

SPACE-COMM EXPO 2023

EARLY JUNE SAW THE UK'S LARGEST COMMERCIAL SPACE
INDUSTRY EVENT PULLING OUT ALL THE STOPS

The high-octane buzz of the Farnborough Air Show may have been missing, but this did nothing to diminish the third annual iteration of Space-Comm Expo, staged over two days at Farnborough's International Exhibition & Conference Centre.

Organised by Hub Exhibitions in partnership with Farnborough International, the event attracted 3,500 visitors from home and abroad for a non-stop conference programme and an exhibition that hosted 150 organisations and businesses from 17 countries. Those participating included the UK Space Agency, UKspace, Civil Aviation Authority, BAE Systems, MDA, Honeywell, Northrup Grumman, Dassault Systèmes, Rolls-Royce and SSTL, among other leading brands. Sponsorship for the event was provided by ADS, CGI, MAXAR and BlackSky, to name but some.

The opening keynotes, compèred by TV science presenter, Dallas Cambell, emphasised the vitality of Britain's space industry – one that consistently outpaces other sectors of the economy and which now has an annual turnover of £17.5 billion.

Kevin Craven, CEO of ADS, the UK aerospace, security and defence trade

association, was one of many to point to the sector's achievements: contributing £7 billion in added-value to the UK economy, directly supporting 48,000 jobs, and exporting goods and services worth £5.9 billion.¹ He believed that its global role in space would be reinforced with the roll-out of the UK's ambitious National Space Strategy.²

George Freeman MP, the Minister of State for science, research and innovation made a video link appearance from Ottawa where he was busy signing-off a £24 million package of science and technology agreements between the UK and Canada and discussing further opportunities for collaboration, not least in space. He stressed not only its economic importance, but its value as a scientific testbed and pointed to the government's recently-announced £50 million Space Clusters and Infrastructure Fund to support cutting-edge R&D facilities across the nation.³

He was followed by David Morris MP who took to the rostrum to update conference on his evolving role as the government's 'Space Champion'. He accepted that maintaining Britain's global reach as a space power required continuing support and investment in education, IP rights, patents and inventiveness. For this reason, he was now working with industry and academia to build the skills base that will underpin its future.

An example of UK inventiveness came later in the day when Chris Newlands, the

mercurial founder and CEO of Glasgow-based Space 2 Consumer (S2C) and recently-appointed Co-Chair for the UK&I Forum of the Open Geospatial Consortium (OGC) gave a thought-provoking presentation entitled 'Satellite imagery ... but not as you know it'. In this, he tantalised his audience with the vision of a world where the mass-market adoption of real-time Earth imagery from thousands of satellites offered exciting societal, climate-focused and commercial opportunities.

It was just one of a number of presentations that addressed topics of interest to readers of this magazine such as the potential of virtual digital twins in space-related design and operational activities, the uses of GNSS and cubesats for infrastructure monitoring, the evolution of low-cost and navigation use redundant MEMS IMU products, and the commercialisation and democratisation of Earth Observation data.

More information on this year's event can be found at <https://www.space-comm.co.uk/>. Next year's Space-Comm Expo will be held 6-7 March 2024, again at the Farnborough International Exhibition & Conference Centre.

¹ *UK Space Outlook 2023 report by ADS in partnership with UKspace. June 2023. (<https://www.ukspace.org/space-sector-delivers-7-billion-in-value-add-to-uk-economy/>)*

² <https://www.gov.uk/government/publications/national-space-strategy>

³ <https://www.gov.uk/government/news/first-dedicated-government-fund-to-build-space-infrastructure-launched-with-50-million>





Almost 4,000 visitors attended the event in Farnborough over two days. Photo: Hub Exhibitions/FIL



150 exhibitors from 17 countries supported the event. Photo: Hub Exhibitions/FIL



ABOVE LEFT: The UK Space Agency was busy explaining its newly-launched £50 million Space Clusters and Infrastructure Fund (SCIF) - the first such government funding dedicated to the development of cutting-edge R&D facilities across the nation. Photo: GeoConnexion. **ABOVE RIGHT:** Conference compere Dallas Campbell in conversation with guest speaker Tim Peake (right), the first official British astronaut to walk in space. Photo: Hub Exhibitions/FIL



ABOVE: Having recently secured €9 million in funding, QuadSAT from Odense, Denmark, was promoting its drone-based antenna measurements and calibration services for satellite systems anywhere in the world. Here, newly-

RIGHT: Shown here on the BAE Systems showstand was a model of the Azalea satellite, scheduled for launch into a low Earth orbit in 2024. It is the first in a multi-sensor satellite cluster designed to deliver high-quality information and intelligence in real time to military customers. As such, it will employ a range of sensors to collect visual, radar and radio frequency (RF) data. This data will be analysed by on-board Machine Learning on edge processors to deliver the resulting intelligence securely, anywhere in the world while still in orbit. Photo: GeoConnexion



appointed Sales Manager, Pat Bennett (right), explains how the company's drone system has been enhanced to emulate orbital passes of a LEO or MEO satellite as seen from the antenna on the ground. This patent-pending technology means that the system can generate virtual passes from any direction and at any elevation angles to perform tracking tests, wherever the antenna is located. Photo: GeoConnexion



Silicon Sensing from Plymouth in Devon was showcasing its non-ITAR MEMS (Micro Electro-Mechanical Systems) inertial products. These included the DMU41, a nine Degrees of Freedom (DoF) Inertial Measurement Unit - the highest performing silicon IMU currently on the market and said to be ideal for small satellite positioning and navigation - as well as for installation in satellite launch vehicles. Photo: GeoConnexion



Smallsat pioneer, Surrey Satellite Technology Limited (SSTL) was showcasing the 12 payloads currently in manufacture at its Assembly, Integration and Test Hall in Guildford, Surrey. The latest of these, HOTSAT-1 - the first in a planned constellation for SatVu - was successfully launched a few days later from the Vandenberg Space Force Base in California. Now in orbit, its thermal imaging sensor will provide valuable and unique insight into economic activity and energy efficiency for a range of industries aligning with global Net Zero goals. Photo: GeoConnexion