

— UNIVERSAL —
DEFENCE & SECURITY
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Space for the Business, Defence & Security Environments

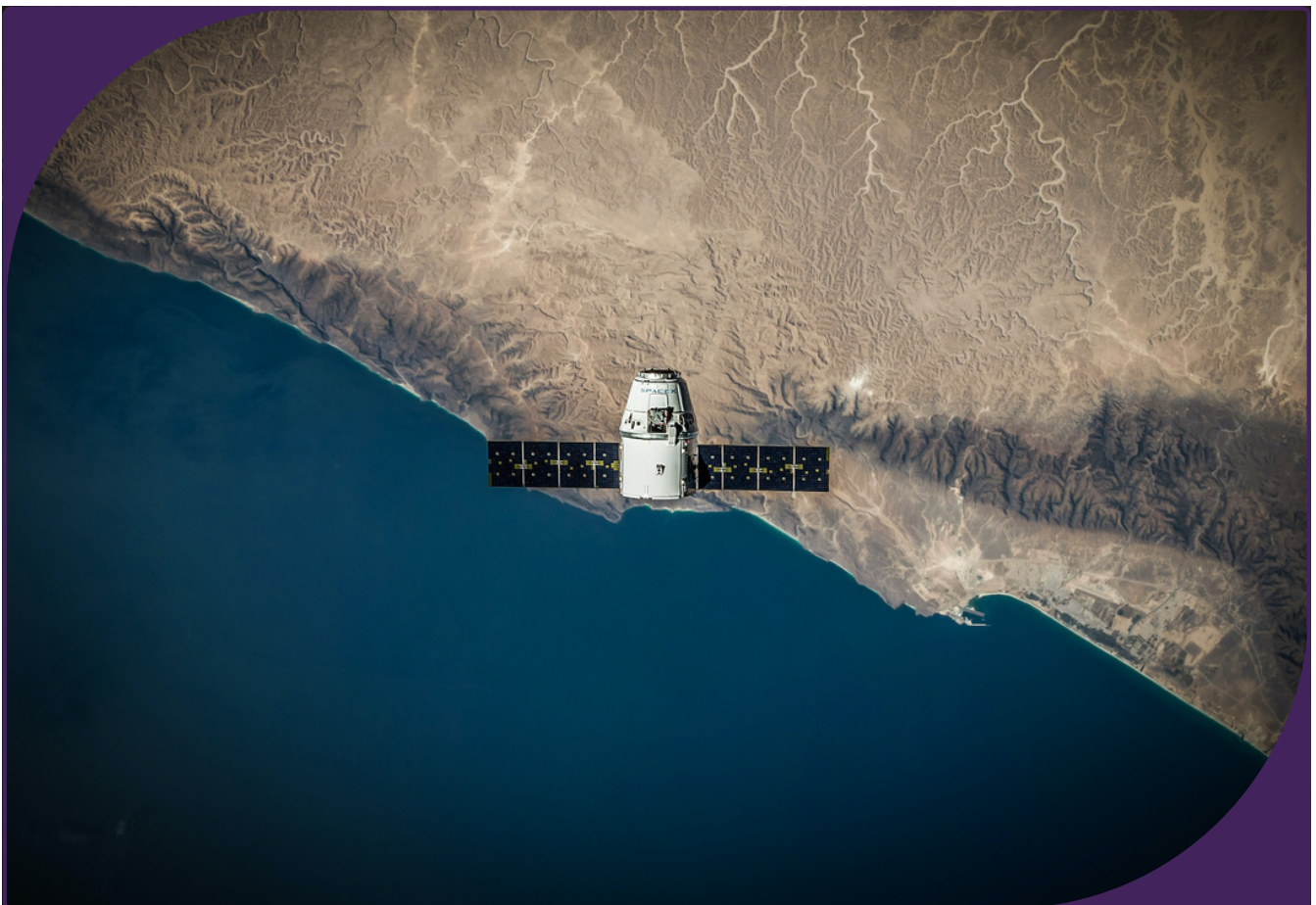


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ABOUT UDSS

Universal Defence and Security Solutions (UDSS) is unique in Europe. We have the largest pool of former UK military, from 4* to warrant officer, across land, sea, air and Civil Service.

- As a result, we are able to cover policy and strategy through to technical advice, across the breadth of the defence and security sectors and in all domains.
- We work in tandem with the **UK MoD, FCO** and **Department for International Trade** and are able to offer the best of UK defence knowledge on all aspects of modernisation, innovation and acquisition.
- This unique experience of mission critical requirements is equally applicable to civilian government and industrial applications where innovation, implementation and evolution of capability and programmes drives success.



SPACE FOR THE DEFENCE & SECURITY ENVIRONMENT

The role of space in **modern warfare, sovereign security** and **humanitarian assistance/disaster relief** is critical. Whether providing accurate global position, ubiquitous and secure communications or delivering decision advantage using earth observation for imagery intelligence, nations across the globe recognise the strategic importance of space-related capability.

As such, it is now more critical than ever for military, government, industry and academic organisations to be able to understand:

- Current capability and future technology development.
- Role of military and commercial assets within a dual-use environment.
- Operation, integration and application of space technology within defence and security organisations.
- Application of artificial intelligence, machine learning, security protocols and rapid dissemination technologies to create operational flowlines.

Our vast military and security experience is now strengthened with industrial space expertise, enabling us to be the ideal partner for those looking to develop both their space strategy and operational capability.

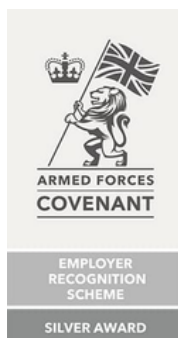


ISO
27001 : 2013
9001 : 2015

INTEGRATED
MANAGEMENT
SYSTEM

REGISTERED

Certificate
No.374922021



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DEFENCE & SECURITY
— SOLUTIONS —
POLICY, STRATEGY AND OPERATIONAL SOLUTIONS FOR GOVERNMENT AND ORGANISATIONS

WHY IS SPACE RELEVANT TO THE FINANCIAL, INDUSTRIAL & CIVILIAN ENVIRONMENTS?

An ever increasing pace of change is driving the need for better decision support systems to meet challenges such as:

- Climate Change
- Supply-Chain Management
- Marine Management
- Geo-Political Instability
- Environmental Risk
- Food and Water Security
- Asset Monitoring
- Land management
- Transport Planning

This next generation of business intelligence will be driven by increased frequency, granularity and accuracy of data.

This will feed analytic engines that turn data into knowledge and visualisations that provide the right knowledge at the right time to the right person in the right form. Space is now recognised as a **critical element** for these current and future decision support systems by a rapidly increasing number of businesses and governments globally.

However, many organisations are underestimating or under-utilising the potential value of space. Rapid technology advances, limited knowledge within organisations and a lack of resource within the marketplace to map capability to business need is stifling uptake and value generation.

We recognise these challenges and (in partnership with the very best of UK and international industrial capability) are providing support, advice, strategy and implementation of space-based technology to reduce cost, increase resilience and improve delivery for organisations across the globe by providing:

- **Knowledge and understanding** of how space can be applied to organisational challenges.
- **Strategy and planning** for innovation, research and development of satellite-based capability.
- **Seamless deployment** of new intelligence derived from earth observation into existing management and operational processes.
- **Ongoing engagement programmes** to maintain knowledge of technology developments and associated future business potential.

UDSS AS YOUR PARTNERS IN SPACE

At UDSS, we provide direct support to both:

- Space organisations looking to engage relevant markets (**defence, security, financial, industrial** etc.) seeking to apply their technology to client need and solutions, *and*
- Those organisations and companies looking to exploit satellite capability for their business and market need.

We act as a neutral, trusted entity and where necessary, we augment our own capability by partnering with UK and international capability providers to optimise our teams for various client needs.

As such, our offering is both wide and deep ranging from strategy and planning to direct deployment of a solution into an organisation and selecting solutions from a **range of technology areas**, such as:



EARTH OBSERVATION

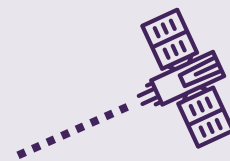
Data sourcing, management, analytics, dissemination and delivery of monitoring systems for a wide range of applications across climate, risk, insurance, finance, land-use and civilian security applications.

CYBER



Advice, strategy and support covering the entire range from ground segment through to SatCom, in-orbit security and end-service delivery.

POSITION



Asset monitoring, historic analysis, risk-modelling and support/advice across land, sea and air specialist applications.

SATCOM

Using satellite communications for strategy, sourcing, implementation, maintenance and monitoring of future developments.



UDSS SPACE TEAM



Air Marshal (Ret'd) Phil Osborn. Formerly the Chief of Defence Intelligence until the end 2018, responsible for the provision of strategic intelligence to Defence and Government, ISR co-ordination and counter-intelligence, as well as Defence leadership of offensive and defensive cyber. Phil has accrued extensive experience of leadership and command, intelligence and cyber, force design and capability planning, and transformation.



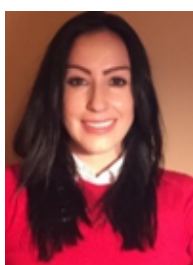
Peter Hewitt. Peter is the Co-Founder and Co-Chairman of UDSS with General Sir Richard Barrons. He has a strong business background having been Chairman or Director of 13 UK Public Companies over the last 25 years and was a founding director of 8 of these. He is an Honorary Group Captain in 601 (County of London) Squadron Royal Auxiliary Air Force and a non-executive director of a number of companies.



Dr. Andy Wells. Andy is the UDSS Strategic Engagement Manager and spent the last 30 years specialising in the application of satellite and geospatial technology to meet both business and governmental challenges. Following a PhD in satellite remote sensing, he has worked within start-up's, SME's and multinationals in a range of tactical business development and strategic board-level positions across 15+ countries and 20+ markets.



Air Marshal (Ret'd) Edward Stringer. Formerly Director General Joint Force Development (DG JFD). Responsible for all operational concepts and doctrine, he produced the Integrated Operating Concept (IOPC) which was the first operating concept that integrates the Space and Cyber domains as equals partners. Edward a member of the Nat'l Space Council. As an Air Cdre he was Commandant of the Air and Space Warfare Centre, which was operational lead for Space, Cyber, EW and all Test & Evaluation.



Michelle Howard. Michelle is a lead government relations and strategic policy advisor in the defence and space sectors. Her early career spanned a number of operationally sensitive government programmes across the Middle East, Southeast Asia, and East Africa. Since moving to the UK in 2016, she has served as an independent consultant in business intelligence, policy research, and government affairs. Michelle is an accomplished linguist, speaking fluent Arabic and German.



Air Commodore (Ret'd) Phil Lester. Philip has over 30 years' experience within the Defence and Security community including with numerous allies and partners. He has been at the forefront of a number of Defence's force development initiatives including multi-domain integration, space, cyberspace and modern deterrence as well as the introduction into service of some novel and highly classified capabilities.



Dr Jamie Saunders. Jamie retired from the Board of the UK National Crime Agency in 2017 after twenty-nine years of public service, the majority at the UK's national signals intelligence and cyber agency, GCHQ. He is a member of the UK Government's Expert Advisory Group on Cyber Resilience and the Advisory Group of the UK's Association of Insurance and Risk Managers in Industry and Commerce, and advisor to a number of digital security start-ups in the UK, US and Japan.



Dr Michael Holden. Michael has a PhD in X-ray lasers and an MBA in Business. His focus for the past 5 years has been the growing Space sector, currently working across the UK Government, industry, trade bodies and academia to develop a Space offering for the DSEI show. He has worked on the UK's Satcom and PNT programmes (Skynet 6 and GNSS). Previously he lead (among others) the successful campaign for the \$3.2bn P-8A Maritime Patrol Aircraft (MPA) capability for Boeing in the UK.



Gp Capt (Ret'd) Sean O'Connor. Sean has been at the forefront of shaping the application of space technologies the past 10 years. He brings an in-depth knowledge of the UK civil and defence space landscape and a nuanced understanding of the current policy environment and stakeholder relationships across UK space sector. Previously, he led a cross-functional and multi-disciplinary team to shape the development of UK Ministry of Defence space capabilities.



Air Commodore (Ret'd) Steven Thornber. Steve has 35 years as an intelligence officer and operational planner, specialising in ISR and targeting. He began his space career in the late 80s as a strategic imagery analyst and sensor planner; he was also the National Imagery Collection Manager before becoming MA to the Director General overseeing Defence's space-based IMINT, SIGINT and MASINT capabilities. From 2010-2013, he commanded the UK's national IMINT capability. Latterly, he was responsible for USCENTCOM's ISR operations, including new space-based capabilities.



Air Vice-Marshal (Ret'd) Mike Hart. Mike Hart spent 35 years as a Royal Air Force Intelligence Officer. He has wide experience of State and non-State adversaries from the Cold War to contemporary counter terrorism, Grey Zone operations and resurgent Russia. He is an experienced user and practitioner of ISR, including space-based ISR, a Senior Associate Fellow at RUSI, and works with the Cambridge Centre for Geopolitics and the Brenthurst Foundation's Africa Security Dialogue.

Space for the Defence & Security Environment

To better understand space support systems and technology please use the contact details below.

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