Federal Aviation Administration, DOT § 23.1505

both the cockpit voice recorder and the flight data recorder; and

(7) It is in a separate container from the cockpit voice recorder when both are required. If used to comply with only the flight data recorder requirements, a combination unit may be installed. If a combination unit is installed as a cockpit voice recorder to comply with §23.1457(e)(2), a combination unit must be used to comply with this flight data recorder requirement.

(b) Each nonejectable record container must be located and mounted so as to minimize the probability of container rupture resulting from crash impact and subsequent damage to the record from fire. In meeting this requirement the record container must be located as far aft as practicable, but need not be aft of the pressurized compartment, and may not be where aft-mounted engines may crush the container upon impact.

(c) A correlation must be established between the flight recorder readings of airspeed, altitude, and heading and the corresponding readings (taking into account correction factors) of the first pilot’s instruments. The correlation must cover the airspeed range over which the airplane is to be operated, the range of altitude to which the airplane is limited, and 360 degrees of heading. Correlation may be established on the ground as appropriate.

(d) Each recorder container must:
(1) Be either bright orange or bright yellow;
(2) Have reflective tape affixed to its external surface to facilitate its location under water; and
(3) Have an underwater locating device, when required by the operating rules of this chapter, on or adjacent to the container which is secured in such a manner that they are not likely to be separated during crash impact.

(e) Any novel or unique design or operational characteristics of the aircraft shall be evaluated to determine if any dedicated parameters must be recorded on flight recorders in addition to or in place of existing requirements.

[Amtd. 23–35, 53 FR 26413, July 11, 1988, as amended by Amtd. 23–58, 73 FR 12562, Mar. 7, 2008; 74 FR 32800, July 9, 2009]

§ 23.1461 Equipment containing high energy rotors.

(a) Equipment, such as Auxiliary Power Units (APU) and constant speed drive units, containing high energy rotors must meet paragraphs (b), (c), or (d) of this section.

(b) High energy rotors contained in equipment must be able to withstand damage caused by malfunctions, vibration, abnormal speeds, and abnormal temperatures. In addition—
(1) Auxiliary rotor cases must be able to contain damage caused by the failure of high energy rotor blades; and
(2) Equipment control devices, systems, and instrumentation must reasonably ensure that no operating limitations affecting the integrity of high energy rotors will be exceeded in service.

(c) It must be shown by test that equipment containing high energy rotors can contain any failure of a high energy rotor that occurs at the highest speed obtainable with the normal speed control devices inoperative.

(d) Equipment containing high energy rotors must be located where rotor failure will neither endanger the occupants nor adversely affect continued safe flight.


Subpart G—Operating Limitations and Information

§ 23.1501 General.

(a) Each operating limitation specified in §§23.1505 through 23.1527 and other limitations and information necessary for safe operation must be established.

(b) The operating limitations and other information necessary for safe operation must be made available to the crewmembers as prescribed in §§23.1541 through 23.1589.

[Amtd. 23–21, 43 FR 2319, Jan. 16, 1978]

§ 23.1505 Airspeed limitations.

(a) The never-exceed speed $V_{NE}$ must be established so that it is—
(1) Not less than 0.9 times the minimum value of $V_D$ allowed under §23.335; and