



UAVS Association

By David Barnes, Director

Leading The Way In The UK Towards Seamless Operation Of Manned & Unmanned Aircraft

The UAVS Association is the only trade association in the UK recognised as representing the interests the UAS industry. It is recognised by the UK Government as being the industry representative and has been granted unparalleled access to Government departments, regional development agencies, regulators and other UAS interested parties.

Its objective is to promote and enable the safe, effective and integrated operation of UAS in both military and civilian environments. It relies totally on funding provided by its 41 members through subscriptions and sponsorship of Association events and therefore is not restricted by the conditions of any public or government funding. Its independence means that it can work alongside UVS International within the European arena in striving for similar goals.

During 2007, the focus has been on CAP 722, the UK Civil Aviation Authority's «Unmanned Aerial Vehicle Operations in UK Airspace – Guidance» document. The CAA's Directorate for Airspace Policy has been co-ordinating a substantial revision and update of the Second Edition originally published on 12 November 2004. In the last 4 years there may not have many changes in general in the field of aerospace operations but the number of UAS systems now being offered for potential civilian applications has grown exponentially.

The ASTRAEA Programme, originally championed by the UAVS Association in 2004, has highlighted the acceleration in interest and potential for UAS and how these might be integrated seamlessly into the congested world of manned aircraft in controlled airspace. The regulators have had to be drawn in to the planning and systems architecture considerations for all future UAVs. This has impacted on CAP 722 significantly.

The Association had two very successful workshops with over 40 industry, government and regulatory representatives attending on each occasion during 2007 to highlight the issues in CAP 722 and to identify changes and updates that would reflect the current operating environment and the capabilities of UAS technologies, in particular the Sense & Avoid mechanism.

The third edition of CAP 722 is scheduled for preliminary publication for industry comment in the first quarter of 2008 and should be issued finally before mid-year. New chapters are expected on Autonomy, Human Factors and Surveillance. Other additions are being considered.

The Association will respond to this new edition with a further series of events and workshops to highlight the changes and to ensure that UK industry remains fully conversant with all the requirements of CAP 722 and how it can operate within these new constraints.

2008 will also see the highlight of the ASTRAEA Programme with a series of demonstrations, both synthetic and hardware, throughout the year culminating in a co-ordinated systems demonstration in October in West Wales. The ASTRAEA Programme has not only encouraged the larger aerospace conglomerates to work together but it has also brought a number of small to medium-sized companies into the UAS arena, some of whom had never been involved in aerospace before. Engineering capabilities from other fields have found a new application in this emerging market. The association therefore is now representing an even wider spectrum of companies and organisations.

Both CAP 722 and ASTRAEA have highlighted the complexity of the regulatory environment which has been built from over 100 years of manned flight. Those involved in building UAV platforms have not usually been involved in addressing all these requirements in the past and therefore a new set of organisations is approaching the regulators for advice and direction in a new field where the regulators have little particular experience or history. Some consider the regulatory framework will not be fully agreed quickly and for some time, but, even then, the UK is still leading the way with others such as the FAA and EASA through EUROCAE WG73 closely monitoring what the UK is doing.

The co-operation that ASTRAEA has facilitated between the aerospace giants in the UK may foster a continued collaboration in the form of a follow on programme of activity if only to address and formalise all the regulatory issues. This successor can also address the spectrum issue for secure UAS communications, a subject that will have to be addressed fully at the next World Radio Conference in 2011. The scale of discussion and resolution is far greater than any one company or organisation can afford to take on and by collaborating they share the risk and share the achievements when it is all resolved.

The association has represented UK industry on the CAA's UAV Steering and Working Groups, SASWG, NATMAC and GAAC for a number of years and will continue to do so. Through its involvement in these groups the association can ensure both large and small companies' interests are promoted at the top level. It has a growing number of interests to serve and that can only be good for all involved.

For more information on the UAVS Association and the events it will be organising in 2008 please visit its website at www.uavs.org

