



USPA Response to NTSB Recommendations on Jump Plane Operations

In response to a 2008 National Transportation Safety Board Safety Special Investigation Report on the Safety of Parachute Jump Operations and resulting NTSB recommendations to both USPA and the FAA, USPA representatives met with FAA officials on October 16, 2008. USPA offered to take a leadership role in addressing the recommendations, believing that the current regulatory requirements for maintenance and pilot training must be reviewed and disseminated. USPA will educate jump plane aircraft owners, DZ operators, and their pilots, using the association's monthly magazine, its website, and direct e-mail communication with its Group Member drop zones. FAA would continue its surveillance and enforcement role.

USPA holds that all drop zones in the U.S. are operating for hire, and therefore must use pilots that hold at least a commercial pilot certificate and a current FAA second-class medical certificate. Also, because they operate for hire, these DZs and their aircraft operators must implement inspections beyond the annual inspection required by FAR 91.409(a), such as a 100-hour inspection program, an FAA-approved progressive inspection program, a manufacturer's inspection program, or other FAA-approved inspection program. The highlights and excerpts of those requirements and other essential regulations are reviewed below. **These excerpts are provided for reference, and are not intended to replace your careful reading and comprehension of the full text of the applicable regulations.**

Pilot Requirements

USPA Group Member drop zones must ensure that all pilots employed or utilized for the purpose of parachute operations hold at least a commercial pilot certificate and a second-class medical certificate. Pilots must have logged a current flight review and recent flight experience, as required by the FARs.

FAR Excerpts

§ 61.23 *Medical Certificates: Requirement and duration.*

(a) *Operations requiring a medical certificate.* ...a person...

(2) must hold at least a second-class medical certificate when exercising the privileges of a commercial pilot certificate...

§ 61.56 *Flight review.*

(c)...no person may act as pilot in command of an aircraft unless, since the beginning of the 24th calendar month before the month in which that pilot acts as pilot in command, that person has,

- (1) accomplished a flight review given in an aircraft for which that pilot is rated by an authorized instructor; and
- (2) a logbook endorsed from an authorized instructor who gave the review...

§ 61.57 *Recent flight experience: Pilot in command.*

(a) *General experience.* No person may act as a pilot in command of an aircraft carrying passengers unless that person has made at least three takeoffs and three landings within the preceding 90 days, and

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required), and, if the aircraft to be flown is an airplane with a tailwheel, the takeoffs and landings must have been made to a full stop in an airplane with a tailwheel.

§ 61.133 *Commercial pilot privileges and limitations.*

(a) *Privileges*

(1) *General.* A person who holds a commercial pilot certificate may act as pilot in command of an aircraft—

(i) Carrying persons or property for compensation or hire, provided the person is qualified in accordance with this part and with the applicable parts of this chapter that apply to the operation; and

(ii) For compensation or hire, provided the person is qualified in accordance with this part and with the applicable parts of this chapter that apply to the operation.

Maintenance Requirements

Because they operate for hire, USPA Group Member DZs must ensure that all aircraft utilized for the purpose of parachute operations comply with the maintenance requirements described in FAR Part 91.409(a) through (f) as applicable. These maintenance requirements include four programs among which most operators will choose :

91.409(a) and (b)—Annual and 100-hour inspection programs

91.409(d)—Progressive inspection program

91.409(f)(3)—Manufacturer’s inspection program

91.409(f)(4)—Approved inspection program

Annual and 100-Hour Inspection Program

Most operators are eligible to use the provisions for both an annual inspection and 100-hour inspections to meet the for-hire requirement. However, multi-engine turbine airplanes are not eligible to use them.

FAR Excerpts

§ 91.409 *Inspections.*

(a) Except as provided in paragraph (c) of this section, no person may operate an aircraft unless, within the preceding 12 calendar months, it has had

(1) an annual inspection in accordance with part 43 of this chapter and has been approved for return to service by a person authorized by §43.7 of this chapter;

No inspection performed under paragraph (b) of this section may be substituted for any inspection required by this paragraph unless it is performed by a person authorized to perform annual inspections and is entered as an “annual” inspection in the required maintenance records.

(b) Except as provided in paragraph (c) of this section, no person may operate an aircraft carrying any person...for hire...unless within the preceding 100 hours of time in service the aircraft has received an annual or 100-hour inspection and been approved for return to service in accordance with part 43 of this chapter...

Progressive Inspection Program

Most operators, except those operating multi-engine turbine airplanes, are eligible to use a progressive inspection program to meet the for-hire requirement. To do so, the registered owner or operator must submit a written request to the FAA Flight Standards District Office having jurisdiction over the area in which the applicant is located.

FAR Excerpts

§ 91.409(d) *Progressive inspection.* Each registered owner or operator of an aircraft desiring to use a progressive inspection program must submit a written request to the FAA Flight Standards district office having jurisdiction over the area in which the applicant is located, and shall provide—

(1) A certificated mechanic holding an inspection authorization, a certificated airframe repair station, or the manufacturer of the aircraft to supervise or conduct the progressive inspection;

(2) A current inspection procedures manual available and readily understandable to pilot and maintenance personnel containing, in detail—

(i) An explanation of the progressive inspection, including the continuity of inspection responsibility, the making of reports, and the keeping of records and technical reference material;

(ii) An inspection schedule, specifying the intervals in hours or days when routine and detailed inspections will be performed and including instructions for exceeding an inspection interval by not more than 10 hours while en route and for changing an inspection interval because of service experience;

(iii) Sample routine and detailed inspection forms and instructions for their use; and

(iv) Sample reports and records and instructions for their use;

(3) Enough housing and equipment for necessary disassembly and proper inspection of the aircraft; and

(4) Appropriate current technical information for the aircraft.

The frequency and detail of the progressive inspection shall provide for the complete inspection of the aircraft within each 12 calendar months and be consistent with the manufacturer's recommendations, field service experience, and the kind of operation in which the aircraft is engaged. The progressive inspection schedule must ensure that the aircraft, at all times, will be airworthy and will conform to all applicable FAA aircraft specifications, type certificate data sheets, airworthiness directives, and other approved data.

Manufacturer's Inspection Program

Multi-engine turbine operators are eligible to use the aircraft manufacturer's inspection program. Multi-engine turbine airplanes must comply with the replacement times for life-limited parts specified in the aircraft specifications, type data sheets, or other FAA-approved documents.

FAR Excerpts

§ 91.409(e) *Large airplanes (to which part 125 is not applicable), turbojet multiengine airplanes, turbopropeller-powered multiengine airplanes, and turbine-powered rotorcraft.* No person may operate a large airplane, turbojet multiengine airplane, turbopropeller-powered multiengine airplane, or turbine-powered rotorcraft unless the replacement times for life-limited parts specified in the aircraft specifications, type data sheets, or other documents approved by the Administrator are complied with and the airplane or turbine-powered rotorcraft, including the airframe, engines, propellers, rotors, appliances, survival equipment, and emergency equipment, is inspected in accordance with an inspection program selected under the provisions of paragraph (f) of this section, except that, the owner or operator of a turbine-powered rotorcraft may elect to use the inspection provisions of §91.409(a), (b), (c), or (d) in lieu of an inspection option of §91.409(f).

§ 91.409(f) *Selection of inspection program under paragraph (e) of this section.* The registered owner or operator of each airplane or turbine-powered rotorcraft described in paragraph (e) of this section must select, identify in the aircraft maintenance records, and use one of the following programs for the inspection of the aircraft:

(3) A current inspection program recommended by the manufacturer.

Approved Inspection Program

A multi-engine turbine airplane operator may develop and use their own inspection program, as long as it meets the requirements of this section and the operator receives approval from the FAA Flight Standards District Office in the area where the aircraft is based.

FAR Excerpts

§ 91.409(f) *Selection of inspection program under paragraph (e) of this section.* The registered owner or operator of each airplane or turbine-powered rotorcraft described in paragraph (e) of this section must select, identify in the aircraft maintenance records, and use one of the following programs for the inspection of the aircraft:

(4) Any other inspection program established by the registered owner or operator of that

airplane or turbine-powered rotorcraft and approved by the Administrator under paragraph (g) of this section. Each operator shall include in the selected program the name and address of the person responsible for scheduling the inspections required by the program and make a copy of that program available to the person performing inspections on the aircraft and, upon request, to the Administrator.

§ 91.409(g) *Inspection program approved under paragraph (e) of this section.* Each operator of an airplane or turbine-powered rotorcraft desiring to establish or change an approved inspection program under paragraph (f)(4) of this section must submit the program for approval to the local FAA Flight Standards District Office having jurisdiction over the area in which the aircraft is based. The program must be in writing and include at least the following information...

Other Requirements

Minimum Equipment List

All of an aircraft's installed equipment and instruments must work before takeoff, unless covered by an approved minimum equipment list. However, small rotorcraft and small non-turbine airplanes may operate with inoperative equipment under 91.213(d), in accordance with specific criteria. Note that 91.213(d) does not apply to turbine aircraft.

FAR Excerpts

§ 91.213 *Inoperative instruments and equipment.*

(a) Except as provided in paragraph (d) of this section, no person may take off an aircraft with inoperative instruments or equipment installed unless the following conditions are met:

- (1) An approved Minimum Equipment List exists for that aircraft.
- (2) The aircraft has within it a letter of authorization, issued by the FAA Flight Standards district office having jurisdiction over the area in which the operator is located, authorizing operation of the aircraft under the Minimum Equipment List. The letter of authorization may be obtained by written request of the airworthiness certificate holder. The Minimum Equipment List and the letter of authorization constitute a supplemental type certificate for the aircraft.

(d) Except for operations conducted in accordance with paragraph (a) or (c) of this section, a person may takeoff an aircraft in operations conducted under this part with inoperative instruments and equipment without an approved Minimum Equipment List provided—

- (1) The flight operation is conducted in a—
 - (i) Rotorcraft, non-turbine-powered airplane, glider, lighter-than-air aircraft, powered parachute, or weight-shift-control aircraft, for which a master minimum equipment list has not been developed; or
 - (ii) Small rotorcraft, nonturbine-powered small airplane, glider, or lighter-than-air aircraft for which a Master Minimum Equipment List has been developed; and
- (2) The inoperative instruments and equipment are not—

- (i) Part of the VFR-day type certification instruments and equipment prescribed in the applicable airworthiness regulations under which the aircraft was type certificated;
 - (ii) Indicated as required on the aircraft's equipment list, or on the Kinds of Operations Equipment List for the kind of flight operation being conducted;
 - (iii) Required by §91.205 or any other rule of this part for the specific kind of flight operation being conducted; or
 - (iv) Required to be operational by an airworthiness directive; and
- (3) The inoperative instruments and equipment are—
- (i) Removed from the aircraft, the cockpit control placarded, and the maintenance recorded in accordance with §43.9 of this chapter; or
 - (ii) Deactivated and placarded “Inoperative.” If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with part 43 of this chapter; and
- (4) A determination is made by a pilot, who is certificated and appropriately rated under part 61 of this chapter, or by a person, who is certificated and appropriately rated to perform maintenance on the aircraft, that the inoperative instrument or equipment does not constitute a hazard to the aircraft.

An aircraft with inoperative instruments or equipment as provided in paragraph (d) of this section is considered to be in a properly altered condition acceptable to the Administrator.

Emergency Locator Transmitters

FAR Excerpts

§ 91.207 *Emergency locator transmitters.*

- (a) Except as provided in paragraphs (e) and (f) of this section, no person may operate a U.S.-registered civil airplane unless—
- (2) ...there must be attached to the airplane an approved personal type or an approved automatic type emergency locator transmitter that is in operable condition, except that after June 21, 1995, an emergency locator transmitter that meets the requirements of TSO-C91 may not be used for new installations.

Transponder

FAR Excerpts

§ 91.413 *ATC transponder tests and inspections.*(a) No persons may use an ATC transponder that is specified in 91.215(a), 121.345(c), or §135.143(c) of this chapter unless, within the preceding 24 calendar months, the ATC transponder has been tested and inspected and found to comply with appendix F of part 43 of this chapter;