Staffordshire launches innovative pilot project

Staffordshire Fire and Rescue Service is running an innovative pilot project to explore alternative ways to deal with incidents.

“This is a really innovative pilot project which has attracted interest on a national stage. Despite the fact that the vehicle is much smaller than a standard appliance, it still carries all the necessary kit which has been tailored specifically to the needs of the area in which it is based.” Group Manager Rob Barber

The Staffordshire Efficient Response Operation (SERO) is being trialled in Newcastle for six months.

It is a four by four vehicle which uses less fuel than a standard fire engine and can be crewed by just three firefighters rather than the usual five-strong crew.

It is significantly cheaper to purchase than a traditional appliance and the running and maintenance costs are less.

The pilot is one of a number of projects that Staffordshire Fire and Rescue Service is looking into in order to provide an even more efficient and effective emergency response for the county’s residents.

As part of the trial, the Service has developed a water misting nozzle for hoses which allows firefighters to use less water when tackling blazes.

An innovative backpack system which enables crews to put out small fires in remote locations is also being piloted. This saves time and energy as it means that firefighters don’t have to drag a heavier, standard hose over difficult terrain.

The backpack has compressed air and water which uses misting technology to extinguish fires. The misting nozzle is also less harmful to the environment than conventional firefighting equipment.

By having a thorough understanding of the type, nature and frequency of incidents that are taking place, the Service can make informed decisions regarding vehicles and equipment.

Group Manager Rob Barber, who has led the project, said: “This is a really innovative pilot project which has attracted interest on a national stage. Despite the fact that the vehicle is much smaller than a standard appliance, it still carries all the necessary kit which has been tailored specifically to the needs of the area in which it is based.

"In Staffordshire, we are always looking to provide our communities with a first class service
that is both efficient and effective while continuing to identify savings where possible. If the SERO vehicle proves to be successful in tackling fires, which we strongly believe it will be, we will be in a position to decide where the most beneficial locations are across the county to base other SERO vehicles at."
A global leader in search and rescue will join forces with Surrey firefighters in the first deal of its kind in the UK. Specialist Group International will provide round the clock support to Surrey Fire and Rescue Service for operations where it has unique expertise, particularly in river and confined space rescues, following a decision by the county council’s Cabinet on Tuesday, 23 October.

The Dorking-based firm, which has helped in the search for missing Welsh girl April Jones, recruits mainly from the military and has provided training nationally for firefighters, police officers and the armed forces.

Chief executive Peter Faulding, who founded the company in 1995, is considered the world’s leading expert in confined space rescue, such as in collapsed buildings. He recently made headlines when he was asked to perform suffocation tests on a sports holdall during the inquest into the death of former MI6 spy Gareth Williams. Mr Faulding also advises the UK Government and has advised the FBI in search techniques.

Specialist Group International has an arsenal of cutting edge equipment and a wealth of expertise at its disposal, which will help keep Surrey safe including:

- A helicopter, to provide vital intelligence from the air during wild fires and other major incidents
- A specialist dive team, which will make Surrey the first fire service nationally to have an underwater search capability
- A fleet of inflatable boats for use in water rescues and during floods
- A remote control submarine, side scan sonar and camera equipment for locating missing persons
- A fleet of 4×4 vehicles for rescues in hard to reach places and in extreme winter weather
• World leading expertise in confined space and collapsed structure rescue
• Specialist rope rescue team for cliff and tower crane rescue.

Kay Hammond, Surrey County Council’s Cabinet Member for Community Safety, said: “Specialist Group International is the best in the world at what it does and would provide rescue expertise we don’t currently have in a cost effective way. This groundbreaking deal is the first time a rescue company has provided permanent backup to a fire service.

“Most importantly, this will make Surrey a safer place. For example, more people die in incidents in the water than need to be rescued from house fires, so enhancing this capability will save lives.”

All fire and rescue services are required by law to have contingencies in place when resources are stretched, such as during a major incident, industrial action or a flu pandemic. Specialist Group International will support the fire service in keeping the county safe in such circumstances.
Tyne and Wear Fire Authority meeting 17th February 2014: review of operational response model

At its meeting today, Tyne and Wear Fire and Rescue Authority Members discussed the feedback received following their decision on 20 January 2014 to change the Service’s operational response model. This included a motion by North Tyneside Council and a petition to Sunderland Council.

Following the meeting, the Chair of the Authority, Cllr Tom Wright, issued the following statement: "Over the next three years Tyne and Wear Fire and Rescue Authority needs to find a projected £8.8m due to reductions in government grant; this continues on from the disproportionate reductions the Fire Authority has faced since 2010/11 leaving the Authority with no option but to examine front line cuts.

"On the 20 January after a detailed consultation, the Fire Authority met to examine the three options available, each one designed to minimise the impact of the financial situation on firefighter and community safety, something this Service has an excellent record in.

"It was with a heavy heart that Members agreed to implement option 3 (which included fire station closures and saves almost £5.5m), which was seen as the best option for the future of this Service. Since that decision Fire Authority members have continued to listen to public concern, specifically around station closures.

"The Fire Authority are in no doubt that changes to the frontline cannot be avoided due to the financial situation, and are committed to ensuring this change is phased in over a three year period to ensure that the excellent safety record of Tyne and Wear Fire and Rescue Service continues. The Fire Authority will, as agreed today, use approximately £6m from allocated reserves over this time and possibly more thereafter, to support the implementation of this change in a phased and gradual way.

"After considering the options available, the Fire Authority has decided it may be possible to avoid station closures in the short term, in the hope that the financial situation improves. It is clear however that if this is not the case then station closures will have to be re-examined.

"The Fire Authority has therefore agreed the following motion:

"The Fire Authority requests the Chief Fire Officer to bring forward an implementation plan for the Integrated Risk Management Plan (IRMP) which includes the following considerations:

- The IRMP implementation plan should be for a minimum three-year period.
- Station closures will only be considered as a last resort.
- Any station closures should only be in the final stages of the implementation plan.
- The Fire Authority will re-examine the IRMP annually in light of future financial settlements from Government.
- The Fire Authority will continue to lobby Government and Opposition MPs for a fairer financial settlement.
- The Fire Authority will continue to explore additional sources of funding to alleviate its financial pressures.

"The impact and size of the cuts will continue to be monitored to ensure the long term stability of the organisation. The Fire Authority’s number one priority is, and will always be, the safety of our staff and the public.

"We will continue to fight the cuts and call on the continued support of MPs, local councillors and the public in the North East to lobby government to prevent any future cuts to this excellent service."
The options the Service consulted on were:

**Option 1**

- Introduce four targeted response appliances (smaller vehicles); staffed by two firefighters, to attend lower risk incidents e.g. false alarms, rubbish fires. Two of the targeted response appliances would be staffed 24 hours a day whilst the other two would be available 24 hours a day, but dual staffed. This would be supported by dynamic call handling by experienced Control Room staff.
- Remove six fire appliances, based on a rigorous analysis of risk, incident patterns and travel times.
- Invest in new firefighting technologies to enhance performance and safety e.g. high pressure fire suppression systems.
- “Stand down” two fire appliances for up to 12 hours a night (during quieter periods) at less busy stations and with a lower risk of fire.
- All fire stations with one fire appliance to be crewed by four firefighters, rather than five. This is at Fulwell (Marley Park) Fire Station, Birtley Community Fire Station, Rainton Bridge Community Fire Station and Chopwell Community Fire Station. This is in line with the existing staffing at stations with more than one fire appliances.
- Reduce the number of aerial ladder platforms (ALPs) from three to two.

This would reduce firefighting staff by 20% (131) and costs by £5,109,689

**Option 2**

- Option 1 and;
- Replace two community fire stations (Wallsend and Gosforth Community Fire Stations) with a new community fire station around the Benton area (the exact location will be decided based on a rigorous analysis of risk, incident patterns and travel times).
- Due to the changes to community fire stations, increase the number of community fire stations with two fire appliances.

This would reduce firefighting staff by 20% (131) and costs by £5,279,689.

**Option 3**

- Option 1, 2 and;
- Close Sunderland Central Community Fire Station, which is surrounded by three stations
- Due to the changes to community fire stations, increase the number of community fire stations with two fire appliances.

This would reduce firefighting staff by 20% (131) and costs by £5,449,689.

Tyne and Wear Fire and Rescue Service continues to be committed to its aim of avoiding redundancies, wherever possible.

Between 2010 and 2017 Tyne and Wear Fire and Rescue Service’s budget will have been reduced by an estimated £12.9m (22%), including a projected £8.833m between 2014/15 and 2016/17.
Plans for a further roll-out of innovative Brigade Response Vehicles throughout the region have today been announced by West Midlands Fire Service.

The changes are the latest following ongoing reviews of how the brigade makes the most efficient use of its staff, vehicles and buildings, as well as how it responds to incidents and continues to deliver vital fire prevention and safety services.

The brigade has committed to keeping open its 38 fire stations, with at least one standard fire engine at all of them, and to maintaining its five-minute target response time to high-risk incidents.

Coventry, Highgate and Walsall stations will each have two fire engines available around-the-clock.

New Brigade Response Vehicles (specially-converted four-wheel drives) will be introduced in July and replace one of the two fire engines currently based at Northfield, Foleshill and Sheldon fire stations. One will also be deployed as a second vehicle at Fallings Park.

Phil Hales, Assistant Chief Fire Officer, said: “The safety of our firefighters and the public is central to everything we do. The changes take account of risk, and reflect a long-term strategy of having a vehicle fleet aligned to demand.

“No firefighters have been made redundant, but overall numbers are expected to decrease until at least 2015. However, because of the numbers leaving, we do plan to recruit some more this year.

“The result is that we are having to think of new ways of operating, but members of the public will not see a change in the level of service we provide. Our stations are staying open, and people will get an appropriate response when they need it. We are also committed to maintain what are probably the best fire service response times in the country.

“Our vital fire prevention and education work will also continue in homes, schools and businesses across the region. We’re in no doubt that this has made massive contributions to the drop in fires that we’ve seen in recent years.”

Councillor John Edwards, Chair of West Midlands Fire and Rescue Authority, said: “We are faced with the unprecedented challenge of losing more than £20 million of the money we get from the Government over four years. We are also at a point where around six firefighters are leaving the brigade a month through retirement or for other reasons.

“Earlier this year, West Midlands Fire and Rescue Authority agreed an average £5 a year increase on council tax, and promised that this would be used to protect frontline staff
Ultra-High Pressure Firefighting: The Fastest Attack

New technology is no stranger to the fire service. Consider our protective gear, SCBA, PPV, thermal imaging cameras, water additives, automatic proportioning systems and CAFS to name just a few. Ultra-high pressure (UHP) firefighting is yet another new revolutionary technology that will forever change the way we fight fires.

One of the best tools on the market for taking advantage of UHP is the PyroLance. This unique system installs in any fire vehicle to allow firefighters to gain access to interior fires by blasting a 3 mm hole through any wall, roof or other type of barrier. Once a barrier is penetrated, the PyroLance continues to shoot a UHP water fog to aggressively attack the ‘gaseous phase’ of the fire. This effectively knocks down the fire and rapidly cools the environment, thereby allowing for a safe entry to conduct search and rescue as well as overhaul operations.

Let’s take a closer look at how PyroLance is changing firefighting by using ultra-high pressure to pierce barriers, then rapidly cool and extinguish fires at their source.

THE BACKGROUND

Traditionally, we have always attacked the ‘fuel’ phase of the fire. Several years ago, researchers in Sweden began experimenting with ‘flashover’ simulators and the ‘gaseous’ phase of fire behavior.

What the researchers discovered was that by flowing an ultra-high pressure water fog into a fire’s thermal layer, they were able to inert the fire gases without introducing oxygen. As a result, the interior heat dropped significantly in a matter of seconds. With the fire controlled, the risk of flashover eliminated and the temperature reduced to a safe level, crews could now make a safe entry into the fire area.

Subsequently, other groups have conducted their own research to evaluate the cooling and suppression capabilities of UHP. All had similar findings.