

A Better Way to Preserve the NAS

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By Mike Orkiszewski

September 25 — An improved system is in place to help the FAA work with the public to safely preserve the nation's skies.

Preserving the National Airspace System and protecting its facilities is easier thanks to improved government transparency and collaboration with the public. But it took a "virtual" transformation in the way business is conducted to get there.

Obstruction evaluations ensure that air navigation safety and the efficient use of navigable airspace is preserved by keeping antennas, buildings, wind turbines and other development from encroaching on the NAS.

But just a few years ago, the evaluation of such development was often anything but transparent or efficient.

"There was an awful lot of paper," said Kevin Haggerty, the Air Traffic Organization's manager of Obstruction Evaluation Services.

Anyone erecting a structure that might encroach on navigable airspace or interfere with air navigation facilities had to fill out a piece of paper and send it in to one of nine evaluation offices.

Once the paper arrived it still needed to be sorted, delivered to an evaluator and entered into a computer. From the time the form was filled out to the moment it was entered into the system, a week could easily have passed.

That was a problem.

"We are required to give a response to the public within 30 days," Haggerty said. "Time is of the essence, and this was a huge paper process."

Nor did that process end at the Evaluation Services office, as each aeronautical study had to be passed along to other offices before a response could be provided. Between the paperwork and maps that were used to verify whether obstructions could be permitted, the program had an enormous footprint in regional offices across the Federal Aviation Administration.

A restructuring under the newly created ATO, however, presented an opportunity to rebuild the program in a way that would benefit the agency and the public alike.

All that needed to be done was take 62 program employees from nine regional offices, along with their accumulated stockpiles of records, and re-establish them in three new Service Area offices whose locations at that time hadn't yet been announced.

When Haggerty asked how he could plan a move into offices that didn't exist, he was told to build the program in a way "that they could go anywhere."

"So before we had transparency and collaboration," Haggerty said, "we had virtuality."

Even with the program's employees spread through all the FAA's divisions and regional offices, it was impossible to position them geographically for access to every airfield in the country. But that didn't matter if everything that they needed to have was available on computer.

Obstruction evaluations rebuilt itself into a virtual program office by first designing a system that could collect, verify and disseminate aeronautical information electronically and graphically.

However, if the new system was going to be a success, it had to work for the people submitting and accessing evaluation-related information. With that in mind, the program partnered with communication companies, tower builders and aviation consultants to help design its new on-line system.

From the group's first meeting six years ago, its focus has been on how the user can best be served by the system.

"Now, when a company submits information for a wind turbine or building or communications tower, and they click enter, it's seen by someone today," Haggerty said. "It will be verified, processed and sent out to the rest of the agency today."

The result is a reduction in turnaround time from about seven days to just over one, including weekends. Users can put in information for a case and get the aeronautical study right away.

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By recovering seven days in the 30-day response process, the quality of the program's determinations also improved, according to Haggerty.

The new system allowed quality and workflow to increase, as well as deeper verification of information. Sketches of obstruction sites on pieces of paper needing verification gave way to comparisons done from geographic information system databases.

Fewer people were needed to do the job, too. The workforce eventually pared itself down from 62 people across nine regions to 35 employees, none of whom had to be formally tied to a service area. The program could operate as a virtual office – connected by computer and phone.

In effect, employees can now be located anywhere, just as long as they are connected and respond to calls. The arrangement lets employees do evaluation work for extended periods on site, if necessary, gaining knowledge about airspace that they might never acquire sitting in an office. And they can do it while still attending to the rest of their workload.

"If you want to go learn the operations of an airport and what the needs of the airport management are, you need to be there," Haggerty said. "That's a collaboration that we just couldn't buy before. And if we weren't virtual, it would be much harder to do."

With a streamlined staff and more transparent system in place, the program's emphasis is increasingly on managing competing demands for the NAS from a more global perspective.

Automation has eliminated much of the labor-intensive work associated with approving and disapproving individual obstruction requests. Freed from more time-consuming tasks, evaluators can focus on trends across all competing demands to ensure fair and consistent standards are applied.

As an example, standards for the height of obstructions near airports have varied in the past based on different interpretations related to a departing aircraft's altitude at the departure end of the runway. An aircraft is supposed to be 35 feet above the ground.

Normally, an obstruction meets standards if its height is one foot or less for every 40 feet of distance that it is located from the departure end of the runway. But, occasionally, taller obstructions have been approved based on a "buffer" resulting from a departing aircraft's expected altitude.

Standardizing such conflicts, without sacrificing navigable airspace, is part of the critical work that obstruction evaluation services faces in the years ahead.

But identifying where the conflicts exist and devising appropriate ways to correct them cannot occur without the collaboration of those who use the system.

An upcoming FAA-hosted conference, [Competition for the Sky 2008](#), provides an ideal venue for system stakeholders to address their needs and devise strategies to meet competing demands on the NAS.

Obstruction evaluation services will be in attendance, listening and learning. Issues and concerns will be collected, as well as potential solutions.

"We built this system to be collaborative," Haggerty said. "I want my people listening, not just saying, 'This is how you fill out a form, and this is how you stay out of our airspace.'"

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



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