

News story: Intelligence technology to keep Joint Force Command one step ahead of adversaries

The 'predictive cognitive control system' is being developed by Gloucestershire-based Montvieux and funded by the MOD's Defence Innovation Fund through the Defence and Security Accelerator's (DASA) fast track 'Revolutionise the human information relationship for Defence' competition.

The system takes a broad range of incredibly complex data, beyond the ability of analysts to simultaneously comprehend, and through the use of Deep Learning based neural networks, is able to make confidence-based predictions of future events and outcomes of direct operational relevance to Defence Users.

As part of Phase 2 development, the system is being refined in the innovation environment at RAF Wyton, and is being deployed into the live operational network (as a Beta service).

This will provide Defence analysts with a Machine Intelligence prediction Joe Hemming, Exploitation Lead said –

“This project is a great example of collaboration between DASA, the competition sponsors (Joint Force Command) and the front lines working hard to turn technology into true capability. It's a clear demonstration of the cultural shift across all organisations to focus on capability integration and exploitation as well as technology development.

Joint Force Commands operational deployment of this technology will allow real users to test the technology in a representative environment which will also demonstrate the real value of the technology to defence. Montvieux received over £600,000 in funding over both phases of the competition.

Lt Col Jon Kerr, Head CII said –

“The DASA has enabled the Centre for Intelligence Innovation to meaningfully engage with industry to understand their innovations and how they might apply to our work. It has then enabled us to shape the development of and deploy Montvieux's application onto our operational system.

This ability to engage early and partner with industry to deliver a solution has been invaluable to us. It has allowed us to put the front edge of innovation from UK industry through an accelerated development process and consequently fast-tracked the delivery of an appropriate solution for Defence.”

Peter Webb, Director of Montvieux, said –

“The parallel focus of DASA on placing advanced capabilities in the hands of military users and developing wider exploitation opportunities, including commercial opportunities, has given us the space to think differently about

how we operationalise our research and innovation within the company. With the help of DASA, we have been able to plan-back from potential commercial outcomes, and identify the right industry partners to move this forward.”

The willingness of Defence, especially CII, to think differently about partnering, rather than conventional contractual relationships, has meant that we’ve been able to jointly support each other. The result is that Defence analysts are getting an amazing capability that generates real insight from the huge volume of information they hold, but also that we will get critical feedback from the operational use of our service. The reference point of having our services in live use also adds credibility to our commercial discussions with industry partners, this is further enhanced by our associated and support from the DASA.

Overall we have found our engagement with DASA invaluable and would encourage other companies to think differently and get involved. We are also hugely appreciative of the critical role our DASA’s Technical Partner has played within the project, especially connecting us with the right people in defence at the right time to help maintain our momentum.”

See the video below for more from Peter Webb, Director of Montvieux:

[Andrew Wire, Montvieux](#)

[News story: Defence Minister announces new prosperity framework between UK and Lockheed Martin](#)

Under a new Prosperity Framework, the UK Government and Lockheed Martin will work together to identify new opportunities to generate value to the UK and to Lockheed Martin. The Framework will work on the creation and exploitation of innovative ideas and technologies; strengthening supply chains; and supporting the development of the advanced manufacturing and technology sectors. This will bring considerable benefits to the wider defence, aerospace and space sectors of the UK economy, creating and sustaining high-level technology jobs and skills in key industries.

Supported by investment of £38 million from Lockheed Martin, opportunities for potential collaboration will be identified across defence and commercial sectors including in autonomous systems, space, artificial intelligence, cyber security, electronic warfare and underwater technologies.

Defence Minister Guto Bebb said:

Lockheed Martin's commitment clearly demonstrates how they view the UK as a top country to work with, with our world-class defence industry, supported by powerhouse universities and a wealth of high-tech and innovative small businesses.

As we look to our post-Brexit future, it is crucial that we create, develop and strengthen our relations with international partners across defence. Foreign investment in defence stimulates robust growth across a host of sectors in the British economy so this should be at the forefront of our international aspirations.

Lockheed Martin has been a partner in UK Defence for almost 80 years and currently adds £1 billion to the economy every year, supporting 1,000 suppliers (75% of which are SMEs) and 10,000 jobs. This mutually beneficial relationship provides the company with its second largest international market. Both the government and Lockheed Martin want this partnership to grow from strength to strength.

Rick Edwards, Executive Vice President for Lockheed Martin International said:

We greatly value our partnership and see this agreement as a way to strengthen our relationship and help the UK to prosper. Our expertise in developing new technology like autonomous systems and exploring new frontiers like space will be invaluable in helping the UK to be a world leader in defence and aerospace.

Minister for Investment, Graham Stuart said:

This partnership with Lockheed Martin, a major global defence company, is great news for the UK, and further reinforcement of this country's position both as the European leader in technology and the number one foreign direct investment destination across the EU.

This is a vote of confidence in the UK's R&D capabilities, its innovative companies and a fantastic commitment from Lockheed Martin to support the development and expansion of their UK supply chain. It is also good news for current and future jobs in the sector whilst ensuring the UK can continue to develop its world leading defence and aerospace industries.

Phillip Dunne's independent review of the prosperity benefits that flow from defence, reinforced the importance of building strong relationships with companies such as Lockheed Martin. This Framework will drive growth and investment in the UK and develop technologies and capabilities which can be exploited for the benefit of defence, the 500,000 jobs it supports, and for the broader UK economy.

Initial objectives for the Prosperity Framework include:

- Activities to assist UK companies to understand Lockheed Martin's business, and technology roadmaps, enabling them to contribute to Lockheed Martin programmes worldwide.
- Activities to improve the performance, resilience and competitiveness of UK supply chains, which will inform Government's wider business and supply chain improvement initiatives.
- Building on Lockheed Martin's work with the UK Space Agency and £13 million investment to develop launch and small satellite capabilities.
- Growth of the UK investment pipeline for LM Ventures, Lockheed Martin's \$200 million venture capital fund.

[News story: UK boosts Africa ties after ministerial visit](#)

The Armed Forces Minister hailed Uganda's significant contribution to the African Union Mission in Somalia (AMISOM) and pledged that the UK will continue to support.

Minister for Armed Forces Mark Lancaster said:

Our defence relationship with Uganda is very strong and we recognise the exceptional contribution they are making towards bringing stability to East Africa, particularly through AMISOM. We share their desire for peace in the region and are looking at ways we can provide further assistance to this cause.

Currently, the UK assists Uganda's AMISOM deployment by training around 6,000 members of the Uganda People's Defence Force each year, coupled with places on focused courses at regional Peace Support Training Centres.

Uganda also plays a significant role in South Sudan its direct neighbour to the north, where the UK has contributed to the UN Mission (UNMISS) with the construction of a field hospital in Bentiu for peacekeepers.

During the visit, Mr Lancaster met with the President of Uganda, Yoweri Museveni, with UK contribution to AMISOM and UNMISS high on the agenda. He had further office calls with the Minister of Defence and Veterans Affairs Adolf Mwesige and Foreign Affairs Minister Sam Kutesa.

The troops providing the AMISOM training are mainly reserves and the

minister, who is himself a reserve, also thanked them for their contributions.

Minister for Armed Forces Mark Lancaster said:

Reservists form an integral component of our Armed Forces, providing a wide range of skills which are vital to the work we do. These men and women have bravely volunteered their time to make a difference towards one of the most impoverished and dangerous countries on the planet.

[News story: Britain to take leading role in next-generation air power, as Defence Secretary launches Combat Air Strategy](#)

Announcing the publication of the new [Combat Air Strategy](#) at the Farnborough International Airshow, the Defence Secretary said he had taken action to strengthen the UK's role as a global leader in the sector and to protect key skills across the UK industrial base.

He outlined the Strategy in front of the combat aircraft concept model which has been developed by UK industry in collaboration with the Ministry of Defence – being publicly unveiled for the first time, it acts as a powerful demonstration of the UK's world leading technical capability and industrial expertise.

Defence Secretary Gavin Williamson said:

We have been a world leader in the combat air sector for a century, with an enviable array of skills and technology, and this Strategy makes clear that we are determined to make sure it stays that way. It shows our allies that we are open to working together to protect the skies in an increasingly threatening future – and this concept model is just a glimpse into what the future could look like.

British defence industry is a huge contributor to UK prosperity, creating thousands of jobs in a thriving advanced manufacturing sector, and generating a UK sovereign capability that is the best in the world.

Today's news leaves industry, our military, the country, and our

allies in no doubt that the UK will be flying high in the combat air sector as we move into the next generation.

For the last 100 years the UK combat air industrial sector has ensured the UK has been at the forefront of technological and engineering developments, delivering world leading capability to the RAF and our allies. This Strategy will ensure the UK continues to maintain this leading position.

The Strategy outlines the way in which the UK will acquire future Combat Air capabilities to maximise the overall value the UK derives from the sector. The framework will balance military capability, international influence, and economic and prosperity benefit along with the overall cost.

It reinforces the commitment in the 2015 Strategic Defence and Security Review to deliver the Future Combat Air System Technology Initiative (FCAS TI). The Government, in partnership with industry, is taking steps to grow existing world-leading design engineering capacity and skills, ensuring that the UK continues to be at the cutting edge of combat air technology.

The concept aircraft has been put together by British firms including BAE Systems, Leonardo, MBDA and Rolls-Royce, which have joined together with the RAF Rapid Capabilities Office to form 'Team Tempest' to pursue the opportunity.

Team Tempest brings together the UK's world leading industry and sovereign capabilities across future combat air's four key technology areas: advanced combat air systems and integration (BAE Systems); advanced power and propulsion systems (Rolls-Royce); advanced sensors, electronics and avionics (Leonardo) and advanced weapon systems (MBDA).

The MOD will now set up a dedicated team to deliver the combat air acquisition programme. They will deliver a business case by the end of the year, and have initial conclusions on international partners by next summer – with engagement with potential partners beginning immediately.

Early decisions around how to acquire the capability will be confirmed by the end of 2020, before final investment decisions are made by 2025. The aim is then for a next generation platform to have operational capability by 2035.

The UK is already 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 in excess of £6bn a year and has made up over 80% of defence exports from the UK over the last ten years.

Investment in combat air technology, combined with the strengths of UK industry, has resulted in the UK being the only Tier 1 partner with the US on the F-35 Lightning II programme, with British industry delivering 15% by value of every F-35 built. The UK has been able to help define the operational capabilities of the aircraft, while reinforcing UK industrial capability, critical skills and supporting wider economic prosperity.

The UK also continues to lead the way in combat air power as one of the four

partner nations in the Eurofighter Typhoon programme. With more than 20,000 flying hours on deployed operations to date, the Typhoon delivers world leading capability, unparalleled reliability and proven interoperability with our allies. The MOD will continue to invest in the Typhoon for decades to come, with the best technologies being carried forward on to next-generation systems.

The F-35 Lightning II and the Typhoon are two complementary multi-role combat aircraft that will make up the RAF's combat air fleet, placing the UK at the forefront of combat air technology – with the Typhoon expected to remain in UK service until at least 2040.

Chief of the Air Staff Air Chief Marshal Sir Stephen Hillier, said:

The Combat Air Strategy will bring together the best of our people, industry and international partners to support the RAF lift-off into the next century of air power. Team Tempest demonstrates our commitment in ensuring that we continue to build our capabilities, draw upon our experience and history to bring forward a compelling vision for the next generation fighter jet. In last 100 years, the RAF has led the way and today's announcement is a clear demonstration of what lies ahead.

Charles Woodburn, Chief Executive of BAE Systems, said:

The UK's combat air capability, built by generations of committed and highly skilled people through a century long partnership between the RAF and industry, is admired the world over. The UK Government's Combat Air Strategy is a powerful statement of intent to invest in next generation combat air systems. We're proud to play a key role in this important programme, with our world leading technology, capability and skills, which will contribute to the UK's defence and prosperity for decades to come.

Warren East, Chief Executive Officer of Rolls-Royce, said:

As the UK's long-term power and propulsion partner, we warmly welcome the Government's announcement of a Combat Air Strategy. The UK's capability in combat air power and propulsion is at a critical point and this long-term commitment from Government will allow us to protect the expertise and key skills that are vital to retaining sovereign capability. It ensures that we are able to develop and deliver the advanced technologies that will be required in future combat air systems to help ensure our national security.

Norman Bone, Chairman and Managing Director of Leonardo in the UK, said:

As Britain's national champion for advanced defence electronics, we are proud to be a part of Team Tempest. Work we have conducted under research and development programmes such as FOAS and FCAS has significantly advanced our thinking with regards to the complex electronics required for future air combat scenarios and we stand ready to support the future needs of the Royal Air Force. We are excited about the work that's already been done, and the work still to do, on the FCAS TI programme and are all set for these activities to feed into the Typhoon successor programme.

Chris Allam, Managing Director of MBDA UK, said:

MBDA is proud to be providing its complex weapons expertise to the Team Tempest partnership. Delivering effects is central to next generation combat air systems, and we will continue to invest in developing our world leading complex weapons and novel technologies to ensure the UK retains sovereign operational advantage and freedom of action in Combat Air. The strong partnership (through the Portfolio Management Agreement) between MBDA and the MoD has already changed the paradigm for complex weapons developments in the UK, delivered world leading capabilities to the UK Armed Forces and provided savings in terms of both time and money. The Team Tempest partnership has the potential to do the same for Combat Air.

[News story: RAF receives 20th Atlas transport aircraft](#)

Secretary of State for Defence Gavin Williamson announced the arrival today at a gala dinner at the Royal International Air Tattoo. The aircraft was handed over to the RAF at Brize Norton, home of the UK's Air Mobility Force. This coincided with crucial trials to test Atlas's ability to deliver cargo by parachute and undergo air-to-air refuelling using a RAF Voyager aircraft.

Atlas, which contributed to hurricane relief in the Caribbean last autumn as part of Operation Ruman, is currently deployed on operations in the Middle East and replaced C-130 Hercules in the South Atlantic this spring.

Secretary of State for Defence Gavin Williamson said:

From deploying troops to transporting armoured vehicles, the Atlas aircraft has played a global role in operations in the Middle East

against Daesh and providing vital relief in the Caribbean. As we come closer to receiving the full fleet of aircraft, we can be proud of the role the Atlas has played in supporting the RAF lift-off into a new century of air power.

The newly-delivered aircraft has formally entered service with the RAF, ready to begin crew training ahead of operational deployment. The international Atlas programme, being delivered by Airbus, is supporting around 8,000 jobs in the UK. In total the UK has ordered 22 Atlas aircraft which are all expected to be delivered to the RAF by the early 2020s.

Adrian Baguley, Director Air Support for Defence Equipment and Support, the MOD's procurement organisation, said:

The DE&S Atlas delivery team, based at MOD Abbey Wood and Brize Norton, is proud to be delivering the Atlas aircraft for the RAF which means the UK has a world-leading tactical and strategic airlift capability. We will continue to work hand-in-hand with Airbus and trials personnel to ensure that this fleet of world-leading aircraft is fully delivered and qualified for UK operations.

The cargo delivery trial, carried out by a UK aircraft crewed by Air Warfare Centre and QinetiQ personnel, involved containers weighing around one tonne in weight being dropped in sequence over Salisbury Plain.

For the air-to-air refuelling trial, which took place near Seville in Spain, an Airbus-owned Atlas, operated by a joint crew including Airbus and UK personnel, received fuel from an RAF Voyager tanker aircraft over a wide range of altitudes and air speeds. The results from both trials are now being analysed with a view to delivering operational clearances.