

GOVERNMENT/INDUSTRY CHARTING FORUM
Instrument Procedures Group
May 9, 2005
HISTORY RECORD

FAA Control # 05-01-259

Subject: VCOA (Visual Climb Over Airport)

Background/Discussion: TERPS Change 19, Vol 4, Chapter 4, paragraph 4.0 makes VCOA mandatory when obstacles more than 3 statute miles from the departure end of the runway DER require a greater than 200 ft/NM climb gradient. If the pilot determines that he cannot meet the published climb gradient, for whatever reason, the pilot may elect to execute the VCOA if available. AIM paragraph 5-2-6 Instrument Departure Procedure (DP) states ODPs are recommended for obstruction clearances and may be flown without ATC clearance unless an alternate departure procedure (SID or radar vector) has been specifically assigned by ATC. Additionally the AIM states specified ceiling and visibility minima (VCOA or increased takeoff minima) will allow visual avoidance of obstacles until the pilot enters the standard obstacle protection area. Obstacle avoidance is not guaranteed if the pilot maneuvers farther from the airport than the specified visibility minimum prior to reaching the specified altitude. When TERPS is developing a VCOA the greatest visibility to be published is 3 SM, but the vertical climb area (VCA) can be up to a maximum of 7.3 NM + distance from ARP to most distant DER for obstacle evaluation.

1. The interpretation of the AIM paragraph may lead one to believe that the aircraft has to remain within the visibility distance; however, the procedure specialist designed the VCA to a greater distance. This distance limitation, based on visibility, may place the aircraft in an undesirable situation based on performance capabilities.
2. Currently there are published VCOAs that are sectorized, such as Meeker, CO "Climb visually within 3 miles southeast of the airport to depart 7400." Etc., The regulation does not specifically prohibit nor does it provide guidance to develop the VOCA with sectors.

Recommendations:

1. Publish a remain within distance in the TAKE-OFF MINIMUMS and (OBSTACLE) DEPARTURE PROCEDURES area; e.g., Visibility 1200-2 ½ for climb in visual conditions, Departure Procedure: Rwy 17, for climb in visual conditions **remain within 2.8 NM**, cross General Dewitt Airport at or above 1100 before proceeding on course.
2. Revise criteria to prohibit the use of sectorization.

Comments: This recommendation affects the AIM and FAA Orders 8260.3 and 8260.46.

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Date: April 14, 2005

INITIAL DISCUSSION (Meeting 05-01): New issue introduced by Larry Wiseman, AFFSA. AFFSA believes there is a disconnect between the TERPS criteria and the AIM guidance; e.g., criteria provides a VCOA obstacle protection area of up to 7.3 NM + the distance from the ARP to the most distant DER, whereas the visibility maxes out at 3 SM. AIM paragraph 5-2-6 may lead pilots that they must remain within the published visibility distance. Tom Schneider agreed to place the issue on the AFS-400 TRB agenda. Larry stated that AFFSA would like to participate in that TRB. Bill Hammett, AFS-420 (ISI) noted that the second portion of the issue paper regarding VCOA sectorization is a criteria issue and should be brought before the TERPS Working Group (TWG). Larry agreed, and will develop a TWG issue paper for the next TWG meeting. **ACTION: AFS-420.**

MEETING 05-02: Tom Schneider, AFS-420, reported that this issue is actively being worked by the AFS-420 staff specialist responsible for departure criteria; however progress is slow. The issue has not been brought before an AFS-400 Technical Review Board (TRB) yet, pending draft criteria revision. The sectorization issue is also being addressed within AFS-420 and was not presented to the TERPS Working Group. **ACTION: AFS-420.**

MEETING 06-01: Tom Schneider, AFS-420, reported that this issue is being actively worked by Phil Prasse, the AFS-420 staff specialist responsible for departure criteria; however, progress is slow. Draft material has been developed; however, no final conclusions have been reached and the material has not been circulated for comment outside FAA. The issue has not been brought before an AFS-400 Technical Review Board (TRB) yet, because travel requirements have kept key staff members from attending. *Editor's Note: TRB has been scheduled for May 11th.* **ACTION: AFS-420.**

MEETING 06-02: Bill Hammett, AFS-420 (ISI), briefed that the issue is still being addressed by Phil Prasse, the AFS-420, staff specialist responsible for departure criteria. An AFS-400 Technical Review Board (TRB) met to discuss the issue on May 11th. The intent is to revise criteria to better align with policy requirements; however progress is slow. Bill added that Order 8260.46, *Departure Procedure (DP) Program*, is again under revision and will allow an exception to the VCOA requirement at high density airports where the maneuver will never be allowed by Air Traffic. Pamela Coopwood, AJT-2300, requested background on the issue. Tom Schneider, AFS-420, provided the information. **ACTION: AFS-420.**

MEETING 07-01: Tom Schneider, AFS-420, briefed that Phil Prasse, the AFS-420, departure criteria specialist has developed new VCOA criteria for TERPS Volume 4, Chapter 4, which will be included in change 21 or 22. A copy of the draft criteria was included as attachment 4 of the meeting minutes. Comments may be forwarded directly to Phil at phil.prasse@faa.gov. **ACTION: AFS-420.**

MEETING 07-02: Tom Schneider, AFS-420, briefed that Phil Prasse, the AFS-420, departure criteria specialist has developed and coordinated new VCOA criteria for TERPS Volume 4, Chapter 4, which will be included in change 21 or 22. Bill Hammett, AFS-420 (ISI), briefed that AFS-420 was exploring new methods of coordinating TERPS changes to

expedite the process. Tom added that he is planning on establishing a 6-month update cycle for 8260.19 similar to the process used for air traffic publication updates. Rich Boll, NBAA, asked the status of the revision to Order 8260.46. Tom replied that he is awaiting forms revisions, which are being prepared by the NFPO. **ACTION: AFS-420.**

MEETING 08-01: Tom Schneider, AFS-420, briefed that with the formation of the USIFPP, a departure working group will be addressing this issue. Since this is a conventional criteria issue, it will not receive a high priority. The next meeting of the departure working group is April 30th. **ACTION: AFS-420.**

MEETING 08-02: Tom Schneider, AFS-420, briefed the following update as provided by Phil Prasse, the AFS-420 departure criteria specialist. "A criteria review group is addressing this issue as well as other departure related criteria and policy issues. This criteria review group has been meeting regularly, most recently on October 1st and 2nd. The comments received regarding VCOA criteria and policy are both extensive and substantial and affect large portions of the current VCOA criteria. A total re-write of TERPS Volume 4, Chapter 4, which includes VCOA criteria, is in progress. The concepts for that re-write were discussed at the October 1st and 2nd meetings with representatives of AFS-420 and 460. While there is agreement on several points, some issues need further review. An updated draft of TERPS Volume 4, Chapter 4 will be completed shortly and then put out for coordination with the departure working group under the USIFPP." AFS-420 will continue to track the VCOA issue and report. **ACTION: AFS-420.**

MEETING 09-01: Tom Schneider, AFS-420, briefed this issue has taken a back seat to higher priorities. Harry Hodges, AFS-420, briefed that after TERPS Change 21 is published, the Order will be revised as Order 8260.3C to meet the new FAA formatting requirements. This re-publication will only contain minor changes to accommodate simultaneous operations. The VCOA issue will be addressed in Change 1, which is approximately 18 months away. AFS-420 will continue to track the issue and provide updates as necessary. **ACTION: AFS-420.**
