



National Transportation Safety Board

Flight Recorders

Specialist's
presentation



Accident Helicopter Recorder

- Flight recorder not required
- Helicopter equipped with Appareo Vision 1000 recorder
- Recorder mounted in overhead of cockpit

Appareo Device Comparison



- Accident device destroyed by impact and postcrash fire; data could not be recovered

Technical Standard Order C197

- TSO-C197 addresses crash-resistant lightweight flight recorder systems
- Appareo device did not comply, and was not required to comply, with TSO-C197 survivability requirements

Results of Lack of Recorded Data

- Investigation could not determine
 - Pilot's actions during preflight and hover checks
 - Pilot's pedal and cyclic inputs
 - Annunciations on caution and warning panel

Previous Related Recommendations

- Safety Recommendations A-13-12 and -13
 - Addressed TSO-C197 specifications
 - Latest in a series of NTSB recommendations since 1999
 - Both classified “Open–Unacceptable Response”
 - A-13-13 reiterated in October 2014



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