

SHOTPOINT®



Real-Time Shot Detection and Shooter Localization
offered by Databuoy Corporation





Databuoy Corporation

Founded in 2006

Headquarters: Vienna, VA

Experts in networked embedded systems

Defense Research Contractor (2006-2013)

Commercial Acoustic Shot Localization (2014-Present)

Contact: Kathleen Griggs, CEO Databuoy Corp.,
kgriggs@dbuoy.com, 703-865-8220

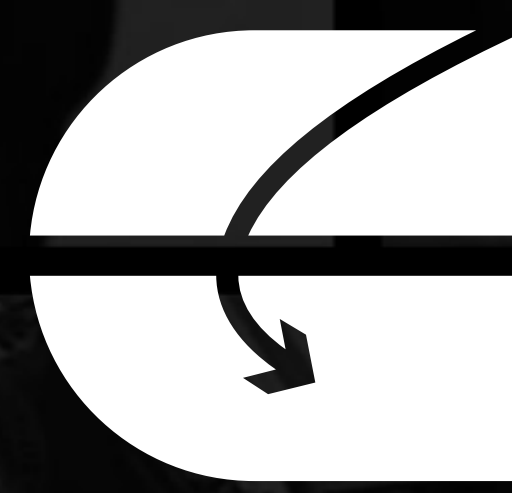


A person in a dark jacket is holding a handgun in a hallway with lockers. The image is overlaid with a blue tint.

An instant can mean the difference between life and death

Cities, schools, offices, airports, retail, hospitality, and more..
are all seeking gunfire detection.

Shotpoint is the technology responders are looking for.



SHOTPOINT[®]

Automatically detect shots

Eliminates false alarms

Does not report echos or bounces as shots

Locates the shooter with $< 2\text{m}$ accuracy

Reports shots in $< 2\text{s}$

Camera image from exact shot time in $< 4\text{s}$

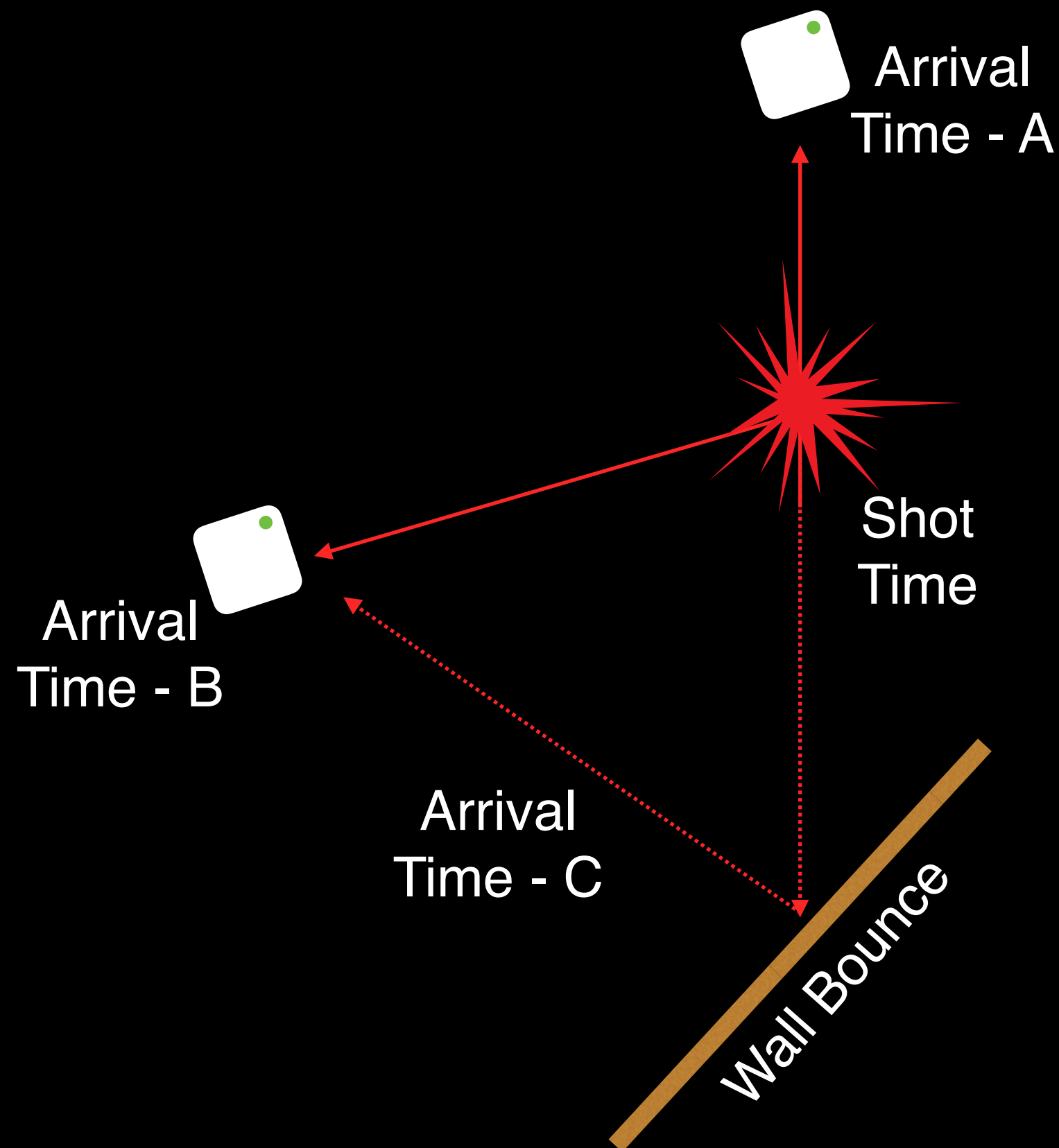
SHOTPOINT SENSORS



Can be used indoors or outdoors
Low Power Sensors (12 VDC / PoE) Ethernet or wireless communications Automated notifications
Camera cueing
Reports time, location and trajectory
Reports non-shot triggers for additional ambient sounds

SHOTPOINT'S PATENTED APPROACH

Time-Event-Source-Synchronized Acoustics (TESSA)

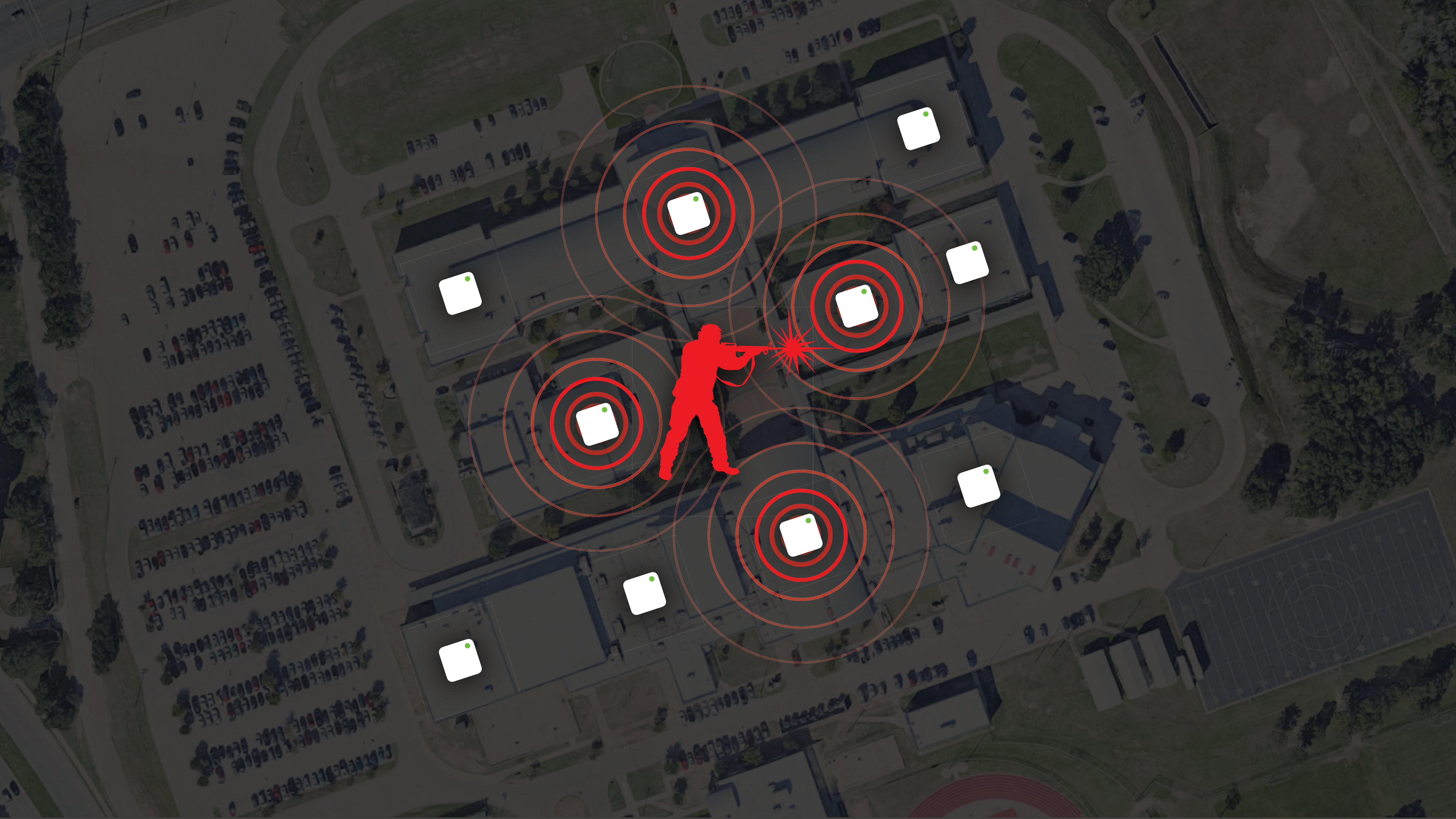


Requires multiple sensors

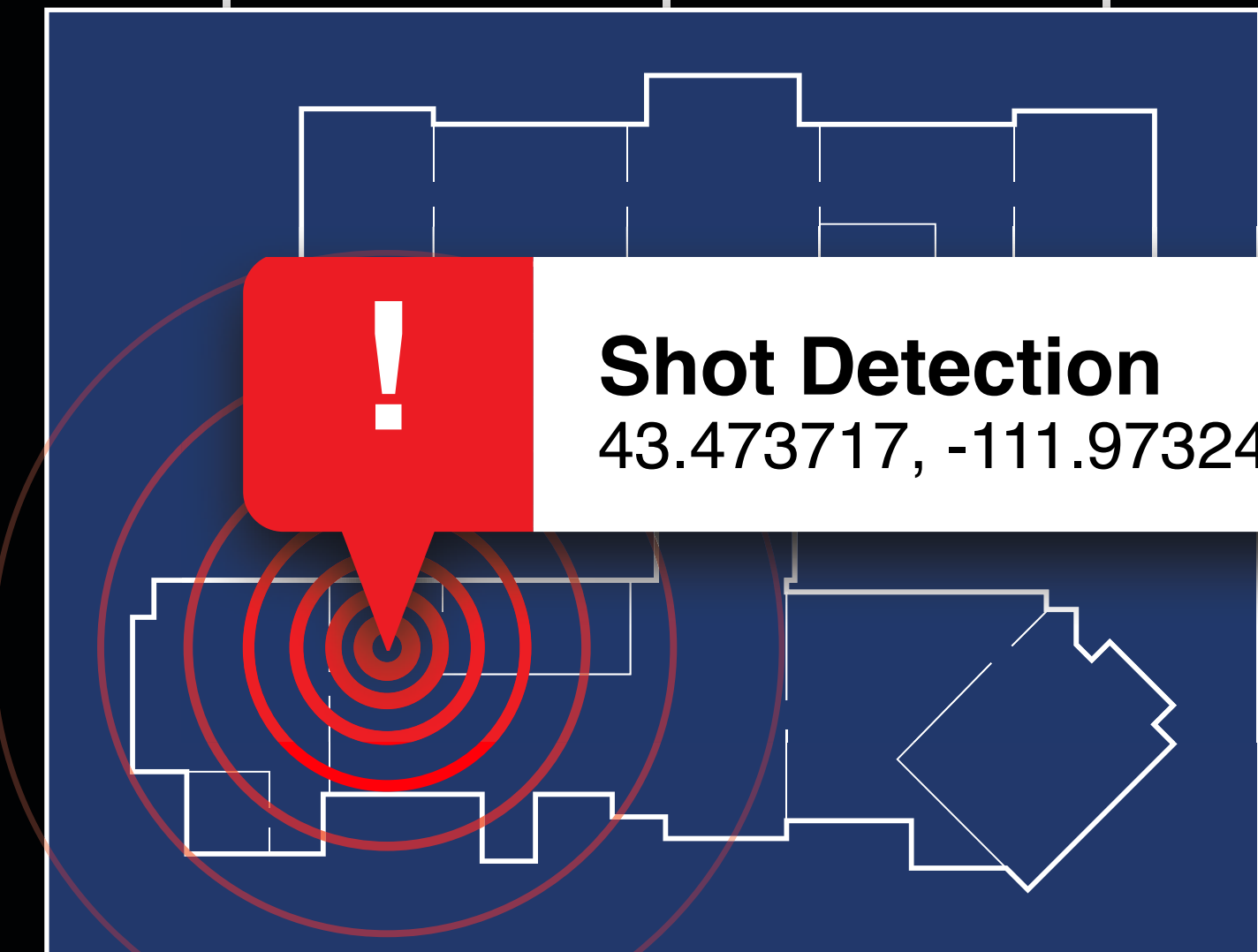
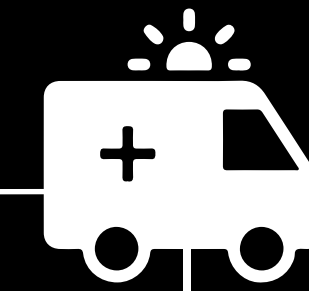
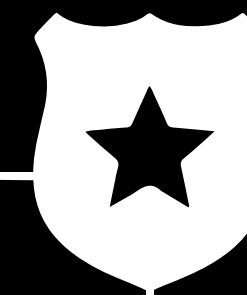
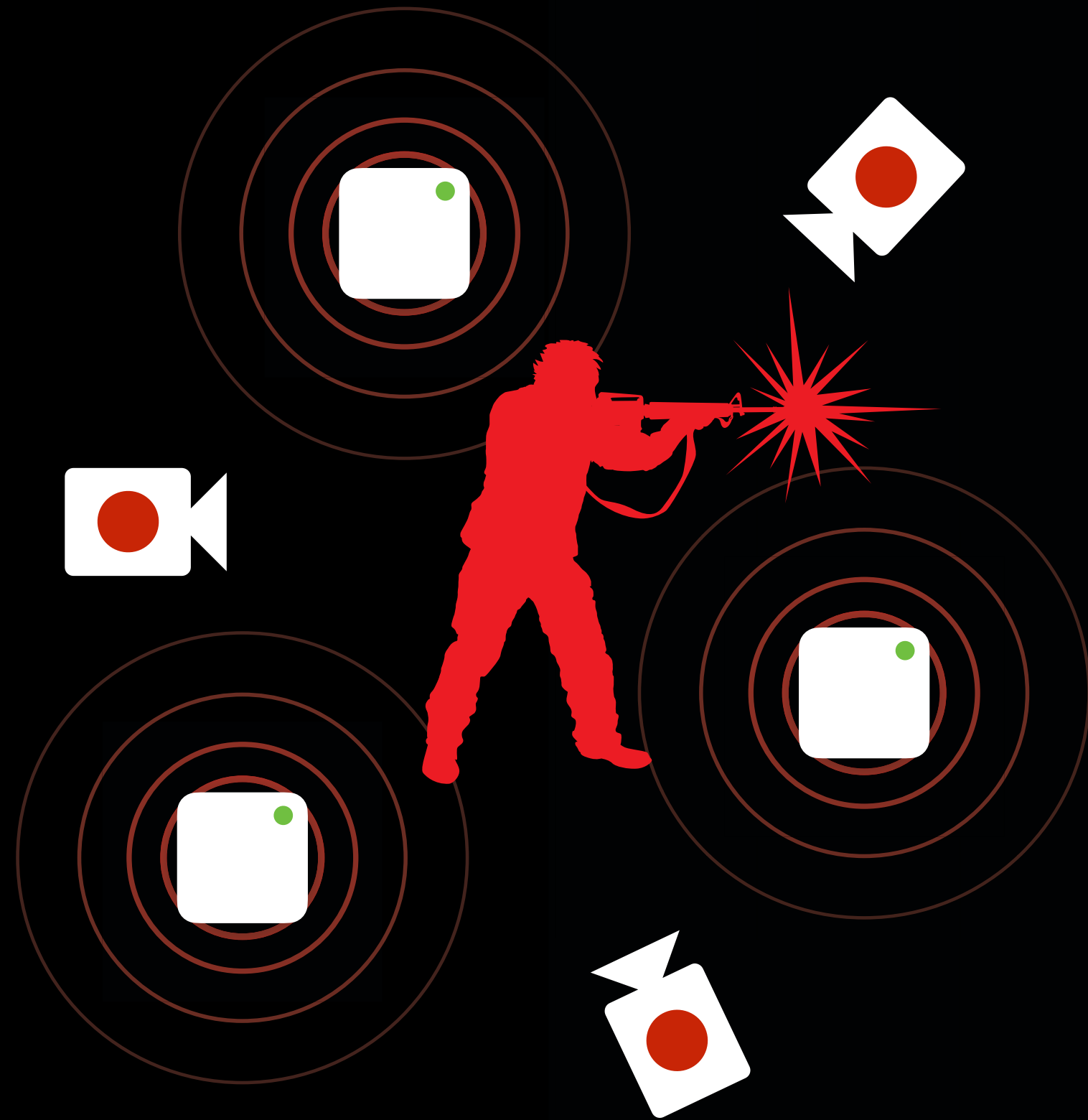
Removes false detections and echos

Locate shots with extreme accuracy

"If the source don't fit then TESSA acquits."



IN 00:01

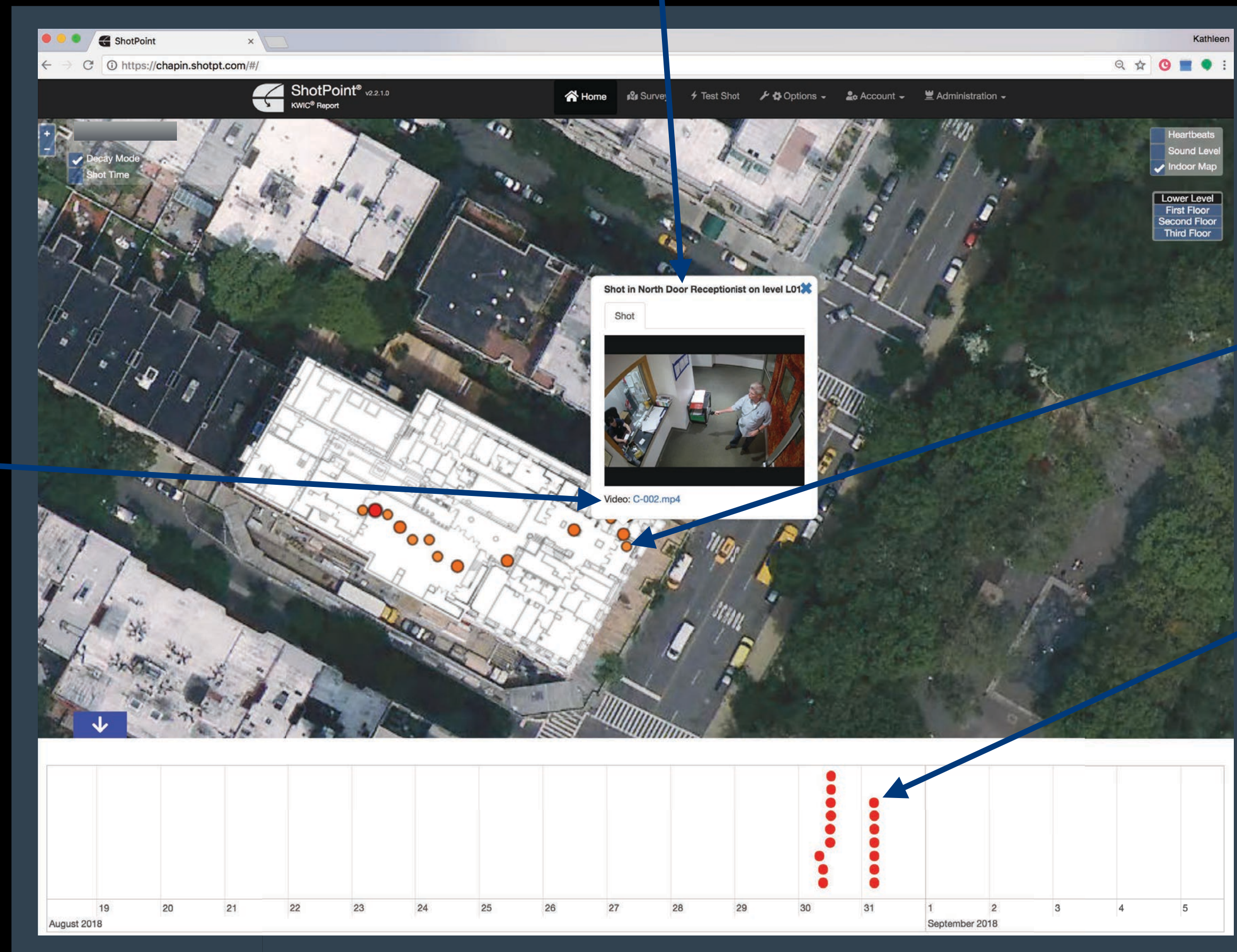


Shot Detection
43.473717, -111.973245

SHOT REPORTS IN WEB BROWSER

Selecting shot dots shows shot message and camera image from the exact shot time

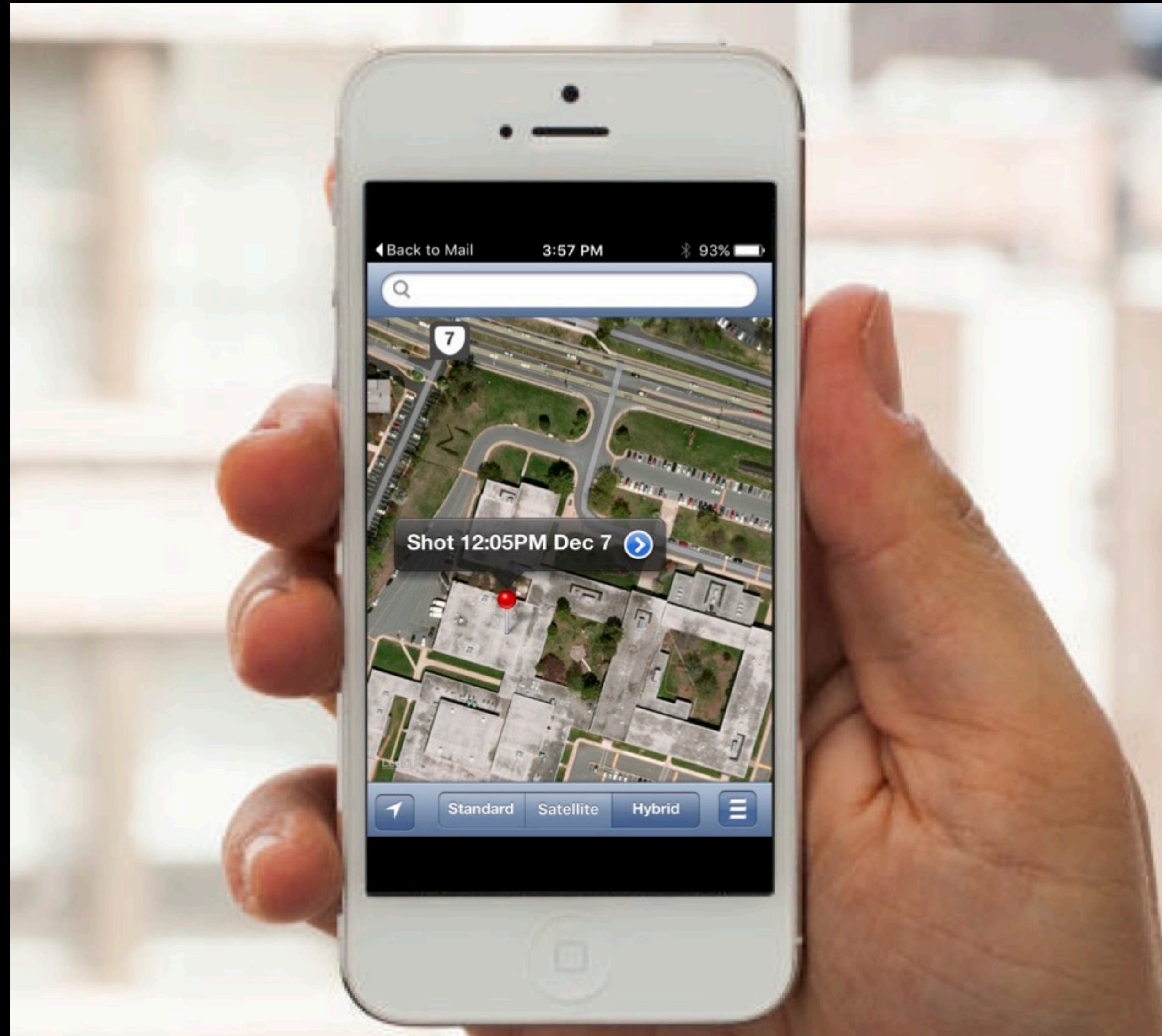
Video clips from before and after shot time are loaded



Shot location dots shown on maps and floor plans

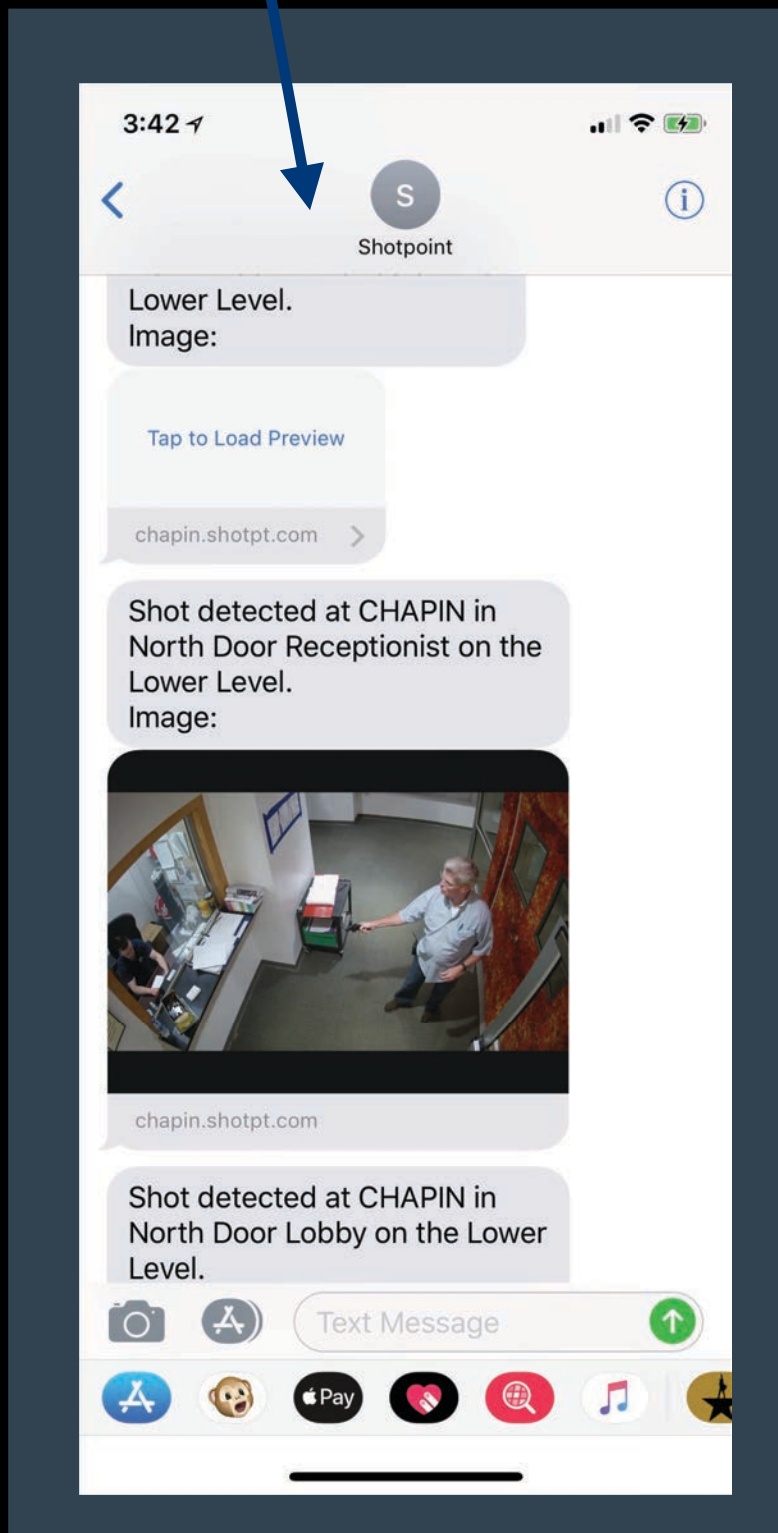
Shot time dots shown on timeline

REAL TIME MOBILE ALERTS

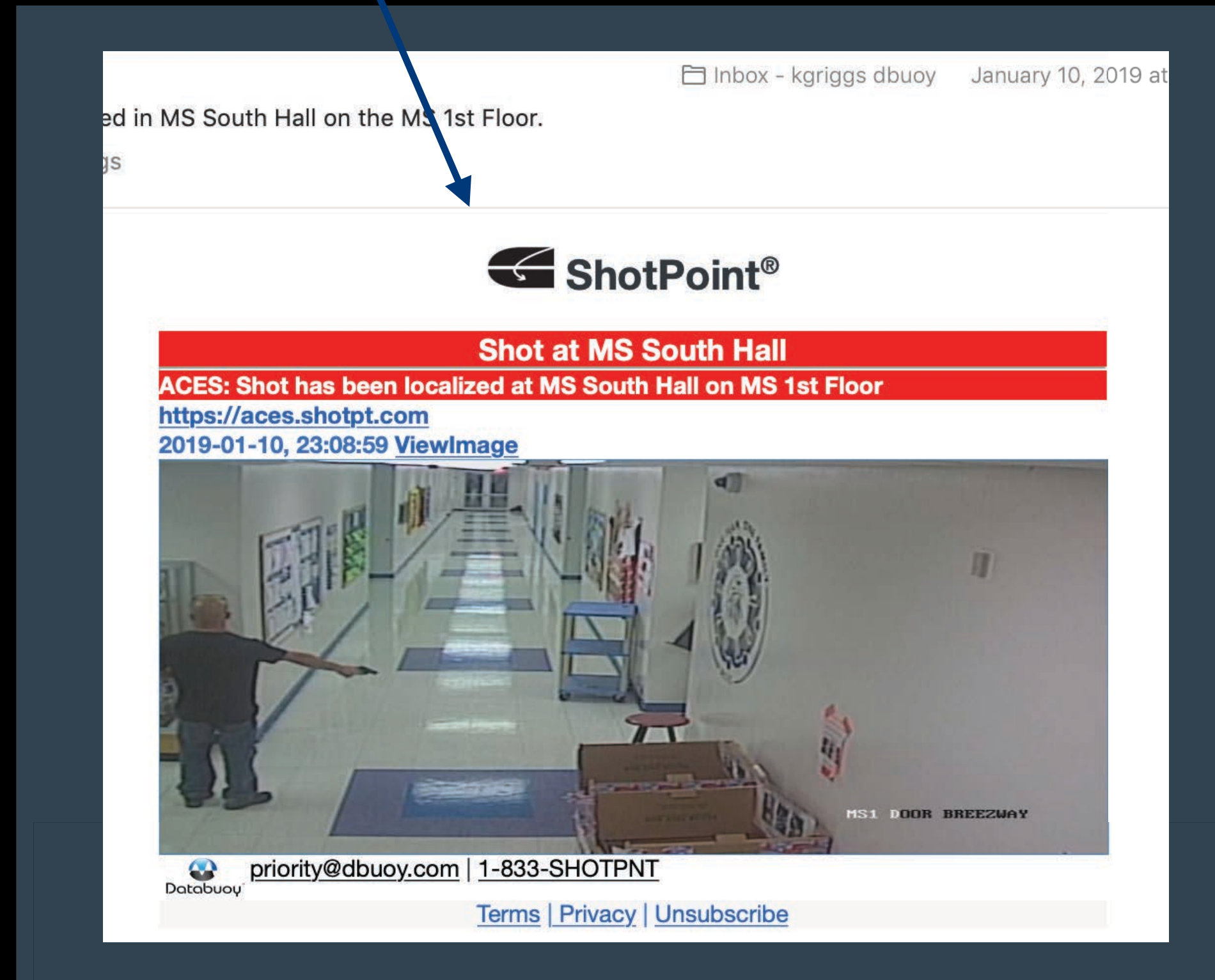


SHOTPOINT TEXT AND EMAIL REPORTS

Text Message



Email Report



Mobile Reports Include Video Clips



SHOTPOINT CONTINUOUS MONITORING

Shot sensors report health and status



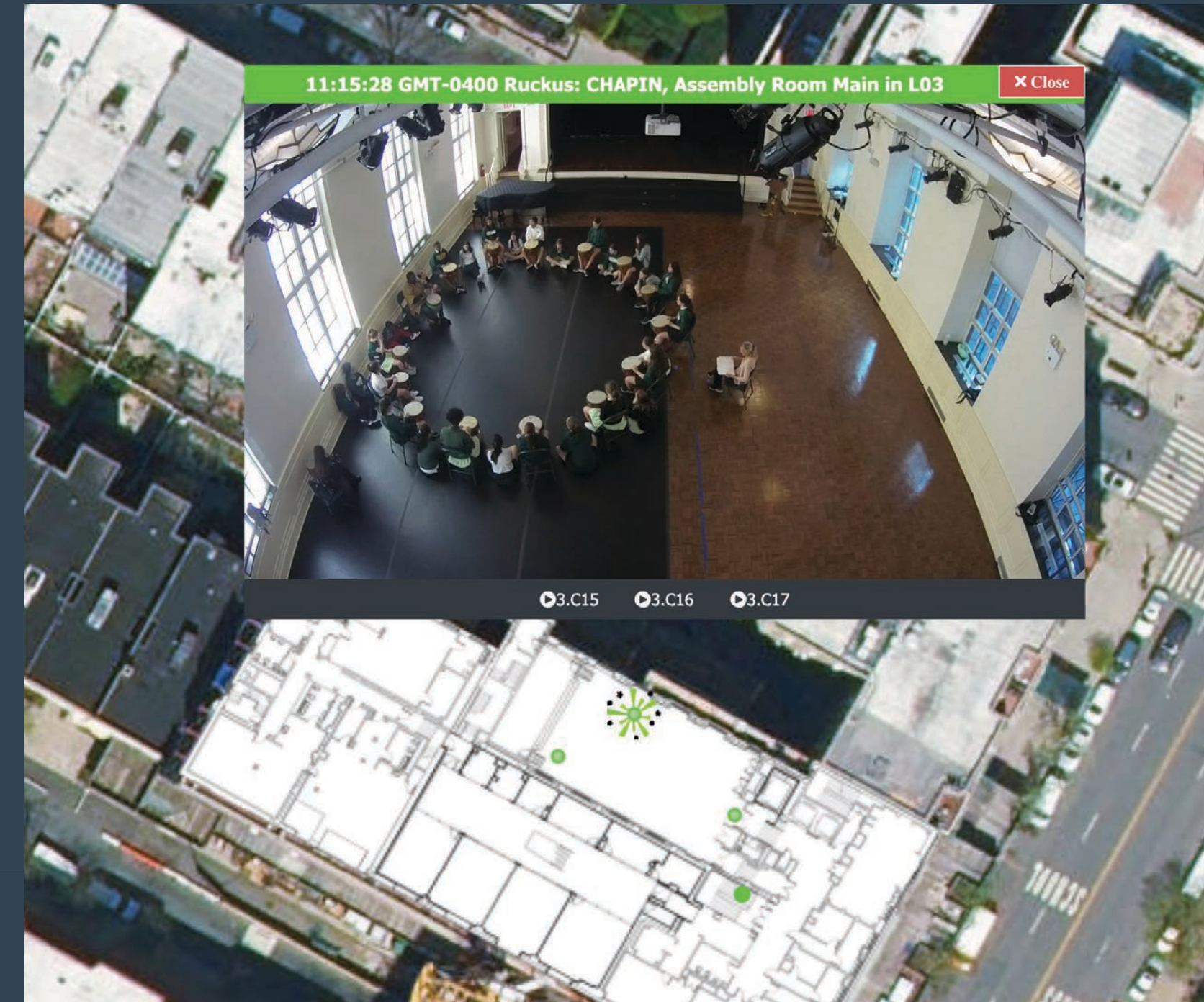
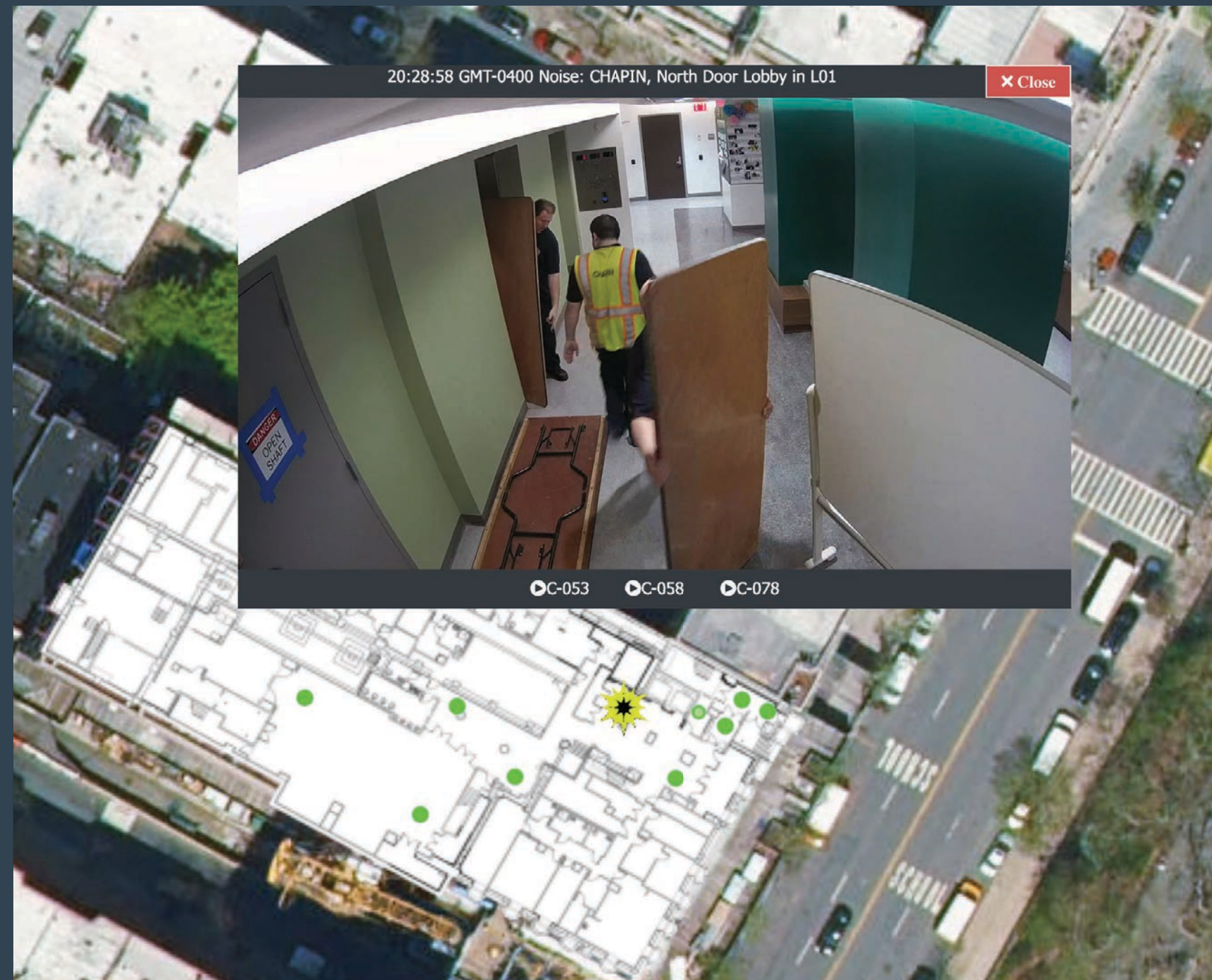
Sensors provide noise level monitoring



SHOTPOINT BANG AND RUCKUS REPORTS

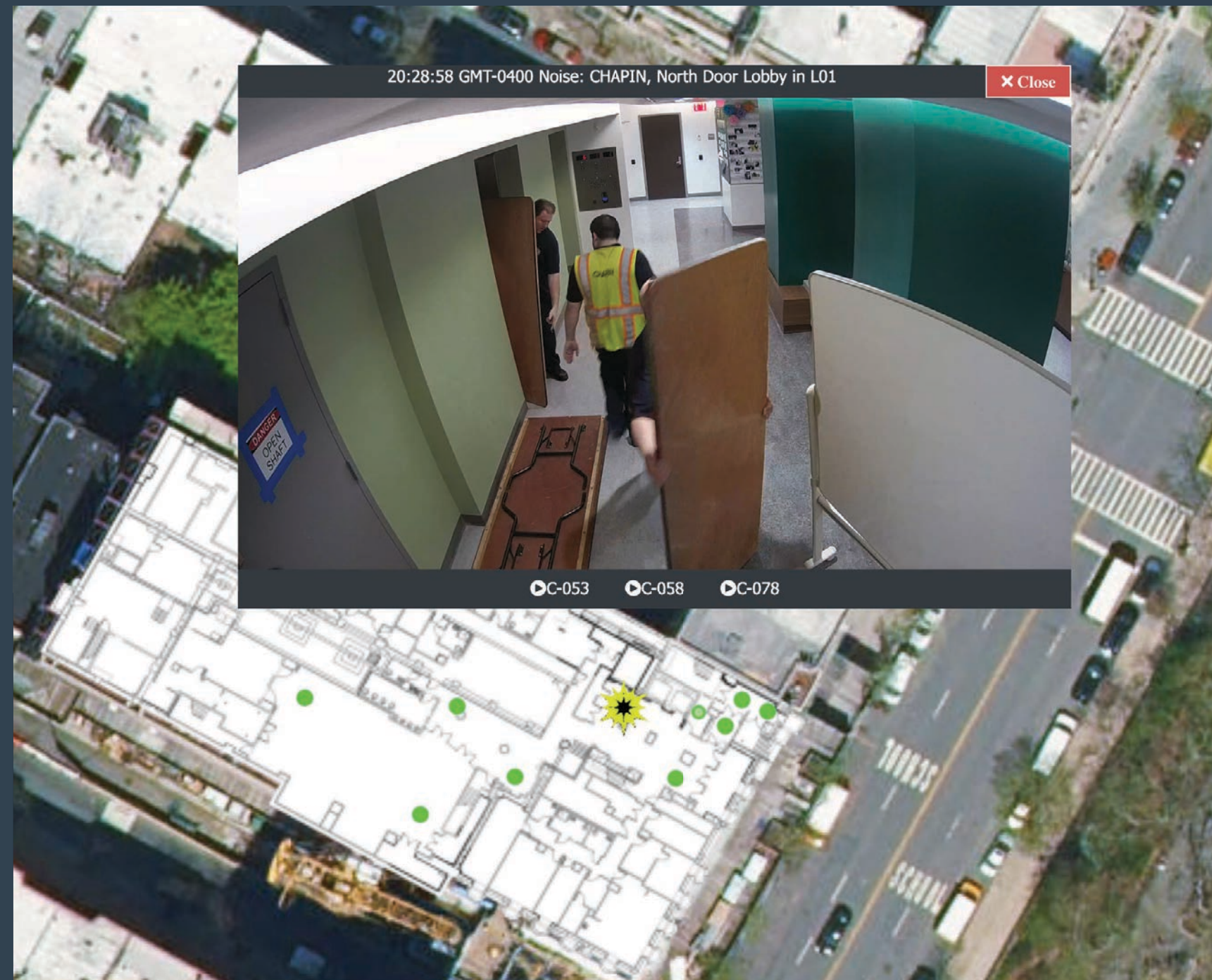
A “Bang” is an impulsive event

A “Ruckus” is a noise episode

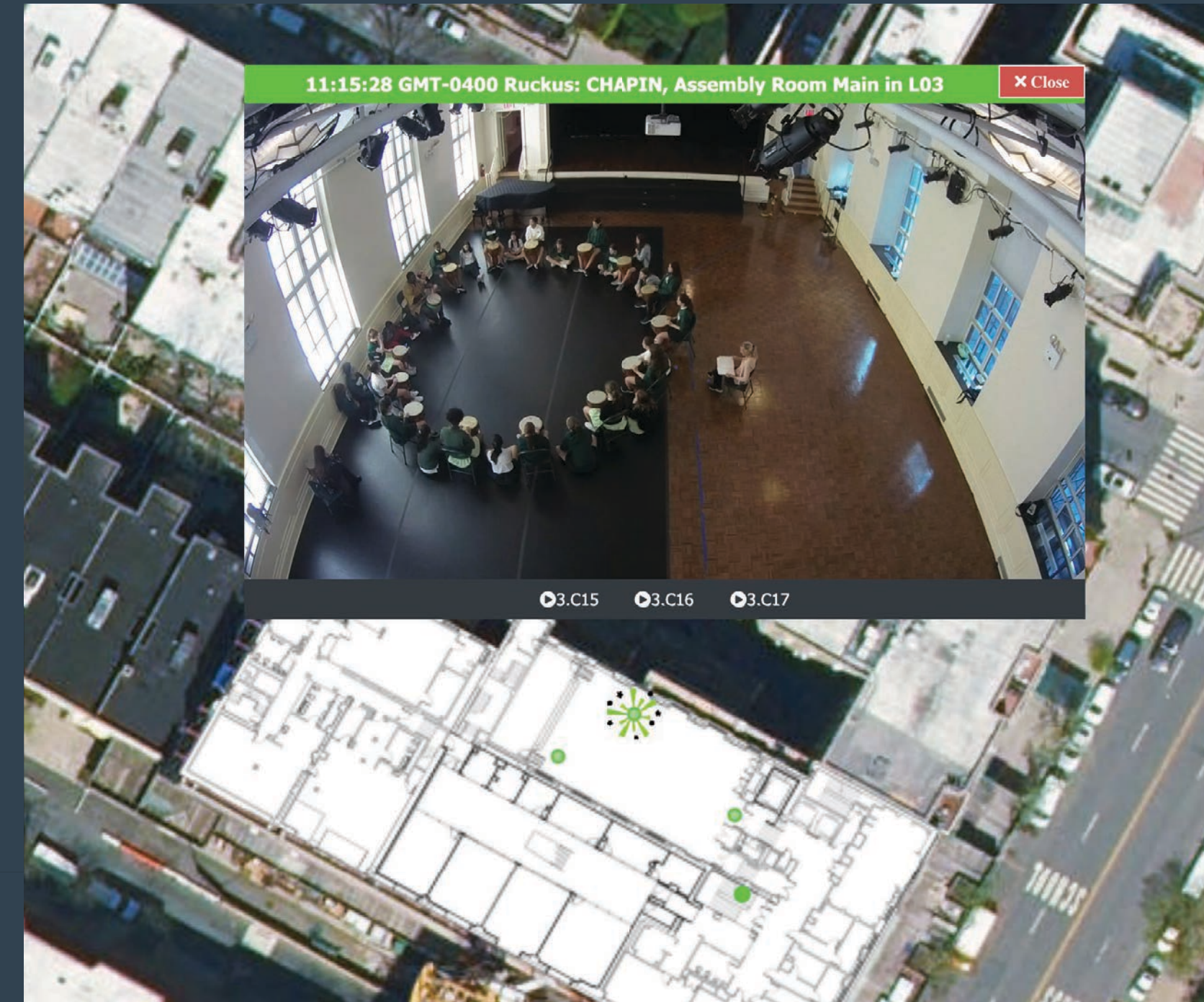


SHOTPOINT BANG AND RUCKUS REPORTS

A “Bang” is an impulsive event

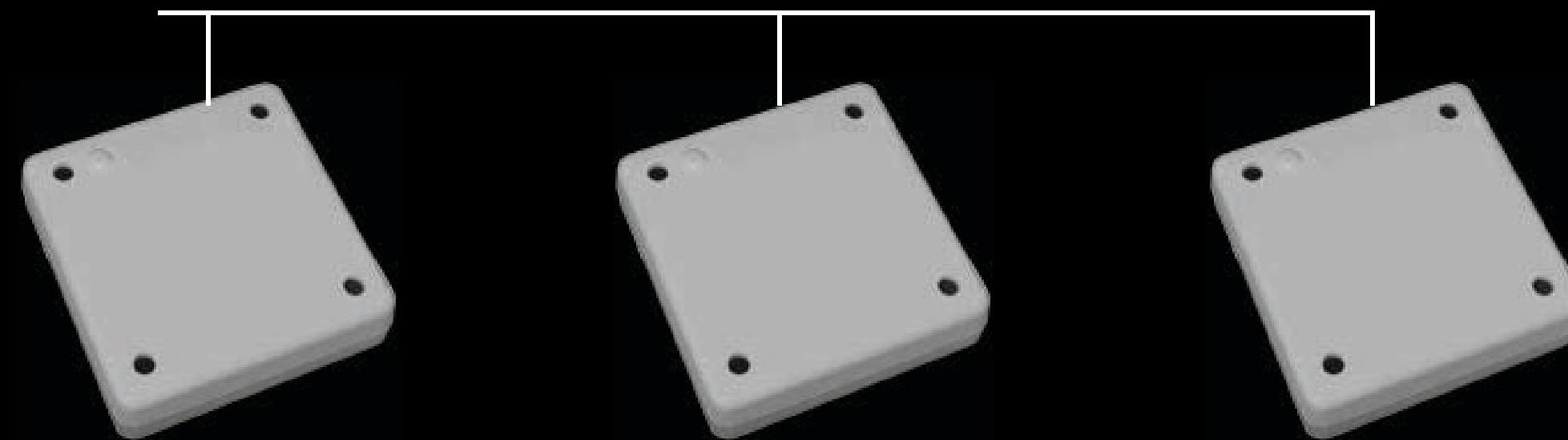


A “Ruckus” is a noise episode



IMPLEMENTING SHOTPOINT

ShotPoint sensors can connect via ethernet



One sensor every 50 meters (165 ft)



A person is seen from behind, operating a professional video camera mounted on a tripod. The scene is outdoors in a field with some structures in the background. The text 'SHOTPOINT' is overlaid in large, bold, black letters across the center of the image. The letter 'S' is stylized with a white arrow pointing downwards and to the right.

SHOTPOINT[®]

SHOTPOINT OUTSIDE

ShotPoint outdoor sensors are rugged, and may be wired or wireless



Outdoor Equipment Description



Sensors proposed for the BGE deployment:

Size: 8"x8"x2.5" (20 cm x 20 cm x 6 cm)

Weight: ~2 lbs

Power: 110/120 VAC or Power Tap Adapter input

Communications: Wireless mesh with loTR

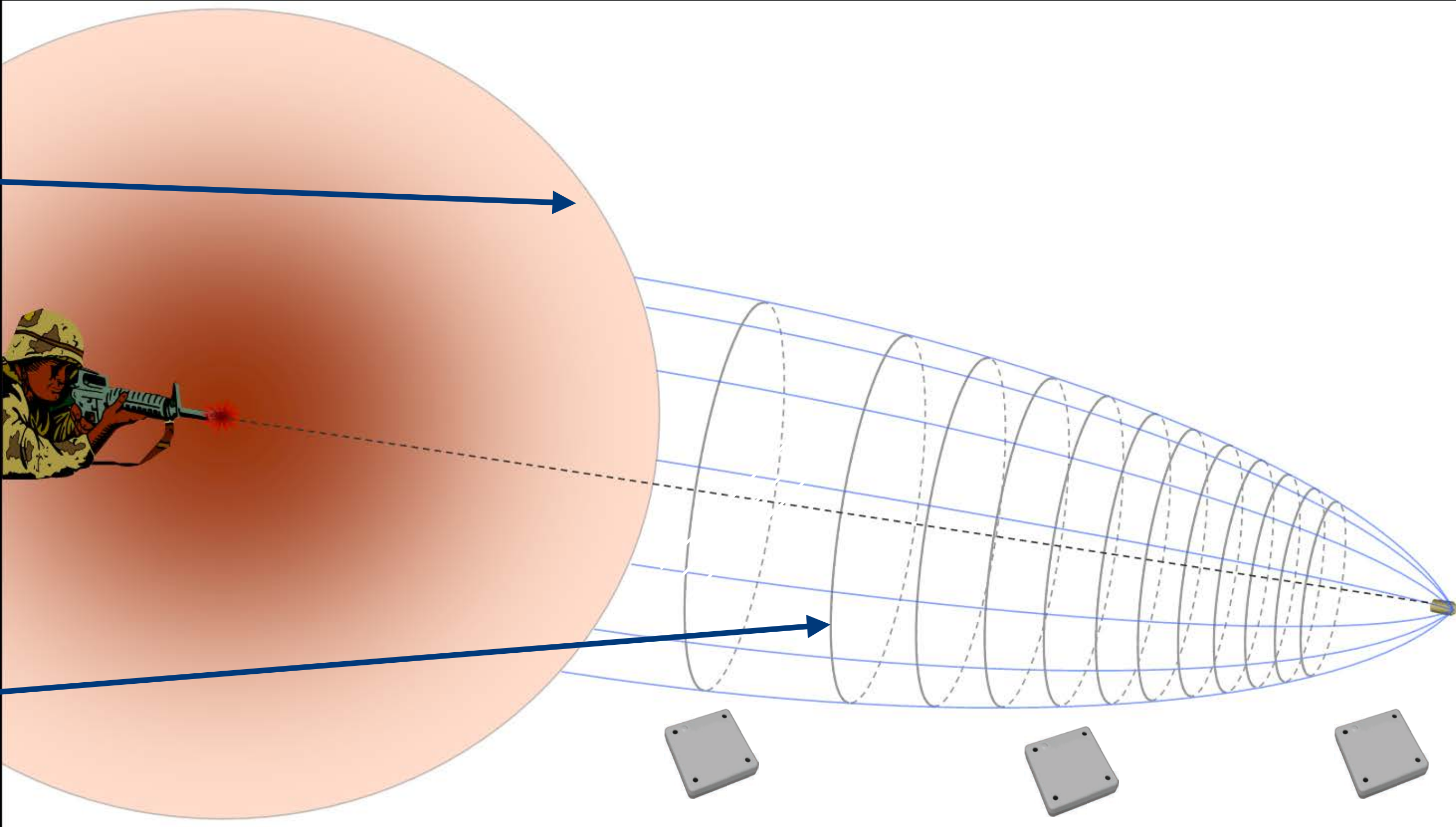
Mount: strap / muffler clamps



SHOTPOINT TRAJECTORY FINDING

Muzzleblast

Bullet shockwave



Shotpoint sensors detect the bullet shockwave and resolve the path of flight

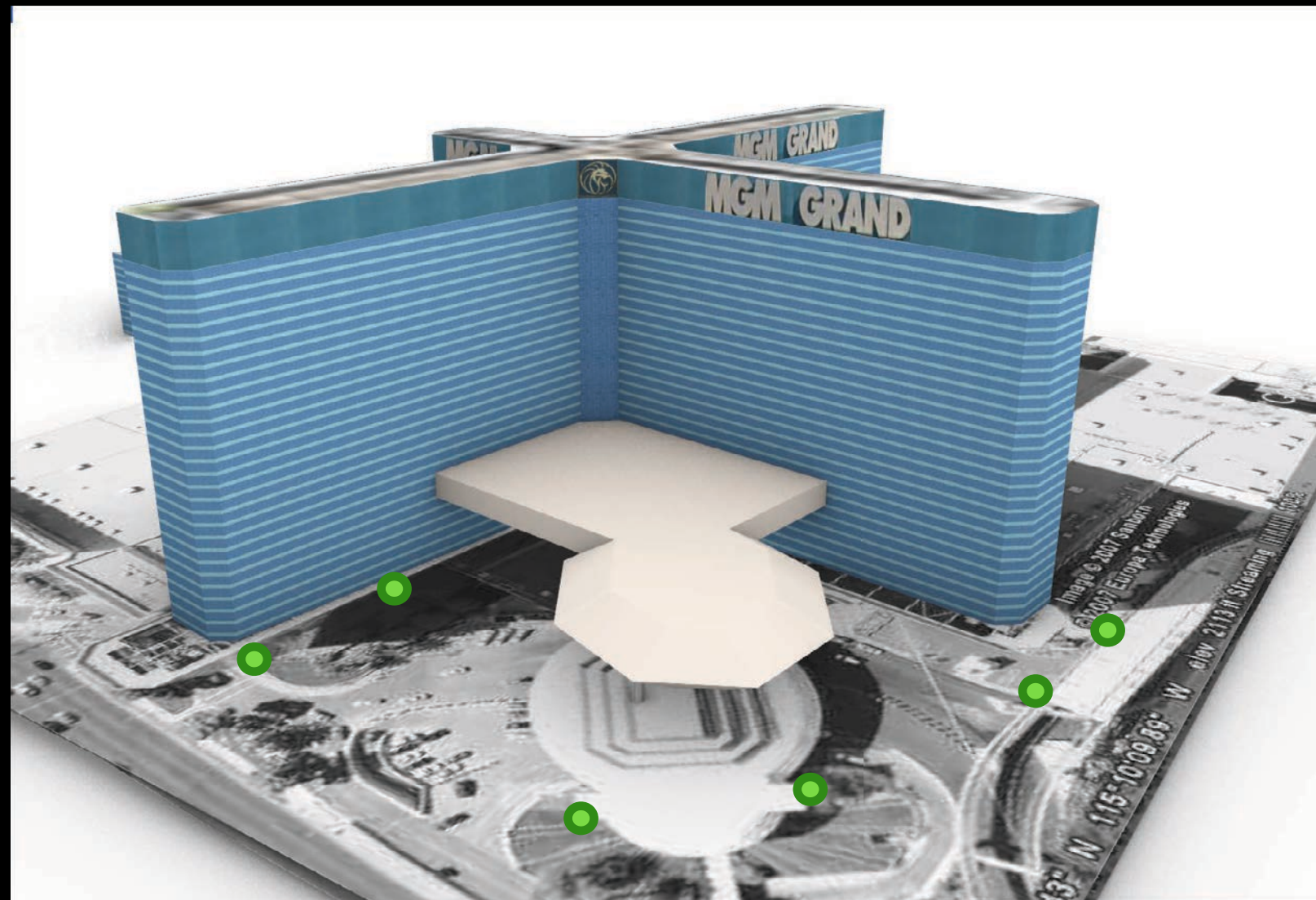
Rifle bullets are supersonic for 600m-1500m

SHOTPOINT 3D TRAJECTORY FINDING

Shotpoint resolves trajectories of rifle bullets to pinpoint shooters

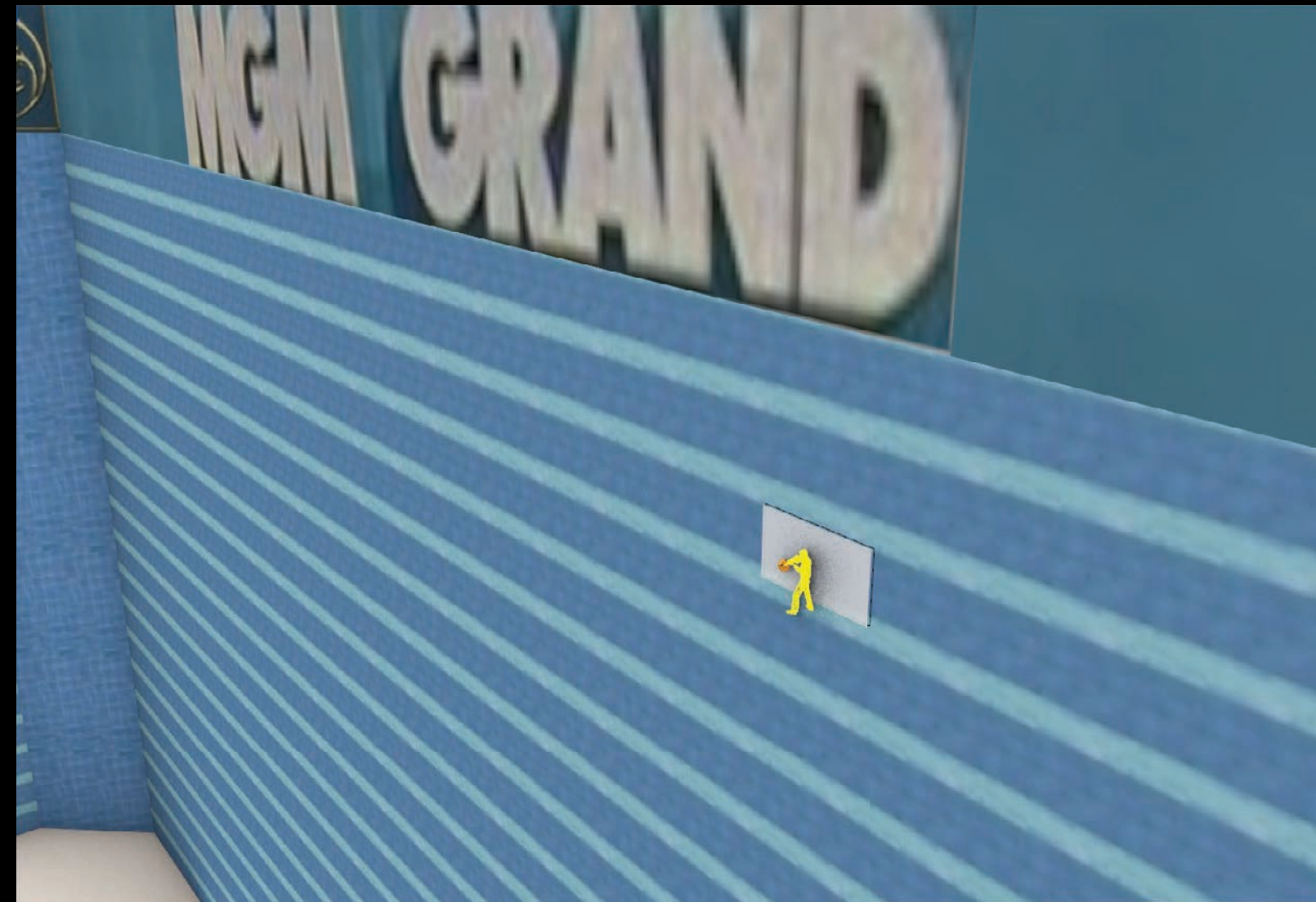


LOCATING SHOOTER AND TRAJECTORY

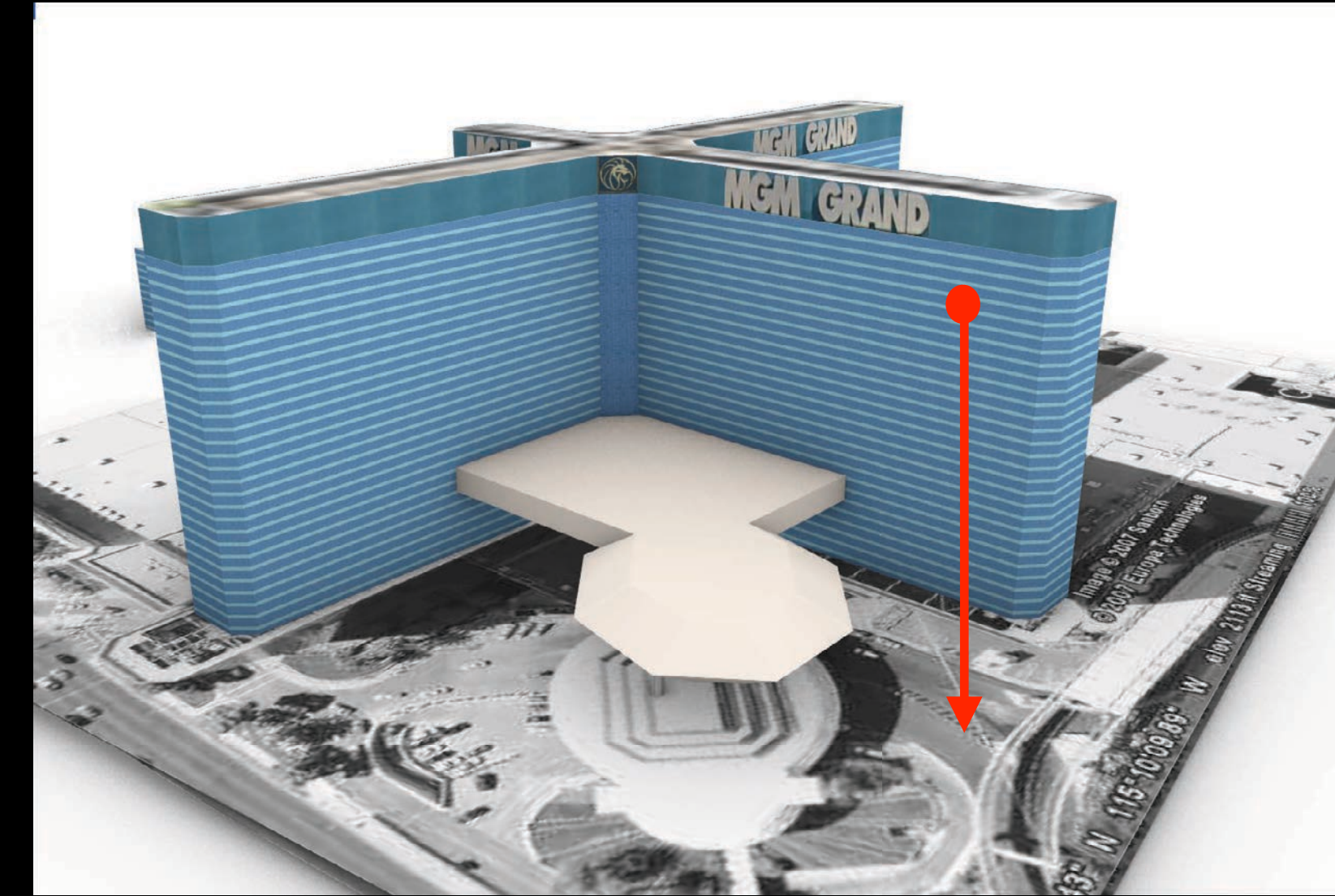


3D hotel map in cloud

Sensors on property



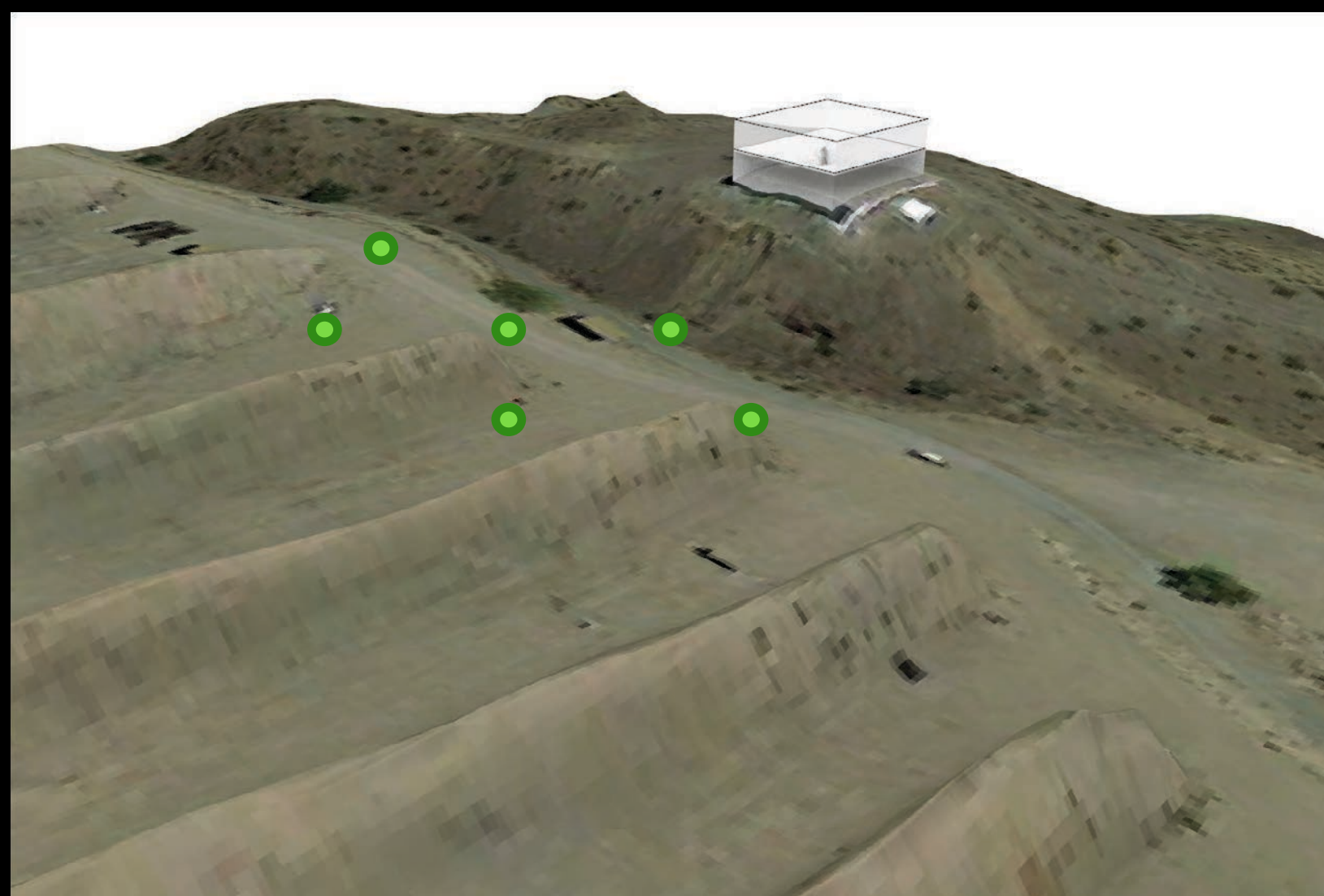
Shots fired!



Sensors find trajectory

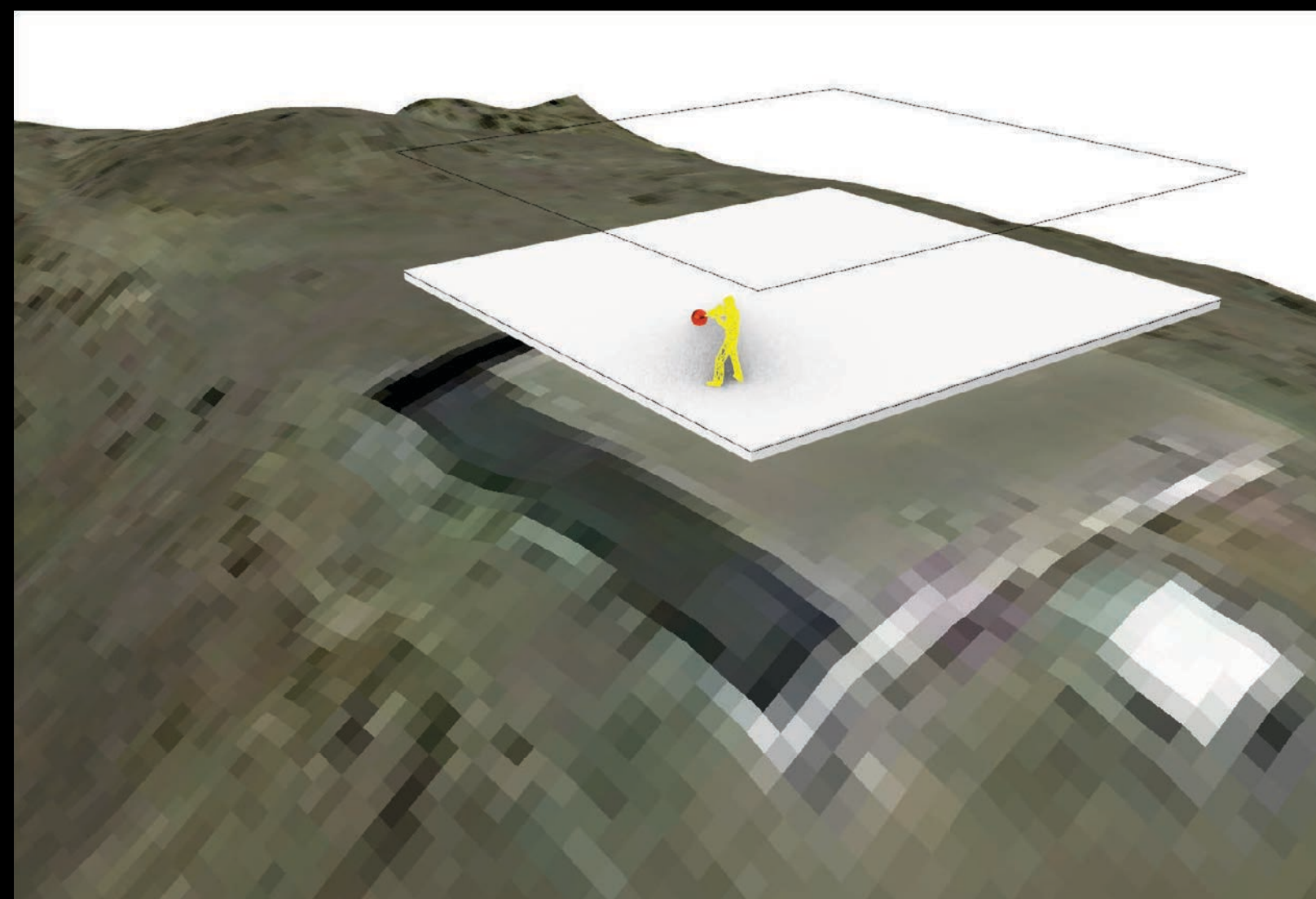
**Shooter located
“MGM Grand, E Tower,
27th Floor”**

SEPTEMBER 12, 2019 DEMONSTRATION

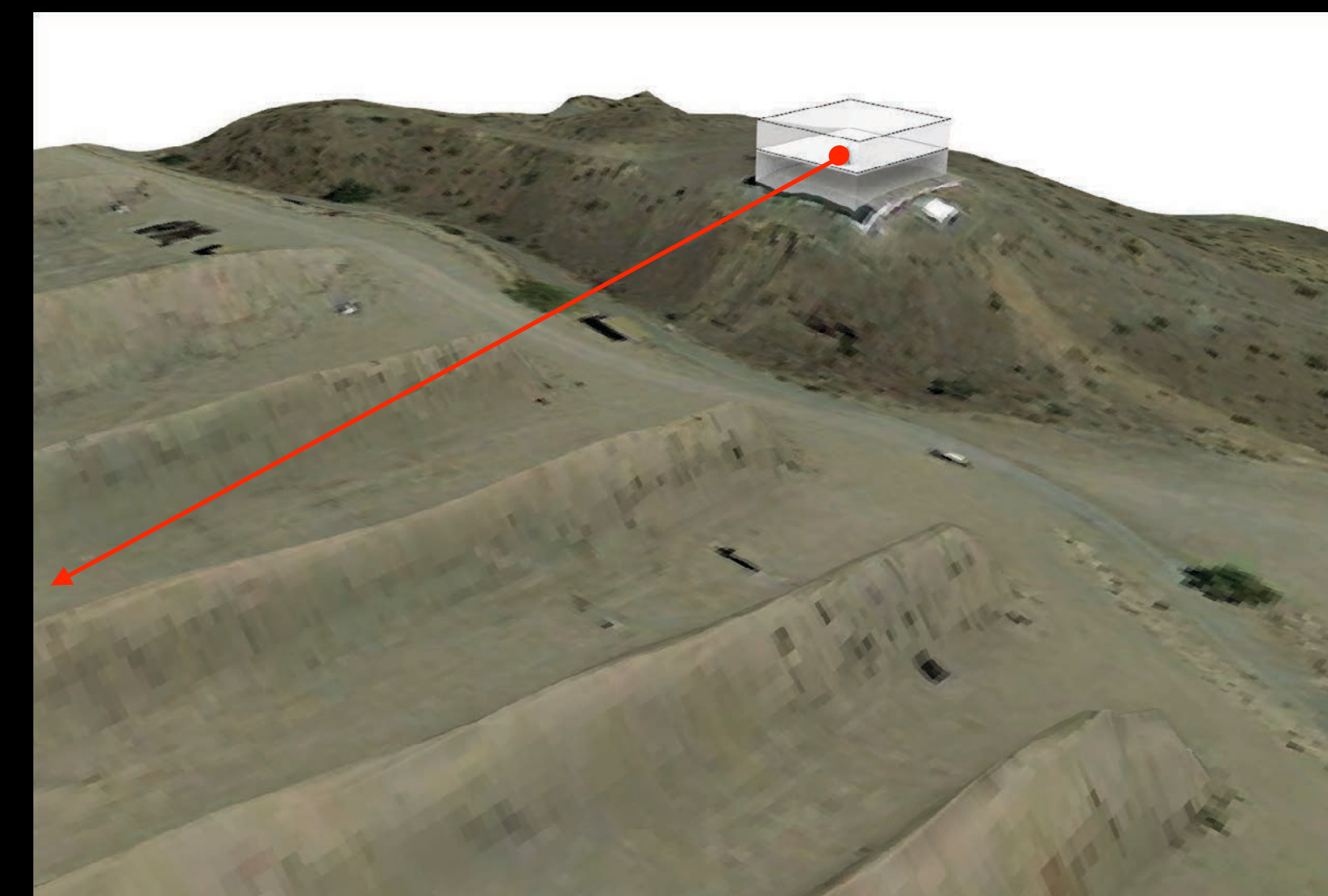


**3D model of ProGun
range and Water Tower**

Sensors on range



Shots fired!

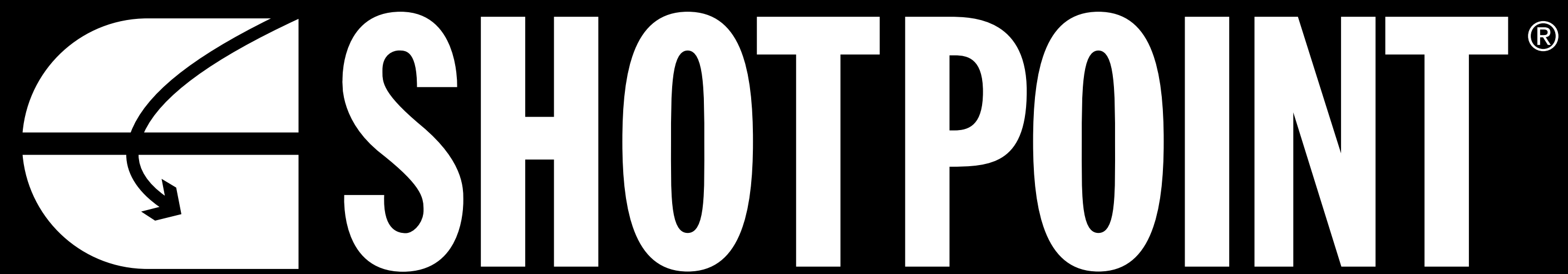


Sensors find trajectory

**Shooter located
“ProGun, Water Tower,
Top”**

LOCATING SHOOTER AND TRAJECTORY





KNOW WHEN IT COUNTS

For More Information Contact:

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Nick Jones, Chief Sales Manager, Databuoy Corp., njones@dbuoy.com