GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
April 18, 2006
HISTORY RECORD

FAA Control # 06-01-262

Subject: More flexible Hold-in-lieu Alignment Options for all Public RNAV IAPs

Background/Discussion: When a hold-in-lieu (HIL) of procedure turn is required on any FAA public RNAV SIAP, the HIL alignment with the succeeding intermediate segment must be within 30 degrees. If the SIAP contains LPV minimums, the alignment is limited to with 15 degrees.

Recently, this alignment limitation created a serious airspace and procedure design issue at Alamosa, Colorado (KALS). The limitation appears to be overly restrictive, especially since a straight-line (TF Leg) RNAV initial approach segment can join an RNAV intermediate segment at up to a 90-degree angle with no additional leg length required.

Recommendations: Where terrain or airspace issues require an offset RNAV HIL, the maximum permitted offset should be 90 degrees. Further, the offset should be used where necessary to retain optimum intermediate segment descent gradient.

Comments: This recommendation affects various RNAV criteria and policy implementation directives.

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Date: April 8, 2006

Initial Discussion (Meeting 06-01): New issue introduced by Rich Boll, NBAA. NBAA is recommending that when a hold-in-lieu-of-procedure-turn is required on a public RNAV procedure, the HIL be increased to 90 degrees. Current criterion is restricted to an offset of 30 degrees from the intermediate segment (15 degrees if LPV minimums are allowed). As the issue was submitted after the suspense, AFS-420 has not had time to perform an in-depth review. Tom Schneider, AFS-420, reported that Jack Corman, the AFS-420 RNAV criteria specialist, stated that from initial review, he doesn't see a problem; however, further study is required. Danny Hamilton, AJW-324, requested interim policy as soon as the study was complete. Tom agreed to forward this request. ACTION: AFS-420.

MEETING 06-02: Tom Schneider, AFS-420, briefed the following from Jack Corman, the AFS-420 RNAV criteria specialist. The Branch is awaiting a finalized PARC RNAV position, which is expected in late Spring. Once received, criteria will be addressed.
ACTION: AFS-420.

MEETING 07-01: Tom Schneider, AFS-420, briefed an update from Jack Corman, the AFS-420 RNAV criteria developer. A change to Order 8260.54 is being processed that will allow up to a 90 degree offset for RNAV HIL. Item Open – Pending Publication.

MEETING 07-02: Tom Schneider, AFS-420, briefed an update from Jack Corman, the AFS-420 RNAV criteria developer. Order 8260.54 will be forwarded to AFS-400 for processing for AFS-1 signature during the week of 22 October. It contains the requested 90 degree offset maximum. Item Open – Pending Publication

> ***Editor's Note:*** *Post meeting comments from Jack indicate that although all AVN non-concur comments have been mitigated, AFS-420 has not received the "official" lifting of the non-concur. This must be accomplished prior to forwarding the Order for signature.*

MEETING 08-01: Bill Hammett, AFS-420 (ISI), provided an update as received from Jack Corman, the AFS-420 lead criteria specialist. The more flexible HIL criteria, recommended through the ACF, is now contained in Order 8260.54A, *The United States Standard for Area Navigation (RNAV),* which was signed on December 7, 2007. Government agencies will implement the new criteria when software is developed. The FAA Module 1 delivery is due in late Fall of 2009 and acceptance is expected in early 2010. Third-party procedure developers must follow the new criteria immediately. Brad Rush, AJW-321, briefed that IAPA software mandates a 90 degree maximum and this requirement has also been incorporated in Order 8260.52. Item Closed.
