JETBLUE SYSTEM OPERATIONS

- SOC located at Long Island City, NY
  - Overall coordination of all flight operations
  - Operational planning
  - Disruption recovery

- SOC functions
  - Manager on Duty
  - Flight Dispatch
  - System Control
  - Crew Resources
  - Maintenance Control
  - Air Traffic Coordination
LINKAGE OF WEATHER FORECASTS TO KEY SOC DECISIONMAKING AREAS

National Airspace System (NAS) Operations

Flight Dispatch / Operational Control

Ground Operations Support

CUSTOMERS  CREWMEMBERS  ASSETS
NAS OPERATIONS: WX/ATM INTEGRATION

- All airspace is not created equal
  - Up to 50% of Ground Stop/GDPs are at a NYC airport
  - 1/3 of all US flights are directly affected by NYC/PHL delays
  - Pre-DOT rule, vast majority of 3-hour tarmac delays departing NYC airports
- "One-size-fits-all" products are less effective for NYC ops
COLLABORATIVE DECISION MAKING

- Mission: Evolve the CCFP concept
  - Keep up with the state of forecast science
  - Incorporate new tech
  - Flexible and tailored to NAS constraints: focus resources, maximize efficacy

- Operational Bridging

- Aviation Weather Statement (AWS)

ATTENTION: THE CONTINUOUS LINE OF DEEP CONVECTION STRETCHING SOUTH FROM WESTERN NY STATE WILL WEAKEN DURING THE NEXT HOUR AND DEVELOP BREAKS. THE ROUTES LISTED ABOVE WILL OPEN AT 0000Z.
CDM: OPERATIONAL BRIDGING

- OB Summer 2013 Demo is ongoing
- Collaborative
  - NAS operator meteorologists
  - NWSChat
- NWS/AWC support
- Future considerations
  - FAA/NWS Budgets
  - Active operator collaboration
  - Tech/cultural integration
DISPATCH: SAFETY, LEGALITY, FUEL IN A CHANGING ECONOMIC & REGULATORY ENV.

- Terminal Forecasts
  - Regulatory necessity (TAF)
  - C&V, Winds
  - Anticipate runway condition/performance
- Turbulence/Icing
- Other hazards
  - Volcanic Ash
  - Convective
- Fuel: cost to carry, cost to divert
- EWINS

2012 Financials (Revenue apx $5B)

- Fuel 37%
- Labor 21%
- Other 11%
- Fees/Interest 11%
- Aircraft 10%
- Marketing 4%
- Tax 4%
- Profit 2%
GROUND OPS/INFRASTRUCTURE PLANNING
A CURRENT GAP

- De-icing/anti-icing – holdover/allowance time
  - Currently based on P-type, intensity
  - Often difficult to forecast/plan
- Gap in forecasting beyond 2 hours
- TAF format restricts expressing forecast for low-probability/high impact events (FZRA, ice pellets etc.)
GROUND OPS/INFRASTRUCTURE PLANNING
A CURRENT GAP

- Infrastructure determines ops tolerance for bad weather
  - Navigation equipment
  - Lighting
  - Runways/taxiways
- Natural hazards
  - “Snowtober” 2011
  - Sandy/Nor’Easter 2012
- Budget constraints
FINAL THOUGHTS

- The weather community succeeds when connected to its customers
  - Forecasts built around the needs of the user
  - ...but flexible to evolve with those needs
- Lessons from the ATM world apply outside the field as well
THANK YOU