Axis video encoders keep a bird's eye view on breeding falcons.



Organization: The Hawk and Owl Trust (Sculthorpe Moor)

Location: Norfolk, UK

Application: Remote monitoring

Axis partner: iCode

Mission

National UK charity, The Hawk and Owl Trust, is dedicated to conserving owls and other birds of prey in the wild. When a pair of breeding Peregrine Falcons was spotted flying around Norwich Cathedral, the Trust asked the authorities if they could erect a nesting platform to record live footage of the birds. The Cathedral gave the Trust the go-ahead, so it started to look for a surveillance system that could deliver high quality, realtime footage.

Solution

Having previously used iCode Systems' iCatcher Console recording solution at its award-winning Sculthorpe Moor Nature Reserve nearby, the Hawk and Owl Trust decided it was the perfect solution to manage the footage by taking care of the full frame rate, broadcast quality recording and remote viewing. It also needed to select a wireless solution and camera that were compatible with the iCode system that offered high quality footage.

As an Axis partner, iCode was able to recommend that a high resolution external camera should be used and converted to IP using H.264 AXIS Q7404 Video Encoders.

Result

As hoped, the breeding birds moved onto the new platform. The real time access delivered by the high quality footage has given The Hawk and Owl Trust a real insight into the life of the Peregrine Falcons. In fact, the video footage was of such a high quality that the local news station was able to use it to showcase the project and it has proved to be an invaluable educational tool for the Trust.



"The real time access delivered by this high quality footage gives us a real insight into the life of these magnificent birds."

David Gittens, The Hawk and Owl Trust.

Axis video encoders keep a bird's eye view on breeding falcons

The Hawk and Owl Trust is a national UK charity. Its work is dedicated to conserving owls and other birds of prey in the wild, and increasing knowledge and understanding of them. It works with partners to conserve the places owls and other wild birds nest and it also manages nesting, roosting and feeding habitats. It also encourages visitors to its wildlife reserves, education centers and outreach projects.

The Peregrine Falcon is a rare bird for Norfolk, with only one breeding pair being recorded within the last 100 years. So when a pair was spotted flying around Norwich Cathedral, the Hawk and Owl Trust asked the authorities if they could construct a nesting platform, 250 feet up the Cathedral's spire, with cameras to stream live video into the visitor center should the birds decide to breed.

The Hawk and Owl Trust and Cathedral authorities had to reconcile the contrasting needs of nature and architectural conservation to provide a new home for the birds with high quality, full frame rate live video streamed constantly and recorded at the Hawk and Owl Trust.

A technical challenge

Although power was available within reach of the proposed nesting platform, there were no data connections. In order to comply with the Cathedral's architectural rules, the Hawk and Owl Trust understood that no additional cables could be used and so a wireless connection was needed to power the camera.

With extensive experience of using iCode Systems' iCatcher Console at its award-winning Sculthorpe Moor Nature Reserve nearby, The Hawk and Owl Trust decided to use it for this project to take care of the full frame rate, broadcast quality recording and remote viewing.

David Gittens from The Hawk and Owl Trust said: "I am totally convinced that the iCatcher based system was the right way to go. It is vital that the footage provided by the camera be of excellent quality so that we could closely monitor and share footage of the birds."

The Hawk and Owl Trust's next requirement was to evaluate which cameras and wireless solution would work best for their needs. As an Axis partner, iCode was able to recommend that a high resolution external camera should be used and converted to IP using AXIS Q7404 Video Encoders.

Axis video encoders convert analog video signals into high quality, digital video streams that are sent over an IP network. They are easy to connect to analog pan/tilt/zoom (PTZ) cameras, allowing for easy operation across the IP network making the images far easier to search through and share. The Trust then used the iCatcher Console to stream the footage wirelessly via the robust Ubiquiti's NanoStation.

Volunteers from Norfolk Fire and Rescue Service helped the Cathedral's foreman install the platform and hardware through a window in a spire. Great care was taken to fit in with the Cathedral's architectural style, such as having the platform painted to match its stone.

"The nesting platform has worked as planned and the breeding pair moved to the platform, so we are delighted that we have been able to record these rare birds of prey," said Gittens. "The real time access delivered by this high quality footage gives us a real insight into the life of these magnificent birds."

Footage taken from the cameras is of such a high quality that the local news station was able to use it to showcase the project. The footage has also proved to be an invaluable educational tool for The Hawk and Owl Trust.







