early all major police departments across the country have body-worn camera programs, which means that defense lawyers, investigators, and paralegals will often need to pore through hours upon hours of video footage as they defend their clients. But body-worn camera footage can be inconclusive at best and misleading at worst. How camera footage is ultimately understood will often ultimately rely on other available evidence, such as other eyewitness accounts and officer reports.

As camera footage becomes commonplace, it is increasingly important for those in the defense community to understand the key technical features of popular body-worn camera systems. Some technical features can help officers and prosecutors, while others can aid the defense by revealing new evidence or raising additional questions about how a particular incident unfolded.

Axon is the leading supplier of body-worn cameras in the United States; other vendors may have similar features. This article discusses three key aspects of Axon’s body-worn camera system that are important for the defense community to understand.

1. Axon cameras capture the moments leading up to an officer hitting the record button.

Officers typically turn on their body-worn cameras at the beginning of their shifts. At this point, the camera is in “buffering mode” — essentially a standby mode in which the camera is powered on and rolling, but it is not yet permanently saving all of the video footage.

Only when an officer taps the “event” button on the camera (what would commonly be thought of as the “record” button) will the camera activate and begin saving footage to permanent memory, for instance, when an officer begins a public encounter or responds to a call-for-service. The camera — now in “event mode” — will save footage until the officer taps the event button again to deactivate the camera, usually at the end of an incident.

One important feature of Axon cameras is the “pre-event buffer,” which automatically saves the 30 seconds of footage prior to the officer activating the camera. This feature is designed to capture the moments leading up to an incident, which could provide crucial insight into why an officer began recording, especially for incidents that may have developed quickly or unexpectedly.

When watching body-worn camera footage, it is often easy to tell when the footage is “pre-event”: It is at the beginning of the video, and the audio is usually on mute. The moment that the audio starts is the same moment that the officer hit the event button to “start” recording. The default duration of the pre-event buffer is 30 seconds, but Axon allows departments to tune the setting to a duration of up to two minutes. It is important for defense lawyers and investigators to determine the setting that local departments use so that body-worn camera footage can be properly understood.

BY HARLAN YU

The Details Beyond Body-Worn Camera Footage

Photo © Axon Enterprise Inc.
Some police officers have been caught unaware of how the pre-event buffer works. In 2017, a Baltimore officer was found planting evidence during an alleged drug arrest. During the pre-event buffer, the officer can be seen dropping a red soup can on the ground in a lot. Moments later, he activates his camera and is seen “discovering” a small plastic bag of drugs inside the red soup can. Public defenders exposed these questionable actions, and the officer was eventually found guilty of fabricating evidence. Prosecutors decided to drop dozens of cases that involved the testimony of this officer and two others.

While the pre-event buffer helped to expose police misconduct in these cases, one can easily imagine savvier officers in the future, who understand how the pre-event buffer works, waiting the requisite 30 seconds or longer before fabricating video evidence. Defense lawyers should consider this possibility when watching body-worn camera footage, and closely compare what the camera footage appears to show with other available evidence.

2. **Officers may have watched footage before writing their incident reports.**

One piece of evidence commonly compared against body-worn camera footage is the officer’s incident report. In many cases, the officer’s narrative may appear to confirm and reinforce what the camera footage shows, but neither may truly reflect how an incident actually unfolded.

The problem is clearly illustrated by an incident in Marion County, Florida, in 2014. Body-worn camera footage showed what appeared to be a struggle between deputies and a suspect. The footage was shaky and turbulent. Multiple deputies can be heard on video shouting, “Stop resisting! Stop resisting!” One deputy’s incident report stated that “after several verbal commands to the defendant to stop resisting and to put his hands behind his back, the defendant still would not comply.” The report seemed entirely consistent with the body-worn camera footage.

But camera footage from another perspective — a fixed surveillance camera on a nearby building — told an entirely different story, showing the suspect giving himself up, with no resistance, while five deputies overwhelm him with brutal and unnecessary punches and knee strikes. Four of the deputies later pled guilty to federal civil rights charges, including one deputy for obstruction of justice for falsifying his police report. The incident is a clear reminder that body-worn cameras often do not tell the entire story, and other evidence will be crucial to investigations.

When it comes to police reports, there is one pivotal detail to understand: In many cases, officers will watch body-worn camera footage as they write their police reports. This means that incident reports may be artificially accurate when compared to the relevant footage. It also means that an officer’s report should not be seen as an independent piece of evidence if the officer has had access to the footage; in fact, the details of an officer’s report could have been largely derived from the footage itself.

Department policies rarely limit when officers can review footage. A 2017 scorecard of major department body-worn camera policies found that more than 75 percent of departments allow officers to review their body-worn footage whenever they wish — even after use-of-force incidents. Only about 15 percent of major departments require officers to write an initial report after certain high-level uses of force, but still allow unrestricted review for less severe incidents.

From an evidentiary perspective, unrestricted footage review is problematic for many reasons. A well-established body of human memory and cognition research shows that watching footage can taint what people remember, including the potential to create false memories. In addition, watching footage can also skew what officers decide to write in their reports, if they feel pressure to conform their reports to what the footage shows, rather than report what they actually saw and experienced. It also can confer undue credibility to officers in the courtroom: Their recollection of events may appear much more accurate when compared to other eyewitnesses, who likely will not have had the advantage of video replay.

It is essential that defense attorneys ensure that judges and juries understand the process by which officer reports were written — specifically, whether they were written with the aid of camera footage — so they can properly weigh the value of an officer’s report and testimony.

3. **Beyond video footage, the Axon system logs a wealth of other officer activity.**

Defense lawyers and investigators naturally focus on what body-worn camera videos show as they work to

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**www.nacdl.org/policingbodycameras**

NACDL released its police body camera report in 2017. The report examines the potential benefits of the use of body-worn cameras and the considerable concerns presented by their use. NACDL’s report sets forth guidelines that will maximize cameras’ use in protecting the public and the police as well as in generating reliable criminal justice outcomes.
defend their clients. But other available data kept by camera systems could answer a number of additional important questions about how footage was later handled: Which officers reviewed the footage, and when? When did supervisors review the footage? Did anyone create a clip of the video? Who marked the video for deletion, and when did that happen?

These are all questions that could potentially be answered by Evidence.com, Axon’s back-end system that is used to store, manage, and access body-worn camera footage. The system maintains an “evidence audit trail” that permanently logs all activity related to each piece of footage — when it was uploaded, each time it was viewed, if a video clip was created, and so on — together with precise details about the date, time, and user who performed each action.

Evidence.com makes it easy for users of the system to view and download a PDF of an evidence audit trail, so defense lawyers can ask for the evidence audit trail each time they ask for footage itself.

In addition to the evidence audit trail, the system also maintains other types of audit trails that could help to answer a range of other important questions. The “device audit trail,” for example, logs activities specific to a particular camera: If an officer claims that an incident was not recorded because the camera ran out of battery mid-shift, the device audit trail could provide clues about the camera’s battery level at various points during the day. It could also reveal missing or withheld footage if (say) the device audit trail shows that the officer pressed the event button at 2:05 p.m. to activate the camera, and later at 2:11 p.m. to deactivate the camera, but no corresponding footage was shared with defense attorneys. Another question could be whether the officer viewed body-worn camera footage while out in the field, using the Axon View smartphone app that pairs with officers’ cameras. The device audit log will log each time that videos are accessed or streamed using Axon View.

The “user audit trail” could yield even more information. Did an officer watch footage from the body cameras of other officers who were on the scene? Which video clips did the officer mark for deletion? The user audit trail could answer these questions.

Further details about the information contained in audit trails maintained by Evidence.com can be found in the system’s public administrator reference guide.

**Conclusion**

Body-worn cameras were pitched primarily as tools to increase police transparency, but the reality is that they are surveillance devices that help officers and prosecutors gather evidence in a wide range of everyday cases. The technology is still developing: Axon has been building further investigative features into their camera systems, such as video search capabilities for objects (such as a gun) and actions (such as a person running). The company has also expressed the desire to add dangerous face recognition capabilities to their body-worn camera systems. As the nature and purpose of body-worn cameras continue to change, the defense community will need to remain attentive and respond effectively to these ongoing technical developments.

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**Notes**


4. Axon, supra note 2.


15. Axon, Beyond CJS: Enhanced (Continued on page 40)
9. This is the heart of Verizon’s privacy policy, nested in language that caveats it appropriately. See https://www.verizon.com/about/privacy/full-privacy-policy. For illustration, this article uses the current Verizon policy throughout.
10. U.S. Const. amend. IV.
13. 2 William Blackstone, Commentaries 2.
17. Id. at 40.
19. See United States v. Seiljan, 547 F.3d 993, 1014-17 (9th Cir. 2008) (Kozinski, J., dissenting), cert. denied, 129 S. Ct. 1368 (2009) (“What makes papers special — and the reason why they are listed alongside houses, persons and effects — is the ideas they embody, ideas that can only be seized by reading the words on the page.”).
20. 631 F.3d 266, 285-86 (6th Cir. 2010).
21. Riley, 134 S. Ct. 2473, 2485 (“We ask instead whether application of the search incident to arrest doctrine to this particular category of effects [data on cellphone] would ‘untether the rule from the justifications underlying the Chimel exception’”: id. at 2492 (“[A]pplying the Gant standard to cellphone would in effect give ‘police officers unbridled discretion to rummage at will among a person’s private effects.’”).

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23. Carpenter, 138 S. Ct. 2206, 2235 (Thomas, J., dissenting) (internal citation omitted).
25. Oral Argument at 15:10, Carpenter v. United States, 138 S. Ct. 2206 (2018), https://www.oyez.org/cases/2017/16-402. (“I think I should caution the Court that — that relying too heavily on those contractual documents in either direction here would, to paraphrase the Court in Smith, threaten to make a crazy quilt of the Fourth Amendment because we may end up with a, you know, hinging constitutional protections on the happenstance of companies’ policies.”).
30. Los Angeles v. Patel, 576 U.S. ___ (2015). The case dealt with these records to the extent they are the hoteliers’ and not as records belonging to hotel guests. The former are entitled to a subpoena-like process. The latter, who are not represented in the process that would divest them of the control of records, are entitled to a warrant requirement.

THE CHAMPION

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Security, Not Just Compliance at 5, https://axon.cn/prismatic.io/axon%2Ff836667-69a2-4169-ad2a-498d9a0f577 _security+white+paper.pdf (last visited May 15, 2019) (“Evidence.com is uniquely sensitive to the needs that surround the handling of evidence. For instance, automatic audit trails keep a complete and unalterable log of who has uploaded, accessed, edited, or shared each evidence file and when, in order to ensure that the proper chain of custody is maintained.”).
17. Axon, supra note 14, at 199-201.