

FAA/Delta Airlines EDR Proof of Concept Demo

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Federal Aviation
Administration



Delta Airlines EDR Status

- **68 737-800s, 3 737-700s have EDR installed and operational**
- **10 more 700s by mid-2009**



DAL EDR Proof of Concept Demonstration

- **DAL/FAA jointly planned**
- **Estimated start date FY09**
- **Yearlong, phased study**
- **Prove cost-benefit of improved turbulence data to airline flight operations**
 - Increased aircrew confidence in turbulence data accuracy
 - Less time off altitude, reduced fuel burn
 - Estimated 10-15% reduction in turbulence-related fuel penalties
 - Improved Capacity



DAL EDR Proof of Concept Demonstration

- **Phase I**

- DAL OCC

- Web-based EDR display initially → Graphical Flight Following (GFF)
 - Strategic use by dispatchers in planning
 - Tactical use by aircrews enroute (voice or data link)
 - Additional data source for OCC meteorologists
 - Data gathering for baseline
 - Aircrews report altitude deviation reasons
 - Fuel burn and safety impacts recorded

- ZTL CWSU Option

- CWSU meteorologists have access to EDR data via ADDS
 - EDR will be used in turbulence forecasts for TMU, Area Supervisors, Operations Managers, ATCTs and TRACONs
 - Less restrictions on air space reduce workload on TMU

DAL EDR Proof of Concept Demonstration

- **Phase II**

- Develop Next Level of Procedures and Processes to manage turbulence for end users
- Expand use of EDR data directly to area supervisors and other participants

