# New satellite propulsion test facility to propel UK into new space age

The new centre will allow UK companies and academics to fire up and test state-of-the-art space propulsion engines at up to 1.5kN in high-altitude vacuum, an equivalent test altitude of 140,000ft. It will cement the international reputation of the Westcott Space Cluster — where the site will be based — in propulsion.

Based in Aylesbury Vale Enterprise Zone, the facility, which is expected to create around 60 jobs, is due for completion in early 2021 and will offer companies a more affordable test facility than international rivals. It will also allow new types of more sustainable propellants to be tested, such as Hydrogen Peroxide and Liquid Oxygen which are more environmentally friendly in sourcing, storage and combustion.

At present, companies can test extremely small engines in the UK but have to go overseas to test bigger engines. The new facility will tackle this issue and help grow the UK's status as a leading space player, giving industry resources that allow us to grow our technological edge.

Designed to support the growth of brand-new space technologies, the government is backing the new facility, dubbed the National Space Propulsion Test Facility (NSPTF), to the tune of £4 million in funding.

Science Minister Amanda Solloway said:

The UK's space industry is booming as we invest in our brightest space scientists, the facilities they work in and the technologies they are creating.

Backed by a £4 million government investment, this pioneering UK-based facility will elevate our most ambitious space businesses, enabling them to undertake complex spacecraft engine testing, while boosting the local economy by creating highly skilled jobs.

- Engines will be fired up in a vacuum from early 2021, with a mechanical pump system generating a vacuum down to 1.5 milliBar in a test cell containing the engine; an equivalent test altitude of approximately 140,000ft, which ensures technology can be deemed ready for the space environment.
- When firing, the pressure of the engine's exhaust plume is partially recovered by a 7-metre-long supersonic diffuser and then cooled by a heat exchanger designed to rapidly reduce temperatures in excess of 2,000°C to just 50°C.

• The gasses then travel along a vacuum manifold to be recovered to ambient pressure by the pump system in the vacuum generation plant.

The UK space sector is already a leader in satellite propulsion and, with a growing space manufacturing sector and plans for UK spaceports, the satellite propulsion field is set to grow substantially in the coming years.

Crucially, this range of engine testing will allow further innovation for the type of orbit-raising and station-keeping engines this facility will be able to test and it is the first step in a plan to test larger engine types.

The UK Space Agency has worked with the European Space Agency, Science and Technology Facilities Council's RAL Space and NAMMO UK to develop this cutting-edge facility, and once up and running the site will use game-changing technology to test the propulsion engines that position orbiting spacecraft in conditions similar to those experienced in space.

The new capability of this facility will allow innovation in propulsion technology, as well as the cost-effective development and testing of even more powerful engines for interplanetary travel, and to drive forward the significant commercial telecommunications satellite market.

Nammo UK has been awarded a major contract to install and operate the equipment to be housed within this new facility at Westcott.

Rob Selby, Vice President of Nammo Space said:

Thanks to this key UK government investment, UK space now can compete favourably with the very best rocket test facilities in the world. The Nammo team have designed, created and produced this phenomenal, state-of-the-art hotfire test facility that is already driving further growth in UK based spacecraft propulsion businesses.

We look forward to testing engines for customers from all over the globe and to further key developments that the NSPTF will enable.

Rod Mordey, Director at PATRIZIA, which owns the 650-acre Westcott Venture Park, said:

This is yet another leap forward for the development of Westcott Venture Park in Buckinghamshire as a centre of excellence in the space propulsion and associated high-tech industries.

Future Investment will ensure Westcott's place at the heart of the UK space industry. Over the next 10 years, Westcott will become the UK Centre for the next generation of propulsion systems and small satellite manufacture.

Richard Harrington, CEO of the Buckinghamshire LEP said:

The national rocket test facility at Westcott is a key step towards delivering a world-leading hub for the space sector in the heart of Buckinghamshire.

We are delighted to support this new facility in our Enterprise Zone, which opens up the next stage in the evolution of the Westcott site to attract new business and investment to this world-class centre of excellence in space propulsion.

The UK space sector is a huge economic success story, growing by over 60% since 2010. Satellites already support £300 billion of UK economic activity through the use of satellite services and is expected to grow further as this new government support unlocks commercial opportunities.

Westcott is recognised as an integral part of the UK space sector growth strategy with a nucleus of well-established companies supporting rocket and satellite enabled research and development projects.

October saw the opening of the Westcott Innovation Centre, part funded by the Local Growth Fund and Aylesbury Vale Enterprise Zone, via Buckinghamshire LEP, and managed by the Satellite Applications Catapult.

This is the latest phase of the site development, which also now includes a 5G Step-Out Test Facility and Incubation Centre and is planned to include a Disruptive Innovative Space Centre for apprenticeships and further specialist testing sites.

Alongside office space and meeting rooms, the centre provides a fully flexible engineering facility, giving businesses working in space and related sectors the opportunity to use specialist equipment for light mechanical engineering and rapid prototyping activities.

## CMA publishes final report in funerals market investigation

Press release

The CMA has published the final report on its in-depth market investigation into funeral services, confirming its remedies for the sector.



The Competition and Markets Authority (CMA) has today confirmed its provisional conclusions, issued in August, which identified a <u>number of issues</u> in the funeral services sector and suggested a package of 'sunlight remedies' to address these.

The <u>final report</u> sets out further detail on the remedies, which are intended to support customers when choosing a funeral director or crematorium and to place the sector under greater public scrutiny.

#### They include:

- an obligation for all funeral directors and crematorium operators to disclose prices in a manner that will help customers make more informed decisions;
- that information must be provided in advance of a customer committing to purchase a service so that people know the price they will be charged and the key terms of business — for example if a deposit is required;
- that customers should be made aware of any relevant business, financial and commercial interests of the funeral director, and that certain practices — such as payments which may incentivise hospitals, care homes or hospices to refer customers to a particular funeral director — will be prohibited;
- a recommendation to government to establish an independent inspection and registration regime to monitor the quality of funeral director services as a first step in the establishment of a broader regulatory regime for funeral services.

As set out in August, the exceptional circumstances of the coronavirus (COVID-19) pandemic mean that some of the remedies the CMA might otherwise have pursued, including measures to control prices, could not be developed.

However, the CMA continues to have serious concerns about the sector and one of the conclusions of the report is that it should consider whether a further market investigation reference is needed when conditions are more stable.

In the meantime, the CMA will continue to monitor the sector using information provided by funeral directors and crematoria detailing their revenues and the volumes of the different services they provide. This will help the CMA ensure that consumers are being fairly treated and decide whether a future market investigation is necessary.

Martin Coleman, CMA Panel Inquiry Chair, said:

Organising a funeral is often very distressing and people can be especially vulnerable during this time.

That's why our remedies are designed to help people make choices that are right for them and ensure they can be confident that their loved one is in good hands.

The CMA will be keeping a close eye on this sector to make sure our remedies are properly implemented and help it to decide whether further action is necessary when circumstances return to a more steady state.

#### Notes to editors

- 1. Under section 131 of the Enterprise Act 2002, the CMA makes a reference to the CMA Panel Chair to appoint a Group of members of the CMA Panel to carry out a market investigation. The investigation and decisions of the Group are required to be taken independently of the Board of the CMA, and the Board's oversight and governance role does not extend into the substance of decisions taken by the Group.
- 2. Media enquiries should be sent to <a href="mailto:press@cma.gov.uk">press@cma.gov.uk</a>, or 020 3738 6460

Published 18 December 2020

### First ballot of the 2021 Youth Mobility Scheme for Japanese nationals

There are a total of 1,000 places available to Japanese nationals for 2021. 800 applicants will be selected in the first ballot in January, while the remainder of the places will be made available in a second ballot in July 2021. If your application is successful you will be able to live, work and study in the UK for up to 2 years.

#### How to apply

If you would like to apply for the scheme you should send one email per applicant to: <a href="mailto:Japan.YMS2021@fcdo.gov.uk">Japan.YMS2021@fcdo.gov.uk</a> between midday (12pm) on Monday 25 January 2021 to midday on Wednesday 27 January 2021 (Tokyo time).

The header or subject line of your email must contain your name, date of birth (DD/MM/YYYY) and passport number as shown in your passport.

This must be written in English only.

For example: SUZUKI Miyu - 31/03/2000 - Passport123456789.

The main body of your email should include the following information, written in English:

- Name:
- Date of birth:
- Passport Number:
- Mobile phone number:

The email account will only be open for 48 hours and all emails received within this timeframe will be sent an automated reply confirming receipt.

Once the ballot closes 800 applicants will be chosen at random by UKVI. If you have been successful a second email will be sent to you by week commencing 1 February to confirm acceptance and provide further instructions on how to make an appointment, along with documentary evidence required to apply for your entry clearance.

Please note successful applicants must prepare online applications and online credit card payments no later than 1 March 2021. Failure to submit your payment online by this date will automatically remove your name from the list and your allocation will be retracted. After you have paid online you have 90 days to submit your paperwork for consideration.

If you are a Japanese national living overseas you can also apply following the instructions above, and if you are chosen to apply you will be able to do so in your country/territory of residence. Applications cannot be submitted for the Youth Mobility Scheme in the UK.

If you're unsuccessful you will receive an email by 5 February and no further action is required.

Further information about the scheme <u>can be found on gov.uk</u> and any enquiries relating to the application process, online application forms and questions in general should be directed to the <u>UKVI International Enquiry Line</u>.

#### Prime Minister's call with European Commission President Ursula von der Leyen: 17 December 2020

Press release

Prime Minister's call with European Commission President Ursula von der Leyen



The Prime Minister spoke to Commission President Ursula von der Leyen this evening about the state of play in the UK / EU negotiations.

The Prime Minister underlined that the negotiations were now in a serious situation. Time was very short and it now looked very likely that agreement would not be reached unless the EU position changed substantially.

He said that we were making every effort to accommodate reasonable EU requests on the level playing field, but even though the gap had narrowed some fundamental areas remained difficult.

On fisheries he stressed that the UK could not accept a situation where it was the only sovereign country in the world not to be able to control access to its own waters for an extended period and to be faced with fisheries quotas which hugely disadvantaged its own industry. The EU's position in this area was simply not reasonable and if there was to be an agreement it needed to shift significantly.

The Prime Minister repeated that little time was left. He said that, if no agreement could be reached, the UK and the EU would part as friends, with the UK trading with the EU on Australian-style terms.

The leaders agreed to remain in close contact.

Published 17 December 2020

## <u>Preparing for a sustainable and inclusive peace in Afghanistan</u>

Thank you, Mr President.

And may I start by thanking Special Representative Lyons and Ambassador Djani in his capacity as Chair of the 1988 Committee for their briefings. I would also like to extend a warm welcome to Ms Zadran and to thank her for her powerful statement — her clear call for peaceful future for the youth of Afghanistan.

Mr President,

On the 12th of September, Afghans took a significant step on the road to peace with the start of the Afghanistan peace negotiations in Doha. We welcome the commitment of the two negotiating teams have shown so far, culminating in their agreement on the rules and procedures, with the talks on the 2nd of December. It is vital that the negotiations resume swiftly on the 5th of January.

Mr President, I would like to emphasise three points today:

First, we must be prepared for a long and challenging process ahead. When the talks resume on the 5th of January, the parties will start negotiating on substance for the first time. In many cases, the distance between the two sides' positions may seem unbridgeable. There will be setbacks before there are breakthroughs.

This is normal and probably indeed necessary. A successful outcome will require a long, challenging process of building trust, finding common ground and compromising. International partners will need to show commitment and patience in the process as well. The UK, for our part, stands ready to offer support.

Second, even if a final settlement takes time, Afghans should start to see the tangible benefits now. Yet, as we have heard many times today, appalling levels of violence continue to blight the lives of Afghans. And let us be clear: the Taliban is responsible for the majority of this violence, violence which not only kills a menace, but also undermines confidence in the negotiations.

The Taliban claim to want a part in Afghanistan's future and the international community, as well as relief from UN sanctions. This requires substantive progress in peace negotiations, an end to violence, and a complete and permanent break from terrorism, including from Al Qaeda.

Third, the outcome of the Afghanistan peace negotiations is for Afghans

themselves to decide. But the parties, and especially the Taliban, must recognise Afghanistan is not the place it was 20 years ago.

To be sustainable, a peace settlement will need to be inclusive and preserve the rights and freedoms of all Afghans, including women and minorities. To maintain international support, the new Afghanistan will need to adhere to its treaty obligations, including those concerning human rights. And to reach a settlement that achieves these ends, the process will need to be inclusive and broad-based.

For my own part, I look forward to supporting women's participation in the process in my new role co-chairing the Group of Friends of Women in Afghanistan with Ambassador Raz.

Mr President,

In Geneva last month, the international community reaffirmed its support to Afghanistan. The UK pledged up to \$207 million dollars in development assistance for 2021.

For its part, the Afghan government renewed its own commitments, as set out in the new Afghanistan Partnership Framework. Together, the commitments made last month can help strengthen Afghan institutions and the government's ability to support its citizens — tasks that are vital even as peace talks unfold.

Today, Afghanistan stands a step closer to being at peace with itself and its neighbours, free from conflict and terrorism, and able to protect the rights and freedoms of all Afghans. We should redouble all our collective efforts to make that a reality.

Thank you.