

## Tech Q&A: Chief Mike Burrige (ret.) of L-3 Communications



### Editor's Corner

with PoliceOne Senior Editor Doug Wyllie

Chief Mike Burrige (ret), a 26-year Law Enforcement veteran, is Executive Director for Public Safety at L-3 Communications Mobile-Vision. Chief Burrige served 22 years with the Santa Barbara County Sheriff's Department where he reached the rank of Sheriff's Commander. He served four years as the Chief of the Farmington, New Mexico Police Department, a 120-member CALEA accredited agency located in Northwestern New Mexico. Chief Burrige is a graduate of the FBI National Academy and FBI LEEDS program. He holds a Bachelors degree in Business Administration and a Master Degree in Organizational Management and Development. Chief Burrige served for four years as the Chairmen of the IACP In-Car camera committee and Digital Video for Public Safety Advisory Panel. He was also an active board member of the IACP TTAP (Technical Technology Assistance Program) and contributing author for the TTAP Executive Information Manual.

In his present role with L-3 Mobile-Vision, Chief Burrige is a subject matter expert who works with local, state, and federal law enforcement agencies to develop and deploy in-car camera and digital video systems. PoliceOne sought a conversation with Chief Burrige so we could get an update on the latest issues and technological advances in the area of in car camera and digital video systems for law enforcement. Some of the questions have been edited for brevity and clarity.

**PoliceOne:** Every citizen on the street seems to have a handheld video recording device, and most times we see that their video recordings are aimed at hurting police efforts. How can officers maximize their own video resources to combat this trend?

**Chief Burrige:** Officers can protect themselves, the community and their reputations by utilizing the in-car camera as a tool to document and demonstrate the work they are doing in the field. It can be a useful tool to show that the officer's work complies with prescribed department policies and procedures and accepted best practices for law enforcement actions. If the officer goes to the next level in his interaction with an in-car camera and narrates the recording, such as describing the actions he is taking, "selling his work" not only on video but to the person they are in contact with it will increase the likelihood of a successful interaction with the citizen and reduces the chances of a complaint. Many officers also reported having used the presence of the camera to deescalate situations that they felt were becoming confrontational by informing citizens that they were being recorded. This interaction and narration can help show the public what types of actions the law enforcement agency is taking and why. Often times people do not fully understand the action officers are taking or why and view the actions of the officer as negative or aggressive.

The video evidence also serves to verify the accuracy of details surrounding the incident. In-car cameras have had a significant impact on improving an agencies and officers' ability to respond to complaints regarding professionalism and courtesy. For the last decade Law Enforcement, agencies and officers have repeatedly reported that the in-car camera ultimately cleared them of accusations of wrongdoing.

**P1:** What's the latest innovation in the use of the video recording technology — not necessarily an improvement in the technology itself — that you've heard about lately?

**Burrige:** Many of our customers have begun to migrate the digital capture technology out of the vehicle and into the station. Our customers are utilizing the same base technology for interview rooms, intox rooms and detention centers. This enables all of their video evidence to be managed from one location and greatly streamlines the evidence retrieval process. When an agency can use an in-house platform to manage all of their digital evidence it enables them to develop a much more streamlined and robust evidence management process. Now our customers can capture, store, manage and retrieve digital files not just from their cars but from motorcycles, prisoner transport vans, evidence rooms and intox cells, all from one convenient and secure location.

**P1:** The collection of video evidence collected from a fleet of squad cars has to be a somewhat complex process. Please explain how it works and what some of the security measures that ensure the chain of evidence is unbroken.

**Burridge:** Some keys for the discussion are how agencies manage the video once it gets back to the agency. Collecting it is one thing but properly planning your backend management is crucial to a successful program. We have spoken to a lot of agencies that got sold on a low price system only to find out the backend wasn't adequate to manage their videos. Think about this: capture, upload, manage retrieve, and store. All of the components need to be in place for an effective in-car video program. If one is missing it's like trying to drive a car without a steering wheel.

After a car has returned from patrol it needs to move the digital video to a secure location. This is accomplished through a secure wireless transfer from the car to the server. Most cars can be uploaded in 15 minutes. When the system recognizes the vehicle and confirms that the unit is authorized to transmit it becomes the process of uploading the video to a dedicated server. Once completed the server wipes the media clean — in this instance a CF card — and the car is ready to resume patrol. The officer doesn't have to touch or transport the evidence. No supervisor intervention is required to attend to the incoming evidence which frees up management resources.

Once inside, the officer can log in and instantly review a video and use that to assist in report writing. The officer can also review the video in the car should they have mobile report writing capability. If the evidence is required for court all that is required is a simple search for the video, selection and a one click request for the video. A certified copy is created for court as well as a copy of the chain of evidence report. All of the agency's video management processes are pre-defined, what that means for an agency is a dramatic reduction in the labor required to manage all of the videos that an agency, even a small one, generate on a weekly basis. Parameters are established that tell the system how long to store the video online and when to move it to near-line storage. Videos can also be tagged by an officer and remain online until it is untagged and released to near line storage.

Of course, the system will also ensure that all of the agencies videos are backed as a redundant measure. The process is almost imperceptible to the agency, that being said, there are quite a few innovative security processes involved in maintaining the integrity of the video evidence. I'll use the analogy of a duck moving across a pond. It appears very easy but he's paddling like crazy under the surface. The digital video recorder in the car is locked, the digital file is hashed to assure documentation of any file level compromise. The transmission of the video itself is secured utilizing WPA2 encryption and authorization. In addition to the physical security and encryption the transfer can only be initiated by the server, any communication not initiated by the server is blocked, any file types that are not expected by the server (think executable files) are blocked by the server. Access and user privileges are hierarchal to ensure only those with authorization can view the files. All of the files are checked for integrity at output, stored redundantly on "write once" media and every activity with that file is recorded in a chain of custody document.

This process has been used by over 95 percent of our customers implementing an in-car video program. All of the labor and risk associated with moving evidence from the car to the agency is eliminated. Many agencies have found that capturing and storing data on a hard drive or DVD system in the car has become outdated with the advent of faster wireless transfers. Wireless transfer eliminates many variables from the process of moving the video from the car to the station. The more variables you can reduce or eliminate in the process the more consistent and effective the process will be.

**P1:** The Byrne/JAG grants deadline has just been extended to June 17, 2009 — how can agencies include the acquisition of new in car video units in their grant proposals? What are some of the key things they can do to get help in supporting this acquisition?

**Burridge:** Communicate. We have witnessed a dramatic increase in the request for information, ideas, or language to assist in an agency's efforts to obtain funding. It is imperative that the agency communicate that the need for this equipment goes well beyond the traffic stop. They need to point out that this equipment helps them bolster their own cultural programs, mission and goals as well as those issues that affect the public that they serve. If they are a smaller agency without in-house grant writing capability they need to use this information and approach local town and city managers to discuss the need for a grant writing expert to help them bolster their chances of acceptance. In-car video has multiple benefits that need to be raised in the grant application. Enhanced officer safety, a reduction in the agencies liability, improved internal controls, agency accountability, enhancing in-service training (post-incident use of videos), community perception and streamlining the judicial process to name just a few. Including these points and taking the time to expand on them will greatly increase the support for the agency's efforts to obtain in-car video for their agency.

**P1:** Many agencies, particularly small, rural agencies where municipal revenues are bottoming out, will not be able use grant funding to buy new technology — they're struggling in many other areas and need to address those. Meanwhile, many of these agencies still rely on older, VHS solutions in use today — what are some of the ways that agencies can get the most out of those devices if they cannot manage the purchase of new digital recording devices?

**Burridge:** Unfortunately there may not be a good answer for this. While the obvious answer is proper care and maintenance of your systems and the foresight to purchase extended maintenance agreements, there isn't much an agency can do with equipment that has been extended beyond its intended period of use. However, in order to assist these agencies with the transition from VHS technology to a digital platform a manufacturer should be developing technology that allows a department to utilize some of the existing components from its VHS system. In Mobile-Vision's instance we developed our most recent VHS platform components to integrate into digital platform so an agency can use most of the components they previously purchased and this can greatly reduce a department's transition costs. From a finance perspective, agencies can also utilize various municipal lease financing options to lessen the impact on their capital expense budget. The real answer here is what priority is the agency placing on their video system and are they communicating that with all of the key decision makers in their town or city.

**P1:** What are your thoughts about the advent of officer-worn video cameras?

**Burridge:** Officer based video and audio collection technology (wearable video cameras). These devices have come to be viewed as an inexpensive alternative to in-car video systems and some of these are proving to be more of a trap than a tool. In many instances these tools will not support officer safety and tactical procedure while performing a traffic stop. During a traffic stop an officer will try to reduce his silhouette when approaching a vehicle. If an officer takes this approach it is very unlikely that an evidentiary-quality video will be collected due to how the body needs to be positioned. If an event does occur a stable video platform such as a vehicle based camera is better suited to capture that occurrence. Often times when an officer is required to use cover and concealment a body worn video capture device just will not capture what an in-car video system will capture. If an officer moves to cover behind his car his body worn device won't capture a suspect's actions. Agencies need to be aware that while there may be application for a body-worn device, the traffic stop is not an environment that leverages this platform well.