

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.289

National Policy

Effective Date: 3/18/15

Cancellation Date: 3/18/16

SUBJ: OpSpec A021, Helicopter Air Ambulance (HAA) Operations

- **1. Purpose of This Notice.** This document provides notification of changes to Operations Specification (OpSpec) A021, Helicopter Air Ambulance (HAA) Operations, and implementation of guidance for operations under Title 14 of the Code of Federal Regulations (14 CFR) part 135 and any 14 CFR part 91 letter of authorization (LOA) helicopter operators.
- **2. Audience.** The primary audience for this notice is certificate-holding district offices (CHDO), principal inspectors (PI), and aviation safety inspectors (ASI) who hold certificate oversight responsibility for part 135 helicopter air ambulance (HAA) operators. The secondary audience includes ASIs having certificate oversight responsibility for other part 135 helicopter operators and for part 91 LOA holders, Flight Standards Service (AFS) divisions and branches in the regions and in headquarters (HQ).
- **3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the Federal Aviation Administration's (FAA) Web site at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.
- 4. Background. To address an increase in fatal helicopter accidents, in particular those engaged in HAA operations, on February 20, 2014, the FAA implemented a comprehensive package of regulatory updates and several new sections to 14 CFR parts 91, 120, and 135. These rules can be accessed at http://www.faa.gov/regulations_policies/rulemaking/recently_published/. These regulatory updates increase safety by requiring increased Class G weather minima, new operational procedures, and additional equipment for HAA operations and other helicopter operations, and unless otherwise specified, are effective April 22, 2015. The final rule package requires implementation of risk analysis procedures for all HAA operators and implementation of Operations Control Centers (OCC) and Operations Control Specialists (OCS) for larger HAA operators, training of medical personnel, and installation of equipment. It revises pilot testing, rules for alternate airports, and procedures for instrument flight and transitions between visual and instrument conditions and flight rules. It also increases weather minimums for all helicopter operations including General Aviation (GA). Many of these requirements address National Transportation Safety Board (NTSB) safety recommendations and are already found in other

Distribution: Electronic Only Initiated By: AFS-200

FAA guidance. Changes to OpSpec A021 authorize implementation of some new systems and procedures.

Note: In addition to the above changes, Title 49 of the United States Code (49 U.S.C.) § 44731, Collection of Data on Helicopter Air Ambulance Operations, requires all part 135 certificate holders utilizing this OpSpec to report flight operations data in the Helicopter Air Ambulance Mandatory Flight Information Report.

- **5. Guidance.** The Air Transportation Division (AFS-200) developed this notice. This notice contains a summary of changes and additions made to parts 91, 120, and 135, which may apply to all helicopter operators, commercial and part 135 helicopter operators, and part 135 HAA operators. See Appendix A for a sample OpSpec A021, along with instructions for authorizations that apply specifically to part 135 HAA certificate holders. The following are new or revised requirements. Operations manuals and training programs must be amended where necessary and verified by the PIs to accommodate these new requirements. The following new requirements are arranged by 14 CFR part and are effective April 22, 2015, unless otherwise noted:
- **a. VFR Weather Minimums.** This is applicable to all helicopters (excepting those engaged in HAA operations that must observe higher Class G minimums). Observe revised Class G visibilities and cloud clearances in accordance with part 91, § 91.155.
- **b.** Employees Covered by Drug and Alcohol Testing Program. OCSs for HAA OCCs are considered covered employees and are subject to drug and alcohol testing in accordance with part 120, §§ 120.105 and 120.215.
- **c. Radio Altimeters (RA).** All certificate holders operating helicopters used in part 135 operations must be equipped with an RA not later than April 24, 2017, in accordance with part 135, § 135.160. This is not limited to HAA operations.
- **d.** Emergency Equipment—Overwater Rotorcraft Operations. With few exceptions, § 135.168 requires that helicopters used in overwater, part 135 operations beyond autorotational distance of the shoreline must be equipped by April 24, 2017, with the following:
 - Approved life preservers with an approved survivor locator light for each occupant; and
 - An approved and properly maintained 406 MHz emergency locator transmitter (ELT) or an approved alternative.

Note: Refer to the regulation for definitions of autorotational distance and shoreline, ELT alternative compliance options, and exceptions.

- e. Instrument Flight Rule (IFR) Alternate Weather Minimums. IFR helicopter alternate weather minimums for part 135 operations have been modified in accordance with § 135.221(b).
- **f. Initial and Recurrent Pilot Testing Requirements.** In accordance with additions and modifications of § 135.293 and in accordance with the implementation timeline guidance below, during each competency check, each rotorcraft pilot must demonstrate competency as follows:

(1) Flat Light, Whiteout, and Brownout Conditions (Including Methods for Avoiding and Escaping Those Conditions, per § 135.293(a)(9)). This addition to the competency check must be made to all checks performed after April 22, 2015.

- (2) Maneuvering the Helicopter. Maneuvering the helicopter solely by reference to instruments to return the helicopter from an inadvertent excursion into instrument meteorological conditions (IIMC) to Visual Meteorological Conditions (VMC), per 135.293(c). Excepting those part 135 helicopter certificate holders limited to visual flight rule (VFR) day operations by OpSpec, which operate helicopters that are not equipped with gyroscopic instruments and which operate in meteorologically unchallenging environments, the training and checking required to comply with this regulation must be accomplished effective for all checks performed on or after April 22, 2015. All normally scheduled competency checks after that date must include § 135.293(c).
- **g. Applicability and Definitions.** Part 135, subpart L contains new HAA equipment, operations, and training requirements. Section 135.601 provides an applicability statement and defines terms used throughout the subpart.
- **h. Pilot-in-Command (PIC) Instrument Qualifications.** In accordance with § 135.603, pilots may not serve in part 135 HAA operations after April 24, 2017, unless they meet the requirements of § 135.243 and hold either a helicopter instrument rating or an airline transport pilot (ATP) certificate with a rotorcraft helicopter rating that is not limited to VFR.
- i. Helicopter Terrain Awareness and Warning System (HTAWS). In accordance with § 135.605, after April 24, 2017, no person may operate a helicopter in HAA operations unless that helicopter is equipped with HTAWS that meets certain Technical Standard Order (TSO) requirements incorporated by reference (refer to the regulation for details). Certificate holders must also ensure Rotorcraft Flight Manuals (RFM) reflect HTAWS use and proper flightcrew response to audible and visual warnings. As HTAWS installations are accomplished, the certificate holder may request relief against the Class G ceiling and visibility restrictions during night conditions based upon operational HTAWS and appropriate crew training. (Refer to § 135.609.) Principal operations inspectors (POI) should verify the operator's approved training and checking program has been appropriately expanded to include HTAWS.
- **j.** Flight Data Monitoring Systems (FDMS). FDMS must be installed before April 23, 2018, per § 135.607. Helicopters not equipped with FDMS may not be used for HAA operations after that date. An approved FDMS must be operational for the duration of the flight from the time electrical power is applied before takeoff until power is removed after landing. An approved FDMS must be capable of recording flight performance data, including, at minimum, time and date of recording, latitude, longitude, and altitude; be installed in a safe manner so as not to present an undue hazard to occupants; and be compatible in all respects with all previously installed equipment and systems on board the helicopter. There are no regulatory requirements or restrictions regarding what information must be recorded nor for the routine use of FDMS-recorded information by the certificate holder. The FDMS is intended to support the operator's flight information analysis efforts and the accident investigation process; therefore, the more information that is recorded by the FDMS, the more details of the flight might be

observed that could lead to identifying causal factors of the accident. Flightcrew members should be briefed on FDMS operating requirements, limitations, and the operator's use of recorded data.

- **k. HAA-Specific VFR Ceiling and Visibility Minimums.** Per § 135.609, HAA-specific VFR ceiling and visibility minimums must be documented in the certificate holder's operations manual. Relief from HAA Class G night minimums is offered for certificate holders who have equipped their rotorcraft and trained their flightcrew members regarding HTAWS and/or Night Vision Imaging System (NVIS).
- **l.** Local Flying Areas. If the certificate holder opts to designate local flying areas in compliance with § 135.609(b) and to utilize relief against ceiling and visibility requirements within these local flying areas, per § 135.609(a), the certificate holder must submit their proposed local flying area(s) to their POI for FAA acceptance and issuance of the optional A021 paragraph authorizing their use. Criteria to be applied to size and composition of the local flying area is provided in § 135.609(b). Approved local flying areas must be listed in OpSpec A021, paragraph d, Table 1, Authorized HAA Operations. Certificate holders do not have to designate local flying area(s); however, absent such areas, the certificate holder must abide by the cross-country visibility and ceiling minima.
- (1) Night Class G ceiling and visibility minima listed in the table depicted in § 135.609(a) are available to the operator *only* if the use of HTAWS or approved NVIS is authorized by other paragraphs within OpSpec A021.
- (2) Each pilot must demonstrate familiarity with each local flying area within which that pilot is authorized to utilize the local flying area weather minima. This demonstration must be accomplished by passing an examination of the pilot's familiarity with each authorized local flying area (not necessarily a flight check) given by the certificate holder within the 12 calendar-months prior to using the local flying area.

Note: A pre/post due month grace period *does not* apply to local flying area examinations.

Note: If a pilot has not successfully passed a local flying area examination within the past 12 calendar-months, cross-country minima must be applied by that pilot to that local flying area.

m. IFR Operations at Locations without Weather Reporting. Section 135.611 provides a detailed discussion of HAA operations under IFR approaches and departures from landing sites which do not provide current weather observations. It provides for nearby approved alternative current weather sources within 15 miles of the site of intended landing and alternatively, use of appropriate National Weather Service (NWS)-approved forecasts to determine if landing minimums will be available. It requires the operator to select IFR alternate airports based upon weather requirements contained in §§ 135.221 and 135.223, and provides for the PIC to make weather observations from the ground at sites without weather reporting for the purpose of meeting 14 CFR part 97 takeoff requirements or § 135.609 HAA-specific Class G VFR weather minima. POIs should evaluate the certificate holder's approved training and checking program to ensure this subject matter is adequately covered.

n. Approach/Departure IFR Transitions. For point in space (PinS) instrument approaches annotated with "Proceed VFR," § 135.613 details the ceiling and visibility requirements for IFR to VFR transitions depending upon the language stated in the instrument approach procedure (IAP). If a VFR transition is involved, visibility and ceiling restrictions for IFR to VFR transitions from other approaches and VFR to IFR departure transitions are also defined. If the published approach or departure procedure is instead annotated "Proceed visually," this transition is part of an IFR clearance and VFRs are not applicable.

- **o. HAA-Specific VFR Flight Planning Requirements.** Per § 135.615, HAA-specific VFR flight planning requirements must be documented in the certificate holder's operations manual.
- **p. FAA-Approved Preflight Risk Analysis.** The certificate holder must include in their manual system FAA-approved preflight risk analysis procedures considering, at minimum, the flight routes obstructions, altitudes, landing site criteria, weather, human factors, and other elements listed in § 135.617(a). Procedures must include risk mitigation techniques and a process for obtaining and documenting approval provided by the certificate holder's cognizant management personnel authorized to release a flight when the risk level exceeds a value predetermined by the certificate holder.
- **q. OCCs.** Certificate holders with 10 or more HAAs must implement an OCC in accordance with § 135.619 on or before April 22, 2016. No operator with 10 or more HAAs may continue HAA operations after April 22, 2016, unless an OCC has been implemented. The OCC must be staffed with a sufficient number of trained and checked OCSs to serve the number of HAAs that could be aloft at any moment. The certificate holder's FAA-approved training and checking program must be expanded to include appropriate training and knowledge testing of OCS personnel in accordance with § 135.619(d). A pre/post due month grace period *does not* apply to OCS training. Certificate holders with fewer than 10 HAAs are encouraged to implement an OCC that is compliant with the same regulations larger operators most observe, and all certificate holders are encouraged to implement an OCC as soon as possible. The PI issuing OpSpec A021 amendments may choose from three options:
- (1) Option 1: In the case of an operator which is not required to implement an OCC by virtue of its size, the optional text will indicate that an OCC is not applicable and that the certificate holder is restricted from operating more than nine HAAs after April 22, 2016, until an OCC is implemented.
- (2) Option 2: If the certificate holder has 10 or more helicopters eligible for HAA operations and has not yet implemented an OCC, the certificate holder is restricted from operating HAAs after April 22, 2016.
- (3) Option 3: In the case of an operator which has 10 or more HAAs and has implemented an OCC, this optional text will indicate the certificate holder will staff and operate an OCC at all times and that HAA operations may be conducted after April 22, 2016.
- **r. Safety Briefings.** PICs or designated flightcrew members must be able to determine appropriate occasions when safety briefings are required and be trained and checked regarding content and delivery of these briefings:

(1) Emergency Equipment: Overwater Operations, per § 135.117. When flights will be over water beyond autorotational distance of the nearest shoreline, as defined in this regulation, all occupants must wear life preservers and be briefed in the wearing of life preservers, ditching procedures, the location of emergency exits, and the use and limitations of overwater emergency equipment on board the helicopter, including life rafts and other equipment.

- (2) General HAA Safety Briefings per § 135.621. Prior to each HAA operation, the PIC or a designated flightcrew member must provide a safety briefing to on duty medical personnel. The certificate holder may opt to provide specific medical personnel safety training. In this case, and to the extent the certificate holder requires, General HAA Safety Briefings may be reduced or eliminated for those personnel who have satisfactorily completed the certificate holder's FAA-approved medical personnel training program within the preceding 24 calendar-months.
- s. Medical Personnel Safety Training. In accordance with § 135.621(a), certificate holders may choose to provide a safety briefing to their medical personnel prior to each HAA operation. Alternatively, in lieu of a safety briefing prior to each HAA operation, per § 135.621(b)(c), the certificate holder may provide their medical personnel with an FAA-approved medical personnel training program within the past 24 calendar-months and maintain records of having provided such training.

Note: A pre/post due month grace period *does not* apply to medical personnel safety training and checking.

t. Flight Operations Reporting.

- (1) In compliance with 49 U.S.C. § 44731, all part 135 certificate holders utilizing this OpSpec shall report flight operations data in the Helicopter Air Ambulance Mandatory Flight Information Report. By congressional mandate, the following information must be reported:
- (a) The number of helicopters that the certificate holder uses to provide HAA services and the base locations of the helicopters.
- (b) The number of flights and hours flown, by registration number, during which helicopters operated by the certificate holder were providing HAA services.
- (c) The number of flight requests for a helicopter providing air ambulance services that were accepted or declined by the certificate holder and the type of each such flight request (such as scene response, interfacility transport, organ transport, or ferry or repositioning flight).
- (d) The number of accidents, if any, involving helicopters operated by the certificate holder while providing air ambulance services and a description of the accidents.
- (e) The number of flights and hours flown under IFRs by helicopters operated by the certificate holder while providing air ambulance services.
- (f) The time of day of each flight flown by helicopters operated by the certificate holder while providing air ambulance services.

(g) The number of incidents, if any, in which a helicopter was not directly dispatched and arrived to transport patients but was not utilized for patient transport.

(2) Reports shall be compiled for each calendar year and must be submitted on a standardized Excel ® worksheet template provided by the FAA beginning with calendar-year 2015. The operator may download the reporting template from the Part 135 Air Carrier Operations Branch (AFS-250) Web site: www.faa.gov/about/office org/headquarters offices/avs/offices/afs/afs200/branches/afs250.

Note: The certificate holder will find this reporting template on the AFS-250 Web site under the header: **HELICOPTER AIR AMBULANCE MANDATORY FLIGHT INFORMATION REPORT**.

(3) The certificate holder must begin collecting data as soon as possible, but not later than 30 days following receipt of this OpSpec amendment or posting of the reporting template on the Web site, whichever occurs later. Reports shall be submitted not later than 30 days following the close of each calendar-year. The preferred method for submitting the report is to attach the report to an email and forward the email with attachment to the email address shown on the template. Alternatively, HAA operators may submit their spreadsheet to the FAA by using most forms of electronic media (e.g., CD-ROM, DVD, flash memory device, etc.) directly to:

Federal Aviation Administration AFS-250, Part 135 Air Carrier Operations Branch HAA Data Collection 800 Independence Avenue SW., Room 831 Washington, DC 20591

- **6. Action.** PIs should review their certificate holder's or operator's OpSpecs and reissue OpSpec A021. This is a mandatory template change with a compliance date of 30 days from the date of this notice. PIs who have general part 135 certificate oversight responsibility should review the changes in the above regulations that will have an effect on assigned operators.
- **7. Disposition.** We will incorporate the information in this notice into FAA Order 8900.1 within the next 6 months. Direct your questions or comments concerning this notice to the Part 135 Air Carrier Operations Branch (AFS-250) at 202-267-8166.

John Barbagallo

Deputy Director, Flight Standards Service

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Appendix A. Sample OpSpec A021, Helicopter Air Ambulance (HAA) Operations: 14 CFR Part 135

a. The certificate holder is authorized to conduct helicopter air ambulance (HAA) operations in accordance with 14 CFR part 135 and this operations specification.

NOTE: Helicopter air ambulance (HAA) was previously known as Helicopter Emergency Medical Evacuation Services (HEMS or HEMES). These terms are used interchangeably.

- b. Off Airport / Off Heliport Takeoff and Landing Operations. The certificate holder is authorized to conduct off airport / off heliport takeoff and landing operations provided the site to be used is adequate for the proposed operation. The certificate holder will consider the size, type of surface, surrounding obstructions, and if applicable, lighting. During night operations, lighting sources must provide adequate illumination of the takeoff/landing area and of any obstructions that may create potential hazards during approach, hovering, taxiing, and departure operations.
- c. <u>HAA Specific Flightcrew Member Training.</u> The flightcrew must satisfactorily complete the certificate holder's approved training program prior to commencing HAA flights.
- d. <u>Local Flying Areas.</u> The certificate holder is authorized to designate, and following FAA acceptance, to use the local flying areas listed in Table 1 below. Local flying areas allow qualified pilots to use lower VFR operating minima depicted in § 135.609. Local flying areas must meet the criteria contained in § 135.609:
- (1) Local flying areas may be any shape but must not exceed 50 nautical miles from any single point designated by the certificate holder.
- (2) Local flying areas need not be contiguous, however, any flight outside a local flying area must be operated in accordance with the non-local area minima depicted in § 135.609.
- (3) Pilots may be qualified for more than one local flying area. Pilots who have not passed a knowledge test on a particular local flying area within the previous 12 calendar months, regardless of operational experience in that area or Helicopter Terrain Awareness and Warning System (HTAWS) or Night Vision Imaging System (NVIS) qualification, must use the non-local area minima depicted in § 135.609 when operating in that area.

Table 1 – Authorized HAA Operations

| Local Flying Area Base | Description | Coordinating Geographic FSDO (if outside the CHDO District) |
|------------------------|-------------|---|
| | | |

- e. <u>Medical Personnel Training</u>. The certificate holder is authorized to conduct FAA approved medical personnel safety training and checking in accordance with § 135.621(b). Medical Personnel who have successfully completed this training and checking within the past 24 calendar months are exempt from preflight safety briefings to the extent defined by the certificate holder.
- f. <u>Flight Data Monitoring System (FDMS).</u> The certificate holder is prohibited from conducting HAA flight operations with helicopters not equipped with approved FDMS after April 23, 2018 per § 135.607.

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g. Operational Helicopter Terrain Awareness and Warning System (HTAWS). The certificate holder is prohibited from operating a helicopter in HAA operations after April 24, 2017 unless the helicopter is equipped with an approved HTAWS, rotorcraft flight manuals are amended, and personnel are compliant with all aspects of § 135.605.

• h. Operations Control Center (OCC). Select one from the following three options:

Select the first radio button option if the certificate holder has 9 or fewer helicopters eligible for HAA operations and is NOT required to implement an Operations Control Center (OCC).

h. <u>Operations Control Center.</u> In accordance with § 135.619, an Operation Control Center is not required. The certificate holder is prohibited from operating more than 9 HAA helicopters after April 22, 2016.

Select the second radio button option if the certificate holder has 10 or more helicopters eligible for HAA operations and has not yet implemented an OCC.

h. Operations Control Center. The certificate holder operates 10 or more helicopters eligible for HAA operations and is prohibited from engaging in HAA operations after April 22, 2016 unless an Operations Control Center compliant in all respects with § 135.619(a)-(h) has been implemented.

Select the third radio button option if the certificate holder has 10 or more helicopters eligible for HAA operations and has implemented an OCC.

- h. <u>Operations Control Center.</u> The certificate holder is authorized to operate 10 or more helicopters eligible for HAA operations providing it adequately staffs and operates an Operations Control Center compliant in all respects with § 135.619(a)-(h).
- i. <u>Class G VFR Ceiling and Visibility Minima Relief.</u> Select one from the following four options:

Select the first radio button option when the certificate holder may apply relief from Class G night minima based on the use of NVIS.

i. <u>Class G VFR Ceiling and Visibility Minima Relief.</u> The certificate holder may, at their discretion, apply § 135.609 NVIS Class G VFR ceiling and visibility minima when the helicopter is properly certificated for NVIS and the flightcrew is compliant in all respects with A050.

Select the second radio button option when the certificate holder may apply relief from Class G night minima based on the use of HTAWS.

i. <u>Class G VFR Ceiling and Visibility Minima Relief.</u> The certificate holder may, at their discretion, apply § 135.609 HTAWS Class G VFR ceiling and visibility minima when the helicopter is equipped with operational HTAWS.

Select the third radio button option when the certificate holder may apply relief from Class G night minima based on the use of either NVIS or HTAWS.

i. <u>Class G VFR Ceiling and Visibility Minima Relief.</u> The certificate holder may, at their discretion, apply § 135.609 HTAWS or NVIS Class G VFR ceiling and visibility minima when either the helicopter is properly certificated for HTAWS or the helicopter is properly certificated for NVIS and the flightcrew is compliant in all respects with A050.

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Select the fourth radio button option when the certificate holder does not qualify by installed and certified equipment or flightcrew training to conduct night HAA operations to lower Class G VFR minimum ceiling and visibility.

- i. <u>Class G VFR Ceiling and Visibility Minima Relief.</u> The certificate holder is not authorized to apply § 135.609 HTAWS / NVIS Class G VFR ceiling and visibility minima.
- j. In compliance with Title 49 U.S.C. § 44731, Collection of Data on Helicopter Air Ambulance Operations, all part 135 certificate holders utilizing this operations specification shall, as mandated by congress, report the following flight operations data to the FAA in their **Helicopter Air Ambulance Mandatory Flight Information Report**:
 - The number of helicopters that the certificate holder uses to provide HAA services and the base locations of the helicopters.
 - The number of flights and hours flown, by registration number, during which helicopters operated by the certificate holder were providing HAA services.
 - The number of flight requests for a helicopter providing air ambulance services that were accepted or declined by the certificate holder and the type of each such flight request (such as scene response, inter-facility transport, organ transport, or ferry or repositioning flight).
 - The number of accidents, if any, involving helicopters operated by the certificate holder while providing air ambulance services and a description of the accidents.
 - The number of flights and hours flown under instrument flight rules by helicopters operated by the certificate holder while providing air ambulance services.
 - The time of day of each flight flown by helicopters operated by the certificate holder while providing air ambulance services.
 - The number of incidents, if any, in which a helicopter was not directly dispatched and arrived to transport patients but was not utilized for patient transport.

Reports shall be compiled for each calendar year on a template provided by the FAA. Reports shall be submitted not later than 30 days following the close of each calendar year.