



GAMA 22-28

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Subject: GAMA Manufacturer Consensus Recommendations for Powered-Lift SFAR

The General Aviation Manufacturers Association (GAMA) represents over 150 of the world's leading general aviation airplane and rotorcraft manufacturers, operators, service providers, repair facilities, and fixed-based operators. GAMA's membership includes developers and manufacturers of powered-lift category aircraft, both traditionally powered and emerging eVTOL. We appreciate FAA's participation at the June 8 GAMA Electric Propulsion & Innovation Committee (EPIC) meeting and discussion on the regulatory path for powered-lift certification and entry-into-service.

During that meeting, it was reassuring to hear the FAA state that the Agency reached internal alignment on a specified path forward for certification and operation of powered-lift aircraft. We appreciate the FAA's commitment to expediently promulgating the required rulemaking to enable entry into service of these aircraft. As we understand through Regulatory Information Number (RIN) 2120-AL72, the FAA proposes a Special Federal Aviation Regulation (SFAR) for alternate eligibility requirements to safely certificate initial groups of powered-lift pilots. The SFAR will specify the operating rules to apply to powered-lift aircraft on a temporary basis while the FAA gathers additional information and determines the most appropriate permanent rulemaking path for these aircraft.¹ The scope of the SFAR should cover powered lift aircraft that will be piloted at entry into service initially conducting operations in Visual Flight Rules and expand to conduct Instrument Flight Rules operations.

The FAA has committed to publishing the Notice of Proposed Rulemaking (NPRM) for the SFAR in a timely manner in order to issue a Final Rule that enables entry into service of the initial powered-lift aircraft in 2024.² GAMA's experience is in order for that to happen, an NPRM should be issued by the end of 2022. GAMA and our powered-lift member companies identified below offer the enclosed consensus recommendations to advance timely promulgation of an NPRM and final rule that supports entry into service of initial powered-lift aircraft expected in 2024.

AIR	Joby Aviation	Vertical Aerospace
Airbus Helicopters	Leonardo Helicopters	Volocopter
Archer	Lilium	Wisk
BETA Technologies	Overair	Zipline
EVE Air Mobility	Supernal	

¹ Although GAMA and its members are still analyzing European Union Aviation Safety Agency (EASA) recently released Notice of Proposed Amendment 2022-06 which offers EASA's regulatory proposals for the safe introduction of manned VTOL-capable aircraft into the European Union, GAMA encourages the FAA to take note of the relevant sections. As many GAMA members plan operations in the United States and the European Union, awareness and alignment to the extent appropriate by both FAA and EASA of each other's approach benefits all stakeholders.

² Acting Administrator Billy Nolen, FAA-EASA Safety Conference – Welcome Remarks, June 14, 2022

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Summary of Recommendations

GAMA and the above members conducted a gap analysis of 14 CFR Chapter 1 and published International Civil Aviation Organization (ICAO) guidance³. The outcome of this gap analysis identified two major recommendations for the powered-lift SFAR:

1. Align path to pilot qualification for powered-lift aircraft operations with ICAO Annex 1, §2.1.1.4
2. Clarify framework for powered-lift aircraft operations utilizing ICAO Doc. 10103 “Guidance on the Implementation of ICAO Standards and Recommended Practices for Tilt-rotors”

In parallel, the membership recommends that the FAA immediately begin additional regulatory and policy tasks critical to the Advanced Air Mobility (AAM) industry at large. These issues are not specific to powered-lift aircraft, but would enable the most efficient operation of many powered-lift aircraft upon entry into service and minimize the number of anticipated exemptions.⁴

Discussion about SFAR Recommendations

(1) Align path to pilot qualification for powered-lift aircraft operations with ICAO Annex 1, §2.1.1.4.

The SFAR should introduce a new path for pilot qualification that implements the ICAO transition language in Annex 1, §2.1.1.4, which provides for a type rating of a powered-lift category to be added to an airplane or helicopter pilot license (*i.e.*, a pilot certificate in the U.S. FAA system). The ICAO guidance recognizes that pilot qualification and training shall be based on an aircraft’s capabilities. The type rating for powered-lift aircraft should be defined in accordance with FAA’s existing Operational Evaluation Board Process in a manner appropriate for each aircraft. The ICAO guidance language considers these possibilities in the transition language:

“The Licensing Authority may endorse a type rating for aircraft of the powered-lift category on an aeroplane or helicopter pilot licence. The endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift category. The training for the type rating in the powered-lift category shall be completed during a course of approved training, shall take into account the previous experience of the applicant in an aeroplane or a helicopter as appropriate and incorporate all relevant aspects of operating an aircraft of the powered-lift category.”

Where existing regulations in 14 CFR Chapter 1 require a pilot to hold the “appropriate” category rating, the airplane or rotorcraft category certificate upon which the powered-lift type rating is added should be recognized. In addition, the SFAR must include an interpretive rule to clarify how the new pilot certification pathway should be understood in the context of the current rules.

(2) Clarify framework for powered-lift aircraft operations utilizing ICAO Doc. 10103 “Guidance on the Implementation of ICAO Standards and Recommended Practices for Tilt-rotors”

ICAO Doc. 10103 states the following:

“Tilt-rotors are part of the powered-lift category of aircraft. This manual does not address other

³ The FAA was a leader in ICAO’s adoption of the powered-lift framework in Annex 1 and Doc.10103.

⁴ Several other topics beyond the SFAR scope also need immediate FAA attention as they are critical for entry-into-service, e.g, energy reserves, levels of autonomy, IFR and appropriate mechanisms to address such as ELOS, ops spec deviation, and performance-based requirements.

aircraft within the powered-lift category such as vectored-thrust or ducted-fan. It is, however, anticipated that this manual will be used as a basis for other civil-powered lift aircraft as they approach design maturity.”

GAMA’s membership asserts that civil powered-lift aircraft have reached a level of design maturity for the FAA to implement the ICAO Doc. 10103 framework for all powered-lift aircraft. For most operating rules, Doc. 10103 recommends the words “helicopter” or “rotorcraft” be read as “powered-lift.” For most rules related to operations over water or high-altitude flight for which oxygen is required, the word “airplane” should be read as “powered-lift.”⁵

Discussion about Parallel Work Essential for Entry Into Service of Several Powered-Lift Aircraft

In addition to the SFAR approach detailed above, the FAA also needs to prioritize the regulatory, legal and policy work necessary to enable new technologies that certain powered-lift aircraft will introduce upon entry-into-service which were not envisioned when the current operating rules were promulgated. Thus, absent additional rulemaking, several powered-lift aircraft OEMs and their respective operators will likely need appropriate alternate requirements from several regulations and policies which prescribe prescriptive standards.

An example is the minimum fuel requirements. These rules feature time-based requirements (*i.e.*, 14 CFR §91.151, §135.209) which did not envision today’s data-rich flight planning and conformance monitoring technologies. These rules should be updated to incorporate an option for a performance-based energy approach to enable entry-into-service by 2024. EASA’s recent NPA 2022-06 for the safe introduction of manned VTOL-capable aircraft provides an example of a performance-based energy framework for eVTOL aircraft.⁶

The FAA and the AAM industry must begin now to identify where regulations and policy can be updated to specify the appropriate procedural pathways such as operations specification, deviation, Equivalent Levels of Safety (ELOS), exemption, rulemaking, etc., required to establish appropriate performance-based requirements for all aircraft. This work must be completed along the same timeline for the SFAR to support entry-into-service. Also, like the SFAR, these actions will enable FAA to gather additional information and determine the most appropriate permanent approach for introducing these technologies and capabilities.

Conclusion and Way Forward

GAMA’s membership is committed to assisting the FAA in developing this powered-lift SFAR, and advancing the essential regulatory and policy work referred to in the previous paragraph, by providing background and information on the concept of operations, data, and consultation. To facilitate effective and timely promulgation of this SFAR rulemaking and prompt issuance of a final rule to enable entry-into-service by 2024, it is essential that the agency solicit industry input and comment through appropriate requests and venues to include stakeholder meetings, workshops, public forums, and advisory committees.

⁵ The attached Appendix A provides GAMA’s recommendations on when and how this conversion to enable powered-lift aircraft operations should be applied. To the extent practical, the FAA should address, in the SFAR, the regulatory requirements for operations beyond VFR-only, as several powered-lift OEMs anticipate IFR operations to commence soon after entry-into-service.

⁶ Where additional data, engagement, or support is required to evaluate new technologies, the FAA should provide guidance on the information required to establish the necessary rules or standards for new technologies not addressed in the SFAR or existing rules.

GAMA and our member companies are available to engage in dialogue on the recommendations proposed herein and to support continued stakeholder and public engagement throughout the rulemaking process.

Respectfully,



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Vice President, Operations



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Vice President, Engineering & Maintenance

Enclosure:

Appendix A: GAMA22-28 Appendix A Powered-Lift SFAR Recommendations Ops Rules Analysis

Attachment (electronic version of enclosure):

Appendix A: GAMA22-28-Appendix A-Powered-Lift-SFAR-Recommendations-Ops-Rules-Analysis.xls

- **Tab “Apply ICAO Annex 1”** – Recommendation for part 61 and part 135 pilot and instructor requirements – transition measures for alternate requirements to safely certificate initial groups of powered-lift pilots appropriate to the powered-lift aircraft
- **Tab “Apply Helicopter”** - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations
- **Tab “Apply Airplane”** – Powered-lift aircraft operate as an airplane for these regulations
- **Tab “SFAR Guidance or Change”** – These regulations should be addressed in the SFAR to provide additional guidance or alternate requirement for appropriate application to powered-lift aircraft

Apply ICAO Annex 1 - Recommendation for part 61 and part 135 pilot and instructor requirements – transition measures for alternate requirements to safely certificate initial groups of powered-lift pilots appropriate to the powered-lift aircraft		
Regulation	Category	Discussion
§ 61.3 Requirement for certificates, ratings, and authorizations.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
(e) Instrument rating. No person may act as pilot in command of a civil aircraft under IFR or in weather conditions less than the minimums prescribed for VFR flight unless that person holds:	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
(1) The appropriate aircraft category, class, type (if required), and instrument rating on that person's pilot certificate for any airplane, helicopter, or powered-lift being flown;	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
(2) An airline transport pilot certificate with the appropriate aircraft category, class, and type rating (if required) for the aircraft being flown;	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
(3) For a glider, a pilot certificate with a glider category rating and an airplane instrument rating; or	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
(4) For an airship, a commercial pilot certificate with a lighter-than-air category rating and airship class rating.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
§ 61.31 Type rating requirements, additional training, and authorization requirements.	Apply ICAO Annex 1 language.	Airman begins with airplane or helicopter rating, as determined by FSB, and adds a powered-lift type rating.
(a) Type ratings required. A person who acts as a pilot in command of any of the following aircraft must hold a type rating for that aircraft:	Apply ICAO Annex 1 language.	Airman begins with airplane or helicopter rating, as determined by FSB, and adds a powered-lift type rating.
(1) Large aircraft (except lighter-than-air).	Apply ICAO Annex 1 language.	Airman begins with airplane or helicopter rating, as determined by FSB, and adds a powered-lift type rating.
(2) Turbojet-powered airplanes.	Apply ICAO Annex 1 language.	Airman begins with airplane or helicopter rating, as determined by FSB, and adds a powered-lift type rating.
(3) Other aircraft specified by the Administrator through aircraft type certificate procedures.	Apply ICAO Annex 1 language.	Airman begins with airplane or helicopter rating, as determined by FSB, and adds a powered-lift type rating.
§ 61.51 Pilot logbooks.	Apply ICAO Annex 1 language.	"Appropriate category" is airplane or helicopter rating with powered-lift type rating.
§ 61.55 Second-in-command qualifications.	Apply ICAO Annex 1 language.	"Appropriate category" is airplane or helicopter plus powered-lift type rating, plus authority approved SIC type specific type specific training.
§ 61.57 Recent flight experience: Pilot in command.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>

Apply ICAO Annex I - Recommendation for part 61 and part 135 pilot and instructor requirements – transition measures for alternate requirements to safely certificate initial groups of powered-lift pilots appropriate to the powered-lift aircraft		
Regulation	Category	Discussion
(c) Instrument experience.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
§ 61.58 Pilot-in-command proficiency check: Operation of an aircraft that requires more than one pilot flight crewmember or is turbojet-powered.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
§ 61.65 Instrument rating requirements.	Apply ICAO Annex 1 language.	An appropriate Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. <u>Recent instrument flight experience must be maintained in the type.</u>
§ 61.183 Eligibility requirements.	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(c) Hold either a commercial pilot certificate or airline transport pilot certificate with:	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(1) An aircraft category and class rating that is appropriate to the flight instructor rating sought; and	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(2) An instrument rating, or privileges on that person's pilot certificate that are appropriate to the flight instructor rating sought, if applying for -	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(i) A flight instructor certificate with an airplane category and single-engine class rating;	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(ii) A flight instructor certificate with an airplane category and multiengine class rating;	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(iii) A flight instructor certificate with a powered-lift rating; or	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
(iv) A flight instructor certificate with an instrument rating.	Apply ICAO Annex 1 language.	This is considered an upgrade following transition to the PL category. <u>Regulate as written in Part 61.</u>
§ 61.187 Flight proficiency.	Apply ICAO Annex 1 language.	An instructor will hold either airplane or helicopter category instructor rating, as appropriate to the aircraft as determined by the FSB, with powered-lift type rating added, utilizing the powered-lift category rating areas of operation (b)(5). The instructor's flight training will be accomplished in the specific powered-lift aircraft type or in a flight simulator or flight training device, specific to the powered-lift aircraft type, with an approved course at a training center certificated under Part 142.
§ 61.195 Flight instructor limitations and qualifications.	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(b) Aircraft ratings. Except as provided in paragraph (c) of this section, a flight instructor may not conduct flight training in any aircraft unless the flight instructor:	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(1) Holds a flight instructor certificate with the applicable category and class rating;	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(2) Holds a pilot certificate with the applicable category and class rating; and	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(3) Meets the requirements of paragraph (e) of this section, if applicable.	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(C) Instrument rating. A flight instructor may conduct instrument training for the issuance of an instrument rating, a type rating not limited to VFR, or the instrument training required for commercial pilot and airline transport pilot certificates if the following requirements are met:	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(1) Except as provided in paragraph (c)(2) of this section, the flight instructor must hold an instrument rating appropriate to the aircraft used for the instrument training on his or her flight instructor certificate, and -	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(i) Meet the requirements of paragraph (b) of this section; or	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
(ii) Hold a commercial pilot certificate or airline transport pilot certificate with the appropriate category and class ratings for the aircraft in which the instrument training is conducted provided the pilot receiving instrument training holds a pilot certificate with category and class ratings appropriate to the aircraft in which the instrument training is being conducted.	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.

Apply ICAO Annex 1 - Recommendation for part 61 and part 135 pilot and instructor requirements – transition measures for alternate requirements to safely certificate initial groups of powered-lift pilots appropriate to the powered-lift aircraft		
Regulation	Category	Discussion
(2) If the flight instructor is conducting the instrument training in a multiengine airplane, the flight instructor must hold an instrument rating appropriate to the aircraft	Apply ICAO Annex 1 language.	Applicable category and class and "appropriate category and class" is either airplane or helicopter with powered-lift type rating added.
§135.243 Pilot in command qualifications.	Apply ICAO Annex 1 language.	Apply ICAO guidance.
(2) Of a helicopter in a scheduled interstate air transportation operation by an air carrier within the 48 contiguous states unless that person holds an airline transport pilot certificate, appropriate type ratings, and an instrument rating.	Apply ICAO Annex 1 language.	An acceptable Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type.
(4) For helicopter operations conducted VFR over-the-top, holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR.	Apply ICAO Annex 1 language.	An acceptable Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type.
(4) For a helicopter, holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR.	Apply ICAO Annex 1 language.	An acceptable Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type.
§135.245 Second in command qualifications.	Apply ICAO Annex 1 language.	An acceptable Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type.
(b) A second in command of a helicopter operated under VFR, other than over-the-top, must have at least a commercial pilot certificate with an appropriate aircraft category and class rating.	Apply ICAO Annex 1 language.	An acceptable Instrument Rating includes either an Airplane or Helicopter instrument rating plus a type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, type ratings shall have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type.
(1) Use of an airplane or helicopter for maintaining instrument experience. Within the 6 calendar months preceding the month of the flight, that person performed and logged at least the following tasks and iterations in-flight in an airplane or helicopter, as appropriate, in actual weather conditions, or under simulated instrument conditions using a view-limiting device:	Apply ICAO Annex 1 language.	
(i) Six instrument approaches;	Apply ICAO Annex 1 language.	
(ii) Holding procedures and tasks; and	Apply ICAO Annex 1 language.	Apply ICAO Annex 1 language.
(iii) Intercepting and tracking courses through the use of navigational electronic systems.	Apply ICAO Annex 1 language.	Apply ICAO Annex 1 language.
§ 142.47 Training center instructor eligibility requirements.	Apply ICAO Annex 1 language.	Clarify an instructor pilot may meet the aeronautical experience requirements of § 61.159 or § 61.161, as appropriate to the specific aircraft type. Advise the training instructor requirements will be specified in the FSB Report for that aircraft.
(a) A certificate holder may not employ a person as an instructor in a flight training course that is subject to approval by the Administrator unless that person -	Apply ICAO Annex 1 language.	Clarify an instructor pilot may meet the aeronautical experience requirements of § 61.159 or § 61.161, as appropriate to the specific aircraft type. Advise the training instructor requirements will be specified in the FSB Report for that aircraft.
Meets at least one of the following requirements -	Apply ICAO Annex 1 language.	Clarify an instructor pilot may meet the aeronautical experience requirements of § 61.159 or § 61.161, as appropriate to the specific aircraft type. Advise the training instructor requirements will be specified in the FSB Report for that aircraft.
(i) Except as allowed by paragraph (a)(5)(ii) of this section, meets the aeronautical experience requirements of § 61.129 (a), (b), (c), or (e) of this chapter, as applicable, excluding the required hours of instruction in preparation for the commercial pilot practical test;	Apply ICAO Annex 1 language.	Clarify an instructor pilot may meet the aeronautical experience requirements of § 61.159 or § 61.161, as appropriate to the specific aircraft type. Advise the training instructor requirements will be specified in the FSB Report for that aircraft.

Apply ICAO Annex 1 - Recommendation for part 61 and part 135 pilot and instructor requirements – transition measures for alternate requirements to safely certificate initial groups of powered-lift pilots appropriate to the powered-lift aircraft		
Regulation	Category	Discussion
(ii) If instructing in flight simulator or flight training device that represents an airplane requiring a type rating or if instructing in a curriculum leading to the issuance of an airline transport pilot certificate or an added rating to an airline transport pilot certificate, meets the aeronautical experience requirements of § 61.159, § 61.161, or § 61.163 of this chapter, as applicable;	Apply ICAO Annex 1 language.	Clarify an instructor pilot may meet the aeronautical experience requirements of § 61.159 or § 61.161, as appropriate to the specific aircraft type. Advise the training instructor requirements will be specified in the FSB Report for that aircraft.

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
§ 43.3 Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Notwithstanding the provisions of paragraph (g) of this section, the Administrator may approve a certificate holder under Part 135 of this chapter, operating rotorcraft in a remote area, to allow a pilot to perform specific preventive maintenance items provided -	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) The items of preventive maintenance are a result of a known or suspected mechanical difficulty or malfunction that occurred en route to or in a remote area;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) The pilot has satisfactorily completed an approved training program and is authorized in writing by the certificate holder for each item of preventive maintenance that the pilot is authorized to perform;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) There is no certificated mechanic available to perform preventive maintenance;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) The certificate holder has procedures to evaluate the accomplishment of a preventive maintenance item that requires a decision concerning the airworthiness of the rotorcraft; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) The items of preventive maintenance authorized by this section are those listed in paragraph (c) of appendix A of this part.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.113 Right-of-way rules: Except water operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) A glider has the right-of-way over an airship, powered parachute, weight-shift-control aircraft, airplane, or rotorcraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) An airship has the right-of-way over a powered parachute, weight-shift-control aircraft, airplane, or rotorcraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.119 Minimum safe altitudes: General.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Anywhere.</i> An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Over congested areas.</i> Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) <i>Over other than congested areas.</i> An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) <i>Helicopters, powered parachutes, and weight-shift-control aircraft.</i> If the operation is conducted without hazard to persons or property on the surface—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) A helicopter may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section, provided each person operating the helicopter complies with any routes or altitudes specifically prescribed for helicopters by the FAA; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) A powered parachute or weight-shift-control aircraft may be operated at less than the minimums prescribed in paragraph (c) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.126 Operating on or in the vicinity of an airport in Class G airspace.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Each pilot of an airplane must make all turns of that airplane to the left unless the airport displays approved light signals or visual markings indicating that turns should be made to the right, in which case the pilot must make all turns to the right; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Each pilot of a helicopter or a powered parachute must avoid the flow of fixed-wing aircraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.129 Operations in Class D airspace.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(e) <i>Minimum altitudes when operating to an airport in Class D airspace.</i> (1) Unless required by the applicable distance-from-cloud criteria, each pilot operating a large or turbine-powered airplane must enter the traffic pattern at an altitude of at least 1,500 feet above the elevation of the airport and maintain at least 1,500 feet until further descent is required for a safe landing.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(f) <i>Approaches</i> . Except when conducting a circling approach under part 97 of this chapter or unless otherwise required by ATC, each pilot must—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Avoid the flow of fixed-wing aircraft, if operating a helicopter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.131 Operations in Class B airspace.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.146 Passenger-carrying flights for the benefit of a charitable, nonprofit, or community event.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) The flight is conducted from a public airport that is adequate for the airplane or helicopter used, or from another location the FAA approves for the operation;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) The airplane or helicopter has a maximum of 30 seats, excluding each crewmember seat, and a maximum payload capacity of 7,500 pounds;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) Each airplane or helicopter holds a standard airworthiness certificate, is airworthy, and is operated in compliance with the applicable requirements of subpart E of this part;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(7) Reimbursement of the operator of the airplane or helicopter is limited to that portion of the passenger payment for the flight that does not exceed the pro rata cost of owning, operating, and maintaining the aircraft for that flight, which may include fuel, oil, airport expenditures, and rental fees;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.147 Passenger carrying flights for compensation or hire.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) For the purposes of this section and for drug and alcohol testing, <i>Operator</i> means any person conducting nonstop passenger-carrying flights in an airplane or helicopter for compensation or hire in accordance with §§119.1(e)(2), 135.1(a)(5), or 121.1(d), of this chapter that begin and end at the same airport and are conducted within a 25-statute mile radius of that airport.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.151 Fuel requirements for flight in VFR conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No person may begin a flight in a rotorcraft under VFR conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 20 minutes.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.155 Basic VFR weather minimums.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Except as provided in paragraph (b) of this section and §91.157, no person may operate an aircraft under VFR when the flight visibility is less, or at a distance from clouds that is less, than that prescribed for the corresponding altitude and class of airspace in the following table:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Class G:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
1,200 feet or less above the surface (regardless of MSL altitude)	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
For aircraft other than helicopters:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Day, except as provided in §91.155(b)	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Night, except as provided in §91.155(b)	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
For helicopters:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Day	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Night, except as provided in §91.155(b)	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
More than 1,200 feet above the surface but less than 10,000 feet MSL	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Day	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Night	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
More than 1,200 feet above the surface and at or above 10,000 feet MSL	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Class G Airspace</i> . Notwithstanding the provisions of paragraph (a) of this section, the following operations may be conducted in Class G airspace below 1,200 feet above the surface:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) <i>Helicopter</i> . A helicopter may be operated clear of clouds in an airport traffic pattern within ½ mile of the runway or helipad of intended landing if the flight visibility is not less than ½ statute	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.157 Special VFR weather minimums.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Except for helicopters, when flight visibility is at least 1 statute mile; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) Except for helicopters, between sunrise and sunset (or in Alaska, when the sun is 6 degrees or more below the horizon) unless—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) The person being granted the ATC clearance meets the applicable requirements for instrument flight under part 61 of this chapter; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) The aircraft is equipped as required in §91.205(d).	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) No person may take off or land an aircraft (other than a helicopter) under special VFR—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Unless ground visibility is at least 1 statute mile; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) If ground visibility is not reported, unless flight visibility is at least 1 statute mile. For the purposes of this paragraph, the term flight visibility includes the visibility from the cockpit of an aircraft in takeoff position if:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) The flight is conducted under this part 91; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) The airport at which the aircraft is located is a satellite airport that does not have weather reporting capabilities.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.167 Fuel requirements for flight in IFR conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, fly after that for 30 minutes at normal cruising speed.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) <i>For aircraft other than helicopters</i> . For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet above the airport elevation and the visibility will be at least 3 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) <i>For helicopters</i> . At the estimated time of arrival and for 1 hour after the estimated time of arrival, the ceiling will be at least 1,000 feet above the airport elevation, or at least 400 feet above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 2 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.169 IFR flight plan: Information required.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Appropriate weather reports or weather forecasts, or a combination of them, indicate the following:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) <i>For aircraft other than helicopters</i> . For at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet above the airport elevation and the visibility will be at least 3 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) <i>For helicopters</i> . At the estimated time of arrival and for 1 hour after the estimated time of arrival, the ceiling will be at least 1,000 feet above the airport elevation, or at least 400 feet above the lowest applicable approach minima, whichever is higher, and the visibility will be at least 2 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) <i>IFR alternate airport weather minima</i> . Unless otherwise authorized by the Administrator, no person may include an alternate airport in an IFR flight plan unless appropriate weather reports or weather forecasts, or a combination of them, indicate that, at the estimated time of arrival at the alternate airport, the ceiling and visibility at that airport will be at or above the following weather minima:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

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Regulation	Category	Discussion
(1) If an instrument approach procedure has been published in part 97 of this chapter, or a special instrument approach procedure has been issued by the Administrator to the operator, for that airport, the following minima:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) <i>For aircraft other than helicopters:</i> The alternate airport minima specified in that procedure, or if none are specified the following standard approach minima:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(A) <i>For a precision approach procedure.</i> Ceiling 600 feet and visibility 2 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(B) <i>For a nonprecision approach procedure.</i> Ceiling 800 feet and visibility 2 statute miles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) <i>For helicopters:</i> Ceiling 200 feet above the minimum for the approach to be flown, and visibility at least 1 statute mile but never less than the minimum visibility for the approach to be	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.175 Takeoff and landing under IFR.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) For aircraft, other than helicopters, having two engines or less—1 statute mile visibility.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) For helicopters— ½ statute mile visibility.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) For part 121 and part 135 operators, the pilot uses a takeoff obstacle clearance or avoidance procedure that ensures compliance with the applicable airplane performance operating limitations requirements under part 121, subpart I or part 135, subpart I for takeoff at that airport; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) For part 129 operators, the pilot uses a takeoff obstacle clearance or avoidance procedure that ensures compliance with the airplane performance operating limitations prescribed by the State of the operator for takeoff at that airport.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.167 Fuel requirements for flight in IFR conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§91.176 Straight-in landing operations below DA/DH or MDA using an enhanced flight vision system (EFVS) under IFR.		
§91.177 Minimum altitudes for IFR operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Operation of aircraft at minimum altitudes.</i> Except when necessary for takeoff or landing, or unless otherwise authorized by the FAA, no person may operate an aircraft under IFR below—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) The applicable minimum altitudes prescribed in parts 95 and 97 of this chapter. However, if both a MEA and a MOCA are prescribed for a particular route or route segment, a person may operate an aircraft below the MEA down to, but not below, the MOCA, provided the applicable navigation signals are available. For aircraft using VOR for navigation, this applies only when the aircraft is within 22 nautical miles of that VOR (based on the reasonable estimate by the pilot operating the aircraft of that distance); or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) If no applicable minimum altitude is prescribed in parts 95 and 97 of this chapter, then—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) In the case of operations over an area designated as a mountainous area in part 95 of this chapter, an altitude of 2,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) In any other case, an altitude of 1,000 feet above the highest obstacle within a horizontal distance of 4 nautical miles from the course to be flown.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Climb.</i> Climb to a higher minimum IFR altitude shall begin immediately after passing the point beyond which that minimum altitude applies, except that when ground obstructions intervene, the point beyond which that higher minimum altitude applies shall be crossed at or above the applicable MCA.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 97.3 Symbols and terms used in procedures.		

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Regulation	Category	Discussion
Copter procedures means helicopter procedures, with applicable minimums as prescribed in § 97.35. Helicopters may also use other procedures prescribed in subpart C of this part and may use the Category A minimum descent altitude (MDA), or decision altitude or decision height (DA/DH). For other than “copter-only” approaches, the required visibility minimum for Category I approaches 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 prevailing visibility, or, if reported, 1,200 feet RVR. Reduction of visibility minima on Category II instrument approach procedures is prohibited.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§110.2 Definitions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>Commercial air tour means a flight conducted for compensation or hire in an airplane or helicopter where a purpose of the flight is sightseeing. The FAA may consider the following factors in determining whether a flight is a commercial air tour:</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>Commuter operation means any scheduled operation conducted by any person operating one of the following types of aircraft with a frequency of operations of at least five round trips per week on at least one route between two or more points according to the published flight schedules:</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Airplanes, other than turbojet-powered airplanes, having a maximum passenger-seat configuration of 9 seats or less, excluding each crewmember seat, and a maximum payload capacity of 7,500 pounds or less; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Rotorcraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>Domestic operation means any scheduled operation conducted by any person operating any airplane described in paragraph (1) of this definition at locations described in paragraph (2) of this definition:</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Airplanes:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Turbojet-powered airplanes;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Airplanes having a passenger-seat configuration of more than 9 passenger seats, excluding each crewmember seat; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Airplanes having a payload capacity of more than 7,500 pounds.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>Flag operation means any scheduled operation conducted by any person operating any airplane described in paragraph (1) of this definition at the locations described in paragraph (2) of this definition:</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Airplanes:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Turbojet-powered airplanes;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Airplanes having a passenger-seat configuration of more than 9 passenger seats, excluding each crewmember seat; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Airplanes having a payload capacity of more than 7,500 pounds.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>Maximum zero fuel weight</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
<i>On-demand operation means any operation for compensation or hire that is one of the following:</i>	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Common carriage operations conducted with airplanes, including turbojet-powered airplanes, having a passenger-seat configuration of 30 seats or fewer, excluding each crewmember seat, and a payload capacity of 7,500 pounds or less, except that operations using a specific airplane that is also used in domestic or flag operations and that is so listed in the operations specifications as required by §119.49(a)(4) of this chapter for those operations are considered supplemental operations;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Any rotorcraft operation.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(i) Airplanes, other than turbojet powered airplanes, having a maximum passenger-seat configuration of 9 seats or less, excluding each crewmember seat, and a maximum payload capacity of 7,500 pounds or less; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) All-cargo operations conducted with airplanes having a payload capacity of 7,500 pounds or less, or with rotorcraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 119.1 Applicability.		Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Nonstop Commercial Air Tours conducted after September 11, 2007, in an airplane or helicopter having a standard airworthiness certificate and passenger-seat configuration of 30 seats or fewer and a maximum payload capacity of 7,500 pounds or less that begin and end at the same airport, and are conducted within a 25-statute mile radius of that airport, in compliance with the Letter of Authorization issued under § 91.147 of this chapter. For nonstop Commercial Air Tours conducted in accordance with part 136, subpart B of this chapter, National Parks Air Tour Management, the requirements of part 119 of this chapter apply unless excepted in § 136.37(g)(2). For Nonstop Commercial Air Tours conducted in the vicinity of the Grand Canyon National Park, Arizona, the requirements of SFAR 50-2, part 93, subpart U, and part 119 of this chapter, as applicable, apply.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Helicopter operations in construction or repair work (but it does apply to transportation to and from the site of operations);	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(7) Helicopter flights conducted within a 25 statute mile radius of the airport of takeoff if -	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Not more than two passengers are carried in the helicopter in addition to the required flightcrew;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) The helicopter used is certificated in the standard category and complies with the 100-hour inspection requirements of part 91 of this chapter;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vii) Cargo is not carried in or on the helicopter;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 119.25 Rotorcraft operations: Direct air carriers and commercial operators.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Each person who conducts rotorcraft operations for compensation or hire must comply with the certification and operations specifications requirements of Subpart C of this part, and shall conduct its:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Commuter operations in accordance with the applicable requirements of part 135 of this chapter, and shall be issued operations specifications for those operations in accordance with those requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) On-demand operations in accordance with the applicable requirements of part 135 of this chapter, and shall be issued operations specifications for those operations in accordance with those requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.1 Applicability.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(9) Helicopter air ambulance operations as defined in §135.601(b)(1).	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.93 Minimum altitudes for use of autopilot	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(g) This section does not apply to operations conducted in rotorcraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.152 Flight data recorders.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.159 Equipment requirements: Carrying passengers under VFR at night or under VFR over-the-top conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Airplanes with a third attitude instrument system usable through flight attitudes of 360 degrees of pitch-and-roll and installed in accordance with the instrument requirements prescribed in §121.305(j) of this chapter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Helicopters with a third attitude instrument system usable through flight attitudes of ±80 degrees of pitch and ±120 degrees of roll and installed in accordance with §29.1303(g) of this	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.160 Radio altimeters for rotorcraft operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(a) After April 24, 2017, no person may operate a rotorcraft unless that rotorcraft is equipped with an operable FAA-approved radio altimeter, or an FAA-approved device that incorporates a radio altimeter, unless otherwise authorized in the certificate holder's approved minimum equipment list.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Deviation authority.</i> The Administrator may authorize deviations from paragraph (a) of this section for rotorcraft that are unable to incorporate a radio altimeter. This deviation will be issued as a Letter of Deviation Authority. The deviation may be terminated or amended at any time by the Administrator. The request for deviation authority is applicable to rotorcraft with a maximum gross takeoff weight no greater than 2,950 pounds. The request for deviation authority must contain a complete statement of the circumstances and justification, and must be submitted to the responsible Flight Standards office, not less than 60 days prior to the date of intended operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.181 Performance requirements: Aircraft operated over-the-top or in IFR conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Notwithstanding the restrictions in paragraph (a)(2) of this section, multiengine helicopters carrying passengers offshore may conduct such operations in over-the-top or in IFR conditions at a weight that will allow the helicopter to climb at least 50 feet per minute with the critical engine inoperative when operating at the MEA of the route to be flown or 1,500 feet MSL, whichever is higher.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.203 VFR: Minimum altitudes.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Except when necessary for takeoff and landing, no person may operate under VFR—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) A helicopter over a congested area at an altitude less than 300 feet above the surface.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.205 VFR: Visibility requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No person may operate a helicopter under VFR in Class G airspace at an altitude of 1,200 feet or less above the surface or within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport unless the visibility is at least—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) During the day— $\frac{1}{2}$ mile; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) At night—1 mile.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.207 VFR: Helicopter surface reference requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
No person may operate a helicopter under VFR unless that person has visual surface reference or, at night, visual surface light reference, sufficient to safely control the helicopter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.209 VFR: Fuel supply.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No person may begin a flight operation in a helicopter under VFR unless, considering wind and forecast weather conditions, it has enough fuel to fly to the first point of intended landing and, assuming normal cruising fuel consumption, to fly after that for at least 20 minutes.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.221 IFR: Alternate airport weather minimums.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Aircraft other than rotorcraft.</i> No person may designate an alternate airport unless the weather reports or forecasts, or any combination of them, indicate that the weather conditions will be at or above authorized alternate airport landing minimums for that airport at the estimated time of arrival.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(b) <i>Rotorcraft</i> . Unless otherwise authorized by the Administrator, no person may include an alternate airport in an IFR flight plan unless appropriate weather reports or weather forecasts, or a combination of them, indicate that, at the estimated time of arrival at the alternate airport, the ceiling and visibility at that airport will be at or above the following weather minimums—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) If, for the alternate airport, an instrument approach procedure has been published in part 97 of this chapter or a special instrument approach procedure has been issued by the FAA to the certificate holder, the ceiling is 200 feet above the minimum for the approach to be flown, and visibility is at least 1 statute mile but never less than the minimum visibility for the approach to be	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) If, for the alternate airport, no instrument approach procedure has been published in part 97 of this chapter and no special instrument approach procedure has been issued by the FAA to the certificate holder, the ceiling and visibility minimums are those allowing descent from the minimum enroute altitude (MEA), approach, and landing under basic VFR.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.223 IFR: Alternate airport requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, fly after that for 30 minutes at normal cruising speed.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No certificate holder may authorize an airplane to take off and no pilot may take off an airplane any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane unless the pilot has completed all applicable training as required by §135.341 and unless one of the following requirements is met:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) A pretakeoff contamination check, that has been established by the certificate holder and approved by the Administrator for the specific airplane type, has been completed within 5 minutes prior to beginning takeoff. A pretakeoff contamination check is a check to make sure the wings and control surfaces are free of frost, ice, or snow.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) The certificate holder has an approved alternative procedure and under that procedure the airplane is determined to be free of frost, ice, or snow.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) The certificate holder has an approved deicing/anti-icing program that complies with §121.629(c) of this chapter and the takeoff complies with that program.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.227 Icing conditions: Operating limitations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) No pilot may fly a helicopter under IFR into known or forecast icing conditions or under VFR into known icing conditions unless it has been type certificated and appropriately equipped for operations in icing conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.229 Airport requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) The limits of the area to be used for landing or takeoff are clearly shown—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) For helicopters, by boundary or runway marker lights or reflective material.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.271 Helicopter hospital emergency medical evacuation service (HEMES).	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) No certificate holder may assign any flight crewmember, and no flight crewmember may accept an assignment for flight time if that crewmember's total flight time in all commercial flight will exceed—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) 500 hours in any calendar quarter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) 800 hours in any two consecutive calendar quarters.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) 1,400 hours in any calendar year.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(b) No certificate holder may assign a helicopter flight crewmember, and no flight crewmember may accept an assignment, for hospital emergency medical evacuation service helicopter operations unless that assignment provides for at least 10 consecutive hours of rest immediately preceding reporting to the hospital for availability for flight time.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) No flight crewmember may accrue more than 8 hours of flight time during any 24-consecutive hour period of a HEMES assignment, unless an emergency medical evacuation operation is prolonged. Each flight crewmember who exceeds the daily 8 hour flight time limitation in this paragraph must be relieved of the HEMES assignment immediately upon the completion of that emergency medical evacuation operation and must be given a rest period in compliance with paragraph (h) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) Each flight crewmember must receive at least 8 consecutive hours of rest during any 24 consecutive hour period of a HEMES assignment. A flight crewmember must be relieved of the HEMES assignment if he or she has not or cannot receive at least 8 consecutive hours of rest during any 24 consecutive hour period of a HEMES assignment.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(e) A HEMES assignment may not exceed 72 consecutive hours at the hospital.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(f) An adequate place of rest must be provided at, or in close proximity to, the hospital at which the HEMES assignment is being performed.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(g) No certificate holder may assign any other duties to a flight crewmember during a HEMES assignment.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(h) Each pilot must be given a rest period upon completion of the HEMES assignment and prior to being assigned any further duty with the certificate holder of—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) At least 12 consecutive hours for an assignment of less than 48 hours.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) At least 16 consecutive hours for an assignment of more than 48 hours.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) The certificate holder must provide each flight crewmember at least 13 rest periods of at least 24 consecutive hours each in each calendar quarter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.293 Initial and recurrent pilot testing requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(9) For rotorcraft pilots, procedures for aircraft handling in flat-light, whiteout, and brownout conditions, including methods for recognizing and avoiding those conditions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No certificate holder may use a pilot, nor may any person serve as a pilot, in any aircraft unless, since the beginning of the 12th calendar month before that service, that pilot has passed a competency check given by the Administrator or an authorized check pilot in that class of aircraft, if single-engine airplane other than turbojet, or that type of aircraft, if helicopter, multiengine airplane, or turbojet airplane, to determine the pilot's competence in practical skills and techniques in that aircraft or class of aircraft. The extent of the competency check shall be determined by the Administrator or authorized check pilot conducting the competency check. The competency check may include any of the maneuvers and procedures currently required for the original issuance of the particular pilot certificate required for the operations authorized and appropriate to the category, class and type of aircraft involved. For the purposes of this paragraph, type, as to an airplane, means any one of a group of airplanes determined by the Administrator to have a similar means of propulsion, the same manufacturer, and no significantly different handling or flight characteristics. For the purposes of this paragraph, type, as to a helicopter, means a basic make and model.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(c) Each competency check given in a rotorcraft must include a demonstration of the pilot's ability to maneuver the rotorcraft solely by reference to instruments. The check must determine the pilot's ability to safely maneuver the rotorcraft into visual meteorological conditions following an inadvertent encounter with instrument meteorological conditions. For competency checks in non-IFR-certified rotorcraft, the pilot must perform such maneuvers as are appropriate to the rotorcraft's installed equipment, the certificate holder's operations specifications, and the operating environment.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(h) Rotorcraft pilots must be tested on the subjects in paragraph (a)(9) of this section when taking a written or oral knowledge test after April 22, 2015. Rotorcraft pilots must be checked on the maneuvers and procedures in paragraph (c) of this section when taking a competency check after April 22, 2015.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.297 Pilot in command: Instrument proficiency check requirements.		Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) The instrument proficiency check must—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) For a pilot in command of an airplane under §135.243(a), include the procedures and maneuvers for an airline transport pilot certificate in the particular type of airplane, if appropriate;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) For a pilot in command of an airplane or helicopter under §135.243(c), include the procedures and maneuvers for a commercial pilot certificate with an instrument rating and, if required, for the appropriate type rating.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Subpart L—Helicopter Air Ambulance Equipment, Operations, and Training Requirements	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Source: Docket No. FAA-2010-0982, 79 FR 9975, Feb. 21, 2014, unless otherwise noted.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.601 Applicability and definitions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Applicability.</i> This subpart prescribes the requirements applicable to each certificate holder conducting helicopter air ambulance operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Definitions.</i> For purposes of this subpart, the following definitions apply:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) <i>Helicopter air ambulance operation</i> means a flight, or sequence of flights, with a patient or medical personnel on board, for the purpose of medical transportation, by a part 135 certificate holder authorized by the Administrator to conduct helicopter air ambulance operations. A helicopter air ambulance operation includes, but is not limited to—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Flights conducted to position the helicopter at the site at which a patient or donor organ will be picked up.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Flights conducted to reposition the helicopter after completing the patient, or donor organ transport.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Flights initiated for the transport of a patient or donor organ that are terminated due to weather or other reasons.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) <i>Medical personnel</i> means a person or persons with medical training, including but not limited to flight physicians, flight nurses, or flight paramedics, who are carried aboard a helicopter during helicopter air ambulance operations in order to provide medical care.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) <i>Mountainous</i> means designated mountainous areas as listed in part 95 of this chapter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) <i>Nonmountainous</i> means areas other than mountainous areas as listed in part 95 of this chapter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.603 Pilot-in-command instrument qualifications.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
After April 24, 2017, no certificate holder may use, nor may any person serve as, a pilot in command of a helicopter air ambulance operation unless that person meets the requirements of §135.243 and holds a helicopter instrument rating or an airline transport pilot certificate with a category and class rating for that aircraft, that is not limited to VFR.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) The certificate holder's Rotorcraft Flight Manual must contain appropriate procedures for—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(1) The use of the HTAWS; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Proper flight crew response to HTAWS audio and visual warnings.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Certificate holders with HTAWS required by this section with an approved deviation under §21.618 of this chapter are in compliance with this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) The standards required in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the FAA must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the FAA's Office of Rulemaking (ARM-1), 800 Independence Avenue SW., Washington, DC 20591 (telephone (202) 267-9677) and from the sources indicated below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_re	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) U.S. Department of Transportation, Subsequent Distribution Office, DOT Warehouse M30, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785; telephone (301) 322-5377. Copies are also available on the FAA's Web site. Use the following link and type the TSO number in the search box: http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgTSO.nsf/Frameset?OpenPage .	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) TSO C-194, Helicopter Terrain Awareness and Warning System (HTAWS), Dec. 17, 2008.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Be operated from the application of electrical power before takeoff until the removal of electrical power after termination of flight.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.609 VFR ceiling and visibility requirements for Class G airspace.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Unless otherwise specified in the certificate holder's operations specifications, when conducting VFR helicopter air ambulance operations in Class G airspace, the weather minimums in the following table apply:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
View or download PDF	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) A certificate holder may designate local flying areas in a manner acceptable to the Administrator, that must—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Not exceed 50 nautical miles in any direction from each designated location;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Take into account obstacles and terrain features that are easily identifiable by the pilot in command and from which the pilot in command may visually determine a position; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Take into account the operating environment and capabilities of the certificate holder's helicopters.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) A pilot must demonstrate a level of familiarity with the local flying area by passing an examination given by the certificate holder within the 12 calendar months prior to using the local flying area.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.611 IFR operations at locations without weather reporting.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) If a certificate holder is authorized to conduct helicopter IFR operations, the Administrator may authorize the certificate holder to conduct IFR helicopter air ambulance operations at airports with an instrument approach procedure and at which a weather report is not available from the U.S. National Weather Service (NWS), a source approved by the NWS, or a source approved by the FAA, subject to the following limitations:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(1) The certificate holder must obtain a weather report from a weather reporting facility operated by the NWS, a source approved by the NWS, or a source approved by the FAA, that is located within 15 nautical miles of the airport. If a weather report is not available, the certificate holder may obtain weather reports, forecasts, or any combination of them from the NWS, a source approved by the NWS, or a source approved by the FAA, for information regarding the weather observed in the vicinity of the airport;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Flight planning for IFR flights conducted under this paragraph must include selection of an alternate airport that meets the requirements of §§135.221 and 135.223;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) In Class G airspace, IFR departures with visual transitions are authorized only after the pilot in command determines that the weather conditions at the departure point are at or above takeoff minimums depicted in a published departure procedure or VFR minimum ceilings and visibilities in accordance with §135.609.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) All approaches must be conducted at Category A approach speeds as established in part 97 or those required for the type of approach being used.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Each helicopter air ambulance operated under this section must be equipped with functioning severe weather detection equipment, unless the pilot in command reasonably determines severe weather will not be encountered at the destination, the alternate destination, or along the route of flight.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Pilots conducting operations pursuant to this section may use the weather information obtained in paragraph (a) to satisfy the weather report and forecast requirements of §135.213 and §135.225(a).	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) After completing a landing at the airport at which a weather report is not available, the pilot in command is authorized to determine if the weather meets the takeoff requirements of part 97 of this chapter or the certificate holder's operations specification, as applicable.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.613 Approach/departure IFR transitions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Approaches.</i> When conducting an authorized instrument approach and transitioning from IFR to VFR flight, upon transitioning to VFR flight the following weather minimums	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) For Point-in-Space (PinS) Copter Instrument approaches annotated with a "Proceed VFR" segment, if the distance from the missed approach point to the landing area is 1 NM or less, flight visibility must be at least 1 statute mile and the ceiling on the approach chart applies;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) For all instrument approaches, including PinS when paragraph (a)(1) of this section does not apply, if the distance from the missed approach point to the landing area is 3 NM or less, the applicable VFR weather minimums are—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) For Day Operations: No less than a 600-foot ceiling and 2 statute miles flight visibility;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) For Night Operations: No less than a 600-foot ceiling and 3 statute miles flight visibility; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) For all instrument approaches, including PinS, if the distance from the missed approach point to the landing area is greater than 3 NM, the VFR weather minimums required by the class of airspace.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Departures.</i> For transitions from VFR to IFR upon departure—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) The VFR weather minimums of paragraph (a) of this section apply if—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) An FAA-approved obstacle departure procedure is followed; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) An IFR clearance is obtained on or before reaching a predetermined location that is not more than 3 NM from the departure location.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) If the departure does not meet the requirements of paragraph (b)(1) of this section, the VFR weather minimums required by the class of airspace apply.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

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Regulation	Category	Discussion
§135.615 VFR flight planning.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) <i>Pre-flight.</i> Prior to conducting VFR operations, the pilot in command must—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Determine the minimum safe cruise altitude by evaluating the terrain and obstacles along the planned route of flight;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Identify and document the highest obstacle along the planned route of flight; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Using the minimum safe cruise altitudes in paragraphs (b)(1)-(2) of this section, determine the minimum required ceiling and visibility to conduct the planned flight by applying the weather minimums appropriate to the class of airspace for the planned flight.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Enroute.</i> While conducting VFR operations, the pilot in command must ensure that all terrain and obstacles along the route of flight are cleared vertically by no less than the following:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) 300 feet for day operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) 500 feet for night operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) <i>Rerouting the planned flight path.</i> A pilot in command may deviate from the planned flight path for reasons such as weather conditions or operational considerations. Such deviations do not relieve the pilot in command of the weather requirements or the requirements for terrain and obstacle clearance contained in this part and in part 91 of this chapter. Rerouting, change in destination, or other changes to the planned flight that occur while the helicopter is on the ground at an intermediate stop require evaluation of the new route in accordance with paragraph (a) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) <i>Operations manual.</i> Each certificate holder must document its VFR flight planning procedures in its operations manual.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.617 Pre-flight risk analysis.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Each certificate holder conducting helicopter air ambulance operations must establish, and document in its operations manual, an FAA-approved preflight risk analysis that includes at least the following—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Flight considerations, to include obstacles and terrain along the planned route of flight, landing zone conditions, and fuel requirements;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Human factors, such as crew fatigue, life events, and other stressors;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Weather, including departure, en route, destination, and forecasted;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) A procedure for determining whether another helicopter air ambulance operator has refused or rejected a flight request; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) Strategies and procedures for mitigating identified risks, including procedures for obtaining and documenting approval of the certificate holder's management personnel to release a flight when a risk exceeds a level predetermined by the certificate holder.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Each certificate holder must develop a preflight risk analysis worksheet to include, at a minimum, the items in paragraph (a) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Prior to the first leg of each helicopter air ambulance operation, the pilot in command must conduct a preflight risk analysis and complete the preflight risk analysis worksheet in accordance with the certificate holder's FAA-approved procedures. The pilot in command must sign the preflight risk analysis worksheet and specify the date and time it was	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) The certificate holder must retain the original or a copy of each completed preflight risk analysis worksheet at a location specified in its operations manual for at least 90 days from the date of the operation.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.619 Operations control centers.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(a) <i>Operations control center.</i> After April 22, 2016, certificate holders authorized to conduct helicopter air ambulance operations, with 10 or more helicopter air ambulances assigned to the certificate holder's operations specifications, must have an operations control center. The operations control center must be staffed by operations control specialists who, at a minimum—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Provide two-way communications with pilots;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Provide pilots with weather briefings, to include current and forecasted weather along the planned route of flight;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Monitor the progress of the flight; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) Participate in the preflight risk analysis required under §135.617 to include the following:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Ensure the pilot has completed all required items on the preflight risk analysis worksheet;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Confirm and verify all entries on the preflight risk analysis worksheet;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Assist the pilot in mitigating any identified risk prior to takeoff; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Acknowledge in writing, specifying the date and time, that the preflight risk analysis worksheet has been accurately completed and that, according to their professional judgment, the flight can be conducted safely.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) <i>Operations control center staffing.</i> Each certificate holder conducting helicopter air ambulance operations must provide enough operations control specialists at each operations control center to ensure the certificate holder maintains operational control of each flight.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) <i>Documentation of duties and responsibilities.</i> Each certificate holder must describe in its operations manual the duties and responsibilities of operations control specialists, including preflight risk mitigation strategies and control measures, shift change checklist, and training and testing procedures to hold the position, including procedures for retesting.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) <i>Training requirements.</i> No certificate holder may use, nor may any person perform the duties of, an operations control specialist unless the operations control specialist has satisfactorily completed the training requirements of this paragraph.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) <i>Initial training.</i> Before performing the duties of an operations control specialist, each person must satisfactorily complete the certificate holder's FAA-approved operations control specialist initial training program and pass an FAA-approved knowledge and practical test given by the certificate holder. Initial training must include a minimum of 80 hours of training on the topics listed in paragraph (f) of this section. A certificate holder may reduce the number of hours of initial training to a minimum of 40 hours for persons who have obtained, at the time of beginning initial training, a total of at least 2 years of experience during the last 5 years in any one or in any combination of the following	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) In military aircraft operations as a pilot, flight navigator, or meteorologist;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) In air carrier operations as a pilot, flight engineer, certified aircraft dispatcher, or meteorologist; or	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) In aircraft operations as an air traffic controller or a flight service specialist.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) <i>Recurrent training.</i> Every 12 months after satisfactory completion of the initial training, each operations control specialist must complete a minimum of 40 hours of recurrent training on the topics listed in paragraph (f) of this section and pass an FAA-approved knowledge and practical test given by the certificate holder on those topics.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(e) <i>Training records.</i> The certificate holder must maintain a training record for each operations control specialist employed by the certificate holder for the duration of that individual's employment and for 90 days thereafter. The training record must include a chronological log for each training course, including the number of training hours and the examination dates and results.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(f) <i>Training topics.</i> Each certificate holder must have an FAA-approved operations control specialist training program that covers at least the following topics—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Aviation weather, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) General meteorology;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Prevailing weather;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Adverse and deteriorating weather;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Windshear;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Icing conditions;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vi) Use of aviation weather products;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vii) Available sources of information; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(viii) Weather minimums;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Navigation, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Navigation aids;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Instrument approach procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Navigational publications; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Navigation techniques;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Flight monitoring, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Available flight-monitoring procedures; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Alternate flight-monitoring procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) Air traffic control, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Airspace;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Air traffic control procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Aeronautical charts; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Aeronautical data sources;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) Aviation communication, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Available aircraft communications systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Normal communication procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Abnormal communication procedures; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Emergency communication procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(6) Aircraft systems, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Communications systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Navigation systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Surveillance systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Fueling systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Specialized systems;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(vi) General maintenance requirements; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vii) Minimum equipment lists;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(7) Aircraft limitations and performance, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Aircraft operational limitations;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Aircraft performance;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Weight and balance procedures and limitations; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Landing zone and landing facility requirements;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(8) Aviation policy and regulations, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) 14 CFR Parts 1, 27, 29, 61, 71, 91, and 135;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) 49 CFR Part 830;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Company operations specifications;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Company general operations policies;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Enhanced operational control policies;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vi) Aeronautical decision making and risk management;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vii) Lost aircraft procedures; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(viii) Emergency and search and rescue procedures, including plotting coordinates in degrees, minutes, seconds format, and degrees, decimal minutes format;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(9) Crew resource management, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Concepts and practical application;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Risk management and risk mitigation; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Pre-flight risk analysis procedures required under §135.617;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(10) Local flying area orientation, including:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Terrain features;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Obstructions;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Weather phenomena for local area;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Airspace and air traffic control facilities;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Heliports, airports, landing zones, and fuel facilities;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vi) Instrument approaches;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vii) Predominant air traffic flow;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(viii) Landmarks and cultural features, including areas prone to flat-light, whiteout, and brownout conditions; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ix) Local aviation and safety resources and contact information; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(11) Any other requirements as determined by the Administrator to ensure safe operations.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(g) <i>Operations control specialist duty time limitations.</i> (1) Each certificate holder must establish the daily duty period for an operations control specialist so that it begins at a time that allows that person to become thoroughly familiar with operational considerations, including existing and anticipated weather conditions in the area of operations, helicopter operations in progress, and helicopter maintenance status, before performing duties associated with any helicopter air ambulance operation. The operations control specialist must remain on duty until relieved by another qualified operations control specialist or until each helicopter air ambulance monitored by that person has completed its flight or gone beyond that person's jurisdiction.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Except in cases where circumstances or emergency conditions beyond the control of the certificate holder require	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) No certificate holder may schedule an operations control specialist for more than 10 consecutive hours of duty;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) If an operations control specialist is scheduled for more than 10 hours of duty in 24 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours at or before the end of 10 hours of duty;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) If an operations control specialist is on duty for more than 10 consecutive hours, the certificate holder must provide that person a rest period of at least 8 hours before that person's next duty period;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Each operations control specialist must be relieved of all duty with the certificate holder for at least 24 consecutive hours during any 7 consecutive days.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(h) <i>Drug and alcohol testing.</i> Operations control specialists must be tested for drugs and alcohol according to the certificate holder's Drug and Alcohol Testing Program administered under part 120 of this chapter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§135.621 Briefing of medical personnel.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Except as provided in paragraph (b) of this section, prior to each helicopter air ambulance operation, each pilot in command, or other flight crewmember designated by the certificate holder, must ensure that all medical personnel have been briefed on the following—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Passenger briefing requirements in §135.117(a) and (b); and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Physiological aspects of flight;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Patient loading and unloading;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) Safety in and around the helicopter;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) In-flight emergency procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(6) Emergency landing procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(7) Emergency evacuation procedures;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(8) Efficient and safe communications with the pilot; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(9) Operational differences between day and night operations, if appropriate.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) The briefing required in paragraphs (a)(2) through (9) of this section may be omitted if all medical personnel on board have satisfactorily completed the certificate holder's FAA-approved medical personnel training program within the preceding 24 calendar months. Each training program must include a minimum of 4 hours of ground training, and 4 hours of training in and around an air ambulance helicopter, on the topics set forth in paragraph (a)(2) through (9) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Each certificate holder must maintain a record for each person trained under this section that—	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Contains the individual's name, the most recent training completion date, and a description, copy, or reference to training materials used to meet the training requirement.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(2) Is maintained for 24 calendar months following the individual's completion of training.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
136.1 Applicability and definitions	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
136.13 Helicopter performance plan and operations	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Each operator must complete a performance plan before each helicopter commercial air tour, or flight operated under 14 CFR 91.146 or 91.147. The pilot in command must review for accuracy and comply with the performance plan on the day the flight is flown. The performance plan must be based on the information in the Rotorcraft Flight Manual (RFM) for that helicopter, taking into consideration the maximum density altitude for which the operation is planned, in order to determine:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Maximum gross weight and center of gravity (CG) limitations for hovering in ground effect;	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Maximum gross weight and CG limitations for hovering out of ground effect; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) Maximum combination of weight, altitude, and temperature for which height/velocity information in the RFM is valid.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Except for the approach to and transition from a hover for the purpose of takeoff and landing, or during takeoff and landing, the pilot in command must make a reasonable plan to operate the helicopter outside of the caution/warning/avoid area of the limiting height/velocity diagram.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Except for the approach to and transition from a hover for the purpose of takeoff and landing, during takeoff and landing, or when necessary for safety of flight, the pilot in command must operate the helicopter in compliance with the plan described in paragraph (b) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 137.11 Certificate required.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Except as provided in paragraphs (c) and (d) of this section, no person may conduct agricultural aircraft operations without, or in violation of, an agricultural aircraft operator certificate issued under this part.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Notwithstanding part 133 of this chapter, an operator may, if he complies with this part, conduct agricultural aircraft operations with a rotorcraft with external dispensing equipment in place without a rotorcraft external-load operator certificate.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) A Federal, State, or local government conducting agricultural aircraft operations with public aircraft need not comply with this subpart.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(d) The holder of a rotorcraft external-load operator certificate under part 133 of this chapter conducting an agricultural aircraft operation, involving only the dispensing of water on forest fires by rotorcraft external-load means, need not comply with this subpart.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 137.19 Certification requirements.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) General. An applicant for a private agricultural aircraft operator certificate is entitled to that certificate if he shows that he meets the requirements of paragraphs (b), (d), and (e) of this section. An applicant for a commercial agricultural aircraft operator certificate is entitled to that certificate if he shows that he meets the requirements of paragraphs (c), (d), and (e) of this section. However, if an applicant applies for an agricultural aircraft operator certificate containing a prohibition against the dispensing of economic poisons, that applicant is not required to demonstrate the knowledge required in paragraphs (e)(1) (ii) through (iv) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Private operator - pilot. The applicant must hold a current U.S. private, commercial, or airline transport pilot certificate and be properly rated for the aircraft to be used.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Commercial operator - pilots. The applicant must have available the services of at least one person who holds a current U.S. commercial or airline transport pilot certificate and who is properly rated for the aircraft to be used. The applicant himself may be the person available.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(d) Aircraft. The applicant must have at least one certificated and airworthy aircraft, equipped for agricultural operation.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(e) Knowledge and skill tests. The applicant must show, or have the person who is designated as the chief supervisor of agricultural aircraft operations for him show, that he has satisfactory knowledge and skill regarding agricultural aircraft operations, as described in paragraphs (e) (1) and (2) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) The test of knowledge consists of the following:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Steps to be taken before starting operations, including survey of the area to be worked.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Safe handling of economic poisons and the proper disposal of used containers for those poisons.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) The general effects of economic poisons and agricultural chemicals on plants, animals, and persons, with emphasis on those normally used in the areas of intended operations; and the precautions to be observed in using poisons and chemicals.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Primary symptoms of poisoning of persons from economic poisons, the appropriate emergency measures to be taken, and the location of poison control centers.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Performance capabilities and operating limitations of the aircraft to be used.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vi) Safe flight and application procedures.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) The test of skill consists of the following maneuvers that must be shown in any of the aircraft specified in paragraph (d) of this section, and at that aircraft's maximum certificated take-off weight, or the maximum weight established for the special purpose load, whichever is greater:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) Short-field and soft-field takeoffs (airplanes and gyroplanes only).	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) Approaches to the working area.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) Flare-outs.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iv) Swath runs.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(v) Pullups and turnarounds.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(vi) Rapid deceleration (quick stops) in helicopters only.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 137.51 Operation over congested areas: General.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) Notwithstanding part 91 of this chapter, an aircraft may be operated over a congested area at altitudes required for the proper accomplishment of the agricultural aircraft operation if the operation is conducted -	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) With the maximum safety to persons and property on the surface, consistent with the operation; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) In accordance with the requirements of paragraph (b) of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) No person may operate an aircraft over a congested area except in accordance with the requirements of this paragraph.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Prior written approval must be obtained from the appropriate official or governing body of the political subdivision over which the operations are conducted.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) Notice of the intended operation must be given to the public by some effective means, such as daily newspapers, radio, television, or door-to-door notice.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(3) A plan for each complete operation must be submitted to, and approved by appropriate personnel of the responsible Flight Standards office for the area where the operation is to be conducted. The plan must include consideration of obstructions to flight; the emergency landing capabilities of the aircraft to be used; and any necessary coordination with air traffic control.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(4) Single engine aircraft must be operated as follows:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(i) Except for helicopters, no person may take off a loaded aircraft, or make a turnaround over a congested area.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) No person may operate an aircraft over a congested area below the altitudes prescribed in part 91 of this chapter except during the actual dispensing operation, including the approaches and departures necessary for that operation.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) No person may operate an aircraft over a congested area during the actual dispensing operation, including the approaches and departures for that operation, unless it is operated in a pattern and at such an altitude that the aircraft can land, in an emergency, without endangering persons or property on the	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(5) Multiengine aircraft must be operated as follows:	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) No person may take off a multiengine airplane over a congested area except under conditions that will allow the airplane to be brought to a safe stop within the effective length of the runway from any point on takeoff up to the time of attaining, with all engines operating at normal takeoff power, 105 percent of the minimum control speed with the critical engine inoperative in the takeoff configuration or 115 percent of the power-off stall speed in the takeoff configuration, whichever is greater, as shown by the accelerate stop distance data. In applying this requirement, takeoff data is based upon still-air conditions, and no correction is made for any uphill gradient of 1 percent or less when the percentage is measured as the difference between elevation at the end points of the runway divided by the total length. For uphill gradients greater than 1 percent, the effective takeoff length of the runway is reduced 20 percent for each 1-percent grade.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) No person may operate a multiengine airplane at a weight greater than the weight that, with the critical engine inoperative, would permit a rate of climb of at least 50 feet per minute at an altitude of at least 1,000 feet above the elevation of the highest ground or obstruction within the area to be worked or at an altitude of 5,000 feet, whichever is higher. For the purposes of this subdivision, it is assumed that the propeller of the inoperative engine is in the minimum drag position; that the wing flaps and landing gear are in the most favorable positions; and that the remaining engine or engines are operating at the maximum continuous power available.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(iii) No person may operate any multiengine aircraft over a congested area below the altitudes prescribed in part 91 of this chapter except during the actual dispensing operation, including the approaches, departures, and turnarounds necessary for that operation.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 137.53 Operation over congested areas: Pilots and aircraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(a) General. No person may operate an aircraft over a congested area except in accordance with the pilot and aircraft rules of this section.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(b) Pilots. Each pilot in command must have at least -	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) 25 hours of pilot-in-command flight time in the make and basic model of the aircraft, at least 10 hours of which must have been acquired within the preceding 12 calendar months; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(2) 100 hours of flight experience as pilot in command in dispensing agricultural materials or chemicals.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(c) Aircraft.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(1) Each aircraft must -	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(i) If it is an aircraft not specified in paragraph (c)(1)(ii) of this section, have had within the preceding 100 hours of time in service a 100-hour or annual inspection by a person authorized by part 65 or 145 of this chapter, or have been inspected under a progressive inspection system; and	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
(ii) If it is a large or turbine-powered multiengine civil airplane of U.S. registry, have been inspected in accordance with the applicable inspection program requirements of § 91.409 of this chapter.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Helicopter ICAO - Powered-lift aircraft operate as a helicopter or rotorcraft for these regulations		
Regulation	Category	Discussion
(2) If other than a helicopter, it must be equipped with a device capable of jettisoning at least one-half of the aircraft's maximum authorized load of agricultural material within 45 seconds. If the aircraft is equipped with a device for releasing the tank or hopper as a unit, there must be a means to prevent inadvertent release by the pilot or other crewmember.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 139.5 Definitions.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Heliport means an airport, or an area of an airport, used or intended to be used for the landing and takeoff of helicopters.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
§ 157.2 Definition of terms.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".
Heliport means any landing or takeoff area intended for use by helicopters or other rotary wing type aircraft capable of vertical takeoff and landing profiles.	Helicopter	Apply ICAO guidance. Read "helicopter" or "rotorcraft" as "powered-lift".

Apply Airplane ICAO - Powered-lift aircraft operate as an airplane for these regulations		
Regulation	Category	Discussion
§135.117 Briefing of passengers before flight.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(9) If a rotorcraft operation involves flight beyond autorotational distance from the shoreline, as defined in §135.168(a), use of life preservers, ditching procedures and emergency exit from the rotorcraft in the event of a ditching; and the location and use of life rafts and other life preserver devices if applicable.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
§ 135.168 - Emergency equipment: Overwater rotorcraft operations.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift". Because powered-lift aircraft are able to glide and do not autorotate, this rule is not applicable
§135.345 Pilots: Initial, transition, and upgrade ground training.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(iv) Operating airplanes during ground icing conditions, (i.e., any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane), if the certificate holder expects to authorize takeoffs in ground icing conditions, including:	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(A) The use of holdover times when using deicing/anti-icing fluids;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(B) Airplane deicing/anti-icing procedures, including inspection and check procedures and responsibilities;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(C) Communications;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(D) Airplane surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and knowledge of how contamination adversely affects airplane performance and flight characteristics;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(E) Types and characteristics of deicing/anti-icing fluids, if used by the certificate holder;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(F) Cold weather preflight inspection procedures;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(G) Techniques for recognizing contamination on the airplane;	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
136.9 Life preservers over water	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(a) Except as provided in paragraphs (b) or (c) of this section, the operator and pilot in command of commercial air tours over water beyond the shoreline must ensure that each occupant is wearing a life preserver from before takeoff until flight is no longer over water.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(b) The operator and pilot in command of a commercial air tour over water beyond the shoreline must ensure that a life preserver is readily available for its intended use and easily accessible to each occupant if:	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(1) The aircraft is equipped with floats; or	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(2) The airplane is within power-off gliding distance to the shoreline for the duration of the time that the flight is over water.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
(3) The aircraft is a multi engine that can be operated with the critical engine inoperative at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the Airplane Flight Manual or the Rotorcraft Flight Manual, as appropriate.	Airplane	Apply ICAO guidance. Read "airplane" as "powered-lift".
136.11 Helicopter floats over water	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(a) A helicopter used in commercial air tours over water beyond the shoreline must be equipped with fixed floats or an inflatable flotation system adequate to accomplish a safe emergency ditching, if -	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(1) It is a single-engine helicopter; or	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(2) It is a multi-engine helicopter that cannot be operated with the critical engine inoperative at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the Rotorcraft Flight Manual (RFM).	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(b) Each helicopter that is required to be equipped with an inflatable flotation system must have:	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions

Apply Airplane ICAO - Powered-lift aircraft operate as an airplane for these regulations		
Regulation	Category	Discussion
(1) The activation switch for the flotation system on one of the primary flight controls, and	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(2) The flotation system armed when the helicopter is over water and is flying at a speed that does not exceed the maximum speed prescribed in the Rotorcraft Flight Manual for flying with the flotation system armed.	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(c) Fixed floats or an inflatable flotation system is not required for a helicopter under this section if:	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(1) The helicopter is over water only during the takeoff or landing portion of the flight, or	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(2) The helicopter is operated within power-off gliding distance to the shoreline for the duration of the flight and each occupant is wearing a life preserver from before takeoff until the aircraft is no longer over water.	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
(d) Air tour operators required to comply with paragraphs (a) and/or (b) of this section must meet these requirements on or before September 5, 2008.	Airplane	Powered-lift aircraft operations over water are covered by 136.9 provisions
Appendix A Special Operating Rules for State of Hawaii	Airplane or Helicopter	As appropriate, apply ICAO guidance. Read "airplane" or "helicopter" as "powered-lift".

SFAR Guidance or Change - These regulations should be addressed in the SFAR to provide additional guidance or alternate requirement for		
Regulation	Category	Discussion
§91.9 Civil aircraft flight manual, marking, and placard requirements.	SFAR to provide guidance.	No person may operate an aircraft of a powered-lift without an approved flight manual.
(d) Any person taking off or landing a helicopter certificated under part 29 of this chapter at a heliport constructed over water may make such momentary flight as is necessary for takeoff or landing through the prohibited range of the limiting height-speed envelope established for the helicopter if that flight through the prohibited range takes place over water on which a safe ditching can be accomplished and if the helicopter is amphibious or is equipped with floats or other emergency flotation gear adequate to accomplish a safe emergency ditching on open water.	SFAR to provide guidance.	No person may operate an aircraft of a powered-lift without an approved flight manual.
§91.207 Emergency locator transmitters.	SFAR to provide guidance.	Requirements will need to align based on powered-lift aircraft performance.
§91.1001 Applicability.	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(10) A <i>minimum fractional ownership interest</i> means—	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(i) A fractional ownership interest equal to, or greater than, one-sixteenth ($\frac{1}{16}$) of at least one subsonic, fixed-wing or powered-lift program aircraft; or	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(ii) A fractional ownership interest equal to, or greater than, one-thirty-second ($\frac{1}{32}$) of at least one rotorcraft program aircraft.	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
§91.1053 Crewmember experience.	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(2) For multi-engine turbine-powered fixed-wing and powered-lift aircraft, the following FAA certification and ratings requirements:	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(i) Pilot in command—Airline transport pilot and applicable type ratings.	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(ii) Second in command—Commercial pilot and instrument ratings.	Rule needs to change.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
§ 119.71 Management personnel: Qualifications for operations conducted under part 135 of this chapter.	SFAR to provide guidance.	Align with airman concepts in Annex 1 - "same category and class" means airplane or helicopter.
(e) To serve as Director of Maintenance under § 119.69(a) a person must hold a mechanic certificate with airframe and powerplant ratings and either:	SFAR to provide guidance.	Align with airman concepts in Annex 1 - "same category and class" means airplane or helicopter.
(1) Have 3 years of experience within the past 6 years maintaining aircraft as a certificated mechanic, including, at the time of appointment as Director of Maintenance, experience in maintaining the same category and class of aircraft as the certificate holder uses; or	SFAR to provide guidance.	Align with airman concepts in Annex 1 - "same category and class" means airplane or helicopter.
(2) Have 3 years of experience within the past 6 years repairing aircraft in a certificated airframe repair station, including 1 year in the capacity of approving aircraft for return to service.	SFAR to provide guidance.	Align with airman concepts in Annex 1 - "same category and class" means airplane or helicopter.
§135.4 Applicability of rules for eligible on-demand operations.	Revise rule and provide guidance in SFAR.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(ii) For multi-engine turbine-powered fixed-wing and powered-lift aircraft, the following FAA certification and ratings requirements:	Revise rule and provide guidance in SFAR.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(A) Pilot in command—Airline transport pilot and applicable type ratings.	Revise rule and provide guidance in SFAR.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
(B) Second in command—Commercial pilot and instrument ratings.	Revise rule and provide guidance in SFAR.	Rule as written is inconsistent with ICAO SARPs. Powered-lift should be regulated as rotorcraft.
§135.244 Operating experience.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.

SFAR Guidance or Change - These regulations should be addressed in the SFAR to provide additional guidance or alternate requirement for		
Regulation	Category	Discussion
(a) No certificate holder may use any person, nor may any person serve, as a pilot in command of an aircraft operated in a commuter operation, as defined in part 119 of this chapter unless that person has completed, prior to designation as pilot in command, on that make and basic model aircraft and in that crewmember position, the following operating experience in each make and basic model of aircraft to be flown:	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(1) Aircraft, single engine—10 hours.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(2) Aircraft multiengine, reciprocating engine-powered—15 hours.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(3) Aircraft multiengine, turbine engine-powered—20 hours.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(4) Airplane, turbojet-powered—25 hours.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(b) In acquiring the operating experience, each person must comply with the following:	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(1) The operating experience must be acquired after satisfactory completion of the appropriate ground and flight training for the aircraft and crewmember position. Approved provisions for the operating experience must be included in the certificate holder's training program.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(2) The experience must be acquired in flight during commuter passenger-carrying operations under this part. However, in the case of an aircraft not previously used by the certificate holder in operations under this part, operating experience acquired in the aircraft during proving flights or ferry flights may be used to meet this requirement.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(3) Each person must acquire the operating experience while performing the duties of a pilot in command under the supervision of a qualified check pilot.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.
(4) The hours of operating experience may be reduced to not less than 50 percent of the hours required by this section by the substitution of one additional takeoff and landing for each hour of flight.	SFAR should provide guidance.	Neither ICAO nor the current FAR addresses single control station aircraft or new/novel types of propulsion systems.