

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

FAA Control # 96-02-170

SUBJECT: Visibility/RVR Issues in VNAV/RNAV IAPs

BACKGROUND/DISCUSSION: Both the FAA and Industry are pressing ahead with the concept of stabilized non-precision IAPs, both using computed VNAV and barometric descent slopes or simply using a published descent “now goes it” table on the IAP chart. A significant issue that must be carefully considered in the context of the TERPS obstacle-clearance-operational environment arenas is the proposal to make the intercept point of the published VNAV slope with the IAP’s MDA the de facto missed approach point. Related to this are operational, policy and regulatory issues pertaining to the pilot’s assessment of the required visual cues when deciding to continue below the minimum safe instrument altitude or commence a missed approach maneuver. The attached ALPA Charting and Instrument Procedures Committee’s supplemental VNAV white paper provides additional background and discussion of the issues pertaining to visibility assessments and the proposed VNAV “decision altitude” MAP.

RECOMMENDATION: A working subgroup be formed to review the operational, policy, and regulatory issues pertaining to the use of both prevailing visibility and RVR during straight-in precision, non-precision, and proposed VNAV published IAP’s. The purpose should be to validate and formalize existing operating procedures for commercial operators’ use of flight visibility where there is no RVR report, and flight visibility when RVR is reported, so that the pertinent regulations and directive policies are realistic and useful to the pilot.

COMMENT: This recommendation affects FAR 91.175(k), related commercial operator regulations, Standard Operating Specifications, FAA Order 8400.1, and the AIM.

Submitted by: Captain Tom Young, Chairman
Charting and Instrument Procedures Committee
AIR LINE PILOTS ASSOCIATION
September 4, 1996

INITIAL DISCUSSION (MEETING 96-02): The position paper was presented by Wally Roberts, ALPA. The paper was prompted by concern that the FAA was considering making the computed intercept point of the published VNAV slope with the published MDA [DA/ (H)] the missed approach point on non-precision approaches. This creates contradictions with table 6 visibility values because, in most cases, the distance of the calculated point to the threshold will increase above Table 6 values (see discussion in ACF agenda issue # 94-02-133). Several concepts were discussed. Jim Enias, AFS-410, advocates the DA (H) concept provided that an obstacle analysis has been conducted. AFS-440 is currently developing criteria for a visual segment obstacle analysis that will hopefully be included in TERPS change 17. Pat Gallagher, APA/AA, advocates retaining the current visibility minimums, yet requiring a missed approach upon reaching the MAP/DA (H) point. Alternatively, the increase in visibility is an acceptable trade-off to allow the concept. Pat then suggested an evaluation of the DA (H) concept at 10-15

sites that are highly used by several air carriers and high performance general aviation aircraft. Results of the testing would be reported back the ACF. Wally again noted any change in concept would require changes to the CFRs. APA/AA will report on concept test results at the next meeting. **Action:** Item Open (APA/AA)

MEETING 97-01: This issue was discussed in conjunction with ACF agenda item # 94-02-133. There seems to be disagreement within the ATA working group over mandating a missed approach at the VDP. The program is alive, but in flux. Ben Rich, APA, emphasized that under current rules, the MDA must remain inviolable. Tom Young, ALPA stated that they had no problem with the concept of using a MDA as a DH provided there was an accompanying obstacle analysis; i.e., an underlying ILS, PAPI, VASI or charted VDP. General consensus is that the proposed criteria in TERPS change 17 do provide a good visual segment obstacle assessment. Jim Enias, AFS-410 stated that AFS-1 has made the policy decision to support the VNAV enhancements for non-precision approaches. He expanded to state that an order containing the requisite criteria for air carriers to be authorized to use MDAs as a DA (similar to reaching a DA on a precision approach), in a VNAN environment, is being coordinated within the FAA. Jim noted that initial application will be via tailored charts. MAP-to-THLD distance as it relates to required visibility was also discussed. Wally Roberts, ALPA, stated that TERPS table 6 should be corrected to bring Category C visibility requirements in line with a 300ft/NM descent gradient (same as Cat D). AFS-410 will continue to track this issue and oversee cleanup of existing IAPs for air carrier VNAV use. AFS-440 will evaluate TERPS Table 6 for possible change. **Action:** Item Open (AFS-410/440)

MEETING 97-02: It was agreed to give ATPAC a chance to resolve the issue, if there is no satisfactory resolution, the matter can be re-addressed by the ACF. **Status:** Item Closed