

tech | talk

BY BOB DOLPH

Laying Down CCTV Law

When selling to and installing CCTV for prospects, wouldn't it be nice to have your expert recommendations endorsed by one of the most prestigious law enforcement organizations in the country? Well stop the presses! One of the best CCTV selling and

training tools has just crossed my desk and I want to share it with all of my special "Tech Talk" readers.

I have always found one of the biggest CCTV application challenges to be getting the customer to spend the money for a solution that would provide the image quality necessary for strong crime scene evidence. Af-

and important reputation as a tool in helping apprehend criminals. That is of course, if the images produced by the CCTV cameras provided a good clear image of the suspect. Today, with the progression of inexpensive cameras and digital imagery, the disappointing part is that the images are often pixelated when enlarged — and may



secsales@bobit.com

gence that can also help you actually sell quality CCTV. Do I sound excited? Well, I am!

7 CRITICAL VIDEO CONSIDERATIONS

The organization referenced in the introduction is the FBI and the new CCTV tool is a 20-minute video named "Caught on Camera." This professionally produced (*see photo*) video has much of the excitement and flair of popular TV shows such as "24."

As you can imagine, poor quality evidentiary video has been a real sore spot for law enforcement organizations like the FBI for some time. Producing a valuable tool such as this video will go a long way in helping security dealers and integrators better aid crime-fighting efforts while also best serving their customers.

Let's take a look at some of the technical items discussed in this video:

Image resolution — Do your cameras provide enough resolution for facial recognition? The better the quality of the image, the more you can do with it. The larger the camera chip, the better the image quality. Minimum horizontal camera resolution should be 480 lines.

Camera position — Are the cameras positioned for a clear view of the subject? Make sure you always have a



Courtesy FBI

The 20-minute video "Caught on Camera" was professionally produced by the FBI. It can be a valuable tool to show your customers to help them better understand CCTV equipment and services.

ter all, isn't that what the customer wants and needs for a good return on investment?

Many years ago law enforcement gave CCTV cameras the appropriate nickname of "the silent witness." With that, the technology gained a valuable

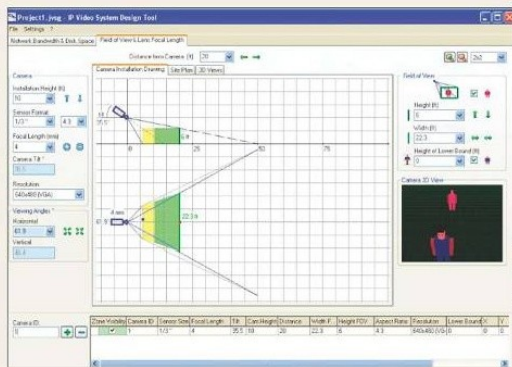
even be worse than previous analog recorded video.

If you are a long-time reader of this column you know that I typically discuss video quality at least once a year. However, get ready to be blown away with a new bit of video intelli-

Tech Talk Tool Tip

This month I have selected a software tool that can be very valuable when you are trying to professionally specify and lay out CCTV systems. The manufacturer is Joint Video Surveillance Group (JVSG) and you can download a trial version at www.jvsg.com. I also recommend checking out the video tutorials at JVSG's Web site. I was impressed with the option of the IP video system design tool that will provide an accurate estimate of DVR storage demands.

Another handy tool is the VM300 view finder from Computar (www.computarganz.com). I have used this tool for many years in sales; it is a great way to quickly show the customer what will be seen in a field of view with a particular camera format and lens focal length. It is small and easy to carry. If nothing else, it will definitely add a professional air to your CCTV survey.



Among other things, Joint Video Surveillance Group's system design tool helps calculate the precise CCTV camera viewing angle and field of view, as well as quickly get focal lengths for third-party camera lenses.

clear field of view (FOV). Is there any serious background light and can you compensate for it with a different angle or camera type? Are the cameras positioned low enough on the wall to get a good image of a person's face and not be blocked by a baseball cap?

Lighting — Is the lighting adequate to capture a good image of the subject; both day and night? Be careful of video with a bright background that can turn the image into a dark silhouette. Place complementary lighting to allow for changes in outside sunlight at different times of the day and night. Window tinting can also help with bright sunlight.

Image detail — Is your recorder set up for the best image detail? The FBI likes to refer to recorded video as "capturing video data." Achieve a

good depth of field (DOF) by using a faster lens and letting more light in. Remember for good detail a person's head should cover at least 15 percent of the screen. Using low recording frame rates to save on storage space can cause you to miss evidentiary detail.

Maintenance — As a provider, are you maintaining your system so that it can do its job when really needed? Periodically inspect cameras to make sure they are working, are in focus, and have not been bumped or moved. Adjust seasonally for outside lights on timers.

Good sight plan — When you sell a system do you assist the customer by providing a well documented sight plan? Where are all the cameras looking? What are the specifications of the

camera and lens? Are key areas such as registers, back and front entrances, primary aisles, hallways, and vending machines covered by cameras? (See this month's Tool Tip for software that can help with sight plan layouts.)

Replaying usable images — If your customer is not able to quickly and easily supply good "native" images they may lose the entire recording system if it needs to be submitted for evidence. You should be able to provide the video easily in the system's native format with a copy of the system's reader software and also in a more standard version such as AVI format. Another issue to consider here is how often the recorded video is overwritten.

(Note: There is a really good digital multimedia evidence (DME) whitepaper called "Best Practices for the Acquisition of Digital Multimedia Evidence." A recently updated version is available from the Law Enforcement and Emergency Services Video Association at www.leva.org.)

VIDEO PUTS THE LAW ON YOUR SIDE

Having such a highly respected organization as the FBI explaining and endorsing your CCTV "best practices" to your customers and sales prospects through the "Caught on Camera" video can work as an excellent sales tool.

I have saved the best news for last. This video, along with some other supporting materials, is available on DVD for FREE from two sources: the FBI at cctvdvd@leo.gov (provide your name, title, organization, street address and phone) and the Security Industry Association (SIA) through Communications Manager Ron Hawkins at rhawkins@siaonline.org. ■

Bob Dolph has served in various technical management and advisory positions in the security industry for 30+ years. To share tips and installation questions, E-mail Bob at secsales@bobit.com. Check out "Tech Talk" archives and Q & A online at www.securitysales.com.