News story: Sky's the limit for defence personnel taking part in Edinburgh Tattoo

The RAF will be the lead presentational service, in its centenary year, for a new show marking the theme of 'The Sky's the Limit'.

The band of the Royal Air Force College, and pipers and drummers from across the Service, will play a central role in the world famous show. Three serving RAF personnel also star in this year's Tattoo advertising campaign.

In 2 of the adverts Flight Lieutenants Jonny Dowen (main image) and Mikaela Harrison, from RAF Conningsby's 29 Squadron and RAF Falcons display team, transform from a highland drummer into a Typhoon pilot, and from a highland dancer into parachutist. In a third version, RAF Honnington's Senior Aircraftman Christopher Craig changes from being a RAF Regiment gunner into a bagpiper (below).



Royal Air Force Regiment gunner into a bagpiper. Image credit: The Royal Edinburgh Military Tattoo

The Royal Navy and army musicians also taking part in this year's Tattoo include the Royal Marine Band Plymouth, The Band of The Royal Regiment of Scotland, and pipers and drummers from The 1st, 2nd and 4th Battalions, The

Royal Regiment of Scotland (1, 2 and 4 SCOTS), The Royal Dragoon Guards, The Queen's Royal Hussars and The Scots Guards.

Brigadier David Allfrey, Chief Executive and Producer of The Royal Edinburgh Military Tattoo, said:

We are delighted to support RAF100 in their role as the lead Service at this year's Tattoo. Under our own theme of The Sky's The Limit, we will explore gravity, the history of manned flight, even into space, and the power of human potential.

We are looking forward to exploring all manner of creative possibilities and collaborations in the production, in the international cast, in the music, in the lighting and projection and in special effects. There are exciting prospects, some of which are out of this world!

Taking place against the iconic backdrop of Edinburgh Castle to a live audience of 220,000, the Tattoo extravaganza returns for 24 performances with a 100 minute showcase of music, dance and technical wizardry, including some of the world's finest military bands and performers.

The Tattoo was set up and run for charitable purposes. It has gifted £10 million to service and civilian organisations including the Soldiers Charity (formerly known as the Army Benevolent Fund) and RAF Benevolent Fund.

News story: Injured veterans and service personnel take part in excavation at Barrow Clump

A team of injured military veterans and service personnel join DIO archaeologists, local volunteers, Wessex Archaeology and Breaking Ground Heritage to excavate the track at Barrow Clump on Salisbury Plain.

Barrow Clump is the site of a scheduled monument, an Early Bronze Age burial mound (c2000BC) that later became the burial place for Anglo-Saxons in the 6th century AD.

The current excavation has been taking place since Monday 2 July and is expected to last until Friday 20 July. It is being done with volunteers from the Operation Nightingale programme which uses archaeology to aid in the recovery of soldiers who are sick, wounded or were injured on operations in Afghanistan.



Skull excavated at Barrow Clump in Salisbury Plain. Photo: Crown Copyright 2018

Last November, remains outside the barrow were found including a man with an iron spear and a woman with jewellery.

In July 2018, service personnel discovered burials with weapons and decorated pottery. Over 80 burials have now been found at the military training site.

Military veterans working on the dig are supported by Breaking Ground Heritage, a charity assisting veterans to learn more about archaeology and heritage with the aim of helping them to learn new skills as part of their recovery. Several are now studying the subject at University with others working as professionals in this area.



Archaeologists and volunteers at Barrow Clump dig site Photo: Crown Copyright 2018

Richard Osgood, Senior Archaeologist from the Defence Infrastructure Organisation said:

One of DIO's priorities is to support the Armed Forces and Operation Nightingale has been a huge success since it was first established in 2011.

I'm amazed at the artefacts that have been uncovered from our previous excavations and without the help of injured, sick and wounded soldiers and local volunteers we wouldn't have uncovered the Anglo-Saxon burial. I look forward to uncovering the track and its findings.

DIO is committed to preserving and maintaining heritage assets and the data found on the excavation will be used to improve the careful management of heritage on Salisbury Plain.

Richard Bennett, Project Director at Breaking Ground Heritage said:

Breaking Ground Heritage is pleased to be involved in this project with the support of DIO.

We work closely with DIO to provide injured soldiers and veterans

with the placements they need to take part in archaeological investigations on the Ministry of Defence estate.

The project has helped to improve the welfare of all those involved. Thank you to everyone who has took part in this project, they have all been valuable to the programme's results.



Skull excavated at Barrow Clump in Salisbury Plain. Photo: Crown Copyright 2018

The data derived from this excavation will be used to inform the careful heritage management of Salisbury Plain.

The discoveries unearthed during this excavation will be laid to rest in the Wiltshire Devizies Museum, along with a monograph on the fieldwork at the end of 2018.

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:

<u>Andrew Wire, Montvieux</u>

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.