

FIRE & RESCUE

INTERNATIONAL INDEPENDENT INTELLIGENCE

Setting the right standard

Strategies for avoiding costly mistakes when specifying a new fire truck

Vital statistics

Are Safety Data Sheets environmentally fit for purpose?



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North Carolina

approaching tornados. The participants trained at paddle boat, rope operations, survival swims, throw-bags, shallow water crossing techniques, contact and towed swim techniques, live bait rescue techniques and some further IRB Operations of ferry gliding and hovering, power turns, survivor recovery/pick-up – after which everyone went for safe shelter from the approaching tornado.

On the following day delegates headed to Lake James to await the arrival of the North Carolina National Guard aviators with one of their UH-60 Blackhawk helicopters to undertake HART Water Operations. North Carolina (NC) Emergency Management's Helicopter Aquatic Rescue Team (HART) is a 'special ops' team consisting of NC National Guard, NC State Highway Patrol air assets, emergency management and local emergency services personnel. Candidates for HART technician positions are chosen based on stringent prerequisite training, as well as a rigorous physical fitness evaluation. This partnership with soldiers from the NC Army National Guard is a very successful collaboration for missions involving swift water/flood

rescue, lost persons and urban/wilderness high angle rescues.

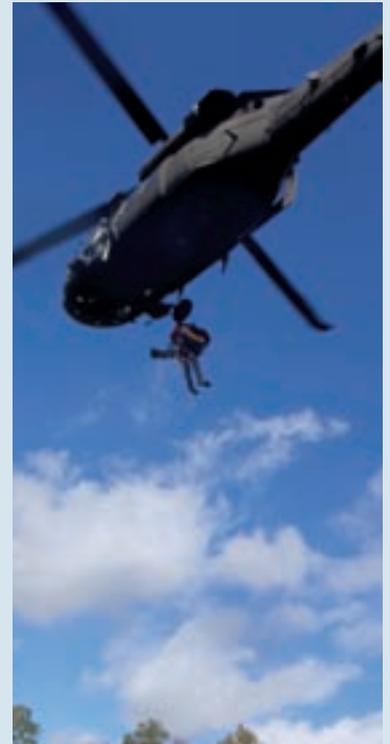
The attendees participated in several helicopter-aquatic rescue training operations.

The following morning the attendees undertook table-top exercises in wide area search operations (WASO).

The Floodfighters Conference was held on October 17, and the delegates enjoyed a very full programme delivered by expert presenters from all over the world on how to mitigate flood hazards and how to improve water rescue response. This was also broadcast on the web.

Deputy Chief Jeff Dulin said: 'The biggest thing that we get out of this is that we meet fellow firefighters from across the world and we exchange ideas – because they do things a little bit different than we do. In this manner we can always learn from each other. We build lifelong friendships.'

Chief Jon Hannan presented delegates with their IFE and NCEM CPD certificates, highlighting how much he had appreciated the excellence in training he had witnessed during the week.



Saved! A UK delegate is airlifted during a HART rescue evolution.
Photo: Professional Rescue and Charlotte FD.

The Swiss army knife of stretchers

ANYONE FACED WITH TRANSPORTING A CASUALTY OVER ROUGH, DIFFICULT TERRAIN OR REMOTE LOCATIONS NEEDS A STRETCHER THAT IS LIGHT AND STRONG AS WELL AS EASY TO CARRY, DEPLOY AND RE-STOW. IS THAT TOO MUCH TO ASK?

The perfect stretcher would feature cross-chest straps and a figure-of-eight foot harness that would permit vertical lifting without the risk that the patient would slide off at either end. Hopefully too it would include a number of other useful features: a system that would protect and immobilise the casualty's head – for instance – that could be used with or without a collar, not to mention the ability to stay afloat with a patient on board if the individual concerned was wearing a lifejacket. Useful too would be a lifting eyelet rated at 200kg at the top for vertical hauling or lowering.

All these qualities and a lot more are to be found in the Saviour Tactical Stretcher. That is despite the fact that it is a roll-up stretcher that weighs a modest 5kg or thereabouts as opposed to 10kg to 15kg for a normal stretcher.

'I designed it in conjunction with a manufacturer, and it's

made in a factory just outside Liverpool, UK,' said Saviour designer, Paul Savage OBE (Officer of the Most Excellent Order of the British Empire). 'Because it is British made it conforms with all the relevant EC Directives and requirements for CE marking,' he continued. 'UK production also means that we can ensure it is a quality product.'

'It comes in either a tube or a rucksack-type bag with dimensions of 70cm by 30cm by 30cm when packed. Furthermore, when in use, if required, it will fit inside any standard



The Saviour Tactical Civillian and its bag.



The Saviour series of stretchers cocoon the patient. They feature a 'double skin' down the centre for increased spinal support.

basket-type response stretcher for the onward patient journey. This means, for example, if firefighters are using a Saviour Tactical to help rescue somebody within a building, and a hydraulic platform with a basket-type response stretcher has to be deployed, the Tactical and the casualty can be put straight in the basket,' said Paul, adding that Saviour Tacticals fit into all standard aircraft litters too.

'What we're thinking about here is the onward patient journey. The ability to put a Saviour Tactical and the patient into so many things means that the patient doesn't have to be decanted all the time. This is crucial as we know that constant rolling and moving from one stretcher to another is detrimental to the patient.

'The Saviour Tactical is actually quite comfortable and comforting. It cocoons you.'

So-called because it can be deployed rapidly, the Tactical uses a skin made from low-density polyethylene. 'What makes it slightly different from normal roll-up stretchers however is that it has a double skin down the centre for increased spinal support.

'Another advantage is that all the straps are individually replaceable, which means that if you get one that is so significantly contaminated that there is no way it can be decontaminated, then you can simply change it. As a consequence you don't have to throw away a stretcher costing hundreds of pounds when you can spend £15 (\$22) on a new strap and it can be put back into use.' This is

an important advantage Paul stressed. 'There is no other stretcher of this type with replaceable parts currently on the market. Other stretchers are, theoretically, single-use, with straps that are sewn in with a lot of stitching, which means a lot of potential contamination points. The Saviour Tactical's straps have a five-year life while the skin has a ten-year life.'

The Saviour Tactical also comes with integral head and foot end drag harnesses. 'The harness is a 6m loop of material. Once the casualty is on the stretcher you can break the loop out, tuck it around you and start walking. You can drag them up and down stairs, across grass, across concrete, you name it. A single person can extricate a single person when needs be. In today's volatile world with the possibility for mass casualty incidents, the ability to drag will provide rapid effective evacuation using minimal rescuers.'

The materials used in the Saviour Tactical can cope with wet, sandy and other harsh environments. 'They've been trialled primarily under severe maritime conditions.' Plus they are X-ray translucent and CT scanner friendly. 'With the Saviour Tactical, a casualty can go from being trapped at the top of a building to being X-rayed or scanned at a hospital without having to be taken out of the stretcher at all.'

A non-intended bi-product of the cocoon nature of the Saviour Tactical is that it can act as an effective pelvic splint when the casualty is in it and the stretcher is tight. 'We've had cases where patients have undergone a CT scan and it has been discovered that the Saviour Tactical was the only thing that that was holding their pelvis together.'

Furthermore, the positioning of the straps means that defibrillator pads can be used and chest compressions performed, again without the patient having to be removed. The Saviour Tactical will fit an automatic LUCAS chest compression system too without modification.

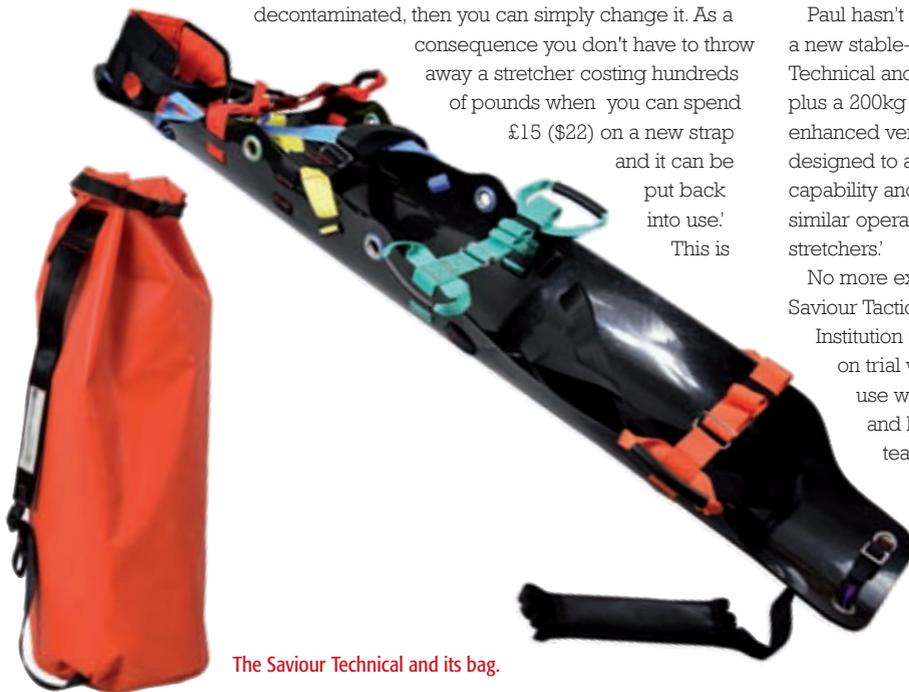
'Soft carrying handles ensure that two or four people can carry the Saviour Tactical easily. Poles can be used if heavier casualties need to be transported over long distances.'

Tactical is neutrally buoyant. Drop it into water and it will float and its ability to keep a patient in a lifejacket above the surface of the water means that it can be relied on in water rescues. 'You can swim the casualty out to a waiting boat using the drag harness.'

Paul hasn't stopped with the Saviour Tactical, and it now has a new stable-mate called the Saviour Technical. Opt for the Technical and you will get the same features as the Tactical, plus a 200kg horizontal lifting capacity as well as an enhanced vertical hauling capability. 'The Technical has been designed to add certified horizontal and vertical lifting capability and is therefore perfect for line rescue teams and similar operations. It really is the swiss army knife of stretchers.'

No more expensive than anything else on the market, the Saviour Tactical is in use with the Royal National Lifeboat Institution (RNLI) across its whole inshore lifeboat fleet and on trial with the Maritime and Coastguard Agency. It's in use with specialist units of the British armed forces too and has been sold to military and search and rescue teams abroad

'Before you buy another stretcher, consider the Saviour range. The Saviour Tactical and Technical provide solutions to all patient extrication and transportation issues in one cost effective unit. The ability to drag, lift, float, haul and winch makes these products unique in the market.'



The Saviour Technical and its bag.