

CHAPTER 6. AIRPLANE AUTHORIZATIONS AND LIMITATIONS

SECTION 1. SELECTED PRACTICES

1461. GENERAL. This section contains background information, direction, and guidance to be used by operations inspectors on selected topics and practices related to aircraft equipment and operating procedures. Each paragraph of this section covers an individual practice.

1463. AIRBORNE THUNDERSTORM DETECTION EQUIPMENT REQUIREMENTS FOR PART 135 OPERATIONS. FAR 135.173 requires that passenger-carrying aircraft equipped with 10 or more passenger seats be equipped with either approved thunderstorm detection equipment or approved airborne weather radar.

A. Exceptions to the Equipment Requirements.

(1) Helicopters operating in day VFR conditions are excluded from this requirement.

(2) Thunderstorm detection equipment is not required to be installed in aircraft used exclusively within the states of Hawaii or Alaska, and in Canada west of 130 degrees longitude and between 53 degrees and 70 degrees north latitude.

(3) Operators are not required to have equipment installed in an aircraft during any training flights, test flights, or ferry flights.

B. Authorized Equipment. FAR 135.173 neither defines nor identifies acceptable thunderstorm detection equipment, but does require that the equipment be approved by the FAA. The FAA has approved airborne weather radar and passive detection equipment, such as lightning detection equipment. Technical Standard Order TSO-C110a, "Airborne Passive Thunderstorm Detection Equipment," establishes the minimum operating performance standards and requirements for thunderstorm detection equipment. Operators may use such systems to fulfill the requirements of FAR 135.173. Principal operations inspectors (POI's) should coordinate with the principal maintenance inspector (PMI) or the principal avionics inspector (PAI) to ensure that the equipment installation is based upon the approved

data for the particular make and model of aircraft.

NOTE: Aircraft certified under Part 25 must be equipped with radar. Aircraft certified under FAR 23 and other regulations have no such requirement.

1465. PASSENGER OCCUPANCY OF A PILOT SEAT. A Part 135 operator may operate an aircraft of eight or less passenger seating capacity with a passenger occupying a pilot seat. FAR 135.113, however, prohibits operation of an aircraft certified after October 15, 1971 with a passenger seating capacity of more than eight seats with a passenger occupying a pilot seat.

A. Aircraft Type Certificated after October 15, 1971. FAR 135.113 states that no certificate holder may operate an aircraft that was type certificated after October 15, 1971 with a passenger seating configuration of more than eight seats excluding the pilot seat, with anyone occupying a pilot seat except the following:

- The pilot-in-command (PIC)
- The second-in-command (SIC)
- A company check airman
- An authorized representative of the Administrator
- An authorized representative of the United States Postal Service

B. Aircraft Certificated on or before October 15, 1971. Operation with a passenger in a second pilot seat was not prohibited until the implementation of FAR 135.113. Certificate holders may operate aircraft that were originally certificated on or before October 15, 1971, with eight or more passenger seats with a passenger occupying a pilot seat. Operators and inspectors should be aware that FAR 135.115 prohibits a PIC from allowing anyone to manipulate the controls except the following:

- A pilot employed by the operator and qualified in the aircraft administrator who has the permission of the PIC, is qualified in the aircraft, and checks flight operations.
- An authorized safety representative of the **1466. - 1532. RESERVED.**

[PAGES 4-871 THROUGH 4-940 RESERVED]