

# Define modernisation

## Hampshire Fire and Rescue Service, UK



HFRS uses SMART solutions to improve the ability to react to emergency incidents.

Six years ago Hampshire Fire and Rescue Service (HFRS) were using Incident Command Unit vehicles that were over 20 years old. Immersing themselves in technology means that today things are different.

HFRS now maintain a fleet of approximately 243 vehicles. Internally, the Incident Command Unit (ICU) has been designed to be modular. The 19" rack mounts support numerous software driven information systems which can be re-programmed or developed to support any future changes. Like the majority of Fire and Rescue Services, all radio and telephone calls that come into the Command and Control Centre are recorded. In 2002 HFRS installed a 32 channel digital recorder with a 240 Gb storage device giving them 72,000 hours of online storage.

To ensure continuing improvement in HFRS's ability to react to emergency incidents, each Control Operator now has three networked PC monitors to work with. One is a touch screen and operates the radio and telephone systems. When a 999 call is received the operator selects the appropriate command on the screen by touch. The second displays the command and control system, "Firecat 2000" - this displays all the information about the incident. The final screen displays a mapping system (GIS) displaying the location of the incident. The system has modernised Command Control by providing an efficient means of receiving emergency calls and employing and controlling resources by voice radio services.

Coming from a broadcasting background, Paul Turner, Radio Systems Engineer at HFRS took another step further by installing multi agency radio channels within their control vehicles. These consist of the normal fire service VHF and UHF radio channels but also police VHF and selected UHF channels.

"As we also have to cover a coastal area we have the MCA (Coastguard) radio channels fitted," says Paul. While the two UHF radio sets in the ICU enable the

### Challenge

To utilise new technology in improving Hampshire Fire and Rescue Service's (HFRS) ability to react to emergency incidents and the communications between bronze, silver and gold command.

### Solution

The introduction of SMART Board® interactive whiteboard overlays to view mapping applications, allowing all information accessed by HQ Command Control to be displayed and viewed by everyone.

### Result

Complete real-time interactivity with incident images ensure that HFRS is leading the way with technology that helps to save lives.

Incident Commander and Sector Commanders to relay information between each other, the VHF radio sets ensure high speed information exchange between the Officers attending incidents and HQ Command Control. "We are now looking to use a satellite link in order to gain a high speed data link from the Incident Command Unit to any suitable receiving centre. This will give us the ability to download dynamic files, use multi-channel voice calls and videoconferencing as well as enable the SMART Board system to be linked with other SMART Boards." Visual and audio contact can even be made with the Hampshire Police Aircraft. This enables HFRS to have an aerial view of an incident. The infra red image provides crucial information on the temperatures involved.

To improve their efficiency further, HFRS use the Blue8 Mapping System with a SMART Board® overlay which is easy to fasten and secure to plasma displays in the ICU. This provides full interactivity with the premise's images. The size and clarity of the screens, and their general presence in the ICU contribute to the ability of this technology to function as a focal point in the fire-fighting process. Using the electronic pens or touch enables fluency when manipulating the displayed maps and premises images. Out-buildings can be highlighted, sections marked out, and marked icons of fire appliances can be dragged and dropped into new locations. The added beauty of this interaction is that all information and annotations are time and date stamped, and can be saved and burnt to CD for incident de-briefs.

A GSM dial-up link between the Firecat 2000 system at HQ Fire Command and Control and the ICU enables staff in both locations to see all jobs in action, messages sent in, and the location of the other vehicles. This also means that in addition to using the SMART Board overlays to view mapping applications, any information accessed by Command and Control can be displayed on the SMART Board overlay for all to see. ICUs in remote locations have full Command and Control whenever needed. Access to Command and Control by all parties enables a complete overview of all the resources that are available in Hampshire and the neighbouring counties which can be quickly mobilised if necessary. Ultimately, in the case of a major disaster resulting in the Command Control being disabled, full operations and management of Control could be carried out from the ICU.

With the current drive for modernisation, HFRS are certainly leading the way with technological innovation. Paul Turner quite rightly believes that HFRS are advanced in their technological infrastructure. However, as someone who has continually driven the evolution of HFRS, Paul is still looking for new areas of innovation and is considering the implementation of a Wireless network and satellite communications to enable the full mobility of the team.

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**Paul Turner,**

Radio Systems Engineer at HFRS

#### About SMART

SMART Technologies Inc. is a leading provider of collaboration solutions that change the way the world works and learns. As the global leader in interactive whiteboards, our focus is on developing a variety of easy-to-use, integrated solutions that free people from their desks and computer screens, making collaboration and learning with digital resources more natural. Our products have transformed teaching and learning in more than two million classrooms worldwide, reaching over 40 million students and their teachers. In business, our Freestorm™ visual collaboration solutions improve the way that people work and collaborate, enabling them to be more productive and reduce costs.

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#### Steljes Ltd

Steljes is a SMART authorised distributor for SMART Technologies

info@steljes.co.uk

08450 724 800

[www.SMARTmeetings.co.uk](http://www.SMARTmeetings.co.uk)