

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

FAA Control # 94-01-126

SUBJECT: Widths of Feeder and Initial Approach segments in New Criteria

BACKGROUND/DISCUSSION: In reviewing FAA order 8260.36A, Civil Utilization of Microwave Landing System (MLS), we noticed the width of the Feeder and Initial, as well as the applicable secondary's have been reduced by half, the Feeder and Initial to +/- 2 miles and the secondary to +/- 1 mile. This trend, reducing Feeder and Initial segment widths with no apparent motivation except to reduce the segment area concerns us. This trend has been noted in the development of GPS criteria also. This reduction has been accomplished with no notice of a test program for data collection for this specific purpose. It seems to be a byproduct of capacity enhancement efforts and there seems to be no overall, organized program to monitor the progress or plan the development of follow-up criteria.

Historically, when a need for procedures criteria has arisen, the Standards Development Branch of the Office of Aviation System Standards studied the need and drafted proposed criteria. The proposal was further reviewed then subjected to flight or simulator tests that provided flight tracks which were analyzed by statisticians. This analysis was conducted under proven methods of statistical inference used for years by universities and industry. A required part of the collection of statistical data is the use of a sufficient population to produce a reasonable level of confidence in the statistical inference obtained. On the surface it appears criteria are now being driven by entities that have a vested interest in reducing airspace and real estate resources. These areas are important, but it also appears that no unbiased oversight group balances these interests against time proven safety and statistically sound methodology. If such methods have been specifically used to justify the reduction of the width of feeder and initial segments, we would welcome this information and the resultant reduction in widths.

The narrowing of the feeder and initial segments at a considerable distance from the airfield is also a human factors issue for the pilot; it may have an adverse effect if training, education and testing are not employed.

RECOMMENDATION: When new criteria are contemplated, all the effected industry should be appraised of the need and given the opportunity to participate in the process of design. Accepted industry and academic standards for evaluation should be employed and the ground rules under which the evaluation is to be made should be agreed upon prior to the start of the evaluation

COMMENT:

Submitted by: Captain Tom Young
Charting and Instrument Procedures Committee
AIR LINE PILOTS ASSOCIATION

INITIAL DISCUSSION (MEETING 94-01): (From Frank Parr AVN-210 notes) New criteria defines feeder widths ½ that of previous criteria in both the primary and secondary area. ALPA

suggests that such reduction should not be accomplished just because it feels good; it should be the subject of testing and statistical analysis with user input. FAA Order 8360.36 is still under refinement at this time and the concept/methodology/rational will be presented to users. **Action:** Item Open (TBD)

MEETING 94-02: The group agreed to leave this item open. **Action:** Item Open

MEETING 95-01: The group agreed to leave this item open, specifically regarding FAA 8260.38A GPS narrowing the en route width to the approach. **Action:** Item Open

MEETING 95-02: The group agreed that Order 8260.38A addresses and closes this issue. **Status:** Item Closed.