

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

FAA Control # 92-02-107

SUBJECT: Questionable Accuracy Of FAA Obstacle Data Used in the Construction of Instrument Approach Procedures.

BACKGROUND/DISCUSSION: The FAA used to construct instrument approach procedures using the best available obstacle data: typically the U.S. Geological Survey (USGS) 7.5 minute quadrangle maps. Such detailed maps would be used to survey not only the critical final and missed approach segments, but would extend to the intermediate and initial approach segments at terrain-laden mountainous locations. It appears that the FAA has become less diligent in this regard, as evidenced by the terrain inconsistencies uncovered by ALPA at Medford, OR. It appears that the FAA relied upon the Klamath Falls sectional to determine the elevation of controlling terrain in the intermediate segment of the MFR VOR/DME-C procedure. We have determined that the sectional was in error by 65 feet on its portrayed spot elevation. The NOS simply manually selects high points from the same USGS maps that the FAA should be (and used to) using. The NOS readily admitted its error and plans to correct the next issue of the sectional. Obviously, this is not the only location subject to such errors, yet the FAA's official internal order (Order 8260.29A) on accuracy values to be assigned to spot elevations on sectional maps is a miniscule +/- 3 feet, notwithstanding that the USGS does not provide that assurance, and NOS has been demonstrated to make mistakes in the drafting of sectional charts.

RECOMMENDATION: FAA order 8260.29A, Obstacle Accuracy Coding for Instrument Procedures, should be reviewed and revised as necessary to be consistent with the accuracy of the sources of Obstacle Data in all cases. Further, the best available USGS quadrangle maps should be used to construct and review all segments on instrument approach procedures where significant terrain underlies and abuts the various segments of the approach procedure.

COMMENT: This recommendation affects FAA Order 8260.29A and other FAA internal directives which provide guidance for the formulation of individual instrument approach procedures.

Submitted by: Charles K. Guy
May 13, 1992
AIR LINE PILOTS ASSOCIATION

INITIAL DISCUSSION (MEETING 92-02): ALPA contends that FAA procedure specialists used to use the United States Geological Survey (USGS) Quadrangle (QUADS) maps as the source for terrain and obstacle heights when constructing IAPs. Now it appears that they are using the Sectional chart as the source for this information. Further, FAA Order 8260.29A states that the accuracy of information taken from the sectional chart is +/- 3 feet. This accuracy is not realistic given that many QUADS, which are used to derive terrain elevations for the sectional, have a contour interval of 20 feet. Medford, Oregon was

used by ALPA to illustrate the point. ALPA recommends that the accuracy coding used for developing instrument approach procedures be reviewed and changed appropriately to reflect the source. Also, the USGS Quads, as the best available source, should be used to construct IAPs. AVN will review the accuracy coding stated 8260.29A and 8260.19B and check the source being used to develop IAPs. **Action: Item Open (AVN)**

MEETING 93-01: Unavailable

MEETING 94-01: (From Frank Parr AVN-210 notes) Problem of procedures specialists using sectional charts in developing an approach. Also one charting agency overstated the accuracy of some of its data. This was corrected in the revision to the FAA 8260.19. Word went to the procedures folks that topographical charts must be used on all procedures. Sectionals are not sufficiently detailed in the contours. **Status: Item Closed.**

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