Thoughts on ATO Weather Training in the Context of NextGen

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Issues

• To what extent do TFM, ATC, TMC Supervisors, etc., receive satisfactory initial and/or OJT weather training?
  – Initial assessment has been informal, *ad hoc*, anecdotal, primarily with retired ATO line personnel
  – TMC training, including weather training, appears to be the most organized training in the FAA today (at ATCSCC) It still has gaps. It not consistent in the NAS.
  – Weather training has many gaps, except certain but important efforts by TMC Supervisors set up OJT efforts to overcome these deficiencies
Issues (continued)

• Full AWA objective assessment for FAA Aviation Weather Division did not occur due to lack of funding
• Without a broad assessment of current weather training practices, recommendations for NextGen era training requirements will limited by no substantive gap analysis
• Critical challenge emerging is preparing the controller workforce for coming NextGen Decision Support Tools and concepts
Evolution of NextGen Training
Requirements for DSTs

• DSTs are/will become increasingly sophisticated

• Most of these capabilities involve weather in ways that will require both operational (knobology) and substance training in far greater depth than in today’s system

• A major objective is to forge how the AT workforce evolve in their weather training to accommodate the sophistication of Decision Support Tools?
Detailed Weather Requirements Will Require **Major** Weather Training

**Fundamental Use Requirements**
- Expressions of FCST uncertainty
- Temporal, Scale resolution
- Update rate
- Accuracy
- Consistency
- Probability
- Reliability

**Training for Systems Evolution**
- CIWS/CoSPA (NWP?)
- Route Availability Planning
- Collaborative Airspace Congestion Resolution
- Traffic Management Advisor
- Traffic Based Flow Management
- Conflict Probe – URET/ERAM
- Dual Pol NEXRAD/MRMS
- Multi-mission Phased Array radar
- Convective Weather Avoidance Model