# PRIMEAU FORENSICS

## **Curriculum Vitae**

## Edward John Primeau, CCI, CFC

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www.primeauforensics.com

www.audioforensicexpert.com

www.videoforensicexpert.com

©**2014** *Revised October of 2014*  In 1979, I began my career as an audio engineer and was trained to record and edit spoken word recordings such as training tapes and audio books. I remained a dialog editor using razor blade editing as the only form of audio editing available back then. I used my audio perception (not visual perception, which is how audio editing is executed today) to match voice tone and levels, as well as create smooth content and flow for these products.

While employed at Ambience Recordings, I conducted my first audio forensic examination for the FBI in Detroit (case information available on the audioforensicexpert.com blog). In 1987, I left Ambience and began Primeau Productions.

I authored the books "The Art of Production" and 'That's Not My Voice!' I earned a merit award in 1993 from the Michigan chapter of The National Academy of Television Arts and Sciences for sound restoration on the NBC show "Peter and the Wolf."

I attended the University of Detroit from 1979 to 1985 with my major in communication studies and a minor in criminal justice (transcript available upon request). While at the University, I was a probation officer for the 53<sup>rd</sup> district court in Troy, Michigan under Judge Drury.

Since then, I have completed hundreds of successful audio and video forensic investigations, testified in several courts located across the United States and worked on various International cases. I have authored several articles that have been published (available upon request) and write blogs regularly. I also blog for Adobe, the software company.

I am a member of AES, ACFEI, and IAI. I am a Certified Criminal Investigator (CCI) and a Certified Forensic Consultant (CFC), as well as a member of the **American Board of Recorded Evidence** with the American College of Forensic Examiners International.

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I help courts and law enforcement agencies understand the science and technology of audio and video forensics. Voice identification is one of my most sought after services at Primeau Forensics followed by audio and video authentication, clarification/enhancement.

With regard to voice identification, it is scientifically known that we all have distinctive characteristics to our voice and words as well as how we pronounce those words. Each of us has a unique nasal cavity, larynx, teeth, tongue, and mouth. These distinct characteristics all come together and create a unique sounding voice that can be examined and analyzed to determine if the voices in question are from the same person.

My forensic philosophy is that authentication and clarification of audio/video media combines art as well as science. The methods that I use require attention to detail and scientific principles, complemented by an appreciation for clarity and aesthetics. My techniques are derived from both a formal education and the application of skills gained by working in many forensics situations.

I also look at forensics as an experimental science because there are no two cases that are the same. As a forensic expert I conduct experiments that include variables and that measure how each outcome pertains to the scientific aspect of the case at hand. My forensic processes that I use to arrive at my opinions are accepted in the scientific community and are structured and methodological. I always take scrupulous (work product) notes that are a part of each case.

To present a few milestones: I have provided audio restoration of informant wire recordings that served as key evidence in convictions involving two Detroit area judges. In the course of my career, I have completed dozens of forensics-focused assignments for attorneys throughout the United States.

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- 1979-1985: University of Detroit (Communications major, Criminal Justice minor)
- **1978-1981:** Probation Officer, 53<sup>rd</sup> District Court, Troy, Michigan
- 1980-1988: Ambience Recording Studio, Audio Engineer/National Sales
  Manager
- 1984-present: Primeau Productions, LLC President; focusing on marketing videos for professional speakers, audio/video editing, convention/conference production
- **1996 present:** TASA audio and video identification/restoration/authentication expert
- 1998-1999: National Speakers Association of Michigan, President
- 2006: Member of International Association for Identification
- 2005: Member Audio Engineering Society
- 2006: Member American College of Forensic Examiners
- 2010: April 20, 2010 approved by ACFEI as a Registered Investigator (RI)
- **2012:** Earned certified forensic consultant designation (CFC)
- **2013:** Completed the Forensic Authentication of Digital Audio Course at the National Center of Media Forensics in September of 2013
- 2014: Received Diplomate Status with ACFEI
- 2014: Attended and took classes at the 99<sup>th</sup> IAI International Educational Conference
- **2014:** Completed Dorothy Stout's Workshop: Digital Video Processing Techniques in September of 2014
- Certified Digital Video Expert at Pelco Global Training Institute
- Member of The American Society of Information
- Established expert with acetate and vinyl restoration Primeau Productions, LLC
- Hundreds of spoken-word recordings analyzed, clarified and/or restored using computer technology and visual examination of audio and videotape to establish critical listening skills
- Experienced in court testimony and pre-trial preparation of counsel

- Published author of audio and video forensics articles (Homeland Security magazine, American College of Forensic Examiners International, National Speakers Association)
- Author of the books "The Art of Production" and "That's Not My Voice!"
- Resource Audio and Video Forensics for Dateline NBC.
- Served as Voice ID expert for the Wall Street Journal
- Worked with the Florida State Prosecutions Office in State V. George Zimmerman
- Manager and moderator of the Digital Audio and Video Forensics Group on LinkedIn

## **AUDIO FORENSIC SERVICES**

Background noise removal Sound clarification/enhancement Voice identification Audio recording authentication Audio file format conversion Courtroom Testimony

## VIDEO FORENSIC SERVICES

Video authentication and restoration Image clarification/enhancement Digital and analog video analysis Courtroom Testimony

Any and all formats of audio and video accepted

Retainer agreement available on request; travel expenses will be quoted in advance excluding meal expenses and flat rate time for travel instead of hourly.

## The following is a partial list of cases I have worked on and/or testified in.

#### US Cases:

DiGiacomo & Baffa
 16<sup>th</sup> Floor
 1601 Market Street
 Philadelphia, PA 19103

#### Defense

Audio Authentication

#### Fitzgerald V. Skobeloff

I represented the plaintiff with counsel DiGiacomo in a medical malpractice suit against a doctor (Skobeloff) and hospital. The case involved a phone answering machine tape erasure – accidentally erased by court reporter. I confirmed the erasure and explained the information could not be recovered. I testified in this case in Delaware County, Pennsylvania.

 Attorney Camille Conway Pugh, Jones & Johnson 180 N. LaSalle St. Suite 2910 Chicago, IL 60601

#### Prosecution

#### Video Authentication

#### E2 Disaster

#### People ex rel. City of Chicago V. Le Mirage, INC.

This was the well-publicized Chicago nightclub stampede disaster that made national news. I was retained by the city attorney of Chicago to examine a nightclub's digital surveillance system. The system had been tampered with and the original footage was not available to examine. Several people were trampled while trying to evacuate a nightclub on Michigan Avenue. The surveillance system incorporated a digital video recorder. One of the owners was behind the accidental erasure of all video evidence.

 Attorney Patrick Coolahan Coolahan, DeMeo & Beard, P.C. 1900 Spring Rd., Suite 508 Oak Brook, IL 60523

#### Defense

#### **Video Clarification**

#### People of the State of Illinois V. Michael Hay

I represented the defendant as a video expert. A CCTV video tape of a (jewelry store) robbery was provided and I captured some frames from the surveillance video and clarified them. I then made several prints of the captured video frames and sent the prints and video files (on a CD). I testified to my findings in the DuPage County Circuit Courthouse, 1900 Spring Rd., Oak Brook, IL 60523.

 Attorney Mark Bendure Bendure & Thomas
 577 E. Larned, Suite 210 Detroit, MI 48226

## Defense Audio Authentication

#### The Judicial Tenure Commission V. Ferrara

I represented the defendant, Judge Ferrara, with Counsel Mark Bendure. My responsibilities included voice identification and examining the tapes for tampering. The Executive Director, Allen Sobel, represented the JTC. I testified in this case here in Detroit in front of the Judicial Tenure Commission.

Attorney Margolis Edelstein
 1500 Grant Building
 Pittsburgh, PA 15219-2203
 (412) 281-4256

## Prosecution Video Authentication

#### David Brinker V. Municipality of Marysville

I represented the Municipality of Marysville to analyze general police department tapes for authenticity and possible alteration. I was hired by the police department in Marysville, Pennsylvania. I testified via telephone.

6. Attorney Charles McKinney Columbus, Ohio

## Defense Audio Authentication

#### People of Ohio V. Wendell Jackson

This is a criminal case I testified in where a CI made audio cassette recordings of a police officer during business transactions. He tried to entrap the officer with receiving stolen merchandise. I examined the cassette recordings and testified in the Federal District Court of the Southern District of Ohio, Eastern Division Courthouse in Columbus, Ohio for this criminal case and determined that they could not be authenticated. We won the case which went on to a civil case I also testified in.

Ron Snyder
 Columbus, Ohio
 614-461-4455

## Plaintiff Audio Authentication

State of Ohio V. Wendell Jackson

This is the civil case as described above held in City Hall in Columbus Ohio. I testified on behalf of Wendell Jackson, the plaintiff on March 29<sup>th</sup> 2006, in the US Court of Appeals for the District of Columbia Circuit.

Attorney Steven Potter
 2701 Cambridge Court, #223
 Auburn Hills, Michigan 48326
 248-377-1700

## Defense Video Reconstruction

#### Haddad V. Indiana Pacers

I was the video expert for the defense, the Indiana Pacers, during this one week trial, took the stand once to explain the video evidence I had assembled from all network sources, including ESPN, Fox Midwest and WB20. I testified in The United States Federal District Court, Eastern Division of Michigan. The jury returned a not guilty verdict on behalf of the Pacers.

 Attorney Garry Weiss Merrillville, Indiana 219-736-5297

> Defense Video Authentication

State of Indiana V. Wesley English

#### Judge Thomas Stefandaker, Jr.

This is a criminal case in the **Circuit Court of Lake County**, **Illinois** in front of Judge Thomas Stefandaker Jr. that Involving analog video tape. I was retained by the defense to prove to the court that video evidence submitted was not reliable as video evidence and should not be used in the trial. **I testified** on behalf of the defendant Wesley English.

 JKD Diamond Brokers Attorney Dianne Marx Dayton, Ohio 937-222-2500

## Defense Video Authentication

#### U.S. Gold and Diamonds V. JKD Diamond Brokers

This case was in the Federal Court in Dayton Ohio on November 3<sup>rd</sup>, 2008. It involves my examination of an Integral Technologies digital video CCTV system examination and authentication of video evidence and the operational characteristics of the system itself. Although I did not testify at trial, I worked closely with the attorneys to have the opposing expert removed from the case and helped write numerous interrogatories that eventually proved the evidence was altered.

The Software was version 4.0. Integral Technologies was sold to Pelco in December of 2007 and is now known as Pelco; Global Leaders in Security Systems.

On November 24<sup>th</sup> 2008 the jury awarded my client a total of 6.9 million dollars in loss and compensatory damages as well as legal fees.

A letter from my client reads:

#### Ed,

Just writing to let you know the jury came back with a very favorable verdict: \$8,400 which represents the actual cost of the diamond, plus the cost of shipping (\$400); \$1.7 million representing the wholesale price of the diamond and \$2.3 million which represents the retail value. We are entitled to treble damages on the \$2.3 million. We couldn't have done it without you! We, obviously, are very, very pleased, as is Mr. Stafford. Thank you again for all your help.

#### Patty

Complete article appears in the Dayton Business Journal November 25<sup>th</sup> 2008. Link to article: <u>http://dayton.bizjournals.com/dayton/stories/2008/11/24/daily21.html</u>

11. Attorney Jerry McHenry Columbus, Ohio614-466-5394Ohio Public Defenders Office

## Defense Video Authentication

State of Ohio V. James McClellan

## I testified in this video case held in the Allen County Court of Common Pleas and helped the court understand the details about a poor

quality police car video tape of a traffic stop.

12. Jeff Updyke

Attorney Patrick Dunn 2701 Cambridge Court, #223 Auburn Hills, Michigan 48326 248-377-1700

#### Defense

**Voice Identification** 

#### People V. Jeff Updyke

I testified in the 37<sup>th</sup> District Court of Warren, Michigan on July 23, 2009 in a criminal matter where Jeff Updyke was accused of impersonating a police officer. The perpetrator called and left a voice mail message claiming the family's daughter was dead behind a shopping center and had overdosed on heroin. This was a voice identification case which included evidence recording and exemplar created by me here in our Rochester Hills location.

13. William Poss

Attorney R. Parker McFarland Cumming, Georgia 770-889-2522

## Defense Audio Authentication

#### State V. Poss

I testified in the Superior Court of Forsyth County in Georgia about an original digital audio recording that had been intentionally deleted. A copy of the audio was admitted into evidence and I testified why that was not an actual original.

14. Louis MouxCo-council: Thomas Sullivan646-247-0346

Renee Hill Law Offices of Murray Richmond Bronx, New York 718-892-8588

#### Defense

Video Clarification and Video Authentication

#### People V. Louis Moux

I testified in the Bronx Supreme Criminal Court in New York about a digital video file being used as evidence that was not an original. It included anomalies and could not be authenticated.

Mack Brooks
 Attorney Mary Hickey
 313-331-8262

#### Defense

#### Video Authentication

#### People V. Mack Brooks

I testified in the Hancock County Common Pleas Court in Ohio about a CCTV police car video being used in the trial of Mack Brooks.

16. Attorney Maureen Williams
829 Commerce Building
416 Main Street
Peoria, IL 61602
309-999-1177

## Defense Video Authentication

#### People V. Awad Rasras

I testified in the Henry County Court in Illinois for an appeal to reconsider a previous decision. A digital video recording was used to convict in the original trial. My report convinced the judge to allow me to examine the video and hear my findings.

17. Chuck Upchurch Rochester Hills, Michigan

> Defense Video Clarification

#### People V. Chuck Upchurch

This is a case where the probable cause was not clear as submitted by an Oxford, Michigan police officer. He stopped Mr. Upchurch because of the wrong color license plate tab. I clarified the police car video showing the tab was the correct color, eliminating probable cause and winning the case for the defense. I testified in the 53-2 District Court in Rochester Hills, Michigan in front of Judge Julie Nicholson.

 Detective Dorothy Peterson Sparks Police Department
 1701 E. Prater Way
 Sparks, Nevada 89434

## Prosecution Video and Audio Clarification

I assisted Detective Peterson and the Sparks Police Department with both the audio restoration and transcription of a seven hour interrogation video. I did not testify in this case, however, I was on the witness list for the prosecution.

A portion of an email from Detective Peterson after the trial:

'I wanted to thank you once again for all your hard work, dedication, and your amazing assistance in cleaning up the noise in the interview recording. I cannot begin to tell you how helpful you were and how helpful the DVD was in this case. But no matter how thankful I am, I am sure that if my 2 ½ year victim's mommy had the information regarding the work that you put in and the time you dedicated, she would be even more grateful. I feel blessed to have been able to work with you even if it was over a very long distance.'

19. Detective Boulet West Bloomfield Township Police

## Prosecution Audio Enhancement and Sound Identification

#### The People of the State of MI V. Sandra Layne

I worked for the West Bloomfield PD to identify and determine the number of shots that were fired during a homicide.

20. Attorney Shannon Smith
The Law Office of Shannon M. Smith, PC
122 Concord Road, Suite 102
Bloomfield Hills, MI 48304
248-636-2595

## Defense Digital Video Authentication

#### People V. Mood

Homeland Security conducted the investigation for this case and were using the images for conviction. I testified in the Oakland County Circuit Court in the state of Michigan that the images could not be compared due to the resolution and format.

21. Attorney Lisa Scolari

Law Office of Lisa Scolari 20 Vesey Street, Suite 400 New York, NY 10007

#### Defense Video Clarification

## United States of America V. Anthony Boykin US District Judge Colleen McMahon

I was able to restore and clarify images from a video to assist in this case for which I testified in the US Federal District Court in the Southern District of New York.

Attorney Dan Sussman
 1017 N. Calvert St.
 Baltimore, MD 21202

#### Defense

**Audio Authentication** 

#### State of Maryland V. Richard Heymann

I testified in Baltimore County Circuit Court in Maryland to demonstrate to the Court that a 911 audio recording had one gunshot instead of two.

23. Eric Litwin Attorney Nenye Uche 661 W. Lake Street Chicago, IL 10075

Attorney Tamara Walker 1016 W. Jackson, Suit I Chicago, IL

## Defense Video Authentication

**People V. Eric Litwin** 

I testified, twice, in the LaSalle County 13<sup>th</sup> Judicial Circuit Court in Illinois in front of Judge Ryan on a motion to dismiss hearings and a third time at trial for this video authentication case. I authenticated video from both the Utica Police Department and the Illinois Police Department.

A review from Attorney Nenye Uche reads:

"Ed Primeau is the best at what he does! As a trail attorney, I depend on experts to educate me in the relevant field for which they are hired. My focus has always been on finding an expert who not only simplifies the subject area, but is also creative in approach. I recently had a case in which I needed an audio and video forensic expert. I found Ed. Ed is a genius and was absolutely amazing in front of the jury."

Attorney Ilyas Rona
 Millighan Coughlin
 Seven Liberty Square – 2<sup>nd</sup> Floor
 Boston, MA 02109

Civil Case – Plaintiff Digital video enhancement

Jorge Correia and Cathleen Runnals V. The town of Framingham, Scott Brown, Brian Blue, Dinis Avila and Michael Stratton

I testified in the United States Federal District Court of **Massachusetts** on digital video enhancement from a surveillance video that had recorded a confrontation taking place.

25. Shirley Bolton
Attorney Ken Ravenell
1 S. Street, 23<sup>rd</sup> Floor
Baltimore, MD 21202

Attorney Stanley Reed 3 Bethesda Metro Center Bethesda, MD 20814

Criminal Case - Defense Video Authentication

State of Maryland V. Shirley Bolton

I testified on surveillance video for this case at the Ellicott City Court House in Maryland. I recovered video evidence from a home surveillance system in order to enhance and identify a series of events that took place. After the evidence was recovered, I assisted the defendant and the court with the ability to view this video during trial and the sentencing hearing. Attorney L. Jay Miller
 Leatherman & Miller
 110 S. Main Street
 Goshen, IN 46526

Criminal Case – Defense Video Authentication

#### State V. Hunyh

I testified in the Elkhart Superior Court in Elkhart, Indiana on the authentication of video and testified about my scientific findings.

 Olasumbo Akinsola Attorney Blake Horowitz
 39 S. LaSalle, Suite 1515 Chicago, IL 60603

> Criminal Case – Defense Reverse Projection

Ms. Akinsola was accused of credit card fraud. I reported on my reverse projection examination of the CCTV surveillance footage which purportedly featured Ms. Akinsola. The CCTV surveillance footage did not show Ms. Akinsola and she was found not guilty of the crime.

#### International Cases:

28. Trond Sefatsson
Rattskonsulterna AB
Box 55509
102 03
Sweden

I was asked to examine still images from a bank robbery committed in Nassjo, Sweden in 2002. I was able to determine the number of people in the images as well as their height.

29. Lionel Tavera Lieu-dit Curtanile 20231 Venaco Corsica, France

> I conducted voice identification for this case from a DVD. I was able to determine whether or not Mr. Tavera's voice was part of a song featured in the film.

 Indian Forensic Lab Delhi, India

I was asked to conduct an investigation in regards to an audio recording. I was able to discover if there were any edits or anomalies in the recording.

31. Lila Pigliafiori Mount Isa, Qld Australia M: 0439-164-713

I clarified and enlarged images from a surveillance video that showed an incident with an individual being struck by a car door. I was able to prove that the individual did not suffer the amount of physical injuries they claimed to from the door, but instead, that the injuries occurred after the incident when the individual instigated a fight.

An email from my client reads:

Hi Ed and Mike,

Just thought you may like to know how the court matter turned out. We won! All charges dismissed. No conviction and all thanks to the video.

Thank you.

Regards, Lila Pigliafiori

# The following is a list of depositions that I have given in the last twelve months:

#### 1. Deposition for Ryan Walker, Geico:

Jones V Butts (1/30/14)

2. Deposition for George Kirklin - Kirklin, Thompson & Pope LLP Nat'l.:

Railroad Passenger Corp. V John Davis Trucking (5/16/14)

#### 3. Deposition for Shawn Warner:

Jones V. Union Pacific (8/6/14)

## **Publications:**

Contributed to an article as voice ID expert for the Wall Street Journal:

#### Article:

## THE WALL STREET JOURNAL.

WSJ.com

#### Yup, It's Him: A Pynchon Mystery Solved

Last Tuesday, long-suffering fans of the reclusive writer Thomas Pynchon received a double gift. Pynchon's latest book, "Inherent Vice," a stoned-out detective story set in early-'70s L.A., was released by Penguin Press (read the <u>Journal's review</u>). And to promote it, the publisher put out a <u>cool video trailer</u> featuring a narrator whose slow, lazy cadence sounds suspiciously like that of Pynchon's, as evidenced by a guest appearance on "<u>The Simpsons</u>" and this clip from what appears to be a <u>German TV spot</u>. Inquiries by <u>GalleyCat</u> and others as to whether Pynchon is the guy channeling the novel's main character, beach bum private eye Doc Sportello, have been met with "no comment" from Penguin Press and the video's producers, Meerkat Media. And, of course, the man himself is mum (Would Pynchon fans expect anything else?).

In an effort to solve the mystery, Speakeasy did a little sleuthing and called Ed Primeau, a Michigan-based sound engineer and voice identification

expert. Like handwriting analysis, voice identification is an inexact science, often used by law enforcement to rule out a suspect rather than to provide a 100% clear-cut ID. Still, people have unique vocal timbres and deliveries, especially Pynchon, who sounds like actor John Astin (i.e. Gomez Addams from the old TV show), mixed with a Midwest corn farmer, with a dollop of aging stoner.

So is it possible to rule out the man in the "Inherent Vice" trailer as being the same guy in the Simpsons episode and German TV clip? Not at all, according to Primeau. In fact, he says, based on a preliminary analysis the speech pattern and inflection is "virtually identical" in all three clips. "It's a very unique style of delivery," Primeau says. "It's very up-and-down. He'll hit these accented spots every few words. You know the TV show "Dragnet," how Joe Friday talked? It's the opposite of that."

We should point out Primeau is an unbiased witness, having never read Pynchon ("I don't know this guy but it looks like he has some history as an author," he said). Nevertheless, if he hasn't been taken by the man's work, Primeau is intrigued by his voice, which he describes as "a tobacco-driven soft rasp."

Primeau's conclusion: "Beyond a reasonable degree of professional certainty, I believe these voices were delivered by the same person." Confronted with Primeau's findings, Tracy Locke, a publicist at Penguin, came clean and admitted, "It is, in fact, Thomas Pynchon doing the narration."

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Letter from author of article:

Hi Ed,

Thanks again for your help with the story. Your critical ear was right; it was Pynchon. When I confronted the publisher with your findings they admitted it, so it was a great scoop for the Journal. Here's a link to the story.

#### Steven Krutz

#### Article:

#### Peter Goodspeed: CCTV puts eyes on London rioters

Peter Goodspeed Aug 9, 2011

As Britons woke to scenes of devastation from riot-hit cities across the country Tuesday, they were also bombarded with digital security camera images of some of the looters who caused the havoc.

Scotland Yard wasted no time in trolling through film from a plethora of closedcircuit television (CCTV) security cameras to retrieve shots of the thugs and arsonists who caused the mayhem.

The police are aided by the fact Britain, perhaps more than any other country in Europe, is saturated with hundreds of thousands of the cameras that monitor building lobbies, stores and streets for security, watch for traffic jams and bill motorists who drive into London's city centre in an attempt to reduce traffic congestion.

Every day, the average Briton is filmed many times — on trains and buses, in schools, hospitals and department stores, sports fields, streets and shops.

The looters and arsonists who have ravaged a half-dozen cities and boroughs are on the same cameras.

"It's incredible, they have cameras everywhere in London," said Edward Primeau, an audio-video forensic expert from Detroit.

"It's a huge advantage to law enforcement. Everything is digital and everything is done with a sophisticated system. The infrastructure and computers that record and sort information are mind-blowing.

"They can sift through 30 images a second and if they are advancing from image to image, all they have to do is hit the export button to distribute an image [of a suspect] from that surveillance footage."

On Tuesday, Scotland Yard released 15 photographs of riot suspects, posting the images on the Internet and asking citizens "to identify people that were engaged in criminality."

"We will be coming to arrest you over the coming days — if necessary, weeks and months," promised Tim Godwin, the acting police commissioner.

"Those who have or intend to go out and commit violent criminal acts should be warned. We will have photographs and evidence that we will use to identify you and bring you to justice," added police Commander Simon Foy.

While rioters are using BlackBerries and smartphones to coordinate their looting sprees, police are also relying on sophisticated new technology.

Many looters have tried to disguise themselves by wearing bandanas, masks or hoods. But modern computer recognition software, combined with London's plethora of surveillance cameras, can still home in on them.

Detectives scouring thousands of hours of CCTV video can use detailed digital images, isolated to individual pixels, to identify a suspect's face or a special feature of their clothing. Then, they let high-speed computers search for that image on other surveillance footage.

It is possible to track a suspect's movements before and after an offence. That can lead police to uncover images where people they are following may have removed their disguises and even identify where they live.

"The recognition software is out there," said Mr. Primeau. "I know the FBI is using it here in the United States and I know the technology is available."

Similar evidence from closed-circuit surveillance cameras helped British police arrest more than 180 people who vandalized buildings in downtown London during a recent student protest over increased tuition fees. The technology enabled counter-terrorism officials to track the movements of terrorists who carried out bombing attacks on the capital's bus and subway system in July, 2005.

Police also could be turning to criminals themselves to make arrests.

Some looters have thoughtfully posted their own photographs and videos of the riots on Internet sites, such as Twitter, Facebook and YouTube, sometimes even posing with trophy items they stole.

#### National Post

pgoodspeed@nationalpost.com

#### Article:

## Ed Primeau authenticates never before heard Elvis Presley song for WWMT TV Kalamazoo, Michigan

MICHIGAN (NEWSCHANNEL 3)

News channel 3's I-Team has uncovered a recording that could change music history.

Elvis fans have been living in the heartbreak hotel since his death, wanting to hear anything new from the king.

Now, a new, never before heard recording, potentially a demo track, has surfaced that could be Elvis Presley.

This is the story of a king, and a recording of a song called 'Living to Love You.'

According to Battle Creek attorney Violet Hinton, that recording has Elvis Presley singing. She says the song comes from songwriter Jimmie Crane and producer Albert Leigh, recorded in 1976, the year before Elvis died.

There was a series of unfortunate events, Hinton says Jimmie Crane passed away, Albert Leigh had a stroke, his studio was broken into and Leigh died after a second stroke. The recording disappeared, only to be rediscovered years later, collecting dust in the attic of Albert Leigh's wife's home.

"Her house was foreclosed on," said Hinton. "She just recently gave what was left of Albert Leigh's things to her sons. They were going through it, they found all this stuff."

One of those sons lives in Battle Creek and brought the recording he believed to be Elvis to Hinton along with a table full of documents.

"All the tapes, all the contracts, all the songs written by Jimmie Crane, copyrights," said Hinton.

Hinton, a lifetime fan of Elvis, couldn't help but be 'all shook up' by the possibility of an undiscovered recording.

"He was the greatest. There's no one like Elvis Presley, never will be," said Hinton. "When I heard that, I knew that was Elvis Presley. I knew it."

Hinton says she's verified the authenticity of the documents and says they connect Elvis, Jimmie Crane and Albert Leigh to the song. Perhaps most important are shipping records, on the song line, "Living to Love You," on the artist line, "Elvis."

However, Hinton admits there's no smoking gun, no one piece of evidence that proves the recording is Elvis Presley.

Hinton brought the case to News channel 3 and we tracked down forensic audio expert Ed Primeau and noted music journalist Gary Graff to help solve the mystery.

"A complete, previously unreleased song by Elvis is a grail, maybe not a Holy Grail, but it's still a significant find," said Graff.

Primeau has done forensic audiovisual analysis work on dozens of legal cases. He says the best case scenario would be having Elvis sing the song today and matching the recording to that, but that's obviously not an option.

"So what we do is we go back to that same era, we pull a piece of music," said Primeau. "We find a similar phrasing vocally in the music and call that our exemplar. We compare that to the sample that we want to know if it is indeed Elvis or not."

The files in, and his ears ready, Primeau takes a close listen to the recording.

And then, Primeau listens, and listens and listens some more, to 'Living to Love You,' to 'What Now My Love' and 'I'll Remember You' off 'Aloha From Hawaii.'

He also analyzes the audio spectrum, watches the waveforms bounce and eventually the veteran witness from dozens of court cases, delivers his verdict.

"Putting you under oath, is this Elvis?" asked News channel 3's Mike Chesney.

"Yes," said Primeau. "It's Elvis Presley, there's no doubt in my mind."

The tonality, vibrato, phrasing and the spectrum, all a match.

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And we took it one note further, comparing the out the audio from a known Elvis song and our mystery recording to an Elvis impersonator and another performer, we used Neil Diamond. They clearly didn't match.

"There's no two Elvis Presley's on this planet," said Primeau. "We heard several nuances that were similar in the impersonator and Elvis, but at the end of the day, it's different."

"Ed Primeau is one of the leaders in his field," said Graff. "His word carries a substantial amount of weight."

It's enough weight for Graff to also believe that the recording is Elvis.

Graff says by the mid-70s, Elvis wasn't doing much recording, which makes this find even more special.

"You're really talking about one of a handful, if that many, of new songs that Elvis recorded in that time period," said Graff. "Who knows what the intent was here. Was this the beginning of a new Elvis album? Was he starting to look for material? Were there discussions about putting him back in the studio?"

"What you've discovered here is an update to an estate that has been quiet for a long time," said Primeau.

"There's going to be a lot of commercial possibilities for this," said Graff.

We want back to Hinton with the news, telling her that the forensic audio expert says the recording is in fact, Elvis.

"I knew it, I just knew it," said Hinton. "I knew the first time I heard it that it was really Elvis. I know there are impersonators, but I knew this was Elvis."

Now Hinton hopes to start the ball rolling for her clients, the family of producer Albert Leigh.

"I'm hoping this gets enough notoriety that the people I've been trying to reach, I'll be able to get through to now," said Hinton.

And Hinton hopes to eventually make it so other Elvis fans across the world can enjoy the king's 'newest' song as well.

This may only be the beginning of the journey for the recording. Graff says if the right people hear about it, they could raise ownership questions. Also, the original reel to reel may also exist, but the Leigh family doesn't have that.

News channel 3 reached out to Graceland and Sony Music Entertainment about this story, but we did not get a response.

#### Article:

'I'm the original voice of Siri'

October 8, 2013

Jessica Ravitz, CNN

**Sandy Springs, Georgia (CNN)** -- For the past two years, she's been a pocket and purse accessory to millions of Americans. She's starred alongside Samuel L. Jackson and Zooey Deschanel. She's provided weather forecasts and restaurant tips, been mocked as useless and answered absurd questions about what she's wearing.

She is Siri, Apple's voice-activated virtual "assistant" introduced to the masses with the iPhone 4S on October 4, 2011.

Behind this groundbreaking technology there is a real woman. While the eversecretive Apple has never identified her, all signs indicate that the original voice of Siri in the United States is a voiceover actor who laid down recordings for a client eight years ago. She had no idea she'd someday be speaking to more than 100 million people through a not-yet-invented phone.

Her name is Susan Bennett and she lives in suburban Atlanta.

Apple won't confirm it. But Bennett says she is Siri. Professionals who know her voice, have worked with her and represent her legally say she is Siri. And an audio-forensics expert with 30 years of experience has studied both voices and says he is "100%" certain the two are the same.

Bennett, who won't divulge her age, fell into voice work by accident in the 1970s. Today, she can be heard worldwide. She speaks up in commercials and on countless phone systems. She spells out directions from GPS devices and addresses travelers in Delta airport terminals.

Until now, it's been a career that's afforded her anonymity. But a new Apple mobile operating system, iOS 7, with new Siri voices means that Bennett's reign as the American Siri is slowly coming to an end. At the same time, tech-news site The Verge posted a video last month, "How Siri found its voice," that led some viewers to believe that Allison Dufty, the featured voiceover talent, was Siri. A horrified Dufty scrambled in response, writing on her website that she is "absolutely, positively NOT the voice of Siri," but not before some bloggers had bought into the hype.

And there sat Bennett, holding onto her secret, laughing and watching it all. For so long she'd been goaded by others, including her son and husband, to come forward. Her Siri counterparts in the UK and Australia had revealed their identities, after all.

So why not her? It was her question to wrestle with, and finally she found her answer.

"I really had to weigh the importance of it for me personally. I wasn't sure that I wanted that notoriety, and I also wasn't sure where I stood legally. And so, consequently, I was very conservative about it for a long time," she said. "And then this Verge video came out ... And it seemed like everyone was clamoring to find out who the real voice behind Siri is, and so I thought, well, you know, what the heck? This is the time."

#### The Siri surprise

The story of how Bennett became this iconic voice began in 2005. ScanSoft, a software company, was looking for a voice for a new project. It reached out to GM Voices, a suburban Atlanta company that had established a niche recording voices for automated voice technologies. Bennett, a trusted talent who had done lots of work with GM Voices, was one of the options presented. ScanSoft liked what it heard, and in June 2005 Bennett signed a contract offering her voice for recordings that would be used in a database to construct speech.

For four hours a day, every day, in July 2005, Bennett holed up in her home recording booth. Hour after hour, she read nonsensical phrases and sentences so that the "ubergeeks" -- as she affectionately calls them; they leave her awestruck -- could work their magic by pulling out vowels, consonants, syllables and diphthongs, and playing with her pitch and speed.

These snippets were then synthesized in a process called concatenation that builds words, sentences, paragraphs. And that is how voices like hers find their way into GPS and telephone systems.

"There are some people that just can read hour upon hour upon hour, and it's not a problem. For me, I get extremely bored ... So I just take breaks. That's one of the reasons why Siri might sometimes sound like she has a bit of an attitude," Bennett said with a laugh. "Those sounds might have been recorded the last 15 minutes of those four hours."

But Bennett never knew exactly how her voice would be used. She assumed it would be employed in company phone systems, but beyond that didn't think much about it. She was paid by the hour -- she won't say how much -- and moved on to the next gig.

The surprise came in October 2011 after Apple released its iPhone 4S, the first to feature Siri. Bennett didn't have the phone herself, but people who knew her voice did.

"A colleague e-mailed me [about Siri] and said, 'Hey, we've been playing around with this new Apple phone. Isn't this you?"

Bennett went to her computer, pulled up Apple's site and listened to video clips announcing Siri. The voice was unmistakably hers. "Oh, I knew," she said. "It's obviously me. It's my voice."

#### Seeking proof

It certainly does sound like Bennett. But proving who supplied the voice of Siri isn't easy. It's not like Steve Jobs sent Bennett a thank-you note, or a certificate to hang on her wall.

There are others who vouch for her. But the tech world -- and specifically the text-to-speech, or TTS, space -- is a complicated business, one that's shrouded in secrecy and entangled in a web of nondisclosure agreements.

Bennett is not bound by such restrictions, which is why she's talking. But the industry has a vested interest in keeping their voices anonymous.

"The companies are competing to create the best-sounding and functioning systems. Their concern is driving revenues," said Marcus Graham, CEO of GM Voices. "Talking about the voice talent, from their perspective, is likely seen as a distraction."

Bennett's attorney, Steve Sidman, can't breach attorney-client privilege to share documents and contracts, but since he began representing Bennett in 2012 he's been intensely aware of her connection to Siri.

"I've engaged in substantial negotiations -- multiple, months-long negotiations -with parties along the economic food chain, so to speak, that involved her rendering services as the voice of Siri," he told CNN. "It's as simple as that."

And then there's Graham, of GM Voices, a man who has built a career around providing voiceover talent for interactive voice technologies.

Graham won't divulge details about any deals he made back in 2005. But he has worked with Bennett for 25 years, has recorded "literally millions of words with Susan" and has installed her voice with clients across the globe. He knows her voice as well as anyone, and he doesn't hesitate when asked if she and Siri are the same.

"Most female voices are kind of thin, but she's got a rich, full voice," he said. "Yes, she's the voice of Siri. ... She's definitely the voice."

#### A '100% match'

In October 2005, a few months after Bennett made those recordings, ScanSoft bought and took on the name of Nuance Communications. Nuance is the company widely accepted to have provided to Apple the technology behind Siri.

When CNN contacted Nuance to try and confirm Bennett's identity as a voice of Siri, a Nuance spokeswoman said, "As a company, we don't comment on Apple." Apple, too, declined to comment.

So CNN took the investigation one step further by hiring an audio forensics expert to compare Bennett's voice with Siri's.

Ed Primeau, of Rochester Hills, Michigan, has been doing this work for three decades. He's testified in courts, analyzed "hundreds, if not thousands" of recordings and is a member of the American Board of Recorded Evidence. He spent four hours studying our "known voice" -- in this case Siri -- with the unknown voice of Bennett.

"I believe, and I've lived this for 30 years, no two voices are the same," he said, after finishing his analysis of the Siri voice and Bennett's. "They are identical -- a 100% match."

To reach his conclusion Primeau created back-to-back comparison files, lifted and listened to consonants and reviewed deliveries. He took the hiss off the Siri sound, created in recording from a phone, and dropped it into Bennett's file.

After studying Bennett's normal speaking voice, he was about 70% certain of the match. But once he had audio of her saying the same words as Siri, he knew his work was done. Even so, he said he asked a colleague for a second opinion.

"I understand the importance of accuracy," Primeau said. "Rest assured: It's 100% Susan."

## How CNN got this story.

This isn't the sort of story I'd naturally go after. Technology is far from my beat. In fact, the first time I ever spoke to Siri was on my work phone -- the kind that's plugged into a wall jack and has a tangled cord attached to the handset.

Bennett was a voiceover artist I was interviewing for aCNN special project on the world's busiest airport -- Hartsfield-Jackson Atlanta International -- scheduled to come out next month. I was tracking down the airport's voices, and she, a voice of Delta terminals, was one of them.

In the course of our phone conversation, I asked her to rattle off some jobs she's had over the years. She gave me a quick and general rundown and then added that she's done a lot of IVR work.

"IVR?" I asked.

"Interactive voice response," she answered. "The sort of thing you hear on a company's phone system."

For reasons I can't explain -- I was still struggling to understand my first iPhone --I blurted out, "Hey, are you Siri?"

She gasped. And then I gasped.

"Oh my God," I said. "You're totally Siri, aren't you?"

What followed was a short, panicked flurry of non-denials and non-confirmations, and a promise from me that I wouldn't do or say a thing.

That was months ago. About two weeks ago, after the confusion over the Verge video, Bennett reached out to me. She was ready to speak as herself and set the record straight.

#### 'My career as a machine'

As a child, Bennett's favorite toy was a play phone-operator system, a big red block with a receiver and lines she could patch in to help imaginary callers make their connections.

Years later, while singing jingles, she was tapped to be the radio and TV voice of First National Bank's "Tillie the All-Time Teller," the first ATM machine. Though that was about 40 years ago, she can -- and does -- still break seamlessly into the high-pitched song.

"I began my career as a machine many years ago," Bennett said. "I'm sure that you hear my voice at some point every day." But the way she is heard was a surprise even to her.

Music and singing had always been a part of Bennett's life. At Brown University, she sang in a jazz band and also with another group at the Berklee School of Music. After graduating, she toured as a backup singer with Burt Bacharach and Roy Orbison. Today, she and husband Rick Hinkle -- a guitarist, composer and sound engineer -- still play in a band, mostly at private events. She fell into voiceover work by chance in the 1970s when she walked into Atlanta's Doppler Studios for a jingle job and the voiceover talent was a no-show. The studio owner looked around and said, "Susan, come over here. You don't have an accent. Go ahead and read this."

She did, and a new career path was born.

Bennett wasn't always accent-free, though. She was born in Vermont and grew up all over New England. Her voice -- dropped Rs and all -- was "SNL"-skit ready. Can she imagine Siri as a New Englander? "Neva! Neva!" A stint in upstate New York helped her lose the accent. By the time she arrived in Atlanta in 1972, with her first husband, former NHL player Curt Bennett of the Atlanta Flames, she was ready to fight off the Southern twang. She fell in love with Atlanta and, after that marriage ended, stayed.

Even though her voice can be heard everywhere, she's enjoyed being out of the spotlight.

"You have a certain anonymity which can be very advantageous," she said. "People don't judge you by how you look ... That's been kind of freeing in a lot of ways."

# 'Part of history'

Bennett works in a sound-proof recording booth in her home, a tin of lozenges at the ready. Her voice is transmitted to the world, while she -- if she so chooses -- sits in her jammies, or more likely her Zumba clothes. Auditions are done by e-mail. She can grocery shop and go unrecognized.

It's not as though her natural speaking voice, heard out of context in the produce aisle, sparks reactions.

So the idea of coming out as the voice of Siri was one she pushed aside. It probably wouldn't have even occurred to her if not for the goading of others, including her 36-year-old son -- whom she, and he, jokingly refers to as "Son of Siri."

"Her voice has been everywhere throughout my life. I'd call my bank while I was in college in Colorado, and it was my mom telling me I had \$4," said Cameron Bennett, a photographer in Los Angeles. He first found out she was the voice of Siri while watching an iPhone 4S commercial on TV. There, on the screen, was director Martin Scorsese talking to his mother. When Cameron bought the phone himself, she began barking at him through its GPS feature, prompting him to yell, "Mom, stop!"

"She's part of history," he said. "It was funny trying to explain to her how big it was. She uses her cell phone for 8% of what it can do."

When Bennett upgraded her phone and first talked to ... well, herself, she says she was a little horrified. It was weird, to say the least. But she was blown away, she said, to play a part in such a technological feat.

Being the voice of Siri, though, doesn't mean she's immune to the sorts of frustrations others sometimes have with the technology.

"But I never yell at her -- very bad karma," Bennett said. That said, she knows not everyone is as gracious: "Yes, I worry about how many times I get cursed every day."

Now, though, with iOS 7 she is passing the telephonic torch to a new Siri. Bennett would be lying if she said she wasn't a bit disappointed, but in her field of work she's learned to expect evolution -- and even revolution.

As technology improves, and the concatenation process becomes less robotic and more human, Bennett thinks anything will be possible.

"I really see a time when you'll probably be able to put your own voice on your phone and have your own voice talk back to you," she said. "Which I'm used to, but maybe you aren't."

## Article and Video Links for JFK Assassination/Air Force One recordings:

Article:

# JFK's last day: Rochester Hills audio expert's care, tapes reveal info, hint at more

November 10, 2013 Julie Hinds, Detroit Free Press

John F. Kennedy arrived in Dallas on Air Force One before noon on Nov. 22, 1963. Hours later, his body was being flown back to Washington, D.C., as radio communications crackled back and forth between the plane and various officials on the ground.

"The president is on board, the body is on board, and Mrs. Kennedy is on board," a voice said at one point, starkly describing the just sworn-in Lyndon Johnson and the-now dead JFK.

This month, as events, books and TV specials mark the 50th anniversary of the assassination, a new piece of evidence with a metro Detroit connection has Kennedy researchers buzzing.

It's an 88-minute audio recording of Air Force One radio transmissions that's described as the most complete version of those communications yet.

And it may indicate that a longer version with fresh revelations is out there somewhere.

The recording is described on the <u>JFKFacts.org</u> website as among the most important pieces of assassination-related evidence to surface in the past five years.

It was enhanced for sound quality and combined from two separate tapes by audio and video forensic expert Ed Primeau and his Rochester Hills-based Primeau Forensics.

Like anything new about the JFK assassination, the recording is bound to be pored over by those fascinated by what a majority of Americans consider an unsolved mystery.

Conspiracy theories still exist that cast suspicions on everyone from the Cubans and the Russians to the mob and even portions of the U.S. government.

Primeau said he believes "100%" that there was editing done to the two tapes that were used in the 88-minute version. And that's bound to raise the sort of questions that keep the search for answers alive.

#### **Expert witness**

Kennedy's death is a 50-year-old case where almost anything can be viewed different ways by different people. But Primeau's expertise is driven by fulfilling the assignment, not furthering an agenda.

"I work both sides," he said of his past experience with both prosecutors and defense attorneys.

Primeau, 55, grew up in Detroit and Troy originally wanting to be a DJ. Instead, he built a career behind the scenes in audio and video production and founded Primeau Productions in 1984, which lists Bob Seger and Billy Sims Barbecue among its past clients.

In the mid-1990s, Primeau started focusing on the growing field of audio and video forensics. He has been an expert witness for criminal and civil cases across the country. In 2012, he was asked by the Orlando Sentinel to analyze the desperate voice overheard in the 911 call in the Trayvon Martin case, a task that led to appearances on CNN and MSNBC and to his being named as a potential witness by the prosecution.

Primeau's conclusion for the Sentinel? It was the 17-year-old Martin who lost his life that night, not the eventually acquitted George Zimmerman, who was screaming for help in the background.

"Bring the truth out, bring an objective opinion. I'm a third-party, non-biased person who comes into a case," he said of his approach to his work.

#### Something missing

In fall 2012, Primeau was contacted by author and JFK assassination researcher Bill Kelly, who wanted technical help in combining two audiotapes of Air Force One radio transmissions: one released in the 1970s from LBJ's presidential library and a longer one that came to light a couple of years ago from the belongings of Gen. Chester Clifton, a military aide to Kennedy. Kelly transcribed the tapes. Primeau, working off and on starting in about January, spent time enhancing the sound quality, sharing his progress with Kelly along the way.

"I lowered the noise, equalized the recordings and added some filtering and brought them up to where they'd be more audible," explained Primeau.

Brad Finegan of Primeau Forensics combined the two tapes in chronological order using Kelly's transcripts and some overlapping as guides. In addition, Primeau obtained aerial video footage from a pilot friend that Finegan and Primeau's son, Mike, used to create a captioned video version of the Air Force One recording.

It was Primeau's idea to use video and captions so that "anyone who wanted to hear these recordings could actually see the words and follow the bouncing ball, if you will, of what's being said."

Kelly said Primeau took the assignment for free and did "tremendous work." Last month, Kelly presented an analysis of the tapes at a 50th anniversary assassination symposium at Duquesne University's Cyril H. Wecht Institute of Forensic Science and Law in Pittsburgh.

"The Air Force One tapes are sort of like the black box of the assassination. It has all the basic information there you want to know of what happened at the highest levels of government in the two hours after the assassination. And it all should be right there, but there's some that's missing," said Kelly, whose website is <u>http://jfkcountercoup.blogspot.com</u>.

"Spine chilling" is how Primeau describes listening to history come to life on the tapes, which are peppered with code names like Volunteer (for LBJ) and Lace (for Jacqueline Kennedy) and urgent efforts to make arrangements for things like a lift to remove the casket from the plane in D.C.

Generals, Secret Service members and radio operators can be heard. Locations like the White House Situation Room and the Air Force command base are mentioned. At one point, the airborne LBJ is patched through to JFK's mother, Rose, at the Kennedy compound in Hyannisport, Mass., to offer his condolences.

Primeau said he believes that the LBJ and Clifton recordings are what are called safety copies that don't contain the entire radio transmissions from Air Force One.

"As I listen to the recordings, I can hear edits. I can actually go through and pick out spots where I believe there are pieces that were missing. And there's lots of theories about why there would be pieces removed."

That conclusion raises questions. "What was taken out, who took them out and where are they?" he asked.

It also points to the possibility that the entire record of the radio transmissions is somewhere out there, says author and former Washington Post reporter Jefferson Morley, who has led the charge to have the CIA release still-classified material on the assassination.

"It's not the tape itself. It's what the tape tells us. And what the tape tells us is that there was a longer recording of the Air Force One communications on Nov. 22.

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That was never known before. What the tape tells us is there could be, somewhere, a recording of the reaction of the U.S. national security agencies to the president's death," said Morley, who's written about the new recording for the site he moderates, JFKFacts.org.

An original source tape with several more hours of content would be a big historical discovery. "It would be the record of the government's response to the assassination itself," Morley said.

#### Looking for answers

The Air Force One recording is considered significant by Morley, Kelly and others still looking for a credible explanation for the JFK assassination. But new information based on fact, not speculation, also interests conspiracy debunkers.

"Aside from what I might disagree with Kelly on, it's always a good thing to try to get the historical record in better shape, to clarify the material," said professor John McAdams of Wisconsin's Marquette University, whose JFK assassination website appeals to those who believe accused assassin Lee Harvey Oswald acted alone.

McAdams says there's probably more material online about the JFK assassination than any other historical subject — and he stresses that plenty of it is implausible. His website notes that sophisticated conspiracy theorists "likely understand that the mass of silly nonsense in conspiracy books and documentaries does no service to the cause of truth in the assassination."

Nationally, those who believe in a lone gunman — the government-run Warren Commission's conclusion — remain in the minority, but their numbers are

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increasing, according to a 2013 Associated Press-GfK poll. It shows that 59% of Americans say they think multiple people were part of a conspiracy to kill Kennedy, but 24% think Oswald acted alone — the highest non-conspiracy percentage since the mid-1960s.

Morley says there's no justification for continued official secrecy about the assassination. "Things are withheld on grounds of national security, and that's not very plausible for 50-year-old documents about Cuba. The secrecy around the subject remains a big problem for public understanding, and it encourages suspicion."

Primeau suspects the original source tapes of the Air Force One tapes may no longer exist. "Will they ever surface? I don't think so. I think they're destroyed, like parts of the Watergate tapes were destroyed, permanently gone so that nobody could ever find out."

Even if that is the case, he adds, witnesses could still be found to speak to what was said all those years ago.

"I think it's everybody's hope that this might nudge somebody, I don't know how else to say this, (who) is going to be around for a few more years and doesn't care about telling the truth now, who might know something, and it might bring us another step closer to the truth."

#### Video Link:

https://www.youtube.com/watch?v=Y2ExPowkomE

# Article Link and Video Links for the Trayvon Martin case:

# Article Link:

http://articles.orlandosentinel.com/2012-05-16/news/os-george-zimmernmanomara-gets-discovery-20120514\_1\_special-prosecutor-angela-corey-evidencerachel-fugate

# Video Links:

Ed Primeau speaks with CNN on the Trayvon Martin Murder, stating his professional opinion of whether or not those screams heard on the 911 recordings are indeed Trayvon's voice. http://www.voutube.com/watch?v=gPrBKbW2YzE

Ed Primeau speaks with MSNBC on the Trayvon Martin Murder, stating his professional opinion of whether or not those screams heard on the 911 recordings are indeed Trayvon's voice.

http://www.youtube.com/watch?v=blmwbMc\_EDc

# Article:

# Caught on Video

Cameras, Computers, and Control: Convenience or Conspiracy? By Edward J Primeau

This article provides an inside look at the ever-expanding role of today's security cameras and surveillance videos, used as a means of monitoring public activity and protecting citizens. I include a basic overview of the types of surveillance applications and compare their functional capabilities, strengths, and weaknesses. I also examine the role of surveillance video in litigation, as well as the many issues that can arise from its use as evidence in legal proceedings. Finally, I offer insight into the ways surveillance videos and other monitoring devices will play an even greater role in the future.

# Article Link:

http://www.abchs.com/ihs/SUMMER2014/ihs\_articles\_6.php

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