

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

N 8900.57

National Policy

Effective Date:  
11/25/08

Cancellation Date:  
11/25/09

## **SUBJ:** Part 135 Helicopter Training Program and Manual Revisions

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**1. Purpose of This Notice.** This notice provides guidance to aviation safety inspectors (ASI) with oversight responsibilities of Title 14 of the Code of Federal Regulations (14 CFR) part 135 helicopter operators. This notice provides policy and regulatory operational safety enhancements specifically tailored to mitigate hazards identified in helicopter operations.

**2. Audience.** The primary audience for this notice is Flight Standards District Office (FSDO) ASIs having oversight of part 135 helicopter operators. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.

**3. Where You Can Find This Notice.** Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://www.fsims.avs.faa.gov>. Operators and the public can find this notice at <http://fsims.faa.gov>.

**4. Discussion.** In consideration of several helicopter related accidents investigated by the National Transportation Safety Board (NTSB), the Federal Aviation Administration (FAA) has reviewed the NTSB safety recommendations and implemented the following pilot training program revisions necessary to ensure ongoing helicopter safety. Principal operations inspectors (POI) responsible for part 135 helicopters operators shall coordinate the applicable sections of this notice with each of their helicopter operators to ensure appropriate manuals, checklists, standard operating procedures, and training programs, as applicable, are revised as outlined below.

### **5. Training Program Revisions and Program Tracking and Reporting Subsystem (PTRS) Entries.**

**a. Full Authority Digital Engine Control (FADEC).** On May 11, 2003, a Bell 407 helicopter was substantially damaged during an autorotative water landing in the Gulf of Mexico, following a loss of engine power while in cruise flight. The NTSB issued the following recommendation to the FAA: A-04-68. Conduct a review of the emergency procedure training for pilots of helicopters equipped with the Rolls-Royce Model 250 series IV engine to evaluate pilots' propensity to take inappropriate action in response to an in-flight failure of the FADEC system and require any necessary changes to emergency procedures and training to better prepare pilots to cope with in-flight FADEC failures.

(1) Therefore, in accordance with 14 CFR part 135, § 135.325 (d), all part 135 Air Carriers operating Bell 407 equipped with Rolls Royce 250 series IV engine and FADEC shall amend their pilot training programs to incorporate the recommended training/procedures cited in SAIB SW-05-70, issued July 21, 2005. SAIB SW-05-70 contains discussion of the FADEC and its characteristics during automatic transition from automatic mode to manual mode. Additionally, the SAIB contains recommendations for operations and effective training for pilots using this equipment. SAIB SW-05-70 may be downloaded at the following FAA public Web site: <http://www.faa.gov/aircraft/safety/alerts>.

(2) By February 1, 2009, POIs, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual revisions, shall:

- Open a PTRS record using code 1030;
- Enter “FADEC8” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**b. SPZ-7000 / SPZ-7600 Dual Digital Automatic Flight Control Systems.** All part 135 operators are required to have in their pilot initial and recurrent training programs, instructions on the authorized methods of checking and operating the equipment installed in aircraft they operate. A recent helicopter crash investigation revealed that the required checks for the onboard digital automatic flight control system were not being accomplished in accordance with the Rotorcraft Flight Manual (RFM).

(1) Therefore, in accordance with § 135.325(d), all part 135 air carriers conducting operations with helicopters equipped with SPZ-7000 or SPZ-7600 Dual Digital Flight Control Systems must incorporate into their pilot training program, if not already incorporated, procedures to ensure pilots are being trained and checked on the equipment cited in subparagraph b above. Such training should emphasize mode awareness; mode function and limitations; incompatible modes; coupling requirements; and normal, abnormal, and emergency procedures. Furthermore, air carrier training programs must include information on preflight checks and the use of the flight director and coupling status annunciation, command cue presentations, when only the pitch or roll mode is engaged, and the differences between SPZ-7000 and the SPZ-7600, if applicable.

(2) By February 1, 2009, POIs, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual revisions, shall:

- Open a PTRS record using code 1030;
- Enter “SPZ8” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**c. Cockpit Voice Recorder Functional Tests.** Accident investigations have revealed that some cockpit voice recorders (CVR) in use by operators are not being tested in accordance with the Aircraft Flight Manual, which if properly tested would have shown them to be either malfunctioning or inoperative prior to the first flight of the day. On November 8, 2006, the FAA

issued SAFO 06019 recommending that operators incorporate procedures into their approved pilot training program and standard operating procedures to ensure such checks are being accomplished.

(1) Therefore, in accordance with § 135.325(d), all part 135 air carriers conducting operations with helicopters equipped with cockpit voice recorders shall revise the pilots initial and recurrent training program and applicable checklists to ensure normal operations include a functional test of the helicopter CVR prior to the first flight of the day. All pilots of aircraft equipped with a CVR must test the function of the CVR before the first flight of each day as part of an approved aircraft checklist. The CVR test must be added to the pilots training program to ensure the CVR is checked in accordance with manufacture instructions.

(2) By February 1, 2009, the POI, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual and checklist revisions, shall:

- Open a PTRS record using code 1030;
- Enter “CVR8” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**d. Preflight of Helicopter Hydraulic Systems.** Include validation of control movement smoothness and identification of adverse flight control “stick-jump.” After investigating a Sikorsky S-76C+ helicopter accident that experienced an upset and subsequent crash into the Baltic Sea, the NTSB cited in NTSB Safety Recommendation A-05-35 the urgency for applicable helicopter operators to conduct functional tests of helicopter hydraulic system checks to include validation of control movement smoothness and checking for any adverse flight control “stick-jump.” Such preflight checks may show that the system is malfunctioning or inoperative prior to flight. The FAA issued SAFO 08005 on January 24, 2008, supplementing SAFO 06021 issued December 6, 2006, to emphasize the importance of this recommendation.

(1) Therefore, in accordance with § 135.325(d), all part 135 air carriers conducting operations with helicopters equipped with hydraulically actuated controls shall revise their initial and recurrent pilot training programs and applicable checklists to ensure their pilots are conducting preflight system checks that specifically includes review of the helicopter’s hydraulic system. All pilots of aircraft equipped with a hydraulic system must test the function of the hydraulic system, to include control movement smoothness and shall check for any adverse flight control “stick-jump,” in accordance with the RFM or published and approved guidance, as part of an accepted aircraft checklist.

(2) By February 1, 2009, the POI, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual and checklist revisions, shall:

- Open a PTRS record using code 1030;
- Enter “STICK” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**e. Procedures for Mitigating and Recovering from Brownout, Whiteout, and/or Flat Light Conditions.**

(1) Each helicopter operator conducting operations where brownout, whiteout and/or flat light conditions could occur, shall update their initial and recurrent pilot training program to include procedures for mitigating and recovering from such occurrences. Such training need only be accomplished during initial or recurrent pilot training after February 1, 2009.

(2) By February 1, 2009, the POI, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual and checklist revisions, shall:

- Open a PTRS record using code 1030;
- Enter “OUT” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**f. Use of External Lights.**

(1) Each helicopter operator shall update their initial and recurrent pilot training program to include training on the use of external lights (e.g., landing lights or search lights) to aid in reconnaissance of a remote landing zone. Such training need only be accomplished during initial or recurrent pilot training after February 1, 2009.

(2) By February 1, 2009, the POI, after confirming that the operator for which they have oversight has made the necessary initial and recurrent pilot training program and applicable manual and checklist revisions, shall:

- Open a PTRS record using code 1030;
- Enter “LIGHT” in the “National Use” field (without quotes); and
- Close the PTRS record when the inspection is completed.

**6. Action.** These revisions are mandatory. Using the authority granted in § 135.325(d), POIs with oversight responsibility of part 135 helicopter operators will provide notice to operators, consistent with the aforementioned regulation, and a copy of this notice within 10 days of the publication date. The POIs will ensure the operators have revised their applicable manuals, checklists, and pilot training programs, as applicable, and entered all applicable PTRS entries described in paragraph 5, by February 1, 2009.

**7. PTRS.** As identified next to each issue described in section 5 of this notice, the POI will complete the applicable PTRS tracking entries as cited herein, by February 1, 2009.

11/25/08

N 8900.57

**Disposition.** This notice will not be incorporated into FSIMS. Direct questions concerning this notice to the Part 135 Air Carrier Operations Branch, AFS-250, at (202) 267-8166.

ORIGINAL SIGNED by  
John W. McGraw for

James J. Ballough  
Director, Flight Standards Service