

[News story: Xbox controllers, Hoverbikes and robotic trucks trialled by British and American Armies](#)

Continuing the MOD's investment in cutting-edge technology, the UK has been working with the US military on autonomous resupply, providing a glimpse into the future of getting much-needed supplies to the front line.

In a week-long exercise in Michigan, the UK MOD's Defence Science and Technology Laboratory (Dstl) and organisations from the US Army's Research, Development and Engineering Command (RDECOM) have been testing an all-terrain 4x4 vehicle controlled by an Xbox-style controller, driverless trucks in convoy and Hoverbike drones for delivering supplies in the most dangerous "last mile" up to the battlefield.

Defence Minister Harriett Baldwin said:

One hundred years ago we pioneered tank warfare with our US allies, and today we remain right at the forefront of military technology together. This exercise has proven the success of our ongoing investment in science and technology as we see concepts becoming reality. This particular project is spearheading solutions to the notoriously dangerous operation of supplying our frontline on the battlefield. Delivering crucial food, fuel and ammo remotely will help save soldiers' lives.



A British Army MAN SV 6-tonne truck leading two US Light Medium Tactical Vehicle trucks in a driverless convoy.

This is a new way of coordinating and delivering vital supplies to front-line operations, aiming to reduce risk to those troops and provide on-demand delivery of food, fuel or ammunition to the front line. The Coalition Assured Autonomous Resupply (CAAR) demonstration, the first in a three-year project to bring concepts to life, marked initial demonstration of unmanned tactical resupply technologies in the three areas.

The line-haul convoy is the first time ever that a UK-US collaboration has joined together in this format, with a British Army MAN SV 6-tonne truck as a 'leader' vehicle in the convoy, followed by two US Light Medium Tactical Vehicles (LMTV) trucks. Travelling at speeds of up to 25mph, the vehicles used integrated robotics to make decisions about speed, steering and other driving functions.

The Unmanned Aerial Vehicles (UAVs) demonstrated included the British-developed Malloy Aeronautics Hoverbike. An advanced prototype quadcopter drone, it can deliver more than 100kg of supplies, using a simple tablet controller. Unveiled for the first time, this version of the Hoverbike could also potentially be used for humanitarian aid and disaster relief missions.

The 4x4 vehicle tested was a tele-operated Polaris MRZR, fitted with advanced sensors, cameras and GPS, and operated by a joint UK-US trials team. Using an adapted Xbox game console controller, Corporal Mortimer and Lance Corporal Thorne remotely 'drove' the 4x4 around the area to simulate an off-road task.



A remote-operated 4x4 being tested by the British and US Armies out in Michigan.

Pete Stockel, innovation autonomy challenge lead for Dstl, said:

Following the communique signature between the two nations in 2014, we have been working closely with our American counterparts to develop effective demonstrations and assessments of important new autonomy technologies, which could one day reduce the burden on and risk to the military user, while improving logistics efficiencies and interoperability.

This is the first time that we have created a UK-US coalition semi-autonomous leader-follower convoy to bring to life concepts which will provide solutions to de-risk the Last Mile of logistics support to the front line.

We are enormously excited to be working with our US colleagues on this project, delivering on the commitment announced at the Farnborough Airshow in 2016. It has been an exciting challenge to drive this forward at pace. This could be a step-change in how operational risk might be managed, costs could be reduced and – ultimately – lives can be saved, as a result of harnessing this rapidly-evolving technology.

Under the Autonomous Last Mile resupply challenge, Dstl and the Defence and Security Accelerator (DASA) are bringing together a wide range of military

and industry partners to join commercial-off the-shelf (COTS) suppliers with novel ideas and tech start-ups in producing a futuristic demonstration of how UK and US forces' tactical resupply might one day operate.

Colonel John McCrann, from Army Headquarters, said:

The British Army is keen to work with its US counterparts through Dstl to identify where autonomous technologies can benefit UK military capability.

Jeffrey Ratowski, TARDEC's project leader for the Coalition Assured Autonomous Resupply (CAAR) effort, said:

We're using US and UK Soldiers to control multiple robotic assets including the convoy, the autonomous last mile- ground piece, and there's also an autonomous last mile- air piece.

The MOD spends 1.2% of its rising £36 billion defence budget on science and technology. In September Defence Minister Harriett Baldwin [announced the 25 winners of the Last Mile Challenge](#), up-and-coming tech startups and entrepreneurs hoping to bring innovative solutions to resupply the frontline.

Any entrepreneurs can apply to Pitch@Palace Series 9.0, the theme of which is "Data, Intelligence, and The Future of Security". A Defence themed On Tour Event is scheduled to take place in London on 31 January 2018. Find out more or apply to take part [here](#).

[News story: Defence Minister reaffirms UK commitment to European security](#)

Defence Minister, Lord Howe, met counterparts at the European Foreign Affairs Council in Brussels today. He reaffirmed the UK's commitment to European security and highlighted the role we play as a global foreign policy and security actor.

Defence Minister, Lord Howe, said:

We are leaving the European Union but not Europe, and regional security remains top of our agenda in the face of increased Russian assertiveness.

With challenges to our common security becoming more serious, our response must be to work together more closely.

Lord Howe discussed the important role the UK plays in European security matters as we prepare to exit the European Union, and highlighted our commitment to the region as a leading member of NATO in a session attended by NATO Secretary General, Jens Stoltenberg.

He reiterated that the UK is unconditionally committed to maintaining Europe's security in the face of an unprecedented range of internal and external threats to the safety and security of our citizens, from international terrorism to cyber threats. This follows the meeting of NATO Defence Ministers in Brussels last week, attended by Defence Secretary, Gavin Williamson, in which he committed four RAF Typhoons to the Southern Air Policing mission in Romania next summer as well as a Battalion that will be held at high readiness to respond to any situation in the Western Balkans.

[News story: UK and Australia step up defence relationship as ministers meet](#)

Amongst the discussions was a meeting with her Australian counterpart, Minister Christopher Pyne, who is responsible for procurement for the country's military.

Australia is the UK's 13th biggest export market, with £8.6bn of goods and services sold in 2015 and the Type 26 Global Combat Ship has been shortlisted for Australia's Future Frigate programme.

The Type 26 is an advanced Anti-Submarine Warfare frigate that will provide essential protection to Britain's nuclear deterrent and new aircraft carriers.

Defence Minister Harriett Baldwin said:

From the first world war to defeating Daesh in the Middle East right now, the UK and Australia continue to fight side-by-side for the values we both share.

In the face of mutual intensifying threats, the strong relationship between our countries allows vital discussions over how best to protect ourselves. As the Australian Navy looks for a new frigate, the Type 26 is a very strong candidate and I hope to see it form the backbone of our Five Eyes partners' navies for decades to come.



Minister Baldwin touring Australian Navy Fleet Command facilities in Sydney.

The visit to Australia comes shortly after Minister Pyne came to London and met Minister Harriett Baldwin earlier this month.

During his visit, BAE Systems announced that they had awarded a further 15 manufacturing contracts to suppliers of the Type 26 programme. Not only did that increase the number of UK maritime jobs supported by the programme to over 4,500, but it also included contracts with two Australian companies, showing the deepening co-operation between the British and Australian defence industries.



The Australian Army show Minister Baldwin the Bushmaster vehicle.

On the flipside of the countries' export relationship, the UK was Australia's fifth largest export destination in 2016, valued at almost A\$15bn. Whilst in the country, the Defence Minister viewed a Bushmaster Protected Mobility Vehicle demonstration.

The Bushmaster protected vehicle, already in service with the Australian Army, is manufactured by Thales Australia and is one of two potential solutions under consideration as the UK looks for another troop-carrying vehicle and protected battlefield ambulance. A decision on the procurement, package two of the UK 'Multi-Role Vehicle-Protected programme' (MRV-P), is anticipated next year.

Alongside Australian Defence Minister Pyne the Defence Minister announced the intention to look at the feasibility of fitting a cutting-edge Australian radar on future British warships. The pair announced that a capability study to fit CEA Technologies' 'CEAFAR' radar to British ships will begin early next year at the second Australia/UK Defence Industry Dialogue in Adelaide. The radar is already in-service with the Australian Navy.



Minister Baldwin at CEA with British High Commissioner to Australia, Menna Rawlings, looking at radar systems.

The Defence Minister also laid a wreath on behalf of the UK at a Remembrance Sunday commemoration event in Canberra on Saturday.

[News story: The Nation remembers](#)

The nationally observed two-minute silence, and the laying of wreaths at the Cenotaph, commemorates those Servicemen and women killed in all conflicts since the First World War.

This year, The Queen viewed the ceremony from a balcony of the nearby Foreign & Commonwealth Office, alongside The Duke of Edinburgh. Her Majesty's wreath was laid on her behalf by The Prince of Wales.

The Prime Minister also attended the service along with Defence Secretary, Gavin Williamson, and other members of the Cabinet, former Prime Ministers, The Chiefs of Staff and over 700 regular and reserve personnel.

For the Royal Family, wreaths were also laid by The Duke of Cambridge, Prince Henry of Wales, The Duke of York, The Earl of Wessex, The Princess Royal and The Duke of Kent.

Paying tribute to members of the Armed Forces, both past and present, the Prime Minister, Theresa May said:

It was an honour to attend the Remembrance Sunday service and to lay a wreath at the Cenotaph in memory of all those who have died in defence of our freedom. This time of year should remind us that our way of life is only made possible by the bravery of the men and women who are prepared to make the ultimate sacrifice to keep us safe.

We should also take great pride in the way we come together as a nation to honour the fallen. Today I pay tribute not just to our Armed Forces but also to those who stand alongside them in this small act of remembrance each and every year.

To signal the start and the end of the two minutes' silence soldiers from the King's Troop Royal Horse Artillery fired a round from nearby Horse Guards Parade which echoed around Whitehall.

As the artillery noise faded, buglers of the Royal Marines sounded the poignant Last Post, which traditionally signalled the end of a soldier's day.

Following the ceremony thousands of veterans from the Second World War and more recent conflicts such as Iraq and Afghanistan, marched past the Cenotaph.

Defence Secretary, Gavin Williamson said:

I am proud to stand alongside members of the Armed Forces and veterans at the Cenotaph to reflect on those who have made the ultimate sacrifice. This year we have commemorated the centenary of the Battle of Passchendaele where the fields of Flanders saw enormous bravery and vast sacrifice.

On Remembrance Sunday we remember all conflicts including our heroes from more recent wars in Iraq and Afghanistan. Around the globe there are currently thousands of troops deployed in 25 operations in more than 30 countries, often putting themselves in danger to make us safer and more secure at home.

After the service at the Cenotaph, The Earl of Wessex took the Salute at the March Past of Veteran and Civilian Organisations, at Horse Guards Parade.

The Armed Forces also marked Remembrance wherever they were in the world, from guarding NATO's eastern border, to striking Daesh in Syria and to the Mediterranean where the Navy is assisting in migrant rescue operations.

[News story: Defence Secretary hosts first meeting in UK with Secretary Mattis](#)

Both have just returned from NATO and counter-Daesh Ministerial meetings in Brussels, where the alliance agreed to adapt its command structure to better reflect the security environment, announcing the establishment of two new headquarters: an Atlantic Command and a Logistics Command.

NATO is the cornerstone of UK and US defence and both nations have been leading calls for NATO to adapt to future threats. The meeting in London focussed on three themes: current threats, capability and shared prosperity.

Defence Secretary Gavin Williamson said:

“From fighting in the trenches of the Great War to countering Russian aggression and tackling Daesh today, the UK has been America’s closest partner for a century. Today our countries are cooperating on everything from operations and intelligence to innovation and this meeting is an opportunity to continue strengthening our special relationship.”

Despite being close to defeat in Iraq and Syria, Daesh remains a concern for the UK and US and the British Defence Secretary reaffirmed his support to the US-led coalition. The pair also discussed the increasing assertiveness from the Kremlin, as the UK stands side by side with US and NATO allies, leading the enhanced Forward Presence Battlegroup in Estonia and contributing soldiers to the US-led Battlegroup in Poland.

Amongst only six NATO countries meeting the commitment to spend at least 2% of GDP on defence, the UK and US are investing heavily in next generation technology, including the F-35 aircraft. US F-35s will fly from the HMS Queen Elizabeth carrier in 2021, demonstrating the close relationship between the two countries.

The defence trading relationship between the UK and US is worth £3 billion a year and as the UK looks beyond Brexit, both countries hope to strengthen that relationship too.