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, <u>ad hoc</u>, 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