

News story: Third Tide-Class Tanker Arrives in UK

The arrival of RFA Tidesurge comes just weeks after her sister ship, RFA Tidespring, met up at sea with aircraft carrier HMS Queen Elizabeth for the first time.

The 39,000-tonne tankers can carry up to 19,000 cubic metres of fuel and 1,400 cubic metres of fresh water in support of Royal Navy operations all over the world.

The detailed customisation work to prepare RFA Tidesurge and her sister ships for operations is being undertaken at the A&P shipyard in Falmouth, sustaining around 300 jobs.

Minister for Defence Procurement Guto Bebb said:

The arrival of RFA Tidesurge in Cornwall marks another key milestone in the Tide Class programme. Tidesurge will soon join her sister ships in providing the integral support which powers our warships and helps our Royal Navy maintain a truly global presence.

While in Falmouth RFA Tidesurge will be fitted with UK specific armour, self-defence weaponry and communications systems, with the total UK work content, including A&P, in the Tide Class programme worth around £150 million and sustaining further jobs at 27 UK-based companies.

The customisation work is expected to take around four months after which RFA Tidesurge will begin final sea trials before entering service in Autumn this year.

Meanwhile, RFA Tidespring, which was preparing to conduct a Replenishment at Sea (RAS) refuelling when it met with HMS Queen Elizabeth in February, is currently acting as the training tanker for the Navy's Flag Officer Sea Training (FOST) and will take part in exercise Joint Warrior in the Spring. RFA Tiderace, which is currently docked at A&P Falmouth, is undergoing preparations for her capability trials which are expected to commence in early April.

Sir Simon Bollom, Chief of Materiel (Ships) at Defence Equipment and Support, the MOD's procurement organisation, said:

I'm proud to say that the delivery of the tanker programme will provide vital support for the Royal Navy, providing it with fuel and fresh water, while also being able to undertake a wide range of maritime operations, including humanitarian relief.

The fourth of the Tide Class vessels – RFA Tideforce – is expected to be delivered later this year.

A&P Group has held the contract to support and maintain RFA ships at home and abroad since 2008. Under the Cluster Support Programme, A&P Group provides maintenance support to groups of MOD vessels, which include RFA Argus and the RFA Bay Class vessels Mounts Bay, Cardigan Bay and Lyme Bay.

[News story: UK side by side with Allies a year on from NATO deterrence deployment](#)

In his first visit to the Baltic ally, the Defence Secretary reaffirmed to the Estonian President and Defence Minister the UK's unwavering commitment to Euro-Atlantic security, a year after UK forces first arrived in country.

Defence Secretary Gavin Williamson said:

For nearly 70 years, NATO has been the guarantee of mutual security. The threats and dangers we face are evolving, intensifying and increasingly challenging – our commitment to our Allies has seldom been more important.

I've seen first-hand the vital role our brave Armed Forces are playing on NATO's eastern border, standing shoulder to shoulder with our Allies to deter Russian aggression.

Nearly 2000 British troops, across two rotations, have led a multinational battlegroup in Estonia as part of NATO's enhanced Forward Presence (eFP) deployment since it officially began just under a year ago in April 2017.

In an address, alongside his Estonian counterpart, Defence Minister Jüri Luik, to the 800 British troops and their NATO colleagues, stationed there now Mr Williamson said this reflected Britain's global outlook and commitment to the defence of our friends and Allies across the Baltic region.

The 1st Battalion, The Royal Welsh are currently based in Tapa to enhance NATO's deterrence posture and the Defence Secretary confirmed that the 1st Battalion, The Yorkshire Regiment will take over from them in June as the UK's enduring presence in Estonia continues.

The UK's battlegroup forms part of the wider NATO eFP, with four multinational battlegroups deployed across the Baltic States and Poland, led by the UK, US, Canada and Germany. The UK has a further 150 soldiers based in

Poland, part of the US led battlegroup, and RAF Typhoons are due to deploy to Romania in May, patrolling the Black Sea skies.

In addition to the 800 personnel, the UK has committed more than 150 vehicles to support Estonia during this deployment, including Warrior infantry fighting vehicles and Challenger 2 tanks.

The Defence Secretary also held meetings in Tallinn with the President Kersti Kaljulaid, Prime Minister Jüri Ratas and Defence Minister Jüri Luik.

[News story: £400m deal signed for battle-winning Brimstone missile for RAF Typhoons](#)

The Ministry of Defence (MOD) has signed a £400 million deal to launch battle-winning Brimstone missiles from RAF Typhoon jets, Defence Secretary Gavin Williamson has announced.

The ultra-accurate Brimstone already has a successful track record, playing a critical role from Tornado fighter jets in the fight against Daesh in Syria and Iraq, and the deal will now see the missile upgraded to become compatible with Typhoons.

The £400 million Brimstone 2 Capability Sustainment Programme with MBDA UK will also build new equipment to support the capability and develop a stockpile of weapons available for operations, creating around 130 brand new jobs and sustaining hundreds more across the country.

Defence Secretary Gavin Williamson said:

Our world-class defence industry is a key foundation on which our great military is built, and the weapons it produces like the pinpoint Brimstone missiles have been crucial in helping our fighter pilots on missions such as driving down Daesh territory in the Middle East. This massive £400m investment is a huge boost to the proud workforce equipping our Armed Forces and will create and protect hundreds of jobs across the country, bolstering both the power of the Typhoon jet and British prosperity.

The new variation is being developed through the Brimstone 2 Capability Sustainment Programme will replace all earlier variants in 2022 and have an upgraded seeker, rocket motor, warhead and guidance system, making it an even more effective weapon.

The new missile will arm Typhoon when it takes over as the RAF's principal ground-attack aircraft in 2019.

The work has created around 130 new jobs and sustains a further 270 existing jobs at MBDA's sites in Stevenage, Bolton and across the company's significant UK supply chain.

Brimstone is currently in use by the UK's Tornado squadrons in Iraq and Syria as part of Operation Shader and has also been used on operations in Afghanistan and Libya.

Chief of Material Land at the MOD's procurement organisation, Lieutenant General Paul Jaques said:

The Brimstone 2 CSP contract enables us to continue to deliver a world class air to surface missile in support of the RAF's Typhoon Squadrons on operations worldwide.

It is excellent news not only for our troops but also for the UK economy, with jobs and skills being sustained across the country.

The programme will also allow the weapon to be further developed for use on future aircraft. Brimstone is among weapons being considered for use by the British Army's new AH-64E Apache attack helicopters and the RAF's next-generation Protector unmanned aerial system.

News story: Porton Down scientists on brink of titanium revolution

Titanium is as strong as steel and half the weight – but around ten times the cost. It is notoriously difficult and expensive to make which limits its wider use.

Defence Secretary Gavin Williamson said:

Our Armed Forces use titanium in everything from cutting-edge nuclear submarines and fighter jets through to life-changing replacement limbs – but production time and costs mean we haven't always used it. This ground-breaking method is not only faster and cheaper but could see a huge expansion of titanium parts and equipment throughout the military. It is a clear example of how our world-class scientists are working behind the scenes to help our Armed Forces as well as bringing prosperity and security to Britain.

Titanium's high strength, light weight and corrosion resistance sees it widely used in defence, in military aircraft and submarines, but its high production costs make it difficult to justify in all but essential areas.

Dstl has invested almost £30,000 in the new research project at the University of Sheffield, which led to the development of the new ground-breaking manufacturing process.

The announcement comes as Dstl supports the Defence Procurement Research Technology and Exportability (DPRTE), which takes place tomorrow [MARCH 27].

The pioneer of this revolutionary technique, Dr Nick Weston said:

FAST-forge is a disruptive technology that enables near net shape components to be produced from powder or particulate in two simple processing steps. Such components have mechanical properties equivalent to forged product. For titanium alloys, FAST-forge will provide a step change in the cost of components, allowing use in automotive applications in automotive applications such as powertrain and suspension systems.



The Defence Science and Technology Laboratory (Dstl) in Porton Down has revolutionised the production of titanium by reducing the 40 stage process down to just two steps and potentially halving the cost. Crown copyright.

So far, small-scale trials have been carried out, but a new large-scale fast furnace facility jointly funded by Dstl and Kennametal Manufacturing (UK) Ltd

has been built and will enable larger components to be produced for testing.

Matthew Lunt the Principal Scientist for Materials Science at Dstl said:

We're really excited about this innovation, which could cut the production cost of titanium parts by up to 50%. With this reduction in cost, we could use titanium in submarines, where corrosion resistance would extend the life, or for light-weight requirements like armoured vehicles.

[News story: Royal Navy prepares for future UK fishery patrols](#)

HMS Forth is the first of five state-of-the-art Royal Navy vessels designed for fishery protection, as well as counter-piracy, anti-smuggling, border patrol, counter terrorism and maritime defence duties.

Defence Secretary Gavin Williamson said:

The Royal Navy has a proud tradition of protecting the UK's coastline and keeping a close eye on our fishing waters. With these state-of-the-art, vastly capable ships we stand ready to protect our fisheries once Britain leaves the EU.

The River-class Offshore Patrol Vessels (OPV) 'production line' is moving apace with the £116 million ships emerging at around six month intervals. The Royal Navy Fishery Protection Squadron are expecting a further two ships – HMS Medway and Trent – to be handed over later this year, with the remaining two – HMS Tamar and Spey – expected to arrive in Portsmouth by 2020. Just last week HMS Trent was formally named at the Glasgow shipyard where was built.

They will become the Royal Navy's eyes and ears around the UK, helping to safeguard fishing stocks. They will also assist in reassuring and protecting the Falkland Islands and are capable of deploying to the Mediterranean and Caribbean to uphold UK interests around the world.

Last week the Treasury announced that the MOD will receive £12.7 million from the Government's Brexit preparation allocation to support work with DEFRA on maintaining the UK's fisheries. The MOD is working closely with other government departments like DEFRA to determine the optimum deployment of these extremely flexible vessels.

With a total crew of around 58, but designed to go to sea with 39, they can spend up to 320 days a year on operational taskings. The larger crew allows a rotation of personnel to ensure they get to spend time at home or on training.

The new OPVs are four knots faster than their predecessors at 24 knots, have an increased range of 5,500 nautical miles, have a 30mm automatic cannon as their main armament instead of a 20mm gun, two Miniguns, four machine-guns and are equipped with two Pacific 24 sea boats. Each ship has an extended flight deck to operate up to Merlin size helicopters and accommodation for up to 50 embarked Royal Marines for boarding and supporting operations ashore if required.