

## Professional breathing apparatus monitoring system in action

- Clear allocation of respiratory protection equipment for rescue personnel and emergency service vehicles

### The story up till now...

Respiratory protection equipment has been loaded onto vehicles by an SCBA technician and alphaSCOUTs allocated to their respective base stations. Each crew member has personalised his or her alphaSCOUT at the start of the shift.

### 9:28 ALARM

Outbreak of fire in a boilerhouse on an industrial estate. Unknown number of workers in the area. The on-duty control centre notifies the police and fire and rescue services +++

### 9:34

Fire appliance no. 3 is the first to arrive. The incident commander sizes up the situation. Two teams are standing with their SCBA at the ready. After opening the cylinder valves the names of the rescue workers and team assignment appear immediately on the screen of the entry control officer's notebook +++



- Designed for use in all incident situations
- Simple and modular system

- SCBA monitoring begins automatically and immediately
- Quick overview of all rescue unit personnel



9:39

The crew advances into the building. The entry control officer sees the status of every rescue crew member at a glance:  
Radio contact: active,  
Motion alarm: not activated,  
Manual alarm: not activated,  
Cylinder pressure: OK +++

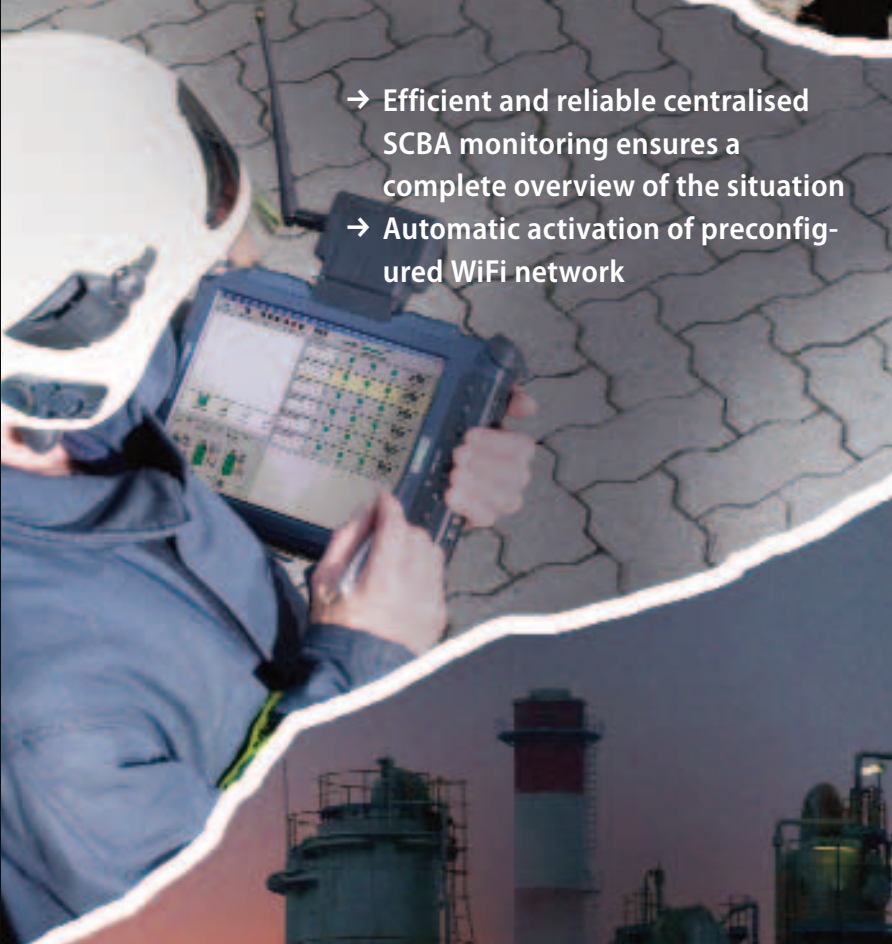


→ Real-time display of rescue unit personnel status at a single glance

9:45

Teams from two more arriving fire appliances are sent into the building. Each entry control officer sees their assigned rescue operatives on their screens +++

The incident commander Colin Scott decides to create a tactical unit from the three vehicles. The entry control officer for the whole crew switches over to the "Centralised Monitoring" display to check on the current status of each rescue operative +++



→ Efficient and reliable centralised SCBA monitoring ensures a complete overview of the situation  
→ Automatic activation of preconfigured WiFi network

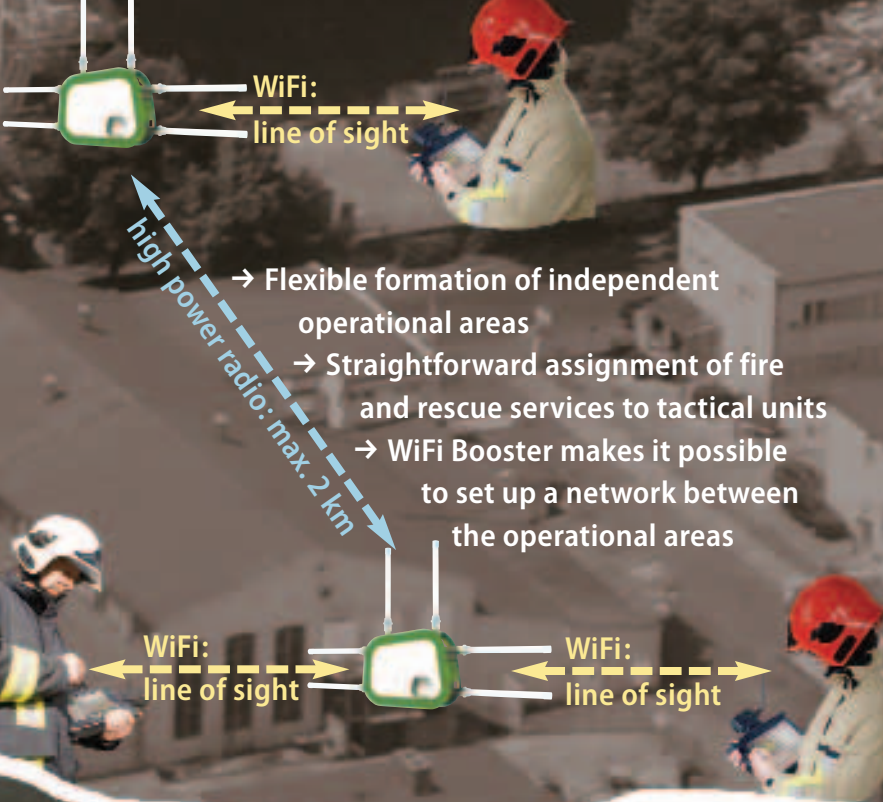
9:56 EXPLOSION

At the back of the boilerhouse an explosion occurs. The fire spreads. Colin Scott decides on a change of tactics and orders all rescue personnel to withdraw. The entry control officer immediately sounds the evacuation alarm for all crews. The rescue teams confirm the signal to withdraw at the press of a button and leave the building +++



→ Evacuation alarm for each team or for the entire crew  
→ Forwarding, reception and manual confirmation of the alarm is shown and documented





- Flexible formation of independent operational areas
- Straightforward assignment of fire and rescue services to tactical units
- WiFi Booster makes it possible to set up a network between the operational areas



- Automatic calculation of the remaining service time
- Alarm activated when predefined remaining service time is reached
- Info per fire fighter: remaining service time, cylinder pressure, alarm and radio communication status



10:02

Two more fire units support the attack from the other side of the boilerhouse. Sector 2 is set up here. The PCs are connected over a network, to enable the data communication between sectors 1 and 2.

The entry control officer in charge transfers the new sector allocation to the monitoring software +++

10:08

Max Marshall, the attack team leader in sector 2 reports the discovery of an injured person in the machine room and begins the rescue +++

10:10 ALERT!

The entry control officer receives a message: remaining service time alert for Max Marshall! The low cylinder pressure in the detail display confirms that Max Marshall has a high air consumption +++



10:15

A deployed rescue team emerges from the building with Max Marshall and the injured person. They hand over the person to the emergency medical service +++

- A mouse click gives an overview of all sectors
- Flexible adaptation of software display to operational procedures and functional structures

→ Monitoring software can only be closed when all rescue personnel have logged off

- All operational data is automatically saved and processed
- Report preparation at the touch of a button: track record per person, pressure flow, device history, incident overview

10:25

Colin Scott wants to get a general idea of the overall situation and selects the software display "General Monitoring". The status of each member of the rescue crew can be seen at a glance in the remote command vehicle +++

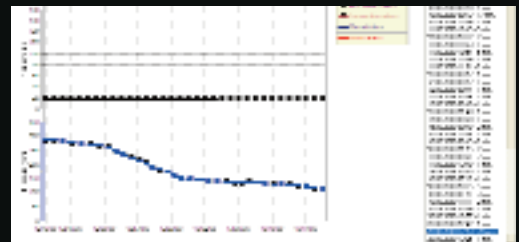
10:28

Report of the team leaders: there are no more people in the building and the fire has been put out. Colin Scott announces that the operation is at an end, and the fire watch is put in place. The team secures its equipment and clears the scene +++

11:23

Operation debriefing in the South Watch. The Max Marshall incident is being discussed. The air consumption curve clearly shows the rapid increase in stress at the beginning of the rescue. The chief fire officer arranges for a training exercise to improve rescue operation procedures.

The individual breathing protection records are printed out and filed away in the operational logbook +++



A reliable and efficient breathing protection monitoring system is absolutely essential to the carrying out of successful operations. MSA's alpha Personal Network is a modular, intuitively operable system. A fundamental component of the automatic monitoring system is the alphaCONTROL software. Its real time display of the rescue crew member's status, its range of alarm functions and its secure and automated reporting system means that the rescue operatives can concentrate on the crisis events at hand. Due to its straightforward switchover from individual to central monitoring, as well as its capacity to form sectors, alpha Personal Network is designed to deal with the most complex of crisis scenarios, and supports the functionality and safety of all operations.