

# *Electronic* EVIDENCE

JORDAN S. GRUBER

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## Chapter 16

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#### A. AUDIO RECORDINGS

§ 16:1 Foundation Requirements for Admission of Audio  
Recordings as Evidence

The following facts and circumstances, among others, tend to establish a  
sufficient foundation for the admission of an audio recording into evidence.<sup>1</sup>

The following elements are essential in virtually all cases:

- . Materiality
- . Relevance to a material issue (formal offer of proof by  
counsel, if necessary)
- . Competency and qualifications of foundational witness
- . Identification of voices, speakers, conversations, or other  
sounds in question voice identification by direct identification  
testimony

1. Counsel should, of course, check his or her local jurisdiction's legal and practical rules, precedents, and guidelines. If counsel is in a jurisdiction where the traditional "seven-pronged" predicate still holds sway, each of its elements must be satisfied. See Chapter 6 as to foundation requirements, generally.

voice identification by direct comparison testimony . voice

identification by exemplar comparison testimony

voice identification by spectrographic (voicegram) analysis

speaker identification by circumstantial evidence identification of

conversation without identification of voices

identification of sounds other than human speech (for example, gunshots or railroad warning signal) by direct identification testimony, direct comparison testimony, etc.

### . **Authenticity** / accuracy of the audio recording

Clear and convincing evidence establishing that the offered evidence is genuine and that there has been no tampering

"Testimony of a participant in the conversation together with proof by an expert witness"

Continuous chain of custody (often in concert with other factors)

A showing that no changes, additions, or deletions have been made in the recording

A participant in the conversation listens to the recording, identifies it, and testifies that it is accurate

A nonparticipant who overheard the conversation as it occurred (either through physical presence or electronic monitoring) listens to the recording, identifies the relevant voices, and testifies to the recording's accuracy

Trial judge otherwise "independently determines that recording accurately reproduces the auditory evidence"

Testimony of forensic audio expert

Circumstantial evidence as to authenticity and accuracy

For digital recordings, use of coding or encryption schemes to show recording is genuine and has not been altered

Self-authenticating recording (rare)

The following elements may be necessary in some cases and may be helpful in others.

- . Absence of material deletions, additions, or alterations in the relevant portions of the recording
- . Usefulness of audio recording to trier of fact and probative value, generally
- . Continuous chain of custody
- . Qualifications, competency, and experience of operator of audio equipment
- . Judicial notice of general accuracy and reliability of audio tape medium
- . Audio recording equipment used was capable of making recording (especially if new or uncommon recorder, format, or storage medium)
- . Audio recording equipment was checked prior to making of recording and was properly operating
- . Specific manner in which recording device was operated to make recording in question, including physical circumstances and conditions at time recording was made
- . Recording is correct and fair representation, especially with respect to volume levels
- . Limited time interval before subsequent playback and listening to by foundational witness
- . Appropriateness and voluntary disclosure of all editing
- . Appropriateness and accuracy of re-recording for purposes of enhancement, consolidation, or editing out of irrelevant, prejudicial, or other incompetent material
- . Affirmative showing that recorded conversation was made voluntarily and in good faith, without any kind of inducement
- . Circumstantial or indirect evidence used to bolster any other foundational criterion

#### § 16:2 Checklist of Steps for Formal Admission into Evidence

The following steps-although not necessarily all of them, and

not necessarily precisely in this order-are required to have an audio recording admitted into evidence:<sup>2</sup>

1. Proffering party has audio storage unit marked for identification.
2. Opposing counsel is allowed to examine audio storage unit.
3. Proffering party requests court's permission to approach and show audio storage unit to foundational witness.<sup>3</sup>
4. Proffering party lays foundation through foundational witness. 5. Proffering party formally moves to have audio recording admitted into evidence.
6. Proffering party inquires whether judge wishes to examine audio storage unit.
7. Opposing counsel conducts voir dire examination of foundational witness (if desired).
8. Proffering party requests ruling from court if not yet given, and requests item be marked in evidence, if not yet done (typically by crossing out words "for identification" on label).
9. At this point permission can be requested to play back the audio recording for the jury, and it can thereafter be used as evidence in any number of different ways.

One of the most important, yet frequently forgotten, of these steps is the fifth step, whereby the proffering party formally requests that the audio recording be admitted into evidence. The necessary language can be as simple as "Your Honor, I offer into evidence this cassette tape marked as plaintiff's Exhibit for identification, the contents of which I request be heard by the jury." It is important to make this formal offer to ensure a complete trial record and to avoid uncertainty at the appellate review stage.<sup>4</sup>

2. See T. Mauet, *Fundamentals Of Trial Techniques* 2d ed., 156-159 (Little, Brown & Company, 1988); J. McElhaney, *Trial Notebook*, 2d ed., 193-197 (American Bar Association, 1987).

3. Depending on chain-of-custody considerations, the witness' familiarity with the audio storage unit, and how recently the witness has listened to the recording, either at an *in camera* hearing or otherwise, it may be necessary for the witness to listen to a

segment of the recording at this point. This is probably best done with headphones.

4. See G. Lilly, *An Introduction To The Law Of Evidence*, 2d ed., 517 (Bancroft Whitney Company, 1987). See also *Grindstaff v State* (1984) 57 Md App 412, 470 A2d 809, cert den 299 Md 655, 474 A2d 1344 (although audio recording was not formally offered into evidence, it was not error to allow jury

In some jurisdictions, for purposes of efficiency in cases involving more than one recording, it is customary to have all such exhibits formally offered into evidence at the same time. The difficulty here, however, is that technically the jury should not be allowed to listen to any audio recording until it has been formally admitted into evidence. The recommended practice, therefore, is to make the formal offer either directly after the foundation has been laid or after opposing counsel has had an opportunity to conduct its voir dire examination of the foundational witness.<sup>5</sup>

### § 16:3 Distortions Potentially Present in Audio Recordings

The following is a list of the different types of distortions that may affect the fairness and accuracy of an audio recording as evidence.<sup>6</sup>

- . Distortions attendant with the recordist's initial subjective choices
  - . Distortions arising from the recordist's intentionally deceptive or falsifying initial subjective choices
  - Distortions arising from confusing the "map with the territory," that is, confusing an after-the-fact, out-of-context representation with the actual sounds as they occurred
  - . Distortions deriving from an audio recording consisting of only one type of sensory information, that is, acoustic information
- . Distortions inherent in the technical imperfections of whatever audio recording system is being used (even the best audio recording equipment can only produce a nearly exact, but not an exact, acoustic representation of what occurred)
- Distortions arising from changes to the behavior of those who are being recorded or who are doing the recording, simply because they know they are involved in the making of a recording

to listen to it where opposing party failed to make timely objection).

6. As to distortions, generally, see § 9:24.

5. See J. McElhaney, *Trial Notebook*, 2d ed., 196 (American Bar Association, 1987).

- . Distortions arising from the recordist's intentional misuse of technical recording procedures

It should be noted that virtually all of the distortions on this list apply not only to the audio, but also to the video, component of video recordings.<sup>7</sup>

#### § 16:4 Chronological Checklist of Defense Considerations

In addition to disputing, when possible, any of the foundation elements or admission steps listed in §§ 16:1 and 16:2, the party against whom an audio recording as evidence may be offered should keep in mind the following specific practical and evidentiary considerations, which are presented in roughly the order that they will arise.<sup>8</sup>

- . During discovery-as described later in this chapter
- inquire into possible existence of adverse audio recordings as evidence, and if existence of such evidence is known or admitted, inquire into details thereof, including operator of recording equipment, length of recording, chain of custody to date, etc.
- . During discovery, consider conducting deposition discovery of person(s) likely to be foundational witness(es)
- . During discovery, obtain a copy of audio recording as early as possible, as well as a copy of any transcript that may be offered
- . Provide adequate time for early and thorough lay review of audio recording

Lack of materiality and relevance

Constitutional and legislative incompetence

Inaccuracies and lack of genuineness in consultation with client or others who were present

Signs of material alteration, surreptitious editing, or other falsification

7. See §§ 11:7, 11:8, 11:11 with respect to distortions in video recordings.

8. These considerations are derived from Chapters 6, 9, 12, and 13.



Inconsistencies between written transcripts, summaries, or other reports and content of recording

Indistinct, incomplete, or inaudible passages

Unfair or excessive prejudice

Hearsay, cumulativeness, or best evidence objections

- . Privileged communications
- . If surreptitious editing or falsification of any type (including tampering, alteration, or fabrication) is seriously suspected, decide with client whether to consult forensic audio expert
- . If necessary, locate qualified forensic audio expert
- . If forensic audio expert is retained, ensure that expert has access to original recording on original audio storage unit for purposes of examination
- . Make strategic decision as to worthwhileness of challenging admissibility of audio recording based on cost/benefit analysis, findings of forensic audio expert, and other factors
- . Refuse to stipulate to authenticity, foundation, or admissibility in general, if strategically beneficial
- . Object to proponent playing recording for trier of fact until it is formally admitted into evidence
- . Ensure that separate foundation has been laid for any re-recording, enhanced re-recording, or composite re-recording before it is admitted into evidence or played for the trier of fact
- . Ensure that proper foundation has been laid before any transcript is admitted into evidence or distributed to, or read to, the trier of fact
- . Allow sufficient time to properly prepare for voir dire examination or cross-examination of foundational witness
- . Explicitly raise existence of serious questions as to accuracy, surreptitious editing, or material falsification with trial court through motion *in limine*, or during *in camera* review, or when foundation is being laid
- . Object as to excess of prejudice over probativeness, cumulativeness, hearsay, privileged communications, or other incompetencies, if possible and strategically appropriate

- . Request opportunity to present to trier of fact copy of original unedited recording, or segments thereof, if applicable and advantageous
- . Request cautionary instruction as to issue(s) audio recording is admittedly relevant to, and as to inference(s) that can be permissibly drawn from an audio recording as evidence
- . **In** criminal case, note to court/trier of fact that higher constitutional scrutiny may apply both with respect to admission standards and ultimate importance of evidence
- . All objections to audio recording evidence on any grounds should be made in a specific and timely manner, and formally preserved for the record on appeal

### § 16:5 Technical Guidelines for Producing Admissible Audio Evidence

The following guidelines/ which are consistent both with the traditional "seven-pronged" predicate for the admission of audio recordings as well as with more modern foundation formulations,<sup>10</sup> are intended to increase the likelihood that an audio recording will be properly recorded in the first place, and then subsequently admitted into evidence. While meant to be thorough, these guidelines are not meant to be exhaustive. Moreover, not every guideline will be appropriate in every situation; that is, what is required or even possible in the case of a witness interview or a deposition may be very different from what is appropriate in the case of a surveillance recording or a spontaneous "on-the-spot" recording. Importantly, if there is official misconduct or an unreported break in the chain of custody, or if a talented, well-equipped, and determined would-be falsifier either creates or gains access to the audio recording in question, then that recording may turn out to have been falsified, whether or not most or all of these guidelines have been followed.

**In** short, following some or even all these guidelines is not

9. These guidelines are partially derived from "Guidelines For Law Enforcement Tape Recording," written by Anthony Pellicano of Forensic Audio Lab Ltd. of Los Angeles, California. Fausto "Tito" Poza, of Poza

Consulting Services, Menlo Park, California, also helped in the review of these guidelines.

10. See, generally, Chapter 6.

meant to ensure admissibility, but is instead meant to significantly increase the probability that: (1) the audio recording equipment used will be capable of making intelligible, relatively high-quality, and complete recordings; (2) any audio recordings that are made will, in fact, be intelligible, of relatively high quality, and complete; and (3) concomitant with the making of any such audio recordings, the groundwork will be established for the subsequent laying of a strong evidentiary foundation. Finally, note that these guidelines are written for analog magnetic audiotapes (for example, cassette or micro cassette tapes), and not for digital or nontape based formats; similarly, there will be no consideration here of encryption schemes, coding mechanisms, and other electronic or mechanical systems that may help to ensure the authenticity and accuracy of audio recordings.

Checklist of routine maintenance procedures<sup>11</sup>

- . The audio recorder is generally clean, well-maintained, properly functioning, and safely stored
- . The audio recorder's record and erase heads have been properly cleaned on a regular schedule in accordance with the manufacturer's recommendations (if any)
- . The entire machine has been lubricated, calibrated, and otherwise maintained according to the manufacturer's recommendations (if any)
- . All functions on the audio recorder (rewind, fast forward, stop, pause, record, voice activation, etc.) have been tested on a regular (although perhaps infrequent) basis
- . All accessory equipment (microphones, surveillance equipment, etc.) has been regularly maintained, tested, safely stored, etc.
- . Each audio recorder and piece of accessory equipment has been permanently labeled and identified for record-keeping, admissibility, and storage purposes

11. Note, if a law enforcement department or other organization! individual has more than one audio recorder, these routine procedures should, obviously, be applied to each machine.

*Checklist of procedures to help ensure recordings are intelligible, relatively high-quality, and complete*<sup>12</sup>

- . For extremely important recordings, the presence of an individual whose sole task is to operate the recording equipment and take written notes may be desirable; such an equipment operator should be experienced with, or at least familiar with, the audio recording equipment being used
- . For extremely important recordings, it may be desirable to set up, test, and run two sets of recording equipment
- . If possible, use brand new, never-recorded-on (virgin) audio tapes
- . Use high-quality, brand name audio tapes if available; avoid inexpensive, generic brands sold in bulk
- . Avoid audio tapes of over 90 minutes in length (45 minutes each side), since these are more prone to breakage and other problems
- . Visually inspect each audio tape to make sure there are no obvious snags, housing cracks, or other damage
- . Have an adequate number of tapes available to record the entire event in question, i.e., have at least one more tape on hand than is thought will be necessary
- . Visually inspect record and erase heads to make sure they are not dirty or clogged, and visually inspect entire tape transport mechanism as well
- . If audio recorder is battery powered, check batteries using battery tester; if there is no battery tester available or if there is any doubt as to battery condition, put in fresh or recently recharged batteries; always have extra set of (preferably alkaline) batteries available
- . If AC-powered recorder or dual powered recorder, have extension cord available; if dual-powered recorder, use AC power when possible and convenient, unless use of AC causes noticeable power hum
- . Make a fifteen- to thirty-second sound check; this should be

12. Unlike those in the previous list, should be followed or considered before these procedures and guidelines each and every recording session.

- done: (1) using the audio recording equipment, plus any accessories (microphones) or surveillance equipment, in the exact same configuration that will be used for the recording session; (2) from the position of the likely speaker(s), that is, with the speaker(s) or a stand-in positioned where the speaker(s) will actually be during the actual recording, and talking approximately as loudly as the speaker(s) will likely be talking during the actual recording; (3) with an unimportant or used test tape that is similar to the tape(s) that will be used during the actual recording
- . In order to avoid starting a recording in the middle of a sentence, make sure that the magnetic audio tape is advanced past the nonmagnetic leader, either by waiting seven to ten seconds after starting the machine or by using a pencil or other device to wind tape past nonmagnetic leader (Note: microcassettes do not have nonmagnetic leaders); the operator of the equipment should also be aware of the nonmagnetic leader whenever a tape is turned over to record on the second side
- . If audio recorder (especially microcassette recorder) is capable of multiple speeds, faster speed (which gives less total recording time) is preferable, assuming adequate number of tapes are available, since it will produce a generally higher quality and more intelligible recording
- . To ensure that tape will not be accidentally re-recorded over, both plastic safety tabs on the top edge of the tape housing should be removed as soon as recording is finished
- . The original recording, as well as any working copies that are made (see below), should be stored in an appropriate case and in an environment that is otherwise not subject to strong magnetic fields, excessive dust, direct sunlight, liquids, high humidity, or extremes of heat or cold
- *Checklist of procedures to help ensure admissibility*
- . For extremely important recordings, the presence of some one whose sole task is to operate the recording equipment and take written notes may be desirable; such an equipment operator should be legally competent, should have no personal interest in the legal matter in question (in extraordinary circumstances, a notary public can be

- retained), and should be available for future testimony with respect to the authenticity and accuracy of the tape
- . Make written record of make, model number, and serial number of audio recorder in evidence log, attorney's notes, or elsewhere
- . If a previously recorded-on tape must be used, it should be properly degaussed (erased) using a bulk degausser, and a notation should be made in the written log or other notes that a previously recorded-on tape has been used; if it is not possible to degauss the tape before recording on it, this should also be noted
- . If not already present, labels should be obtained and placed on tape(s) for subsequent recording of identification information
- . At start of taping, the person operating the audio recorder should make a verbal statement that includes, at minimum, day, date, time, place, parties present (including nonspeaking parties), and tape number and side information; if possible, make, model number, and serial number of equipment should also be verbally noted, along with a brief, general description of what is about to be recorded
- . If an interview of a witness or other party is being conducted, the witness should be asked to state his or her name, address, and place of employment, and that he or she is cognizant that a recording is being made<sup>13</sup>
- . In a criminal confession situation, if *Miranda* rights are read aloud on the recording, the subject should be asked to respond with an audible, verbal, and intelligible response rather than with a nod of the head or other body language
- . If at all possible, avoid stopping or pausing the tape while recording is ongoing
- If it does become necessary to stop or pause the tape, for example because someone becomes temporarily indisposed, ill, or for any other reason (including the end of a side being

13. See 2 Am Jur Trials, Locating beginning of a taped interview should and Interviewing Witnesses § 82, for a more detailed discussion of how the

- reached), then whoever is operating the tape recorder should, if possible, verbally indicate that the tape is about to be stopped or paused, the reason it is about to be stopped or paused, the tape number and side information, and the date and time at which the recording has been interrupted
- . **In** all circumstances after a recording has been stopped or paused, there should, upon the resumption of recording, be a verbal statement by the person operating the recording equipment as to the date, time, case name, and tape number and side information
- . If it becomes necessary to stop the tape because the end of a side will soon be reached, then the operator of the equipment should (1) signal to the current speaker(s) to complete his or her current statement, (2) make the necessary statement with respect to the stopping or pausing of the recording, and (3) do both of these things before the tape runs out and before the trailing magnetic leader is reached
- . It is advisable to not rewind or fast forward the tape if it has paused or stopped; moreover it is preferable not to remove any tape from a tape recorder until the side currently being recorded on has been finished
- . Once both sides of a tape have been completely recorded on, the tape should be labeled, using ink or indelible marker, with appropriate identification information, including date, time, case name, location, and tape number and side information; if possible, other applicable post-recording procedures (such as removing safety tabs) should also be commenced
- . Any stopping, pausing, starting, etc., along with the times and reasons such interruptions occurred, should be noted in the written log or other notes of the taping session
- . At the conclusion of the recording, the operator of the equipment should verbally repeat all pertinent information, including date, time, case name, names of parties present (speaking and nonspeaking), location, and total number of tapes and sides used
- . At the conclusion of recording, all labeling should be finished and double-checked; information should include date, time,

case name, names of parties present (speaking and nonspeaking), location, and tape number and side information, with first and second sides being clearly marked as such (either as "Side 1" and "Side 2" or "Side A" and "Side B")

- . Any unfinished or remaining notations should be made in written evidence log or other notes
- . For important recordings, as soon as is practicable after the recording has been made, the safety tabs have been removed, and the tape has been completely labeled, a first generation (preferably high-quality digital) copy of the tape should be made through the line-recording (or "direct patch") method, that is, not through a speaker-to-microphone configuration
- . For important recordings, in order to be able to subsequently verify the recording's accuracy, someone who will be available for later testimony-including either the operator of the equipment or someone else who was present-should listen to the recording (after the safety tabs have been removed) relatively soon after the recording is made; the recording can be listened to while the first generation copy (see above) is being made
- . For important recordings, after making the first generation copy, which will serve as the working copy, the original tape should be stored in a safe place or, in law enforcement situations, sealed and placed in the possession of an appropriate custodian
- . Any change in the location or custody of the original tape, and to the degree practicable the working copy, should be noted in the evidence log or other notes pertaining to the tape recording; to the degree that it is anticipated that an audio recording will be offered in evidence, it is important to have a record of its location and who had access to it from the time it is made until the time it is offered in court<sup>14</sup>

14. For a review of recommended law enforcement tape control procedures, see C. Fishman, *Wiretapping and Eavesdropping* §§ 342-347 (Lawyers Cooperative Publishing, 1978).