flee from the police. She did not see anything in the hands of Duenez.

Whitney Duenez (Wife of Ernie Duenez): Whitney indicates that she was inside the 242 Flores residence at the time of the shooting. It should be noted that this is confirmed by the video. She was not aware that the pick-up had even pulled up to the residence. She heard the shots and then heard someone yell, "Ernie don't move". She stated that she ran outside and saw Duenez laying on the his back with one foot inside the pick-up. Whitney was aware that Duenez had a warrant for his arrest and indicated that Duenez would not turn himself in because he didn't want to miss his son's birthday. Whitney indicated that it would not be surprising if Duenez had a knife. She stated that she and Duenez had not been getting along lately, because of Duenez' infidelity. Whitney indicated that earlier in the day she went over to the Pilsbury address to confront Duenez about his infidelity.

Ana Espinal (Occupant of 242 Flores): Espinal indicated that she was made aware of the incident only when she heard the shots, as she was inside. She indicated that she immediately went outside and could see Duenez with one foot in the pick-up and one foot on the lawn.

Responding Officers: Officers Avakian, Bonetti, Rangel and Sgt. Aguilar were interviewed. All officers indicated that they were aware of the earlier reported incidences from the same day. These statements are consistent with descriptions above. None of the officers were on scene when the shooting occurred. These officers responded to the scene immediately after the shooting. It appears from the video and from their statements that they secured the scene and medical attention was brought on-scene thereafter.

**Neighborhood Canvas**: Investigators initiated a canvas of the Flores Avenue neighborhood to determine if anyone had viewed the incident. Most neighbors indicated that they heard shouting (although they couldn't state what was being said) followed by several shots. Of note, off-duty CHP Officer Lundbom stated that she saw and heard Officer Moody draw his weapon and order the subject to stay down no less than three times. Officer Lundbom could not see Duenez' hands. I. Krupczynski was across the street from the 242 Flores Ave. address. She indicated that she heard Officer Moody order the suspect to lay down, and then heard 8-9 shots. She did not see a weapon in the hand of Duenez. She added that the officer was protecting himself.

Scene Process: 242 Flores is a single family residence situated in a typical tract development within the City of Manteca. The front door, and garage driveway faces the southwest. The garage is in the front of the living portion of the house facing due west. The blue pick-up was parked on the northern-most portion of the lawn, west of the garage, pointing east. The right front passenger door was wide open, with the window shot out. Thirteen expended shell casings were recovered on the premises. Near the right passenger door was a glass drug pipe and a knife sheath. In the bed of the pick-up was a fixed blade knife, with a black handle and with an approximately 4-inch blade. The knife was analyzed and found to have a mixed DNA sample, one of which was consistent with the DNA of Duenez. No prints were able to be lifted from the knife.

Forensic Firearms Examination: Officer Moody's departmentally-issued S&W 40 caliber semi-automatic weapon was analyzed. It appeared to be in proper working order. Officer Moody indicated that he typically loaded the weapon with fourteen in the magazine and one in the chamber. When the weapon was recovered it had a bullet in the chamber and a single bullet in the magazine. The thirteen shell casings recovered from the scene matched the firing pin impressions from Officer Moody's weapon.

It is of note the that the FVS Report indicates that fourteen shots were audibly recognized in the video. Yet analysis of Officer Moody's firearm, with two cartridges within, and the recovery of thirteen casings would indicate that only thirteen shots were fired. It is likely that the additional shot audibly recorded in the video was an echo.

Autopsy: An autopsy of Ernest Duenez was performed on June 9, 2011 by Dr. Bennet Omalu. He noted 11 gunshot wounds to Duenez: 1 to the head; 8 to the trunk; and 2 to the extremities. The gunshot wound to the head was in the right cheek with trajectory down, left and forward. Gunshots to the trunk were as noted: 1) in back with trajectory right, down and slightly backward; 2) grazing shot across chest; 3) in back with trajectory forward, up and left; 4) left back with trajectory forward, right and up; 5) in chest with trajectory back, down and right; 6) in right chest with trajectory right, up and slightly back; 7) in back with trajectory forward, right, and down; and 8) in lower chest with trajectory right, down and forward. The gunshots to the extremities were as follows: 1) in right arm with trajectory forward, slightly up and left; and 2) in left forearm with trajectory up, right and forward. The autopsy does not indicate which shot was fired first, merely the analysis of the wounds. The autopsy indicated that Duenez had abrasions on his body. Toxilogical analysis of Duenez' blood indicated that he had 1.1 mg/L of Methamphetamine and 0.21 mg/L of Amphetamine in his system. The autopsy indicates that Duenez died due to gunshot wounds to the trunk.

### **HISTORY**

Ernest Duenez had an extensive criminal history, detailed below. He had nine felony convictions, two of which were strikes. He had been to prison on four separate commitments. He had two misdemeanor convictions. He had numerous parole violations. Duenez was a documented gang member and he had been convicted of resisting arrest or fleeing from law enforcement.

1996 -Felony 459 1st - probation

1997 -Felony 261.5c - 32 months prison

2001 - Felony 11377 - 16 months prison

2003 - Misdemeanor 148(a) and Misdemeanor 14601(a)

2004 - Felony 2800.2, Felony 10851, Felony 496D- 4 years prison

2009 - Felony 245(a)(1), Felony 10851, Felony 186.22(a)

### **LEGAL ANALYSIS**

Homicide committed by a law enforcement officer is governed by Penal Code §196 (*Kortum v. Alkire* (1977) 69 Cal.App.3d 325, 333). The test for determining whether a homicide was justifiable is whether the circumstances "reasonably created a fear of death or serious bodily harm to the officer or to another (*Martinez v. County of Los Angeles* (1996) 47 Cal.App.4th 334). Reasonableness must be considered in the context of the "dangerous and complex world" police officers face every day, because "what constitutes 'reasonable' action might seem quite different to someone facing a possible assailant than to analyzing the question at leisure." (*Martinez v, County of Los Angeles, supra,* 47 Cal.App.4th at 343 (*quoting Smith v. Freeland* (6<sup>th</sup> Cir.1992) 954 F.2d 343, 347)).

Under Penal Code §§197 and 198, homicide is justifiable and not unlawful when committed by a person who reasonably believed that, he or someone else, was in imminent danger of being killed, suffering great bodily injury, or a forcible and atrocious crime (*People v. Ceballs* (1974) 12 Cal.3d 470, 478). For a homicide to be in self-defense, the person must actually and reasonably believe in the need to defend with deadly force (*People v. Flannel* (1979) 25 Cal.3d 668, 674). If the belief both subjectively exists and is objectively reasonable, it constitutes "perfect self-defense" and the homicide is considered legally justifiable (*In re Christian S.* (1994) 7 Cal.4th 768, 783).

In the present case, officers of the Manteca Police Department were attempting to locate and apprehend Ernest Duenez on a PAL warrant and for fresh charges. It appears that Officer Moody was aware of Duenez' criminal past, although not detailed. Officer Moody set up on a location where Duenez was likely to arrive. When Duenez did arrive, Officer Moody initiated the stop. As shown in the video, Officer Moody clearly identifies his presence and his purpose. Camarena indicated that he knew of Officer Moody presence and warned Duenez to comply with Officer Moody's commands. Duenez responded that "he needed to go". Duenez disregarded Officer Moody's numerous commands and the warning of his associate. When he did exit the pick-up, he took with him an 8-inch fixed blade knife (blade 4 inches long). Duenez had that knife in his right hand with the point up. Officer Moody clearly commanded Duenez to drop the knife. When Duenez turned toward Officer Moody, the officer fired. Duenez made no action which indicated that he was giving up or acquiescing to Officer Moody's commands. Officer Moody indicated that he felt that his life was in danger. Officer Moody, by training knew that a person with a knife could kill him from the distance separating the two. As such, it appears that Officer Moody's fear of great bodily injury or death was actual. Similarly, given the close proximity of Officer Moody to Duenez and that Duenez had a knife in his hand, Officer Moody's belief appears to be reasonable. It should be noted that Officer Moody was in close proximity to Duenez because he believed that Duenez was going to run or be involved in a hand-to-hand combat situation. Only upon seeing the knife did Officer Moody re-initiate his duty weapon. These actions appear to be reasonable as well.

#### CONCLUSION

It is the opinion of the District Attorney that Officer John Moody was legally justified in his use of lethal force against Ernest Duenez.

Critical Incident/Protocol; Shooting Death of Ernest DUENEZ, Jr. June 8, 2011 Manteca Police Department 11-14975

# Forensic Video Analysis

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Prepared by Grant Fredericks, Analyst, Forensic Video Solutions, Inc. November 26, 2012

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## **APPENDICES**

Observations.pdf

Possible Knife Movement.pdf

Markers.pdf

## Standard of Review

All statements and opinions herein are determined to a reasonable, or higher, degree of professional and scientific certainty and/or probability.

## Introduction

I have been retained as an expert in Forensic Video Analysis by the San Joaquin County District Attorney's Office. In various communications and meetings, I have been asked to conduct an analysis of video and audio data that was recorded to an in-car video system placed in a Manteca Police Department patrol vehicle.

Specifically, on August 24, 2012, I received a letter from the San Joaquin County District Attorney's Office requesting that I attempt to answer the following questions:

- 1. Determine the exact number of shots fired by Officer John Moody
- 2. Determine the timing of the shots
- 3. Attempt to determine shot placement
- 4. Recognize and list all commands by Officer Moody
- 5. Determine what object(s) were in Ernest Duenez's hands
- 6. Track location of any objects that were removed from Duenez
- 7. Can you explain how this knife came to be in the bed area of the truck?

- 8. The investigation is considering that there is an object in Duenez's hands as he exits the vehicle.

  An object located by investigators is in fact a knife. After examining the video what response would you have to this belief?
- 9. Please keep in mind any other relevant information as you conduct this analysis

## **Summary of Observations/Opinion**

- 1. Officer Moody fired fourteen (14) shots. He pulled the trigger at least four more times after his pistol was empty of live rounds.
- 2. Timing of the shots:

Shot 1: 18:42:52.000

Shot 2: 18:42:52.233

Shot 3: 18:42:52.466

Shot 4: 18:42:52.666

Shot 5: 18:42:52.900

Shot 6: 18:42:53.033

Shot 7: 18:42:53.166

Shot 8: 18:42:53.500

Shot 9: 18:42:53.733

Shot 10: 18:42:53.933

Shot 11: 18:42:54.233

Shot 12: 18:42:54.433

Shot 13: 18:42:55.066

Shot 14: 18:42:56.200

i. One trigger pull at 18:42:56.866

- ii. Two trigger pulls at 18:42:57.666
- iii. Sounds of trigger pull at 18:43:01.366
- iv. One trigger pull at 18:43:04.000

#### 3. Placement of shots:

Shot 1 – miss – in general direction of open door, passenger compartment, and fence in background

Shot 2 - miss - round strikes 'soffit' (overhang) near 2nd upper window of house

Shot 3 – shatters passenger window in area of Duenez's right forearm; likely "Gunshot N" (Pathologist's report)

Shot 4 – possible "Gunshot J" (Pathologist's report)

Shot 5 - unknown placement

Shot 6 - possible "Gunshot H" (Pathologist's report)

Shot 7 - likely strikes brick in flower bed

Shot 8 - likely "Gunshot A" (Pathologist's report)

Shot 9 - unknown placement

Shot 10 - unknown placement

Shot 11 - unknown placement

Shot 12 - likely "Gunshot R" (Pathologist's report)

Shot 13 - likely "Gunshot Q" (Pathologist's report)

Shot 14 - likely "Gunshot K" (Pathologist's report)

### 4. Commands Given by Officer Moody:

All commands were loud and audible.

18:42:44.433 - "Hands Up."

18:42:45.433 - "Hands up Ernie".

18:42:46.666 - "Don't you move".

18:42:47.766 - "Ernie, don't you move or I'll shoot you".

18:42:49.766 - "Hands up, now".

18:42:51.233 - "Drop the knife, now".

(Shot 1 Fired) - 18:42:52.000

(Shot 14 Fired) - 18:42:56.200

18:43:01.266 - "On the ground, now."

18:43:03.533 - "On the ground. Get back, now".

5. Object(s) in Duenez's hand:

Knife in Duenez's right hand prior to shots fired.

- 6. Location of Object(s) removed from Duenez:
  - a. Crack pipe from right front pocket (Crime Scene Photo Item (#13)
  - b. Knife sheath from belt (Crime Scene Photo Item (#14)
- 7. How did knife get into bed of truck?

Cannot be determined from video examination

8. Identification of object in Duenez's right hand, compared with knife recovered from vehicle:

The knife in Duenez's right hand, as he exits vehicle, is consistent with knife located in bed of truck.

9. Additional observations:

See Analysis Section, below.

## Qualifications

I am a Forensic Video Analyst with extensive experience in the recovery, scientific examination and evaluation of recorded video and audio information involving criminal and civil investigations in the United States (US), Canada and in the United Kingdom (UK). I have been continuously active in this science since 1984.

I attained an undergraduate degree in television broadcast communications in 1982 and have been continuously involved in the video and imaging industry for the last thirty years

As a Forensic Video Analyst, I have processed thousands of videotapes and computer discs containing digital multimedia evidence for both criminal and civil cases. I have been providing expert testimony as a Forensic Video Analyst since the early 1990's. I have provided expert testimony in the field of Forensic Video Analysis more than one hundred (100) times in US and Canadian courts at all levels. I have testified as an expert in Forensic Video Analysis in Washington State, Oregon, Idaho, California, Nevada, Colorado, Arizona, Iowa, Missouri, Massachusetts, Pennsylvania, Michigan, Maine, New York, Texas, Florida, British Columbia, Alberta, Manitoba, in the Yukon Territories, London, England, Auckland, New Zealand and in the Cayman Islands.

Since 1999, I have been the Principal Instructor for a series of Forensic Video Analysis courses offered by the Law Enforcement & Emergency Services Video Association (LEVA), a non-profit organization that has trained more than 2000 law enforcement video analysts from throughout the world.

I am the Team Leader for LEVA's Forensic Video Analysis Certification Program.

For the last ten years, I have been a contract instructor of Forensic Video Analysis and Digital Multimedia Evidence Processing for the Federal Bureau of Investigation (FBI) National Academy in Quantico, VA.

I am the Digital Video Advisor to the International Association of Chiefs of Police (IACP) for its In-Car Video project and for its Digital Interview Room Standards project, which is funded by the US Department of Justice (DOJ).

I am currently an adjunct instructor for the University of Indianapolis. Each year I teach approximately six (6) one week long courses for the University in various disciplines involved in the science of Forensic Video Analysis, including the use of advanced imaging technology. Students are serving as video analysts, primarily from law enforcement agencies in the US, Canada, the UK, Australia, and Asia. Each of the courses focuses on digital video and analog video engineering principles, and on the application of proper scientific methodologies for processing digital multimedia evidence, including scientific techniques used to determine image timing intervals in order to accurately convert time-lapsed video into real-time video for synchronization of separately recorded video sources.

One of the courses that I teach at the University of Indianapolis is entitled Photographic/Video Comparison, which focuses on the identification of vehicles, clothing and weapons captured to digital and analog video recording sources. I have taught this course in Canada at the British Columbia Institute of Technology, in the UK, and in Indianapolis for each of the last nine (9) years. This course is accredited by the University of Indianapolis and by LEVA, which recognizes the course in its Forensic Video Analysis Certification Program.

A significant element of the Photographic/Video Comparison course material, and of the other courses that I teach, involves the science of Reverse Projection. Reverse Projection is the scientific process of obtaining accurate measurements and making accurate observations from photographic and video images. Reverse Projection has been used among imaging scientists, investigators and in US courts regularly for more than forty (40) years as a tool to reproduce crime and accident scenes, in order to conduct measurements and to make other accurate observations.

Each of the courses that I teach focuses on reflection of light, pixel tracking, digital compression technology, color measurement/analysis, and on digital and analog artifact (error) identification for the sole purpose of ensuring accurate interpretation of video evidence. Since each of the signal and digital components could impact the meaning of images, the majority of testimony that I have provided includes a narrative explanation of the events captured to the video recording system.

I am a former Police Officer with the City of Vancouver Police Department in Canada where I was assigned to the Criminal Investigation Division as the head of the department's Forensic Video Unit.

## **Exhibits**

All information, any and all of the underlying foundational or support materials, and/or any portion thereof within this document, or any of its references or attachments, are to be considered important exhibits with regard to this case and this report. All .mpg files, .jpg files, .txt files, PDF files, images, videos, audio, recordings, etc. are all to be considered exhibits that are hereby fully incorporated, and are an integral part of this report, and may be used at any time during any aspect of proceedings associated with this case, including, but not limited to, deposition and/or trial as exhibits to aid in my testimony or presentation.

In order to attempt to answer the posed questions, I was provided with the following exhibits for my analysis:

On August 10, 2012, my office received a computer forensic generated hard drive, which contained original data from Officer Moody's in-car video recording system.

- Item 1. Coban-topcam audio/video data
- Item 2. .mpg exported file and Coban player

On August 23, 2012, my office received a disc containing the following:

- Item 3. Case Photos 37 images from the crime scene, and one photo of a "Fred Carter" knife
- Item 4. Crime Scene Photos 214 images of the crime scene, and four images of Officer Moody

Each of these items was reviewed in detail.

## Compensation

See attached Fee Schedule

# **Equipment & Software Used**

Avid Media Composer 6.5

Photoshop CS 6.0

VirtualDub 1.9.11

VLC 2.0.1

MediaInfo 0.7.58

## **Analysis**

On April 19, 2012, my office received a telephone call from Chief Nick Obligacion of the Manteca Police Department in California. Chief Obligacion requested our availability to examine the video and audio in this case. No exhibits were provided at this time.

On July 30, 2012, my office received a written authorization from Mr. Mark Ott, Deputy Attorney of the San Joaquin County District Attorney's Office. In the authorization, Mr. Ott indicated that the exhibits would be hand-delivered to our office.

On August 10, 2012, Lt. Tony Souza of the Manteca Police Department in California arrived in my office for a case conference and exhibit review. At the time of the meeting, Lt. Souza provided me with Items #1 and #2 (in-car video data) for my examination.

On August 23, 2012, I received Item #3 and Item #4.

On August 24, 2012, I received a written request from Mr. Ott to answer specific questions within my report. (See Introduction on page 3 of this report).



Officer Moody is parked on the side of the road approximately half of a block from the location of the shooting. His vehicle is facing an intersection. The location of the shooting is identified by the red arrow.

The date and time is indicated by a graphic timestamp located at the bottom right corner of some of the images. The timestamp appears every five seconds and remains on-screen for approximately one second.





At 18:42:20.000, a Mazda pickup is seen entering the intersection, and turning toward the home where the shooting occurred.



Note that the video is recorded and plays back at a rate of thirty (30) images per second. As a result, a new image is produced every 33 milliseconds (ms). Within this report, times are provided within the limitations of the image refresh rate and to a 33 ms accuracy. The times are depicted with four sets of numbers: 18:42:20.000 (hours: minutes: seconds: milliseconds).

At 18:42:27.366, Officer Moody begins to move his police vehicle toward the Mazda. His emergency equipment is not yet engaged. There is no audio recorded at this point.

At 18:42:31.000, the Mazda begins to turn toward the driveway of the house.

At 18:42:30.000, the police vehicle turns into the driveway behind the Mazda.

Due to the distance of the Mazda, and to the point of view of the camera, no video information is available regarding the occupants of the Mazda.

At 18:42:38.000, the light bar is initiated. The letters 'LBR ON' is a graphic representation of the light bar trigger activation with the Coban in-car video recording system. Audio begins to be recorded at 18:42:39.300.

At 18:42:39.833, the Mazda comes into view of the camera. The Mazda is stopped.



The Police vehicle comes to a stop behind the Mazda at 18:42:41.466.

The image to the left is the field of view provided by the camera for the remainder of the events.



At 18:42:43.266, the passenger door begins to open.

The Mazda is a two door vehicle.

There is some motion in the front passenger seat where a female is located.



At 18:42:44.433, the front door is full open.

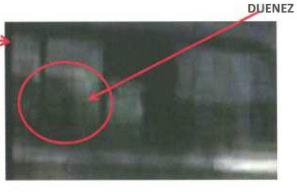
Officer Moody calls out, "Hands up".

Open passenger door



At 18:42:45.600, DUENEZ raises his body upward from behind the front seats.

Officer Moody calls out, "Hands up Ernie".





At 18:42:46.666, DUENEZ moves toward the open passenger door.

Officer Moody calls out, "Don't you move".

Officer Moody closes his driver's door, and begins to move toward the Mazda.



At 18:42:47.766, Officer Moody continues to move toward the Mazda as he yells, "Ernie, don't you move or I'll shoot you."

At 18:42:48.900, while verbalizing the command,

Officer Moody's shadow is visible. His gun is visible at about head level.



DUENEZ begins to emerge from the vehicle.

At 18:42:49.833, Officer Moody attempts to holster his pistol as he yells, "Hands up".

DUENEZ continues to move toward the open

passenger door.

Officer Moody attempts to holster his pistol at 18:42:49.966 and again at 18:42:50.533. He is successful holstering the pistol on the second attempt, but immediately removes his pistol again.



At 18:42:50.566, DUENEZ partially exits the vehicle.

As his right hand moves forward, Office Moody stops his forward movement, and removes his pistol.



L MIM2

At 18:42:50.733, DUENEZ raises his right hand. A knife blade is seen in three consecutive images as his hand moves upward.



**Knife Blade** 

Due to the level of compression in the images, the blade appears as a reflective group of pixels that moves upward at the end of DUENEZ's right hand. Interlaced artifacts are present within the area of motion of the blade.

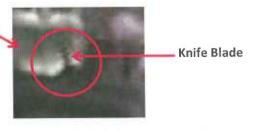
At 18:42:50.900, Officer Moody yells, "Now."



At 18:42:51.066, DUENEZ brings his right hand to a position above the cab of the vehicle. He has braced his left hand on the top of the door, and his right hand on the roof. He is leaning forward in a high position and is facing toward Officer Moody.

DUENEZ has a long bladed knife visible in his right





The interlaced artifacts (jagged lines) representing the area of the blade are caused by the motion of the knife in DUENEZ's hand.



Knife Sheath

the belt area of the middle of his body.

At 18:42:51.200, DUENEZ turns his body toward

Moody. As he turns, the knife sheath is visible near

• 5

At 18:42:51.233, Officer Moody yells, "Drop the knife now."



At 18:42:51.500, DUENEZ has jumped to the ground.

DUENEZ begins to turn his body toward the open door of the vehicle.

DUENEZ's right hand and the knife are no longer visible.



At 18:42:51.900, DUENEZ has reached forward and downward with his left hand.

Officer Moody moves slightly to his left, and further behind the Mazda.



At 18:42:52.000, Officer Moody fires Shot #1.

There is no apparent reaction from DUENEZ.

The method of determining the moment when each shot was fired utilizes three primary observations:

- 1) Audio of all shots (except Shot #2) were clear and uniquely visualized within the waveform of the audio signal.
- 2) All bullet casings, as they were ejected from the pistol, can be visually tracked in the air.
- 3) Most shots resulted in visible gas expulsion from the pistol toward DUENEZ. The visual gas/debris exiting the pistol was visible immediately after the shots were fired.



2<sup>nd</sup> bullet strikes soffit



Officer Moody's weapon is aimed high at the time of

Shot #2 is fired at 18:42:52.233.

There is no apparent reaction from the shot. DUENEZ.

The bullet strikes the soffit under the roof near the 2<sup>nd</sup> set of upper windows. Debris from the area of the soffit falls to the ground as Shot #2 strikes the house.



At 18:42:52.333, the shell casings from Shot #1 and from Shot #2 are visible as they move through the air.

Shot #3 has not yet been fired.

Note: shell casing #2 is moving faster than the shutter speed of the camera, therefore it is caught in multiple positions as it leaves the pistol at high speed.



Casing from Shot #2



Casing from Shot #1



Shot #3 is fired at 18:42:52.466. The image to the left is recorded 33ms after the shot is fired. The passenger side window is smashed by the bullet.



DUENEZ reacts noticeably to the 3<sup>rd</sup> shot. His left arm and shoulder move upward. DUENEZ's right forearm was in the area where the window was shattered. It is possible that this shot caused the injury to DUENEZ's right forearm, noted as 'Gunshot N' in the Pathologist's report.

The interlaced artifacts in the area of DUENEZ's body indicate that he was moving quickly at the time that the image was recorded.



Shot #4 is fired at 18:42:52.666.

It is possible that this shot caused the injury to DUENEZ's left chest, noted as 'Gunshot J' in the Pathologist's report.



Shot #5 is fired at 18:42:52.900.

DUENEZ's body is in motion as he drops to the ground.

It is not possible to determine from the video whether or not DUENEZ was struck by the  $5^{\rm th}$  shot.



Shot #6 is fired at 18:42:53.033.

DUENEZ's body is in motion as he drops to the ground.

It is possible that this shot caused the injury to DUENEZ's right chest, noted as 'Gunshot H' in the Pathologist's report.



Shot #7 is fired at 18:42:53.166.

It is impossible to determine with any degree of certainty the placement of the bullet from Shot #7; however, debris is seen moving upward from the area of the flower bed behind DUENEZ. This shot could be the cause of the bullet fragment recovered from the flower bed, as depicted in CS Photo #22.



Shot #8 is fired at 18:42:53.500.

Due to the movement of DUENEZ's face, and to the apparent debris motion away from his face, it is possible that this shot caused the injury to DUENEZ's face, noted as 'Gunshot A' in the Pathologist's report.



Shot #9 is fired at 18:42:53.733.

It is not possible to determine from the video whether or not DUENEZ was struck by the  $9^{\text{th}}$  shot.



Shot #10 is fired at 18:42:53.933.

It is not possible to determine from the video whether or not DUENEZ was struck by the  $10^{\rm th}$  shot.



At 18:42:54.200, Officer Moody moves his left hand toward his radio mic, located near his left shoulder.

His pistol is still pointed toward DUENEZ.



While his left hand is in motion toward his mic, the 11<sup>th</sup> shot is fired at 18:42:54.233.

It is not possible to determine from the video whether or not DUENEZ was struck by the 11<sup>th</sup> shot.



At 18:42:54.433, the 12<sup>th</sup> shot is fired.

It is possible that this shot caused the injury to DUENEZ's upper middle back, noted as 'Gunshot R' in the Pathologist's report.



At 18:42:55.066, Shot #13 is fired.

It is possible that this shot caused the injury to DUENEZ's back, noted as 'Gunshot Q' in the Pathologist's report.



At 18:42:55.466, Officer Moody begins to broadcast: "Shots fired. Shots fired".



During the middle of his broadcast, at 18:42:56.200, Officer Moody fires the 14<sup>th</sup> shot.

It is likely that this shot caused the injury to DUENEZ's left stomach area, noted as 'Gunshot K' in the Pathologist's report.

Shots 11, 12, 13 & 14 were fired while Officer Moody was holding the pistol with one hand.



At 18:42:56.866, Officer Moody can be heard pulling the trigger on his pistol.

The pistol is close to his in-car camera audio microphone, and the distinctive trigger pull sound is clear.



At 18:42:57.666, Officer Moody can be heard pulling the trigger on his pistol two more times in rapid succession.

The weapon is empty, and no shot is fired.



At 18:42:59.233, a female witness emerges from the side of the house.



At 18:43:01.266, DUENEZ moves in an upward sitting position briefly.

Officer Moody calls out, "On the ground now."



At 18:43:03.533, DUENEZ has fallen backward to the ground. Officer Moody begins to turn toward the woman, who is moving quickly toward DUENEZ.

Officer Moody yells toward the woman, "On the ground.

Get back now."



As he yells at the woman, Officer Moody waves with his left hand. At the same moment (18:43:04.000), he pulls the trigger of the pistol again. The pistol is pointed toward the grass in front of the officer.



Pistol



At 18:43:06.000, Officer Moody broadcasts:

"Three Adam \_\_\_\_\_. Shots fired. Suspect armed with a knife."

The female witness is seen running toward DUENEZ.

For the next sixteen seconds, Officer Moody is seen giving commands to the female and to the occupants of the vehicle.



At 18:42:22.000, another officer arrives on scene.

At 18:44:35.533, the officers are preparing to approach the vehicle and DUENEZ. The vehicle has not yet been secured.

Officer Moody states,

"He's got a knife on him."

At 18:44:47.166, the vehicle is cleared. Officer Moody begins to place surgical style plastic gloves on his hands.

At 18:44:58.933, DUENEZ makes a respiratory sound. See "Markers" PDF for a full list of DUENEZ respiratory sounds.



At 18:45:20.733, Officer Moody takes hold of DUENEZ's left hand, and begins to pull him away from the vehicle.

DUENEZ's foot is caught in the seatbelt, and Officer Moody is unable to pull him.



Officer Moody attempts to free DUENEZ's foot from the seatbelt. At 18:45:37.633, another officer opens a knife and cuts the seatbelt from around DUENEZ foot.

Officer with knife



At 18:45:46.266, Officer Moody pulls DUENEZ away from the vehicle.



At 18:45:58.733, Officer Moody receives handcuffs from another officer, and begins to hand cuff DUENEZ.

At 18:46:18.033, Officer Moody requests that the medics be brought into the scene.

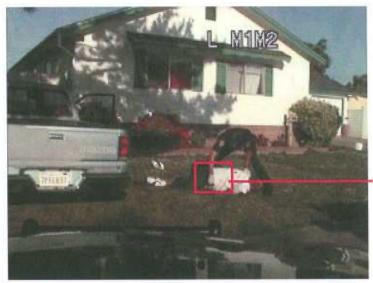
See the full transcript in the attached "Markers PDF".



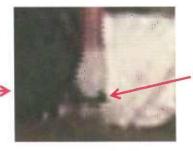
At 18:46:27.566, Officer Moody again requests for the medics.



At 18:46:32.600, Officer Moody begins to search DUENEZ.



At 18:46:41.566, Officer Moody removes the knife sheath from DUENEZ's belt.



**Knife Sheath** 



At 18:46:43.366, Moody removes a crack pipe from DUENEZ's right front pocket.

At 18:46:50.200, Moody places the knife sheath and the crack pipe on the grass.



Crack Pipe

**Knife Sheath** 

Of note: at 18:48:56.333, Officer Moody steps over the crack pipe, kicking it to a new position approximately one foot away. It is moved again, but very slightly, when DUENEZ is treated by the medical crew. The crack pipe is then photographed in its resting position in the crime scene as Item #13.

At 18:49:45.333, one of the emergency medical technicians kicks the knife sheath as he steps over it. The knife sheath is moved approximately one foot. The knife sheath is then photographed in its resting position in the crime scene as Item #14.



At 18:48:03.000 and at 18:48:06.000, Moody asks for a knife in order cut off DUENEZ's shirt.

At 18:48:09.233, an officer approaches Moody and provides him with a knife.

Moody is primarily left alone with DUENEZ for approximately three and a half minutes. During most of this time, Moody is seen cutting DUENEZ's shirt off with a knife.

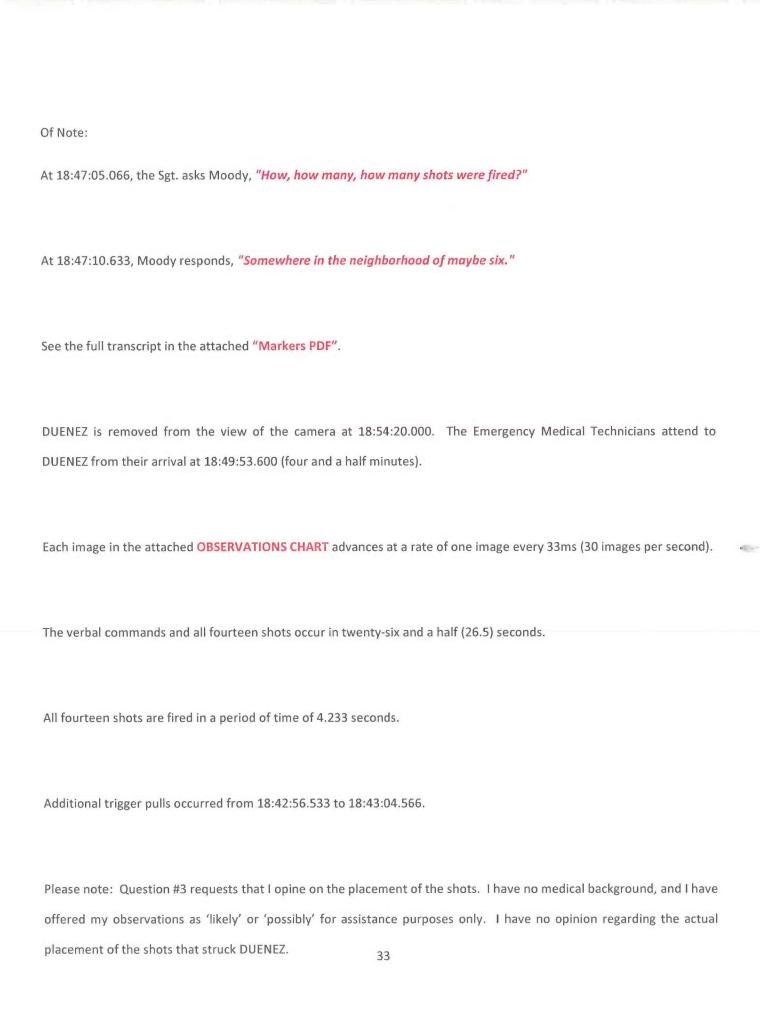


At 18:49:53.600 Emergency Medical Technicians arrive and take over care of DUENEZ. At this time, Moody has just finished cutting off DUENEZ shirt.

Moody then places the knife on the Mazda.



At 18:52:59.700, the officer who provided the knife to Officer Moody recovers his knife. No one else touches the knife, and it remains in the same position on the Mazda.



## **Opinion**

Answers to the specific questions asked by Mr. Ott have been detailed thoroughly in this report, and are summarized on pages three through seven.

However, the video cannot conclusively assist with the primary question: Question #7: How did knife get into bed of truck?

The video refresh rate provides one image every thirty-three milliseconds, or thirty images per second. Objects as small and as fast-moving bullet casings are sometimes detectible in the video images. I would normally expect that if the knife that was recovered from the bed of the truck were the same knife that is clearly seen in DUENEZ's right hand at 18:42:51.066, its movement from his hand to the back of the truck would be easily detectible. There are no clear images showing the knife moving from DUENEZ's hand to the truck. It is important, however, not to put too much weight on the lack of images of knife movement as a determining factor of whether the knife found in the truck is the knife held by DUENEZ. There are a number of possible reasons why, if it is the same knife, that the video could not clearly detect its movements. The most likely explanation for lack of evidence of motion is due to speed. If the knife is moving very fast, its movement would be blurred, as are many of the faster moving shell casings. In fact, the shell casings become easiest to detect when they are some distance from the gun, and their trajectory is slowing. When they are first ejected from the pistol, they are not visible because of their speed. Also, the shell casings are moving diagonally across the screen. If the knife moved from DUENEZ's hand to the truck bed, it would be moving toward the camera, and would therefore be less detectable.

Having carefully examined the images of DUENEZ clearly holding a long pointed object, described as a knife in this

report, the only moments when the knife could have moved from DUENEZ's hand to the truck would be at the

moment of Shot #3. As outlined in Possible Knife Movement.pdf, attached, it is possible that the knife could have

been thrown by DUENEZ (as an involuntary motion) as he quickly jerked his right arm toward his body after being

shot in the forearm.

As outlined in this report, I have formed the opinion that when DUENEZ exited the Mazda he was carrying an object

in his right hand that was consistent with a knife. The blade of the object is consistent with the blade of the Known

knife. DUENEZ was holding the knife in an upward position from his hand. As stated, Officer Moody was in a much

better position to see the knife than was the camera. Officer Moody's vision would not have been affected by the

same frailties of image compression and minimal image refresh rate that the camera images suffered.

Due to the lack of resolution in the images, and to the refresh rate, I am unable to offer an opinion as to whether or

not the knife recovered from the bed of the Mazda is the same knife observed in DUENEZ's right hand. However, as

stated above, the Known knife (Item #14) could be the knife being held by DUENEZ.

Due to the lack of resolution in the images, I am unable to precisely measure the blade of the knife being held by

DUENEZ, and I therefore cannot compare its length with the length of the knife sheath that was recovered from

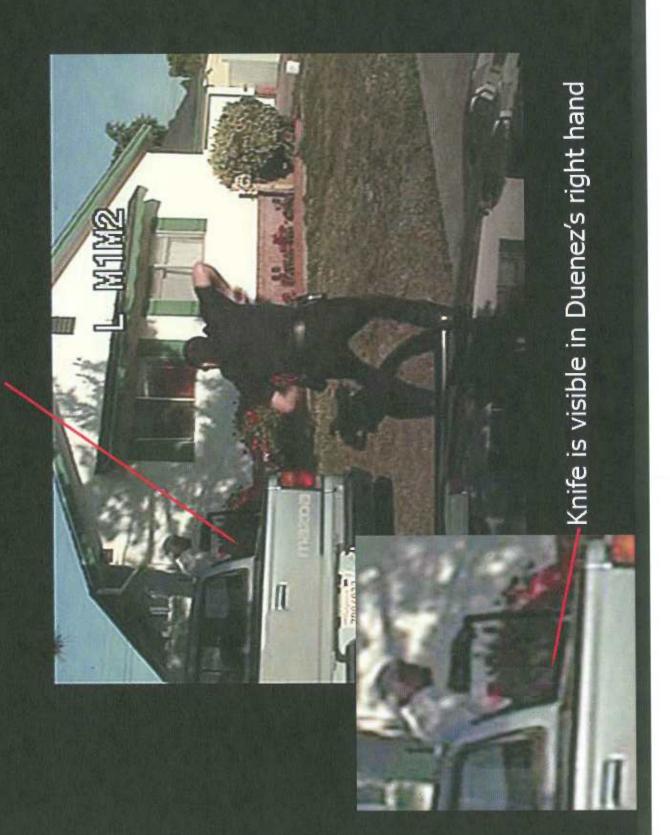
DUENEZ belt by Officer Moody.

Dated this 26th day of November, 2012 in Spokane, Washington.

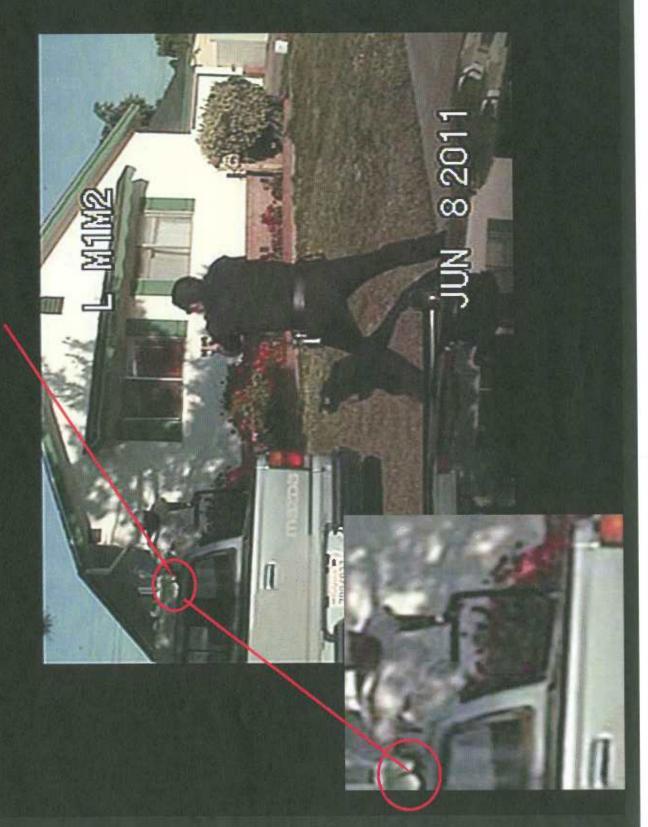
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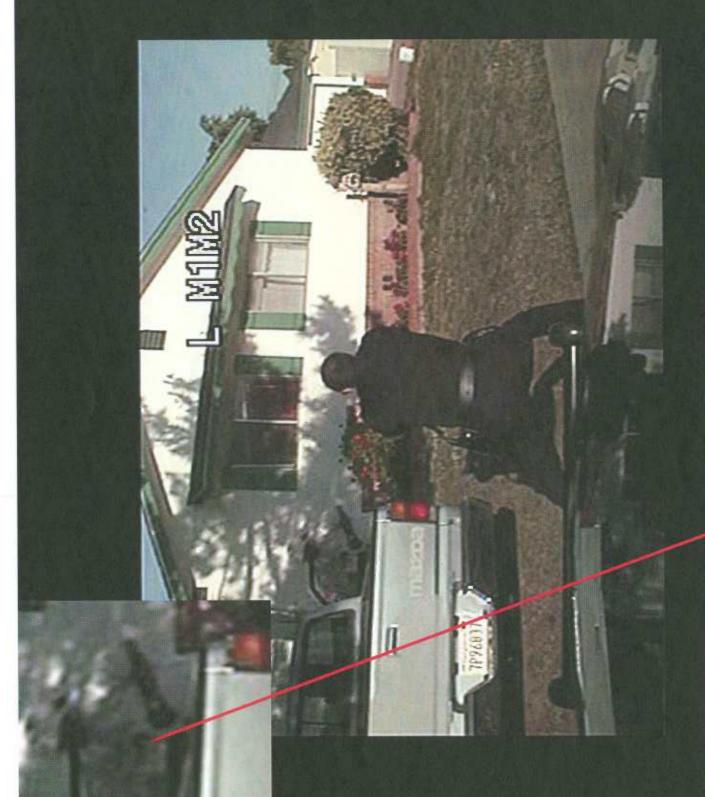
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Duenez right hand becomes visible to the camera

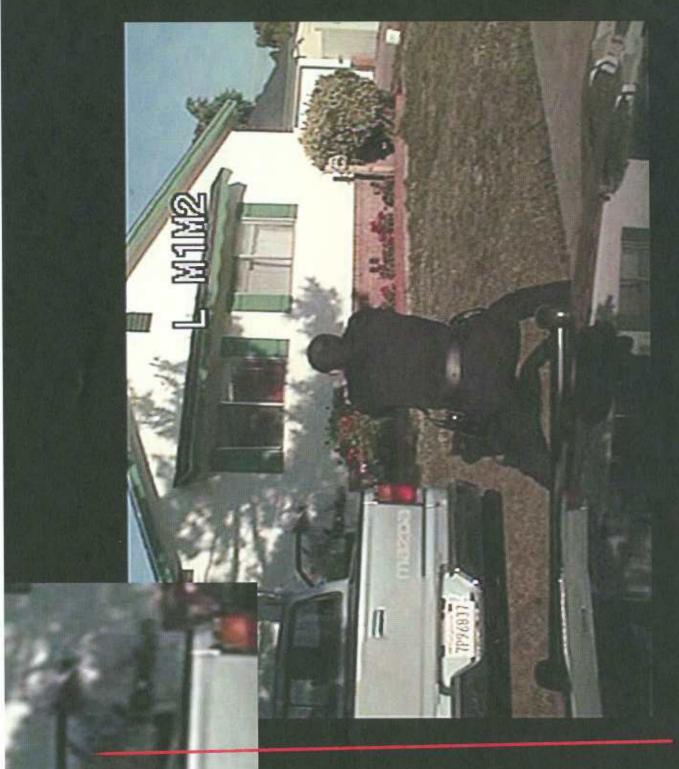


Knife visible in Duenez right hand

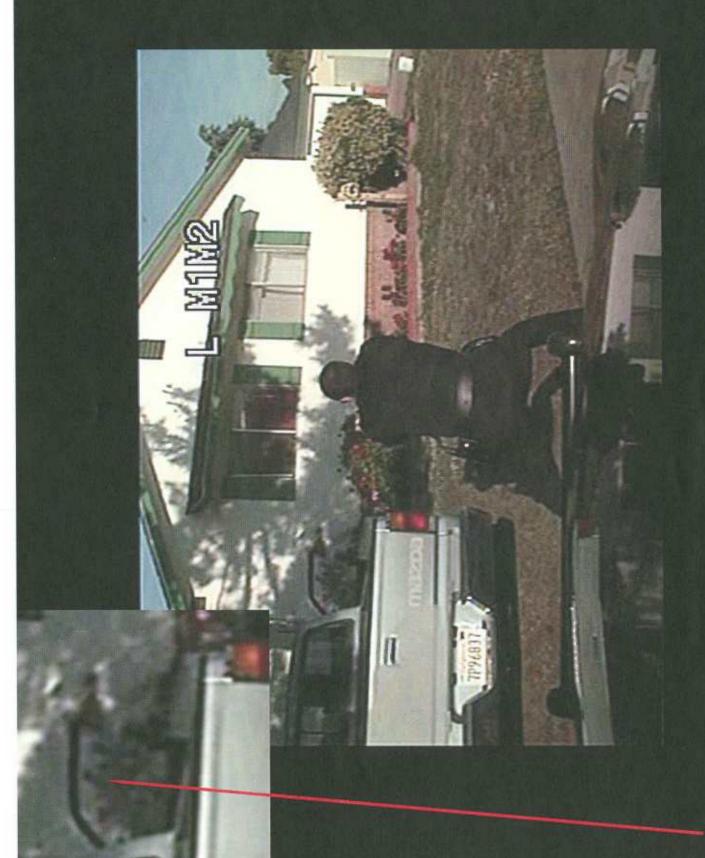




DUENEZ right hand in motion to his chest



Object shaped consistent with knife



Object is falling with glass (possibly moving toward camera)