VIRGINIA:

IN THE CIRCUIT COURT OF FAIRFAX COUNTY

JOHN C. DEPP, II,

    Plaintiff,

v.

AMBER LAURA HEARD,
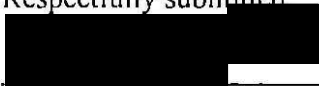
    Defendant.

Civil Action No.: CL-2019-0002911

PLAINTIFF JOHN C. DEPP, II'S MOTION FOR SANCTIONS FOR FAILURE TO COMPLY WITH NOVEMBER 8, 2021 ORDER

Plaintiff John C. Depp, II, by and through his undersigned counsel, hereby moves this Honorable Court to sanction Defendant Amber Laura Heard for her failure to comply with the Court's November 8, 2021 order regarding forensic imaging.

Counsel for Plaintiff hereby certifies that they have in good faith conferred with opposing counsel in an effort to resolve this dispute without court action.

A memorandum in support of this motion and proposed Order are filed herewith for the Court's consideration.

Respectfully submitted

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Tel.: (202) 536-1785
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VIRGINIA:

IN THE CIRCUIT COURT OF FAIRFAX COUNTY

JOHN C. DEPP, II,

     Plaintiff,

v.

AMBER LAURA HEARD,

     Defendant.

Civil Action No.: CL-2019-0002911

PLAINTIFF JOHN C. DEPP, II'S MOTION FOR SANCTIONS
FOR FAILURE TO COMPLY WITH NOVEMBER 8, 2021 ORDER

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*Counsel for Plaintiff and
Counterclaim Defendant John C. Depp, II*

Dated: March 22, 2022

Plaintiff and Counterclaim Defendant John C. Depp, II, by counsel, hereby moves the Court, pursuant to Virginia Supreme Court Rule 4:12(b)(2), to impose sanctions on Defendant and Counterclaim Plaintiff Amber Laura Heard for failure to comply with the Court's November 8, 2021 Order (the "Order") directing the forensic imaging of Ms. Heard's devices, annexed hereto as **Exhibit A.**

INTRODUCTION

In recognition of the fact that the authenticity and integrity of the photographs Ms. Heard relies on in this action is at issue, this Honorable Court ordered Ms. Heard to produce her devices for a forensic imaging and analysis of the specified extracted data. The Court's Order imposed common-sense limitations to protect Ms. Heard's privacy and data, which Ms. Heard and her experts have exploited to the point that the contemplated analysis by Mr. Depp's forensic expert likely cannot be completed in advance of the upcoming jury trial of this action commencing on April 11, 2022. Since the Court entered the Order on November 8, 2021, the imaging, extraction, and review process has been plagued by delays and technical snafus which are, at best, negligent and, at worst, intentional stonewalling designed to thwart the very forensic analysis ordered by this Court. The result: Mr. Depp has incurred extensive costs, both from his expert and the Court-appointed limited discovery issue conciliator, for nothing; Mr. Depp's forensic expert, Bryan Neumeister has not been able to review let alone analyze the authenticity and integrity of the photographs Ms. Heard relies upon to support her claims of abuse. In a case where there are he-said she-said claims of domestic abuse, the prejudice to Mr. Depp in not being able to test the authenticity of this key evidence cannot be overstated. There must be consequences.

BACKGROUND

On November 8, 2021, the Court ordered a forensic imaging of Ms. Heard's devices so that

Mr. Depp's forensic expert, Bryan Neumeister, could analyze the integrity of photographs of Ms.

Heard taken during specific time periods during which she claimed abuse by Mr. Depp. Pursuant

to the Order, the forensic imaging would be conducted by Ms. Heard's designated forensic experts,

under the supervision of Mr. Neumeister and/or his colleague Matt Erickson, by November 30,

2021. *See* Order at ¶ 4. Because the hardware and software used to conduct the imaging and

extraction of data is critical to ensuring the integrity of the data for purposes of Mr. Neumeister's

analysis, the Order provided that, should Ms. Heard's experts not have access to the appropriate

hardware and/or software, Mr. Neumeister would make arrangements with Ms. Heard's experts to

ensure the appropriate programs are used. *See id.* at ¶ 5. To protect Ms. Heard's personal and

potentially privileged data, the Order provided that a neutral third-party attorney, Craig Young,

would review the extracted data and isolate any irrelevant or privileged information from the

dataset to be analyzed by Mr. Neumeister, at Mr. Depp's expense. *See id.* at ¶ 8.

Unfortunately, as of *February 18, 2022*, the imaging of all of Ms. Heard's devices and

cloud accounts *still* had not been completed and Mr. Depp's expert had *not received a single piece*

of extracted datum to analyze. *See* **Exhibit B** (Neumeister Decl., Feb. 18, 2022 at ¶ 7). In fact,

Mr. Neumeister did *not receive any extracted data until March 2, 2022* and, to date, is *still*

receiving data extracted from Ms. Heard's devices on a rolling basis. *See* **Exhibit C** (Neumeister

Decl., dated Mar. 22, 2022, at ¶¶ 7-8). Even when data is finally available to send to Mr.

Neumeister, there are inexcusable mishaps and delays: on one occasion, an encrypted drive of

photographs was sent to Mr. Neumeister without the password necessary to access the contents,

so the drive needed to be resent; on another occasion, Mr. Neumeister received a file without the raw photographs, not in the agreed-upon format. *See id.* at ¶ 9.

Making matters worse, much of the data that has been provided to Mr. Neumeister to date are either irrelevant or seem to be corrupted. Of the over 58,000 photographs Mr. Neumeister has now received, a substantial portion are not the types of photographs ordered to be analyzed, namely pictures of Ms. Heard. *See id.* at ¶¶ 12-13; Order at ¶ 6. Many of the other photographs are essentially incapable of analysis. For example, there are multiple photographs that are visually the same and indicate they are the directly photographed image, but these "original" photos do not hash (with the "hash" being the digital fingerprint of the photograph). *See* Exhibit C at ¶ 14. For other photographs, the EXIF data shows dates from the 1970s or 1980s, which is literally impossible since EXIF data was not invented until more than 20 years later (and Ms. Heard was not born until ████. *See id.* at ¶ 15. The EXIF errors were not the result of photos being extracted from unallocated space, as they revert to Epoch time in the EXIF data in most every case. *See id.* Thus, these anomalies may be the result of the unlicensed and outdated software used by Ms. Heard's experts to image her devices, a fact which was only discovered by Mr. Depp's experts on February 24, 2022. *See id.* at ¶¶ 10-11, 14-15. Ideally, Ms. Heard's experts would have used licensed, up-to-date software to ensure a clean imaging and extraction, but, unfortunately, the forensic images were extracted before Mr. Neumeister's team learned that Ms. Heard's experts were using unlicensed software. *See id.* at ¶¶ 10-11. In short, the process has been a mess and the data obtained therefrom is unusable for purposes of the analysis Mr. Neumeister was retained to perform. *See id.* at ¶ 16.

ARGUMENT

Pursuant to Rule 4:12(b)(2), a trial court may sanction a party for failing "to obey an order to provide or permit discovery." Va. Sup. Ct. R. 4:12(b)(2); *see Judkins v. Shorter*, 53 Va. Cir. 230 (2000). "Given the sweep of Rule 4:12, a trial court has 'broad discretion' to fashion an appropriate sanction." *Judkins*, 53 Va. Cir. 230 (quoting *Woodbury v. Courtney*, 239 Va. 651, 654 (1990)). Items of recovery can include, *inter alia*: (a) out-of-pocket costs and attorneys' fees (*see id.*); and (b) "[a]n order that the matters regarding which the order was made or any other designated facts will be taken to be established for the purposes of the action in accordance with the claim of the party obtaining the order" (*see* Va. Sup. Ct. R. 4:12(b)(2)(A)).

Here, Ms. Heard and her retained experts are in blatant and inexcusable contempt of this Court's Order directing the forensic imaging of Ms. Heard's devices. Regardless of whether this contempt is the result of sheer incompetence or intentional conduct, sanctions are warranted. *See* Va. Sup. Ct. R. 4:12(b)(2). Although the Court need not find that Ms. Heard's failure to obey the Order has caused Mr. Depp prejudice to award sanctions, *see Landrum v. Chippenham & Johnson-Willis Hospitals, Inc.*, 282 Va. 346, 355 (2011), Mr. Depp's prejudice is undeniable and, accordingly, sanctions all the more necessary to right the wrong. Mr. Depp has, at great expense, retained a forensic expert, foot the bill for a neutral third-party attorney, which as of the first invoice Mr. Depp has received from Mr. Young, totals $40,070, to review extracted data (and thereby protect Ms. Heard's personal and privileged data), all in order to vet the evidence which is at the centerpiece of Ms. Heard's case: photographs purporting to show injuries caused by Mr. Depp; and because of Ms. Heard's unconscionable disregard of this Court's Order, all of this may be for naught, as time has essentially run out for a competent imaging, extraction, and analysis to

be conducted before trial. Mr. Depp, accordingly, requests the Court impose the following sanctions on Ms. Heard:

(1) Order Ms. Heard to reimburse Mr. Depp the cost of (a) his retention of Mr. Neumeister and (b) the Court-appointed limited discovery issue conciliator, Craig B. Young; and

(2) Order that all photographs of purported injuries that Ms. Heard intends to rely on at trial (as reflected on her Exhibit List, filed March 14, 2022) are inadmissible for any purpose; or

(3) Alternatively, instruct the jury at trial that they may infer that any photographs of purported injuries that Ms. Heard offers and are admitted at trial have been manipulated or altered to show injuries that are not present.

Respectfully submitted,

████████████

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*Counsel for Plaintiff and
Counterclaim Defendant John C. Depp, II*

Dated: March 22, 2022

Exhibit A

VIRGINIA:

IN THE CIRCUIT COURT OF FAIRFAX COUNTY

JOHN C. DEPP, II,

      Plaintiff,

      v.

AMBER LAURA HEARD,

      Defendant.

Civil Action No.: CL-2019-0002911

ORDER

Upon consideration of Plaintiff and Counterclaim-Defendant John C. Depp, II's ("Mr. Depp") Motion to Compel Defendant and Counterclaim-Plaintiff Amber Laura Heard's ("Ms. Heard") Production of Original Devices and Operating System Drives and Cloud Backups of These Original Devices as Requested in Plaintiff's Seventh Set of Requests for Production ("Plaintiff's Motion") and Ms. Heard's Cross-Motion to Compel Mr. Depp's Production of Forensic Evidence and for Sanctions ("Defendant's Motion"), the oppositions thereto, arguments of counsel, and being fully advised, it is, this 8 day of November 2021, hereby ORDERED as follows:

1.   Defendant's Motion is **DENIED**, except Mr. Depp shall produce any native files with metadata of photographs reflecting injuries and audio and video recordings of Mr. Depp and Ms. Heard that are in Mr. Depp's possession, and that have been previously produced in discovery without metadata.

2.   Plaintiff's Motion is **GRANTED** in part and **DENIED** in part.

3.   Defendant Amber Laura Heard ("Ms. Heard") shall produce her original devices, including mobile devices and computers (including laptops and iPads), as well as operating system

drives and cloud backups of these original devices (the "Requested Material"), for purposes of performing a physical imaging of all data from the original devices, as requested in Plaintiff's Seventh Set of Requests for Production. For purposes of clarification, Ms. Heard's original devices shall include all devices on which the data was "taken or originated or have been maintained" as requested in Plaintiff's Seventh Set of Requests for Production, including but not limited to, Ms. Heard's current devices and all cloud backups.

4. **The Imaging of Devices**: Under the supervision of Mr. Depp's retained forensic expert, Bryan Neumeister and/or Mr. Neumeister's colleague, Matt Erickson, either in person or over Zoom (or an equivalent audio/visual platform), Ms. Heard's designated forensic expert shall perform forensic imaging of the Requested Material on a date agreeable to the parties but no later than November 30, 2021, in the following manner:

a. For computers (laptops and desktops), a write-blocked "Raw (DD) non-segmented forensic image" shall be taken for each original computer drive;

b. For mobile devices (cell phones and tablets), Ms. Heard shall provide the password(s) for the devices she used during the relevant time period so that the data can be accessed and a "CheckM8/checkra1n extraction" shall be performed, where possible, for each cell phone;

c. For the cloud account(s) (iCloud, Gmail, etc.), Ms. Heard shall provide her username(s) and password(s) and extraction using Oxygen or Cellebrite software shall be performed;

5. If Ms. Heard's designated forensic experts do not have access to the hardware or software required to conduct the imaging described above, Mr. Neumeister will make arrangements with Ms. Heard's expert. In the event that a dispute arises between Ms. Heard's

expert and Mr. Neumeister or Mr. Erickson related to the manner in which the imagings are performed, Stephen Cochran, the Court-appointed conciliator, shall resolve the dispute.

6.   **The Extraction of Relevant Data:** After the Requested Material is imaged, Ms. Heard's designated expert, also under the supervision of Mr. Neumeister and/or Mr. Erickson, shall extract the following categories of relevant data for review and analysis (the "Extracted Data"):

a. **Photographs of Ms. Heard:** All photographs of Ms. Heard taken during the following time periods, which all correspond to dates in which Ms. Heard alleges that Mr. Depp abused her:

Date of Alleged Abuse	Time Period To Be Searched
Late 2012/Early 2013	December 15, 2012 – January 15, 2013
March 8 and 22, 2013	March 6, 2013 – April 5, 2013
June 2013	June 1 – June 30, 2013
May 24, 2014	May 22, 2014 – June 7, 2014
August 17, 2014	August 15, 2014 – August 31, 2014
December 17, 2014	December 15, 2014 – December 31, 2014
January 25, 2015	January 23, 2015 – February 8, 2015
March 3-5, 2015	March 1, 2015 – March 19, 2015
March 22-23, 2015	March 20, 2015 – April 6, 2015
August 2015	August 1, 2015 – August 31, 2015
November 26, 2015	November 24, 2015 – December 10, 2015
December 15, 2015	December 13, 2015 – December 29, 2015
December 29, 2015	December 29, 2015 – January 12, 2016

April 21, 2016	April 19, 2016 – May 5, 2016
May 21, 2016	May 19, 2016 – June 4, 2016
July 22, 2016	July 15, 2016 – July 29, 2016

b. **Deleted Photographs**: All deleted photographs of Ms. Heard taken during the time periods outlined in the second column of the table in paragraph 6(a).

7. Only the Extracted Data (as opposed to the forensic image) can be and will be reviewed by anyone at this time.

8. Once the extraction is complete, Craig B. Young ("Mr. Young"), the Court-appointed limited discovery issue conciliator, will act as the neutral third-party attorney and will review the Extracted Data to identify and isolate any irrelevant or privileged information that will not be subject to Mr. Neumeister's forensic analysis. At the same time, Ms. Heard shall also have the right to receive and review the Extracted Data for the purpose of reviewing Extracted Data for privilege or work product only. Any privileged Extracted Data identified by Mr. Young or Ms. Heard will be isolated and will not disclosed to or reviewed by anyone else, including Mr. Neumeister until the Court makes a determination on the privilege or work product objections pursuant to a privilege protocol.

9. The relevant data from the extraction will, in the first instance, be treated as attorneys' and expert's eyes only. Mr. Neumeister will conduct his analysis of the relevant data from the extraction and the parties' attorneys (and Ms. Heard's expert(s)) will be permitted to review this set of data. Once both parties' attorneys have had an opportunity to review the data that Mr. Neumeister has/will be analyzing, the data shall be re-designated or de-designated consistent with the operative Protective Order in this action.

10.   Ms. Heard's attorneys shall disclose to Mr. Depp's attorneys an inventory of all previously imaged photographs, text messages, emails, and video and audio recordings (the "Inventory") by Bates stamp if produced, and in list form if not yet produced. For each of Ms. Heard's previously imaged Inventory, Ms. Heard's attorneys shall disclose to Mr. Depp's attorneys and to Mr. Neumeister the following information relating to the Inventory:

For Computers (Laptops and Desktops)

    a.   What type of forensic image was created;

    b.   What software and version of the software was used to create the forensic image;

    c.   What make/type of write-blocker was used to create the forensic image;

    d.   Was an uncompressed write-blocked forensic image extracted; and

    e.   Whether a hash verification was completed for each file, and for the forensic image as a whole.

For Mobile Devices (Cell Phones and Tablets)

    a.   What type of extraction(s) were performed: a logical, advanced logical, CheckM8/checkra!n, or physical extraction if jail-broken- by the other forensic company;

    b.   Whether a jailbreak method was used in the extraction process;

    c.   What iOS was on the phone; and

   d.   What software make and version were used for the extraction(s).

Cloud Accounts (iCloud, Gmail)

    a.   Whether a forensic analysis was conducted and, if so, what software was used.

11.   Upon review of the Inventory by Mr. Depp's attorneys and Mr. Neumeister, Mr. Neumeister together with Mr. Depp's attorneys may decide to have Mr. Neumeister conduct an

independent forensic imaging of any previously imaged Inventory in the same manner as described above for the Requested Material.

November 8, 2021

████████████████████████
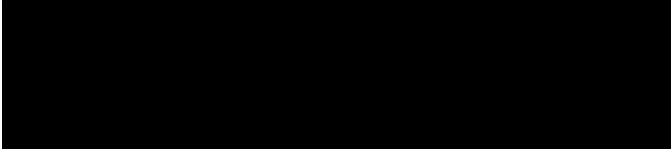
Chief Judge, Fairfax County Circuit Court

Compliance with Rule 1:13 requiring the endorsement of counsel of record is modified by the Court, in its discretion, to permit the submission of the following electronic signatures of counsel in lieu of an original endorsement or dispensing with endorsement.

WE ASK FOR THIS:

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Andrew C. Crawford (VSB 89093)
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Counsel for Plaintiff John C. Depp, II

SEEN AND OBJECTED TO:

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Adam S. Nadelhaft (VSB No. 91717)
Clarissa K. Pintado (VSB No. 86882)
David E. Murphy (VSB No. 90938)
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Counsel to Defendant Amber Laura Heard

Exhibit B

VIRGINIA:

IN THE CIRCUIT COURT OF FAIRFAX COUNTY

JOHN C. DEPP, II

    Plaintiff,

    v.

AMBER LAURA HEARD

    Defendant.

Civil Action No.: CL-2019-0002911

DECLARATION OF BRYAN NEUMEISTER

1.   My name is Bryan Neumeister.

2.   I am a court certified video, audio, and digital photographic forensics and technical expert and the CEO of USA Forensic LLC.

3.   I have been retained by Mr. Depp in this matter.

4.   I have extensive experience collecting, analyzing, and producing electronically stored information ("ESI") in law enforcement and legal proceedings, including approximately 600 cases in the last four years alone. I have over 41 years of audio/video professional experience, and twenty years of experience testifying and consulting for federal and state governments, agencies, prosecutors, defense attorneys, Fortune 500 companies, and individuals in a variety of aspects concerning analysis of photographs, audio and visual recordings, phone and text messages, and other digital data.

5.   This declaration is based on my personal knowledge.

6.   The Court-ordered deadline for completion of the forensic imaging was November 30, 2021.

7. To date, some forensic imaging of Ms. Heard's devices has occurred, but no photographs have been produced to me for my review.

8. On or about February 11, 2022, my colleague Matt Erickson received a communication from Tyler Swasy, one of Ms. Heard's experts' colleagues, in which Mr. Swasy stated that there are still 8 or 10 forensic images of backup files from Ms. Heard's iCloud that need to be parsed. Analyzing this data is a time-consuming process, and the delay has already rendered it extremely difficult to complete that analysis before trial. Further delay will further increase the difficulty of doing so.

I declare under penalty of perjury that the foregoing is true and correct.
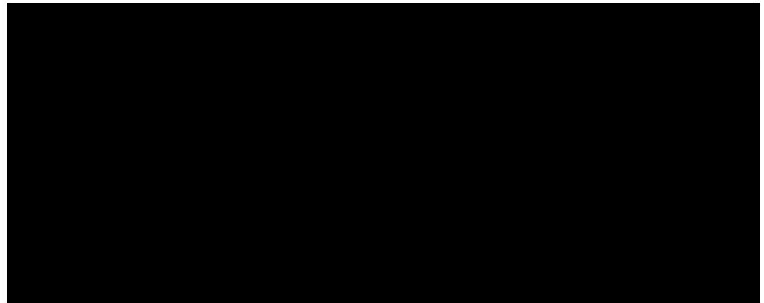
Exceted on this __18th__ day of February, 2022

Exhibit C

VIRGINIA:

IN THE CIRCUIT COURT OF FAIRFAX COUNTY, VIRGINIA

JOHN C. DEPP, II	:	
Plaintiff and Counterclaim	:	
Defendant,	:	
	:	
v.	:	
	:	
AMBER LAURA HEARD,	:	Civil Action No.: CL-2019-0002911
	:	
Defendant and	:	
Counterclaim Plaintiff.	:	
	:	

DECLARATION OF BRYAN NEUMEISTER

1.   My name is Bryan Neumeister.

2.   I am a court certified video, audio, and digital photographic forensics and technical expert and the CEO of USA Forensic LLC.

3.   I have extensive experience collecting, analyzing, and producing electronically stored information ("ESI") in law enforcement and legal proceedings, including approximately 600 cases in the last four years alone. I have over 41 years of audio/video professional experience, and twenty years of experience testifying and consulting for federal and state governments, agencies, the Department of Defense, prosecutors, defense attorneys, Fortune 500 companies, and individuals in a variety of aspects concerning analysis of photographs, audio and visual recordings, phone and text messages, and other digital data. My CV is attached hereto.

4.   This declaration is based on my personal knowledge, years of experience, training, and education.

5.   As set forth in the Protective Order, "Ms. Heard's designated forensic expert shall perform forensic imaging of the Requested Material on a date agreeable to the parties but no later than November 30, 2021." November 8, 2021 Order, ¶ 4. The forensic imaging of Ms. Heard's devices did not begin until December 13, 2021 and resumed again on January 10, 2022.

6.   After the imaging of the devices, Ms. Heard's forensic experts were supposed to extract the relevant data for review and analysis, which included various photographs of Ms. Heard for certain periods of time outlined in Paragraph 6 of the Court's November 8, 2021 Order.

7.   I did not receive any data that was extracted from the devices until March 2, 2022.

8.   As of the date of this declaration, March 22, 2022, I am still receiving data from the extraction of these devices.

9.   One encrypted drive of photos was sent to me without the correct password necessary to access the contents, so the drive needed to be resent. On another occasion, I received the files without the raw photos, and not in the agreed upon format.

10.   Further, Mr. Ackert and Mr. Swasy – Ms. Heard's retained experts – used unlicensed and outdated software to image the devices – including Cellebrite and Microsoft Excel. More specifically, they are using an unlicensed 2010 version of Microsoft Office / Excel. Their key software in this case, Cellebrite, is also unlicensed, which means it is outdated and obviously not supported for updates by the manufacturer.

11.   We did not discover that they were using unlicensed Cellebrite until February 24, 2022, at which time I declined to approve their work as requested in an email from them.

12.   To date, there are approximately 58,623 photographs that I have received.

13.   A fair percentage of these photographs are obviously not of Ms. Heard, including photographs of purported property damage, Mr. Depp, and text messages. Per the Court's

November 8, 2021 Order, Mr. Young was supposed to mark as irrelevant any photographs that were not of Ms. Heard. *See* November 8, 2021 Order, ¶ 8.
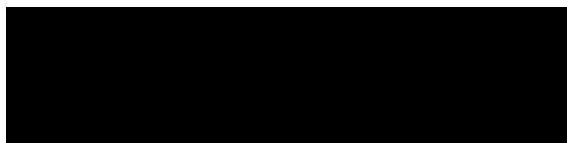
14.   Further, the imaging of these devices as I have received them is something that I have never seen before in my professional experience in performing forensic imaging without direct access to the devices or their forensic images. For example, there are 12 images which visually look the same and indicate that they are "a directly photographed image," though the sizes and orientations are different. These "original" photos should all hash with one another (the hash is a digital fingerprint of the photo) but they do not. The answer to these questions *may* be in their extraction, but their software was unlicensed and outdated so it would have to be re-run on current software to be forensically valid.

15.   Also, some of the EXIF data has dates of when the photographs were taken which do not make sense. For example, the EXIF data for some photos indicate they were taken in the 1970s or 1980s, even though EXIF data was not invented until 1995. The anomalies in the EXIF data cannot be attributed to unallocated space or default to the normal EPOCH date when there is an EXIF error.

16.   Based on the data I have received, made on unlicensed and outdated software, I am not able to opine as to the authenticity of the photos.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 22nd day of March, 2022.

Bryan Neumeister

3

Bryan Neumeister

USAForensic Labs in Phoenix & Detroit

IEEE, IPVM, ABRE, DLA, AES, SAM, CAGE, ASCAP, DUNS

Court Certified: US Military, Federal, State, Civil, US District Court, Department of Justice,

USAForensic, LLC. Court Certified Audio, Video, Computer, Cell Phone & Cell Tower Forensic Experts.

39 EMMY AWARDS for Technical Excellence

41 Years Professional Experience

www.USAForensic.com

United States Department of Defense – (SAMS Forensic contract with C.I.D. / JAG)

United States District Courts: Contracted Technical Expert

US Department of Justice: Contracted Technical Expert

Defense, Law Enforcement and Government Agencies.

Special Prosecutor's Office on Corruption - P.A.N.E.L. - US & Puerto Rico

Audio Engineering Society- Member & Lecturer

DLA- DARPA: Defense Advanced Research Projects Agency (classified)

Institute of Electrical and Electronics Engineers – Member

Technical work in 23 countries

<u>Legal & Technical:</u>

41 Years Professional Full-time Audio & Video Experience

Professional Audio & Video Enhancement,

Computer Drive Recovery,

Cell Phone Forensics – Tower Analysis

Federal & State Government Agencies Computer Drive Recovery

DLA, DOE, DARPA: Defense Advanced Research Projects Agency (classified)

Law Enforcement Agencies, National, State & Local

8 Years Search & Helicopter Rescue (MCSO-DPS- Arizona)

Worked Internal Affairs cases *for* Phoenix Police Department & The AZ Department of Public Safety.

US Military – Army, Navy, Air Force, Marines & Coast Guard (SAM contract)

Los Angeles District Attorney's Office -NELOS

Department of Defense (classified & non-classified)

Beta Tester for Various Forensic Systems Manufacturers

United States District Court system: Forensic Consultant

United States Grand Jury system: Forensic Consultant

U.S. Department of Justice: Forensic Consultant- Audio forensic work

OPDS and Office of the Public Defender: Vendor number

Work with US Army CID Prosecutors Office & Maricopa County Prosecutors Office

Phoenix PD Homicide - Mesa PD Homicide- Case Video & Audio Evidence Enhancement

Work with various Innocence Projects - Nation wide

10 Years with NBC Television - Technical Video / Audio

Federal, State, Aviation and Civil Law cases - Court Certified Technical Expert

2 State of the Art Facilities. Over 75 custom Computers & Processors

State of the Art HD Video and Audio Gear.

Gear and Software Upgraded Daily

3D Sonographs, Spectrographs, Spectral 3D -HD Video & 192kHz - 64-bit Audio

Expert Cell Phone Analysis (Oxygen, Cellebrite, Secure-View): Towers, Transmitters, Phones & Software

D.O.E. Military Forensic High-Speed Video Expert

Photo Enhancement using Clear-ID, Pixel Stacking & Frame averaging etc.

1

ACLU, Innocence Project cases

Graduated Pi Sigma Alpha- California State University Northridge - 1980 (Political Science, emphasis on Journalism)

Have worked in 23 Countries as a Technical Expert

Published Nationally

<u>Accepting of cases limited to 150-200 per year worldwide</u>

Non-Military court cases include Federal, US District, Grand Jury, RICO, Homicide, Murder for Hire, Fraud, Robbery, Armed Robbery, Assault with a Deadly Weapon, Arson, Kidnapping, Bank Robbery, DUI, DWI, Civil Cases...etc. Currently working over a dozen Homicide and Capital cases nationwide. For Defense, Prosecution, Civil and Insurance carriers.

<u>Large Cases (Small Sample)</u>: (numerous cases are not listed due to confidentiality)

2021 – State of AZ v. Simona Poulson, 2 cts. 1st Degree Murder premeditated: (cell tower expert for the defense) *Not guilty on both counts*

2021 – State of AZ v. Ricardo Miranda (Trial testimony, expert witness for the Defense)

2021 – Beyers/Munger v. Litchfield (Deposition) Photo Expert – *Case settled favorably*

2021 – Hammon v. Giacomini (Deposition) – Photo Expert – *Case settled favorably*

2021 – State of AZ v. Patrick Sanford 2nd Degree Murder: Photo expert for the Defense. Case dismissed with prejudice due to "egregious prosecutorial misconduct" on behalf of the prosecutor and police, 25 yr. ballistics expert caught lying on the stand, 2 police officers resigned.

2021 – Anita Tomczak v Don Quixote Hotel, Ltd. (Deposition)

2021 – State v. Jarvis Ross (Defense, 2 evidentiary hearings)

2021 - State of AZ v. Jerry Sanstead. Hired as cell phone experts. 2021 *Case dismissed even though a new state law was based on original charge*

2020 - United States v. YN2 Charmaine K. March- (Arson) Federal Military Court Martial **Retained by the Dept. of Defense** *(US Navy)* to debunk "Police Cell Tower Tracking Techniques". Daubert hearing determined the practice was not a science and was *inadmissible*, as it did not meet, as used, Daubert standards in Federal or US Military Court.

2020 - State of AZ v. Steven Jones (NAU) – Video Expert for **Defense** – State's scene measurement & reenactment video ruled inadmissible due to scientific inaccuracy depicting the scene and possible bias. Case pleaded down from murder to manslaughter

2019 - State of Texas v. Fredrick Lee - (Capital Murder) - Retained by **Defense** as Surveillance Video Expert: *Not Guilty*

State of AZ v. Michael Allen Voden- Retained by the **Prosecution** as Audio Expert: *Guilty*

State of Arizona v. Keshawn Green (1st degree murder) - Retained by the **Prosecution** as Surveillance Video Expert: *: Guilty*

US Government v U-Haul Philadelphia – Retained by **Defense** as Surveillance Video Expert: *: Settled*

US Grand Jury Cleveland, Ohio: Hope Steffi - Retained as Surveillance Video Expert: *Civil large settlement*

Government of India: Sri Nithyananda Swami - Retained by **Defense** as Video Expert: *Not Guilty*

US Government v. Charles Keating - In Trial, Retained by **Defense** as Video Expert: *Not Guilty*

United Kingdom (London, Barrister) V. Tyrone Williams - Retained as Audio Expert: *Civil Settlement*

US Government v. Charles Keating III - In Trial, Retained by **Defense** as Aerial Video Expert: *Not Guilty*

Scaffide v. Lincoln County Wyoming- Retained by **Government** as Surveillance Video Expert: *Not Guilty*

State of Arizona v. Jeffery Martinson - Retained by **Defense** as Video Expert

State of AZ v. Antonio Brown (rape) retained by pro per- **Not guilty** *Willits issued against prosecution.*

City of Phoenix v. Copeland: retained by City as Cell Tower Experts: *Civil, favorable settlement.*

State of Montana v. Daniel Pallet- Retained by **Defense** as Surveillance Video Expert: *Dismissed with Prejudice*

State of Arizona v. Pedro Barraza – Retained by **Defense** as Surveillance Video chain-of-custody Expert: *V. Not Guilty*

State of Arizona v. Alan Champagne (1st Degree Murder) - Retained by the **Prosecution** as Surveillance Video Expert: *V. Guilty*

State of Arizona v. Jodi Arias – *Penalty Phase* – Defense Computer Expert - *"During the first trial in 2013 and earlier in this trial, Mesa police experts testified that there was no porn and or viruses on the computer. Martinez had used that testimony to impeach Arias' claims that there were both, and it furthered his portrayal of Arias as a liar. But defense experts subsequently found porn and the viruses associated with the device. Mesa police have since admitted it was there all along." -Gannett*

<u>Precedent Setting Cases:</u>

United States v. YN2 Charmaine K. March- (Arson) Federal Military Court Martial **Cell Tower** expert for the **Defense** Retained by the Department of Defense *(in 2020)* to debunk "Police Cell Tower Tracking techniques" - Tower Tracking was ruled inadmissible in trial as "a practice, rather than actual science". In a Daubert hearing the only use granted by the Federal Court was that the Prosecution's expert could say the phone connected in either the East or West coast of the United States. *The Judge had a technical background.* Not Guilty (Attorney Lt. Patricia Liggett)

State of Arizona v. Jerry Sanstead: accused of texting and driving leading to an accident, tragically taking the life of a police officer. Arizona's texting driving law was set by this case. Upon USAForensic review of the phone and tower records, the case was dismissed as Stanstead's phone had been idle for 2 minutes prior to the crash. (Attorney Larry Kazan)

State of Arizona v. Steven Jones (referred to in the media as the NAU Shooter) – Video Expert for Defense – State's scene measurement & reenactment video ruled inadmissible due to possible bias and scientific inaccuracy depicting the scene. Charge reduced form initial 1st degree Murder to Manslaughter. (attorney Christopher Dupont)

US v. Daniel Scott Pallett, CR 18-11-M-DLC According to the federal rules of evidence 902-13/14 there must be metadata (hash values) connecting the submitted files presented to the original data. Since the original data was never presented and the original files never Hashed- there was a chain of custody issue. The Case was dismissed with prejudice Missoula, Montana on exactly those Daubert grounds. (Attorney Nick Kirby Brooke)

State of AZ v. Pedro Barraza CR2016-002708 The judge dismissed several of the charges lodged against the defendant, as police could not authenticate the video which was the strongest evidence they had against Barraza. Proper procedures, protocols were not followed when they obtained it, the video was not allowed into evidence. Not guilty verdicts for four defendants. (Attorney Marcus Finefrock)

State of AZ v. William James Hartwell CR2015-001482 When asked to preclude video in this trial, the judge (Sheri Stephens) ruled that because the video on a hard drive had been simply viewed without a write-blocker, the dates-last-modified were changed and the video was not valid in court. (Attorney Rick Poster)

Books

"Earthbound Misfit" (Helicopter Rescue, TV Helicopters, Medivac & work with Law Enforcement agencies)591 pages - senior contributing author & consultant.

"The Secrets of the Blue Oyster Cult" - Bryan Neumeister discussed as Blue Oyster Cult musician & composer on "Curse of the Hidden Mirror" & "Heaven Forbid" Albums.

"Career of Evil" – author J.K. Rowling (Harry Potter) - Lyrics used in book from Blue Oyster Cult album I co-wrote songs on.

"After You're Dead" -Featured as Forensic expert character, "Bry", in #1 bestselling series of Crime/Fiction books by author Cary Allen Stone.

"SEEDS, The Journey Begins" – Science Fiction. Character likeness and full name used in book as a scientist. -Autor #1 bestselling Amazon author Cary Allen Stone. 2019

"SEEDS, The Journey Continues" – Science Fiction. Character likeness and full name used in book as a scientist. -Autor #1 bestselling Amazon author Cary Allen Stone. 2020

"SEEDS, The Journey Home"– Science Fiction. Character likeness and full name used in book as a scientist. -Autor #1 bestselling Amazon author Cary Allen Stone. 2021

"SEEDS Trilogy" revised- Science Fiction. Character likeness and full name used in book as a scientist. -Autor #1 bestselling Amazon author Cary Allen Stone. 2021

National News Media: Forensic Analyst:
- 48 Hours (Audio Expert) 2022 (current show production)
- CBS & FOX News San Diego. 2021 Active case audio clarification
- FOX Business Network: Featured Forensic Expert https://www.youtube.com/watch?v=O4KAKImynls
- CNN: Advisory Video Expert
- The Science Channel Six 1-hour Episodes on Video & Audio Forensics
- Universal Studios/BBC & MSNBC: Video Forensic Expert: *Real, Fake or Unknown* TV series
- Six 1-hour episodes of TV series analyzing viral videos with unknown metadata
- CNN: Jodi Arias: Audio & Photographic Forensic Expert (in Trial testimony)
- FOX News: Boston Bombings: Forensic Surveillance Expert (analyst)
- CNN: Trayvon Martin / Zimmerman: Audio Forensic Expert (analyst)
- NBC/Gannett: Forensic Surveillance Expert
- Numerous Podcasts 2021 (Cold Case Files etc)- forensics.

Publications:

- Published Nationally re Forensics
- The Legal Investigator Magazine- Surveillance Systems - TV vs. Reality
- High Tech, High Stakes Published in Expert Ease - National Forensic Publication.
- Consultant to CPU Magazine as a Forensic Audio and Video Expert on Hardware and Software.
- Featured by NEAT Video in online publication & mailer re forensic video clarification.
- Experts.com Main expert on two publications on Deep Fake video.

Lectures:

2020-2021 lectures rescheduled due to Covid

2019 State Bar of Arizona (CLE)

Latest in forensic (beta) technology and what can now be done forensically with electronic data

2018 Audio Engineering Society:

Metadata and chain of custody of files: dithering / file conversion

2018 CLA Conference:

Digital Forensics (Facility) Cell phones, Towers, Metadata, Photos, COmputers Audio & Video Forensic

2018 AACJ Annual Attorney Winter Conference (Facility)

Digital forensics: Audio, Video, social media, Cell Phones, Towers, Computers & Photography

2107 Audio Engineering Society:

Cellphone forensic audio re metadata, chain of custody, forensic acquisition of audio

2016 Federal Habeas Conference

Cellphone and Tower forensics

2016 Audio Engineering Society:

Topics: *Multi-Pathing of Transmitted RF Signals, Forensic audio*

2015 Inns of Court:

Topics: Cell Phone metadata, Audio & Video Forensics

2015 Audio Engineering Society:

Topics: Pareidolia, Dithering, Forensic Audio & NyQuist Theorem

2014 Audio Engineering Society & Conservatory of Recording Arts

Topics: NyQuist Theorem, Sample Dithering & Forensic Audio

Opening of the 2013 APDA (Arizona Public Defenders Conference)

Topics: Audio, Video, Photographic & Surveillance Forensics

APDA Faculty Member - *1,550+ Attorneys attended conference* (June 26-28, 2013)

Television: National & International Broadcast:

Recipient of <u>39</u> EMMY AWARDS from The National Association of Television Arts and Sciences for Technical Excellence

40+ additional National & International Awards.

Winner CANNES Film Festival (Gold) (Technical Audio Excellence)

Winner CALGARY Film Festival (Gold) (Technical Audio Excellence)

Worked for NPR & NBC Television News stations for 12+ Years.

Phi Sigma Alpha - National Political Science Honor Society – Lifetime Member.

Member: NAB, BMI, ASCAP, AES, ERA, NATAS

Winner: Film Advisory Board Gold Medal, Parents Choice Award

Film & Television Clients:

2021: For the BBC: PLANET EARTH III -*Just finished filming part 3 of the Emmy Award winning series 9/28/21*

NBC – ABC – CBS – PBS – BBC – FOX – DREAMWORKS – SCREEN GEMS FILMS – TOUCHSTONE FILMS – LUCASFILMS LTD. - LEVIS – COCA COLA – AMBLIN ENTERTAINMENT – PEPSI – VOLKSWAGEN -TOYOTA – CHEVROLET – NISSAN – AMERICAN EXPRESS – UNIVERSAL PICTURES – LORIMAR – TRIMARK FILMS – TRIMARK ENTERTAINMENT – GANNETT – A&E – DISCOVERY CHANNEL – FOX – DIAL SOAP – COORS BEER – BUDWEISER – MTV – PIZZA HUT – MOTOROLA – UNION CARBIDE – DISNEY – INTEL – MICROSOFT – VISA – MASTERCARD – ARMY – NAVY – AIR FORCE – MARINES – UNITED AIRLINES – CONTINENTAL AIRLINES – PARTNERS FILMS CANADA - PRTV – NATIONAL MEDIA – MOMENTUM FILMS – DFXTV -LOTTO/LOTTERY – GREYSTONE PICTURES – HISTORY CHANNEL – DISCOVERY CHANNEL -WARNER BROTHERS – DAIRY QUEEN – AT&T –MLB – NBA – NFL – SUPER BOWL XXX – ESPN – MAJOR LEAGUE BASEBALL – McDonald's – MCI – HARLEY DAVIDSON – STOUFFER'S- CARQUEST – MD HELICOPTERS – BOEING – "FUTUREWEAPONS", "MYTHBUSTERS" {THE LUXOR – FLAMINGO – STRATOSPHERE – CESAR'S PALACE – MGM GRAND – NYNY - The HARD ROCK...CASINOS all in LAS VEGAS} - NUMEROUS ADVERTISING AGENCIES...

Certified Cell Phone Forensics:
Latest Cellebrite Ultimate 4PC, Secure-View Forensics, Oxygen Detective, CheckM8, APEX Laboratory and Field systems
2021 Cellebrite Cloud Analyzer. Oxygen Detective Cloud Jet Extractor
SV Striker box, PassWare Forensic, EnCase, etc.
D.A.R.T Tower Tracking and signal software- latest versions.
Police use of Cell tower tracking debunked - US Federal court (Department of Defense contract)
PassWare Complete Forensic Decryption of 280+ encryption methods using 32-core liquid cooled systems.
Recovery of deleted apps and data from over 14,000 cell phones.
All cell phone communications Apps, iCloud, iOs, Android, Windows OS etc. Password decryption & recovery.
DCode, Plist, SqLite Browser, Opanda, Kies, EnCase Extractor, EnCase readers, FTK, Stellar Phoenix Professional data recovery.
Six fly-pack MSI 8/12 Core multi-SSD Field-Units for extraction at any location

Cell Towers & CDRs: NOTE: CDR plotting is a practice - not a scientifically peer reviewed science.
In a Daubert Hearing in US Federal Court Norfolk VA, (2020) Hired by Department of Defense to debunk "cell tower tracking: Police Tower Tracking ruled inadmissible in US Federal and Military court – as a practice but NOT a Science. Does not meet FRE 702 standards of evidence.
D.A.R.T & 2021 Oxygen Detective Plotting
2016- Call Data Records & Towers (Lucent, Samsung, Nortel) *PATC certification*
AT&T, Verizon, Sprint, T-Mobile, Cricket, US Cellular, Tracfone, MetroPCS *and subsidies…*
Call Records Analysis – Switching analysis. *Cloud, SMS, MMS E-Mail.*
TOWER Dumps: Lucent, Samsung, Motorola, Ericsson etc. PATC 2016
Cellebrite Cloud analyzer. Oxygen Detective Jet
GPS, NELOS, Wi-Fi and Blue tooth tracking and E911-FCC mandated data location logs.
D.A.R.T. advanced and HTCI Mapping to verify if a call did hit a specific Tower Switcher.
Paperwork for legal requests for all the above available on www.USAForensic.com.

Forensic Video & Surveillance Video Recovery/ Analysis
Custom AI artificial intelligence 8K algorithms written for specific codecs and formats:
DME Forensics DVR Examiner, iNput-Ace, Omnivore, D-plex Pro Forensic, D-Tective, ClearID Forensics and numerous forensic systems with over 200 clarification plug-ins. 8K file handling.
Artificial Intelligence software updated weekly.
Latest computer and cell phone programs *such as FTK, Autopsy, Cellebrite, Apex, Secure-view, Oxygen, EnCase…*
Beta Tester of Software & Hardware for leading Forensic Companies (Clear-ID, iZotope, DC8 Forensics etc)
Hard drive recovery for US Military (SAMs vendor) - Forensic drive analysis.
Recover damaged files, deleted files, Changes in Registry & Meta-Data, Hash values, SHA2 etc
All Surveillance Systems as well as Computer Drives
Validate video pixel by pixel with iNput-Ace
Tampering or Keying detected.
Restore corrupted photographic or video files.
Photo Enhancement using Clear-ID, Pixel Stacking & Frame averaging etc.
Working with computers since 1977. 3 Field Extraction teams available.
Network analysis, Tor tracing, Brute force & PassWare decryption etc.
PassWare Forensic Decryption of 280+ encryption methods using 16 core liquid cooled systems
Determining how files got onto a computer.
Validating dates of files/ changes to files via Sha2 HASH values.

Computers
EnCase Ultimate, X-Ways, Autopsy, FTK and many other specialized tools:
PassWare Forensic decryption. Custom 36 core liquid cooled machines.
First code written in 1977 while attending Cal State University.
Recovery using Tableau write-blockers USB 3.0 T8-R2 & T35ES-R2 Tableau & DME forensic Imaging.
Beta tester of Software & Hardware for leading Forensic Companies (Clear-ID, iZotope, DC8 Forensics etc)
Hard drive recovery for US Military (SAMs vendor) - Forensic drive analysis.
Recover damaged files, deleted files, Changes in Registry & Meta-Data, Hash values
All Surveillance Systems as well as Computer Drives
Restore corrupted photographic files.
Photo Enhancement using Artificial Intelligence, Clear-ID, Pixel Stacking & Frame averaging etc.

Working with computers since 1977. 2 Field Extraction teams available.

Network analysis, Tor tracing, Brute force & PassWare decryption etc.

PassWare Forensic Decryption of 280+ encryption methods using 36-core liquid-cooled systems.

Determining how files got onto a computer.

Validating dates of files/ changes to files via Sha2 HASH values.

Header Data verification

Forensic Photographic work:

Photographic clarification, metadata validation

Lux, Luminance & RGB analysis

Film, Digital, thermal imaging, and infra-red cameras

Clear ID Forensics, iNPUT-ACE, Omnivore, Deplex-Pro

Vectorscope, Waveform scope, Luminance and RGB scopes in Lap

Pixel data analysis / Frame & Field level analysis

Lens and lens-aberration analytics

Lens MM relations to chip size and format

Lens wide-angel distortions correction using metadata.

Deleted or Damaged Photo data memory cards recovered.

Cellphone camera metadata work.

Geo data verification

Dozens of forensic photo analytical plug-ins

Stills lifted from 8k video and clarified.

All 17.5 x 11 -inch stills printed on heavy photo stock at 1200 PPI.

Studied from 1974-1979 with Dr Bill Wallner (co-inventor of infra-red photography)

Cameras from high-end Hasselblad thru Panavision down to GoPro

Ultra-High-speed camerawork with Phantom-V cameras

Cineflix & Cine-Alta.

Helicopter mounts 14,500 hours aerial cinematography

Have shot professionally in 23 countries.

Complete 8K up-Rez in lab.

8K, 10-bit calibrated video cards and monitors.

Pantone charting and color correction in field and lab

Lux and Luminance lighting measurement in accident or crime scene cases.

3-axis gyro-stabilized cameras

All available camera mounts for GoPro 4K cameras for accident and test work.

DOD and DOE military testing high speed and aerial photography.

FAA licensed 4K Drone operator

Testified numerous times on photographic issues in Federal, Criminal, Civil, Military, and Aviation cases.

Photo Work published internationally.

Field Cameras

For evidence gathering and accident recreation include Red & Cinealta 8K, Sony 4K & HD cameras, DJI Osmo, 3Axis stabilized 4k system, GoPro 4Ks all mounts and FAA Licensed 4k Drone. Fuji 3D Camera. Ultra-slow-mo Phantom Cameras available. Mercalli stabilization and Re-SpeedR.

Editing and all monitors are true 4k = 4086*2160.

Thermal Imaging.

Thermal Video and still along with mixed format Thermal.

Emmy Award winning crews for crime scene Recreation.

Professional Sound & Music:

Over 20,000 voice tracks professionally worked with since 1980

Federal, US District Court, State, US Military, Civil and Aviation cases to TV Network television,

commercials, video games and films

Sonographs, Spectrographs and 3D Audio Decibel and Frequency Mapping

iZotope RX professional, 3D Spectral Audio, DC10 Forensics, Pro Tools, Plugins from Cedar,

Waves, iZotope, Plugin-Alliance BX-Series, Bauer, SSL, NovelTech, BlueCat, SPL, FabFilters, Sony, Sequoia & Many others

Over 200 forensic plugins and programs running on 36 core l-quid cooled computers

Federal and State voice comparison cases

Set Daubert standard for voice comparison in Arizona.

Phonetic breakdown of spoken words on spectrograph.

Sonographs, Spectrographs and 3D Spectral audio graphs printed and embedded in forensic reports.

Human Voice separated from background noises and ambience.

Tampering detection

Metadata analysis

NyQuist Theorem analysis

Edit detection.

Dithering analysis

Re-sampling analysis

Audio background continuity

Sine wave detection or embedded frequency (agency)

AC power ground loop & harmonics removal.

Background noise removal.

Phase cancelation and removal of music from dialog

Voice clarification, harmonic enhancement for muffled audio

Removal of reverb (jail hallways or lecture halls etc)

Removal of mic thumps and clicks that can be misidentified as edits.

Transfer of tape to HQ digital medium: cassette, micro cassette, reel to reel

Police radios split tracked.

32-bit audio running in 64-bit systems

192 kHz field units.

Conversion of any audio codec to another PROPERLY with correct dithering

Time coding of audio for clients down to thousandths of a second for easy reference.

IEEE engineering standards

Written & Recorded Music with *Blue Oyster Cult*, 25+ million albums sold - Gold & Platinum records & *Credence Clear Water Revival* recording artist Tom Fogerty (Movie Score).

-Mixed & engineered for numerous top recording acts; Jazz, Rock & Classical.

-Written music for hundreds of commercials including music cuts for Super Bowl XXX

-Written Music/SFX for 5 popular Video Games.

-Worked "Live" sound as sound mixer for concerts with crowds up to 35,000. *Challenging live mixes like: Chick Corea, Return to Forever, Ronnie Laws, Gerald Wilson's 24 piece Big Band etc.*

-Recently won another Emmy Award for best music on a Television series (Written & Performed).

I have Mixed and Mastered hundreds of National, International & Regional Television Shows.

Aerial Photography / Rescue / Surveillance:

Over 14,500+ Flight Hours of Jet Helicopter Photography – Film, HD Video, Research, Surveillance, Search & Rescue for Law Enforcement & Wildlife Rescue - Civilian Military Contractor.

Currently: Advisory Partner& Photographer - 4:4:4 Professional Film & TV Helicopter (*SaberCat HD*)

Pilot received the Harmon Flight Trophy from President Reagan at the White house. The Trophy is currently on display in the Smithsonian Air and Space Museum.

FAA Licensed: AERIAL 4K GPS-guided VIDEO DRONE

FAA licensed 4K Video-drone, *Phantom Quadcopter.* Satellite-GPS controlled:

Owner & Operator); Mounted camera *GoPro Hero* 4K Black Edition

Thermal Imaging & Thermal Video Recording with image-on-image technology

Night Vision & Infra-Red

OSMO 3-axis stabilized 4k system, fully loaded.

Forensic Counter-Surveillance:

Radio Frequency Response 10MHz ~ 10GHz (20+ GHz if needed)

Analog, Digital, WiFi, Cellular GSM/GPRS/EDGE/3G/4G signals all will set off alarms.

Detection Frequencies: GSM 880-915MHz, CDMA 824-849MHz, WCDMA (1920-1980MHz), and DCS (1710-1785MHz)

Digital 'Burst' Signal Detect for all GSM/3G/4G Trackers/SMS(Text) detection

Series and Parallel transmitters

Automobile GPS transmitters

Transmitting GPS trackers (only when GPS device is transmitting signal location)

Devices on internet phone and IP phone

Detect & Prevent:

Wire telephone tapping

Laser tapping

Recordings of a voice recorder, tape, digital and parabolic reflector using white noise & sibilance.

generators

40HZ 100-watt sine-wave generators to eliminate laser recording from windows.

Thermal Imaging & Thermal Video Recording with image-on-image technology

1080P Sony Night Vision Cameras & Infra-Red Lighting

OSMO 3-axis stabilized 4k system

Weapons: Classified & Non-Classified:

-Worked many homicide cases involving gunfire sound analysis, frequency, location & Triangulated acoustics.

-Worked with numerous surveillance videos to enhance shooting scenes for law enforcement and attorneys.

-Gunshots analyzed, compared & enhanced from: cell phones, land lines, surveillance equipment, 2-way communication, Police Duplex & Simplex, etc.

-Worked numerous cases requiring gunfire video enhancement from surveillance systems, cell phones and various recording devices.

-Have access to many renown civilian & military firearms experts for testimony as needed.

-Over 2-million rounds photographed &, recorded both audio and video, including Phantom high-speed filming and forensic testing over 41 years. Work & have worked with -US Navy Seal Teams 1, 2 & 6, SOCOM, DEVGRU, 160th Night Stalkers. US Army Sniper teams. DOD & DOE.

-Harmonic resonance tested on various weapons platforms.

-Additionally, work with many US Government retained Military contractors.

-I currently have US Military SAMS / DUNS contract.

-Worked with numerous SWAT and TOU teams in actual field operations.

-Worked with LAPD, w/ Krav Maga training.

-MSCO Helicopter Rappel Trainer (1980s Tac-Ops-Unit) - MSCO Helicopter Search & Rescue = SKY12 & DPS

-Worked with Springfield Armory testing the initial launch of the entire XD Pistol line. 9 mm, .40, .357, .45

-Work often with DillonAero on the M-134 Mini-gun project (over 20 years working together).

-Analyze Muzzle flash and sound signature of McMillan Sniper rifles for US Army Snipers (over 10 years of work together).

-Air to Ground target acquisition and aerial sniper training documentation. Thousands of hours of aerial law enforcement, search & rescue & air to ground gunship work.

-Assigned to USS CVN70 Carl Vinson and Helicopter-Carrier USS New Orleans as civilian videographer.

-Have been a "go to" guy for live Weapons Photography & Sound Recording for The Military Channel, History Channel, MythBusters, Future Weapons, Discovery Channel, National Geographic, BBC and many others.

-Produced one of the largest selling automatic weapons DVDs ever made, "Firestorm in the Desert" &

-Produced one of the largest selling handgun training DVDs of all time with Rob Leatham, "Shooter Ready

Civilian Technical Advisor on the board of CowTown Range & Studios, which is an extremely active 88-acre Training facility for SOCOM, Swat Teams, Navy Seal Teams, DEVGRU, Homeland Security and many Special Operations teams. CowTown Range is currently under DOD and various Agency contracts for range work, tactical training, and weapons development.

Weapon recording analysis for cases includes.

Various rounds recorded over surveillance systems, cell phones, 4k, HD, SD and high-speed Phantom video cameras.

Diverse types of pressure, loads, powders, barrel length and calibers recorded for analysis.

Cell phone cases include NyQuist Theorem frequencies relating to cell Phone FQ range, Sample Rate and Bit depth of recordings.

Cell phone line noise and background audio of conversations recovered from 911 calls.

Dithering artifacts created during sample rate conversions.

Dithering harmonics relating to audio captured by Cellebrite or Oxygen Forensics, when transferred to 44.1-16 bit for distribution.

Cell call transmission, multi-pathing of signal, tower horn tracking v. switcher tracking, topographical anomalies of transmissions, transmission artifacts

Phase cancellation of recordings due to microphone set ups.

Distances of cell phone to firearm (FARO 130 system)

Shootings captured by police wire or boomerang units.

Sonographs and spectrographs along with 3D Spectral recording to narrow down gunshots to 1,000ths of a second.

Shooting weapons in range shoot houses or gun ranges recorded over cell phones.

Shots recorded over cell phones in cars, houses, open acoustic spaces.

Ambiance and acoustics graphed and measured of gunshots on surveillance and cell phone.

USAForensic, LLC. (41 Years *Professional Experience*)

Certified Audio & Video Forensic Experts: Federal, Military, State, Civil & Aviation