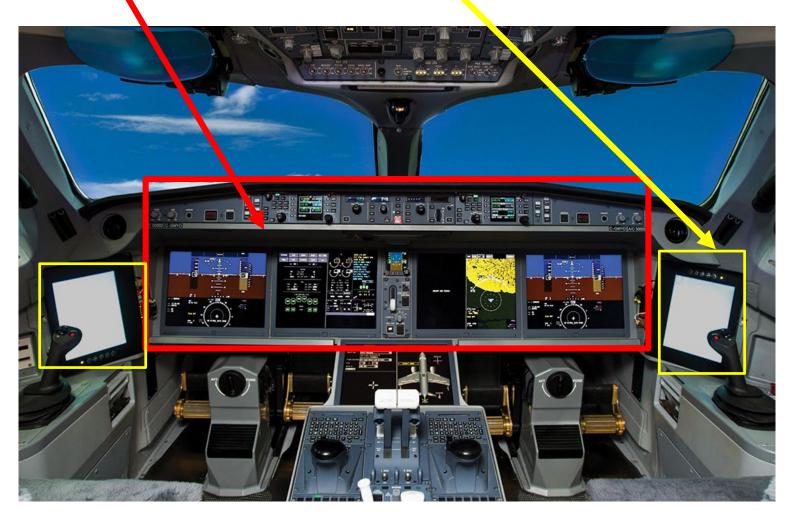


# Weather Solutions for Safety and Efficiency

#### Solution Drivers

- Safety
- Passenger Experience
- Efficiency/Emissions
- Capacity = Delays
- Overall IMPROVED WEATHER DATA DELIVERS BETTER SOLUTIONS FOR ALL DRIVERS versus Either/Or Model

#### Barriers to innovation: Aircraft mod vs EFB

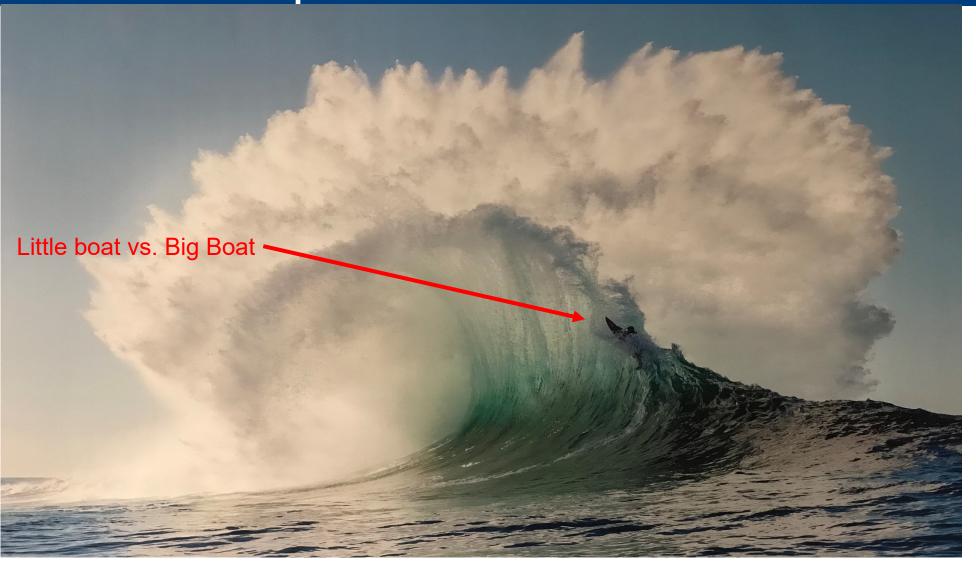


Delta Air Lines Proprietary & Confidential

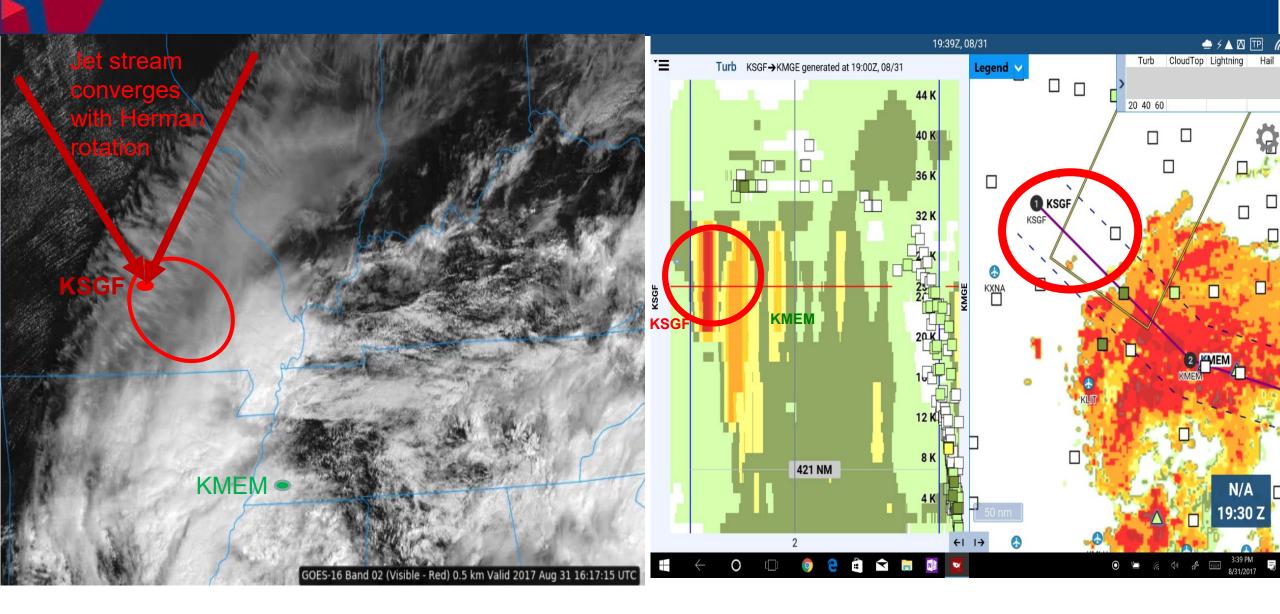
## First Step - Turbulence Reports Data Objectivity vs. Ambiguity

- Antiquated Processes highlighted
  - Wright Brothers PIREPS
  - ATC Chat Room
- Industry status for automated turbulence reports = Uncertainty
  - FAA NCAR Developed Eddy Dissipation Rate (EDR) Open
  - Accelerometer Based Conversion to EDR Proprietary
  - Other solutions Manufactures, Independent vendors
- Ultimate drivers for Delta solution
  - Standardized, open platform for all to use and share

### What is Eddy Dissipation Rate? Atmospheric State similar to Sea State



#### PR input for the underlying model - 15 minute Nowcast



#### Overall approach to weather delivery

- Type of information delivered
- Approach to delivering weather data
- Standardization across weather delivery systems
- A change in philosophy

### Antiquated information - Teletype Weather (1928)

FAUS42 KKCI 171745 FA2W MIAC FA 171745 SYNOPSIS AND VFR CLDS/WX SYNOPSIS VALID UNTIL 181200 CLDS/WX VALID UNTIL 180600...OTLK VALID 180600-181200 NC SC GA FL AND CSTL WTRS E OF 85W. SEE AIRMET SIERRA FOR IFR CONDS AND MTN OBSCN. TS IMPLY SEV OR GTR TURB SEV ICE LLWS AND IFR CONDS. NON MSL HGTS DENOTED BY AGL OR CIG. . SYNOPSIS...CDFNT NRN ME. CDFNT SC CSTL WTRS WWD TO SRN GA. 06Z CDFNT GA CSTL WTRS TO EXTRM SWRN GA. 12Z CDFNT NERN ME-EXTRM NWRN PA. CDFNT NRN FL CSTL WTRS TO FL PNHDL CSTL WTRS.

What is "PY"?

#### Everything you ever wanted to know...



### No standardization - different colors for the same information

