

# case study

## Ohio Lottery Wins Big with Sony's HD Robotic Cameras

### Customer:

- Mills James Productions

### Industry:

- Entertainment

### Challenges:

- Leverage technology to innovate new production work-flow to reduce costs for short-form video production
- Implement new production methodology with sustainable reliability

### Solution:

- Design and implement a multi-camera, remotely-operated system integrating PTZ cameras with virtual set creation managed over IP links across state

### Benefits:

- Significant savings via elimination of traditional production requiring dedicated personnel for camera operation and ongoing set-up/strike of set



Drawing numbers live on-air is a key element for state lotteries to generate excitement, exposure, and revenues. In August 2013, Mills James Productions implemented an innovative remotely operated multi-camera production system for the Ohio Lottery, leveraging Sony technology to create a streamlined production solution.

"We were seeking a more efficient way to operate our drawing studio, and the Sony BRC-H900 cameras enable a far more economical workflow that cuts operational costs without cutting corners on quality," said Dave King, chief engineer at Mills James. "We set out to find what the latest advances in technology could do for us, and the Sony cameras have brought a fundamental improvement."

### Leveraging Sony Technology for Savings

The new Sony remotely-operated production package marks a fundamental advance over the legacy production process. The live production

consists of three shots—wide, medium and close-up—of numbered balls popping out of five machines. Utilizing standard production techniques at a local TV station had been a costly, labor-intensive process for a live shoot that lasts little more than the length of a commercial.

Mills James, the Columbus, Ohio-based media production firm, designed, integrated, and now operates the new production system combining remote-controlled cameras and virtual sets. The decision to build this around five BRC-H900s and two RM-IP10 IP-based controllers followed an in-depth survey of existing technology at NAB 2013. Minnesota-based AVI Systems, an A/V, telepresence, and broadcast systems integrator, guided Mills James through the technology options from its Cincinnati office.

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**Dave King,**  
Chief Engineer,  
Mills James Productions

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**Scott Lanum,**  
VP Teleproduction Services,  
Mills James

Director. "We'd looked at a wide range of possible solutions from videoconferencing codecs on up. These deliver full-blown, no-compromise HD broadcast quality."

According to Scott Lanum, VP Teleproduction Services, Mills James, the design operates effectively with just a small crew at the Cleveland facility augmented for two hours per day with Columbus-based staff. Remote control of camera operations and switcher functions makes this possible.

"The BRC-H900s offer an incredible value-proposition both for imaging excellence as well as for the advanced remote production/virtual set workflow they enable," he said.

One of the more remarkable features of the PTZ robotic cameras is the cost savings they deliver. The BRC-H900s' low operating costs allows them to be dedicated to the single project. They remain onsite at the drawing studio in Cleveland with command and control at Mills James' headquarters in Columbus.

"Initially, we thought that we needed something larger than the BRC-H900's 1/2-inch CMOS sensors to capture and broadcast the images needed to make the most of the virtual set," said Dave King, chief engineer. "We found that these cameras were completely up to the task. The chroma key backdrops look terrific, and these cameras deliver the broadcast picture quality at a considerable savings over models with the larger 2/3-inch sensors."

Another key consideration in Mills James' choice was Sony's ability to deliver product in time for an August 1 launch.

Proposals for the project were submitted by May 1, and so that demanded a quick turnaround after the selection. Sony was ready to deliver. When the green light lit, Mills James had the system ready for launch in less than 60 days.

#### How did it go?

"This installation is a prototype for how to do remote production with virtual sets," said Lanum. "We have complete confidence in the Sony cameras and controllers and expect to take this into other applications. For example, daily check-ins with financial experts is a staple for business news shows. Having these senior executives take time away from work to come down to a TV studio on a regular basis is problematic. Bringing a virtual set to them via BRC-H900 is a far more practical approach."

