

Preserving Our Skies

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By Mike Orkiszewski

September 11 - When people think of disappearing resources, the airspace above us is not usually considered. But the FAA is actually protecting the airspace from being eaten away – starting from the ground up.

It seems everybody wants a piece of the sky.

Communities need to build bigger buildings as part of their growth plans. The communications industry has to erect towers. High fuel prices warrant wind turbines for energy.

And, of course, there is the aviation community at large. Big commercial airlines, air taxis, airports, general aviation and helicopters all want to ensure that this precious resource – airspace – is preserved and protected.



Kevin Haggerty, manager of the ATO's Obstruction Evaluation Service, explains what it takes to manage competing demands for the nation's airspace. Photo: ATO

Kevin Haggerty, manager of the ATO's Obstruction Evaluation Service, says it's going to take four things to manage competing demands for the nation's airspace: transparency, collaboration, preservation and protection.

“Protection is the number one thing, because we have to ensure safety,” Haggerty said, emphasizing that development must not encumber navigation and communication facilities, much less navigable airspace.

The FAA protects airspace by preserving it intact and free from encroachment. But in order to save what we have, we have to define it, and that’s part of the problem according to Haggerty.

Unlike land-based modes of transportation, in which miles of highway or railroad track can be easily tallied, airspace is more difficult to quantify. What’s more, new technologies are complicating the calculation by increasing aviation demand where it exists and creating demand where it never existed before.

For example, Required Navigation Performance lets aircraft fly more discrete tracks, which in theory means they should use less airspace. Demand, however, dictates that we use that freed airspace by fitting in more tracks. And those tracks can now be flown at lower altitudes because they are more precise, increasing the need for airspace closer to the ground.

However, the people who put up buildings, towers and wind turbines generally don’t understand what’s going on in the sky. They just see planes flying in one direction or another – and a lot of empty sky in which to build.

To help the public understand how our airspace is structured, and to let them know what is needed to keep it safe and unencumbered, the FAA is sharing information electronically. It is also encouraging the use of a common operating system for people who use the NAS, both on the ground and in the air.

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“We have to be able to communicate every aspect of the NAS that we possibly can and make that transparent to people,” Haggerty said.

By making the system more transparent, fewer surprises are likely to occur.

Surprises are generally not a good thing, especially when it comes to very expensive projects. Haggerty cites the example of a building in San Diego that had to be lowered 20 feet after it encroached on airspace needed for operations at the airport.

In the wind turbine industry, performance tax credits are sold as much as four years ahead of construction. After a company spends money to lease land and buy equipment, the last thing it wants to hear is that it can't build because the turbines will affect a long-range radar well away from the building site.

Collaboration resolves problems before they happen. Haggerty has worked with Homeland Security and the Department of Defense to establish a Web site with a “stop light” system for people wanting to erect wind turbines.

“They can put in their lat/long [and] if they are in a green area they won't affect radar at all,” Haggerty said. Coordinates giving a yellow light mean radar might be affected, but mitigating solutions could exist. A red light indicates radar operation will certainly be affected.

What's important is that stakeholders with competing demands come together to develop mutually acceptable solutions that allow for construction without diminishing the NAS.

Building partnerships is important.

After all, the FAA doesn't have the authority to protect airspace directly. Unless encroachment is specifically covered under an airport improvement program, the agency traditionally has relied on states to tell their citizens what they can or cannot do.

But by increasing public airspace awareness through transparency, collaboration can then be used to develop strategies that will ultimately preserve and protect the national airspace system.

To help make that happen, the FAA is hosting a conference Sept. 29 to Oct. 2 in Las Vegas, Nev. *Competition for the Sky 2008* will bring together federal, state and local authorities, commercial and private NAS users, and the military, to provide insight and guidance on NAS operations and requirements.

The first full day of the conference features discussion related to obstruction marking and lighting, and also the effect of wind turbines on long range radars. The second day will focus on airport encroachment and zoning. The final day will be devoted to telecommunications and protecting the NAS.

For more information and to register, please go to www.csky.info.



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