

Weather Training for NextGen Dispatchers

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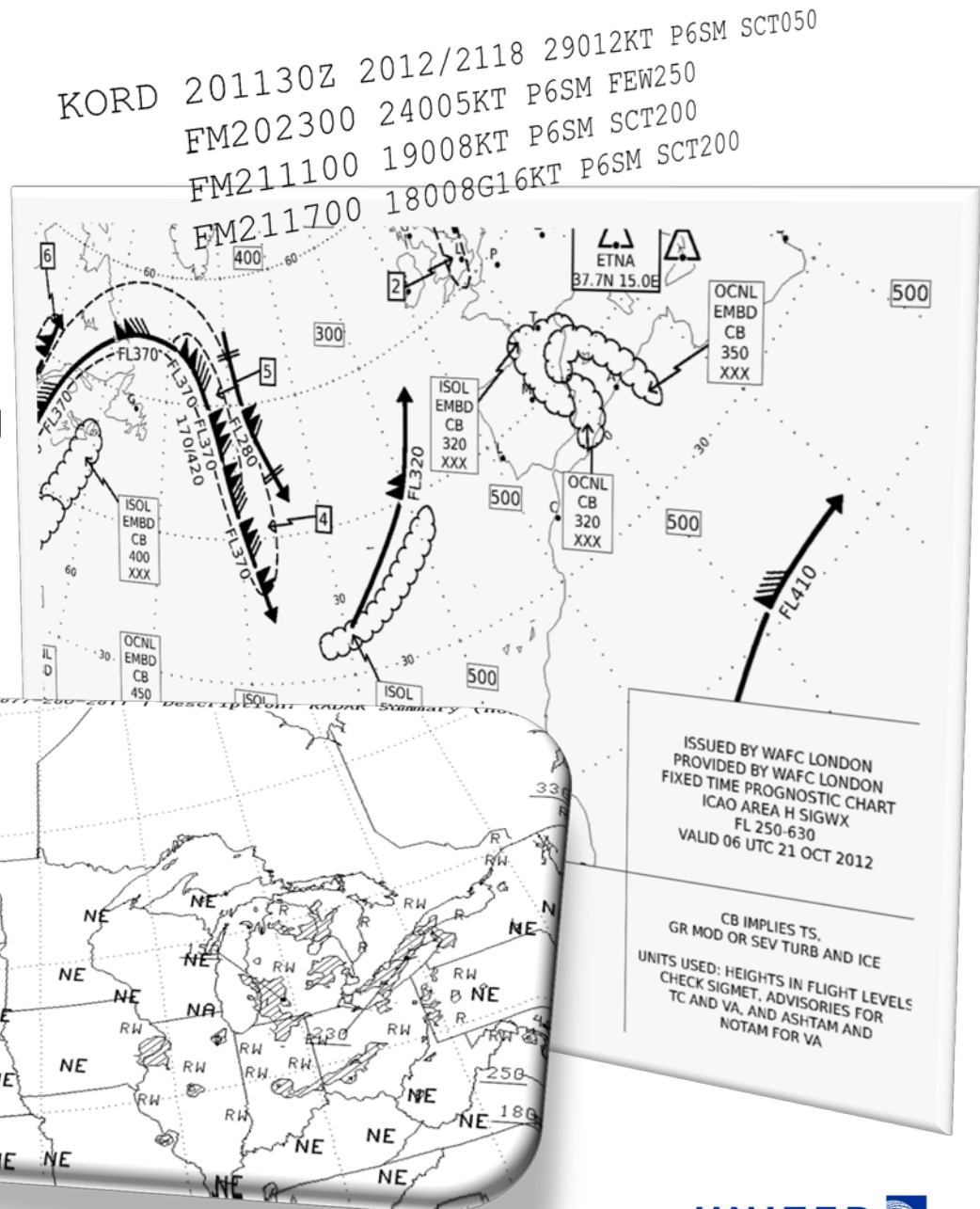
“There is no mystery or magic involved, only the awareness and involvement of three critical functions that are a part of any safe air operation. A truly effective system is based on training, internal communications, and full operational involvement in the process.”

-- FAA AC00-30B: Atmospheric Turbulence Avoidance

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Out With the OldGen...

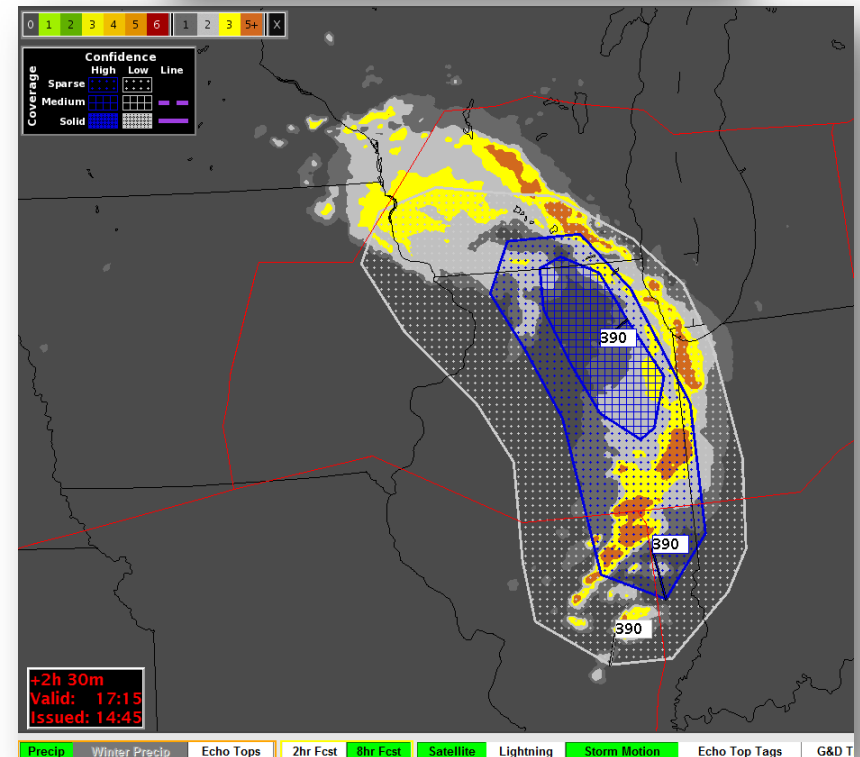
- Obsolete FAA training standards based on 1950s-era weather technology
- Emphasis on “decoding” at the expense of understanding
- Reliance on deterministic forecasts and static “snapshot” charts



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