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### **Day 1 Part 2 Meeting notes:**

- **Weather Aggregation and Correlation:** Gary Pokodner discussed the challenges of weather aggregation and the importance of using crowd sourcing and correlation to improve sensor accuracy. He emphasized the need for sensors to work as a team rather than individually to provide more accurate regional weather data.
  - **Challenges in Aggregation:** Gary highlighted that adding more data points sometimes worsened the results due to inaccuracies at higher resolutions. He noted that pilots had better scores with lower resolution data, indicating a need for careful data aggregation.
  - **Confidence Levels:** Gary pointed out that the highest confidence levels among pilots often corresponded with the worst scores, suggesting a disconnect between confidence and accuracy in weather data interpretation.
  - **Weather Aggregation Origin:** Gary explained that the issues with weather aggregation led to the development of their current approach, which uses crowd sourcing and correlation to improve sensor accuracy and provide regional weather data rather than point-to-point data.
  - **Correlation Example:** Gary provided an example of using sensors at different elevations to correlate humidity levels and ceiling heights, demonstrating how sensors can work together to provide more accurate weather data.
  - **Algorithm Development:** Gary mentioned the development of algorithms to convert correlations into actionable data, which can then be used in weather aggregators to predict conditions in regions without certified sensors.
- **An Inventory of Non-Certified Weather Sources:** Elizabeth Wilson (AI Notes N/A)
- **Testing and Evaluating ASTM F38 Weather Standards:** Chris Zarzar (AI Notes N/A)
- **Visibility Tool Launch:** Ethan Krimins announced the launch of a new visibility tool that allows users to determine visibility using their cell phones. The tool is designed to be accurate, instantaneous, cheap, and mobile, and has been tested in various environments.
  - **Tool Features:** Ethan described the visibility tool as accurate, instantaneous, cheap, and mobile. It can be downloaded on Android and Apple phones and used without Wi-Fi or cellular connectivity after installation.
  - **Testing Environments:** The tool has been tested in various environments, including urban, rural, maritime, desert, and in-flight locations, demonstrating its versatility and reliability in different conditions.
  - **Usage Example:** Ethan provided an example of using the tool in Ohio, showing how it can determine visibility in real-time, even in challenging weather conditions.
  - **Development Background:** The tool was developed over four years with significant investment and collaboration from universities and small businesses, emphasizing its robust development process.

- **Future Enhancements:** Ethan mentioned plans to expand the tool's capabilities to include other meteorological measurements, such as wind and cloud type, to further aid UAS and general aviation operations.
- **FAA Weather Community of Interest (COI) Update:** Starr McGettigan provided an update on the FAA's Weather COI, highlighting the progress made since the last briefing, including the resolution of 40 problem statements and the ongoing efforts to improve processes and collaboration across the agency.
  - **COI Progress:** Starr reported that the COI has resolved or closed 40 out of 68 problem statements since its inception, indicating significant progress in addressing weather-related issues within the FAA.
  - **Process Improvements:** Efforts are ongoing to streamline processes within the COI, including reorganizing the COI structure and improving how problem statements are moved through the agency for resolution.
  - **Collaboration Efforts:** The COI continues to enhance collaboration across various FAA lines of business and staff offices to ensure a unified approach to addressing weather-related challenges in the NAS.
- **NextGen Weather Processor (NWP) and CSS Weather Update:** Doug Murphy provided an update on the NextGen Weather Processor and CSS Weather, discussing the current status of data access, the upcoming External Web Service, and the timeline for operational readiness. He also addressed questions about cybersecurity and the integration of new radar datasets.
  - **Data Access:** Doug explained that data from CSS Weather and NWP is accessible via NESG connection for operational use, with plans to expand to the swim cloud distribution service in the future.
  - **External Web Service:** The upcoming External Web Service (EWS) will replace the current CWSU and COSPA websites, providing a unified platform for accessing weather data. The EWS is expected to be operational by spring, with a test system available soon for early adopters.
  - **Operational Readiness:** Doug outlined the timeline for operational readiness, targeting the next spring for full operational capability. The transition will include a period of overlap with the current systems to ensure a smooth transition.
  - **Cybersecurity Concerns:** Doug addressed questions about cybersecurity, noting that the FAA is exploring options for single sign-on to enhance security and ease of access for users, particularly large organizations like airlines.
  - **Radar Data Integration:** Doug mentioned that while there are no immediate plans to integrate new radar datasets, the FAA is open to considering it in the future, depending on prioritization and funding availability.

#### Follow-up tasks:

- **Weather Needs Portal Clarification:** Clarify the process for F PAW members to submit problem statements through the Weather Needs Portal, ensuring it accommodates individual submissions and group feedback. (Starr)

- **Single Sign-On for EWS:** Explore and provide an update on the feasibility of supporting single sign-on for the External Web Service (EWS) to accommodate large organizations like United Airlines. (Doug)
- **Public Submission Eligibility:** Confirm and communicate that the Weather Needs Portal is open to all public users, including researchers and non-operators. (Starr, Tammy Flowe)
- **Follow-Up on Nathan's IOU:** Provide a detailed response to Nathan Polderman regarding the submission process for F PAW members through the Weather Needs Portal. (Starr)