

The PROSECUTOR

Recorded Evidence

BY PAUL GINSBERG

THINK OF RECORDED EVIDENCE as a kind of time machine with which a judge and jury can go back to the scene of a crime being plotted or executed, and be that fly on the wall actually hearing, and sometimes seeing, the crime as it actually unfolds. In addition to hearing the words, you can also hear the tone, the inflection, and the volume as the words are spoken. This is pretty powerful evidence. The public hears it every day in movies and on television (although those recordings are always crystal clear). A defendant can no longer pay off witnesses to testify that he was miles away from a meeting. You hear him as though you were there with him. Juries love this kind of evidence because they become more involved in the case while listening to recordings, rather than just hearing testimony from the witness stand.

Are recordings important? O.J. Simpson, Rod Blagojevich, Richard Nixon and thousands of others now know the answer to that question.

The defense is left with the choice of attempting to suppress recordings, or at worst, arguing the meaning or intent of the spoken words using motions to suppress and the testimony of expert witnesses. Over the last 34 years, while assisting as a forensic audio expert in 1,700 trials, I have been in a unique position to observe trials with recordings in every imaginable venue, from local real estate disputes and small claims cases heard in the basements of the local libraries, to major year-long terrorist cases in U.S. District Court. I would like to share with you some tips on how to

deal with this unique form of evidence, as well as how to counter defense objections, so that you can derive the maximum benefit from this compelling form of evidence.

ON-BODY RECORDING

In the course of planning an investigation, the subject of recording a conversation may come up. It may be a consensual recording of a rape victim with a suspect, an informant speaking with co-conspirators planning a crime, or an undercover agent buying or selling drugs. The location of the recording can determine whether or not the recording is intelligible. A quiet car is obviously a much better recording environment than a noisy bar or restaurant. The recorder does as it is programmed, recording all sounds in its range without regard to which are relevant and which are extraneous.

In all cases the wearer of the device should be instructed to keep the recorder going continuously and to disable any voice-activation functions, thus allowing low speech, even whispers, to be recorded (for future enhancement). Also, in the case of a digital recording, the machine should be set to HQ or high quality mode. Mono, or single channel, is generally sufficient for saving memory capacity. The quality of the recording is far more important than two-channel stereo operation. The wearer of the device should position the microphone as high on his person as possible for maximum pickup. Obviously a shirt pocket is a better

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choice than a hip pocket. Nowadays miniature digital recorders and external microphones can be worn on-body and concealed under clothing, and still record with high quality.

There are manufacturers who produce special recorders designed specifically for law enforcement. These recorders are small and some can record audio and video for hours or days at a time. They are fashioned to look like everyday objects, not recorders. The recordings can be downloaded into a laptop after a meeting. When these were being designed, I worked with manufacturers and requested that several features be included to maintain authenticity, since these are tapeless with no physical tape available for examination. I asked that the recordings be made in a non-standard file format that is proprietary and cannot be penetrated or edited. Further, I requested a continuous incrementing date and time signal to be interwoven into the audio channels so that during playback, one could see the time signal, recorded at the time of the conversation and note that it was incrementing continuously. Finally, I asked that whenever the recorder was turned off that the file be terminated and a new file begun when it was later turned on again. These features have been incorporated into these sophisticated machines, along with programmable quality and times of recording. If interested, I can direct you to the manufacturers of these devices currently being used by the CIA, FBI, DEA and many other federal agencies.

The wearer should speak a brief preamble, giving name and date and time. Some announce the expected participants. A similar postscript should be recorded at the conclusion of the meeting, including the time. With a continuous recording and a comparison of the announced times along with the measured time of recording, it is easy for a forensic audio expert to bolster the credibility of the recording on the witness stand.

TELEPHONE RECORDINGS

Many contacts between informants, undercover agents, or victims and defendants are by telephone. In the case of a telephone recording, there is no reason for the recording to be less than perfect since there is no concealment. When speaking into the telephone, you are actually speaking into the recorder.

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There are several ways to record a telephone conversation. The first method is to hold a small recorder near the telephone handset. This results in a very low recording with pick-up of noises in the vicinity of the recording. The near party will be recorded clearly, and the far party will be recorded through the handset and into the microphone of the recorder with a low and tinny sound. Clearly this is not the best way to record telephone conversations.

A second method is by use of a suction cup induction coil. A wire is plugged into the microphone input of the recorder and, on the other end, a suction cup in which there is a coil of small wire is stuck onto the handset side of a telephone handset. Electrical signals picked up by the induction coil are fed into the recorder through the wire. This method usually results in fair voice level, but hum and interference from fluorescent lights, computer monitors and televisions are also picked up by the induction coil. This, too, is not the most desirable way to record from the telephone.

The best way to record from a standard telephone is by using a telephone recording adapter available at electronic stores for approximately \$20. This little device, the size of a package of cigarettes, has several wires connected to it. One plugs into the recorder microphone input jack. The other is a modular telephone plug that plugs into the telephone line. Using this device both sides of the conversation are recorded clearly, with no extraneous noise added at the recording location, as with the acoustical coupling device described above.

As proscribed with an on-body recording device, a telephone recorder should run continuously, and a preamble and post-script should be recorded. The resulting tape or

CD should be documented and stored.

If the recorder is plugged into a telephone line and an incoming call is received, special instruments can be used to decode the recorded incoming caller-ID information. This can be useful in the course of an investigation as well as for cross-examination.

For recording cellphones the procedures are the same. You can record acoustically in the field, or alternately, by using a special cell telephone recording adapter, in which you use a hands-free headset and the adapter is connected between the headset and the cellphone, for direct pickup of both sides of the conversation.

AFTER THE RECORDING

Once the recording has been made it should be treated as any other piece of physical evidence. In the case of a micro-

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cassette or cassette, it should be initialed and dated by the wearer of the device, or by the supervising agent in the case of an informant, and stored in its own sealed evidence envelope with a chain of custody history showing who has had custody, dates of custody, and purpose, i.e., review, copying, enhancement, trial preparation, etc.

For digital recordings, the conversation should be downloaded and stored on CD or removable “thumb” drive in its proprietary file format. Manufacturers of portable digital recorders, including Olympus, Panasonic and Sony, all store their recordings in special file formats that are playable only by using their special player software. These files have high evidentiary value since they cannot be edited, unlike dis-

covery copies that can be in WAV file format and playable (and edited) on any computer with Windows Media Player software. Of course, to eliminate any defense objections to the open, easily-tampered WAV files, it may be best to provide the defense with CDs containing the proprietary files and player software from the outset.

During discovery, a diligent defense attorney, seeking to suppress recordings, will often request access to the original recording as well as the machine on which the recording was made. Requesting the original recording is legitimate in order to examine chain of custody and to do a supervised digital download of contents directly from the actual evidence.

Presumably the defense’s basis for requesting the machine would be to test whether it was the same machine on which the recording was made, for the purpose of attacking the credibility of a witness. For subsequent reference, the recording agent should note the machine on which the recording was made, including serial number, on the outside of the evidence envelope containing the original recording.

A word of caution: Providing restricted law enforcement machines to defense attorneys should be resisted, since divulging the physical dimensions, shapes, and types of concealments could destroy the value of these tools, compromise active investigations, and even put undercover agents at risk. At trial, if the defense asks your recording expert to describe these recorders, have the expert explain these concerns to the judge who should easily sustain the prosecution’s objection.

MULTI-RECORDING CASES

In large, multi-defendant cases spanning months or years there are often large numbers of recordings to be offered as evidence. It is useful to organize the material so that it can be accessed efficiently. One of my professors once said, “If you do 90 percent work in planning, you only have to do 10 percent work later.” My experience has shown that this advice certainly applies to trial preparation.

With respect to evidentiary recordings, it is useful to prepare a spreadsheet with each recording on its own line, with columns as follows:

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Recorded Evidence

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- Date
- Time
- Duration
- Participants
- Telephone Call or Meeting
- Short Synopsis
- Enhanced (Y/N)
- Transcribed (Y/N)
- Interpreted
- If foreign Language (Y/N).

The spreadsheet provides a concise, easy-to-access history of recorded meetings and telephone conversations between agents, informants, victims, and defendants. The more recordings in a case, the more valuable this spreadsheet will be.

MALFUNCTIONS AND BROKEN TAPES

On television and in the movies every recording is perfect. Microphone placement is ideal and all equipment runs flawlessly. In the real world, however, we are not so fortunate. Occasionally machines malfunction and sometimes tape breaks. I was on one case in which a law enforcement agent's body recorder stopped mid-conversation because the batteries had been depleted. It had taken six months to arrange the meeting, and the agent had neglected to load fresh batteries in the recorder. Happily I was able to testify as to the resulting recording after testing the recorder and batteries in the lab. On occasion, despite all proper handling, a machine will fail to operate properly. In that case, the recording, or lack of it, should be documented by the agent, and the machine should be sent for repair. All documentation should go into the case file. Likewise, in the case of a tape that breaks during recording, rewind or duplication, everything needs to be documented at the time of the event. This is much easier to deal with at trial, than trying to explain, after the fact, that the reason there was no recording of a critical meeting was the malfunction of a machine. This could strain credibility.

In one case involving a federal telephone wiretap, multiple cassette recorders were recording the calls. One set of cassettes, numbering into the hundreds, was sealed and designated as the original evidence, while the other set was

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used as the work set, for review and transcription. Before trial, in order to prepare enhanced trial copies, I asked to work from the originals. Once they were unsealed I discovered that no calls had been recorded on any of the cassettes. The only sounds were clicks that were recorded at the start and end of each conversation. It was later discovered that the input cable to the "evidence" recorder had not been plugged into the machine. I performed a study comparing the start and stop clicks on the evidence recordings to the beginnings and endings of calls on the work set, to bolster the evidentiary value of the work set for admission at trial. The story has a good ending. The defendants pleaded guilty without requesting access to the originals. This all could have been prevented had the monitoring agent played back a second or two of each recording as it was being rewound, to verify the proper operation of the machines.

Broken tapes can be repaired by an expert using a professional splicing block and splicing tape. For trial, it is best to use properly-made digital copy CDs rather than cassettes or microcassettes. Playback is easy using a laptop connected to external speakers or a headset array.

TRIAL VOIR DIRE OF JURORS

Some people have strong feelings about the use of recordings. There are those who feel that any recording is an invasion of privacy (even in the course of a law enforcement investigation) yet others embrace recordings and give them maximum weight during deliberations.

Some people have hearing difficulties and may be self-conscious about the condition. The recordings may sound muffled or unclear to them. As a result they may give the contents of the recording less weight than a juror with normal hearing.

To accommodate all of these prospective jurors' concerns, a voir dire question can be posed at the outset, as follows: "Ladies and gentlemen, during the course of the trial I expect that you will be listening to recordings made during the investigation without the knowledge or consent of all parties. Do you have any feelings one way or the other, and would the introduction and playing of these recordings interfere with your ability to make a fair and impartial decision in this case?"

TRIAL PRESENTATION CDS

Microcassettes, cassettes, and multi-channel reel tapes used in recording the transactions of brokerage companies and 911 call centers, all require playback equipment in order to present the recorded material to judge and jury.

Nowadays it is much more practical to produce discovery and presentation CDs directly from the original evidence, regardless of its format. In the case of long meetings in restaurants, there may be two hours of non-pertinent

conversation and five minutes of relevant conversation. A CD containing selected excerpts can easily be played either on a PC or laptop computer or on a standard CD player. It can also be duplicated easily using standard computer software.

Improperly made discovery copies cause needless arguments and delays. Typically, copies made from original recordings may be distorted or contain hum as a result of an improper copying technique, such as mis-match between playback machine and input to computer or CD recorder. The result is that assumptions are made as to quality of recordings and evidence by prosecution and defense alike. There have been many cases in which defendants have gone to trial rather than enter a guilty plea because they believed the recorded evidence was unintelligible and distorted. Had they listened to a decent copy, they might have pleaded.

The next consideration is file format on the resulting CD. One can either choose WAV file format, compatible with PC and laptop computers using Windows Media Player software, or CD Audio format, compatible with PC and laptop computers, as well as CD players. Note that CDs burned with CD Audio format files have a maximum record time of 80 minutes, while WAV files are smaller allowing more material to fit on a CD.



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TRANSCRIPTION

In real-life, conversations take place in less than ideal environments. Many are in restaurants, on the street, or in places where there is considerable background noise, like televisions, music, others talking, vehicles, or just about anything that would tend to obscure the relevant conversation.

When we have less than perfect recordings (just about every case), it is beneficial to produce a written transcript for use by judge and jury in following along as the recording is played. A Google search for “transcription software” will yield a number of software options. Typically, a software package will accept files from CD in WAV, MP3, or a number of more specialized file formats. A foot-pedal with a cord that plugs into the USB port of the computer allows the transcriber to stop and start the playback in order to type using a word processing program. Speed can usually be controlled and sections replayed to assist the transcriber. The cost is around \$200 and is a good office acquisition since it can be used to transcribe undercover tapes, telephone mes-

I suggest using a pair of low-distortion headphones for review as well as for presentation at trial. With headphones, extraneous noises at the listening location will not affect the playback.

sages, as well as dictation.

I suggest using a pair of low-distortion headphones for review as well as for presentation at trial. With headphones, extraneous noises at the listening location will not affect the playback. If a simple boom-box or loudspeaker is used at court and Juror # 1 sneezes, Juror #7 behind him, misses what may be a crucial line of the recording. If someone

shuffles papers at the defense table, an important word or phrase may be lost. Also, most courtrooms have hard walls that are reflective and cause echoes. For these reasons, headphones are best.

Transcription is done by repeatedly playing the recording while writing down all statements that are heard and recognized. Begin by playing the recording and writing down statements, phrases or even isolated words that are heard. The result will be what I call, the “skeleton transcript.” Then, on successive reviews, the “meat” can be added until you have a case of diminishing returns and a substantially complete transcript.

At trial, the judge will likely issue a cautionary instruction to the jury as follows: “Ladies and gentlemen, we are now going to hear a recording. Transcripts have been prepared to assist you while listening. If there comes a time when what you see and what you hear differ, it is what you hear that controls. The recording is evidence. The transcript is an aid.”

Defense may proffer its own version of a transcript or partial transcripts. This difference of opinion can be resolved during a pre-trial conference with the judge deciding on the correct phrase to be used in the jury transcript or, more likely, the judge will allow both transcripts to be used. This is an opportunity for you to request to play the recording twice, once with your transcript and once with the defense transcript. Ordinarily during trial you would not be able to play a recording twice without the objection that it would place undue emphasis on the recorded evidence. However, if objection is made to your transcript, this is a perfectly reasonable way to resolve the differences.

Sometimes the defense will argue that no transcript should be used at all since the recording is the evidence and the transcript will prejudice the jury. In this case and as an alternative, you may want to offer to play the recording, stopping after each line to ask the witness what was said and by whom. You can tell the judge that this may add a day or two to the length of the trial, but that you continue with either method. Needless to say the transcript is almost always allowed. On one or two occasions I have seen the recording played first without the transcript and then with it. This is desirable because it allows the jurors to become immersed in the sound beforehand so they know what to

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expect when the recording is played again. The real world is a noisy place.

VOICE IDENTIFICATION

Despite having the software to produce spectrograms (plots of frequencies and amplitudes of speech) opposing experts can point to the same squiggles and come to differing conclusions. This is not science, and one has to beware of the “testimony for money” witnesses. Voice-identification evidence is not allowed in some jurisdictions because it is not an exact science and is subject to interpretation by the “experts.” Use caution when considering this type of testimony.

PROFANITY

Recordings are made when participants are in their natural environment. Conversations may be sprinkled with profanities, slurs, and otherwise politically incorrect words and phrases. If the defendants uttered the words they should be heard and included in the transcript. This provides the judge and jury with an accurate picture of the individuals.

You might consider apologizing to the judge and jury when quoting profanities from the transcript while you question a witness, but the quote should be accurately read to the witness.

If there are profanities in recordings ask the judge to include a voir dire question to prospective jurors to the effect that recordings may be played that include off-color language. “Do you have any feelings one way or another about profanity, and would that prevent you from making

an unbiased decision in this case?”

FOREIGN LANGUAGES

Why play a recording if the jurors do not understand a word of the language? It is to convey the tone of the voices. The jurors should be able to tell whether a threat was in earnest or just a joke. Counting of money is obvious in recordings and the transcript helps. Transcript preparation for a foreign-language recording is a little different from other transcripts. The speaker’s name is shown on the left in one column (as seen in a script for a play). The next column is the statement in the native tongue, and the final column is the English translation.

In this way we can separate the transcription from the translation. Using this technique, arguments can be clear as to whether a word or phrase in the original tongue was transcribed accurately or whether the translation of the word or phrase is accurate.

DEFENSE-PRODUCED RECORDINGS

Defense-produced recordings are subject to the same requirements for admission, namely a proper foundation, including needing to be found to be authentic and intelligible. In one case, at mid-trial the defense produced a recording that purported to be an exculpatory recording of a meeting between the defendant and others. Defense even proffered transcripts. After an examination of the tape, it was obvious that a subsequent over-recording was performed by the defendant. To make matters worse, the transcript contained the words of the portion that had been obliterated by

the over-recording. One year later there was a perjury trial and conviction.

When the defense seeks to introduce recordings, you may need to have an expert test for authenticity, especially if the content appears to contradict other statements.

VIDEOTAPED STATEMENTS

Sometimes a defendant will agree to a videotaped statement or confession and then recant. He may claim that the videotape was altered, spliced or edited. To counter this argument, it is useful to take some precautions to ensure that the recording will be admissible.

Sometimes a defendant will agree to a videotaped statement or confession and then recant. He may claim that the videotape was altered, spliced or edited.

It is advisable to have a microphone somewhere near the subject, as opposed to using the video camera's internal microphone. Any camera store will have a variety of suitable wired and wireless microphones that mate with the camera's audio input jack.

Also, there should be a wall clock with a sweep second hand in the video picture during the interview. In this way it is easy for a recording expert to testify that the clock in the picture is continuous, and so the conversation must be continuous as well—a simple piece of inexpensive insurance.

In this case the preamble and post-script should be done in the presence of the subject, since this is not a covert recording. Also, always have the recorder running continuously and document any time the recorder is turned off with announcements of the time.

As with any other recording, the statement or confession should be transcribed for use at trial.

HIGH-PROFILE CASES

Sometimes a prosecution with recordings will generate a large amount of public interest. Examples are plentiful from O.J. to political corruption investigations, to 911 calls in celebrity domestic violence cases. In these cases the public (and press) will want to listen to the recordings, and there will be a tendency to want to share the evidence to convince them of the guilt of the accused. Evidence should be presented to a properly empaneled jury and in context.

Releasing recordings to the public can only lead to objections from the defense at trial and the inability to have a fair trial. Resist the urge. The indictment should be sufficient.

After the recordings are played at trial or after a verdict, tapes and transcripts of played portions can be released. Before that time, there is the possibility of perjury.

MOST COMMON DEFENSE OBJECTIONS AND HOW TO DEAL WITH THEM

The two most common objections to recordings are *audibility* and *authenticity*.

Defense will use any means to suppress an incriminating recording. In one case, after a prominent politician testified, under oath, that he had never made incriminating statements, a tape was introduced by prosecution. Defense had no choice but to attack its authenticity, or face credibility, if not perjury, issues. The recording was examined and found to be authentic.

Defense often calls upon supposed "experts" to testify as to unintelligibility or flaws, testifying about "tampering and editing." I have come across defense experts who were actually librarians, biologists, and musicians, all self-styled, self-appointed forensic audio experts. Do a background check on defense experts.

On television and in the movies all recordings are crystal clear. Jurors have this in their minds. In the real world every recording has ambient noise and background sounds along with the pertinent conversation. A competent foren-

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Recorded Evidence

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RECORDED EVIDENCE GUIDELINES

- Check Batteries and make test recording
- Record preamble and postscript with date, time and participants' names
- Record continuously—disable voice-activation feature and do not stop recorder mid-conversation
- For digital recorders use HQ (high quality) setting. Mono is fine. Stereo is not necessary.
- Preserve original recording in its original format as primary evidence. For digital recordings, download file in manufacturer's proprietary file format.
- For telephone recordings, connect directly to the telephone line using a telephone recording adapter.
- Document all recordings and machine malfunctions in case file
- Enhance, if necessary, to maximize intelligibility
- Have recording examined for authenticity and continuity to counter claims of tampering, if necessary
- Prepare transcript
- Present recording at trial using best equipment available, preferably with headphones.

sic audio expert, working with state-of-the-art forensic tools can minimize, if not eliminate, interfering sounds that would tend to mask the underlying conversation. Defense may request a pre-trial audibility hearing. Be prepared to play enhanced recordings, using the best playback equipment at your disposal, using transcripts to assist in following the conversation.

There are sophisticated methods for reducing background noise in recordings. When having someone enhance recordings, have the expert assure you that none of the techniques used will alter the speech, add or remove any speech content, or affect the voice identification properties of the voices. The hardest part of my job is characterizing the differences between the desired speech and the interference that tends to mask the speech. Happily, digital speech enhancement is a very powerful tool and can compensate for less than ideal recording conditions.

In the latest O.J. Simpson case, for example, there was considerable shouting during the recording. In the Waco recordings there was gunfire, tanks advancing, and everyone wore a gas mask, muffling their voices. Nevertheless, with patience and state-of-the-art software, I was able to enhance the conversations so that they could be presented at trial.

I derive great satisfaction when a jury reaches a satisfactory verdict, after requesting to rehear recordings that I have enhanced during deliberation. Threats, negotiations, and

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The Magic of the Portable Document Format (PDF) File

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other incriminating conversations are very powerful to a deliberating jury. And, with cutting edge enhancement techniques we can now hear sounds like gunshots or money being counted, that may become significant in a prosecution. In one case a union representative claimed that he was just playing with a wiffle ball bat during a conversation. Enhancement showed that he was brandishing a metal baseball bat in a threatening manner.

Similarly, in order to counter claims of tampering, a qualified forensic audio expert can perform tests to differentiate between normal machine functions and intentional operator intervention. Alleged discontinuities, over-recordings, and erasures can be evaluated using special laboratory techniques. Continuous recordings can be defended against contrived claims of tampering. Remember, not only is the authenticity of the recording at stake, but so is the credibility of the prosecution case and the testimony of your agents. When there is an allegation of tampering, it must be countered.

A FINAL WORD

In this article I have attempted to provide advice on issues that can arise when recorded conversations are presented in the course of a prosecution. They have all been learned while “at the wheel” in trials from coast to coast. The words spoken by a defendant during the commission of a crime are very powerful evidence, and judges and juries look forward to “being there” by way of a recording. Try to be prudent about how many recordings to play, especially if they are lengthy and repetitive. Hours of listening to recordings can be draining. Conversely, they can certainly be pivotal, and there is nothing that comes close to hearing the words directly from a defendant in the commission of a crime.

And, don't forget that, in enhancement and examination of a recording, you are demonstrating that you are doing everything in your power to arrive at the truth for the tryer of the facts. This can only increase credibility and your connection with the jury.

We have just scratched the surface. As you know, each case has its own set of facts and considerations that must be addressed. In one case it will be intelligibility, in another, chain of custody. As with any other form of evidence, attention to detail is important in laying a proper foundation for admissibility.

into a PDF, then you can typically select text that can be copied into another application. Any formatting (i.e., bold, italics, font) will most likely be lost during the cut and paste process and you will have to reformat the text. Typically, reformatting is a lot easier than retyping several paragraphs. Fortunately, many court decisions from the online court sites will allow you to cut and paste from PDF decisions.

If the PDF file was created from a scanned document, you will have created an image file and you will not be able to cut and paste text from most scanned documents. Even with the full version of Adobe's Acrobat Pro (around \$500) cutting and pasting from scanned documents is difficult, if not impossible.

There is no question that PDF files are going to be around for some time because they are easy to open and look the same on every computer and printer. Learning how to work with these files will save you a lot of time in and out of the courtroom.

ATTENTION

LIBRARIANS

The National District Attorneys Association will publish four issues of *The Prosecutor* magazine in 2009 instead of our usual six. We apologize for this change but the loss of federal funding has prompted the association to cut its budget.

We hope to resume the normal publication schedule for *The Prosecutor* magazine as soon as possible. Thank you for your patience.