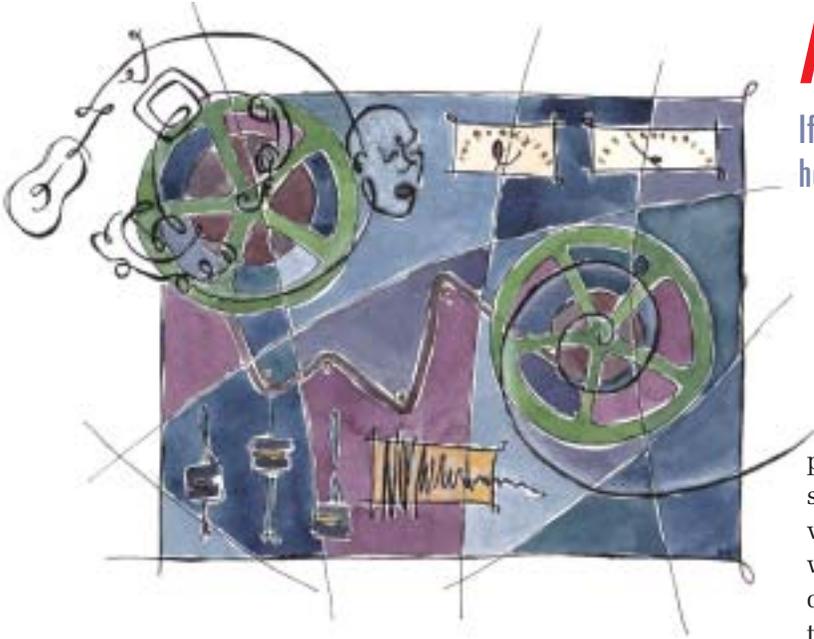


Audio Files

If you have audio evidence that's hard to hear, it may be possible to clean it up.



THE COMPTROLLER at a mid-size U.S. construction firm forgot that his company routinely taped all its telephone calls, to provide a record of customer orders and other important conversations. The tapes were kept for 60 days before being recycled. That's how he was caught skimming cash from his employer.

A forensic audit had uncovered a large number of cheques made out to cash over several years by a series of junior bookkeepers. Interviews and other evidence strongly implicated the comptroller, who apparently had been coercing the junior bookkeepers into making out the cheques, cashing them and then giving him the money to cover his "petty cash" expenses. But there was insufficient direct evidence to prove this assumption. Until someone remembered the tapes.

An examination of the existing tapes turned up a conversation between the comptroller, who was calling from home, and the most recent bookkeeper. Unfortunately, the sound on the tape wasn't very clear. So the company took the tape to GaideCom Inc., a Long Island company that

provides forensic audio services. They were able to clean up the tape so that the conversation could be clearly heard. They discovered the comptroller asking the bookkeeper, "Have you cashed that cheque for me yet?" on the same day as one of the cheques had indeed been cashed. It was the empirical evidence that helped resolve the case in the firm's favour.

MANY CLIENTS NEEDED THE SERVICE

Susan Gaide, who runs GaideCom (www.gaidecom.com) with her husband Mark, says the couple began offering forensic audio services as a complement to the crisis communications and public relations services they already offered. "I had so many clients coming to me with poor quality audio tapes of meetings and voice mail and other audio sources that were critical to a matter we were working on that I realized there was a need for this service as well," she says. As both she and Mark, who has 25 years experience as a sound engineer, are classically trained musicians, they felt more than qualified to do the work.

There are two primary aspects to what they do, she explains. One

is the technical enhancement of the tape to make the voices or any other significant sounds as clear as possible. This can be accomplished by methods such as filtering, boosting, compressing and equalizing the audio, so that the background noises (the most common problem), for example, are reduced and the speaking voices made easier to hear.

The second aspect is where their musical ears prove beneficial. "We often have to produce transcripts of a tape," Susan says, "and it can be difficult discerning who is talking when several people are speaking at the same time or have similar voices." For example, a person sitting across the room from a microphone will sound different from a person sitting right in front of a microphone (or within close proximity to a recording device). The proximity to the recording device/microphone and accompanying differences in room noise help distinguish one voice from another.

GaideCom cautions clients to be careful how they handle the original tape or audio source. "They should do nothing on their own that might harm it or contaminate the chain of command," says Gaide, "especially if the tape is needed in a possible legal action." That sounds like good, clear advice. ■