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Cheap and Easy Remote Video Surveillance

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Anti-Terrorism Advisory Council

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by

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ISSUE . . .

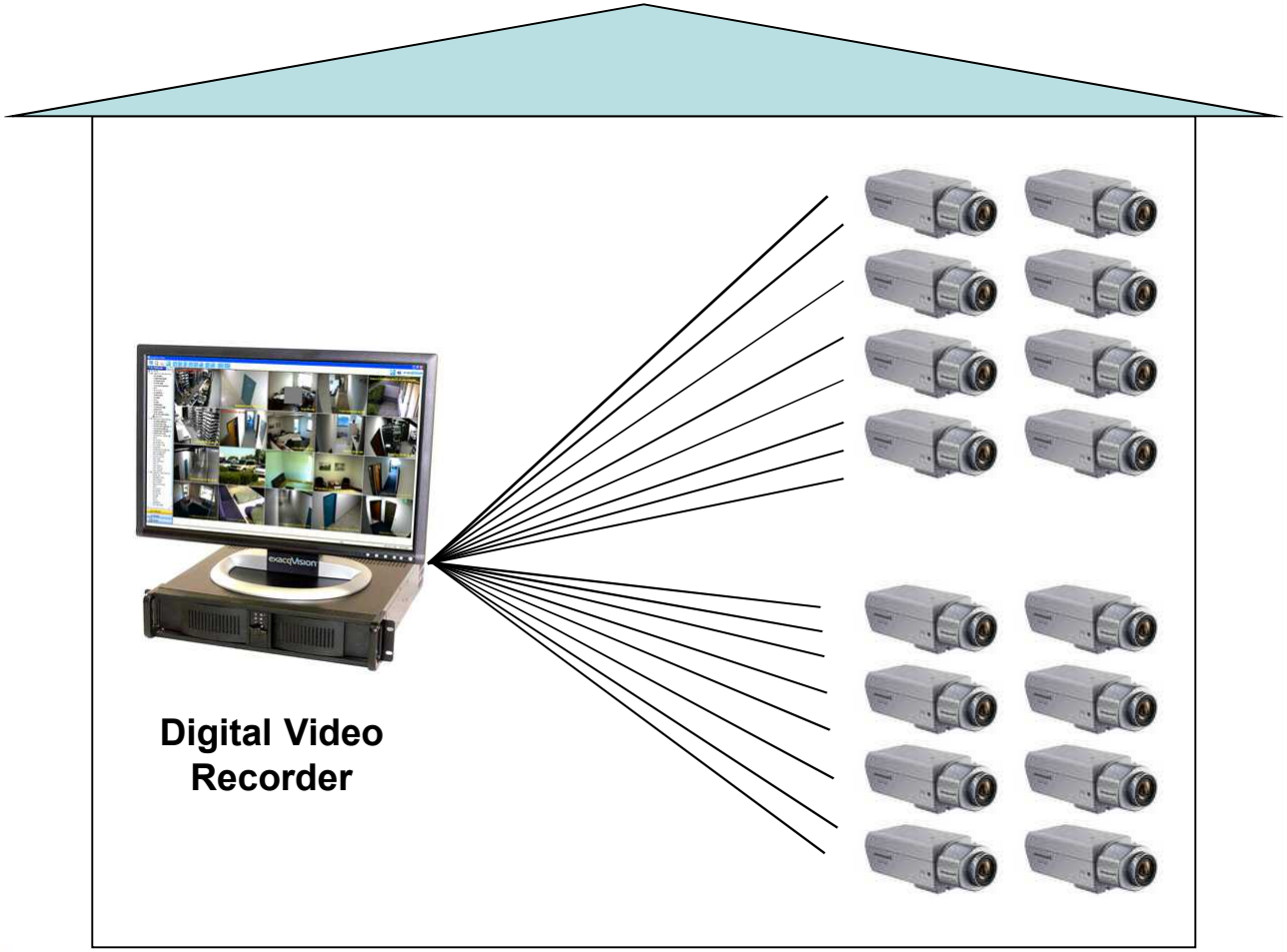
- If a terrorist-type event occurs within a school, first responders need to know what is going on inside the facility in order to be able to respond appropriately

- Sophisticated web applications can provide video images from that school's video cameras to anywhere needed

HOWEVER . . .

However . . .

- Web systems often require expensive expertise for both initial install and long-term maintenance
- Web systems crash on occasion
- Web systems can be brought down by a loss of power somewhere in the system
- Web systems can be brought down by a sophisticated adversary

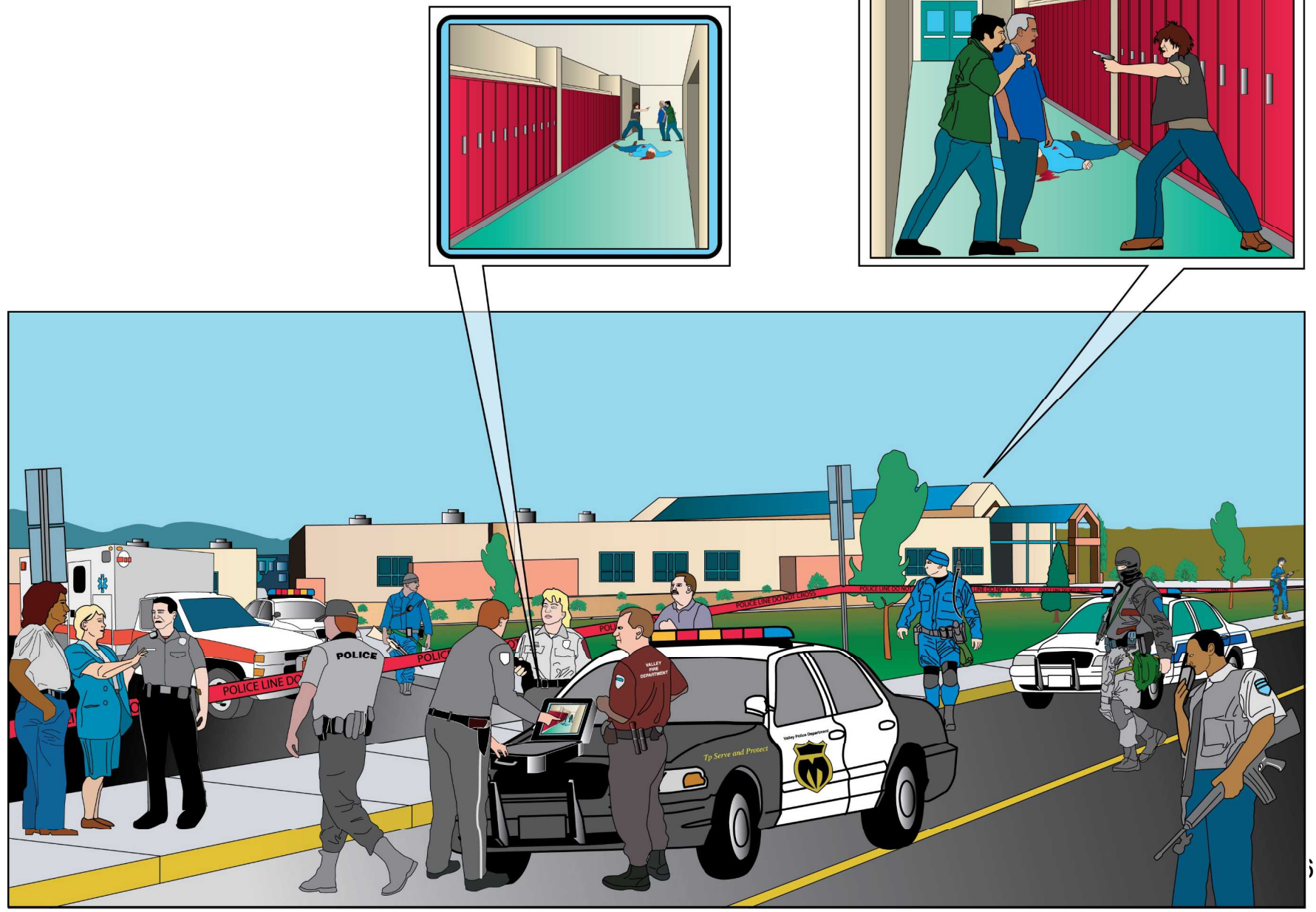

Digital Video
Recorder


POLICE
POLICE

Transmitter

Receiver

Black box


EXIT
POLICE LINE DO NOT CROSS
POLICE
VALLEY FIRE DEPARTMENT
Valley Police Department
To Serve and Protect

The RV (Remote Video) System . . .

- Does not rely on the internet or web applications
- Uses off-the-shelf security products that are mature & reliable
- Can be set up by anybody who can follow instructions
- Requires two pieces of hardware and some wiring located in a secured (locked) area
- Is Compatible with any standard camera system
- Works with a DVR or a VCR (different, but still simple to install)

The RV System . . .

- All the equipment necessary for the response team to use the RV system fits into one portable fat briefcase (plus the battery)
- Is simple to use by a response team – hook up the battery, turn on the power, and look at the images
- Added encryption will prevent the interception of signals by unauthorized persons using similar hardware
- With the use of a UPS (Uninterruptible Power Supply) to allow for continuous operation of the school's video system, the RV system can be used for hours even if there is no power to the facility

The RV System . . .

- Uses RF (remote frequencies) to transmit video images to the police unit. The transmitter & receiver strength determines the distance away that images can be viewed . . . as much as several miles away
- Is very inexpensive for schools – about $1000 for each of a facility's DVRs with16 video cameras
- Is relatively inexpensive for a response force – about $5000 for the unit that will allow response to any RV facility included in its programming


POLICE
POLICE
POLICE
POLICE
911


A.C.M.E. Security Services
SECURITY

Summary . . .

The RV System allows emergency responders to view in real-time, from outside a school, the video images that are being captured inside a school building by the cameras installed within that facility.

This work was conceived and developed by Richard Sparks (retired, Sandia Labs) and Mary W. Green (Sandia Labs).