

# TOMORROW'S FIREFIGHTER

## MEETING THE TECHNOLOGICAL CHALLENGE



Firefighters with MSA M1 SCBA System

*The changing role of the firefighter in recent years has largely been driven by an overall reduction in requirement to respond to fires but, more importantly in many ways, by the emergence of new risks and hazards. This is borne out by recent statistics in the UK showing that the overall trend in fires attended is down 43% compared with 10 years ago<sup>1</sup> with a growing and significant increase in non-fire incidents attended. However, fires that do require a response are potentially more dangerous because of the increasing heat load, duration, and toxicity of structural fires.*

Today's firefighter faces a new set of challenges, some as a result of climate change with firefighters called out to incidents of flooding and other natural disasters but others as a result of the changes in the fabric of our own lives. Smart buildings with solar panels and green roofs, electric cars and other new means of transport bring their own unique challenges when things go wrong. More houses being built are made of wood, cars are manufactured with more plastic materials, new connected technology in our homes increase the likelihood of short circuits and fires, and energy-efficient buildings contain new types of insulation that make fires hotter. This is true also of search and rescue operations, responding to medical incidents and assisting other agencies in response to terrorist or other major incidents.

Fire chiefs are more clearly focussed on the safety and wellbeing of their firefighters on the front line, ensuring that no matter what conditions they face, the equipment they are using will help get them home safely. Recent high profile emergency incidents have further highlighted the need for firefighters to learn new skills and be better equipped with the very best in technology, to allow them to concentrate on the critical job they do in protecting us and helping to save lives. Companies like MSA are at the forefront of innovation, developing advanced solutions and technology platforms of the future, with products that are simple to use and that will enable firefighters to do their job, safely and efficiently.

The technology that we take for granted in the way we now communicate, are entertained and share information and experiences is being applied to more critical technology, benefitting many industries including the fire service. Software, thermal imaging applications and wireless communication capabilities have become more mainstream on the fireground. The real innovation is found in taking a modular approach to smart solutions that are fully integrated. This will allow a fire service to invest in new technology and provide the best protection for their firefighters as and when budgets allow. It will do away with the necessity to scrap existing kit or pay for an expensive upgrade whenever new and better technology is launched.

Today's multi-layered, cloud-based telemetry and communication systems are capable of providing complete monitoring and transmission of data, as well as multi-gas detection and evacuation and alarm commands given by the firefighters or by incident command. It will also provide the ability to download data and records after an event for future training and analysis purposes. Companies like MSA are investing in software development to deliver integrated, connected and user-friendly PPE with features that ensure it is part of an intuitive and integrated system, designed to improve firefighter safety.

MSA is developing technologically-advanced safety equipment designed to help meet today's changing fireground dynamics. As a leading manufacturer providing firefighters with head-to-toe protection, MSA is dedicated to continuing to innovate on behalf of firefighters around the world ensuring their personal protective equipment will work together to help keep them safer than ever before possible.

[www.MSAafety.com/M1-UK](http://www.MSAafety.com/M1-UK)

<sup>1</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/738452/detailed-analysis-fires-attended-fire-rescue-england-1718-hosb1718.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/738452/detailed-analysis-fires-attended-fire-rescue-england-1718-hosb1718.pdf)