

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
(Transcribed/Re-Formatted)
HISTORY RECORD

FAA Control # 98-02-210

SUBJECT: Use of Distance Limits for GPS Holding Patterns

BACKGROUND/DISCUSSION: Whenever a GPS standard instrument approach procedure (SIAP) needs a course-reversal initial approach segment, the FAA policy is to use holding in-lieu-of procedure turn instead of the standard procedure turn. Yet, these holding patterns are based on pilot timing of the holding pattern, which is to not exceed one minute inbound. Further, TSO-C129 IFR certified GPS avionics need at least two miles of centered CDI flight inbound to the FAWP in order to assure proper CDI and RAIM programming. Often, slower aircraft are forced to turn inbound so as to comply with the one-minute inbound limitation that 2 miles of inbound, on-course flight within the intermediate segment is not possible.

RECOMMENDATION: All holding patterns shown on GPS SIAPs, whether for course reversals or for missed approach holding, should show a distance limit for the holding pattern instead of requiring timing. It appears that 4 miles would be a good value; i.e., the value at which the inbound turn would *commence*. It appears that charting 4 miles as the outbound limit would satisfy containment within presently evaluated patterns on GPS SIAPs. Further, the AIM should be amended to describe this procedure and why at least 2 miles of inbound on-course flight is highly desirable.

COMMENT: This affects Order 8260.38A, "Civil Utilization of Global Positioning System (GPS)," the Aeronautical Information Manual, and related directives.

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INITIAL DISCUSSION (MEETING 98-02): Position paper presented by ALPA; however, due to time constraints, there was no discussion of this issue. All attendees are requested to review the issue paper for discussion at the next meeting. AFS-420 should have a preliminary FAA position for the next meeting to brief at the next meeting. **Action: Item Open (AFS-420).**

MEETING 99-01: Time precluded discussion of this issue. AFS-420 will provide a FAA position at the next meeting. Status: AFS-420 to report at the next meeting. **Action: Item Open (AFS-420).**

MEETING 99-02: Dave Eckles, AFS-420, presented a status update paper prepared by Jack Corman, AFS-420. Flight Standards concurs with ALPA's suggestion that all GPS holding be specified in NM leg lengths vice time. Policy has been forwarded to AVN-100 to specify NM leg lengths when completing FAA Form 8260-2. This policy will be included in Change3 to Order 8260.19. Wally Roberts, ALPA, requested that a standard 4 NM leg length be charted on all currently published GPS holding patterns. Dave countered that this would require formal amendment to the SIAPs and poses an unacceptable workload on AVN. He stated that all future GPS holding patterns will contain NM leg lengths. Currently published patterns will be amended by attrition during the AVN periodic review process. He recommended the issue be closed. The group agreed. **Status: Item Closed**