FAA Requirement (Summary)

Effective March 31, 2008 the references in Appendix 1 dictate that all operators using RNAV as their primary navigation method must have a RAIM prediction report before departing. See Appendix 1 for an excerpt of this requirement.

What is a RAIM Prediction Report?

RAIM (Receiver Autonomous Integrity Monitoring) is a technology developed to assess the integrity of Global Positioning System (GPS) signals in a GPS receiver system. The locations, paths, and scheduled outages of each GPS satellite are published, and therefore systems can calculate in advance geographical areas without sufficient GPS coverage. The RAIM Prediction Report is used by a dispatcher or crew member to determine coverage of GPS systems for a given flight plan. If the dispatcher or crew member determines that a given flight plan does not have sufficient GPS coverage, then a new flight plan must be created.

Jeppesen Currently Supports RAIM

Jeppesen has developed a solution for providing GPS RAIM prediction reports through Jeppesen’s Service Bureau. Jeppesen’s RAIM solution:

- Supports both RAIM prediction algorithms common in GPS devices:
  - Fault Detection (FD): Used by traditional RAIM to detect faults (differences between a satellite’s pseudorange measurement and its expected value).
  - Fault Detection and Exclusion (FDE): Used by newer GPS receivers to allow continued operation in the presence of a GPS failure.
- Supports configurable minimum duration outages—the acceptable duration that an aircraft can be without GPS coverage
- Includes support for the following Jeppesen products:
  - OPSControl 8.1
  - JetPlan.com 8.6
  - JetPlanner 3.1
  - JetPlan Engine 3.39.1
  - AOC Integrator 8.1
- Supports CrewBrief and EasyBrief applications.
- Supports the following GPS RAIM Prediction Report outputs:
  - Non Precision Approach (NPA): Report that calculates GPS coverage for specific airports (POA, POD and any relevant alternates) for a specific time.
  - Route: Report that calculates GPS coverage for an entire route along a series of checkpoints.