

ParcAberporth & West Wales UAV Centre

Making Routine UAS Operations a Reality

The UAS industry is poised for substantial growth to support civil applications and operations driven by the environmental and fuel use advantages of Unmanned Aircraft Systems. Come the day when regulatory, safety and procedural concerns have been addressed, opportunities will abound for payload, platform manufacturers, and their associated supply chain. However, whilst waiting for that anticipated day, the question must be asked: How does the industry prepare itself? The answer used to be: with great difficulty. Problems and obstacles abound and it has not been easy to develop, demonstrate or, more simply, fly a UAS in today's world.



Military operating environments and small, model aircraft type systems aside, operators must be prepared to leave civilisation behind and de-camp to a more remote part of the planet such as polar or desert regions to fly larger civil UAS. The conduct of meaningful, controlled and safe operations on a routine basis has been a challenge. Taking up this challenge and, in particular, focussing on developing the ability for *routine* operations, ParcAberporth (Wales, UK) is poised to deliver one of the most complete offerings to support UAS flying and development available anywhere in the world.

Ground infrastructure also includes state of the art accommodation available at ParcAberporth – modern, adaptable buildings underpinned by the Welsh Assembly Government assistance to companies wishing to establish a longer-term presence in the region. Campaign-style operations are also readily supported, with the WWUAVC able to provide packages that afford tactical deployments and re-deployments as and when required. Indeed, the WWUAVC can provide a one stop shop for all type and sub-system certification needs, reducing certification timescales and cost.

Driving this offering is the dedicated operational centre of ParcAberporth, the West Wales UAV Centre (WWUAVC). A partnership between the privately-owned, commercially operated West Wales Airport and the global technology company, QinetiQ, the WWUAVC is the beating heart of ParcAberporth. The WWUAVC is working to bring together on-the-ground know how, a range of support facilities plus technical and operational support to enable UAS operations to be conducted safely, in a controlled environment and on – most critically – a *routine* basis.

Notwithstanding the remaining work to be finalised, the WWUAVC is already delivering services to customers, as well as working with the UK MOD to develop a package of services ready to support the Watchkeeper programme when it comes to UK shores in late 2008.

Opened in July 2006, the WWUAVC has been pursuing the development and implementation of considerable infrastructure. Infrastructure such as comprehensive airport facilities geared for UAS operations; indeed, it is a proud achievement that West Wales Airport has the world's first UAS operations manual with formal regulatory approval.

Once complete, the ParcAberporth UAS operating environment will ensure that West Wales is primed to provide focussed, safe and routine delivery of UAS operations in a manner few other locations can match, especially when viewed as a complete package. The UAS industry and its supply chain will have access to accommodation, airspace options, airport facilities and the under-pinning safety infrastructure on a permanent or campaign basis, to meet all their needs. The industry can be sure that the WWUAVC is ready to support the expected growth in demand.

The choice of the western side of the UK mainland as location for a UAS operating environment is not an accidental one. ParcAberporth has been the catalyst for a growing international realisation that, when coupled with existing local QinetiQ-operated facilities, West Wales is very well placed to deliver one of the best, if not the best, environments for the UAS industry to develop. For example, the WWUAVC is developing procedures and permissions to enable the provision of varied airspace options serviced by an air traffic management unit, thus building the foundation for proving the integration of unmanned and manned operations in a practical and pragmatic way.

For more information about how Wales can help support your UAS business growth in Europe contact: ibw@wales.gsi.gov.uk or visit www.ibwales.com/aerospace

In 2008, the airport infrastructure is set for a major development to include new hangarage and office accommodation as well as a new 1200m runway; the latter element supporting increased capability for accessing the site, making the airport an accessible hub from most European locations.

