



FAA Office of Airports

Message from Robert Bonanni, P.E.

-Office of Airports National Resource Engineer for Airports and Airspace

Welcome to the inaugural issue of the Airport Surveying-GIS Program newsletter. Our goal with this newsletter is to keep you informed of how the program and the Airports-GIS program are progressing. Each quarter we will present information on what we are doing to improve the program, the associated Advisory Circulars and other items of interest. Our

computer systems specialist will discuss upcoming changes to the system and provide tech tips on ways to use the system more efficiently. We are hoping to get some small articles each issue from our government representatives and aeronautical industry working groups. Our intent is to address common problems they are seeing and issues they are having with in-

formation submitted for their review. As we continue to develop the Airport Surveying-GIS program and the Airports-GIS we encourage you to contact us to provide feedback on the program and system. If you have a comment or suggestion for us, please do not hesitate to let us know by sending us an email at: 9-awa-arp-airportsurveyinggis@faa.gov.

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Airport Surveying

New navigation technologies such as satellite-based and Required Navigation Performance systems permit aircraft to move freely from the constraints of ground-based navigation systems. To use these new technologies, the Federal Aviation Administration (FAA) must safely manage aircraft on the ground and in the air. To accomplish that goal, laws authorize us to manage airport and aeronautical data. One way we do that is with our Airport Surveying-GIS (Geographic Information System) Program.

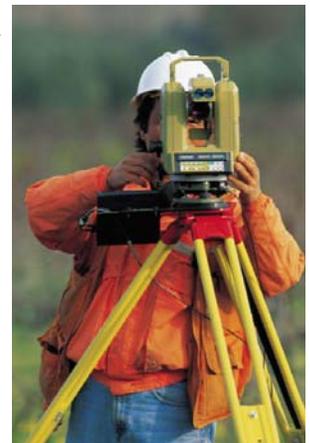
Under this program, the National Geodetic Survey (NGS) generates a portion of the aeronautical surveys we need and continue to use. But in addition, the Airport Surveying-GIS program provides the government's technical expertise to independently verify and validate those surveys completed by airports and the private sector. In short, this program validates airport and aeronautical data in a systematic way that satisfies industry standards.

The primary contribution of the Airport Surveying-GIS Program is its ability to capture and

manage information in digital form. The FAA will create a single central warehouse for airport engineering, aeronautical and airport layout data. We'll make that available via the internet to a variety of aviation information consumers. The program has many parts and phases that need further explanation here.

Program Overview

The Airport Surveying-GIS Program has three-phases. Phase 1 was completed in March 2006 and consisted of defining and publishing airport and aeronautical data collection standards. This phase also brought about support for instrument flight procedure development and the construction of a database to support these efforts



Airport Surveying Cont.- Expected Outcomes of the Airport Surveying-GIS Program



Phase 2 will be complete by the third quarter of the 2008 fiscal year. The goal for this stage is to enhance program guidance to better organize all airport and aeronautical data. We are also beginning to use the program across all FAA lines of business and provide special services such as on-demand electronic Airport Obstruction Charts and Airport Layout Plans.

The final phase of the program works toward integrating Airport Surveying-GIS data with other FAA databases and programs. This will include supplying government and public access to the FAA's data via the web. Additionally, airports without the ability to use this technology will be provided with limited GIS capa-

bility.

The Airport Surveying-GIS program gives private industry the tools they need to collect and provide the FAA and individual airports with data about the nation's airports and infrastructure. Also, non-GIS equipped airports gets some limited GIS access to use for their planning, development, environmental studies, noise analysis and modeling.

It's clear that the Airport Surveying-GIS program allows us to accomplish a variety of extraordinary services and transactions that improve aviation management and safety, some of which include:

- On-line ability for public airports and consultants to access electronic Obstruction Charts
- With these charts, more

quickly provide pilots information about airport updates

- Permits public airports and consultants to electronically submit airport layout, engineering and aeronautical survey data to the FAA
- Lets the FAA publish airport layout-related information for airports

In the end, Airport Surveying-GIS gives us the ability to analyze three dimensional airport design and obstruction identification surfaces. We can integrate a variety of information and file formats and create sophisticated on-demand maps for a variety of aviation analysis and planning tasks. We'll put all this into an easy-to-use, web-based, spatially referenced database that allow for the rapid exchange of airport information. This is an exciting program.

“Most projects require at least two and some will require three Survey and Quality Control plans”

Survey and Quality Control Plans

There is some misunderstanding about how to develop and submit survey and quality control plans in (or to) the Airport Surveying -GIS program. These are vital plans that let everyone associated with the project know exactly how it will be accomplished. Most projects

require at least two and some will require three Survey and Quality Control plans, each using the information from a single AC. If you are a consultant, use the Advisory Circulars from the table below to develop your survey and quality control plans. We will pre-

pare templates of the three plans and post those on our web site. The main point is to not copy and paste information from the AC. Instead, tell us how you will complete the project and so we can ensure the project meets airport and FAA requirements.

AC 150/5300-16	Describes how you will tie the survey project to the National Spatial Reference System (NSRS)
AC 150/5300-17B	Describes the standards you must use for the imagery you collect and submit if your project involves safety critical data .
AC 150/5300-18B	Describes how to submit aeronautical surveys to NGS. Provides field data collection and Geographic Information System (GIS) standards.

Advisory Circulars to use when developing survey and quality control plans



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If you have any questions on the email registration process, ideas for future articles, or general feedback on the newsletter, please contact Daniel Peck at 9-awa-arp-airportsurveyinggis@faa.gov

FAA Office of Airports

Federal Aviation Administration
Office of Airport Safety and Standards
800 Independence Avenue SW, Suite 621
Washington DC 20591

Email: 9-awa-arp-airportsurveyinggis@faa.gov.

http://www.faa.gov/airports_airtraffic/airports/



Tech Tips

Have you ever wondered what your next step of action is when you're working on your project? Whether you log on as an airport sponsor, consultant, ADO/Region, or NGS wouldn't it be nice if the system could advise you on what to do next based on your functional role? This is exactly the kind of enhancement that you will soon experience in our next release of the Airports GIS system(10/30/2008). In addition to the "Your next action is..." feature, the following are a few other highlighted improvements that will be introduced in our upcoming changes to the system:

- Improved screen layout where your active workflow task action button corresponds to your next action advisory message.
 - All workflow task action buttons are presented and activated based on your project requirements.
 - All activities related to each workflow task action button are organized in its own workspace.
 - Ability to submit your required plans (Survey & Quality Control Plan, or Geodetic Plan, or Imagery Plan) selectively.
 - Ability to use "Add Note" function to submit your project status report.
 - Ability to delete (mark as obsolete) documents submitted by mistake or that have not been approved by NGS/FAA.
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