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Subject: **ACTION**: Special IFR Helicopter GPS Point-In-Space (PinS) Approaches

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From: Manager, Flight Technologies and Procedures  
Division, AFS-400

Reply to  
Attn. of:

To: Manager, National Flight Procedures  
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The FAA Order 8260.3B, United States Standard for Terminal Instrument Procedures (TERPS), paragraphs 1107 and 1127c, and FAA Order 8260.42A, Helicopter Global Positioning System (GPS) Nonprecision Approach Criteria, paragraph 16, contain guidance for constructing helicopter PinS approach procedures. This letter establishes interim policy and the attached visual segment criteria provides guidance for constructing special IFR helicopter GPS PinS approach procedures to heliports, evaluating of obstructions in the visual segment, and establishing flyability of the approach procedure.

To ensure a safe IFR operation to a heliport, it is essential to establish the acceptability of the landing site, to design a safe, flyable approach procedure, and to provide a flight inspection evaluation consistent with the type of operation. The following guidance is being provided for the construction of special IFR helicopter GPS PinS approaches:

#### HELIPORT EVALUATION.

Before designing a special IFR helicopter GPS Pins approach , ensure the heliport meets the following criteria:

a. An FAA Form 7480-1, Notice of Landing Area Proposal, has been filed under 14 CFR Part 157. Based on the FAA determination, a procedure can be developed under the following conditions:

- (1) No objection.
- (2) Conditional, but the conditions have been resolved by the proponent.

(3) If an objection determination was issued, no IFR approach procedure shall be developed.

b. The 8:1 surface detailed in AC 150/5390-2, Heliport Design, may not be penetrated.

c. An acceptable onsite evaluation of the heliport for VFR use shall be conducted by a helicopter instrument rated Aviation Safety Inspector (ASI) (Operations) or similarly qualified helicopter instrument rated pilot, acceptable to the FSDO, using FAA Order 8700.1, General Aviation Inspector's Guide, chapter 61.

d. For night operations, an acceptable onsite evaluation shall be conducted by a helicopter instrument rated Aviation Safety Inspector (ASI) (Operations) or similarly qualified helicopter instrument rated pilot, acceptable to the FSDO, using FAA Order 8700.1, General Aviation Inspector's Guide, chapter 61.

#### PROCEDURE DESIGN.

When a helicopter GPS PinS approach procedure serves a landing area more than 10,500 feet from the MAP, annotate the procedure, "PROCEED VFR." These criteria apply to helicopter GPS PinS approach procedures developed to service a heliport within 10,500 feet of the MAP:

a. Annotate the procedure "PROCEED VISUALLY TO THE LANDING SITE."

b. The course change from the final course to the visual track at the MAP to the heliport shall not exceed 30 degrees.

c. The published minimum visibility shall not be less than the distance from the MAP to the heliport.

d. Chart the obstructions required by the application of the attached criteria.

e. If the procedure is determined to be unusable at night, or night operations are not requested, annotate the procedure: "Procedure NA at night."

#### SPECIAL AUTHORIZATION REQUIRED (SAR)

##### Equipment:

a. The GPS navigation equipment must meet TSO C129 requirements with an external course deviation (CDI) or horizontal situation indicator (HSI), and distance display mounted in the pilot's primary instrument scan.

### Pilot Training

Each operator shall provide training to each pilot in procedures for the transition from instrument approach flight speeds to visual flight speeds that will allow the pilot to see and avoid geographic features and obstructions from the missed approach point to the landing site. Pilot training shall provide familiarization with the surrounding geographic features and obstructions in the approach and landing areas.

### Helicopter Characteristics

Maximum V<sub>mini</sub> 70 knots.

### FLIGHT INSPECTION.

Helicopter criteria permits shorter segments, steeper descents, and greater angles of turns between segments, than for airplanes. However, if an approach procedure is constructed with MAXIMUM turns, MINIMUM segment lengths, and MAXIMUM descent angles/gradients on all or most segments, an unacceptable cockpit workload can result. To assure flyability of the procedure, a helicopter instrument rated flight inspector and/or an ASI should:

- a. Evaluate the visual segment for a smooth transition from segment to segment. The procedure must be flyable without incurring an excessive workload and not delay the transition to visual reference or identifying the landing area.
- b. Perform a satisfactory flight evaluation at night for night operations to be authorized.

More detailed visual segment criteria will be included in the revision of FAA Order 8260.42A, Helicopter Global Positioning System (GPS) Nonprecision Approach Criteria.

Thank you for your efforts in promoting a safe IFR helicopter instrument approach procedure system. If you have questions, feel free to call Jack Corman or Steve Winter, at (405) 954-4164.

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