



U.S. Department
of Transportation
**Federal Aviation
Administration**

OCT 20 2010

Ms. Heidi Williams
Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, MD 21701

Dear Ms. Heidi Williams:

We received your questions regarding operational impact on the airways in northwestern Alaska due to the upcoming wide area augmentation system (WAAS) geostationary satellite (GEO) outage. You also inquired about the availability of alternative routes.

When the WAAS GEO, CRW (PRN-135) stops transmitting, we expect WAAS service to be unreliable north and west of a line from 70°N150°W to 64°N164°W and the following guidelines will be in effect:

1. To fly Q-routes in Alaska, operators must be under Air Traffic Control radar surveillance and use Technical Standard Order (TSO)-C145/146 equipment or TSO-C129 equipment. Additionally all operators flying Q-routes in the affected area must check receiver autonomous integrity monitoring (RAIM) for availability during preflight planning and follow published RAIM guidance.
2. To fly T-routes in Alaska, operators must use TSO-C145/146 equipment; however, operators may not fly T-routes in the affected area.
3. TSO-C145/146 and TSO-C129 equipped operators may fly Area Navigation (RNAV) Global Positioning System (GPS) approaches in the affected area to the Lateral Navigation line of minima but must check RAIM for availability during preflight planning and follow published RAIM guidance.
4. Any required alternate airport within the affected area must have an approved instrument approach procedure with a title other than GPS or RNAV(GPS) that is anticipated to be operational and available at the estimated time of arrival and which the aircraft is equipped to fly in accordance with Aeronautical Information Manual (AIM) paragraphs 1-1-20 c 6 and the note in 1-1-19 g.

Guidance is also available in the AIM paragraph 5-1-16 f, Notices to Airmen Publication, Operation on U.S. Area Navigation (RNAV) Routes, Standard Terminal Arrivals, and Departure Procedures (4-GEN-10), WAAS Flight Operations in Alaska- Interim Operational Guidance (4-A&H-11), and Advisory Circular 90-100A, paragraph 10.a(5). In terms of

alternative routes, AOPA members may choose to file VOR airways or contact Flight Service for alternatives.

If you have further questions, please contact Inspector Catherine Majauskas, Performance Based Flight Systems Branch, AFS-470, at (202) 385-4623.

Sincerely,

Handwritten signature in black ink that reads "G Powell for". The signature is written in a cursive, somewhat stylized font.

Leslie H. Smith
Manager, Flight Technologies and Procedures Division