NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8260.VGF

National Policy

Effective Date:
MM/DD/YYYY

Cancellation Date:
MM/DD/YYYY

SUBJ: Design, Evaluation, and Development Policy Additions and Revisions for RNP APCH Navigation Specification (NavSpec) Instrument Approach Procedures (IAPs) with a Visual Guidance Fix (VGF) within FAA Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design, FAA Order 8260.19, Flight Procedures and Airspace, and FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS).

1. Purpose of This Notice. This notice provides guidance for the design, evaluation, and documentation of Performance Based Navigation (PBN) Instrument Flight Procedures (IFPs), specifically RNP APCH Navigation Specification (NavSpec) instrument approach procedures (IAPs) with a visual guidance fix (VGF). This notice contains guidance pertinent to Title 14, Code of Federal Regulations, part 97, Standard Instrument Procedures.

2. Audience. All personnel who are responsible for IFP development, evaluation, and/or documentation.

3. Where You Can Find This Notice. You can find this notice on the FAA's public website and the Dynamic Regulatory System.

4. Background. In 2019, as a response to a Commercial Aircraft Safety Team (CAST) request, the Federal Aviation Administration (FAA) established public RNP APCH procedures that uniquely offer the flight crew continuous advisory lateral and vertical guidance from the VGF to the landing runway threshold. Previously published procedures conforming to these principles were developed with various waivers to existing IAP design criteria. This notice codifies design, evaluation, and documentation guidance for this type of IAP.

5. Guidance. See appendix A for information applicable to FAA Order 8260.58, appendix B for information applicable to FAA Order 8260.19, and appendix C for information applicable to FAA Order 8260.3.

6. Explanation of Policy Changes. See appendices A, B, and C for new policy and applicable policy changes.

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7. Disposition. We will incorporate the information in this notice into FAA Orders 8260.58, 8260.19, and 8260.3 as applicable before this notice expires. Direct questions or comments concerning the information in this notice to 9-AWA-AFS400-COORD@faa.gov.

Lawrence Fields
Executive Director, Flight Standards Service

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Appendix A. Revisions to FAA Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design

1. This information is added.

Section 1. General

1-1. Applicability. Approach procedures with a visual guidance fix (VGF) provide a continuous lateral and vertical path from the PFAF to the landing runway threshold, while allowing turns in the FAS. The VGF is located within the final approach segment, followed by one or more sub-segments leading to the runway threshold. These procedures use a "fly visual" planview note that allows pilots to fly beyond the VGF while descending below the MDA, after ensuring flight visibility meets the minimum required, and without visual references required by 14 CFR 91.175(c)(3). This use of "fly visual" provides an exception to Order 8260.3 paragraph 3-3-5 usage. These procedures are the only type authorized for use of a VGF.

1-2. Requirements. Comply with the following requirements:

a. An approach procedure with VGF requires Flight Standards approval and is only developed when a straight-in instrument approach procedure is not feasible or would be operationally inadequate. Initiation of an approach procedure with VGF must include the air traffic control facility(s) with responsibility for the approach. Offices initiating development of the procedure should coordinate with Flight Standards as early in the project initiation stage as possible. Early coordination will help prevent unnecessary work resulting from denial of approval after development.

b. All new and amended approach procedures with a VGF must be satisfactorily evaluated in a Flight Standards flight simulator or equivalent to verify flyability.

c. RNP APCH is the only allowable NavSpec for approach procedures with a VGF.

d. Approach procedures with a VGF will provide only an LNAV line of minima. Circling is not authorized.

Section 2. Design

2-1. Final Approach Segment.

a. The FAS begins at the PFAF and ends at the MAP. The VGF is located within the final segment. Stepdown fixes are permitted between the PFAF and VGF. RNP APCH final flight phase (with associated XTT of 0.30) is the only allowable NavSpec for the FAS.

b. The MAP must be the LTP.

c. The combined length along the flight track (measured along the shortest path between the plotted positions of the fixes) from the PFAF to the LTP/MAP must not exceed 10 NM.

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d. Including any turn at the VGF, only TF turns with FB waypoints are allowed in the FAS. No turns are allowed between the PFAF and VGF.

e. Including any turn at the VGF, no more than three turns are allowed in the FAS, and all turns must be in the same direction. The maximum turn magnitude of any individual turn is 60 degrees. The track from the last fix prior to the LTP/MAP to the LTP/MAP must be aligned with RCL extended (±0.03 degrees) and the maximum alignment difference between the track from the PFAF to the VGF and the RCL extended is 180 degrees.

f. The last fix prior to the LTP/MAP must be no closer than 1 NM to the LTP/MAP. The calculated altitude at that fix (see paragraph 2-1.i) must be no lower than 500 feet above airport elevation if the course change at that fix is more than 10 degrees and no lower than 300 feet above airport elevation if the course change is 10 degrees or less.

g. Vertical Descent Angle. The VDA applies continuously from the PFAF to the LTP/MAP.

(1) The VDA will ideally match the angle and TCH of the visual glide slope indicator (VGSI) of the landing runway.

(2) If a VGSI is installed and within VDA limits noted in paragraphs 2-1.g(4) and 2-1.g(5) below, the VDA angle/TCH should match the VGSI as closely as possible. The TCH may exceed the VGSI TCH by no more than 3.0 feet and it must be no lower than the VGSI TCH.

(3) If there is no VGSI or if it is outside applicable VDA limits, the VDA should be three degrees with the appropriate TCH for the applicable wheel height group, however the TCH must not exceed 60 feet.

(4) If necessary, the VDA may exceed three degrees but must never be more than the angle shown in table 1.

Table 1. Maximum VDAs

Maximum Approach Category	Maximum Angle (degrees)
A	5.1
B	3.7
C	3.3
D	3.1

(5) The VDA must never be less than three degrees.

h. Leg lengths between the VGF and LTP/MAP must support a climb beginning at the VGF at the MDA while the aircraft continues on the lateral path to the LTP/MAP where the missed approach begins. Calculate assumed altitudes at fixes between the VGF and the LTP/MAP using a climb gradient of 500 ft/NM unless the aircraft approach category does not exceed CAT B, in which case use 250 ft/NM. Use the fix-to-fix distance from the VGF to the LTP/MAP with the MDA as the starting altitude, and round the resulting altitude down to the nearest 100-foot increment. Use the nominal airspeeds in table 2 for leg length calculations. The minimum values

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shown may be used if necessary to achieve the desired leg lengths; however, the lower minimum values matching the approach category speeds may be used with Flight Standards approval. An airspeed less than the nominal values in table 2 must be published as a do-not-exceed speed prior to the LTP/MAP as part of the missed approach instructions (see Order 8260.19).

Table 2. Airspeeds for Leg Length Calculations from VGF to LTP/MAP

Maximum Published Approach Category	CAT A	CAT B	CAT C	CAT D
Nominal	110	140	200	210[1]
Minimum	100	130	165	185
Minimum with FS approval	90	120	140	165

[1] 200 underlying Class B airspace per 14 CFR § 91.117(c) or within 4 NM of the primary airport of a Class C or Class D airspace per 14 CFR § 91.117(b).

i. Calculate recommended altitudes for descent at each fix between (but not including) the VGF and LTP/MAP using Order 8260.58 formula 1-3-4, rounded up to the next 1-foot increment. Use the LTP elevation plus TCH for the beginning altitude (alt_b), and use the distance from the LTP to the respective fixes, measured along the fix-to-fix track.

j. Obstacle evaluation areas. The OEA from the PFAF to the LTP/MAP uses FB fix turn construction with an XTT of 0.3 (see Order 8260.58 paragraph 1-2-5.d) with the exception of the transition from the intermediate segment to the FAS at the PFAF (see Order 8260.58 paragraph 3-1-4.d). The entire final segment from PFAF to LTP/MAP will be evaluated for obstacle clearance. Use the altitudes determined from paragraph 2-1.h for determination of turn radii. For the turn radius at the last fix prior to the LTP/MAP (see paragraph 2-1.f) use the greater of that turn radius or the turn radius based on paragraph 2-1.h, Only the distance from the PFAF to the VGF will be considered for excessive length of final determination. Precipitous terrain evaluation will be based on the entire OEA from the PFAF to the LTP/MAP.

k. Visual Descent Point (VDP). Do not establish a VDP.

2-2. Missed Approach Segment. Standard LNAV missed approach criteria applies from the LTP/MAP.

2-3. Minimums.

a. Visibility. The visibility is the straight-line distance from the LTP to the most distant fix between the VGF and LTP (to include the VGF), rounded up to the next greater 1/2 SM increment, or the next greater 1 SM increment for visibilities of 3 SM or greater. The visibility must be no less than 2 SM. Approach light credit must not be provided.

b. Minimum Descent Altitude. The MDA will be the altitude of the vertical path (derived from the VDA) at the VGF rounded up to the next higher 20-foot increment. If the final segment ROC would drive a greater MDA, the VGF must be moved back to a point that provides a vertical path altitude at the VGF no greater than 20 feet below the MDA. The MDA must be no

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lower than 400 feet above airport elevation plus precipitous terrain and primary RASS adjustments.

c. Category D will be the highest allowable approach category.

d. Helicopter visibility reduction will not be allowed.

2-4. Descent Evaluation Area. A descent evaluation area provides obstacle protection for aircraft descending from the VGF to the landing runway. Use the projected descent altitudes calculated in paragraph 2-1.i for determination of the DTAs used in this paragraph.

a. Evaluation Area Boundary Construction. The boundary originates at an origin line perpendicular to, and centered on, the RCL at the LTP. The origin line width is equal to the greater of 340 feet or the runway width plus 200 feet.

(1) Outside Boundary Construction. Construct the boundary on the outside of the turns as follows:

(a) *Step 1*: Scribe arcs with radius of 1 x XTT centered on each fix from the VGF to the last fix prior to the LTP/MAP.

(b) *Step 2*: Create a construction line perpendicular to the outbound track at the last fix prior to the LTP/MAP and create a construction point at the intersection of this line and the arc centered on that fix.

(c) *Step 3*: Create a construction line between the construction point created in *step 2* and the closest end of the origin line. Determine the angle between this construction line and the fix-to-fix track between the LTP/MAP and last fix prior and apply *step 3a* or *step 3b* as appropriate.

1. *Step 3a*: If the angle is at least 8.54 degrees, the boundary will connect from the end of the origin line to the construction point on the arc from *step 2*.

2. *Step 3b*: If the angle is less than 8.54 degrees, extend a construction line from the end of the origin line diverging from the fix-to-fix track line at an angle of 8.54 degrees. Create a construction line parallel to the fix-to-fix track line from the construction point created in *step 2*. Connect these two lines at their intersection point to begin the outside boundary.

(d) *Step 4*: Complete the outside boundary by first connecting lines tangent to the arcs created in *step 1* beginning at the arc centered on the last fix prior to the LTP/MAP and ending at the arc centered on the VGF. Finally, create a line beginning at ATT prior to the VGF, tangent to the arc centered on the VGF, and parallel to the fix-to-fix track centerline inbound to the VGF.

(2) Inside Boundary Construction. Construct the boundary on the inside of the turns as follows:

(a) *Step 1*: Create construction lines offset by 1 x XTT from the fix-to-fix track lines in the direction of the inside turn for all tracks from the VGF to the LTP/MAP.

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(b) *Step 2*: Create construction lines at the DTA start and end points associated with the fixes from the VGF to the last fix prior to the LTP/MAP, and perpendicular to the respective inbound or outbound tracks. Create construction points at the intersection of these construction lines and the construction lines created in *step 1*.

(c) *Step 3*: Create a construction line (*lineConst_1*) between the construction point created in *step 2* associated with the DTA end point of the last fix prior to the LTP/MAP and the closest end of the origin line. Determine the angle between this construction line and the fix-to-fix track between the LTP/MAP and last fix prior and apply *step 3a* or *step 3b* as appropriate.

1. *Step 3a*: If the angle is at least 8.54 degrees, the construction line from *step 3* will be the beginning of the inside boundary line.

2. *Step 3b*: If the angle is less than 8.54 degrees, extend a construction line (*lineConst_2*) from the end of the origin line diverging from the fix-to-fix track line at an angle of 8.54 degrees. Create a construction line (*lineConst_3*) from the construction point on the outbound side of the last fix prior to the LTP/MAP created in *step 2* and parallel to the fix-to-fix track line outbound from the fix. If the intersection of *lineConst_2* and *lineConst_3*is less than 1 x XTT from the fix-to-fix track line, terminate *lineConst_2* at this point to begin the inside boundary. Otherwise, terminate *lineConst_2* at the point it intersects *lineConst_3* and terminate *lineConst_3* at the point where it intersects *lineConst_1*.

(d) *Step 4*: Complete the inside boundary by connecting lines from the end point furthest from the origin line of the line from *step 3a* or *step 3b* as applicable, then continuing to connect boundary lines along the construction points created in *step 2*. Terminate the inside boundary at ATT prior to the VGF.

b. Obstacle Evaluation. The descent evaluation area is protected by a surface beginning at the evaluation area origin line at the LTP rising toward the VGF at a slope of 2/3 x VDA. This surface must not be penetrated.

(1) Evaluation Distance. The obstacle evaluation distance will be the distance from the LTP to the point on the fix-to-fix track line perpendicularly abeam the obstacle, measured along the fix-to-fix track line. If the obstacle location will not provide a line perpendicular to the track line, use the distance between the obstacle and the nearest point on the track line. If the perpendicular point falls outside the ATT prior line at the VGF, use the distance from the obstacle to the intersection of the track line and the ATT prior line.

(2) Slope Origin. The slope origin and starting elevation is based on TCH. Where the TCH is greater than 50 feet, the slope starting elevation is V_{offset} above the LTP elevation. Calculate V_{offset} using formula 1. Where the TCH is less than 40 feet, the slope origin is X_{offset} distance from the beginning of the evaluation area. Calculate X_{offset} using formula 2.

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Formula 1. Slope Origin Starting Height

$$V_{Offset} = \begin{cases} 0, & TCH \leq 50\ feet \\ TCH - 50, & TCH > 50\ feet \end{cases}$$

Formula 2. Slope Origin Starting Distance from LTP

$$X_{Offset} = \begin{cases} \dfrac{40 - TCH}{\tan\theta}, & TCH < 40\ feet \\ 0, & TCH \geq 40\ feet \end{cases}$$

Where:
θ = VDA (degrees)

(3) **Slope Elevation.** Determine the slope elevation at the obstacle evaluation locations using formula 3.

Formula 3. Slope Elevation

$$Slope_{Elev} = tan\left(\theta \times \frac{2}{3}\right) \times \left(d - X_{Offset}\right) + THRe + V_{Offset}$$

Where:
θ = VDA (degrees)
d = Distance (feet) from LTP to obstacle evaluation point
$THRe$ = LTP elevation (MSL)

2-5. Visual Area Evaluations. Do not conduct a 34:1 surface evaluation. Do not conduct a 20:1 surface evaluation if $\boldsymbol{X_{Offset}} \geq 200$ feet. The 20:1 surface evaluation will begin at the visual area origin (see Order 8260.3) and extend to the point where the 20:1 surface elevation reaches the elevation of the visual path evaluation slope (see formula 4). If the formula 4 result is negative or is greater than the distance from the LTP/MAP to the last fix prior to the LTP/MAP, extend the 20:1 surface to the last fix prior to the LTP/MAP. Use Order 8260.3 formula 3-3-1 to determine the visual area 1/2 width, except use the distance between the visual area origin and the point the 20:1 surface elevation reaches the visual evaluation slope elevation for *d*, or the distance to the last fix prior to the LTP/MAP as applicable. The procedure will not be authorized at night if any unlighted 20:1 penetration exists in this area.

Formula 4. Distance from LTP to End of 20:1 Surface Evaluation

$$distance = \frac{200 + 20 \times V_{Offset} - 20 \times X_{Offset} \times tan\left(\theta \times \frac{2}{3}\right)}{1 - 20 \times tan\left(\theta \times \frac{2}{3}\right)}$$

2. Appendix A, table A-1 is revised to add: "VGF: visual guidance fix."

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Appendix B. Revisions to FAA Order 8260.19, Instrument Procedures and Airspace

1. Paragraph 5-2-4.c(2)(a) is changed to read: "When the SIAP specifies a minimum altitude at the PFAF greater than 1000 feet above the highest terrain in the final segment, the 1000-foot point is assumed to be inbound from the PFAF at a distance determined by application of a descent gradient of 500 ft/NM for distances in excess of 7 NM from runway threshold, and 300 ft/NM for distances at/less than 7 NM from the runway threshold (i.e., use both gradients to compute the 1000-foot point when the final segment is longer than 7 NM) [see figure 5-2-2 and figure 5-2-3]. For approach procedures with a visual guidance fix (VGF), the distance from the PFAF is measured along the fix-to-fix path."

2. Paragraph 5-2-4.c(2)(b) is changed to read: "When the SIAP specifies a minimum altitude at the IF greater than 1000 feet above the highest terrain in the intermediate segment, the 1000-foot point is assumed to be inbound from the IF at a distance determined by application of a 500 ft/NM descent from the IF [see figure 5-2-4]. For approach procedures with a VGF, the distance from the IF is measured along the fix-to-fix path."

3. Paragraph 5-2-4.k(3) is changed to read: "List distance from ARP (for circling only), list distance from runway threshold (for straight-in or procedures with a VGF), or list distance from a named fix to the 1000-foot point for procedures with multiple turning segments. For approach procedures with a VGF or where RF turns are used in a segment where the 1000-foot point is located, provide a depiction of the segment(s) which define the start of the segment. Include the named fixes and coordinates of the fixes along the route; include the calculated distance from the PFAF, IF, IAF or fix to the 1000-foot point. If multiple occurrences appear within a procedure, list the distance from a fix to the first 1000-foot point occurrence separately (first point a pilot encounters 1000 feet above terrain on the procedure). For example: If EDCBA IAF to the beginning of the IF segment has the 1000-foot point in the initial segment and ZYXWV IAF has the 1000-foot point in the initial also, list both 1000-foot points. If the 1000-foot point is in the common intermediate segment or final segment, list only once."

4. Paragraph 5-2-4.k(4) is changed to read: "Width of the segment primary area at the widest point between the class B/C/D/E surface area and the 1000-foot point; and the highest terrain elevation in the segment containing the 1000-foot point [see paragraph 5-2-4.d(2) and figure 5-2-19]. For approach procedures with a VGF or segments containing RF turns, document the width of the segment primary area, and describe the points (latitude/ longitude) where a line perpendicular to the centerline at the 1000-foot point corresponds with the width of the primary area. For segments with more than one RF turn, or complex turning areas, attach a simple depiction of the area showing the 1000-foot point and highlight/display the required airspace."

5. Paragraph 5-2-4.k(5) is changed to read: "True course (to the hundredth of a degree) of the segment in which the 1000-foot point is located. For approach procedures with a VGF or where RF turns are contained within a segment where the 1000-foot point is located, leave blank and add description of the RF segment when applicable [fix name and coordinates of the RF center point and radius as listed in paragraph 5-2-4.k(2) examples] or description of the TF segments for an approach procedure with a VGF [fix names and coordinates as listed in paragraph 5-2-4.k(2) examples]."

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6. Paragraph 5-2-4.k(6) is changed to read: "List distance from ARP (for circling-only), list distance from runway threshold (for straight-in), or list distance from the named fix to the 1500-foot point for procedures with multiple turning segments. If applicable, state: "1500-foot point located in the PT maneuvering area;" or "1500-foot point located in holding pattern area;" or "1500-foot point located in (name of start fix) intermediate segment" or "1500-foot point is located in (name) feeder segment." The applicable Air Traffic Service Area will then establish the transition area in accordance with Order JO 7400.2, Procedures for Handling Airspace Matters. If the 1500-foot point is located in an initial or feeder segment and additional airspace is needed, describe the fixes (latitude/longitudes of start/end fixes as in paragraph 5-2-4.k(2) examples). For approach procedures with a VGF or where RF turns are used in a segment where the 1500-foot point is located, provide a depiction of the segment(s) which define the start of the segment. Include the named fixes and coordinates of the fixes along the route; include the calculated distance from the PFAF, IF, IAF or fix to the 1500-foot point. If multiple occurrences appear within a procedure, list the distance from a fix to the first 1500-foot point occurrence separately (first point a pilot encounters 1500 feet above terrain on the procedure). For example: If EDCBA IAF to the beginning of the IF segment has the 1500-foot point in the initial segment and ZYXWV IAF has the 1500-foot point in the Initial also, list both 1500-foot points. If the 1500-foot point is in the common intermediate segment or final segment, list only once."

7. Paragraph 5-2-4.k(7) is changed to read: "Width of the segment primary area at the widest point between the class E 700-foot airspace (transition area) and the 1500-foot point; and the highest terrain elevation in the segment containing the 1500-foot point [see paragraph 5-2-4.e]. For approach procedures with a VGF or segments containing RF turns, document the width of the segment primary area, and describe the points (latitude/longitude) where a line perpendicular to the centerline at the 1500-foot point corresponds with the width of the primary area. For segments with more than one RF turn, or complex turning areas, attach a graphic depiction of the area showing the 1500-foot point and highlight/display the required airspace."

8. Paragraph 5-2-4.k(8) is changed to read: "True course (to the hundredth of a degree) of the segment in which the 1500-foot point is located. For approach procedures with a VGF or where RF turns are contained within a segment where the 1500-foot point is located, leave off true course and add a description of the RF segment (or TF segments for an approach procedure with a VGF) where applicable [fix name and coordinates of RF center point and radius, or fix names and coordinates for an approach procedure with a VGF as listed in 5-2-4.k(2) examples] of the segment."

9. Paragraph 8-6-6.d(14) is added and reads: "For approach procedures with a VGF, while the missed approach begins at the MAP which will be the approach runway threshold, the missed approach instructions must include information to navigate from the VGF to the MAP and any necessary speed restriction prior to reaching the MAP. Include any speed restriction and an instruction to continue along the approach track, followed by the missed approach instructions beginning at the MAP as a separate sentence beginning with "from" and noting the MAP. For example: "(DO NOT EXCEED [airspeed] KIAS UNTIL RWY [runway number]) CONTINUE ON THE DEPICTED TRACK TO RWY [runway number]. FROM RWY [runway number], …" "

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10. Paragraph 8-6-7.c(1)(b) is changed to read: "RNAV procedures – enter the course established by the service provider's computation. For RNAV procedures that contain RF turns in the final segment, and for approach procedures with a VGF – place an asterisk here. An asterisk will then be placed prior to the fix names that make up the final approach segment in the terminal routes "To" block."

11. Paragraph 8-6-7.f is changed to read:

f. Line 6. (FAA Form 8260-3)

(1) Applicable to vertically guided procedures only.

(a) Enter minimum glide slope/glide path (GS/GP) intercept altitude. The GS/GP intercept point is considered to be the PFAF for vertically guided procedures.

(b) For RNAV (RNP) procedures that contain RF turn fixes located between the PFAF and LTP/FTP, enter the computed glidepath altitude at each fix.

Example:

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(c) If a fix or facility is located on the final approach course between the precise FAF (GS/GP intercept) and the non-precision FAF (no OM/LOM installed), enter the name of the fix or facility and the GS/GP elevation in feet. Where non-precision minimums are not published, establish a fix, and associated GS/GP altitude.

(d) Enter the altitude of the GS/GP in feet at the OM/PFAF. For procedures where the OM exists but no longer serves as the LOC FAF (moved to coincide with PFAF), an ILS "gross error" check altitude will still be depicted at the OM. When this situation occurs, in the "Additional Flight Data" block, enter "Chart OM in half-tone."

(e) Enter the altitude of the GS in feet at the MM, and the IM for ILS procedures only. If not installed, leave blank.

Note: GS/GP altitude computations contained in Order 8260.3, chapter 10 include earth curvature (EC) values.

(2) For approach procedures with a VGF, document the altitudes at the PFAF and the calculated recommended altitude(s) at the VGF and any fix(es) between the VGF and MAP on line 6 of the profile section.

Example: "GIZMO 4300, DENVR 3613, OZLOW 2942"

12. Paragraph 8-6-7.g(3)(c) is added and reads: "The 34:1 surface is not evaluated for approach procedures with a VGF. For these procedures, annotate "34:1 is not clear." "

13. Paragraph 8-6-10.u is added and reads:

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u. Unique notes required for approach procedures with a VGF.

(1) The VGF must be annotated in the planview. Use note: "CHART IN PLANVIEW AT [VGF fix name]: (VGF)."

(2) Helicopter visibility reduction is not allowed. Use note "CHART NOTE: HELICOPTER VISIBILITY REDUCTION IS NOT AUTHORIZED."

(3) The track from the VGF to the MAP must be noted in the planview. Use note: "CHART PLANVIEW NOTE: CROSS [VGF fix name], FLY VISUAL TO AIRPORT ALONG DEPICTED TRACK."

(4) A profile note is required to denote the presence of turn(s) in the final segment. Use note: "CHART PROFILE NOTE: TURNS [or TURN] REQUIRED FROM VGF TO RW[runway number]."

Example: "CHART PROFILE NOTE: TURNS REQUIRED FROM VGF TO RW13L."

14. Paragraph 8-7-1.b(1) is changed to read: "Segments. Identify each TAA, feeder, hold-in-lieu of procedure turn, initial, intermediate, and final segment, and stepdown fixes therein. If the segments are associated with an RNP, the RNP values must be included. Example: (RNP 0.15), (RNP 1.00), etc. If the IF is also an initial approach fix, identify the IF with "(IF/IAF)" in the "From" column. For precision approaches which have separate intermediate and final segments for the precision and non-precision approaches, identify all: Intermediate: ILS and Intermediate: LOC; Final: ILS and Final: LOC. Identify the primary missed approach segments (and alternate missed approach segments, when established). For approach procedures with a VGF, identify the segments between the VGF and MAP as final stepdown segments."

15. Appendix A, table A-1 is revised to add: "VGF: visual guidance fix"

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Appendix C. Revisions to FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS)

1. **Appendix B, table B-1 is revised to add: "**VGF: visual guidance fix"

2. **Appendix B, section 2 is revised to add: "**Visual guidance fix. The fix on an approach procedure with a VGF that marks the point where the flight crew, if they have the required flight visibility, may begin descent below the MDA to the landing runway following lateral and vertical guidance."

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