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## Newsletter - June 17th, 2009

### FltPlan.com Offers Free RAIM Prediction Service

#### **FAA will require GPS RAIM predictions starting July 1 - If you have GPS equipment you need this information**

July 1, 2009 is right around the corner. That's the date when the FAA will require RAIM predictions from pilots filing RNAV 1 routes (Q and T), RNAV 1 STARs, and RNAV 1 DPs as part of their preflight planning if navigation will be predicated on GPS. Instead of just doing a RAIM prediction for your approach, you'll also need to predict that you'll continue to have RAIM for every leg of the flight. FltPlan.com, using FAA approved methods, makes compliance easy.

RAIM stands for Receiver Autonomous Integrity Monitoring. It is a technique used within a GPS receiver/processor to monitor GPS signal performance. Basically, it's a check to see if the receiver will be able to validate its position.

RAIM optimally requires six satellites in view (or five satellites if the aircraft is equipped with baro-aiding). Baro-aiding is a method of augmenting the GPS integrity by using a non-satellite source. It uses the pressure altitude corrected for the local barometric pressure setting to provide accurate altitude information.

According to FAA document AC 90-100, "the pilot should confirm the availability of RAIM with the latest GPS NOTAMs. If no GPS satellites are scheduled to be out-of-service, then the aircraft can depart without further action. If, however, any GPS satellites are scheduled to be out-of-service, then the availability of GPS integrity (RAIM) must be confirmed for the intended flight (route and time). In the event of a predicted, continuous loss of RAIM of more than five minutes for any part of the intended flight, the flight should be delayed, canceled, or re-routed where RAIM requirements can be met."

GPS RAIM Predication requirements apply to any flight using:

- U.S. RNAV routes (Q routes and Tango routes)
- RNAV Departure Procedures (Obstacle Departure Procedures and Standard Instrument Departures)
- RNAV Standard Terminal Arrivals (STARs)
- GPS NPA (non-precision approaches using GPS)
- Alternate Airport (if using GPS)

The good news is that FltPlan.com allows you to check your pre-flight GPS RAIM prediction with ease. This is a free service utilizing FAA approved methods. If the equipment entered in your aircraft profile indicates that you have GPS equipment, FltPlan.com will automatically calculate your flight plan for GPS RAIM along your route of flight using current GPS satellite information. To make things even easier, we will display one of the icons below (see Fig. 1) on the bottom left side of the NavLog. This lets you know at a glance whether or not there are probable outages along your route. You can also click on the GPS RAIM icon and get a full graphical report (see Fig. 2). If you need documentation, you can confirm the check by printing the NavLog or the full report.






 <b>GPS RAIM</b> <b>Good</b> No GPS outages that will effect your flight	 <b>GPS RAIM</b> <b>Warning</b> GPS outage within 1 hour window of your flight	 <b>GPS RAIM</b> <b>Caution</b> GPS outage within 2 hour window of your flight
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Fig. 1


FltPlan.com 

GPS RAIM REPORT (generated 02/23/2009 13:36z)

**Summary: Your Flight is affected by predicted RAIM Outages**  **GPS RAIM**

Flight Start Time: **02/24/2009 01:30**      End Time: **02/24/2009 03:49**      [More Information](#) On RAIM Prediction

This map will highlight any predicted RAIM outages within 1 hour of your scheduled departure time.



WARNING! Your flight is affected by predicted RAIM outages.

Fig. 2

GPS satellite information is available no more than 50 hours in advance. Because of this, FltPlan.com will not calculate or display GPS RAIM

Prediction for any flight plan more than two days in the future. FltPlan.com will automatically calculate your flight plan for GPS RAIM for any NavLogs displayed for the current day, or the following day.

In addition to your route of flight, FltPlan.com checks for:

- Terminal Departure RAIM
- Terminal Arrival RAIM
- Arrival Airport NPA (non-precision Approach) RAIM
- Alternate Airport RAIM (if you have listed an alternate)

FltPlan.com's RAIM Prediction complies with FAA requirement for preflight planning and provides an easy, free method to verify that your flight also complies.

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## Some FAQs About eAPIS

**I've submitted my eAPIS manifest. Do I still need to have a completed Form 178 for the CBP officer?**

Technically no, but it doesn't hurt to have it. According to CBP policy, the eAPIS manifest replaces Form 178. However, due to the complexities of training thousands of CBP officers, it's possible for misunderstandings to occur. If you subscribe to FltPlan.com's eAPIS service, you can quickly print a copy of Form 178 by clicking on the link on your eAPIS page. This way all your bases are covered.

**Is it still necessary to notify the port of arrival by phone or radio before my arrival in the U.S.?**

Yes. Your eAPIS manifest does serve as advance notice, but pilots still need to follow up with CBP for their destination airport and make sure that the arrival details are accepted.

**My passenger has a passport but no other document type. What do I do?**

That's not a problem. Just leave Document 2 blank. Two forms of documentation are not required, just helpful.

**If my departure time changes by an hour or two do I need to resubmit my manifest?**

No. It is only mandatory if the arrival/departure date changes. However, if your departure time varies by more than three hours from your originally submitted manifest, we suggest you submit a new manifest.

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## Upload Your Flight Plans to Your Aircraft's FMC with Satcom Direct

**FltPlan.com is now a Satcom Direct preferred datalink provider**

FltPlan.com, in conjunction with Satcom Direct, now allows you to get your FltPlan.com NavLog information sent directly to the flight deck.

There's no longer any need to type all your data into your FMS. This saves time, saves your fingers, and cuts down on data entry errors. Your FMS computer can be pre-populated with following data from your flight plan:

- Route of flight
- Navigation points and intersections
- SIDs and STARs
- Winds aloft data
- Fuel Burn Info
- ETE

For more information on uploading your flight plan data through Satcom Direct, contact Satcom sales representatives Kevin Finegan ([kfinegan@satcomdirect.com](mailto:kfinegan@satcomdirect.com)) or Howie Lewis ([hlewis@satcomdirect.com](mailto:hlewis@satcomdirect.com)). You can also call Kevin or Howie at 321-777-3000.

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## Correct ICAO Aircraft Type Designators Become Mandatory

Here at FltPlan.com we have always encouraged the use of ICAO aircraft type designators and given warning messages if the aircraft type designator you entered was incorrect. Now, however, use of the correct ICAO aircraft type designator will be mandatory. ATC computers are programmed for aircraft performance based upon the aircraft type. If you file a flight plan with an invalid aircraft type, the controller will get a notation of ZZZ and there will likely be a delay or a query from ATC on your type aircraft.

When you use FltPlan.com, you will get an "invalid aircraft type" message if the aircraft type you listed is not ICAO compliant. If you're unsure what the correct designator is, a list of most all aircraft type IDs for General Aviation aircraft can be found on the Change or Add Aircraft page. Just scroll down the page. The aircraft are listed by manufacturer, then model. Some common mis-entries are as follows:

- PA28 should be **P28A**
- M20E should be **M20P**
- B200 should be **BE20**
- GIV should be **GLF4**
- LR35 should be **LJ35**

If you think your aircraft type is valid, but you're receiving an "invalid a/c type" message, send us an email at [Support@FltPlan.com](mailto:Support@FltPlan.com).

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## FltPlan.com Now Offers Full Flight Planning To and From Bermuda

You can now create and file flight plans to/from the island of Bermuda using FltPlan.com.

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