Weather Training for NextGen Dispatchers

Nathan Polderman
Sr. Manager – NOC Training
United Airlines

“There is no mystery or magic involved, only the awareness and involvement of three critical functions that are a part of any safe air operation. A truly effective system is based on training, internal communications, and full operational involvement in the process.”

-- FAA AC00-30B: Atmospheric Turbulence Avoidance

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Out With the OldGen…

- Obsolete FAA training standards based on 1950s-era weather technology
- Emphasis on “decoding” at the expense of understanding
- Reliance on deterministic forecasts and static “snapshot” charts
In with the NextGen…

Understanding and usage of weather information must evolve from 1-D to 4-D

- Maintaining situational awareness
  - Ability to process high-density, rapid-refresh weather information
  - Proactive vs. reactive
- Translating probabilistic output into categorical decision-making
  - Risk-based training philosophy
  - Understanding the limitations, confidence/uncertainty inherent to forecast process
- Interpreting 4-D weather tools
  - Aviation Weather Statement (AWS)
  - Advanced graphical visualizations (e.g. ECFP, CoSPA)
  - What do the colors mean?
United Airlines Dispatch Training

- Enhanced Weather Information Systems (EWINS) Program as a foundation for advanced weather analysis and training
  - FAA approval and oversight
  - Required Initial and Recurrent Dispatcher training
  - Includes qualification to issue Flight Movement Forecasts (FMFs)

- Core Competencies
  - Basic meteorological theory
  - Primary and supplementary weather data sources/tools
  - Forecast process: methodology, limitations and uncertainty
  - Advanced probabilistic forecasting techniques and products
  - Comprehension and application of technical forecast discussions and outlooks
  - Interpretation and application of radar and satellite imagery