

# Royal National Lifeboat Institution takes safety on board



The Royal National Lifeboat Institution (RNLI) is held in very high regard for providing, even in the most perilous circumstances, a 24-hour lifeboat search and rescue service around the United Kingdom and the Republic of Ireland. The operational numbers for 2003 are impressive. From 232 lifeboat stations strategically placed around the UK and Ireland, the 4,600 crew members took part in over 8,000 launches, rescuing on average 21 people per day. All this is delivered by a charity funded entirely by donations and mainly staffed by volunteers.

## The Lifeboat Crew Training College

The professionalism of the RNLI is exemplified by its impressive new four story, £11 million Lifeboat Crew Training College at the RNLI headquarters in Poole, Dorset.

Tony Wheat from local security specialists Meggitt Marsh Guardian Systems was also involved from the start, first as the security consultant putting together the security requirement document for the new building, and then as the installer. Tony outlined the requirements the new security system is designed to address: "As well as the training facilities here, there are expensive lifeboats moored at the centre and high value stores also. We identified four main issues in the system requirement – threat of attack and theft from the two sides of the site, both sea and land; protection of all the assets from theft, vandalism and arson; health and safety of all persons on the site, especially in the training tank; and traffic control at the road access points and within the site.

## CCTV system and Access Control

To address these requirements, an integrated CCTV and Access Control system was installed, centred in a 24-hour control room. The control room staff view eight Vista monitors (PVD 1700 DG) that display the images from the 50 plus cameras throughout the site, and recording is provided by four Vista Triplex™ Columbus Digital Video Recorders (VC16Te320).

Vista medium resolution colour cameras (NCL735Cke) were selected for the internal locations on the site and maintain surveillance of entry doors and the internal facilities. External surveillance is undertaken by high-resolution Vista Protos<sup>3</sup> cameras (VPC9420) with PTZ control. Tony Wheat explained “The environment here for external cameras is quite harsh with the seafront conditions of salt spray in high winds. We have a service level agreement with a response time of only one hour of down time.”

Access control throughout the site is provided by TDSi equipment including barriers, 5002-0352 proximity readers, and 5002-3092 door controllers, with all external doors and many internal doors carefully coded to manage and restrict access.

## The Wave Tank

The cameras in the wave tank are the most innovative part of the installation. The requirement is to monitor the safety of trainees as they work in full kit in the water. This includes capsizing their boats, operating the radio by diving under a capsized boat, righting the boat, and re-starting the engines, which are usually flooded with water. Throughout these exercises there is inevitably a level of danger, and to minimise this the images from four cameras in the wall of the tank are displayed via a Vista VSCQe quad on a monitor in the observation area one floor above the level of the water.



The cameras are housed in waterproof tubes in the side of the tank, similar to those used for the underwater lights. Capturing images through water is not straightforward, with its high density and the risk of reflection of the underwater light sources off various surfaces such as the covers of the waterproof unit, the walls of the tank and even the surface of the water. However the Watec WAT-250 high-

resolution colour cameras selected for the task combined with their careful positioning within the waterproof units resulted in excellent picture quality and clarity for safety monitoring.

## Reliable supplier

Tony Wheat summed up the initial installation and the ongoing maintenance. “We have been undertaking installation and maintenance work here with the RNLI for a number of years, so they are clearly satisfied with the service we provide, and for that we rely on a good distributor for both CCTV and Access Control equipment. For the installation I needed high spec reliable and easy to maintain equipment at sensible prices with all delivery promises met. For ongoing maintenance I need good technical support for quick repair or replacement of any faulty parts. Norbain meets all these needs, and are an essential part of keeping this important RNLI system in full operation.”

