



Federal Aviation Administration

Memorandum

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Subject: Implementation of Order 8260.3B, U. S. Standard for Terminal Instrument Procedures (TERPS), Change 20

PURPOSE

This memorandum provides policy guidance for instrument procedure developers concerning the implementation of Federal Aviation Administration Order (FAAO) 8260.3B, Change 20.

IMPLEMENTATION POLICY

1. TERPS, Change 20, is effective on 12/21/2007. These criteria replace FAAO 8260.3B, Volume 1, Chapter 3, and Volume 3, Chapter 2, minima criteria, and are applicable to all Standard Instrument Approach Procedure (SIAP) types; i.e., these criteria supersede the minima criteria specified by any other 8260 series directive or aeronautical circular used to determine instrument approach procedure minimums.
2. When these criteria are applied to existing vertically guided approach standard instrument approach procedures (SIAPs) serving up-sloping runways, the decision altitude (DA) may be lowered to the appropriate height above threshold (HATh) value. However, when lowering the decision altitude (DA) results in an obstacle clearance surface (OCS) penetration by an unchanged obstacle that was cleared or avoided when evaluated under the previous standard; calculate the lowest DA value that resolves the penetration. When the new DA value does not exceed that previously published, the Category (CAT) I SIAP is NOT considered restricted and no limitation imposed on existing or proposed CAT II/III procedures.
3. Except as indicated by Change 20, paragraph 3.3.2b(1), applicability of automated precipitous terrain adjustments shall be specified for each SIAP type/segment by the appropriate directive. Otherwise, AFS-400 Policy Memo Subject; Automated Precipitous Terrain Adjustments, dated June 18, 2004, is still in effect.

4. In order to most effectively manage and use resources, FAA procedure developers must apply these criteria to:
 1. All new (original) approach procedures
 2. All procedure amendments (except abbreviated amendments)
 3. Other procedures as time and resources permit
 4. All US Army procedures within two years of release of this change

Non-FAA procedure developers must apply these criteria to all new procedures, and all procedures they maintain no later than the required biennial review.

SIAPs currently annotated “Fly Visual to Airport” do not require Flight Standards approval until converted to the new standard.

For the purpose of Flight Inspection, Flight Standards does not consider a minima increase or decrease solely the result of application of the new standard a SIAP revision (re: Order 8200.1C paragraph 6.10). This is also applicable to those SIAPs addressed in paragraph 2 of this memorandum.

5. USAF: The USAF will implement FAAO 8260.3B, change 20 when procedure development software is modified. Implementation should not exceed 1 year from release of this change. All instrument procedures will then be updated within 6 months of automation support.
6. USN: The USN will comply with Change 20 implementation when the joint automation (FAA / DoD) effort (IPDS) can fully support both procedure design criteria flight inspection requirements and the USN is able to employ such automation.
7. Concurrent to implementation, Flight Procedure Standards will initiate or request appropriate revisions to the Aeronautical Information Manual (AIM), Order 7110.65 to include Pilot/Controller Glossary (P/CG) addendum, FAA-H-8261-1 Instrument Procedures Handbook (IPH), Order 7930.2K NOTAM Handbook, Order 7340.1 Contractions, and Airman Practical Test Standards. Additionally Flight Procedure Standards will coordinate with NACO to make the appropriate updates to the appropriate Terminal Procedures Publications (e.g. the TPP legend, Chart User’s Guide, etc.)
8. See attachment 1 for clarification and reference updates to associated directives which are required to support implementation of the new standard.

If you have any questions, please contact Mr. Harry Hodges, Manager, AFS-420, at (405) 954-4164.

APPENDIX 1. Required Criteria/Policy Revisions

Order 8260.3B Volume 1

Throughout entire document all references to “HAT” should be interpreted to read “HAT/ HATh.

Paragraph 4 (as supplemented by TIL 03-048). May be interpreted to read "**4. EXISTING PROCEDURES.** Unless otherwise specified, existing procedures are evaluated under the criteria that are current at the time of the periodic review. A procedure that cannot be amended to meet current criteria is considered “nonstandard.” Approval of nonstandard procedures is covered in paragraph 141.

Exception: Minima for existing procedures not required to be evaluated under 8260.3B Volume 1, Change 20, Chapter 3 by the provisions of the implementation agreement may continue to be evaluated under the preceding standard. This includes evaluation/approval of existing procedures annotated “Fly Visual to Airport”.

Paragraph 232c. May be interpreted to read "**c. Obstacle Clearance** . The obstacle clearance in the initial approach primary areas shall be a minimum of 1,000 feet. In the secondary area 500 feet of obstacle clearance shall be provided at the inner edge, tapering uniformly to zero feet at the outer edge. Allowance for precipitous terrain should be made as specified in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231. "

Paragraph 233c. May be interpreted to read "**c. Obstacle Clearance** . The obstacle clearance in the DR initial approach segment shall be a minimum of 1,000 feet. There is no secondary area. Allowance for precipitous terrain should be considered as specified a paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231. "

Paragraph 234c. May be interpreted to read "**c . Obstacle Clearance** . A minimum of 1,000 feet of clearance shall be provided in the primary area. In the secondary area, 500 feet of obstacle clearance shall be provided at the inner edge, tapering uniformly to zero feet at the outer edge (see figure 6). Allowance for precipitous terrain should be considered as specified in paragraph 3.2.2b of this volume. The primary and secondary areas determine obstacle clearance in both the entry and maneuvering zones. The use of entry and maneuvering zones provides further relief from obstacles. The entry zone is established to control the obstacle clearance prior to proceeding outbound from the PT fix. The maneuvering zone is established to control obstacle clearance AFTER proceeding outbound from the PT fix (see figure 5). The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231. "

Paragraph 235c. May be interpreted to read "**c. Obstacle Clearance.** Obstacle clearance in the initial approach primary area shall be a MINIMUM of 1,000 feet. Obstacle clearance at the inner edge of the secondary area shall be 500 feet, tapering to zero feet at the outer edge. Where no IF is available, a 10 NM intermediate segment is assumed and intermediate segment required obstacle clearance (ROC) is applied. The controlling obstacle, as well as the minimum altitude selected for the intermediate segment, may depend on the availability of an IF. See figure 8. Allowance for precipitous terrain should be considered in the penetration turn area as specified in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231. "

Paragraph 242c. May be interpreted to read "**c. Obstacle Clearance** . A MINIMUM of 500 feet of obstacle clearance shall be provided in the primary area of the intermediate approach segment. In the secondary area, 500 feet of obstacle clearance shall be provided at the inner edge, tapering to zero feet at the outer edge. Allowance for precipitous terrain should be considered as specified in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 241. "

Paragraph 243c. May be interpreted to read " **c . Obstacle Clearance.** A MINIMUM of 500 feet of obstacle clearance shall be provided in the primary area. In the secondary area, 500 feet of obstacle clearance shall be provided at the inner edge, tapering to zero feet at the outer edge. Allowance for precipitous terrain should be considered as specified in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 241. "

Paragraph 251. May be interpreted as deleted (replaced by Change 20 paragraph)

Paragraph 252. TIL00-012A Policy memo indicates that the TIL is cancelled concurrent with publication of TERPS Change 20. This is in error and should indicate that the TIL is cancelled concurrent with publication of TERPS Change 21.

Paragraph 260b. May be interpreted to read " **b. Obstacle Clearance .** A minimum of 300 feet of obstacle clearance shall be provided in the circling approach area. There is no secondary obstacle clearance area for the circling approach (see paragraph 3.2.1b of this volume)."

Paragraph 274. May be interpreted to read " **274. STRAIGHT MISSED APPROACH OBSTACLE CLEARANCE.** Within the primary missed approach area, no obstacle shall penetrate the missed approach surface. This surface begins over the MAP at a height determined by subtracting the required final approach ROC and any minima adjustments per paragraph 3.2.2 of this volume from the MDA . It rises uniformly at a rate of 1 foot vertically for each 40 feet horizontally (40:1) for a standard climb gradient. See figure 17. Where the 40:1 surface reaches a height of 1,000 feet below the missed approach altitude (paragraph 270), further application of the surface is not required. In the secondary area, no obstacle may penetrate a 12:1 slope that extends outward and upward from the 40:1 surface at the inner boundaries of the secondary area. See figure 18. Evaluate the missed approach segment to ensure obstacle clearance is provided."

Paragraph 289b. May be interpreted to read " **b. The obstacle does not penetrate** a 7:1 (fixed wing) or 3.5:1 (Helicopter) obstacle identification surface (OIS). The surface begins at the earliest point the fix can be received and extends toward the MAP 1 NM. The beginning surface height is determined by subtracting the final segment ROC (and applicable adjustments from paragraph 3.2.2 of this volume) from the minimum altitude require at the fix. The surface slopes downward 1 foot vertically for each 7 feet horizontally (fixed wing) or 1 foot vertically for each 3.5 feet horizontally (helicopter) towards the MAP.

Paragraph 293a. May be interpreted to read " **a. Level Holding .** A minimum of 1,000 feet of obstacle clearance shall be provided throughout the primary area. In the secondary area 500 feet of obstacle clearance shall be provided at the inner edge, tapering to zero feet at the outer edge. For computation of obstacle clearance in the secondary area see paragraph 232c. Allowance for precipitous terrain should be considered as stated in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231. "

Paragraph 906. May be interpreted to read " **906. MDA.** The lowest altitude on final approach is specified as an MDA. The MDA adjustments specified in paragraph 3.2.2 of this volume shall be considered."

Chapter 10 is replaced by NOTICE N 8260.64 or successor

Paragraph 1126. May be interpreted to read " Chapter 3 is changed as follows:"

Paragraph 1126a. May be interpreted to read "Chapter 3 references to "runway" or "runway environment" (i.e. paragraph 3.1.3) is understood to also mean "landing area" or "landing area environment".

Paragraph 1126b. Delete.

Paragraph 1126c. May be interpreted to read "Chapter 3 paragraphs 3.2.1b and 3.3.1b do not apply.

Paragraph 1126d. May be interpreted to read “ Chapter 3 paragraph 3.2, Vol. 3 paragraph 3.7, and Notice 8260.64 paragraph 10.3.4 apply except that a DH of 100 feet may be approved without approach lights; table 3-8 does not apply and paragraph 1167/ table 29 governs the establishment of the DH.”

Paragraph 1127. May be interpreted to read " Chapter 3 is changed as follows:"

Paragraph 1127a(1). May be interpreted to read " **(1) Approach to Runway.** The minimum visibility may be 1/2 the computed straight-in CAT A fixed-wing value from Chapter 3 tables 3-6 , but not less than 1/4 mile or 1,200 RVR. Chapter 3, paragraph 3.3.2d(2) applies.”

Paragraph 1127a(2). May be interpreted to read “**(2) Approach to Landing Area.** (Landing area within 2600 of MAP). The minimum visibility required prior to applying credit for lights may not be less than the visibility associated with the HAL, as specified in Table 25. Chapter 3, paragraph 3.3.2d(2) applies. Chapter 3 paragraphs 3.3.2a and 3.3.2b do not apply.”

Paragraph 1127b(1). May be interpreted to read “**(1) Approach to Runway.** The minimum visibility may be 1/2 the computed straight in fixed-wing value specified in table 3-5a, but not less than 1/4 mile or 1,200 RVR. Chapter 3, paragraph 3.3.2d(2) applies.”

Paragraph 1127b(2). May be interpreted to read “**(2) Approach to Landing Area.** The minimum visibility authorized prior to applying credit for lights (NALS visibility) is 1/2 mile or 2,400’ RVR. Chapter 3, paragraph 3.3.2d(2) applies. Chapter 3 paragraphs 3.3.2a and 3.3.2b do not apply.

Paragraph 1127c. May be interpreted to read “ Point-in-Space Approaches. The minimum visibility prior to applying credit for lights is 3/4 mile. If the HAS exceeds 800 feet, the minimum no-lights visibility shall be 1 mile. No credit for lights will be authorized unless an approach visual lights guidance system is provided. Also see Chapter 3, paragraph 3.1.3c. Alternate minimums are not authorized. Table 25 does not apply.”

Paragraph 1128. May be interpreted to read “**VISIBILITY CREDIT.** Where visibility credit for lighting facilities is allowed for fixed-wing operations, the same type credit should be considered for helicopter operations. The approving authority will grant credit on an individual case basis, until such time as a standard for helicopter approach lighting systems is established. The concepts stated in Chapter 3, paragraph 3.1.3b apply, except heliport markings may be substituted for the runway marking requirements specified therein.”

Paragraph 1129. May be interpreted to read “**TAKEOFF MINIMUMS.** Chapter 3, section 5 does not apply. Helicopter takeoff minimums will be in accordance with the appropriate Federal Aviation Regulations and DoD directives.”

Paragraph 1533b. May be interpreted to read " **b. Obstacle Clearance.** The 40:1 missed approach surface (standard climb gradient) begins at the edge of the area at the WP displacement tolerance or the displacement area of the ATD fix of the MAP identified as the line D-A-B-C in figures 15-20 and 15-21. For the triangular area shaded in figures 15-22 and 15-23 resulting from a skewed course of 15° or less, the 12:1 slope is measured from point A. The obstacle slope is established by measuring the shortest distance from the line D-A-B-C to the obstacle (see figures 15-22 and 15-23). The height of the missed approach surface at its beginning slope is determined by subtracting the required final approach obstacle clearance and adjustments specified in paragraph 3.2.2 of this volume from the MDA."

Paragraph 1534b. May be interpreted to read " **b. Obstacle Clearance.** The 40:1 obstacle clearance surface (standard climb gradient) begins at the edge of the WP or fix displacement area or the MAP. The height of the missed approach surface over an obstacle in zone 2 is determined by measuring a straight-line distance from the obstacle to the nearest point on the A-B-C line and computing the height based on the 40:1 ratio (see figure 15-26). The height of the missed approach surface in zone 3 is determined by measuring the distance from the obstacle to point C, as shown in figure 15-26, and computing the height based on the 40:1 ratio. The height of the missed approach surface over point C for zone 3 computations is the same height as the MDA, less adjustments specified in paragraph 3.2.2 of this volume"

Paragraph 1535b(5). May be interpreted to read " **(5) The height of the missed approach surface** over point X for section 3 computations is the height of MDA adjustments in paragraph 3.2.2 of this volume plus a 40:1 rise (standard climb gradient) in section 1 as measured from line A-B to end of section 1.

Paragraph 1540. May be interpreted to read " 1540. **APPROACH MINIMUMS.** Chapter 3 of this volume, applies except that table 3-11 criteria relating minimum visibility to a distance from the station shall be applied as a variation of XTRK fix displacement tolerance of the plotted position of the MAP shown in table 15-5. XTRK values in table 15-2 shall be applied for VOR/DME. An XTRK value of 0.6 NM shall be applied for non-VOR/DME.

Paragraph 1731b. May be interpreted to read " **b. Obstacle Clearance.** The minimum obstacle clearance of the route shall be provided throughout the primary area. In the secondary area 500 feet of obstacle clearance shall be provided at the INNER edge, tapering to zero feet at the outer edge. For computation of obstacle clearance in the secondary area, the computation formula specified in paragraph 1721 shall be applied. Allowance for precipitous terrain should be considered as stated in paragraph 3.2.2b of this volume. The altitudes selected by application of the obstacle clearance shall provide at least the minimum ROC (plus ROC adjustments if applicable). See paragraph 231."

Appendix 1 Definitions may be interpreted as

"MDA - Minimum Descent Altitude (paragraph 3.2.1)"

Appendix 5 paragraph 2. May be interpreted to read "2. **NONSTANDARD SYSTEMS** . Approach lighting systems other than the U.S. standard installations may be considered equivalent to the standard systems for the purpose of formulating minimums authorized for military procedures, provided requirements of paragraph 3.1.3c are met. This appendix illustrates several non-U.S. standard systems and is offered as a guide to the determination of equivalency."

Appendix 6. Appropriate index entries may be interpreted to read:

"Adjustment to MDA	3.2.2
Alignment, Approach Course	3.1.3b
ALSF-1.....	3.1.3a
Alternate Minimums	3.4
Approach Course Alignment	3.1.3b
Circling Approach Minimums	3.2.1b, 3.3.3
Civil Takeoff Minimums	3.5
Final Approach Length, Effect on MDA.....	3.2.2d
HIRL for RVR Approval.....	3.1.2a(2)
Lighting Systems.....	3.1.3
Lighting, Visibility Credit	3.1.3b
MALSR	3.1.3a, A5-10
MALS.....	3.1.3a, A5-6
MDA Adjustment	3.1.3a

MDA Effect on Visibility Minimums	DELETE
MDA for Circling Approach.....	3.2.1b
MDA for Straight-in Approach	3.2.1a
MDA	3.2.1
Military Minimums	3.1.1
Minimum Alternate	3.4
Minimums, Circling.....	3.2.1b, 3.3.1b, 3.3.3
Minimums, Departure.....	3.5, Vol. 4 1.4.6
Minimums, Establishment	3.1
Minimums, Military	3.1.1
Minimums, Standard	DELETE
Minimums, Takeoff & Landing	3.5
Minimums, Takeoff.....	3.5
Nonprecision Approach Minimums	DELETE
Precision Approach Minimums	DELETE
Publication of Minimums	3.1.1
Remote Altimeter Source, Effect on MDA.....	3.2.2
Rounding MDA.....	3.2, 3.2.1
Runway Lights for RVR Approval	3.1.2a(3)
Runway Markings.....	3.1.2a(3), 3.1.3b(1)
Runway Requirements.....	3.1.2a(3), 3.1.3b(1)
RVR Approval, Runway Requirements.....	3.1.2a(3), 3.1.3b(1)
RVR Substitute Values.....	DELETE
RVR	3.1.2
SSALF	3.1.3, A5-4
SSALS	3.1.3, A5-4
Standard Lighting Systems	3.1.3
Standard Minimums	DELETE

Straight-in Approach Minimums.....	3.2.1a, 3.3.2
Straight-in Minimums	3.2.1a, 3.3.2
Take-off Minimums.....	3.5
Transmissometer Locations, RVR	3.1.2a(1)
Unstandard Lighting Systems	3.1.3c
Variations of Lighting Systems.....	3.1.3c
Visibility Credit for Lights.....	3.1.3b
Visibility, Minimums.....	3.3
Visibility Reduction	3.1.3b
Visibility Reduction, Operational Conditions	3.1.3b
Visibility Values for RVR	DELETE”

TIL 03-047

Cancelled.

TIL 03-048

All references to “HAT” should be interpreted to read “HAT/ HATH.

Paragraph 4. May be interpreted to read "**4. EXISTING PROCEDURES.** Unless otherwise specified, existing procedures are evaluated under the criteria that are current at the time of the periodic review. A procedure that cannot be amended to meet current criteria is considered “nonstandard.” Approval of nonstandard procedures is covered in paragraph 141.

Exception: Minima for existing procedures not required to be evaluated under 8260.3B Volume 1, Change 20, Chapter 3 by the provisions of the implementation agreement may continue to be evaluated under the preceding standard. This includes evaluation/approval of existing procedures annotated “Fly Visual to Airport”.

Order 8260.3B Volume 3

Throughout entire document all references to “HAT” should be interpreted to read “HAT/ HATH.

Table 2-2B no longer applies.

Order 8260.3 Volume 4

Throughout entire document all references to “HAT” should be interpreted to read “HAT/ HATH.

Paragraph 4.2.1. May be interpreted to read “**Diverse VCOA** . Identify the highest obstruction within the visual climb area (VCA). This is the preliminary height of the VCA level surface. Evaluate a 40:1 surface (standard climb gradient) from the edge of the level surface. If the 40:1 surface is penetrated, raise the VCA level surface height by the amount of the greatest penetration (see figure 4-3). Determine the VCOA "climb-to" altitude using the following formula:

Climb to altitude level surface MSL height 250' ROC adjustments (vol. 1, para 3.2.2)

Example : $5124 + 250 + 0 = 5374$ rounds to 5400'

Where OCS height 5124

adjustments 0"

Paragraph 4.2.2e(1). May be interpreted to read "(1) Raise the VCA level surface the amount of penetration. Determine the climb-to altitude using the formula below, or...

climb to altitude level surface MSL height 250' ROC adjustments (vol. 1, para 3.2.2)

Example : $5124 + 250 + 0 = 5374$ rounds to 5400'

Where OCS height 5124

adjustments 0"

Order 8260.19D

All references to "HAT" should be interpreted to read "HAT/ HATH.

Paragraph 241a(4). May be interpreted to read "(4) Ensure that minimums meet criteria. Review IFP forms for conformance to current standards. Check published IFP charts and text for correct portrayal.

Exception: Minima for existing procedures not required to be evaluated under 8260.3B Volume 1, Change 20, Chapter 3 by the provisions of the implementation agreement may continue to be evaluated under the preceding standard. This includes evaluation/approval of existing procedures annotated "Fly Visual to Airport".

Paragraph 404s. May be interpreted as deleted.

Paragraph 404v. May be interpreted to read "**v. Volume 1, Change 20 paragraph 3.1.2, Runway Visual Range (RVR).** RVR must be authorized on adjacent runways, when segments of those runways are located within a 2,000-ft radius of the transmissometer location and the requirements of Order 8260.3, Volume 1, Change 20 paragraph 3.1.2a, are met."

Paragraph 404w. May be interpreted to read "**w. Volume 1, Change 20 paragraph 3.1.2a(3), Runway Marking and Lighting.** If runway markings are removed or obliterated subsequent to the commissioning of the RVR, the RVR minimums may require adjustment. However, before an adjustment is made to the minimums, the NFPO should advise the airport sponsor of the proposed course of action. Where corrective action cannot be accomplished within a reasonable length of time, the NFPO must submit a revised procedure reflecting the adjustment to the landing minimums."

Paragraph 404x. May be interpreted to read "**x. Volume 1, Change 20 paragraph 3.1.3a, Standard Lighting Systems.** The runway alignment indicator light (RAIL) portion of a minimum intensity approach lighting system with runway alignment indicator lights (MALSR) or short simplified approach lighting system with runway alignment indicator lights (SSALR) must be operating in order to apply approach light credit associated with a full approach light system (FALS) facility class. Unattended approach light systems that have a radio control device for a pilot to exercise control over the system, qualify for the same minimums as light systems that are controlled from a ground position."

Paragraph 404y. May be interpreted to read “**y. Volume 1, Change 20, paragraph 3.4, Establishing Alternate Minimums (Other than Standard).** Do not authorize alternate minimums when the facility providing final approach guidance is a CAT 3 monitored facility. If a procedure has a stepdown fix predicated on a CAT 3 monitored facility, establish alternate minimums no lower than the minimum altitude without the fix [see paragraphs 213c(1) and (2)].”

Paragraph 405g. May be interpreted to read “**g. Establish published visibility** in accordance with Order 8260.3, Volume 1, Change 20 paragraph 3.3.3c, except;

Paragraph 405g(1). May be interpreted to read “**(1) One-half mile visibility** reduction is authorized when a full approach light system (FALS) is installed to the sidestep runway. The minimum visibility after applying this reduction may not be less than 1 mile.”
(rest of paragraph unchanged)

Paragraph 406b. May be interpreted to read “**b. For procedures authorized straight-in minima**, recompute visibility based on the revised MAP-to-threshold distance and the NALS facility class.”

Paragraph 406e. May be interpreted to read “**e. The elevation of the new threshold**, touchdown zone, and airport will more than likely change. In this case, evaluate the revised HAT/HATh/HAA for visibility impact and NOTAM changes accordingly. The new temporary HAT/HATh/HAA/THLD/field elevation values must be NOTAMed only when necessary for safety of flight.

Paragraph 452b. May be interpreted to read “**b. Minimum Altitudes.** Show minimum altitudes for each approach segment except for the portion between the 45-degree turns. Establish the minimum altitude for the final approach segment in accordance with Order 8260.3, Volume 1, Change 20 paragraph 3.2.1. Since these are emergency procedures, do NOT establish ceiling and visibility minimums.”

Paragraph 852e(1). May be interpreted to read “**(1) On Category II and III procedures**, enter distance in feet to the threshold from the inner marker (IM) and 100-ft HAT/HATh points (as applicable).

Paragraph 854f. May be interpreted to read “**f. Make no entry in the Category E boxes**, except where a valid military requirement exists.”

Paragraph 854i(1). May be interpreted to be deleted.

Paragraph 854i(3). May be interpreted to read “**(3) When Order 8260.3, Volume 1, Change 20 paragraph 3.3.2d**, requires visibility to be limited to $\frac{3}{4}$ mile or 1 mile because of 20:1 or 34:1 surface penetrations, a note is required to prevent helicopters from applying 14 CFR Part 97.3(d-1) that states: “The required visibility minimum may be reduced to one-half the published visibility minimum for Category A aircraft, but in no case may it be reduced to less than one-quarter mile or 1,200 ft RVR.” Use: “**Chart Note: Visibility Reduction by Helicopters NA.**”

Paragraph 854j. May be interpreted to read “**j. HAT/HATh/HAA.**

Paragraph 854j(1). May be interpreted to read “**(1) HAT/HATh.** Enter height above touchdown zone elevation (procedures not implementing TERPS Change 20) and height above threshold (procedures implementing TERPS Change 20) when straight-in minimums to a runway (including COPTER) are authorized. For COPTER straight-in and point-in-space (PinS) SIAPs noted to “proceed visually” to the landing site, enter “HAL.” For COPTER PinS IAPs noted to “proceed VFR” to the landing site, enter “HAS.” See paragraphs 857p and 858. When evaluating foreign terminal instrument procedures, where threshold elevation is not available, use airport elevation to determine HATh.

Note: Helicopter procedures to elevated heliports (e.g., heliport on the roof of a hospital) and Point-in-Space (proceed VFR) procedures pose unique circumstances when calculating weather minimums. Consideration must be given to the elevation of the source providing the ceiling information. For example, if the weather source providing the ceiling information is considerably lower than the heliport on top of the building, a much higher ceiling value must be established when the HAL value is provided.”

Paragraph 854k. May be interpreted to read “**k. ILS Category II/III.** Include Category II/III minimums when authorized in the NOTES section immediately below the MINIMUMS boxes. Establish only one set of Category II minimums in the 100-ft to 199-ft range with the applicable RVR established by TERPS criteria. At locations where ILS Category II procedures have been established, a separate Copter ILS Category II procedure may be developed that contains a HAT/HATH less than 200 ft but no lower than 100 ft above TDZE/THLD elevation. These Copter ILS Category II procedures are separate and use the standard Copter (CAT I) ILS naming convention, are documented on a separate Form 8260-3, and may contain localizer minimums on the same chart. A radio altimeter (RA) height must also be provided for publication with the DA. For copter procedures, the DA and HAT/HATH will be entered in the minima boxes and the RA will be entered in the NOTES section adjacent to the Category II note. Enter these items as follows: **(rest of paragraph unchanged).**”

Paragraph 854l(1)a(3) Note. May be interpreted to read “ *Note: CAT A is not affected until the HAT/HATH is more than 880 ft; CAT B is not affected until the HAT/HATH is more than 740 ft.*”

Paragraph 854m(2)g. May be interpreted to read “(g) **When required by TERPS Volume 1, Change 20, paragraph 3.3.2(d),** use one of the following : “**Chart note: Procedure NA at night;**” or “**Chart note: Straight-in minimums NA at night;**” or “**Chart note; Circling NA at night;**” or “**Chart note; Circling to RWY XX NA at night.**”

Paragraph 855k. May be interpreted to read “k. When the “Fly Visual” from MAP to landing area provisions of Order 8260.3, Volume 1, chapter 3, have been applied, annotate the chart as directed by Flight Standards approval.”

Paragraph 856d(5). May be interpreted to read “(5) **Missed approach procedures** requiring a turn of more than 15 degrees must specify an altitude that is at least 400 ft above the TDZE/THLD elevation prior to commencing a turn. Round the resulting altitude to the next higher 100-ft increment: “**Climb to 1200 then climbing left turn to 3100 via heading 070 and ABC R-167 to ABC VOR and hold.**” Alternatively, a specific point (fix, waypoint, etc.) that will allow sufficient distance, at an assumed 200 ft/NM or specified gradient rate of climb to reach 400 ft above TDZE/THLD elevation may be used: “**Climb via ABC R- 090 to 9 DME, then climbing left turn to 5000 direct XYZ VORTAC and hold.**” See also paragraph 856b for rounding guidance.”

Paragraph 858b. May be interpreted to read “**b. ELEVATION, TDZE/THLD ELEVATION, AIRPORT NAME.**”

Paragraph 858b(1). May be interpreted to read “(1) **Enter the official airport/heliport name** and airport/heliport elevation as derived from NASR. For COPTER PinS procedures noted to “proceed VFR” to the landing site, revise “Elevation” and “TDZE/THLD elevation,” and enter “Surface Elevation.” Then enter the highest terrain/surface elevation within a 5,200-ft radius of the MAP. For multiple COPTER point-in-space SIAPs, enter “Various Heliports.”

Note: Paragraph 857p requires each heliport to be identified in the Additional Flight DataBlock.”

Paragraph 858b(2). May be interpreted to read “ (2) **TDZE/THLD elevation.** Enter Touchdown Zone Elevation (procedures not implementing TERPS Change 20) or threshold elevation (procedures implementing TERPS Change 20) values of record (e.g. from the NASR or AIRNAV database) for the runway designated in the procedure title. Enter the sidestep runway and TDZE/THLD elevation below the first entry; e.g.;

TDZE: 28L 2854

TDZE: 28R 2858

Leave the TDZE/THLD elevation blank if straight-in minimums are not authorized or if the procedure is a COPTER PinS procedure [see paragraph 857p].”

Paragraph 860h. May be interpreted to read “(h) **Min. Alt.** The obstruction elevation + ROC + altitude adjustment = minimum altitude (computed); OR, high terrain elevation + airspace adjustment = minimum altitude (computed).

Enter the appropriately rounded value. Make entries on the obstruction line as well as the airspace evaluation line. When possible, separate sets of segment entries with a blank line. The segment minimum altitude to be published must be the higher rounded value, and must match the respective altitudes shown on the corresponding Forms 8260-3/4/5/7. For part-time remote altimeters, make entries in the final/stepdown "Alt. Adj." and "Min. Alt." columns on a separate line just below the entries for full-time altimeter. The minimum altitude values for nonprecision final/stepdown and circling must be rounded to the next higher 20-ft increment. For precision or APV approaches, enter DA and HAT/HATh values separated by a "/"; e.g., 1718/200, 1640/383, etc."

Paragraph 871e(1). May be interpreted to read **“(1) Enter the TDZE/THLD elevation** in the preprinted area for each runway authorized straight-in minimums. Appendix 12, paragraph 4w. May be interpreted to read “w. Vertical Alert Limit (VAL). The VAL is half the length of a segment on the vertical axis (perpendicular to the horizontal plane of the WGS-84 ellipsoid), with its center being at the true position, that describes the region which is required to contain the indicated vertical position with a probability of 1-10⁻⁷ per approach, assuming the probability of a GPS satellite integrity failure being included in the position solution is less than or equal to 10⁻⁴ per hour. The range of values is 0 to 50.8m with a 0.2 resolution. The VAL for LPV procedures is a fixed value at 50.0 meters where the HAT/HATh is 250 feet or greater. If an LPV procedure has been established to support a HAT/HATh less than 250 feet (no less than 200 feet), a VAL of 35 meters will be used. **(rest of paragraph unchanged).”**

N8260.52

All references to “HAT” should be interpreted to read “HAT/ HATh.

Paragraph 1.14. May be interpreted to read “CALCULATION OF VISIBILITY MINIMUMS. See Order 8260.3 Change 20.”

N8260.64

All references to “HAT” should be interpreted to read “HAT/ HATh.

Paragraph 10.3.1. May be interpreted to read

"10.3.1 Inoperative Components . Failure of direction or distance information renders the entire PAR system inoperative. Failure of the glidepath feature may revert the PAR to a nonprecision approach system and the nonprecision minimums specified in TERPS, volume 1, chapter 3 apply. In this case, apply the obstacle clearance requirements specified in volume 1, chapter 9, for localizer and localizer type directional aids."



Thomas J Nichols/AMC/FAA
AFS-420, Flight Procedure
Standards

01/02/2008 10:06 AM

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bcc

Subject Change 20 implementation letter addendum #1

I inadvertently failed to address Order 8260.19D, paragraph 404t in the 8260.3B, Change 20 implementation letter. Please attach the guidance below as an addendum to the memo.

Paragraph 404t May be interpreted as deleted.

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*****NOTICE*****



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01/02/2008 11:31 AM

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Subject Change 20 implementation letter addendum #2

I also inadvertently failed to address TIL 01-025, Turning Area Curve Radii in the 8260.3B, Change 20 implementation letter. Please attach the guidance below as addendum #2 to the memo.

"TIL01-025 - indicates that the TIL is cancelled concurrent with publication of TERPS Change 20. This is in error and should indicate that the TIL is cancelled concurrent with the next revision to Order 8260.3B, Vol 1 Chapter 17 or as directed by AFS-420."

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*****NOTICE*****



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01/02/2008 12:52 PM

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Subject Change 20 implementation letter addendum #3

Finally, I inadvertently failed to address TIL 00-016, Interim US Army Helicopter Departure Criteria, TIL 02-042, RNAV Q route processing, and TIL 02-043, TERPS Change 19, correction #1 in the 8260.3B, Change 20 implementation letter. Please attach the guidance below as addendum #3 to the memo.

"TIL 00-016 - indicates that the TIL is cancelled concurrent with publication of TERPS Change 20. This is in error and should indicate that this TIL is cancelled as directed by AFS-420."

"TIL 02-042 - indicates that the TIL is cancelled concurrent with publication of TERPS Change 20. This is in error and should indicate that this TIL is cancelled upon publication of the next revision to Order 8260.3B, Vol 1. Chapter 15 or as otherwise directed by AFS-420."

"TIL 02-043 - indicates that the TIL is cancelled concurrent with publication of TERPS Change 20. This is in error. It should indicate that Attachment 1 of this TIL is cancelled upon publication of the next revision to Order 8260.3B, Vol 4, Chapter 3 or as otherwise directed by AFS-420. Attachment 2 of this TIL is cancelled by change 20. Attachment 3 of this TIL is cancelled upon publication of the next revision to Order 8260.3B, Vol 3, Chapter 2 or as otherwise directed by AFS-420."

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