



Federal Bureau of Investigation
Digital Evidence Laboratory

Operational Technology
ERP Building 27956A
Quantico, Virginia 22135

REPORT OF EXAMINATION

To: Tampa
Squad ORA-2
Attention: SA James Majeski
Date: April 2, 2012
Case ID No.: 44A-TP-74471 - 9
Lab No.: 120323250 KR GA

Reference: Communication dated March 22, 2012

Ref. No.: Serial 3

Title: TRAYVON MARTIN-VICTIM;
GEORGE ZIMMERMAN-SUBJECT;
RACIAL DISCRIMINATION- FORCE AND OR VIOLENCE

Date specimen received: March 23, 2012

Specimens:

Q1 One Memorex CD-R marked in part "911 Calls" and
"Case# 201250001136"

Request:

Special Agent James Majeski of the Tampa Division requests, per the above referenced communication, that the Forensic Audio, Video and Image Analysis Unit (FAVIAU) conduct an audio enhancement examination on specimen Q1. Also, analysis of the word following "fucking" at approximately 2 minutes and 20 seconds of file 20120571656-S13PIR.wav was requested to be identified.

On March, 24th, 2012, Special Agent Majeski requested via telephone that FAVIAU conduct a voice comparison examination of the designated area of specimen Q1 (screams in the background of the 911 call of file SPD TWIN TREES S35 EVT



20120571669.wav) and the caller's voice of file 20120571656_S13PIR.wav of specimen Q1. In addition, a signal analysis examination of specimen Q1 recordings was requested, including a chronology of the specimen Q1 audio events.

Opinions and Conclusions:

This report contains the opinions and conclusions resulting from the voice comparison and signal analyses.

Summary of Examination:

The audio on all eight files of specimen Q1 was enhanced and three FBI CD-R discs were made each containing direct and enhanced copies from specimen Q1.

The specific request to identify the word following "fucking" at approximately 2 minutes and 20 seconds of file 20120571656-S13PIR.wav could not be done due to weak signal level and poor recording quality.

Voice comparison is not possible for the designated voices due to extreme stress and unsuitable audio quality.

Details of Examination:

Specimen Q1 was electronically enhanced to optimize the intelligibility of the voices and attenuate interfering or distracting features in the recordings.

The specific request to identify the word following "fucking" at approximately 2 minutes and 20 seconds of file 20120571656-S13PIR.wav could not be done due to weak signal level and poor recording quality.

Critical listening and digital signal analyses were conducted on the first approximately 45 seconds of the 911 call on file SPD TWIN TREES S35 EVT 20120571669.wav of specimen Q1. During this 45 second segment, the designated screaming voice is audible for approximately 18.82 seconds in the background while a neighbor talks to the 911 dispatcher. Of the 18.82 seconds, the screaming voice is superimposed for approximately 16.29 seconds by a simultaneous exchange between the calling female neighbor and the 911 female dispatcher. The total duration of the screaming voice without another voice overlapping is approximately 2.53 seconds long.

Critical listening and digital signal analyses further revealed that the screaming voice of the 911 call is of insufficient voice quality and duration to conduct a meaningful voice comparison with any other voice samples primarily due to the screaming voice being: (1) produced under an extreme emotional state, (2) limited in the number of

words and phrases uttered, (3) superimposed by other voices most of the time, and (4) distant, reverberant and very low signal level.

Three FBI CD-R copies were made containing direct and enhanced audio from specimen Q1. One of the discs was designated as Derivative Evidence "DE1" and the other two are labeled "Copy".

It is recommended that a high quality set of headphones be used when listening to the direct and enhanced audio files to obtain the optimum intelligibility.

Special Agent Majeski advised telephonically on April 2, 2012, to discontinue the request for preparation of an audio event chronology of specimen Q1.

The audio enhancement and signal analyses were conducted by Kenneth Marr. The voice comparison analysis was conducted by Dr. Hiroataka Nakasone.

Disposition of Evidence:

Specimens Q1, DE1 and the two additional copies were forwarded to your office via FedEx on March 24, 2012.

Examiner:


Kenneth W. Marr

Operational Technology Division
Forensic Audio, Video and Image Analysis Unit

Examiner:


Hiroataka Nakasone

Operational Technology Division
Forensic Audio, Video and Image Analysis Unit