

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.637

National Policy

Effective Date:
8/4/22

Cancellation Date:
8/4/23

SUBJ: Part 135, § 135.163(h)—Gyroscopic-Instrument Energy-Source Requirements for Single-Engine Aircraft Conducting Passenger-Carrying Operations

1. Purpose of This Notice. This notice provides guidance and information to aviation safety inspectors (ASI) responsible for Title 14 of the Code of Federal Regulations (14 CFR) part 135 certificate holders (CH) that operate passenger-carrying, single-engine aircraft under instrument flight rules (IFR). The information contained in this notice will assist ASIs in determining if single-engine aircraft comply with the gyroscopic-instrument energy-source requirements to conduct IFR passenger-carrying operations under part 135, § 135.163(h).

2. Audience. The primary audience for this notice is Flight Standards Safety Assurance ASIs with oversight of part 135 CHs that utilize single-engine aircraft in passenger-carrying operations under IFR. The secondary audience includes Safety Standards and Foundational Business offices.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices and the Dynamic Regulatory System (DRS) at <https://drs.faa.gov>. Operators and the public can find this notice on the Federal Aviation Administration's (FAA) website at https://www.faa.gov/regulations_policies/orders_notices and DRS.

4. Background.

a. General. On August 6, 1997, the FAA published the final rule (Federal Register (FR) Document Number 97-20641, Commercial Passenger-Carrying Operations in Single-Engine Aircraft Under Instrument Flight Rules), which expanded the provisions to conduct IFR passenger-carrying operations in single-engine aircraft. These additional requirements include the gyroscopic-instrument energy-source requirements of § 135.163(h). The FAA authorizes these operations through the issuance of Operations Specifications (OpSpecs) A046, Single-Engine IFR (SEIFR) Passenger-Carrying Operations Under CFR Part 135; D103, Additional Maintenance Requirements—Single-Engine IFR; and when required, D104, Additional Maintenance Requirements—Emergency Equipment.

b. Section 135.163(h) Compliance. Section 135.163(h) contains the gyroscopic-instrument energy-source requirements for single-engine aircraft carrying passengers under IFR. Section 135.163(h) requires two independent and selectable sources of energy with at least one

being an engine-driven pump or generator. Each energy source should be able to drive all required gyroscopic instruments and installed so that failure of one instrument or source does not interfere with the energy supply to the remaining instruments or the other energy source.

Note: For single-engine aircraft in all-cargo operations only, the rate of turn indicator has a source of energy separate from the bank and pitch and direction indicators.

5. Guidance. Some single-engine aircraft with electronic flight instrument systems (EFIS) may have a standby gyro installed that utilizes only a single source of energy. In those cases, if the standby gyro is required equipment, is required to be operational by the minimum equipment list (MEL), or is required by emergency procedures, it does not meet the requirements of § 135.163(h). Operators wishing to use this combination of equipment will need to install an independent secondary source of energy that will supply energy in the event the primary source of energy is not available.

a. OpSpec D103. CHs complying with § 135.163(h) must have the alternate source of gyroscopic energy listed in OpSpec D103. Additional maintenance tests or procedures may be required for items listed in OpSpec D103.

b. OpSpec D104. If the gyroscopic instrument is required emergency equipment, CHs complying with § 135.163(h) must also have the alternate source of gyroscopic energy listed in OpSpec D104. Additional maintenance tests or procedures may be required for items listed in OpSpec D104.

6. Action. This notice serves to provide information only. No action is required.

7. Disposition. We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions or comments concerning the information in this notice to the Air Transportation Division (AFS-200), Operations Group (AFS-220) at 202-267-8166.



Caitlin Locke
Acting Deputy Executive Director, Flight Standards Service