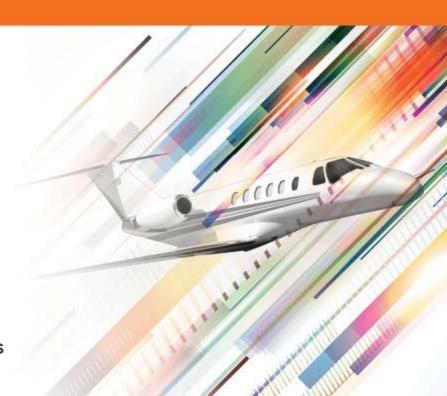


Weather Content Evolution

Thursday 12 Oct | 8:00 - 9:45

PRESENTED BY:

Matt Taylor, The Weather Company and IBM Business





Three Points to Consider

- Increased connectivity; more content in the pilot decision cycle
 - Increased content causes increased workload and training
 - Industry will need to manage the UX and workload implications
- Autonomous use cases will not need visualization
 - Weather content will need machine-to-machine usability
 - Will this spur GA to eventually be managed like UAS
- Weather content development can not be isolated from its use
 - Content has to be useful in analytical and machine-to-machine cases
 - Decision makers will need to be transparent with their business constraints



How the weather content gets to the Pilot

Planning

- Weather Channel / Local TV Station
- Mobile App
- Webpage
- Flight Services
- Trip Support

Preflight

- Mobile App
- Webpage
- Flight Services
- Trip Support
- Visual

Inflight

- Weather radar
- ATC / ATIS
- Inflight connectivity
- Sirius XM / FIS-B
- Cellular
- Visual
- Is there a way to drive consistency between sources and representations?
 - Minimum performance standard
- How can weather avoidance behaviors be driven without weather content?
- How can industry balance the content demand against the evolution of decision making?



How the weather content gets to UAS

- Ground-based datalink; i.e. UTM
 - Are routing controls or weather content sent?
- More important to ask, how do UASs networks achieve an ROI
 - Continuously sharing their position and environmental content with UTM and other UASs to optimize the network
 - Sense and avoid non-position reporting airspace users; i.e. GA
- Spurs the questions:
 - Will all airspace users be continuous position reporters?
 - Will all airspace be dynamically controlled to prevent weather incursions?



What and Why for Probabilistic Weather Content

NYC Snow Forecast: Average does not result in a consistent good decision

Snow Accumulation Probability Distribution

