

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
April 29-30, 2002
HISTORY RECORD

FAA Control # 02-01-244

Subject: Cancellation of GPS overlay approaches.

Background/Discussion: At the implementation of GPS, to provide service to the flying public, the FAA authorized operators to fly existing, ground based, instrument approaches through the GPS overlay program. This program had several phases culminating in the current Phase 3, which requires an approach to have "GPS" in the title to be flown with GPS equipment. To facilitate this, ground based approach procedures which are authorized for use with GPS have the phrase "or GPS" in the title; e.g., VOR or GPS RWY 12.

Present policy guides AVN-100 to remove all "or GPS" authorizations at an airport when stand-alone GPS or RNAV (GPS) approach procedures are published for that airport. Many GPS approaches were published before this policy was established. This resulted in many airports with stand alone approaches designed for GPS use which also have ground based approaches with "or GPS" authorization.

Additionally, early experience with GPS operations taught that GPS equipment does not perform well on approaches that require a course reversal over the final approach fix (FAF).

Recommendation: Cancel all "or GPS" authorizations at airports that have a stand alone GPS or RNAV (GPS) approach procedure. Cancel all "or GPS" authorizations which require a course reversal, either procedure turn or hold in lieu, over the FAF.

Comments: This will require no policy change. The FAA can begin removing the appropriate "or GPS" portion of approach procedures titles at a rate that is manageable by the charting agencies.

Submitted by: Norman LeFevre for the Aeronautical Information Service Working Group (AISWG).

Organization: AFS-420

Phone: (405) 954-5854

Fax: (405) 954-2528

E-mail: norman_b_lefevre@mmacmail.jccbi.gov

Date: April 26, 2002.

INITIAL DISCUSSION (Meeting 02-01): New issue presented by Norm LeFevre, AFS-420. AFS is advocating removal of "or GPS" approaches anytime that a stand-alone GPS approach is published at an airport. He further supports removing "or GPS" authorizations from all conventional SIAPs that require a course reversal at the FAF, either procedure turn (PT) or hold-in-lieu of PT. Jim Terpstra, Jeppesen, briefed that this would have no impact on FMS users. Norm agreed and noted that once "or GPS" is removed, then TSO-C129 equipped aircraft could not fly the conventional SIAP using GPS as the navigation source.

Several representatives expresses opposition to blanket removal of “or GPS” approaches at airports that had a stand-alone GPS procedure unless the stand-alone procedure served the same runway. Norm withdrew that portion of the issue, but held fast to the second part of the recommendation regarding removing those “or GPS” approaches with a course reversal at the FAF. He briefed that users would keep the option of retaining necessary “or GPS” approaches through the RAPT. Mike Brown, AOPA, asked if there would be a method of circulating a list of “or GPS” procedures proposed for cancellation. He also would like to further coordinate an official AOPA response to the proposal. **ACTION: AOPA.**

MEETING 02-02: Tom Schneider, AFS-420, briefed that there is no way of circulating a list of “or GPS” approaches proposed for cancellation as requested by AOPA at the last ACF unless a manual search of the TPPs is accomplished. AFS-420 does not have the resources to conduct such a search. Mike Brown, AOPA, stated that if that was the case, then his organization is opposed to removal of overlay approaches unless a stand-alone procedure is published concurrent with the cancellation. Item held in abeyance pending development of a procedure list. **ACTION: TBD.**

MEETING 03-01: This issue is re-opened. It was considered for closure at the previous meeting (02-02) as no agency had the resources to manually develop a list of GPS overlay approaches that could have the “or GPS” removed for AOPA review. Lynn Boniface, AFS-420, provided a list for review that was subsequently developed by AVN-100 and AVN-500. The list is separated into three categories of “or GPS” procedures: 1) “or GPS” approaches that have a stand-alone RNAV (GPS) procedure published for the airport; 2) Circling only “or GPS” approaches that have a stand-alone straight-in RNAV (GPS) procedure published for the airport; and, 3) No-FAF “or GPS” approaches that are deemed as uncodable by NACO. Lynn requested the attendees review the list and provide feedback. He also reminded the attendees that the GPS overlay program was developed to allow early implementation of GPS. The program was never intended to be permanent. Jim Terpstra, Jeppesen, stated that he could see no reason why the “or GPS” had to be removed as it caused no additional workload or charting requirements. He also stated there were instances where a RNAV (GPS) procedure aligned with the runway centerline had higher minimums than a conventional NAVAID procedure that was offset. AOPA, as the primary interested party, was tasked to review the list and provide feedback to AFS-420. **ACTION: AOPA.**

MEETING 03-02: Lynn Boniface, AFS-420 briefed that FAA is trying to eliminate some GPS overlay approaches where a stand-alone has been published to the airport. At the last ACF, AOPA was provided three lists of procedures for consideration. Hal Becker, AOPA, explained that AOPA has formally responded to FAA, recommending the following conditions as its policy for canceling GPS overlay approaches:

- 1. The airport must have an existing stand-alone GPS approach to the same runway as the "or GPS" procedure, or a stand-alone approach must be developed and effective on the date of the cancellation, and,*
- 2. The cancellation of the "or GPS" procedure must not result in an increase in minimums for the straight-in or the circling procedure.*

AOPA believes the above stipulations will provide clear, simple guidance to the RAPT,

preserve the existing access to the airports in question, and allow users to utilize their investment in GPS technology to the maximum extent possible. Lynn stated that the FAA would like to first pursue elimination of all circling-only "or GPS" approaches where a straight-in approach with circling minima (no lower than what is currently published) is published. Randy Kenagy, AOPA, stated that this might have an operational impact. For example, an aircraft may have to fly considerable distance to get to the straight-in IAF when the IAF for the circling only approach may be closer, or in some cases overflown. He further stated that any cancellations must be coordinated with air traffic so as to ensure there is no degradation of ATC services to the airport. Lynn agreed that all cancellations would be fully coordinated. Eric Secretan brought up the issue of no-FAF procedures that appeared "uncodable" due to descent gradient violations. Bill Hammett, AFS-420 (ISI) responded that it appeared that the descent gradients on list of "uncodable" approaches had been improperly calculated (from pseudo FAF to threshold vice the MAP). Bill also noted that the coding problems arose from charting agencies attempting to put a vertical descent angle (VDA) on approaches where it was not allowed by policy or criteria. Eric agreed to further research this area. Lynn re-emphasized that the GPS overlay program was only to be temporary in nature. He re-stated that FAA would continue to pursue "or GPS" eliminations, especially circling only and no-FAF approaches. All "or GPS" procedure eliminations would be publicly coordinated. **ACTION: AFS-420 and AVN-100.**

MEETING 04-01: Brad Rush, AVN-101, briefed that the number of overlay approaches is down to approximately 1,700 from 4,500. His office is still developing stand-alone approaches and canceling overlay approaches under current policy. Bill Hammett, AFS-420 (ISI), noted that AOPA had provided specific recommendations at the last meeting for the overlay cancellation process. He further noted that coordination is required for all procedure cancellations and recommended the issue be closed. Randy Kenagy, AOPA, noted that coordination between AVN-100 and AOPA has improved. Kevin Comstock, ALPA, asked the impact of losing fixes when some overlays are cancelled. Brad stated the requirement to name all fixes would mitigate this. Ted Thompson, Jeppesen, agreed that this is not a problem. The group agreed the issue could be closed. **Issue Closed.**
