**David Norris**Personally, I thought there was considerable value in the pilot and controller perspectives on putting the weather services products to use in the field. Perhaps there could be some perspective given by those in training for both ATC, pilots and Flight Service about how the various weather service products and the tutorials could be or are being utilized in training products and courses and what would be needed to further encourage their use — e.g., YouTube tutorials on the ADDS website that are widely deployable across operating systems (Mac, PC etc) and don't take up a lot of bandwidth to incorporate, etc.

I would respectfully recommend that there be a no solicitation requirement. One of the speakers totally abandoned his published topic and – to me – seemed to give more of a sales pitch about the commercial products he offered than actually give any value added info re the overall topic.

Those are the things I could encourage off the top of my head.

## W. Kent Tobiska Topic: Space Weather Effects on Aviation

**Objective:** Inform pilots, crew, agency, and owner aviation stakeholders on which space weather effects are relevant to aviation, what is current state of art for mitigation/management of effects, and future progress anticipated.

**Possible Format:** Discussion Panel with session chair overview and 5 invited speakers each having a 15-minute presentation over a 2-hour time frame on Nov 19.

## Suggested speakers/topic areas:

- 1) Synopsis Overview of Space Weather Effects (session chair, W. Kent Tobiska, SET)
- 2) Radiation environment above FL 260 from galactic cosmic rays and solar proton events (Brad Gersey, PVAMU)
- 3) HF communication disruptions from disturbed ionosphere conditions (Bob Schunk, USU?)
- 4) WAAS navigation disruptions from disturbed ionosphere conditions (Leo Eldredge, FAA?)
- 5) Space weather effects management and mitigation steps by pilots, ATC, owners, and agencies (Mike Holland, Captain, AA?)
- 6) Ongoing and upcoming ICAO policy initiatives (Terry Onsager, NOAA SWPC?)

Planning sub-group: W. Kent Tobiska, FPAW rep, one more person from SpWx community

Ralph Petragnani One issue I would like to see addressed is the FAA's continuing, unjustified resistance to allowing FAA Certified AWOS systems that are not certified as AWOS III or higher. There are many of these less than AWOS III FAA certified AWOS installed throughout the country that could provide additional weather reporting. This will assist in providing additional weather reporting for flight operation an enhance flight safety.

Jim Block Title: Tactical Turbulence avoidance with in-cockpit "Nowcast" product

With the new EDR Turbulence Nowcast product from Schneider Electric, the aviation industry will now have access to tactical turbulence data in the cockpit that will allow them to make better short term turbulence avoidance decisions. This product will provide high quality and accurate EDR Turbulence information, updated every 15 minutes, with a 1 hour outlook of turbulence on an global scale. This will help bridge the gap between the current pre-flight forecasts available today and the need for more real-time information in-flight.

**Stephen Darr** As usual, my interests lie in the area of downlinked weather parameters and their use in air traffic management and weather forecasting. I also think it would be interesting to hear from the NWS on their upgraded computing environment and what they think it will do for their modeling, e.g. speed it up, make it more detailed, more accurate, etc.

## Matt Freer Topic for Discussion

Icing forecasts by the National Weather Service have no in situ measurements of cloud properties, in particular those of super-cooled liquid water drops, to validate predictions and provide real time updates into the forecasting system.

Appendix O will require new measurement capabilities of supercooled drizzle drops on some types of new aircraft that fall in a particular weight category. The implementation of this regulation is an opportunity to develop a method for creating a large database of cloud information that would refine icing forecasts.

## Possible panel discussion

"What are the advantages of collecting data from future, cloud measurements on commercial aircraft and what are the challenges and costs for implementing an information collection system?"