

In the line of fire – when only the best will do



It's 45°C with the sun blazing down on a parched dusty terrain and an armoured personnel carrier has just been hit by an IED. The vehicle is badly damaged, lying on its side and on fire. Two soldiers are trapped inside, others have managed to escape the vehicle. Helicopter air cover is called up to ensure that the site is safe from insurgent attack and the on-station fire fighting team are immediately called on to get to the scene as fast as possible to extinguish the fire and hopefully release the trapped and injured soldiers alive.

This is just one of many dangerous scenarios which firefighters of the UK's Defence Fire Risk Management Organisation (DFRMO) are called upon to respond to at Camp Bastion in Afghanistan. The UK military is part of the ISAF coalition helping the Afghan people to develop their own military protection against the Taliban and other insurgent forces in their war-torn country.

This article will be looking at the role of DFRMO firefighters in protecting the Army, Air Force and Navy throughout the world where the UK has a presence in providing defence for its citizens.

Structure

DFRMO has three main legs to its operational structure, providing the necessary resources to meet the different levels of risk and the type of training and experience required.



In total, there are around 2000 firefighters making up DFRMO's operational strength around the world and these are drawn from three different sources. Active operational deployments use military trained firefighters in teams made up of RAF firefighters and Navy Aircraft Handlers/firefighters. These cover all active theatres, which currently include Afghanistan and the Falkland Islands. Non-active theatres, including the UK, Germany, Cyprus and Gibraltar, use firefighters from RN and RAF as well as the Defence Fire and Rescue Service. The third leg is formed from local employed contractors (LECs), including major public sector contractors e.g. Qinetiq, AWE Plc, Babcock and SERCO, who have a contracted responsibility for some UK locations as well as the Ascension Islands, where the UK firefighters work in conjunction with a local US team.

Afghanistan - Camp Bastion

Although impossible to appreciate the conditions on the ground at Camp Bastion, filmed reports



Oil tanker fire

from there over the past 10 years have left a lasting impression of the hostility of both the climate and environment and the ever-present threat of insurgent attack. Protecting the base is a team of 38 military firefighters deployed on four month tours working in watches on a 24 hours on/24 hours off rotational basis. There are two fire stations in theatre. One covers the domestic site and the other the airfield.

The domestic structural firefighters also provide cover for the technical area. Their roles and responsibilities include the maintenance of fire fighting equipment within the site, testing fire extinguishers, hydrants and fire alarms, as well as training other service personnel on fire safety issues. This fire team, along with the US fire service, also cover the hospital heli-pad, assisting the air medics with the unloading of personnel and casualties for



Hercules Fire

the hospital. Equipment includes a structural appliance and a variety of ARFF foam vehicles. A typical day's activities would include: familiarisation training on site specific and multi-national aircraft; servicing equipment; fire training army personnel and pre-positioning for casualty arrivals.

The airfield fire station covers all aspects and activities on the airfield involving multi-national fixed wing aircraft from the Hercules, BOEING Galaxy, BOEING Globe Master and Antinov transport planes to fighter jets as well as helicopters. The firefighters operate a selection of ARFF vehicles on the crash line with a number of Major Foam Vehicles (MFV) in reserve due to the fact that, unlike in the UK, replacement vehicles cannot be readily obtained from nearby locations. In the event of a major incident they provide immediate back-up until the off-duty crew report for duty. A typical day includes: training; aircraft familiarisation and responding to aircraft emergencies. There is no local aircraft training simulator as this is all undertaken prior to deployment.

Cyprus – Akrotiri

Cyprus is a strategic location for the UK's military. Set in the far east of the Mediterranean, it provides a vital staging post for troops and supply line for equipment. The volatile nature of the Middle East region is an ever-present danger to the area's security and stability and the bases on Cyprus are ideally located offshore to allow speedy response times for aircraft and personnel when required.

Akrotiri can be the central point for the assembly of troops and support teams travelling out from the UK or bases in Germany for final training and deployment to active theatres. Currently Afghanistan is the principal focus but in the past, Cyprus was a key location for troops and equipment deployed during the Iraq conflict. Around 50 RAF firefighters are based at Akrotiri.

Cyprus is home to two Sovereign Base Areas – East and West – which jointly have five operational fire stations: Akrotiri; Episkopi; Troodos; Ayios Nikolaos and Dhekalia. In addition to the Airfield Rescue Fire Fighting (ARFF) capability, DFRMO also has a structural response at Akrotiri. RAF Akrotiri response capabilities include six ARFF vehicles comprising five MFVs and one RIV and one MAN E1 structural appliance. The other four fire stations operate structural appliances consisting of seven Scania appliances and 10 water bowsters together with a number of support vehicles. As the Sovereign Base Areas extend offshore, they also have a responsibility for ships within their coastal areas and work closely with the Republic of Cyprus Fire and Rescue Service to meet all emergency responses. Wildland fires are particularly prevalent and demand high levels of interoperability between all the emergency response services in Cyprus.

Firefighter training on Cyprus covers the full range of risks and responsibilities including aircraft familiarisation as well as shipboard fire fighting, in which both RAF firefighters and Civilian Defence Fire and Rescue Service personnel will be involved. There are an additional 120 LEC firefighters deployed within the Sovereign Base Area to provide fire and rescue services for the military's land based assets.

Bicester

Bicester, centrally located within the UK, is one of the military's larger bases and plays a key role in the supply chain for UK and overseas bases. The site is served by some 26 firefighters of the Defence Fire Rescue Service. Their role includes providing a community fire safety service, fire risk management for defence infrastructure and an operational response and training capability supporting civilian and military community structural fire fighting support. As part of its civilian support role, DFRMO provides daily assistance for Oxfordshire Fire and Rescue Service, providing structural fire fighting support as required, as well as site asset protection, and ambulance services in Oxfordshire with whom they deliver first responder support to the community and back-up for road traffic incidents on public roads. Bicester has one fire truck on station with a number of other supporting vehicles. Training resources include a hot house facility, where regular training with BA equipment is undertaken.

Protecting the frontline

Protecting DFRMO's firefighters presents particular challenges given the extremes of climate and wide ranging operational environments, including the operational deployment of military firefighters. Selecting the right PPE is therefore fundamental in balancing the right level of physiological stress with effective protection in both hot and cold climates, taking account of the optimum wearer comfort under extended periods of active deployment.



DFRMO's ICP PPE range

In reviewing its needs during 2007/2008, DFRMO instigated a wide ranging review programme in which it evaluated a number of available options before taking the decision to opt for Bristol's ICP PPE, which was delivered and deployed across all its global operations during 2010. The ICP structural ensembles, similar in construction to Bristol's award winning Ergotech Action™ design, introduced leading edge design built on the most advanced fabrics available. The combination of a PBI Gold Ripstop™ outer fabric; a Gore Crosstech Airlock™ thermal barrier, which also gives protection against bloodborne pathogens, and a Nomex Comfort™ fabric inner lining was

chosen on the basis that it provided the best all-round answer to meeting the complex requirements of firefighters from the Falklands to Afghanistan.

Since DFRMO selected Bristol's kit, the Australian Defence Force has re-evaluated its firefighters' needs and, in 2012, contracted with Bristol to equip it with Ergotech Action2™ fire coats and trousers for its Army, Air Force and Navy.

DFRMO adopted the ICP PPE as part of a Fully Managed Service (FMS), through which the head-to-toe firefighter protection will be acquired under a lease arrangement, with garment lifetime maintenance provided under the managed services element of the contract. Phil Salt, CFO, said, "Firefighter safety can never be over emphasised and ensuring our personnel are provided with the right levels of protection for the risks they face is paramount. I have great confidence in the PPE and services being provided by Bristol Uniforms and believe we have achieved a level of protection that balances the appropriate levels of thermal protection against the physiological stresses firefighters are exposed to. The Integrated Clothing Project has delivered an effective, robust and versatile solution that will meet the needs of our firefighters for the next 10 years."

Bristol's joint MD, Roger Startin, added, "DFRMO adopted the ICP as the preferred procurement option for their firefighter PPE back in 2009, took delivery of and deployed their kit in January 2010 and were the first to contract for our Fully Managed Service. Now, with nearly four year's experience working together, we can judge the success of the project as having resulted from our commitment and continued ability to meet DFRMO's requirements over the long term. Working together to ensure the smooth running of a contract which covers not only firefighter PPE, but also station wear and ceremonial uniforms, has been made possible through the close working relationship we have developed. Ultimately, both DFRMO and Bristol have enjoyed the benefits which mutual trust and close collaboration have delivered and which we intend to continue to deliver throughout the full term of the contract."

Reader Reply No.

Author: Bristol Uniforms' Joint Managing Director, Ian Mitchell and DFRMO Area Manager Barry Lewis, Operations Capability Manager



DFRMO's ICP station wear