

Eyes along the coast - safety through the lens at Cape Cornwall Watch.

Reliable and robust Axis IP camera technology essential for watch keepers in hazardous Atlantic conditions.



Organization:

National Coastwatch Institution

Location:

Cape Cornwall, UK

Industry segment:

Government

Application:

Safety and security

Axis partner:

NCI Technologies

Mission

Cape Cornwall Watch is a team of volunteers that monitors a section of Cornwall's coast for hazardous activities. Part of the National Coastwatch Institution, it had been reliant on a manual process of watching the coastline, often with binoculars, to identify possible signs of danger. This manual process had proven to be especially challenging when monitoring tourist hotspot Priest Cove during stormy conditions. Always a busy cove catering for visitors and fisherman alike, it was essential that the team conducted regular reviews of activities to ensure the safety of all that used it. That is why a community campaign was undertaken to fund the installation of leading network video technology, allowing watch keepers to clearly see into the cove and improve public safety.

Solution

Following a review of the most suitable technology available by NCI Technologies, a leader in the field of IT support and services in Cornwall, AXIS Q6055-E was selected for installation.

An advanced PTZ dome style camera from Axis Communications, it provides watch keepers with both sweeping overviews of the cove and sea, as well as superb zoomed-in detail to monitor fishing boats in the water. Its 32x optical zoom, in combination with HDTV 1080p resolution, provides top of the range close-up views of people and objects of interest. The camera is located on a cliffside facing the Atlantic Ocean; AXIS Q6055-E is therefore a perfect choice for the demanding outdoor environment due to its robust design and build.

Result

The installation of the new camera has greatly improved safety for both users of the cove and the watch keepers, who would often have to venture onto the cliffs in perilous conditions to gain an insight into activity in the water and within the cove. Applying its experience of similar installations at other coastal locations, NCI Technologies was able to overcome the difficult weather and terrain.

Photo courtesy of Gary Jobe Photography

“We needed the best of the best technology for this installation to be a success. With the camera placed where it is, it had to be robust and reliable, as it’s a difficult place to reach should engineers be required to resolve a technical issue. Axis cameras provide us with this reliability.”

James Scott, IT Consultant at NCI Technologies.

The system has been highlighted by the watchkeepers as being extremely easy to operate and benefitting from a very high image quality. Through excellent imagery and remote monitoring capabilities, the camera has helped Cape Cornwall Watch prevent several potentially catastrophic situations, including children being stranded by the changing tides.

The National Coastwatch Institution is a voluntary organisation pioneered in 1994 to restore a visual watch along the UK’s shores. The opening of its 51 posts to date came as a result of many Coastguard station closures throughout England and Wales. The Cape Cornwall station has a 34-strong team of volunteers who man the station 12 hours per day. Until recently, Priest Cove was not easily visible to the watch station, potentially putting both visitors and fishermen at risk, as well as the watch keepers themselves who had to mount a rocky route to see into the cove. This route is especially dangerous during stormy weather, not an uncommon occurrence on a cliff side facing the Atlantic Ocean.

Robust technology – a natural extension of its surroundings

The project was made a reality by NCI Technologies. Its team advised on the best camera for the unique installation, as it required technology robust enough to perform under extreme weather conditions. The system also had to be aesthetically pleasing so as not to impact the area’s outstanding natural beauty, which regularly attracts tourists to take in its panoramic views.

Richard Saynor, Station Manager at Cape Cornwall Watch, commented, “The camera has allowed us to greatly improve our ability to help anyone who may get into difficult situations in Priest Cove or along the coast towards Land’s End. NCI Technologies has been extremely helpful and supportive of our aim to improve coastal safety. They advised on the most suitable equipment and best locations. They then carried out the installation seamlessly, despite the challenging landscape and conditions.”

James Scott, IT Consultant at NCI Technologies, said, “During the installation we had to be extremely careful not to disrupt the wildlife and ensure minimal impact on the environment. We achieved this through a respray of the camera so it blended in with the cliffs, while also creating a small trench to hide the cabling with a flexible pipe. Not only did this ensure that the cable was out of view, but it also wasn’t a trip hazard for visitors walking along the cliffs.”

Enhanced safety – eyes along the coast of Cornwall

A major benefit for Cape Cornwall Watch is creating a clearer picture of events within the cove and along the coast, a significant challenge when reliant on a manual process. The watch keepers were aware there was a large amount of activity they were unable to see, such as children playing on the slipway, and many others swimming in the coves. The concern for Cape Cornwall Watch was that it can sometimes prove to be a very dangerous area, where the tide changes rapidly.

Richard Saynor continued, “We’ve seen youngsters playing on the rocks, others jumping through waves, and people often don’t realise that when the tides change, they may need help to return to safety. We aim to improve public safety by preventing an incident, rather than having to respond to one. The team of watch keepers was impressed by the quality of the images, which were much better than we were hoping for. This allows us to identify potential incidents and react quickly to stop them becoming accidents.”



“A bonus feature is the remote monitoring function through a mobile application. If this function goes live in the future, when the Coastguard wants an update while we are off duty, it will be very easy for us to login and provide this, even when the station is unmanned,” says Richard Saynor, Station Manager at Cape Cornwall Watch

