

AERONAUTICAL CHARTING MEETING
Charting Group
Meeting – October 23 - 24, 2019

RECOMMENDATION DOCUMENT

FAA Control #19-02-342

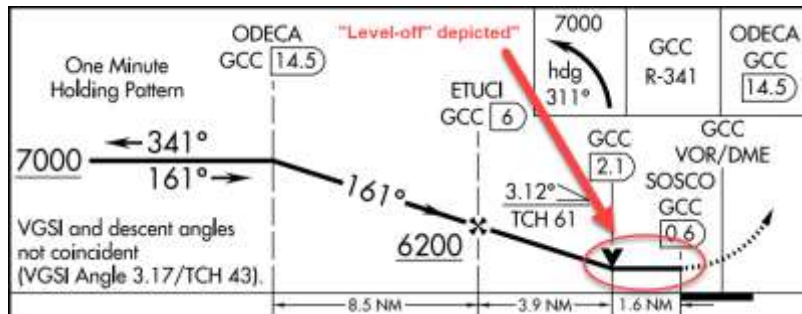
Subject: Depiction of Profile Procedure Track for NPA Procedures

Background/Discussion: Current guidance in the IAC 4 Specification pre-dates a variety of rules and concepts that have been implemented in flight procedures in regards to Vertical Descent Angle (VDA) for Non-precision Approach (NPA) procedures. Paragraph 3.4.5.6 currently requires NPA procedures that are charted without vertically-guided minimums to depict a horizontal “level-off” for the vertical path from VDP or MDA, but **ONLY** when:

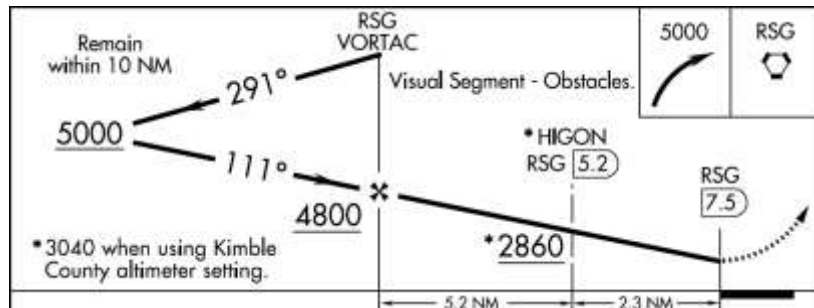
- VDP is published; or
- VDP is not published, but angle/TCH is provided

3.4.5.6 Procedure Track

On RNAV procedures without precision minima i.e., DAs, the approach track shall begin at the point specified on the procedure form and shall descend to the MDA or VDP point, thence horizontally to the missed approach point. On non-RNAV procedures without precision minima, the horizontal segment shall be shown from the VDP, when it exists, or the MDA when there is no VDP, and a vertical glide angle/TCH is provided. The segment shall typically be 0.2" in length but length may vary due to the layout of the profile components.



However, in other situations where the VDP and/or angle/TCH have been removed, the depiction is much different.



When Flight Inspection has directed removal of angle/TCH, which in many cases also causes removal of the VDP, Aeronautical Information Services does not publish or code the angle/TCH, **yet the chart depicts a continuous descent to threshold.** This seems counter-intuitive, and it may be the case that the current IAC specification guidance should be updated to fully harmonize with current practices in flight procedures in regards to VDA continuous descent.

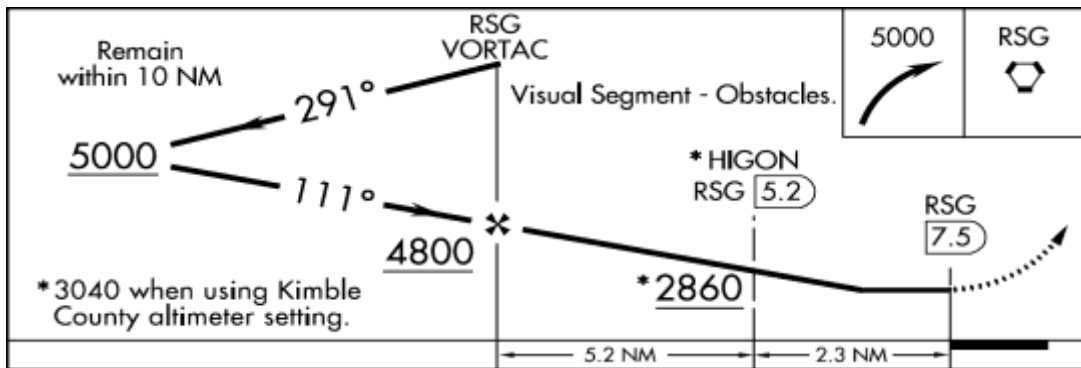
Recommendation:

Revise IAC 4 paragraph 3.4.5.6 as follows to provide guidance that ALL NPA-only straight-in charts provide depiction of the horizontal level-off at the VDP/MDA or at a pseudo-point based on the unpublished-VDP (when the VDP and/or angle/TCH have been removed).

3.4.5.6 Procedure Track

On all NPA-only straight-in procedures, the approach track shall begin at the point specified on the procedure form and shall descend to the MDA or VDP point (even if unpublished), thence horizontally to the missed approach point. The segment shall typically be 0.2" in length but length may vary due to the layout of the profile components.

When the visual area surfaces are not clear, or when the VDP and/or angle/TCH have been removed from the procedure, the profile will telegraph that continuous descent to the threshold may not be possible, and will depict a level-off at the unpublished VDP point.



Comments:

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Date: 10/4/2019

MEETING 19-02

Krystle Kime, FAA/AJV-A222, briefed the new recommendation. Krystle explained how guidance in the Interagency Air Committee (IAC) Specifications predates new rules that have been implemented in flight procedures with regard to the depiction of the profile for Non-Precision Approach (NPA) procedures. Current specifications require that such procedures be charted with a horizontal "level-off" segment from the Visual Descent Point (VDP) or Minimum Descent Altitude (MDA) when a VDP is published or, if the VDP is not published, but the angle/threshold crossing height (TCH) is published. Due to changes in criteria, there are now situations where flight inspection has directed the removal of the angle/TCH and VDP because the visual segment is not clear of obstacles. In such cases, Terminal Charting is depicting a continuous descent to the threshold. This seem counterintuitive since a continuous descent could imply that the segment is clear of obstacles. Krystle is recommending that the specification be revised for all NPA straight-in procedures to ensure the profile depicts a horizontal level-off segment.

John Barry, FAA/AIR-6B1, asked why the VDPs are being removed from the charts. Dale Courtney, FAA/AJW-292, stated that a VDP comes off a chart as a result of a flight inspection determination. Its removal is either because of obstacles in the visual segment or 20:1 penetrations at night.

There was audience concurrence for moving forward with IAC specification changes, as outlined by Krystle, in support of this proposal.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-A250, to draft an Interagency Air Committee (IAC) specification change to provide guidance that all NPA straight-in charts will depict the horizontal level-off segment in the profile.

MEETING 20-02

Samer Massarueh, FAA/AJV-A221, reviewed the issue. Krystle Kime, FAA/AJV-A222, reported that the Interagency Air Committee (IAC) specification change to provide guidance that all Non-Precision Approach (NPA) procedures will depict the horizontal level-off segment in the profile has been signed and implemented. The affected charts have all been updated effective November 5, 2020.

All actions have been completed and there was agreement to close this item.

STATUS: CLOSED