Industry Perspective of Weather Technology in the Cockpit (WTIC) Program Pilot Industry Survey

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NCAR RESEARCH APPLICATIONS

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Survey Objectives

- Gaps, benefits, and impacts associated with
 - Weather information on electronic flight bags (EFB) in the cockpit. Identify any operational decisions that pilots are expected to make that are difficult due to a lack of cockpit information.
 - On-route metering and received speed instructions/adjustments versus in cockpit adverse weather and wind information that may be inconsistent with the on-route metering and speed instructions.
 - Route availability planning and consistency with cockpit weather information and pilot decision making.
 - Use and availability of Graphical Turbulence Guidance (GTG) and Eddy Dissipation Rate (EDR) for turbulence avoidance.
 - Weather information in the cockpit consistency and as supplemental information along with aircraft weather radar to make decisions.
 - Data linking weather information availability of the weather information when needed.



Survey Objectives (continued)

- Consistency, impact, changes of flight management systems (FMS) use of wind information and its outputs versus time metering.
- Impact of outcomes from take-off and landing performance assessments (TALPA) and information (e.g. runway condition, braking performance, etc.) needed in the cockpit to make more informed takeoff and landings.
- Necessity for terminal and enroute icing information and any operational issues associated with a lack of that information.

Industry Participants

- Air Line Pilots Association (ALPA, approximately 62,000 pilots, 35+ airlines)
- National Business Aviation Association (NBAA)
- Southwest Airlines Pilots Association (SWAPA)
- Allied Pilots Association (APA, American Airlines)
- Independent Pilots Association (IPA, 3000 pilots from UPS)

Status

- Survey development over a one-year period, including input from
 - ALPA
 - NBAA
 - WJHTC
 - WTIC Program Office and other FAA divisions
 - NCAR
- On-line tool used Google Forms
 - Automatic data collection and reporting
 - Offers data, company, and individual security
 - Survey design tailors flow based on previous answers and demographics
- Survey data collection began on 19 May 2022; Final Report due on 30 June 2022

