

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

FAA Control # 94-02-132

SUBJECT: Public Access to US FAA Terminal Radar Area ATC Minimum Vectoring Altitude (MVA) Charts

BACKGROUND/DISCUSSION: The use of radar vectors by ATC to provide efficient navigational guidance to and from the en route structure has been a reality of terminal instrument operations for several decades now. It is indisputable that radar vectors substantially enhance the efficient movement of IFR traffic with our ground-based air traffic system. The historical downside, though, has been the total reliance by the flight crew on actions by the controller, which have to be accepted as a matter of trust--trust that the controller applies the minimum vectoring altitude (MVA) chart correctly and that VHF communications maintain integrity.

At mountainous locations, vectors are routinely given toward higher terrain. Wary flight crews use various, often inaccurate methods such as inspection of the area chart, use of sectional charts, or attempted correlation with approach charts to audit the integrity of radar vectors. But, things do go wrong, and aircraft have flown into higher terrain. Also, it is unknown how often alert and wary flight crews have saved the day by taking aggressive actions during a vector which has gone awry.

There have been historical attempts made by pilot safety representatives to get current MVA charts into the cockpit. But, this has always met with stiff resistance from the FAA. The FAA's historical concerns have been based on the issue of crew inability to accurately determine the aircraft's location on an MVA chart carried in the cockpit.

However, we now have emerging technology which will eliminate the FAA's previous concerns: GPS and FMS moving map portrayal of the MVA chart. It would be a simple matter for the terminal MVA chart to be one more selectable preference in the menu of moving map options. Terrain-model information in the moving map would normally be the preferred preference in terminal operations, except during extended radar vectors, where the display of the MVA chart being used by ATC would be the preference.

RECOMMENDATION: The first order of business is to convince the FAA to bring MVA charts into the public domain. Presently, the FAA treats MVA charts as internal documents. These charts are accessible only through a tenuous Freedom of Information Act (FOIA) request. The charts should be distributed into the national flight information system like SIAPs, airways, SIDs, and STARs. Any change to MVA sector boundaries or lowering of sector minimum altitudes should be accomplished only by routine amendment. In the unusual event where a sector minimum altitude must be increased between routine charting cycles, this could be affected by FDC NOTAM.

COMMENT: This recommendation affects internal FAA Air Traffic Service Directives, Flight Publication Directives, and Flight Crew Training.

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

INITIAL DISCUSSION (MEETING 94-02): Dan Hanlon, ATP-126 and Tom Young, ALPA led a discussion of public access to MVA charts. Tom stated that the advent of GPS and moving map displays make the use of MVA data even more practical. The availability of this data would allow pilots to cross check the Air Traffic Controllers altitude assignments while being vectored. Dan responded that limited resources must be carefully allocated and questioned whether this would be a justifiable expenditure of FAA resources. In any case, someone in the FAA's upper management would have to make that decision. Rudy Ruana, Jeppesen stated that his company was working on terrain data and that they believed any expenditure to prevent controlled flight into terrain would be worth the effort.

The group then discussed the availability of MVA data and what would be required to make it available. Dick Powell, ATP-220 stated the data is available but it might take some degree of effort to extract it. Dick further stated that the other options are in work and may make this issue moot. He noted that the ACF would receive a briefing September 28, 1994 on the Off Route Obstruction Clearance Altitude (OROCA) which would be published on the approach charts.

Dan agreed to research what changes are made to MVA data and how often they are made. Dick stated that this is an AAT-100 problem and He too would do research in an effort to scope the problem. Both will report their findings at the next ACF. **Action: Item Open (ATP-220 and AAT-100)**

MEETING 95-01: ATP-100 said there was no need for the release of these charts to the public. **Status: Item Closed.**