

A place for GA in the Single Sky

IAOPA is heavily involved in the Single European Sky and its research project, SESAR. Ben Stanley explains where we stand



The topic of Europe, and the UK's relationship with the rest of the continent, dominates the news at the moment. The management of risk in the financial world takes centre stage, with concerns over nations' ability to pay and how this will impact future commitments.

At AOPA's London office we've also been doing some thinking on managing risk in general aviation. Part of our 'raison d'être' is to be able to control the risks arising from European or UK regulation and policy, and ensure GA has a robust and proactive voice in the key debates.

One of these policy areas is the Single European Sky. This is the European Commission's and member states' answer to fragmented airspace and performance issues in Europe. It seeks to generate improvements in the European aviation 'network', a term used to describe the inter-relationships between the airspace users, air traffic control providers and airports. It aims to do this by improving airport capacity, introducing new technology synchronised across Europe, and enhancing safety. The objective is to

improve the performance of aviation in terms of cost, environmental impact, safety and flight efficiency.

This appears to be a 'very good thing.' No-one could have any issue with improving performance?

Well, at first glance, no. But almost exclusively at present, the 'network' performance is being defined with reference to commercial air traffic, and in particular scheduled airlines. Whilst AOPA has no argument that a focus must be placed on solving commercial air transport issues – after all, we are also delayed on those early morning Brussels flights as well – it cannot be right that a single business model is promoted through public funds at the expense of others, particularly if other models can show necessary purpose and function vital to the economy as general aviation and aerial work clearly do.

A clear mandate, but little progress

This was recognised by the European Parliament and Council around four years ago, when they released a series of resolutions and conclusions stating that the: "...programme must fully take into

account the specificities of general and business aviation and deliver real benefits to the sector without placing unnecessary burdens on it." – The Agenda for Sustainable General and Business Aviation.

At the time, and through the hard work of the European AOPA members, GA's needs were written into the strategic document for European Air Traffic Management development. Of particular interest to our readers might be the text that stated that a low-cost positioning system e.g. ADS-B, should be developed by 2011; that precision approaches using satellite augmentation should be in operation by 2011, and that in-flight reception of aeronautical information and meteorological data should be prioritised for GA.

So where are we four years on? Satellite augmentation approaches are beginning to be rolled out in Europe – the first was approved in France this year. However, with three operational approaches in Europe versus thousands in the USA, progress is painfully slow.

Cheap (circa £500) certified ADS-B boxes are still not available, as certification



costs drive up the price. In the UK, NATS is attempting to drive R&D on the issue. But the level of European or government funding is almost non-existent, again in stark contrast to the USA. In some cases, we need to actually disable the function in our US-specified box when flying in Europe!

Finally, it is a crime that safety-related information such as terrain, traffic or weather is still not available via a cost-effective data uplink on GA airframes in Europe. The USA is rolling out its Flight Information Services across the continent, giving GA pilots access to life-saving information (see http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/surveillance_broadcast/general_information/media/ADS-B_FAQ.pdf). Yet in Europe, we are told that we cannot use the same technology as the USA (no business case for the cost-conscious air traffic control organisations), but no other solution will be available for the next fifteen years.

Clear objectives for general aviation

So what is AOPA doing about this on your behalf? In a recent Department for Transport presentation, we laid out our objectives for Air Traffic Management to an audience from the DfT, CAA, NATS, airlines, airports and industry. These objectives can be summarised as:

Safety – GA safety must be taken into account in future European targets, with the safe conduct of GA-related flights ensured in controlled and uncontrolled airspace. This is particularly a concern for AOPA with the introduction of Unmanned Aerial Systems in uncontrolled airspace – something likely in the next five to ten years;

Affordable and beneficial – AOPA knows that GA has to be part of the future system. Saying no to developments will not help us in the long run, as we stand the risk of being isolated and placed in ever-smaller amounts of segregated airspace. We have a vision to develop ADS-B as a cheap means of showing our location to ATC and other users, allowing access to most airspace. For those users who have difficulty equipping (e.g. non-power gliders), notified airspace may be the solution. We will aim to be interoperable with other users in controlled airspace, but in a way which is proportionate (in terms of cost) and functionally beneficial, noting that the business case for each GA operator tends to be unique.

Access – we must retain access to airports and airspace vital for the health of our sector; this includes access for non-scheduled GA to regional airports or airspace across Europe, and requires flexibility in the 'network'. It also includes safe approaches to airports at lower minimums, through the use of satellite-

based technology.

These objectives and others have been included in a recent update to the high level European operational concept for the SESAR programme – the €3bn research programme driven by industry to facilitate the introduction of new technologies and concepts. This update finally took GA (and rotorcraft) concerns into account in the European arena, and should lead to objectives being placed in the strategic policy documents.

Going forwards in controlling risk

However, it doesn't stop there. The next step is to secure funding to develop GA solutions: interoperable with the European network, yet beneficial to the GA user base. AOPA believes that with a relatively small amount of targeted funding, huge steps could be made in introducing valuable performance-enhancing

equipment to European GA. We are working with GA industry to assist in defining solutions and standardising them at a European level so they appear in your cockpit for as low a price as possible. The aim here is to mitigate investment risk for GA industry so they are able to innovate and introduce new beneficial products in Europe.

We will also be contributing to the UK's future airspace strategy through an industry group. This will take the European strategies and concepts, and seek to apply them in the UK's airspace. Obviously, AOPA is seeking to manage risk by ensuring the future solution is acceptable and beneficial to all airspace users.

Our voice is being heard... but we need our members to help us in what we're saying. Please do write to us at the AOPA UK office, or to info@aopa.co.uk to share your views on where GA and Air Traffic Management should go in the future. ■



UAVs lead to more controlled airspace

Canada has announced its intention to carve out new controlled airspace for unmanned aerial vehicles, and IAOPA is expressing its concern at the development. Transport Canada has announced its intention to change a large swathe of the Open FIR into Class F airspace on the grounds that the UAVs that will fly there are unable to conform to the rules of the air. IAOPA's position is that remotely piloted vehicles should be able to demonstrate the same "sense and avoid" capability as manned aircraft, and that manned aircraft should not be excluded from airspace because of UAVs.

But the UAV industry will be worth vast amounts of money and there is enormous pressure on regulatory authorities to engineer airspace access for remotely piloted aircraft. Rationalising its move, Transport Canada says: "Currently, unmanned aircraft are unable to present a level of compliance with Air Traffic Management (ATM) communications, navigation and surveillance requirements equivalent to that for manned aircraft."

Given the large areas of airspace that could be affected, the move will materially affect general aviation operations. IAOPA's position is that impinging on the freedom of manned aircraft to use the airspace is a bad precedent and a safety hazard.

Kevin Psutka, President of the Canadian Owners and Pilots Association, says: "UAV operators are pushing hard for airspace to test their aircraft and they want it to be conveniently located so that they do not have to travel too far from their development facilities. This airspace typically is located near where we live and fly. Our antiquated NOTAM system cannot be relied upon for ensuring that all pilots are informed of temporary restricted airspace activation. Until such time as sense-and-avoid has been developed, these operations should, at a minimum, be conducted in airspace that is in very remote parts of our country."