STATE OF NEW YORK COUNTY OF MONROE
COUNTY COURT

THE PEOPLE OF THE STATE OF NEW YORK

-vs-

MOTION IN LIMINE
Indict. No. 16/404
Filed: April 26, 2016

SILVON S. SIMMONS,

Defendant.

PLEASE TAKE NOTICE that upon the annexed affirmation of Katherine Higgins, Esq., attorney for the defendant, the undersigned will move this Court, at a criminal term thereof, before the Honorable Sam L. Valleriani, Monroe County Court Judge, located at the Hall of Justice, City of Rochester, County of Monroe, on the 23rd day of March, 2017, at 9:30 a.m., or as soon thereafter as counsel may be heard, for the following relief:

A. An Order, pursuant to defendant's rights to the due process and a fair trial as protected by the Fourteenth Amendment of the United States Constitution and Article I, Section 12 of the New York State Constitution, precluding the prosecutor from offering at trial testimony and/or evidence regarding data purportedly collected by the "ShotSpotter" system during an investigation of this incident, or a *Frye* hearing to review this matter;

B. An Order, reviewing the admissibility of the evidence collected by the "ShotSpotter" system under the standard set forth in *Daubert v. Merrell Dow Pharmaceuticals,* 509 U.S. 579 (1993);

C. A judicial subpoena for records relating to this incident from SST, Inc. / ShotSpotter;

D. A judicial subpoena for all ShotSpotter records and alerts on April 1, 2016, from the Rochester Police Department and/or City of Rochester;

E. A judicial subpoena for records of all communications between Rochester Police Department and SST, Inc. / ShotSpotter, relating to this incident;

F. An Order granting such other and further relief as this Court deems just and proper.

DATED: Rochester, New York
March 17, 2017

Yours, etc.

TIMOTHY DONAHER
Monroe County Public Defender
BY: Elizabeth Riley
BY: Katherine Higgins
10 North Fitzhugh Street
Rochester, New York 14614
(585) 753-4037

TO: SANDRA DOORLEY
Monroe County District Attorney

ATT: Julie Hahn, Esq.
Kevin Fitzgerald, Esq.

STATE OF NEW YORK COUNTY OF MONROE
COUNTY COURT

THE PEOPLE OF THE STATE OF NEW YORK

-vs-

ATTORNEY AFFIRMATION

SILVON S. SIMMONS,

Defendant.

Katherine Higgins, an attorney admitted to practice in the State of New York, affirms under penalty of perjury pursuant to CPLR §2106 that:

1. I am an Assistant Public Defender for the County of Monroe and have been assigned to represent defendant, Silvon S. Simmons, in this action.

2. I make this affirmation in support of the relief requested in the annexed Notice of Motion and for such other and further relief as to this Court may seem just and proper.

STATEMENT OF FACTS

3. That on or about April 26, 2016, Indictment No. 16/404 was filed by a Monroe County grand jury charging the defendant, Silvon S. Simmons, with Attempted Aggravated Murder, Penal Law §110.00/125.26(1)(a)(i), Attempted Aggravated Assault on a Police Officer, Penal Law §110.00/120.11 and two counts of Criminal Possession of a Weapon in the Second Degree, Penal Law §§265.03(1)(b) and 265.03(3), all allegedly occurring on April 1, 2016.

4. The sources and grounds for your affiant's belief on the allegations made herein are conversations between your affiant and the defendant, an investigation conducted by members on staff at the Monroe County Public Defender`s Office, and a review of the various papers and pleadings served and filed in connection with this incident.

MOTION IN LIMINE TO EXCLUDE SHOTSPOTTER TESTIMONY OR EVIDENCE

5. Defendant Silvon S. Simmons is charged with Attempted Aggravated Murder, Attempted Aggravated Assault on a Police Officer, and two counts of Criminal Possession of a Weapon in the Second Degree, based on an accusation that he fired a weapon at Rochester Police Department Officer Joseph Ferrigno on the night of April 1, 2016 near 9 Immel Street in the City of Rochester.

6. Upon information and belief, the prosecution will seek to introduce testimony and evidence obtained from the "ShotSpotter" system, used by the City of Rochester.

7. "ShotSpotter" is an acoustic gunfire detection system owned by a California-based corporation called SST, Inc. The City of Rochester is a customer of SST, Inc., and has installed the ShotSpotter system at various locations throughout the city.

8. The purpose of the ShotSpotter system is to pick up acoustical impulses in certain neighborhoods in the City of Rochester, to then preliminarily identify those impulses as gunfire, and to then alert officers to a general location where it is possible there was recent gunfire activity.

9. Defense counsel expects that the prosecution will seek to introduce audio files from the City of Rochester's ShotSpotter system which are purported to contain an audio recording of gunfire at the location of the incident on the night of April 1, 2016.

10. Defense counsel also expects that the prosecution will seek to introduce testimony of an employee from SST, Inc., in order to attempt to provide inferences and conclusions to the jurors regarding the contents of the audio recording.

11. Upon information and belief, there is very little objective evidence tending to show that Mr. Simmons fired a weapon at Officer Ferrigno on the night of April 1, 2016. No projectile was ever recovered from the weapon allegedly fired by Mr. Simmons. Mr. Simmons has been scientifically excluded as a contributor to any of the multiple DNA profiles found on the weapon he allegedly possessed. Apart from the testimony of Officer Ferrigno (who, upon information and belief, has been the subject of numerous civil lawsuits, civilian complaints and professional disciplinary proceedings), there are no other eye witnesses to the events that allegedly occurred in the driveway and backyard

of Mr. Simmons' house on April 1, 2016.

12. Upon information and belief, based on statements made by investigating officers and provided to defense counsel as discovery, the prosecution is alleging that the audio recordings collected by ShotSpotter provide objective evidence that five gunshots were fired in the area of 5/7 and 9 Immel Street around 9:00 pm on April 1, 2016.

13. However, defense counsel is also in receipt of a forensic report from SST, Inc., indicating that on April 2, 2016, the incident was "Reclassified to Multiple Gunshots from Helicopter, Reason: per customer," and that the "Number of rounds updated from 3 to 4." (*See* "SST Detailed Forensic Report," page 3, attached hereto as Exhibit A).

14. New York courts have not addressed the admissibility of ShotSpotter data, evidence, or testimony, and defense counsel submits that such evidence or testimony is not admissible under the standard set forth in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

15. Furthermore, the expected introduction by the prosecution of data collected by the ShotSpotter system, and the expected "expert" testimony, including inferences and conclusions drawn from that data, is exactly the type of "scientific" evidence a court should scrutinize prior to permitting its admission before a jury.

PRECLUSION OF AUDIO FILES AND TESTIMONY AND/OR REVIEW OF ADMISSIBILITY UNDER *FRYE* AND *DAUBERT*

16. Following the standard set forth in *Frye,* New York courts may only allow "expert" testimony based on scientific principles and techniques, which "when properly performed, generate results accepted as reliable within the scientific community generally." *Parker v. Mobil Oil Corp.*, 7 N.Y.3d 434, 446 (2006)(citation omitted).

17. The *Frye* test is "intended to 'protect juries from being misled by expert opinions that may be couched in formidable scientific terminology but that are based on fanciful theories.'" *Styles v. Gen. Motors Corp.*, 20 A.D.3d 338, 342 (1st Dep't 2005) (citation omitted).

18. Ensuring the reliability of scientific evidence before it is admitted against a criminal defendant is essential to the fairness of a criminal trial as protected by the

Fourteenth Amendment of the United States Constitution and Article I, Section 12 of the New York State Constitution.

19. Although SST, Inc.'s ShotSpotter system relies in part on basic concepts in acoustics, physics, and mathematics which are generally accepted as reliable in the relevant scientific communities, the use for which defense counsel expects the prosecution to introduce this evidence far exceeds these basic accepted concepts.

20. The purpose of the ShotSpotter system is to detect acoustical impulses through sensors placed on buildings, to then use a method of triangulation in order to determine a general location, and to then notify law enforcement of potential gunfire activity so that they may respond and investigate. The system serves as an investigative tool, at best.

21. Even when the ShotSpotter system is used for its intended purpose – to detect and locate possible gunfire – its reliability is questionable, and it has limited usefulness, especially in an urban environment such as the City of Rochester. There are dozens of factors that can influence the detection, identification, and location of acoustical impulses – environmental factors, such as weather, wind, humidity; geographical factors, such as buildings, obstacles, and tree cover; as well as accuracy issues, such as false postives, false negatives, and incorrect location identification.

22. Furthermore, there is absolutely no scientific basis to use the data from the ShotSpotter system for any purpose other than to determine the approximate location of purported gunshots. Upon information and belief, the prosecution here is not seeking to use the ShotSpotter audio files or testimony from an SST, Inc. employee for its stated purpose of determining the location of possible gunshots.

23. Indeed, there is no disagreement in this case by the prosecution or defense regarding the approximate location of gunfire. By Officer Ferrigno's own admissions, he fired his service weapon at Mr. Simmons in the rear of the driveway between 5/7 and 9 Immel Street. What is in dispute is the number of shots fired, and the number of firearms used, at that exact location. ShotSpotter technology cannot reliably answer those questions.

24. Upon information and belief, the ShotSpotter system did not detect or alert law enforcement to any potential gunfire activity on the night of April 1, 2016, as the

system was reportedly in "squelch mode" and did not produce any alerts. (*See* Exhibit A, page 3.)

25. As the system did not "alert," the report generated by ShotSpotter regarding this incident was, upon information and belief, generated after communication between members of the Rochester Police Department and employees of SST, Inc.

26. One of the major concerns regarding the use of ShotSpotter is the insertion of subjective human evaluation in classifying these acoustical impulses. Upon information and belief, the inferences and conclusions made by the SST, Inc. employee are based solely on the individual's skill or experience, and are not subject to any standards or guidelines set forth either by SST, Inc., or the broader scientific community.

27. These subjective evaluations are inherently unreliable, and, based on your affiant's review of transcripts from other New York criminal cases where SST, Inc. employees have testified, not only is there disagreement amongst the SST, Inc. employees or owners, but their analysis changes in order to conform with the theory of the prosecution's case.

28. Indeed, the potential for biased evaluations and conclusions is ripe in the context of ShotSpotter data, as the customers of SST, Inc. are the police departments and municipalities on whose behalf they often are called to testify. The potential bias is particularly heightened in this case where the customer's employee, Officer Ferrigno, is suspected of wrongdoing that would have extreme professional disciplinary implications. Indeed, in previous cases where the Monroe County Public Defender's Office has sought to introduce ShotSpotter data in support of a theory of defense, employees or owners of SST, Inc. were unresponsive and uncooperative, and refused to provide certification of subpoenaed records in order to allow the defense attorney to introduce them at trial. Similar opposition was received in response to defense subpoenas issued on Mr. Simmons' behalf in the instant case as well (more details follow in the "Request for Subpoenas" section, below).

29. Further complicating the conclusions and inferences drawn by the SST, Inc. employee is the addition of cognitive bias that appears in situations such as these, which is scientifically unreliable and prone to error.

30. As indicated above, the report issued by SST, Inc. and the conclusions drawn by their employees were changed after communication with members of the Rochester Police Department. This points to potentially serious and detrimental cognitive bias, wherein the interpretation of seemingly objective information collected by the ShotSpotter system was then influenced by subjective information and thus susceptible to contextual or confirmation bias, so that the ultimate conclusion drawn deviated from the initial objective analysis.

31. Furthermore, due to proprietary interests of SST, Inc., the ShotSpotter technology and the reports and conclusions generated by the system have been subjected to little (if no) peer-reviewed testing by the larger scientific community, and therefore have not been sufficiently vetted to be admissible in court. (*See* "Reporter's Transcript of Preliminary Hearing," in the case of *People v. Gillard*, June 2, 2014, Contra Costa County, California Superior Court, p. 4065 – 4067, attached hereto as Exhibit B.)

32. For the above-stated reasons, as well as detailed arguments set forth in the *amicus curiae* brief being filed by The Innocence Project in support of the instant Motion *In Limine*, defense counsel respectfully requests that the Court preclude admission of data collected from the ShotSpotter system, or testimony regarding conclusions drawn from that data, at trial, or, in the alternative, a *Frye* hearing to determine the admissibility of such data.

33. Defendant further submits that notwithstanding the *Frye* test standard in New York, if this Court concludes that such evidence is generally accepted as reliable in the scientific community, but is not based on a sound scientific foundation, admission of such evidence against a defendant at trial violates a defendant's rights to due process and a fair trial as protected by the New York State and United States constitutions, and in order to protect his rights, this Court must apply the *Daubert* standard set forth by the United States Supreme Court. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589-590 (1993) (requiring that scientific testimony be relevant and reliable in order to assist the trier of fact.)

34. As noted by the Court of Appeals in *Parker v. Mobil Oil Corp.*,

> "The introduction of novel scientific evidence calls for a determination of its reliability. Thus, the *Frye* test asks 'whether the accepted techniques, when properly performed,

> generate results accepted as reliable within the scientific community generally' .... *Frye* holds that 'while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs."

Parker v. Mobil Oil Corp., 7 N.Y.3d 434, 446 – 447 (2006) (citations omitted).

35. Defendant respectfully requests an Order reviewing the admissibility of data collected from the ShotSpotter system, or testimony regarding conclusions drawn from that data, under the standard set forth in *Daubert v. Merrell Dow Pharmaceuticals,* 509 U.S. 579 (1993);

REQUESTS FOR SUBPOENAS

36. In addition to the above requests for preclusion, defense counsel also requests judicial subpoenas deuces tecum, to the Rochester Police Department, the City of Rochester, and SST, Inc., relating to this incident.

37. According to the reports by various members of the Rochester Police Department regarding this incident (and provided to defense counsel by the prosecution pursuant to its discovery obligations), it appears that there were multiple other incidents involving possible gunfire in the vicinity of the Immel Street location on April 1 – April 2, 2016.

38. Multiple police reports, as well as an audio file from the Office of Emergency Communications, indicate a civilian report of gunshots on Immel Street earlier in the evening on April 1, which reportedly led to Officer Ferrigno's interest in pursuing the vehicle in which Mr. Simmons was a passenger as it turned down Immel Street approximately one hour later.

39. Furthermore, during the course of the investigation after Officer Ferrigno shot Mr. Simmons, while canvassing the neighborhood, Rochester Police Department Officer Dylan Minnick noted in his report that he also heard "what sounded like at least three gunshots coming from the area west of Ames St." (*See* Officer Minnick's "Investigative Action Report Case Update," p. 2, attached hereto as Exhibit C.)

40. Notably, the provided police reports indicate that the ShotSpotter system did not produce alerts for the other possible gunfire incidents that day, highlighting potential inaccuracies or malfunctions in the ShotSpotter system during the specific time period in question.

41. Additionally, the prosecution has provided the defendant with a number of items relating to ShotSpotter through discovery – a disc containing a number of audio files purportedly of data collected by the ShotSpotter on the evening of April 1, 2016, as well as a 12-page Forensic Report created by SST, Inc., related to this incident.

42. The Forensic Report indicates that the acoustical impulses were initially identified as "helicopter" and that number of rounds was initially identified a 3. The report then states that this analysis was reclassified per customer request. (*See* Exhibit A, p. 4.)

43. Additionally, upon information and belief, there are further reports and records maintained by SST, Inc., relating to the incident on Immel Street on the night of April 1, 2016, which were not provided to defense counsel by the prosecution. Included in these additional records maintained by SST, Inc., should be a report indicating the likelihood (indicated by a "confidence" percentage) that each acoustical impulse is indeed a gunshot; the triangulation analysis; the source code analysis; the maintenance, calibration, and error rate records of each sensor from which data was collected in this investigation; as well as records showing the location of all other ShotSpotter sensors in that area of the City of Rochester, including ones that did not alert to any acoustical impulses on the date and time in question.

44. On or about September 7, 2016, SST, Inc., was served with a Subpoena Deuces Tecum signed by your affiant herein. On September 9, 2016, your affiant received a response from SST, Inc., indicating that they had received our subpoena, and stating "As the County of Monroe is not a customer of SST, report generation and expert testimony services are billable" and that they would not provide the requested records until they received remuneration. Specifically, their "Forensic Services Order Form" indicated that SST, Inc. would charge $600 an hour for "Records Inquiry" and $5,250 for a "Forensic Report." (*See* Response from SST, Inc. to Defense Subpoena, attached hereto as Exhibit D.) As the Court is aware, Mr. Simmons is represented by

the Monroe County Public Defender's Office due to his indigency, and neither Mr. Simmons nor the Public Defender's Office has the financial resources to pay SST, Inc., thousands of dollars for subpoenaed records.

45. Defense counsel therefore respectfully requests:

a. A Judicial Subpoena Deuces Tecum directing SST, Inc., to provide defendant with all records relating to this incident, including all data, analyses, logs, reports, maintenance and calibration records, triangulation and source code analyses as stated in the attached proposed subpoena, and a record of all communications between Rochester Police Department and/or City of Rochester employees and SST, Inc., regarding this incident;

b. A Judicial Subpoena Deuces Tecum directing the City of Rochester and/or the Rochester Police Department to provide defendant with records relating to all ShotSpotter data and alerts from the ShotSpotter system installed throughout the City of Rochester, and any response by the City or RPD to such alerts, from April 1 – April 2, 2016, as well as records of all communications between the City of Rochester and/or the Rochester Police Department and SSI, Inc., regarding the incident on April 1, 2016.

WHEREFORE, Defendant respectfully moves this Court to grant the relief requested, and for such other and further relief as this Court deems just and proper.

March 17, 2017

Katherine Higgins, Esq.

cc: Julie Hahn, Esq.
Kevin Fitzgerald, Esq.

PROPOSED

JUDICIAL SUBPOENA DUCES TECUM

(2)

STATE OF NEW YORK
COUNTY OF MONROE

COUNTY COURT

PEOPLE OF THE STATE OF NEW YORK,

IND. NO. 16/404

VERSUS

JUDICIAL SUBPOENA
DUCES TECUM

SILVON SIMMONS,

DEFENDANT.

TO: SST, INC. / SHOTSPOTTER
7979 GATEWAY BLVD., SUITE 210
NEWARK, CA 94560

YOU ARE HEREBY NOTIFIED, THAT ALL BUSINESS AND OTHER MATTERS BEING LAID ASIDE, YOU AND EACH OF YOU APPEAR AND ATTEND AT THE MONROE COUNTY COURT CLERK'S OFFICE, FIFTH FLOOR, HALL OF JUSTICE, ON THE 3RD DAY OF APRIL, 2017, AT 9:30 IN THE MORNING, AND AT ANY ADJOURNED DATE TO GIVE TESTIMONY IN THIS CASE ON THE PART OF THE DEFENDANT AND THAT YOU BRING WITH YOU, AND PRODUCE AT THE TIME AND PLACE AFORESAID, THE FOLLOWING:

1. **ANY AND ALL DATA CAPTURED FROM THE AREA OF 5/7 IMMEL STREET, 9 IMMEL STREET, 10 IMMEL STREET, AND THE SURROUNDING AREA BETWEEN GLIDE STREET, ORCHARD STREET, LYELL AVENUE, AND CAMPBELL STREET, IN THE CITY OF ROCHESTER, MONROE COUNTY, NEW YORK, FROM APRIL 1 – 2, 2016, AT OR AROUND AND BETWEEN THE HOURS OF 1:00 PM ON THE 1ST AND 1:00 AM ON THE 2ND, INCLUDING, BUT NOT LIMITED TO:**
   a. **ANY AND ALL REPORTS, SYSTEM DOCUMENTATION, OR DATA RESULTING FROM ANY "IMPULSIVE SOUNDS" DETECTED BY EACH AND EVERY ACOUSTICAL SENSOR AND TRANSMITTED TO THE SHOTSPOTTER LOCATION SERVER;**
   b. **ANY AND ALL LOCATION SERVER NOTIFICATIONS TO THE SST SERVICE OPERATIONS CENTER;**
   c. **ANY DOCUMENTATION, DATA, AND/OR AUDIT TRAIL REGARDING EACH INCIDENT'S REVIEW CLASSIFICATION;**
   d. **ANY AND ALL INCIDENTS PUBLISHED TO THE FLEX ALERT CONSOLE FOR THE ABOVE-REQUESTED TIME FRAME.**
2. **A COMPLETE LIST AND/OR MAP OF SHOTSPOTTER SENSORS AND THEIR LOCATIONS IN ROCHESTER.**
3. **ANY AND ALL RECORDS REFLECTING WHICH SHOTSPOTTER SENSORS WERE FUNCTIONING IN ROCHESTER ON APRIL 1-2, 2016.**
4. **A COPY OF THE COMPLETE DIGITAL REPORT SENT TO THE MONROE COUNTY DISTRICT ATTORNEY'S OFFICE REGARDING THIS INCIDENT.**
5. **CORRESPONDING LATITUDE AND LONGITUDE DATA FOR EACH INDIVIDUAL IMPULSIVE NOISE THAT WAS DETECTED IN THE REPORT SENT TO THE MONROE COUNTY DISTRICT ATTORNEY'S OFFICE.**
6. **ANY AND ALL SHOTSPOTTER ALERTS OR LOGS FOR IMPULSIVE SOUND EVENTS THAT OCCURRED IN ROCHESTER, BETWEEN JANUARY 1, 2016 AND JUNE 1, 2016, INCLUDING THE CORRESPONDING PROBABILITIES THAT THOSE IMPULSIVE NOISES WERE GUNSHOTS.**
7. **ANY AND ALL RECORDS OF REQUESTS TO RECLASSIFY EVENTS THAT OCCURRED IN APRIL 2016, AS WELL AS FOR THE THREE MONTHS PRECEDING AND FOLLOWING APRIL 2016.**
8. **ANY AND ALL RECORDS OR DATA REFLECTING HOW MANY IMPULSIVE NOISES RECORDED IN ROCHESTER WERE CONFIRMED TO BE GUNSHOTS, BETWEEN JANUARY 1, 2016 AND JUNE 1, 2016.**
9. **ANY AND ALL RECORDS OR DATA DOCUMENTING THE NUMBER OF FALSE POSITIVES AND FALSE NEGATIVES OCCURRING IN ROCHESTER BETWEEN JANUARY 1, 2016 AND JUNE 1, 2016.**

10. ANY AND ALL RECORDS REFLECTING ROCHESTER'S ORIGINAL PURCHASE OF THE SHOTSPOTTER SYSTEM, INCLUDING THE COST AND SPECIFICS OF THE SYSTEM INSTALLED, THE CONTRACT IN EFFECT ON APRIL 2016 AS WELL AS THE CURRENT CONTRACT.
11. ANY AND ALL RECORDS OF SYSTEM IMPROVEMENTS OR EXPANSIONS SINCE INSTALLATION.
12. ANY AND ALL RECORDS REFLECTING SERVICE CALLS OR PROBLEMS WITH THE SHOTSPOTTER SYSTEM IN ROCHESTER BETWEEN JANUARY 1, 2016 AND JUNE 1, 2016.
13. ANY AND ALL "SPOOL" DATA FROM APRIL 1-2, 2016 - THE COMPLETE RECORDING OF AUDIO WHICH SST EMPLOYEES REVIEWED TO REVISE THEIR SOFTWARE'S DETERMINATION THAT THE IMPULSIVE SOUNDS WERE MULTIPLE GUNSHOTS AND NOT A HELICOPTER.

KINDLY CERTIFY THE RECORDS PURSUANT TO CPLR §§4518 AND 2307, TO AVOID HAVING A CUSTODIAN PERSONALLY TESTIFY. ALL RECORDS ARE TO BE DELIVERED TO THE MONROE COUNTY COURT CLERK, ATTENTION OF HONORABLE JUDITH SINCLAIR, ROCHESTER, NEW YORK, IN ADVANCE OF THE ABOVE DATE. A COPY OF ANY RECORD MAY BE SUBMITTED IF IT IS CERTIFIED AS A COMPLETE AND ACCURATE DOCUMENT.

FAILURE TO COMPLY WITH THIS SUBPOENA IS PUNISHABLE AS A CONTEMPT OF COURT AND MAY MAKE YOU LIABLE TO THE PERSON ON WHOSE BEHALF THIS SUBPOENA WAS ISSUED FOR A PENALTY NOT TO EXCEED FIFTY DOLLARS AND ALL DAMAGES SUSTAINED BY REASON OF YOUR FAILURE TO COMPLY.

DATED: _____

_____
MONROE COUNTY COURT JUDGE

TIMOTHY P. DONAHER
MONROE COUNTY PUBLIC DEFENDER
BY: KATHERINE HIGGINS ESQ.
ATTORNEY FOR DEFENDANT
OFFICE: 10 N. FITZHUGH STREET
ROCHESTER, NEW YORK 14614
TEL.: (585) 753-4233

STATE OF NEW YORK
COUNTY OF MONROE

COUNTY COURT

PEOPLE OF THE STATE OF NEW YORK,

VERSUS

JUDICIAL SUBPOENA
DUCES TECUM

SILVON SIMMONS
CR#16-078072 (CITY OF ROCHESTER),

DEFENDANT.

TO: ROCHESTER POLICE DEPARTMENT
185 EXCHANGE BLVD
ROCHESTER, NEW YORK 14614

YOU ARE HEREBY NOTIFIED, THAT ALL BUSINESS AND OTHER MATTERS BEING LAID ASIDE, YOU AND EACH OF YOU APPEAR AND ATTEND AT THE MONROE COUNTY COURT CLERK'S OFFICE, FIFTH FLOOR, HALL OF JUSTICE, ON THE 3RD DAY OF APRIL, 2017, AT 9:30 IN THE MORNING, AND AT ANY ADJOURNED DATE TO GIVE TESTIMONY IN THIS CASE ON THE PART OF THE DEFENDANT AND THAT YOU BRING WITH YOU, AND PRODUCE AT THE TIME AND PLACE AFORESAID, THE FOLLOWING:

Any and all records relating to all ShotSpotter data and alerts from the ShotSpotter system installed throughout the City of Rochester, and any response by the City or RPD to such alerts, from April 1 – April 2, 2016, as well as records of all communications between the City of Rochester and/or the Rochester Police Department and SSI, Inc., regarding the incident on April 1, 2016.

KINDLY CERTIFY THE RECORDS PURSUANT TO CPLR §§4518 AND 2307, TO AVOID HAVING A CUSTODIAN PERSONALLY TESTIFY. ALL RECORDS ARE TO BE DELIVERED TO THE MONROE COUNTY COURT CLERK, ATTENTION OF HONORABLE SAM VALLERIANI, ROCHESTER, NEW YORK, IN ADVANCE OF THE ABOVE DATE. A COPY OF ANY RECORD MAY BE SUBMITTED IF IT IS CERTIFIED AS A COMPLETE AND ACCURATE DOCUMENT.

FAILURE TO COMPLY WITH THIS SUBPOENA IS PUNISHABLE AS A CONTEMPT OF COURT AND MAY MAKE YOU LIABLE TO THE PERSON ON WHOSE BEHALF THIS SUBPOENA WAS ISSUED FOR A PENALTY NOT TO EXCEED FIFTY DOLLARS AND ALL DAMAGES SUSTAINED BY REASON OF YOUR FAILURE TO COMPLY.

DATED: _____

_____
COUNTY COURT JUDGE

TIMOTHY P. DONAHER
MONROE COUNTY PUBLIC DEFENDER
BY: KATHERINE HIGGINS, ESQ.
ATTORNEY FOR DEFENDANT
OFFICE: 10 N. FITZHUGH STREET
ROCHESTER, NEW YORK 14614
TEL.: (585) 753-4233

EXHIBIT A

SST™

Detailed Forensic Report

City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Shooting Description

At 21:09:38 (9:09:38 PM) hours on April 01, 2016 ShotSpotter detected a Multiple Gunshot incident in Rochester, NY. ShotSpotter recorded the incident as Flex ID #140660 and located it at 9 Immel St.

Incident Time Analyzed

The spool data were reviewed for 21:09:38 hours on April 01, 2016.

Position With Respect to the Coverage Area

Figure 1 – ShotSpotter Coverage Area displays the ShotSpotter coverage in Rochester, NY at the time of the incident. The red dot indicates the location of the shooting incident, the red dashed line denotes the boundaries of the ShotSpotter coverage area, and the triangle symbols represent the sensors that participated in detecting the incident.

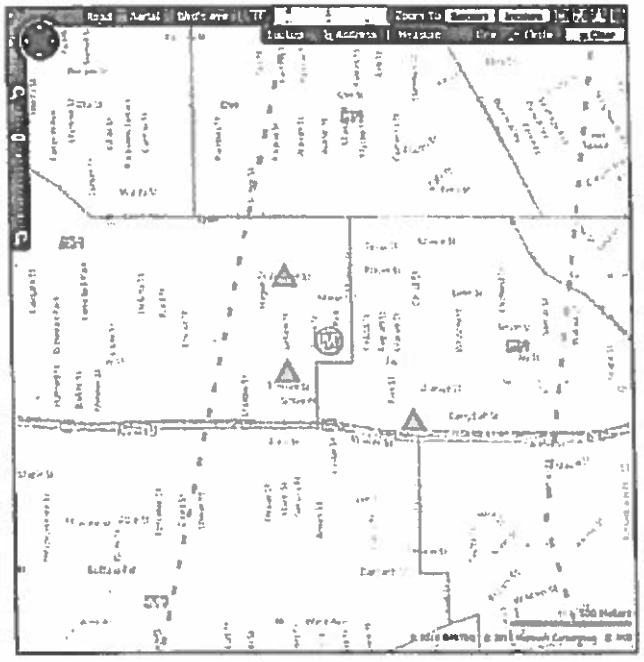


Figure 1 - ShotSpotter Coverage Area Rochester, NY

SST™

Detailed Forensic Report Certification

I, Paul C Greene, declare:

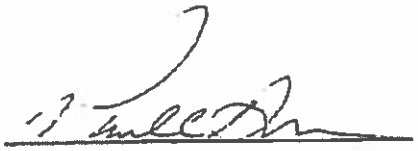
That I am Customer Support, Lead Engineer at SST, Inc. I have personal knowledge of the following matter, and, if called as a witness, could and would testify thereto. I have prepared the report and any attachments, identified below, which is attached hereto.

I declare under penalty of perjury under the laws of the State of Arizona that the report is true and correct.

Report:

City :	**Rochester, NY**
Zone :	**281**
Reference Date :	**01 APR 2016**
Customer's Ref. #:	
Report Date :	**07 APR 2016**
MD5 Hash (PDF):	B4124E74D305C1F1759D1BF6B419F8AA
SVN Revision (PDF):	**63720**

Executed this 8 of APR, 2016, at SIERRA VISTA, AZ.



Paul C Greene

pgreene@shotspotter.com

SST™

Detailed Forensic Report

City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Auto-detected by ShotSpotter? Yes

About ShotSpotter

ShotSpotter was installed in Rochester, NY in 2006. ShotSpotter has three primary components: acoustic sensors, a Location Server application, and the ShotSpotter Flex user interface. The ShotSpotter Location Server is operated by SST, Inc. and runs on a virtual server hosted at a remote facility, the ShotSpotter Flex user interface resides on a PC at the customers dispatch facility, and the acoustic sensors are deployed in geographic areas that are designated by the customer.

Each sensor is triggered by impulsive sounds in its environment. The acoustic measurements of these impulsive sounds and the exact time that they were detected are transmitted to the Location Server as possible gunshot sounds. The Location Server analyses the data received and determines if the impulsive sound can be located and classified as gunfire. If the impulsive sound can be located and classified as gunfire it reports the incident to the SST Service Operations Center where a human operator reviews the incident for classification accuracy. The reviewed gunfire incident is then published to the customers user interface. The user interface, referred to as the Flex Alert Console, provides an actionable view of the incident with an emphasis on the time and location that the shooting occurred. Gunfire incidents are typically detected, located, reviewed, and published to the customer in less than 60 seconds.

The firing of a gun or an explosive device creates a loud, impulsive sound that can, under optimum environmental conditions, be detected above urban background noise up to two miles away from the firing incident location. Thus, the operation of ShotSpotter is understandably subject to the laws of physics and acoustic propagation.

ShotSpotter detects and properly geo-locates (provides latitude and longitude) 80% of detectable outdoor incidents within the coverage area, accurate to within a circle whose radius is 25 meters. SST, Inc. does not guarantee 100% detection because real world, urban environments may contain intervening buildings, topography, foliage, periods of increased traffic or construction noise, and other urban acoustic noises that may either prevent the sound of a gunshot from being detected by the sensors(s), or may change or modify the audio characteristics of the sound of a gunshot so that it no longer matches the sensor(s) detection parameters.

Other factors, such as obstructed or attenuated muzzle blast, weapon discharge in an enclosed space, or if the weapon discharged is of .22 or smaller caliber, may also prevent the sensor(s) from not detecting all, or some shots fired.

SST™

Detailed Forensic Report

City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Analysis

Figure 2 – Incident review At 21:09:38 on April 01, 2016, ShotSpotter detected and located a Multiple Gunshot incident in Rochester, NY. Below is a table which shows the timeline of the incident being updated.

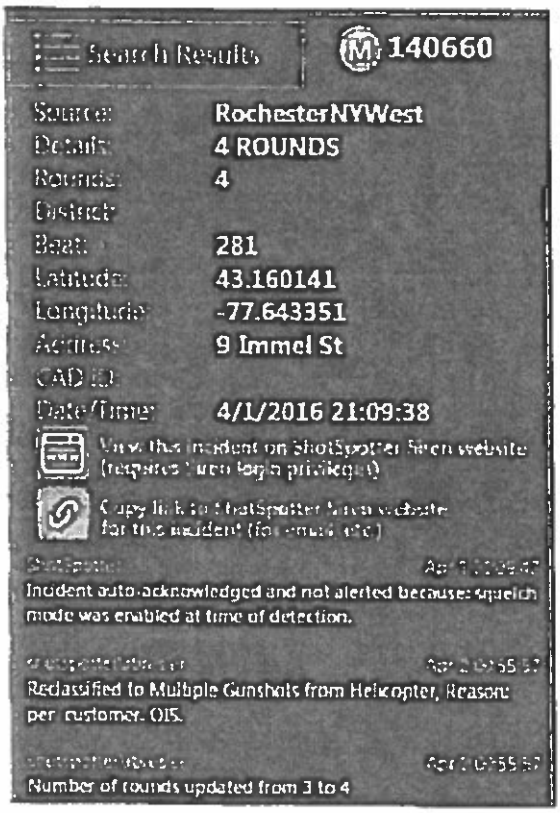


Figure 2 – Flex ID #140660 Incident review timeline

Figure 3 – Address Location displays the locations calculated by ShotSpotter. The address of 9 Immel St was read from either a database of parcel information provided by the city or county and uploaded into ShotSpotter or from the map provider. The red dot indicates the location of the shooting incident as calculated by ShotSpotter in real-time and reported to the ShotSpotter operator.

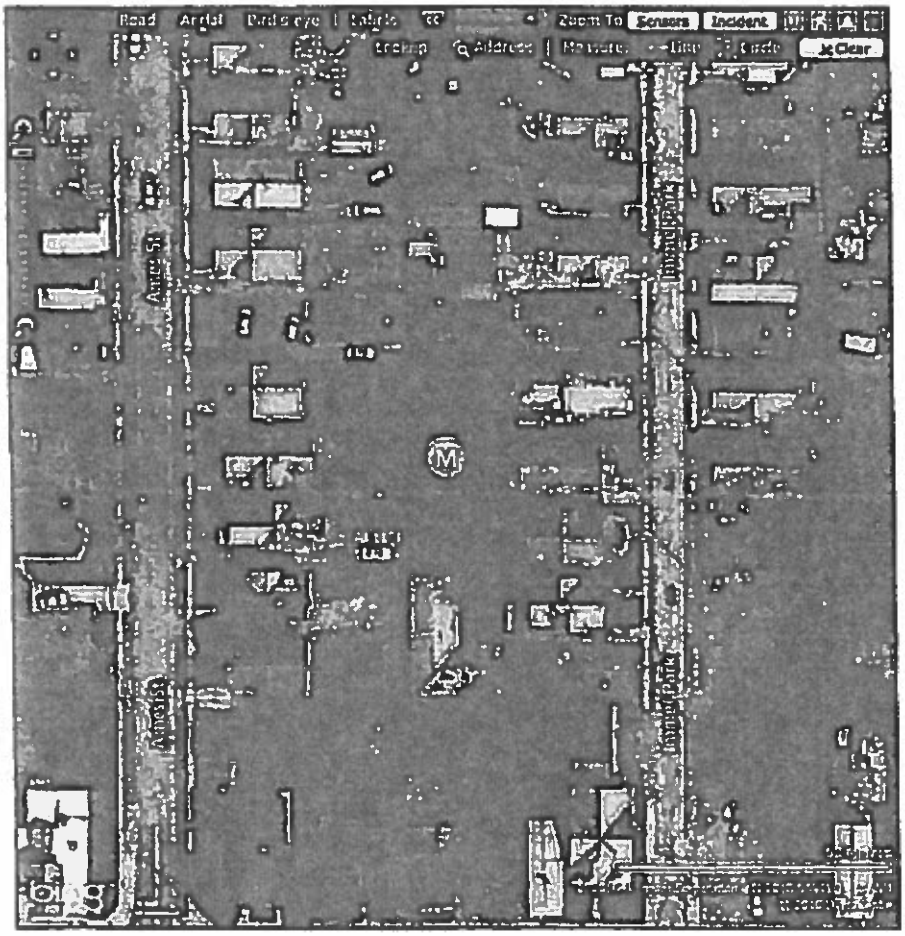


Figure 3 – Flex ID #140660 Flex Location

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Detailed Forensic Report

City :	Rochester, NY
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Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Table 1 – Timeline of Discharge of Shots: The following table shows the time of discharge for each of the rounds which comprise this shooting event. The times listed below are the time the system calculated the trigger was pulled based on the environmental conditions at the time of the event. These times precede the time at which the system notified the ShotSpotter Operator listed because of small radio, computational, and network delays. All times are obtained from system and sensor clocks that are synchronized to GPS time, which is in turn synchronized with the atomic clock at the National Institute of Standards and Technology in Boulder, CO.

Shot	Time
1	21:09:35.122
2	21:09:37.377
3	21:09:37.723
4	21:09:38.057
5	21:09:38.325

Table 1 – Shot timeline, Flex ID #140660

Figure 4 – Individual Shots Fired The following image plots the location of each round fired in Google Earth. This image is created by post-processing the archived data. Post-processing is a "manual" re-evaluation of the archived data through software tools that duplicate the real-time location algorithms that are a resident part of the ShotSpotter Location Server. Post-processing can be selectively performed on subsets of the raw data so that noises from different sources can be isolated for analysis.

In the image below the red dots indicate the location of each of the rounds fired. The locations calculated in post-processing are not identical to, but are typically within normal limits of what the ShotSpotter calculated in real-time. The yellow circle indicates a 25m margin of error radius for gunshot incidents that occur within the boundaries of the coverage area depicted on page 1 and is present in the image for reference only.

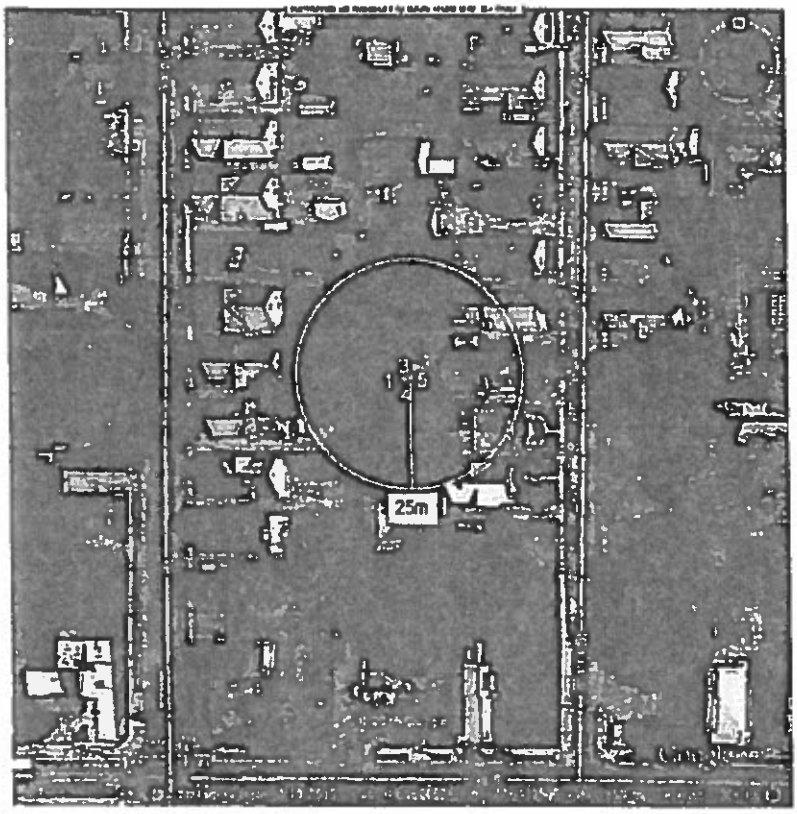

Figure 4 – Individual Shot Locations, Flex ID #140660

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Detailed Forensic Report

City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Multilateration:

The source of a pulse (a sound that goes bang, boom, or pop) is located using a mathematical process called multilateration. Multilateration requires a minimum of three sensors that surround the source to accurately report the time that a pulse is detected. Each participating sensor will detect that pulse at slightly different times. The Location Server calculates the time differences between pairs of sensors to generate a curve called a hyperbola. All of the resulting hyperbolae are then plotted onto a map. The spot where the hyperbolae intersect is where ShotSpotter locates the shot. When more than three sensors participate in the detection, Location Server performs automatic calculations to find a solution that minimizes the error to the greatest extent possible.

Figure 5 – Multilateration plot Flex ID #140660 was detected by six sensors.

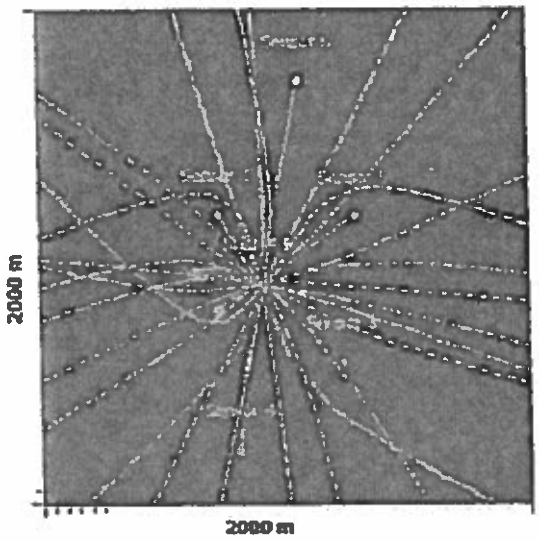

Figure 5 - Multilateration, Flex ID #140660

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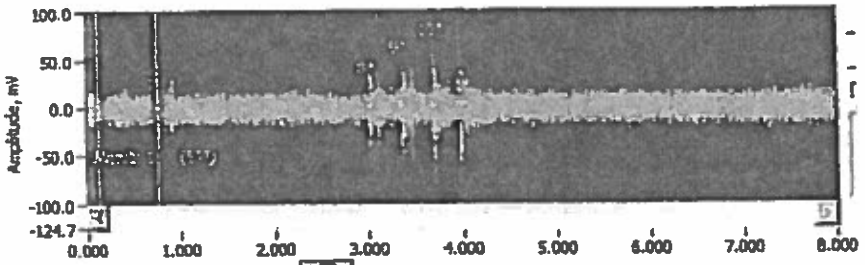
Detailed Forensic Report

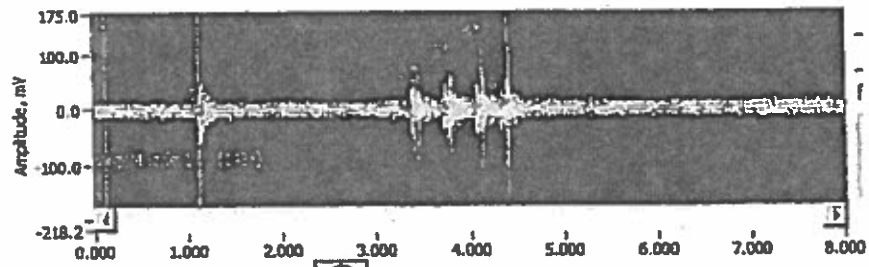
City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Site-specific Acoustics

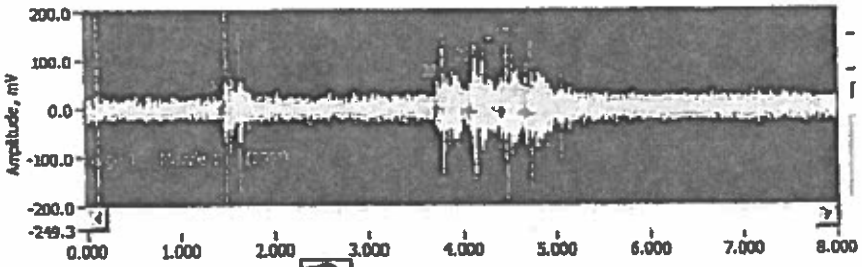
The sound of these shooting events can be heard on many sensors. Below are pictorial representations of the audio clips and a link to the corresponding .wav file for three sensors close to the incident. The depicted audio waveforms and audio clips represent 8.0 seconds of audio that was manually downloaded from each participating sensor. (Double-click on the speaker icons to play the audio from each sensor.)



Sensor 10 (211m)



Sensor 8 (329m)



Sensor 28 (466m)

Conclusion

At 21:09:38 (9:09:38 PM) hours on April 01, 2016 ShotSpotter detected a Multiple Gunshot incident in Rochester, NY. ShotSpotter recorded the incident as Flex ID #140660 and located it at 9 Immel St.

After review, the locations and times of five rounds fired were calculated.

Acoustical data analysis of a gunfire incident is complex and not comprehensive. The conclusions above should be corroborated with other evidentiary sources such as recovered shell casings, and witness statements.

SST™

Detailed Forensic Report

City :	Rochester, NY
Zone :	281
Reference Date :	01 APR 2016
Customer's Ref. #:	CAD#
Report Date :	07 APR 2016

Certification and Acknowledgement

Certification

I, Paul C Greene, declare that I am the Lead Customer Support Engineer at SST Inc. I have personal knowledge of the matter referred to in this report, and, if called as a witness, could and would testify thereto. I declare that the above is true and correct.

Executed this 8 of APR, 2016,

at SIERRA VISTA, AZ.

Paul C Greene

SST, Inc.
7979 Gateway Blvd.

Suite 210
Newark, CA 94560-1156
+1 (510) 794-3162
+1 (650) 887-2106 fax
pgreene@shotspotter.com

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

Arizona All-Purpose Certificate of Acknowledgement

State of Arizona)
County of Cochise)

On 4/8/16

before me Edward C Zimmermann Notary Public personally appeared Paul C Greene who provided to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under the laws of the State of Arizona that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature

Notary Public

EDWARD C ZIMMERMANN
Notary Public - Arizona
Cochise County
My Comm. Expires Nov 30, 2019

ShotSpotter FLEX

Enhanced Incident Report

City :	Rochester, NY
Zone :	RochesterNYWest
Incident Date :	01 APR 2016
Report Date :	03 APR 2016

Incident/Flex ID# 140660

Street Address: 9 Immel St.

Latitude, Longitude: 43.160141, -77.643351

Date & Time: 04/01/2016 9:09:35 PM

Number of rounds fired: 5 ROUNDS

Sensor #	Range from Incident	Audio clip notes	Audio clip (click icon to play)
Sensor 10	215 meters	Clear audio of 5 shots	
Sensor 08	342 meters	Clear audio of 5 shots	
Sensor 11	458 meters	Clear audio of 5 shots	
Sensor 28	464 meters	Clear audio of 5 shots	

Notes: Incident 140660 only detected the last 4 shots of the shooting event. The first shot was found during a search of the sensor audio spool. The timestamp for the first shot is 9:09:35 PM.

EXHIBIT B

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF CONTRA COSTA

HONORABLE JOHN W. KENNEDY, JUDGE, PRESIDING

DEPARTMENT 8

THE PEOPLE OF THE STATE OF CALIFORNIA,	)	
Plaintiff,	)	
vs.	)	No. **05-164044-0**
TODD GILLARD,	)	
Defendant.	)	

REPORTER'S TRANSCRIPT OF PRELIMINARY HEARING

JUNE 2, 2014

COURTHOUSE, MARTINEZ, CALIFORNIA

A P P E A R A N C E S

For the People: MARK A. PETERSON
District Attorney
BY: SATISH JALLEPALLI
Deputy District Attorney
Contra Costa County

For the Defendant: Law Offices of John M. Hamasaki
BY: JOHN M. HAMASAKI
1112 Bryant Street, 3rd Floor
San Francisco, CA 94103

Reported By: DEBRA MACK EASTRIDGE, CSR #9260

MONDAY, JUNE 2, 2014 - 9:42 A.M.

PROCEEDINGS

THE COURT: Calling the matter of People versus Todd Gillard.

Counsels' appearances, please.

MR. JALLEPALLI: Good morning, Your Honor, Satish Jallepalli for the People.

MR. HAMASAKI: Good morning, Your Honor, John Hamasaki on behalf of Todd Gillard, who is present in custody.

THE COURT: Good morning.

We had set this today for Mr. Gillard's ruling on the holding order as to preliminary hearing. Also, Mr. Hamasaki, you may be the unfortunate recipient of timing that I have -- I gave the final conclusion on the Kelly-Frye ruling, but I did not articulate the ruling, for lack of time, last time. I do have to do that on the record at some point, and so this is my last opportunity to do so. So if you'll bear with me, my plan is to go through the detailed ruling on the Kelly-Frye issue, and then address the holding order issue.

So anything before I do so?

MR. JALLEPALLI: No.

MR. HAMASAKI: No, Your Honor.

THE COURT: Okay. As to the Kelly-Frye hearing that we held, for the record, I have reread and considered the original motions to exclude ShotSpotter technology that were filed by the defense, also, motions to exclude the 115 testimony of Paul Greene, G-r-e-e-n-e, and the request for a Kelly-Frye hearing, the People's reply to the motion to strike

the testimony, and the response filed by Mr. Cannon on behalf of Bobby McHenry. I also have, obviously, considered all of the testimony of the Kelly-Frye hearing and the arguments of Counsel.

First issue was the People's request for judicial notice of two decisions from other state trial courts. Under Evidence Code Section 452(a) I am permitted to take judicial notice of the decisional law of other states. And the cases relating to Kelly-Frye hearings do permit this Court to consider decisions of other courts, including unpublished decisions of other states' trial courts.

I found that in People versus Brown, 40 Cal.3d 512, Page 530; People versus Smith, 107 Cal.App.4th 646, Page 666; People versus Hill, 89 Cal.App.4th 48, Pages 56 to 59, and the People versus Smith, 215 Cal.App.3d 19, Page 25.

So I do take judicial notice of the two transcripts submitted by the People. The first is State of New York versus Joseph Durham, D-u-r-h-a-m, a decision made March 24th, 2012. The second case being State of Missouri versus Edward Roach, R-o-a-c-h, the decision dated November 1st, 2011. And I do -- I have read and I do respect the decisions of those courts.

I do note that in each case, either expressly or by proffer of Counsel, the only witnesses who testified at those Kelly-Frye hearings were, I think one was a Durham hearing, D-u-r-h-a-m -- I'm sorry, Daubert, D-a-u-b-e-r-t, hearing in another state, but the only witnesses in both hearings, as I understand, it were ShotSpotter employees or proponents.

There was no contrary evidence submitted by the defense in either case. So having received the same evidentiary bases I likely would have reached the same conclusions as those judges. So I have factored them in with that in mind.

Turning to the legal standards I am to apply in this Kelly hearing. In the State of California Kelly is the controlling case, and the Kelly rule requires that the proponent of expert testimony that is based on the application of a new scientific technique must satisfy three criteria.

First, that the technique or method is sufficiently established in the relevant scientific community to have gained general acceptance as a reliable technique or method in that community;

Second, this must be established by the testimony of one or more qualified experts; and

Third, the evidence must show that the correct scientific procedures, that is, those that have been accepted, were employed in this particular case.

The standards are from People versus Cook, 40 Cal.4th 1334, Page 1344; People versus Soto, S-o-t-o, 21 Cal. 4th 512, Page 519; and People versus Leahy, L-e-a-h-y, 8 Cal. 4th 587, Pages 594 to 606.

I note that Kelly applies only to the use of new scientific techniques. And that not every disagreement among scientists triggers the application of Kelly. Kelly applies only to expert testimony that's based on a technique, process or theory that is new to science, and even more so, new to the law. And the reason for that is that Kelly is concerned with

an unproven technique that appears to provide some definitive truth that the expert need only accurately recognize.

The classic example being a machine or procedure that analyzes physical data produces a result.

And again, the rationale is that the courts are being conservative in erring on the side of caution; that is, they are willing to forgo the admission of such new techniques until it is reasonably certain that the pertinent scientific community no longer views them as experimental or of dubious validity. That's in People versus Venegas, 18 Cal.4th 47, Pages 83 to 85; in the Leahy case, I just cited, at Pages 595 to 606, and Kelly itself, that's People versus Kelly, 17 Cal.3d 24, Pages 31 to 32, and People versus Johnson, 139 Cal.App.4th 1135, Pages 1147.

The general acceptance is defined as a consensus drawn from a typical cross-section of the relevant qualified scientific community. It does not mean mere numerical majority. When the numerical majority is supported by minimally qualified people, it is of little value under the case law.

The Court must consider the quality as well as the quantity of evidence supporting or opposing the new technique.

And the Kelly rule does not require unanimity among experts.

That's all from the Leahy case, Pages 611 to 612.

Leahy also notes that longstanding use by law enforcement is less important than repeated use, study and confrontation -- or excuse me, confirmation by scientists.

That's at Pages 605 to 606.

Turning to my factual findings as a result of the evidentiary hearing. The People presented two expert witnesses, Jack Freytag, F-r-e-y-t-a-g, and Jason Dunham, D-u-n-h-a-m.

The defense presented four witnesses, Dr. Durand Bogault. Last name is spelled B-o-g-a-u-l-t. Dr. Massimo Franceschetti. First name, M-a-s-s-i-m-o. Last name is F-r-a-n-c-e-s-c-h-e-t-t-i. All one word. And Dr. Vitaliy Lomakin. First name, V-i-t-a-l-i-y. Last name, L-o-m-a-k-i-n. And finally, Peter Barnett, who's a criminalist.

I found that Mr. Freytag is qualified to testify within the meaning of the Kelly Prong Number Two. And I found him to be an expert in the fields of acoustic science and forensic acoustics. I also found his testimony credible. Although he was retained by the People as an expert, he did demonstrate in his testimony a reasonable degree of objectivity. He has never worked for ShotSpotter, and more importantly, when confronted with potential evidence contrary to his opinion, he acknowledged that such evidence, if presented to him, could change his opinion. So he appeared to be relatively objective.

Turning to Jason Dunham. Mr. Dunham is also a qualified expert within the meaning of Kelly. His expertise is in computer science, but particularly its use in the implementation of gunfire location technology. He may be one of the most knowledgeable people in the country on the issue

of using computer software to establish and implement a gunfire location technology system.

He is, of course, one of the founders of SST, Incorporated, that is the parent company that created ShotSpotter, and he's also a principal in that company. So he clearly has a bias in the sense that he has a financial interest in the welfare of his company and the degree to which its product is accepted in the law enforcement community and accepted in court as admissible evidence.

However, despite that inherent bias, which I considered, of course, I found Mr. Dunham's testimony entirely credible. I found he answered each question asked by either side honestly and straightforwardly, and he candidly admitted the weaknesses of the ShotSpotter technology, and the science, or the aspects of the science, on which it is based.

I also found he was particularly helpful in explaining how the ShotSpotter technology works, because of his intimate familiarity with it.

So I note that the bias of a witness, based on having a horse in the race, essentially, although initially kind of criticized in the Kelly decision and early decisions, has been found not to be an impediment to that expert qualifying under Prong Two of the Kelly analysis. Obviously, it's a factor you consider in evaluating the credibility of the expert, but it does not preclude them from being a qualified expert, because of course, oftentimes in more complex science those familiar with the science are those who are in the business of operating it for profit.

And I rely on People versus Cook, 40 Cal.4th 1334, Page 1346, and People versus Smith, 107 Cal.App.4th 646, Page 669.

As to Dr. Bogault, I found he was qualified as an expert within the meaning of the Kelly decision, Prong Two.

I found his expertise to be in acoustical engineering.

I found that he was helpful in explaining many of the relevant scientific concepts. He explained them clearly and made them understandable, and used PowerPoint effectively to illustrate the concepts. However, I found that Dr. Bogault did very little to conceal that he viewed his role in this process as an advocate for the side that hired him. He would frequently refer to his PowerPoint presentation as his argument, and virtually every slide in the PowerPoint contained argumentative illustrations, titles or added information.

I found that Dr. Bogault could rarely answer a question from either side with a simple yes or no. He seemed to feel a need to answer in paragraphs or pages, apparently making every effort to argue his case, regardless of what question was asked.

So as a result I found that Dr. Bogault's testimony instills little confidence, because I cannot assume that he evaluated any issue by looking at both sides of the issue objectively. So that detracted from the weight I give to his testimony.

Dr. Franceschetti I found qualified within the

meaning of Kelly, and I qualified him as an expert in wave propagation, signal analysis and sensor networks. I found him to be credible and objective, so I believed his testimony.

For example, he, too, would concede issues that were arguably against his position. He acknowledged the strengths of the ShotSpotter technology, and objectively described what he felt were the weaknesses.

Similarly, Dr. Lomakin I found qualified within the meaning of Kelly. I qualified him as an expert in wave propagation, scattering, defraction and signal processing, all relevant fields. I also found him credible and reasonably objective, again willing to look at ShotSpotter objectively, recognize its and strengths and articulate the areas in which he felt it was not accepted in the scientific community.

Final witness called by the defense, Mr. Barnett, was qualified as a criminalist. However, I don't think he was either offered as an expert in the field of forensic acoustics or any of the other sub fields that I think are key to this issue. He qualified generally as a criminalist. He did have helpful insight into the need for caution in adopting new scientific techniques, and the need for peer review and objective analysis. But, again, he was really not qualified to render an opinion as to whether ShotSpotter technology has been accepted in the relevant scientific communities, and he was not offered, as I understood it, for that purpose. It was kind of background or general information on the need for caution in this field. But I did find him both credible and objective.

Turning to factual findings on how the ShotSpotter technology works.

First, the ShotSpotter technology was developed by SST, Incorporated. I will refer to them interchangeably, usually by the term ShotSpotter.

ShotSpotter relies upon a network of acoustical sensors. Each sensor consists of a microphone, a GPS chip and a converter chip that converts analog sound waves into digital code for transmission over, essentially, telephone lines or similar digital transmission lines to computers.

The way the system works is that when a gun is fired the muzzle blast from the gun sends out a sound pressure wave in all directions.

A gunshot sound wave is a high level, high intensity sound wave with a rapid rise time, a peak frequency and a short duration. The gunshot sound, as with all sound, travels at the speed of sound; that is, 1,130 feet per second at sea level, with an approximate relative humidity of 30 percent at 59 degrees Farenheit. And all of those factors; that is, altitude, humidity, temperature, can affect the speed of sound, but only very marginally, and almost to the point of being irrelevant for purposes of this discussion, not irrelevant, but minimally relevant.

So the way the ShotSpotter works is the microphones are constantly activated and pick up all ambient sounds around them that are within their detection levels. When they detect an impulsive sound, and that sound is identified as having the characteristics of a gunshot by virtue of its rapid rise and

so forth, then the sensor sends that sound to a central server operated by ShotSpotter.

In order for the ShotSpotter mechanism to work they must receive the impulsive sound in at least three sensors in order to identify it as a gunshot and estimate a location.

So when multiple sensors receive the sound wave from a single gunshot each sensor receives the sound at a slightly different time. The location of each sensor and the precise time at which the sound is received are provided by the GPS chip, which is accurate to within one one-billionth of a second.

For each pair of sensors that receive an impulsive sound identified as a potential gunshot sound, they send it to the central server, and the computer is able to calculate a hyperbola for each pair of sensors. A hyperbola being a curved line that is based on the time difference of arrival between the two microphones.

The more sensors that pick up an impulsive sound the more hyperbola are created. Then these hyperbola are created by using an algorithm that has been widely accepted in the relevant scientific community and mathematics generally. This is called multilateration.

So ShotSpotter determines the location of the potential gunshot sound based on the point at which the greatest number of hyperbola intersect.

And the ShotSpotter computers record the data received from the sensors into its database, and preserve acoustic recordings of the sound waves for later review.

As indicated, the more sensors that capture and identify the impulsive sound and send it to the server, the more hyperbola are created, and then the more accurate the location estimate is likely to be.

It's clear, based on the testimony, that ShotSpotter's computer software cannot accurately distinguish between various types of impulsive sounds that have characteristics similar to a gunshot, for example, firecrackers or backfire noise from a car. So therefore, it requires human review of the audio recording.

So under -- depending on which system the ShotSpotter customer selects, either the customers themselves can elect to have their own personnel review the audio recording and determine whether an impulsive sound is a gunshot, or they can have ShotSpotter personnel conduct that human review.

ShotSpotter itself trains its employees to identify gunshot noises and distinguish them from other impulsive noises, just by the human ear, and by comparing them with a series of none gunshot sounds.

It is generally agreed among the scientists that people can more accurately identify a gunshot than the computers can at present. However, there was no evidence as to the degree of accuracy with which ShotSpotter personnel are able to identify gunshots.

Turning to the characteristics of sound waves that are relevant to this system. As I mentioned, when a gun is fired a sound pressure wave is sent out in all directions. When the sound wave hits any obstacle part of that sound wave

is absorbed, for example, by a building or tree, part of it is reflected, and part of it is transmitted through the obstacle. And the degree to which each of those three things will occur depends on the surface and the composition of the material that constitutes the obstacle.

So reflection is when sound bounces off a surface, for example, of a building, and the degree to which it reflects or diffuses will depend on the surface of the building or the other obstacle. Reflection will lengthen the path of the sound waves slightly.

Diffusion occurs when the sound waves encounter a rough surface. The rough surface causes the sound wave to disperse in multiple directions more widely than mere reflection from a smooth surface. Diffusion diminishes the level or volume of the sound.

And defraction is when a sound wave encounters a barrier, such as a building and it causes the sound wave to bend or defract around the obstacle, either over the building or around the building or both. Defraction also changes the path length slightly.

Sound attenuates generally, that is, its volume diminishes as it travels through the air over distance, and also as it is transmitted through various objects.

Now, applying these principles in the real world circumstance of a city, which is where ShotSpotter was used in this case. ShotSpotter is typically deployed in an urban atmosphere. They place a number of microphones throughout the city, place as many as are necessary to achieve the level of

reliability that they promise to their customers.

Things like the topography of the land, the hills or valleys, the environmental conditions, including trees and ambient noise, and the configuration of buildings all can affect the travel of that sound.

Richmond, the relevant city in this case, is a typical relatively small city with residential, commercial and retail structures throughout the city. But most of the buildings that are at issue in this case are one or two stories, but of course, some are higher than that.

My understanding from the testimony is that each building or other obstacle between the location of the gunshot and the location of the sensor will cause some degree of reflection, diffusion and defraction of the sound wave; that is, each time a sound wave encounters a building or other obstacle it will reflect off the building or -- and/or diffuse around the building, and thereby slightly lengthen the path between the gunshots and the sensor.

The alteration of the path length. That is, the degree to which it is lengthened by the defraction and diffusion and reflection, and therefore, the time of arrival differential is very slight, given the overall distances involved. And this is a key point in my view; that is, I credit Mr. Freytag and Mr. Dunham when they testify that when you have a distance between the gunshot and the sensor in hundreds or thousands of feet, a 20 or 30 foot high structure will alter the sound path by a very small relative amount, and therefore will affect the time of arrival differential by a

very small, often insignificant, amount, given the distances over which the sounds are traveling.

The ShotSpotter system does allow for those slight differences in its calculations.

First, the hyperbola are based on the differential in times of arrival rather than the direct time of arrival itself, it's the differential that counts. And then when you have an adequate number of sensors, the number of hyperbola that are created and intersect at a same or very similar place can accurately identify the location of the gunshot within a reasonable or measurable degree of accuracy.

And the ShotSpotter employees are able to review and manipulate the data to exclude hyperbola that do not appear to or do not intersect with the majority of hyperbola, because they are likely to either be reflected or defracted sound waves that is echoes from the actual gunshot, or they may be from an unrelated impulsive wave; for example, construction, from a different source of sound.

So the experts at ShotSpotter are able to eliminate hyperbola that do not appear to relate directly to the gunshot.

Related to the test fires, when ShotSpotter installs its system in any given city it conducts a series of test fires to verify that the system is functioning properly and achieving the results that are within the margin of error that ShotSpotter promises its customers. They do promise that 80 percent of gun -- of the gunshot locations will be identified within 25 meters, that is, 82 feet of the actual true

location.

When the system was installed in Richmond, ShotSpotter in Richmond conducted a total of three sets of test fires. The first two were performed jointly by ShotSpotter and the Richmond Police Department with handguns. The third apparently was conducted by Richmond police officers independently, using shotguns and blanks rather than actual shells. That third test was discarded as inconclusive, as I understand it, because shotgun blanks do not produce the muzzle blast that is necessary for the ShotSpotter system to work accurately.

As to the two test fires that were conducted jointly, the first test fire involved 46 rounds fired from various different locations within Richmond. Of those 46 rounds, all but one were accurately identified and located by the system.

The second test fire involved approximately 60 rounds fired, and all 60 of those accurately identified the location.

It is true that most of the test fires were done in parks within the City of Richmond. And the defense argues that that arguably reduced the immediate number of obstacles nearby; that is, houses were a little farther away in parks than they would be on an average city street, which I think has some validity to it, although some of test shots apparently was conducted at the edges of parks near buildings.

Turning to the legal analysis. The first question I have to address is whether the ShotSpotter technology is a new scientific technique that must satisfy the Kelly rule before it can be admitted into court.

I think there is no question and has never been a dispute that the fundamental principles on which ShotSpotter is based are accepted in the respective scientific communities. That is, multilateration is based on Euclidean geometry that dates back to 300 BC. It is widely used today in GPS satellite location systems, cell phones, and et cetera. It was used in World War I to locate German guns by the Allies. It was used in the Loran navigation system by the maritime industry before the GPS satellite system was established. And none of the experts in this process questions the acceptance of multilateration principles.

Similarly, the equipment used, such as the microphones that capture the sound waves, the chips that convert the sound waves to digital signals to be sent over the air waves, and the GPS system used to identify the location of the microphones and the precise time of the gunshot are all widely accepted and, for example, used in cell phones ubiquitously.

So the People argue and have a valid point that the combination of historically accepted techniques does not, in itself, create a new technique subject to Kelly analysis. That's in People versus Cowan, C-o-w-a-n, 50 Cal.4th 401, Pages 470 to 71; People versus Nolan, N-o-l-a-n, 95 Cal.App.4th 1210, and People versus Bury or B-u-r-y, 41 Cal.App.4th 1194, Page 1206.

That is, a new device -- also a new device that applies accepted techniques, such as a new alcohol detection device or a new system of DNA analysis, does not, in itself,

require Kelly analysis, because it is applying accepted techniques.

In my view, the question in this case is whether ShotSpotter's complex system of placing sensors throughout a city, identifying impulsive sounds as gunshots, and applying its algorithms to the data received by multiple sensors in this urban environment, and then applying human opinion to the identification of the gunshot, and some interpretation of the algorithms and hyperbolae to exclude those that are not consistent with the majority, whether that complex system is accepted in the relevant scientific community.

As I noted, the first step in this process is the receipt of the sound waves by microphone, conversion of the sound waves from the analog sound waves to digital signals, and then sending them to a computer. None of those are new technologies. Both the equipment and the methodologies are commonly used and have been for many years. They are done by microphones and cell phones on a routine basis.

The second step is identifying an impulsive sound as a gunshot to the exclusion of other similar sounds, such as firecrackers and backfires.

As I noted, this step is preliminarily done by the computer software that compares the rise time and other acoustic characteristics of the impulsive sound to the traditional characteristics of a gunshot. But the best the computer can do is say that they are similar and cannot exclude other types of impulsive sounds that meet those characteristics. And ShotSpotter does not claim that its

automated process can definitively or reliably identify a gunshot. That's why they require review by a human ear in order to make the final determination whether a sound is a gunshot or not.

Therefore, I find that the computer aspect of identifying the sound as a gunshot is more akin to the cases where fingerprints and DNA were searched against a large database in order to identify potential matches subject to confirmation by human scientists. For example, People versus Farnam, F-a-r-n-a-m, 28 Cal.4th 107, Page 160, and People versus Johnson, 139 Cal.App.4th 1135, Page 1155.

Also, this aspect of the system, in my view, does not create the danger that Kelly sought to guard against. In other words, ShotSpotter does not claim that its computers provide a definitive truth as to the identification of gunshot sounds. They do require human review, and a human would be required to render his or her opinion, based on their training, that the sound is a gunshot sound. So I don't think the jurors would be inclined to believe that there's some scientific magic to this that imparts a mythical truth that can't be questioned. It's simply expert testimony on an opinion basis that opposing counsel can cross, opposing counsel can present their own experts, and arguably, the sound could be played for the jury, along with known gunshot sounds, so the jurors themselves could render an opinion as to whether it is a gunshot or not.

So I don't find that this aspect of the ShotSpotter system requires Kelly-Frye analysis; that is, the

identification of the gunshot. And I rely on cases that hold that a scientific technique that a lay person can understand and evaluate through their own senses or observations is not subject to the Kelly rule. I have already cited People versus Cowan, C-o-w-a-n, 50 Cal.4th 401, Pages 471 to 72; Farnam, at Page 160. People versus Ayala, A-y-a-l-a, 24 Cal.4th 243, Page 281; and In re O.D., 221 Cal.App.4th, 1001, Pages 1006 to 1007.

So I conclude that this step in the ShotSpotter system, that is, identification of an impulsive sound of a gunshot, does not require Kelly analysis or approval.

The third step is collecting data from all of the responding sensors, calculating their hyperbola, determining the location at which the greatest number of hyperbola intersect, and then excluding outliers as either likely echoes or unrelated sounds.

In my view this is a new scientific technique that requires Kelly analysis. As I have indicated, although some of the components of the system are not new; that is, the equipment used, the microphones, GPS sensors and so forth, that some of the fundamental techniques, such as multilateration, the mathematics involved are not new to the scientific community. It's the combined application of these in a complex environment, such as a city, with all the potential of different effects on the travel of the gunshot sound that I have described, and the application of the human interpretation of the data, in my view, it's that combined system that is a new scientific technique. I rely on People

versus Venegas, V-e-n-e-g-a-s, 18 Cal.4th 47, Pages 84 to 89; Leahy at Pages 605 to 607; Brown at Pages 530 to 31, and the Kelly decision itself at Pages 32 to 33.

So we move on to the, really, the first prong of the Kelly analysis, and that is whether the ShotSpotter technology, as I have described it, is accepted in the relevant scientific community.

I find that the relevant scientific communities are acoustical engineering, sound propagation and wave propagation, and similar sub fields included computer science of developing the software to conduct these calculations, as some of the other expertises that the relative experts had, are all relevant to this issue. But I think the primary field is acoustic engineering.

So the bottom line is I have the People's two experts say yes, it's accepted, the ShotSpotter system, and the defense's three experts that say no, it's not accepted. And as I have indicated, I agree that it's not just a matter of counting the number of experts on each side. I have to analyze the qualifications, and more importantly, the basis for each expert's opinion.

As to the People's experts, again, I found their testimony credible, but I looked to the basis of their opinion that the ShotSpotter system is accepted in the scientific community.

Now, the potential bases for that include a Popular Science magazine article from 1918, talking about the use of multilateration to locate German guns in World War I; a US

geological survey in the early 1990s that was referred to, but I have very little information about, and it's not in evidence, nor is this Popular Science article. I have the ShotSpotter's test fires in Richmond, which I described and was described in some detail here. I have references to a presentation by Dr. Calhoun, who is a ShotSpotter founder and principal, to a group of forensic scientists in New Jersey. But again, I have very limited information of what that presentation entailed, and it's not itself in evidence in this hearing; and a study that is referred to as the efficacy study, which was an anecdotal questionnaire commissioned by ShotSpotter, but conducted independently by the National Organization of Black Law Enforcement Executives. That is, ShotSpotter paid for the study but gave independent authority to the organization to conduct a study independently of ShotSpotter. That study itself is not in evidence, but again, it was described in some detail by the experts who rendered opinions here. Although I noted it, as indicated, mostly an anecdotal questionnaire rather than a technically reviewed scientific paper. And I also have the fact that ShotSpotter obtained and received patents, which are, as all patents, matters of public record.

So it's my conclusion that Mr. Freytag and Mr. Dunham were relying on the general acceptance of multilateration principles as the basis of their opinions that the ShotSpotter technology is accepted in the relative -- relevant scientific community. But as I have indicated, my legal view is that those basic principles, although accepted themselves, aren't

the question. The question is whether the combination of the use of those principles in this complex real world environment of a city, which has many layers of complexity and requires interpretation of data, application of expertise to interpret the data generated by the ShotSpotter computers in the form of hyperbolae.

So therefore, my view is that that complex technology, when combined, takes it outside of the general acceptance of multilateration into a new scientific technique, similar to the cases I have cited.

I also think that Mr. Freytag and Mr. Dunham were testifying that in their opinions ShotSpotter has demonstrated the reliability of its system within the margin of error that they promise. And I agree with them that ShotSpotter has so demonstrated the reliability of its product. That is, that 80 percent of shots will be accurately identified within 25 meters.

So it is, in my view, likely that the system will appear reliable, or does appear reliable, within those parameters. And this degree of accuracy is fine for use by law enforcement in investigating crimes and following up on potential gunshots in the city and so forth, but that's not the question I'm dealing with. As I have indicated, the California Supreme Court has told us that we are to err on the side of caution, and not to admit scientific evidence that has not been vetted by the relevant scientific community generally and accepted in that community, but before we allow an expert to testify to conclusions based on that system. And so that's

why I find the ShotSpotter combination of technologies and application in a urban environment has not yet been scientifically vetted sufficiently to be admissible in court. Until there is a reasonable reasonably broad consensus in the relevant scientific community, I'm not permitted to admit such testimony into evidence.

So my conclusion is that the evidence presented at this hearing did not show that a typical cross-section of experts in the fields of acoustic engineering, sound propagation, wave propagation and the other sub fields that I have indicated, have gotten together, studied the ShotSpotter system as it's applied in the urban environment, and concluded that it has been accepted as reliable in their respective fields.

There are no peer-reviewed articles in scientific journals on the application of ShotSpotter in a city. There are no symposia discussing its acceptance, with the possible exception of a New Jersey presentation, but I have very little detail about that. It sounds like a presentation by the ShotSpotter people, as opposed to a discussion among experts as to its acceptance.

I don't have a national or state government agency reports, similar to those used in the DNA development, of various systems of DNA analysis that were tested by the FBI and national laboratories or consortiums of laboratories in order to be accepted in the general scientific community, such as in People versus Soto, 281 Cal.4th at Page 538.

I do recognize that ShotSpotter is a proprietary

technology, so that is an impediment to publishing it in a public journal and having it generally studied. I understand the difficulty of that, and I recognize that ShotSpotter has legitimate business reasons for keeping its trade secrets secret, and that's a perfectly legitimate business decision on their part. That itself would not preclude acceptance by the community. As I indicated, some of DNA testing systems in their development were proprietary systems, such as the Profiler Plus DNA system. Despite that, the companies were able to have them approved by objective studies conducted by the company and reviewable without disclosing the trade secrets. They also had them reviewed by either the federal or state Departments of Justice and by a number of county crime labs, again without disclosing publicly the mechanisms that they used, but they were able to have objective validation by independent government agencies without disclosing their trade secrets. Examples are People versus Hill, 89 Cal.App.4th 48, Pages 56 to 59, and People versus Smith, 107 Cal.App.4th 646, Pages 665 to 669.

Those are options for ShotSpotter, but until and unless that's done I can't find that it meets the general acceptance requirement of Kelly, since I have found it is, in combination, a new scientific technique.

So my ruling is that the expert testimony that a gun was fired at a particular location at a given time, based on the ShotSpotter technology, is not presently admissible in court, because it has not, at this point, reached general acceptance in the relevant scientific community.

So in evaluating the evidence at the preliminary hearing, I have not considered the proffered testimony of Mr. Greene or any of the evidence from ShotSpotter relating to the location of gunshots.

Mr. Hamasaki, I did state some general factual conclusions and findings in relation to the holding orders in general, and I will incorporate those by reference. And of course, you'll receive a transcript with those. But on the basis of the holding -- excuse me, the preliminary hearing as a whole, I am not holding Mr. Gillard to answer on Count One, a violation of Penal Code Section 182(a)(1), the overall conspiracy to murder, because I find the evidence was not sufficient to show that Mr. Gillard participated in the overall conspiracy to murder. There was only one call prior to June 15th, 2013, and that call only reflected Mr. Johnson's opinion of what Mr. Gillard wanted them to do in relation to the ongoing gang war. And in my view, Mr. Johnson's opinion is not admissible against Mr. Gillard.

On the other hand, I do hold Mr. Gillard to answer on Count Five, a violation of Penal Code Section 182(a)(1), conspiracy to murder on July 15th, 2013, and that he committed overt act Number 15. It's my view that Mr. Gillard did clearly participate in the conspiracy to retaliate for the shooting of a Deep C member, and encouraged Devonte Bernstine and Brian Johnson to go on the offensive in the gang war against those perceived to have shot the Deep C member.

I also hold Mr. Gillard to answer on Count Six, violation of Penal Code Section 186.22(a), active

participation in a street gang between June 21st and July 15th, 2013.

I do find that Mr. Gillard participated in a street gang with the knowledge that its members engaged in a pattern of criminal street gang activity. And that Mr. Gillard willfully promoted, furthered and assisted in felonious criminal conduct by members of the Lils and Deep C, that being conspiracy to murder, in violation of Penal Code Section 182(a)(1).

I'm not holding Mr. Gillard to answer on Penal Code Section -- on Count Seven, excuse me, Penal Code Section 245(c), assault with a deadly weapon, or by force likely on a peace officer, on July 15th. I had no evidence that he was present for, involved in or participated in the conduct in ramming Officer Caine's police car.

I do not hold Mr. Gillard to answer on Count Eight, a violation of Vehicle Code Section 2800.2, evading a peace officer, reckless driving on July 15th, 2013.

Therefore, I hold Mr. Gillard to answer on Counts 5 and 6 with the relevant enhancements, and I discharge Mr. Gillard on Counts One, Seven and Eight. We set the preliminary hearing for this Friday, June 6th.

MR. JALLEPALLI: Thursday.

MR. HAMASAKI: Thursday.

MR. JALLEPALLI: The arraignment.

THE COURT: Thank you, the arraignment. Arraignment is set for June 5th at 8:30.

MR. JALLEPALLI: Yes.

MR. HAMASAKI: Yes.

THE COURT: 8:30 in Department 27. Thank you.

MR. HAMASAKI: Your Honor.

THE COURT: Yes, sir.

MR. HAMASAKI: Unrelated to this, and off the record.

(This matter concluded at 10:35 a.m.)

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STATE OF CALIFORNIA)
) ss.
CONTRA COSTA COUNTY)

I, DEBRA MACK EASTRIDGE, Certified Shorthand Reporter, do hereby certify that as such I took down in stenotype all of the proceedings in the within-entitled matter, THE PEOPLE OF THE STATE OF CALIFORNIA, Plaintiff, versus TODD GILLARD, Defendant, Superior Court Action Number 05-164044-0, heard before the Honorable JOHN W. KENNEDY, Judge, and that I thereafter transcribed my stenotype notes into typewriting through computer-assisted transcription, and that the foregoing transcript constitutes a full, true, and correct transcription of the proceedings held before me at the aforementioned time.

IN WITNESS WHEREOF, I have hereunto subscribed my name this date, June 8, 2014.

DEBRA MACK EASTRIDGE
Certified Shorthand Reporter #9260

EXHIBIT C

ROCHESTER POLICE DEPARTMENT
INVESTIGATIVE ACTION REPORT
CASE UPDATE

CR #
2016-00078072

DETAIL

Victim's Name (Last, First, Middle) or Name of Business	Location of Offense	Beat
OFFICER JOSEPH FERRIGNO	9 IMMEL ST Rochester	281

Date/Time of Occurrence	Offense / Charge / Incident (Most Recent Classification)
04/01/2016 21:10	ATT. AGGRAVATED MURDER OF POLICE OFFICER

Classification After Investigation (Include Law Section Number)
ATT. AGGRAVATED MURDER OF A POLICE OFFICER

SUSPECT / MISSING PER

Suspect Type	Suspect Name (Last First Middle)	Nickname

Address	Date of Birth	Age	Sex	Race	Ethnicity	NCR99 / JCR #

Height	Weight	Hair Color	Hair Length	Eye Color	Glasses	Complexion	Build	Facial Hair	Gang Affiliation

Clothing, Jewelry, Distinguishing Features	Offender Condition	Scars, Marks, Tattoos

Missing Person Code	Missing Person Mother's Maiden Name	Missing Person Place of Birth	School ID Number

VEHICLE RECOVERY

Year	Make	Model	Style	Color

State	Registration #	VIN #	Towed to / Towed by

Location Recovered	Date	Time	Owner Notified by

Evidence of Damage / Method of Theft	Time Radio Notified of Recovery

NARRATIVE

On listed date and approximate time I responded to 7 Immel St to assist officers with a shots fired investigation. Upon my arrival I assisted with scene security and then I assisted with the K9 track for the additional suspect by playing the area.

At approximately 2138hrs I was assigned by Sgt. Marone to conduct a neighborhood check on Ames St between Jay St and Masseth St. I checked the odd numbers while Officer Bower checked the even numbers. I came up with the following results:

479 Ames St - no answer

495 Ames St (down) - Amanda Girard - stated she only heard two to three gunshots, did not see anything.

495 Ames St (up) - Angelique Beatty - stated she was not home, heard/saw nothing.

INVESTIGATION

Continuance of	Changed to	Closed by
Field		

Exceptional Clearance	Bias Type	Victim Relationship to Suspect

Property Recovered	Value of Property	# Arrested	SRR	Multiple Clearup	Teletype Status

Additional Techwork Performed	Further Investigation Conducted By
	CIS - MCU

Reporting Officer		ID #	Date	Reviewed By
MINNICK	DYLAN	2024	04/02/2016	COR\fz1543\ZENELOVIC, FLAMUR\4/4/2016\08:25

ROCHESTER POLICE DEPARTMENT
INVESTIGATIVE ACTION REPORT
CASE UPDATE

CR #
2016-00078072

NARRATIVE

497 Ames St - Fynesse Sanders - stated she heard/saw nothing.

499 Ames St - no answer

507 Ames St - Jason Garcia - stated he heard "maybe like six" gunshots, stated it sounded like "pop, pop, pop" then a short space then "pop, pop, pop", stated he did not see anything.

521 Ames St (down) - Travon Brown - stated he only heard five to six gunshots, saw nothing.

521 Ames St (up) - Ruben Martinez - stated he heard/saw nothing.

525 Ames St - no answer

529 Ames St - Nicole Reagan - stated she was not home, heard/saw nothing.

531 Ames St - Patricia Jackson - stated she heard/saw nothing.

541 Ames St - elderly F/W refused info - stated she heard/saw nothing.

543 Ames St - vacant

At approximately 0243hrs I returned to Jay St/Immel St where I was directed by Sgt. Pursel to relieve 3rd platoon officers in the backyard of 5 Immel St, I maintained this post until approximately 0553hrs when I was relieved by Officer Clinkhammer.

NOTE
While conducting the neighborhood check on Ames St, at approximately 2138hrs I heard what sounded like at least three gunshots coming from the area west of Ames St, may have been related to CR#16-078107, refer to that incident for further detail.

Nothing Further.

Reporting Officer		ID #	Date	Reviewed By
MINNICK	DYLAN	2024	04/02/2016	COR\fz1543\ZENELOVIC, FLAMUR\4/4/2016\08:25

ROCHESTER POLICE DEPARTMENT
INVESTIGATIVE ACTION REPORT
CASE UPDATE

CR #
2016-00078072

ADDITIONAL PERSONS

R = Reporting Person W = Witness PK = Person w/Knowledge NI = Not Interviewed

Type	Name (Last, First, Middle)	DOB	Sex	Race	Eth	Address	Telephone No
NO	GIRAD, AMANDA	08/17/1990	F	W	N	496 AMES ST DOWN Rochester, NY 14609	(585)498-8045
NO	BEATTY, ANGELIQUE	10/19/1992	F	B	N	496 AMES ST UP Rochester, NY 14609	(585)305-2951
NO	SANDERS, FYNESSE	09/29/1992	F	B	N	497 AMES ST Rochester, NY 14609	(585)420-8774
NO	GARCIA, JASON	09/14/1983	M	W	H	507 AMES ST Rochester, NY 14609	(585)200-6766
NO	BROWN, TRAVON	09/09/1999	M	B	N	521 AMES ST DOWN Rochester, NY 14609	(585)709-7887
NO	MARTINEZ, RUBEN	03/09/1967	M	W	H	521 AMES ST UP Rochester, NY 14609	(585)351-9936
NO	REAGAN, NICOLE	11/27/1986	F	W	N	615 AMES ST Rochester, NY 14609	(585)286-8338
NO	JACKSON, PATRICIA	11/17/1963	F	B	N	631 AMES ST Rochester, NY 14609	(585)284-2257

R = Reporting Person W = Witness PK = Person w/Knowledge NI = Not Interviewed

Type	Name (Last, First, Middle)	DOB	Sex	Race	Eth	Address	Telephone No

R = Reporting Person W = Witness PK = Person w/Knowledge NI = Not Interviewed

Type	Name (Last, First, Middle)	DOB	Sex	Race	Eth	Address	Telephone No

Reporting Officer		ID #	Date	Reviewed By
MINNICK	DYLAN	2024	04/02/2016	COR\fz1543\ZENELOVIC, FLAMUR\4/4/2016\08:25

Page 1 of 1

ROCHESTER POLICE DEPARTMENT
INVESTIGATIVE ACTION REPORT
NARRATIVE ONLY

CR #
2016-00078072

DETAILS

Victim's Name (Last First Middle) or Name of Business	Location of Offense	Beat
OFFICER JOSEPH FERRIGNO	9 IMMEL ST	281

Date/Time of Occurrence	Offense / Charge / Incident (Most Recent Classification)
04/01/2016 21:10	ATT. AGGRAVATED MURDER OF POLICE OFFICER

NARRATIVE

On 04/02/16 at approximately 2230hrs I relieved Officer Timothy Hall from prisoner guard at Strong Memorial floor 3, unit 1800, room 11.

I had no interaction with (S), his welfare was maintained by medical staff.

I was relieved of my post at approximately 0220hrs by Officer Katie Kratts.

Reporting Officer		ID #	Date	Reviewed By
MINNICK	DYLAN	2024	04/03/2016	ZENELOVIC, FLAMUR

EXHIBIT D

SST™

September 9, 2016

Katherine Higgins
Attorney for the Defendant
10 North Fitzhugh Street
Rochester, NY 14614

RE: State vs Silvon Simmons
CR 16-070872

Dear Ms. Higgins,

Pursuant to a subpoena received from your office and in order to facilitate your request, find attached SST's Forensic Services Order Form. As the County of Monroe is not a customer of SST., report generation and expert testimony services are billable, portal to portal, and must include all travel expenses. Once we receive a PO or other form of remuneration, we can move forward with report creation and necessary travel arrangements.

If you have any questions, please feel free to contact me at any time.

Thank you,

Mike Will
Senior Director
Customer & Technical Support
SST Inc.

Attachment

7979 Gateway Blvd. Suite 210
Newark, CA 94560-1158
+1 510 794 3100 main
+1 888 274 6877 toll free
www.ssl-inc.com
www.shotspotter.com

FORENSIC SERVICES ORDER FORM

7979 Gateway Blvd., Suite 210 • Newark, CA 94560-1156 • Ph. +1(888) 274-6877 • Fax +1(650) 887-2106

INACTIVE OR NON-CUSTOMERS

☐	Records Inquiry	A CD with the report will be shipped via 2 day FedEx. Basic report requires approx. 1 hour.	$600 per hour
☐	Forensic Report	1 shooting incident per report, covering a maximum 8 hour window. Hard copy report is shipped via 2 day FedEx.	$5,250 per report
☐	Expert Witness Testimony	Charges are based on actual expenses and time from door to door.	$600 per hour plus travel expenses and per diem*

For inactive or non-customers, no work will commence until SST, Inc. is in receipt of a properly served subpoena. SST, Inc. will notify the appropriate system owner/subscriber regarding receipt of the subpoena. By signing below, you represent that you are authorized to execute this binding contract on behalf of the company/agency named below.

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City: _____ State: _____ Zip: _____

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Billing Address:
(if different from above) _____ Phone: _____

City: _____ State: _____ Zip: _____

*Rates applicable from the start of a travel day to the end of the travel day.