Moon rocket's first flight heralds exciting future

The UK Space Agency has welcomed the successful launch of NASA's Artemis I rocket to the Moon.

The Artemis 1 Space Launch System (SLS) took off from the Kennedy Space Center in Florida at 6.47am on 16 November, sending the uncrewed Orion capsule, powered by the European service module that includes Orion's engines, towards the Moon.

The event was postponed from the original planned date on 29 August and a second attempt on 3 September due to technical issues. The rocket was then rolled back from the launchpad to avoid Hurricane Ian.

The successful launch marks the beginning of the NASA-led Artemis programme, which the UK is part of through the European Space Agency (ESA) Human and Robotic Exploration Programme, and which will eventually see humans return to the Moon.

ESA is a key partner in the Artemis programme, delivering Orion's European Service Module, as well as elements of the Moon-orbiting Lunar Gateway.

Libby Jackson, Head of Space Exploration at the UK Space Agency, said:

The launch of the Artemis 1 mission is a hugely significant moment for the global space community, paving the way for humanity to return to the Moon in the coming years.

We are proud to be a part of ESA, which is contributing to this mission with the Orion service module, and we look forward to seeing direct UK involvement in the Lunar Gateway, currently in development through ESA's exploration programme.

It's also exciting to see this mission being tracked in the UK from Goonhilly Earth Station in Cornwall, marking a major step for our capacity to offer commercial lunar communications from the UK.

The Artemis programme marks the next chapter of human space exploration, and we look forward to continued involvement as it comes to life.

National Space Champion David Morris MP said:

Gene Cernan, who was the last man to walk on the Moon, told me that one day we will return, and I'm proud to say the UK will have a part to play in that return by contributing to the Artemis

programme nearly half a century after Gene left the surface of the Moon.

The UK will play a key role in developing the Lunar Gateway. Businesses all across the UK will be involved in building the service module and habitation module of a new space station to orbit the Moon, generating economic benefits and high-skilled jobs demonstrating the UK's prominence and prestige in the international space programme.

NASA's Artemis programme is currently on schedule to land the first woman and the next man on the Moon by 2025 and international partners will collaborate to achieve a sustainable presence on the lunar surface as an envisaged steppingstone to the first human mission to Mars.

During the Artemis 1 test flight, experts at Goonhilly Earth Station in Cornwall will provide operational support, helping to track the spacecraft and up to six of its 10 satellite payloads once in orbit.

Matt Cosby, Chief Engineering Officer at Goonhilly Earth Station, said:

We look forward to contributing to this iconic mission from here in the UK.

Goonhilly played a role in distributing the Apollo Moon landing footage back in 1969; we're now taking one step further and contributing to humanity's return to the Moon.

Supporting Artemis is a fantastic way to further demonstrate our capabilities as we continue to expand our deep space commercial services.

The Artemis 1 mission will test all SLS systems in preparation for the crewed Artemis 2 mission to the Moon. It will demonstrate Orion's heatshield in lunar entry conditions, operate systems in the flight environment, and retrieve spacecraft, among other objectives.

The mission is expected to last 25 days, including outbound transit, the journey around the Moon and deployment of satellites, followed by a return transit before splashdown in the Pacific Ocean in December.

NASA plans to send the first crewed Artemis mission into space in 2024 and expects the first Artemis astronauts to land on the lunar surface in 2025.

Named after the Greek goddess of the Moon and sister to the god Apollo, namesake of NASA's first Moon missions, the Artemis programme will see the construction of the Lunar Gateway: a new space station where astronauts will be able to live and work.

The build of the Lunar Gateway will include crucial contributions from Thales Alenia Space UK (TAS-UK) and Imperial College London, provided with backing from the UK Space Agency.

The team at Imperial College London is building the magnetometer sensor that will monitor cosmic and solar rays as part of ESA's European radiation sensors array that will assist experiments on-board the Gateway to assess how deep space conditions could affect astronauts and equipment.

Meanwhile, TAS-UK is developing the ESPRIT refuelling module, which will enable the spacecraft to safely refuel while in orbit.

PM call with Prime Minister Justin Trudeau and President Zelenskyy: 16 November 2022

Press release

The Prime Minister and Canadian Prime Minister Justin Trudeau spoke to Ukrainian President Zelenskyy from the G20 in Indonesia today.



The Prime Minister and Canadian Prime Minister Justin Trudeau spoke to Ukrainian President Zelenskyy from the G20 in Indonesia today.

The Prime Minister and Prime Minister Trudeau expressed their condolences for the terrible loss of life as a result of Russian attacks on Ukraine overnight.

They underscored their enduring support for Ukraine's resistance and updated President Zelenskyy on their discussions at the G20 on this issue.

The Prime Minister and Prime Minister Trudeau emphasised the importance of a full investigation into the circumstances behind missiles falling in Poland

yesterday. They stressed that, whatever the outcome of that investigation, Putin's invasion of Ukraine is squarely to blame for the ongoing violence.

President Zelenskyy thanked the Prime Minister and Prime Minister Trudeau for their support.

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<u>Spaceport Cornwall receives first-ever</u> <u>UK spaceport licence</u>

- historic moment as UK Civil Aviation Authority issues first-ever UK spaceport licence
- Spaceport Cornwall has demonstrated it meets the statutory requirements on safety, security, environment and other aspects to operate a UK spaceport
- nearly 150 satellite licences issued by the UK Civil Aviation Authority, supporting the growing space sector which is creating thousands of jobs

The UK's first orbital space launch moved one step closer to take-off as Spaceport Cornwall received the UK's first-ever spaceport licence.

The UK Civil Aviation Authority issued the licence, following consent from Transport Secretary Mark Harper, meaning he is in agreement with the licensing decisions made by the UK Civil Aviation Authority.

Spaceport Cornwall, based at Cornwall Airport Newquay, has demonstrated to the regulator it has met the appropriate safety, security, environment and other aspects to operate a UK spaceport. The approval also means Spaceport Cornwall has the infrastructure, equipment and services for horizontal space launches.

The licence enables Virgin Orbit to begin 'wet dress' rehearsals ahead of a proposed launch, which would be the first of its kind on European soil.

This latest licence adds to nearly 150 satellite licences already approved by the UK Civil Aviation Authority since becoming the UK's space regulator in July 2021.

The growing space industry will boost innovation and is estimated to be worth £16.5 billion and support 47,000 jobs, with 2,500 apprentices opening the sector up to even more people.

Transport Secretary Mark Harper said:

The cosmic cornerstone is being laid for the UK's first orbital space launch, with the UK Civil Aviation Authority granting Spaceport Cornwall the first-ever spaceport licence.

Virgin Orbit's planned launch reinforces our position as a leading space nation as we look to the future of spaceflight, which can spur growth and innovation across the sector, as well as creating thousands of jobs and apprenticeships.

Richard Moriarty, Chief Executive of the UK Civil Aviation Authority, said:

This is an historic moment as we licence the first-ever spaceport in the UK. We're proud to be playing our part in facilitating the UK's space ambitions through assessing the safety, security and other requirements of these activities. This is another major milestone to enable this country to become a leading launch nation.

When we became the space regulator, we committed to delivering in an open, effective and proportionate way, with public safety at its heart. Our work does not stop with this licence decision as we continue to assess other licence applications and oversee the effectiveness of licenced activities, all enabling the UK's space sector to grow safely and securely.

Melissa Thorpe, Head of Spaceport Cornwall, said:

To be the first Spaceport in the UK with a licence to operate is a historic moment. The regulatory environment created by the Civil Aviation Authority ensures that UK launch will set the global bar in terms of responsibility and transparency.

Cornwall is now ready to open up the use of Space for Good, and support the UK industry in harnessing the power of space to benefit life on Earth.

The UK Civil Aviation Authority's licence for Spaceport Cornwall follows months of working closely with government and other organisations including the Marine Management Organisation, the Maritime and Coastguard Agency and the Health and Safety Executive.

The UK Civil Aviation Authority continues to work on several licence applications, including being in very advanced stages with Virgin Orbit on its applications for launch and range licences, as well as the satellite operators, ahead of a proposed first UK launch.

The regulator is also progressing applications from a range of other spaceports and operators, and recently started a consultation on the

environmental effects of a proposed SaxaVord launch in Scotland.

Dan Hart, Virgin Orbit CEO, said:

Obtaining this license marks a point of distinction for Spaceport Cornwall, and is a key preparatory milestone for this first orbital launch from the UK.

We appreciate the efforts of the British regulatory agencies with the support of the US Federal Aviation Administration in this first-time licensing process, as we strive in our respective roles to ensure a safe and successful mission in the coming weeks.

Ian Annett, Deputy CEO at the UK Space Agency, said:

The first-ever spaceport licence granted by the UK Civil Aviation Authority is another major milestone as we look forward to the first satellite launch from UK soil this year. Getting to this stage is a testament to the hard work from partners across government and industry to make our launch ambitions a reality and we are now tantalisingly close.

Establishing orbital launch capabilities in the UK is already bringing investment and jobs into Cornwall and other communities across the UK and inspiring a new generation to join our growing space sector.

Councillor Louis Gardner, Cornwall Council portfolio holder for economy, said:

What a fantastic milestone. We are now one step closer to becoming the UK's first operational Spaceport and I speak for all of us at Cornwall Council as we await with great excitement the next steps, looking towards Launch UK with our partners the UK Space Agency and Virgin Orbit.

CMA accepts remedy to address concerns in foam merger

US-based Carpenter agreed to buy Belgian firm Recticel's global engineered foams business in a €656 million (Euros) deal announced in 2021. The firms

both supply engineered foam products used to make household goods such as mattresses, upholstery and kitchen sponges from plants located in the UK.

Following an initial Phase 1 investigation, the Competition and Markets Authority (CMA) identified competition concerns in 3 foam-related markets in the UK (the supply of comfort foam, unconverted technical foam, and converted comfort foam), and referred the deal for an in-depth Phase 2 investigation in July 2022.

At the outset of the Phase 2 investigation, Carpenter and Recticel conceded that the deal raised competition concerns and asked the CMA to "fast-track" the case to the assessment of a remedy that could address those concerns.

The CMA accepted the businesses' request and consulted, in September, on the merging business' proposal to sell the majority of the UK arm of Recticel's engineered foams business to address the competition concerns raised by the deal.

The CMA's final report confirms that the deal could reduce competition. This means that, without remedies to restore this loss of competition, the deal could have damaged the competitiveness of UK-based manufacturers that rely on foams to make their products, as well as leading to less choice and a poorer outcome for consumers.

The CMA has also concluded that, with minor modifications, the remedy proposed by the merging businesses will fully replace the loss of competition arising from the merger. This means that Carpenter will now be required to sell the majority of the UK arm of Recticel's engineered foams business to an independent third-party, approved in advance by the CMA, with the capabilities to ensure that the business remains as competitive as it is at present.

The CMA's decision today brings the case to a close well ahead of the 22 January 2023 statutory deadline, highlighting the potential efficiency benefits of "fast track" remedies processes.

Kip Meek, Independent CMA Panel Chair, said:

Having completed a thorough review of the evidence over 2 months ahead of the statutory deadline, we have confirmed our provisional conclusion that the merger could reduce competition in certain foam markets.

Requiring Carpenter to sell most of the UK arm of Recticel's engineered foams business to an independent, CMA-approved buyer will protect UK manufacturers from higher costs — and ultimately means that their customers won't get a worse deal when buying beds, sofas or everyday items like kitchen sponges. On these terms, the transaction can go ahead.

For more information, visit the <u>Carpenter / Recticel merger inquiry page</u>.

Notes to editors

- 1. Under the Enterprise Act 2002 the CMA has a duty to make a reference to Phase 2 if the CMA believes that it is or may be the case that a relevant merger situation has been created, or arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the United Kingdom for goods or services.
- 2. The process that applies where merging parties request to concede a substantial lessening of competition is set out in paragraphs 7.18 to 7.21 of CMA2 revised.
- 3. In addition to conceding that the deal raises competition concerns, the firms agreed to waive their right to challenge this position during the CMA's Phase 2 investigation and also submitted a proposed remedy to address the concerns identified.
- 4. The CMA introduced a mechanism to 'concede' an SLC in the revised version of CMA2 revised introduced in January 2021. This was the first time that merging businesses have conceded an SLC in a Phase 2 merger inquiry. This has enabled the outcome of the investigation to be reached significantly more quickly than usual (ie over 2 months before the 24-week statutory deadline)
- 5. The CMA found that, if the deal went ahead, the combined companies would face limited competition in the UK in: Comfort foam (uncut foam for mattresses, upholstery etc.); Unconverted technical foam (for sponges etc.); Converted comfort foam (cut up foam ready for larger items like mattresses).
- 6. The CMA asked for views on the remedy offered by 12 October 2022 and on its provisional findings by 19 October 2022. The statutory deadline for the CMA's final report is 22 January 2023
- 7. The CMA concluded that the divestiture under the Parties' Remedy Proposal to a suitable upfront purchaser, who has sufficient R&D capabilities and chemical procurement experience, would be effective and proportionate in addressing the SLCs and the resulting adverse effects.
- 8. For media enquiries, contact the CMA press office on 020 3738 6460 or press@cma.gov.uk.

PM meeting with President Biden of the United States: 16 November 2022

Press release

The Prime Minister met US President Biden today at the G20 Summit in Indonesia.



The Prime Minister met US President Biden today at the G20 Summit in Indonesia.

The leaders agreed on the national and international importance of the strong UK-US relationship, particularly given the challenging economic times the world is currently facing.

The Prime Minister and President Biden underscored that the actions of President Putin and his regime are directly responsible for precipitating global economic issues including rising inflation. Maintaining international pressure to ensure Putin fails in Ukraine is in everyone's interest.

The leaders agreed to work together, and with allies, to address the economic consequences of Putin's brutality. This includes action to protect the most vulnerable in our countries and around the world, and efforts to secure our long-term energy supply.

They stressed the importance of likeminded allies providing a counterpoint to authoritarian regimes, including ensuring developing countries can grow in a sustainable way.

The Prime Minister and President Biden both agreed on the importance of sustained engagement in the Indo-Pacific region and pointed to the AUKUS pact as an example of that. The Prime Minister outlined the UK's Indo-Pacific priorities, including joining the CPTPP trade bloc.

The leaders looked forward to working together to take forward cooperation between the UK and the US on areas including trade, defence and upholding the Belfast (Good Friday) Agreement.

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