Friends / Partners in Aviation Weather

October 23, 2002 Process Improvements Paul Fiduccia, Facilitator

Changes From 2001 FPAW

- Format Changes
 - Lead with Coordinated User Issues presentation
 - Add Product Needs and Introduction
 - *(Combined: Issues Provider Views User Responses)
 - More time for discussion (30&30 >> 20&40)
 - Delete Modeling and Assimilation
- Issues and Action Items Changes
 - Important, Broad-Based, High-Level, Strategic Issues
 - Action Items compiled during panels; Adopted with Conclusions and Recommendations; Yearly report-out

Action Item Process

- Compile requested Action Items in writing during panel discussions: What-Who-When
- Submit to Executive Committee:
 - Segment 1 4 items at end of Segment 4
 - Segment 5 6 items at end of Segment 6
- Development of Action Items in Segment 7; Part of Conclusions and Recommendations

FPAW 2001 Action Items Resolution

- Status: Substantially Completed
 - 17 Total action items
 - 11 Completed
 - 6 Incomplete, delayed, "soon"
- Final Resolution Process
 - Review Action Items 10/4/02 Memo at Break
 - Raise inadequately resolved issues during relevant provider panel presentation

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October 23, 2002 Coordinated User Issues Paul Fiduccia, SAMA

Criteria For Coordinated User Issues

- Important A high priority user need of many members of an association
- Broad-based important to multiple associations and segments of civil aviation
- High-level An issue appropriate for senior FAA, NWS, and NASA managers
- Strategic Typically 1 year for completion

FPAW 2002 User Panel

- <u>Associations</u>
 - ADF
 - AOPA; AOPA/ASF
 - ALPA
 - ATA
 - NBAA
 - SAMA
- <u>Unions</u>
 - NAATS
 - NATCA

- <u>Agencies</u>
 - FAA (FSSs)
 - NASA (TFM)
- <u>Airlines</u>
 - American
 - Delta
 - Northwest
 - Southwest
 - United

Summary of Coordinated User Issues

- User-Driven Requirements Process
- Specific Areas For Product Improvements
- Pilot Operational Use of New Graphics
- PIREPS Improvements
- New Weather Sensors
- NWS Combined Weather Products
- Weather Forecast Improvements for RNP-RNAV
- Principles For Use Of HIFL/HIML Products
- New Graphics For FSS Briefers

User-Driven Requirements Process

- Users Define "What" Product Requirements Are
- Consult Product Developers For "How" Options
- Systems Engineering Approach
- Coordinated Development of Product Suites
- User Involvement in AWTT, FPAW Inadequate
- Recommendations, Technical Input, ConUses
- Incorporate User Needs In OEP
- Create Group of FAA, NWS, Airlines and GA (Panel 2)

Specific Product Improvements

- International Weather
- More Airport-Specific TAFs
- Wind-Shear Detection Lower-Tier Airports
- NOTAM Support
- Winter Weather Information
- Priority Convection Improvements
- Support Low TRL TFM Products
- Deploy NEXRAD-Based Products

Pilot Operational Use of New Graphics

- Programs incomplete until pilot operational use
- Complete the Internet Policy AC -- Soon
- Agreed criteria for product approval, including appropriate comparisons to existing products
- CIP/FIP: Do the work, address all the issues necessary for pilot operational use approval
- Agreed criteria for operational approvals
- Clarify that new graphics are included in 91.103 (Panels 2 and 6)

PIREP Improvements

- Dispatchers: GUI Direct PIREP WMSCR input
- Pilots: "Sky Spotter" FSS Support
- Controllers: Comply with Handbook Sec.2-6-3
- Develop Workable Solicited PIREP System
- Future controller automation enhancement to simplify PIREP input and dissemination (Panel 3)

New Sensors

- GOES-12 Schedule: Plan for pre-2012
- Include Volcanic Ash Sensor in GOES-12
- R&D forward-looking turbulence sensor
- Accelerate TAMDAR automatic humidity and icing sensor and downlink

Endorsement of NWS Combined Weather Products

- Endorse: Proposed GFAs
- Endorse: discontinue TWEBs, most 9+ hr TAFs
- Enable increased TAFs to 3900 airports
- Endorse: Auto-generated structured text from GFAs in GAMET-like format
- Enhance GFAs with flight path tool for vertical cross section
 - (Panel 4)

Forecasts – Obs Needed For RNP-RNAV and WAAS

- Determine what is needed
- Forecast and Observation attributes
- Dissemination methods
- Additional locations

Human-In-(What)-Loop

- Deploy both Human-in-forecast-loop (HIFL) and human-in-monitoring-loop (HIML) graphics
- Criteria for selecting primary product type
 - Short-term fcst., high update rate: HIML (humans can't produce fcsts. Quickly enough)
 - Medium-term fcst., low update rate: HIFL (humans have more skill), HIML Supplementary
 - Long-term fcst.: HIML (models have more skill)
- Sufficient funding for HIML and HIFL products

(Panels 4 and 6)

Graphics for FSS Briefers

- Implement Graphics In Near Term (Pre-OASIS (2010) unless shorter schedule)
 - Use NOTAM Short Term Solution?
 - Use SUA/ISE?
 - ADDS Access? Fund the ADDS re-test.
- New weather graphics on DUAT

(Panel 5)

Conclusion

- Eight Important, Broad-Based, High-Level, Strategic User Issues
- Specific User Proposals To Resolve Them
- Relevant Panel to Respond
- Revisit at end of meeting for compilation of Action Items