



UK Space industry takes next step towards sustained spaceport operations: Spaceport Cornwall and Sierra Space sign MoU

Spaceport Cornwall, the UK's horizontal launch site, and US based space company Sierra Nevada Corporation, which will be engaging through its wholly owned subsidiary Sierra Space, have signed a memorandum of understanding (MoU) to explore future collaboration opportunities following the completion of UK Space Agency funded Concept of Operations for Sierra Space's Dream Chaser® spaceplane.

Spaceport Cornwall and Sierra Space have a shared vision to democratise space - increasing space sector participation by lowering the cost of access to space and communicating the vital role satellites can play in combating some of the global climate challenges world leaders are currently discussing at G7.

The signing of the MoU follows discussions between the two companies over the past two years and follows the completion of the concept of operations (CONOPS) undertaken by Sierra Space regarding the suitability of Spaceport Cornwall to be a return location for its runway landing Dream Chaser.

In an exciting advancement for the UK Space industry, the conclusion of the study was that Spaceport Cornwall was a favourable potential return location and is likely to lead to a more detailed landing site study ahead of Cornwall being named a planned return location for missions in the future.

Dream Chaser is designed to launch from a variety of vertical launch vehicles to low-Earth Orbit (LEO), and return to a spaceport or airport runway similar to any large commercial aeroplane - the system is designed for multiple reuse, making it a more sustainable launch system .

With more than 30 years of spaceflight heritage and more than 500 space missions supported, Sierra Space is a world-leading space company and is a valuable second launch partner for Spaceport Cornwall, in addition to Virgin Orbit, who will achieve the UK's first ever sovereign orbital launch from the site in 2022.

The CONOPS, funded by the UK Space Agency as part of their Horizontal Launch Fund, investigated a number of factors including the operational requirements of Dream Chaser, the US/UK regulatory framework, return mission trajectory analysis, risk analysis, environmental and infrastructure review, as well as a consideration of present and future supply chain capability.

As well as considering spaceflight operational requirements, Sierra Space also offered insights into what additional facilities could be offered on site. These insights were incorporated into the currently under construction 'Centre for Space Technologies', a multi-user cluster of buildings at Spaceport Cornwall including payload integration, launch and mission operations facilities, as well as shared workspace and laboratories to conduct scientific research, potentially immediately after payloads have returned from space.



Collaborating with Sierra Space as a return location will not only generate further economic growth through Spaceport Cornwall, but will also create demand in the local supply chain for post mission services such as maintenance, repair, de-fuelling, and academic research for on board scientific experiment payloads.

Melissa Thorpe, Head of Spaceport Cornwall said: "We are delighted to welcome representatives from Sierra Space to Cornwall during the G7 Summit, and to announce the signing of the MoU. Spaceport Cornwall is a multi-user spaceport and it's a great achievement to add an additional launch/reentry partner to our consortium a year ahead of first launch from the site in 2022. Satellite technology offers so much hope in combating many of the environmental challenges being discussed here this week, and we're proud to be able to showcase the part Cornwall, and the UK is playing."

Fatih Ozmen, CEO and owner of SNC: "Sierra Space envisions launching and landing a fleet of Dream Chasers around the world. Spaceport Cornwall is an excellent partnership to assist in our endeavour to make space travel globally accessible."

Ian Annett, Deputy Chief Executive of UK Space Agency: "This exciting collaboration, enabled by funding provided by the UK Space Agency, will help Spaceport Cornwall realise their ambitions and support the growth of the UK spaceflight industry. As the UK builds back greener, the space sector will help us predict, mitigate and adapt to the effects of climate change. Dream Chaser is a sustainable concept that will bring economic benefits to the UK, create skilled jobs in the sector and ensure the UK thrives in the commercial space age."

Councillor Steve Rushworth, Cornwall Council: "The signing of this MoU is another significant step forward for Spaceport Cornwall in the year leading up to the first launch. Not only will this lead to further diversification of Cornwall Airport Newquay, the economic benefit of a second partner will be wide reaching - increasing productivity and creating more job roles in what will be a multi-user spaceport."