

| Parameters | Range | Installed system ¹ minimum accuracy (to recovered data) | Sampling interval (per second) | Resolution ³ read out |
|---|-----------------------------|--|--------------------------------|----------------------------------|
| Altitude rate | ±8,000 fpm | ±10% Resolution 250 fpm below 12,000 ft. indicated. | 1 | 250 fpm below 12,000. |
| <i>Engine Power, Each Engine</i> | | | | |
| Main rotor speed | Maximum range | ±5% | 1 | 1% ² |
| Free or power turbine | Maximum range | + 5% | 1 | 1% ² |
| Engine torque | Maximum range | ±5% | 1 | 1% ² |
| <i>Flight Control—Hydraulic Pressure</i> | | | | |
| Primary (discrete) | High/low ..... | ..... | 1. | |
| Secondary—if applicable (discrete). | High/low ..... | ..... | 1. | |
| Radio transmitter keying (discrete). | On/off ..... | ..... | 1. | |
| Autopilot engaged (discrete) .. | Engaged or disengaged ..... | ..... | 1. | |
| SAS status—engaged (discrete). | Engaged/disengaged ..... | ..... | 1. | |
| SAS fault status (discrete) | Fault/OK ..... | ..... | 1. | |
| <i>Flight Controls</i> | | | | |
| Collective ⁴ | Full range | ±3% | 2 | 1% ² |
| Pedal Position ⁴ | Full range | ±3% | 2 | 1% ² |
| Lat. Cyclic ⁴ | Full range | ±3% | 2 | 1% ² |
| Long. Cyclic ⁴ | Full range | ±3% | 2 | 1% ² |
| Controllable Stabilator Position ⁴ . | Full range | ±3% | 2 | 1% ² |

¹When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

²Per cent of full range.

³This column applies to aircraft manufactured after October 11, 1991.

⁴For all aircraft manufactured on or after December 6, 2010, the sampling interval per second is 4.

[Doc. No. 25530, 53 FR 26152, July 11, 1988; 53 FR 30906, Aug. 16, 1988, as amended by Amdt. 135–69, 62 FR 38397, July 17, 1997; Amdt. 135–113, 73 FR 12570, Mar. 7, 2008; 73 FR 15281, Mar. 21, 2008; Amdt. 135–121, 75 FR 17047, Apr. 5, 2010]

APPENDIX D TO PART 135—AIRPLANE FLIGHT RECORDER SPECIFICATION

| Parameters | Range | Accuracy sensor input to DFDR readout | Sampling interval (per second) | resolution ⁴ read out |
|--|---|--|--------------------------------|----------------------------------|
| Time (GMT or Frame Counter) (range 0 to 4095, sampled 1 per frame). | 24 Hrs | ±0.125% Per Hour | 0.25 (1 per 4 seconds). | 1 sec. |
| Altitude | – 1,000 ft to max certified altitude of aircraft. | ±100 to ±700 ft (See Table 1, TSO-C51a). | 1 | 5' to 35' ¹ . |
| Airspeed | 50 KIAS to V _{so1} and V _{so} to 1.2 V _D . | ±5%, ±3% | 1 | 1kt |
| Heading | 360° | ±2° | 1 | 0.5° |
| Normal Acceleration (Vertical) | –3g to + 6g | ±1% of max range excluding datum error of ±5%. | 8 | 0.01g |
| Pitch Attitude | ±75° | ±2° | 1 | 0.5° |
| Roll Attitude | ±180° | ±2° | 1 | 0.5°. |
| Radio Transmitter Keying | On-Off (Discrete) ..... | ..... | 1 | |
| Thrust/Power on Each Engine | Full range forward | ±2% | 1 (per engine) ... | 0.2% ² . |
| Trailing Edge Flap or Cockpit Control Selection. | Full range or each discrete position. | ±3° or as pilot's indicator | 0.5 | 0.5% ² . |
| Leading Edge Flap on or Cockpit Control Selection. | Full range or each discrete position. | ±3° or as pilot's indicator | 0.5 | 0.5% ² . |
| Thrust Reverser Position | Stowed, in transit, and reverse (discretion). | ..... | 1 (per 4 seconds per engine). | |
| Ground Spoiler Position/Speed Brake Selection. | Full range or each discrete position. | ±2% unless higher accuracy uniquely required. | 1 | 0.22 ² . |
| Marker Beacon Passage | Discrete ..... | ..... | 1 | |
| Autopilot Engagement | Discrete ..... | ..... | 1 | |
| Longitudinal Acceleration | ±1g | ±1.5% max range excluding datum error of ±5%. | 4 | 0.01g. |
| Pilot Input And/or Surface Position-Primary Controls (Pitch, Roll, Yaw) ³ . | Full range | ±2° unless higher accuracy uniquely required. | 1 | 0.2% ² . |