Minutes of the September 25, 2014 Meeting of the Metro Atlanta Chapter of the AMS/NWA

Members in attendance: 27

Location: Delta Meteorology Department, Atlanta, Georgia

7:00 Meeting begins
7:01 President Keith Stellman welcomes members to meeting, introduces Executive Committee
7:02 Next meeting dates: Likely October 29 and November 13
7:03 President outlines what to expect in the year ahead
   - Mentor Mixer in October w/UGA members
   - Social Science: what to learn from the public with Dr. Laura Myers
7:08 Treasurer’s report: Little over $1,000 in the account; solicits members to pay dues
7:09 Members introduce themselves
7:15pm Tom Fahey Gives Tour, Overview of Delta
   - Briefings are done at 7:30am, 7:30pm as well as 9am; look for any “hot spots” including snowstorms, thunderstorms, tropical cyclones, etc. Covers domestic as well as international (covers the entire world)
   - More focus on the domestic conditions on the 7:30am briefing
   - Delta has 26 meteorologists at its Atlanta location
   - Ground stops: A combination of Center Weather Service Units, the FAA, and the System Command Center, and airliners weigh in and discuss the designations of ground stops, ground delays, etc. The FAA has 51% weight on making the call.
   - Tom explains how Delta reports turbulence, including GLoad (acceleration due to gravity). Turbulence can be reported by pilots, which is subjective; EDR on the 767 planes is used to submit turbulence reports every single minute.
   - How does Delta prepare for en route turbulence and other weather hazards? Turbulence plots are graphed and generated for pilots to use. TPs have levels: Advisory, Alert, Avoid
   - Tools Delta mets use include “Looper”, which is an internal version of AWIPS/Wright-Weather; Vectorworks is a CAD tool that was retooled to be a map drawer; Turbulence Management System; can overlay model data over Turb Mang.
   - How do weather products get distributed throughout Delta? Dispatcher and Pilot-InComand are jointly responsible for preflight planning, delay, and dispatch
   - Turbulence Plots (TPs) are also included in every flight’s pre-flight paperwork
   - Once pilots are in route, if a TP is issued/updated, the dispatcher manually updates
- What’s next? Take advantage of tablets, mobile devices in the cockpit; this would allow graphics to be real-time enroute; develop a system that can integrate global data into one UI, instead of using multiple websites, UI tools; transition meteorologists to human over the loop as models improve (talking turbulence forecasting). Models come up with turbulence forecast, and the human comes in and edits the turbulence areas
- Every flight has a dispatcher; there are 260 dispatchers; each dispatcher could have 10 to 12 flights (international) to 20 to 30 (domestic)
- Process Challenges: Rapidly changing conditions and changing plans (Current: TP are pushed for notification. Future: Alert based on exceeding thresholds along flight route); meteorologists editing 4-D Grid models
- Currently able to locate large areas favorable for turbulence, but difficult to resolve details (exact locations, timing, intensity). Need forecast model improvements. Applying gridded based values to impact on different size aircraft

9:00 Presentation ends, meeting adjourns