## News story: Qatari jet export deal swings into action

The deal, worth around £5bn includes the aircraft and a bespoke support and training package. Qatar is now buying nine Hawk trainers, rather than six, which will also be welcome news for BAE Systems' factories in Warton and Brough which make the jets.

Welcoming the news, Defence Secretary Gavin Williamson said:

This monumental, multi-billion-pound deal is now officially in place, and those from across government and industry who have worked so hard on it together can be extremely proud to see it reach this stage. It's a massive boost to the British defence industry, helping to support thousands of jobs, and it will help us further build the trust between the UK and Qatar to tackle the challenges we both share, support stability in the region and deliver security at home.

UK Export Finance's (UKEF) £5bn package of support was vital to securing the deal, including by providing financing and insurance. UKEF's role is to support UK exports including by providing export finance to enable overseas buyers to purchase goods and services from the UK, and export insurance for companies selling overseas.

International Trade Secretary, Dr Liam Fox said:

The UK Government is proud to be a part of this hugely significant export contract, supporting BAE Systems, its nearly 35,000 employees and the 9,000 companies in its supply chain.

This support from UK Export Finance will sustain jobs in one of the UK's key industrial sectors, support economic growth, and strengthen our own defence capabilities as well as those of a key strategic ally.

BAE Systems Chief Executive, Charles Woodburn said:

This contract, effective today, represents a significant step in BAE Systems' long-term relationship with the State of Qatar, as it becomes the ninth country to choose Typhoon. The proven combination of Typhoon and Hawk will provide the Qatari Armed Forces with the most advanced and flexible multi-role combat aircraft on the market today, along with best in class support and training.

The Defence Secretary Gavin Williamson and his Qatari counterpart, Dr Khalid bin Mohammed al Attiyah, oversaw the signing of the deal in Doha in December. Deliveries of the first Typhoon aircraft are expected to commence in 2022.

The deal also involves a package of training and co-operation between the British and Qatari Air Forces which will see them working closely together in the future. A new UK-based Typhoon joint squadron, reformed as No.12 squadron, will comprise both Qatari Emiri Air Force and RAF personnel, including pilots and ground-crew based at RAF Coningsby in Lincolnshire ahead of the delivery of the aircraft. It represents a unique initiative, with the RAF not having formed a squadron with another nation since the Second World War and the Battle of Britain.

The UK and Qatar share mutual interests in countering violent extremism, and ensuring stability in the region, and the deal further reinforces those ties by helping to prevent terrorism from spreading and protecting the prosperity and security of the UK at home.

Qatar is the ninth country to purchase the Typhoon, with the deal sustaining thousands of UK jobs. The MOD continues to bang the drum for the UK's world-leading aerospace industry, with sales of defence equipment to foreign customers surging by 53% last year to £9bn.

The UK is a world-leader in the combat air sector, with a mix of skills and technologies unique in Europe, supporting over 18,000 highly skilled jobs. The sector delivers a turnover of more than £6bn a year and has made up over 80% of defence exports from the UK over the last ten years.

The support follows the launch of the Government's Export Strategy, which sets out how the government will support businesses of all sizes to make the most of the opportunities presented by markets around the world.

#### News story: UK tests life-saving chemical detection robots and drones

Tests of the cutting-edge multi-million-pound project, co-funded by the Ministry of Defence and the Home Office, included robots that can 'read' and climb stairs and miniature drones weighing less than a bar of soap which could soon come into service to rapidly assess hazardous scenes.

The aim of the ground-breaking research, named Project Minerva, is to reduce the risk to emergency services and front-line troops attending incidents or operations involving hazardous chemical or biological materials. The recent trials, which took place at Gloucestershire Fire Service College, saw concept drones and robots thrown into simulated contaminated scenarios in both UK homeland and battlefield environments. The technology was tested against the

speed and accuracy of human response teams supported by specialist DSTL scientists, the military, police and fire services.

Defence Secretary Gavin Williamson said:

Following the reckless nerve agent attack in Salisbury this year, we have seen the bravery and professionalism of our Armed Forces, emergency services and MOD scientists. They have worked tirelessly to investigate and clean up deadly contaminated areas. This project will ensure we stay at the forefront of dealing with such heinous attacks, whether on our streets or on foreign battlefields. We are investing millions in this pioneering technology to do more to protect those who so fearlessly protect us.

The Minister of State for Security and Economic Crime, Ben Wallace, said:

I am excited to see the UK being on the front-foot and leading in the development of these autonomous technologies which are secure, reliable and useful for dangerous sites. The potential to protect our responders and protect the public from potentially hazardous scenes is considerable. The UK's experience and pedigree in security means we are in a prime position to identify what is best placed to tackle the threats of the future.



Project Minerva tests cutting-edge robots and drones at DSTL, Porton Down.

Crown copyright.

Project Minerva was launched in September 2016 and has been supported by over £3 million in joint funding over 24 months. The project intends to bring the designs from concept to reality in an accelerated timeframe. The recent trials involved the winning concepts for phase 2 of the project.

The project is led by the Defence Science and Technology Laboratory (DSTL). It is funded jointly by the Ministry of Defence science and technology portfolio and the Home Office and contracted through the Defence and Security Accelerator (DASA) with funding from Defence Science and Technology (DST).

Peter Stockel, DSTL's autonomy lead, said:

These two weeks of trials see the culmination of over 18 months of work to realise an exciting vision, which could see robots and humans working together in demanding situations and potentially save lives when dealing with incidents involving hazardous substances. In this 'technology exploration', we've been working with industry and academia to rapidly advance robotic and autonomous solutions to enhance our response options and tools for the near future.

With continued involvement across Government, and demonstration with the user community, we aim to mature this emergent capability to test the 'art of the possible' and accelerate this into the hands of the prospective users for further operational evaluation, both for MOD and the Home Office.

Major John Green, Military Advisor CBR Division for DSTL, said:

The military is putting a lot of time and effort into CBRN [chemical, biological, radiological and nuclear] and Minerva could have a significant effect on our capability and potentially decrease the training burden. It is a project for everything else to build on.



Project Minerva tests cutting-edge robots and drones at DSTL, Porton Down. Crown copyright.

The Defence Secretary Gavin Williamson also announced measures to maintain the UK's world-leading chemical analysis and capability in March, when he outlined £48 million-worth of investment in a new Chemical Weapons Defence Centre at DSTL.

Phase 1 of Project Minerva, which ran for 6 months until July 2017, funded 18 development projects and was worth £1.37 million.

Four teams were then selected to develop their concepts further in this second phase. Just over £1.6 million total funding was awarded to the following phase 2 winners, all of which are small-or-medium-sized enterprises and academic institutions:

- BMT Defence Services (with Rescue Global, Herriot Watt and Edinburgh Universities), with Red Alert, unmanned aerial vehicles which have gassensing technology and 2D-and-3D mapping and modelling, all mounted on commercially-available drones to allow upgrades as drone technology evolves.
- Horiba MIRA, with a small purpose-designed ground robot, which can deploy on decontamination missions, climb stairs and 'read' or recognise hazardous chemical signs and symbols, exploiting cutting-edge neural network technology.
- Loughborough University (with Swarm Systems and Createc) with SceneSEARCH a pocket-sized nano-drone weighing in at less than 250g which has gas sensors and video and thermal imaging capability.

• Snake Eyes, by Autonomous Devices Limited and Pendar, a unique hybrid air and ground vehicle optimised for confined spaces which can relay 3D images of a space and detect chemical agents using a compact laser system.

For more information on Minerva click here.

## News story: International Federation of Pharmacists' Annual Congress

This year the Military and Emergency Pharmacy Section (MEPS) of FIP represented over 20 countries. Members are from a variety of defence organisations including those from Canada, New Zealand, Ireland and the Australian Medical Assistance team and non government organisations working in the field of disaster relief.

The UK military were represented with Lt Col Ellie Williams co-ordinating the core MEPS events, including a meet and greet event at the Royal Highland Fusiliers Museum, a formal dinner night at the Royal College of Physicians and Surgeons of Glasgow and the Host Nation Study Day. The latter was held at Edinburgh Castle and supported by a multidisciplinary UK defence team presenting on vaccinations, the fielding of a new operational analgesia and distribution of blood products in field conditions.

MEPS president said

The visit to Edinburgh Castle was especially informative. The presentations demonstrated the similar challenges and opportunities that most of our organisations face. This ability to share and resolve problems together is what makes MEPS a successful collaboration of pharmacists.



Lt Col Ellie William's receiving a Certificate of Appreciation' from the Federation Internationale Pharmaceutique (FIP). MOD Crown Copyright.

# News story: Defence Minister hails enormous Shropshire military hub as transformative for frontline troops

The Minister visited the £83 million Defence Fulfilment Centre (DFC) after touring the armoury and current logistic facilities on-site at MOD Donnington. The 80,000 square-metre centre, due to be fully operational in 2019, is the size of ten football pitches and will streamline distribution and storage.

It is set to deliver over £300 million worth of savings by 2028 by streamlining the way storage and distribution is delivered and restructuring the way contract negotiations are conducted for commodities.

With two warehouses and a support building, it will be a central hub for storage and distribution of defence's £30 billion inventory, including spare parts, food, clothing, and medical supplies.

Defence Minister Stuart Andrew said:

We've invested over £80m in this enormous Shropshire centre as we are determined to ensure our personnel have everything they need, from batteries to boots, wherever they are in the world. This hub will have a transformative impact on our troops once it is fully up and running next year, putting a truly state-of-the-art supply network at the fingertips of our brave men and women on the frontline.



Defence Minister hails enormous Shropshire military hub as transformative for frontline troops. Crown copyright.

The DFC is part of the Logistics Commodities and Services Transformation programme. In April 2015 the MOD signed a 13-year contract, worth approximately £6.7 billion, with Team Leidos to run the storage, distribution and commodity procurement functions formerly performed by the Logistics Commodities and Services Operating Centre.

Alongside special environmental storage, the DFC's automated storage and retrieval system will be capable of picking more than 1,000 items an hour.

Roger West, Director Logistics Delivery at DE&S, said:

It was a privilege to welcome the Minister to MOD Donnington and accompany him on a tour of the site and the Defence Fulfilment Centre.

The DFC will make a significant contribution to us providing

better, more efficient, storage, distribution and commodity procurement services for our armed forces.

The delivery of this facility is testament to the excellent relationship between DE&S and our delivery partner Team Leidos.

DFC is managed by Kuehne + Nagel on behalf of Team Leidos, and will use new warehouse management systems to maximise value for money and manage the complex supply chains of the 21st Century seamlessly.

Matt Wiles, Vice President Leidos UK, said:

It was an honour to welcome the Minister on behalf of Team Leidos to the Defence Fulfilment Centre (DFC).

Following the DFC's official opening in April 2017, we have successfully installed and integrated new information systems with the MOD's and started an 18-month programme to re-locate much of the MOD's stock holdings into the new facility.

When fully operational, the DFC operated by Kuehne & Nagel on behalf of Team Leidos, will help deliver a modern agile, responsive and modern supply chain to the MOD at significantly better value for money.

#### News story: UK standing by for Storm Isaac in the Caribbean

As the storm makes its way towards the Caribbean Windward islands, an Operational Liaison and Reconnaissance Team has been deployed to work with the Governors and supporting agencies on the islands. A further 87 engineers, medics, maritime experts and other specialists have joined the regular crew of RFA Mounts Bay, which is the mobile hub of the British relief effort. Approximately 1,000 personnel are deployed or being held at high-readiness for if further storms head towards the region.

Homes were destroyed and infrastructure was decimated when Hurricane Irma and Maria, two of the most powerful hurricanes for decades, hit the region backto-back in September 2017.

Defence Secretary Gavin Williamson said:

I want to assure everyone in our Overseas Territories that our

Armed Forces have been pre-positioned in the region and are absolutely prepared to help. We will be there to support during this hurricane season while still helping those whose lives were devastated by Irma and Maria to rebuild their lives and homes.

As well as being able to carry vital aid and equipment, RFA Mounts Bay will use the Royal Navy Wildcat helicopter on board to provide aerial support. There is also a medical facility on board, with 10 patient beds.

The Humanitarian Assistance and Disaster Relief (HADR) troop, consisting of Royal Engineers from the British Army and Royal Marines, have been training with their French counterparts in Martinique to ensure they are fully prepared. This training is part of a six-month deployment to the region for hurricane season, while RFA Mounts Bay also carried out a significant HADR exercise in July.

Commanding Officer of RFA Mounts Bay, Captain Peter Selby RFA said:

As proved during our Humanitarian Assistance and Disaster Relief exercise in July, RFA Mounts Bay is prepared and ready to assist the Government and people of Montserrat. We are currently on route and undertaking the final stages of preparation for our response.

As well as preparing for this year, RFA Mounts Bay was in the region when Irma struck last year and will remain there until 2020 to provide support to the islands.

Captain Jonathan Cooke of 24 Commando Royal Engineers (24 Cdo RE) OC HADR Troop said:

Humanitarian Assistance and Disaster Relief Troop onboard RFA Mounts Bay is ready to assist residents on Montserrat. We have previously deployed to the island both in July and on Operation RUMAN last year and have gained a good understanding of the current status of the island and infrastructure in order to best support the island if required.

Montserrat Governor Andrew Pearce OBE said:

We are delighted to welcome this small team from the Armed Forces as we make our final preparations for the approaching storm. I am also particularly reassured that if we need her, RFA Mounts Bay is ready to respond.