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# Technology and Operational Safety—Pros and Cons for Police Officers

The point of view (POV) camera is a compact portable device carried by police officers that captures video/audio records of operational situations. However, this technology may create serious repercussions in post-incident investigations, if the differences between human and camera perception are not understood. In addition, POV cameras pose specific issues for officer safety. Data integrity is a crucial issue for the legal process after the fact, as well as for reviewers understanding how to interpret the data correctly in the context of the original situation.

## Technological Advances and Public Safety

Modern advances in technology provide numerous options for public safety agencies to increase operational efficiency, such as the officer-mounted POV camera, which is a tactical networkable computer combining advanced audio-video record/capture capabilities. POV cameras contribute to officer efficiency by reducing report documentation workload while increasing accuracy and accountability.

However, the POV camera may raise false expectations that could have serious repercussions in use-of-force investigations. The camera is perceived as a “third eye” that reliably captures the wearer’s

perspective, but there are important differences in how humans and cameras process information, and no camera records events exactly as the officer perceives the event.

In most cases, POV cameras will assist in reconstructing what an officer faced on the street, help refresh an officer’s memory so they can give a fuller account, and help reviewers better understand an officer or suspect’s actions. In some cases, there may be differences between officer memory and camera recording, the officer may have no recollection of key situational elements, or there may be discrepancies that seem inexplicable or controversial. If the differences between human and camera perception are not understood, the video could end up confusing and misleading officers, reviewers, and the public. The rationale is that, even with a POV camera theoretically recording from the officer’s perspective, differences in information processing will prevent a recording exactly matching what an officer perceives during a confrontation. Fundamentally, these differences have to do with field of view, focus of attention, and interpretation.

## Selective Perception

A common misconception is “a video of an event tells the whole story.” A camera records action from a perspective that’s very limiting in its ability to tell the full story. In a video recording, some action may



Looxcie 2 Video Camera. Source: <http://www.flickr.com/photos/54450095@N05/6345166957>.

be missing, and what's shown can be significantly skewed. POV cameras claim to have the view of the officer, but they don't. No camera records things the same way that an officer's eyes and brain record it. The camera is a "neutral, unemotional observer." It has broad focus, with expanse and detail restricted by position and lens quality/range. In contrast, an officer in an operational situation does not have the same panoramic vision. While the camera indiscriminately captures the broader picture, the officer selectively assesses a scene from the outset of an encounter (e.g., observing for threat cues). The officer focuses on information determined by context, excluding what is considered irrelevant.

Training and experience, the basis for operational decisions, allows for quick identification and selective focus of relevant information. In contrast to the camera's inclusiveness, the officer's brain suppresses from cognition what seems unimportant. Of millions of bits of information that emanate from a given environment, only a small proportion will reach the brain's processing area and even less will be formulated into conscious perceptions upon which judgments are based. Context influences meaning. A POV camera doesn't know or record how the officer is interpreting what is seen.

### Operational Considerations

There are benefits of POV cameras for officers and agencies. However, they may serve to instill a negative attitude of wariness and distrust in officers towards their agency, which in turn may affect operational choices made by officers. Feeling like bureaucracy is scrutinizing every word and action does little to foster confidence, and to be effective in their role, officers must feel confident that the bureaucracy they

serve trusts them to do the tasks they are employed and trained to do.

POV cameras pose specific issues to physical safety. A camera has the possibility of causing blunt force trauma, as pieces of camera material pose the risk of edged weapon or fragmentation trauma to the skull, soft tissue, and sensory organs if shattered. In the event of a close-proximity struggle with a suspect, the camera may become dislodged and swing around, impeding or distracting officer actions. The camera cable may accidentally get tangled around an officer, or purposefully in the case of a suspect using it to choke/restrain the officer.

The presence of a camera may make the officer a target, regardless of where it is located. If the suspect doesn't want their actions recorded they might continuously move away from the camera field of view, causing the officer to constantly move to maintain camera focus on the suspect and result in the officer becoming overly focused on "recording the suspect" rather than operational awareness. The suspect might try to disrupt the camera's ability to

record, by trying to dislodge it from the officer, or trying to damage it to impair its function. The worst case scenario would be for the suspect to try and neutralize the camera/officer through violent action as a means of escaping the situation, eliminating the camera as a plausible option to destroy incriminating evidence. Regardless of

perception, the recording provides evidence in court that is harder to refute than verbal testimony alone. With the camera attached to the officer, this puts the officer directly in potential harm's way.

POV cameras offer the advantage of going where the officer goes. As a situation unfolds and officers change position, the camera adapts to suit. This is more relevant with the head-mounted version of the POV camera, as it will always focus on the officer's line of sight, whereas the shoulder/chest-mounted version will see only where the torso faces. Movement is a key factor for effective action in a violent confrontation. An officer "interviewing" a suspect involves static positioning at appropriate safe distance. Engaging a resistive suspect involves dynamic movement, creating a jerky and shaken image, which becomes difficult to analyze for officer/suspect action.

During a situation, an officer has many aspects to focus on, and wearing a POV camera creates additional factors for officer consideration, with these extra factors possibly distracting the officer from the matter at hand. Officers may make tactical decisions based on "keeping the cameras rolling" and getting situational footage for later use,

Point of view cameras pose specific issues to physical safety.

rather than making sound tactical decisions based on safety and control.

## Post-Incident Analysis

The integrity of the data must be assured before the data is reviewed and analysed. The camera software/hardware must be robust enough to record accurately under any operational conditions – light, weather, position, interaction, etc. The image and audio should remain uninterrupted for continuity of transmission, as “gaps” can create issues in post-analysis. Video evidence should clearly display the time/date taken, so the equipment should enable time/date indenting in the recording process. A statement should accompany video evidence detailing who took the video, date, time, and location the data was obtained, the nature of the evidence and the duration of footage.

A key issue for evidence is data integrity, ensuring that a recording remains in its original unadulterated form. The recorded footage must be stored in accordance with correct evidentiary handling procedures, and the original recordings should be available when requested by the courts, as well as to justify the storage and handling process. The data needs to be reliably and transparently stored in a secure manner, up to and including the point where it is reviewed and analyzed, and this includes strictly monitoring any copies.

POV cameras can be useful in recording situations in real time that can then be reviewed later, a process that may have the following benefits:

- Officer – assist with recall of events after a situation.

- Agency – review of conduct with policy and used for training.
- Legal – used as evidence in court proceedings.
- Public – correct perceptions of reality versus bias opinion.

The data must be used in context. Taking a 20 second behavioral “snapshot” from a 20 minute situation can be misleading and used to represent bias views and influence opinion. It is crucial that those reviewing/analyzing the data properly understand the pros and cons this data represents, and account for these factors during review. An advisory is a useful tool in promoting thorough and impartial investigations, and should be delivered before officers view video of an incident they were involved in or before persons responsible for judging the officer’s actions see it. The advisory should be formulated with the assistance of legal representatives experienced in use-of-force investigations. The purpose is not to challenge the integrity of the equipment, but to remind all parties

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that it has limitations. POV camera recordings can be great memory refreshers for the officers involved and offer valuable insights for reviewers, but the key lies in understanding that they do not definitively explain every incident.

## Author Information

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