

**United States  
Federal Aviation Administration  
(FAA)  
New Flight Plan Format  
Implementation Status**

**Follow-up Meeting/Workshop on the  
Implementation of the New ICAO Flight Plan  
Format for NAM/CAR Regions  
(Mexico City, Mexico, 26 to 28 March 2012)**

# OUTLINE

- a) State's General Information***
- b) Upgrades to Automated Systems***
- c) Tests***
- d) Publications***
- e) Training***
- f) Safety Assessments***
- g) Contingency Measures***
- h) Switchover Plan)***
- i) Letter of Agreement and other operational issues***

# *State's General Information*

[Flight Information region (s) (FIRs)/ ATS Area/ ATS Units]

1. Has your State/ANSP developed a national action plan for the New FPL 2012 and conduct the implementation actions accordingly? **Yes**
2. Have your updates been included in the ICAO CAR REGION SYSTEM IMPACT SUMMARY TABLE? **Yes- no updates needed**
3. ATS Units/User/Airlines with whom the major exchange of FPL messages is carried out **See next slides**
4. Main concerns regarding the implementation: **See next slides**
5. Will your Administration be ready for this implementation by 15 November, 2012? **Yes.**

# ***FAA Key Interfaces***

- ANSPs
  - Mexico
  - Cuba
  - Canada
  - Japan
  - Australia
  - New Zealand
  - Fiji
  - Tahiti
  - Portugal
- Airlines
  - SWA, DAL, ASQ, UAL, AAL, SKW, EGF, AWE, FLG, JBU (top 10 cover 30% of flights)
- Filing Services
  - e.g. FAA services, Flightplan.com, ARINC, SABRE, Jeppesen, Universal Weather, Jeppesen, Honeywell

# *Main Concerns*

- Operational use
  - Complexity of Equipment/capability; use in ATC operations
  - Consistency of implementations- test, test, test
- Schedule
  - ERAM deployment underway at the same time as 2012 implementation

# Upgrades to Automated Systems

Questions	Answer	Remarks
1. Updates to FPL interfaces in AFTN terminals, completed?	<i>No- ongoing</i>	AISR Software is developed, currently in testing.
2. ATC System updated (FDPS, FPL terminals, etc)?	<i>No- ongoing</i>	See FAA plan (IP-01 attachment)
3. If system updates are ongoing, what is its current stage of implementation? Please indicate target date to complete	<i>Varies by system</i>	See FAA plan (IP-01 attachment)
4. Has the safety assessment been made? If no, please indicate target date	<i>Yes</i>	An overall safety assessment is complete. Separate system-specific assessments still to be done.
5. Is your Administration using a front end converter? If so, please indicate target date of implementation?	<i>No</i>	
6. Main concerns regarding these updates?	<i>See Previous Slide</i>	

# ***Planned FAA En Route Facility Status On November 15***

## **HOST**

Indianapolis  
New York  
Kansas City  
Boston<sup>1</sup>  
Washington  
Cleveland<sup>1</sup>  
Memphis  
Fort Worth  
Atlanta  
Jacksonville  
Miami<sup>1</sup>

## **ERAM**

Salt Lake City<sup>1</sup>  
Seattle<sup>1</sup>  
Denver  
Albuquerque<sup>1</sup>  
Minneapolis<sup>1</sup>  
Chicago<sup>2</sup>  
Oakland<sup>2</sup>  
Los Angeles<sup>1,2</sup>  
Houston<sup>1</sup>

<sup>1</sup> Automated interface to an adjacent ANSP

<sup>2</sup> Scheduled to transition from Host to ERAM -4<sup>th</sup> Quarter 2012

# ***Summary of Safety Risk Management Panel Results***

- Inaccurate Flight Data
  - Air Traffic Controller could be presented with inaccurate information about the flight
    - Concerned with data that affects separation decisions
    - Concerned with data that affects PBN route assignment
  - Potential causes:
    - Inaccurate equipment translation
    - Amendments lost during transition mode change
    - (FAA-specific) Use of both PBN/ and NAV/ for RNAV-1
    - (FAA-specific) Activate wrong day flight if DOF/ was used
    - Use of NONRVSM in STS/ and W in Field 10a
    - Inadequate error checking, e.g. consistency of 10a and PBN/
  - Recommendations:
    - Reject any flight plan with STS/NONRVSM and W in Field 10a
    - Pay attention to translation results in testing; check against procedures
    - If 120 hour filing not supported, reject for DOF/ more than a day in advance
    - Review PBN route assignment procedures; address in controller training
    - Review loss of PBN procedures; address in controller training

# ***Summary of Safety Risk Management Panel Results***

- Unavailability of Flight Data
  - Necessary flight plans could be lost
  - Potential Causes:
    - Improper transition configuration could cause rejects (i.e. neighbor facility transition mode is set incorrectly)
    - Differences in validation checks between ANSPs could cause rejects
  - Recommendations:
    - Ensure error cases are tested in ANSP-ANSP testing– both sides of the interface should generate cases
    - Create a detailed transition procedure that addresses coordination to determine proper configuration for neighboring facilities

# ***Summary of Safety Risk Management Panel Results***

- Mis-interpretation of Flight Data
  - Especially during transition, controller may mis-interpret flight plan contents due to mix-up regarding version
    - RNP-10 and RNP-4 are filed differently
    - RNAV-1 using PBN/ versus NAV/
  - Fortunately, all credible cases lead to under-estimating aircraft capability- not an unsafe condition, just not efficient
- Recommendations
  - Include transition mode behavior in training
  - Consider asking filers to include NAV/RNP10, RNP4 during transition even when filing NEW

# ***Summary of Safety Risk Management Panel Results***

- FAA-specific implementation risks
  - PBN/ will be maintained as the “as-filed” capability except for RNP-4, RNP-10
  - Limited ability to change NEW content in legacy (Host) en route system (being replaced)
- Causes
  - FAA operations do not deal with any PBN/ capabilities outside of RNAV-1, RNP-10, RNP-4
  - NAV/ will still be the primary means of determining RNAV-1 capability until we can transition to use of PBN/ information
  - Legacy system being replaced will accept, pass NEW format but controller GUI was not reworked (can change fields from the command line)
  - Change of equipment/capability is a rare event, we are experiencing issues even today with pilots and controllers knowing what to do in the event of an equipment failure (what is the effect on PBN/ on loss of a piece of equipment? e.g. autopilot; one altimeter; GNSS?)

# TESTS

Questions	Answer	Remarks
1. Has your Administration took action to upgrade the FPL processing system(s) in coordination with the corresponding supplier	<i>Yes</i>	See FAA Plan (in IP-01)
2. For testing, has your Administration developed a Test Guidance/ protocol?	<i>Yes</i>	See separate document
3. Have internal testings (FAT/SAT) being carried out and completed?	<i>Partially</i>	See FAA Plan (in IP-01)
4. When your administration will be able to conduct tests with other ANSPs?	<i>July 2012 (with limited tests earlier)</i>	See FAA Plan (in IP-01) and following pages.
5. 3. When will your administration be able to start tests with airlines/operators?	<i>Accepting e-mail plans now.</i>	See FAA Plan (in IP-01) and following pages
6. The regional strategy established that the NEW FPL format should be processed starting 1 July 2012, together with the CURRENT format, will your Administration be able to do so?	<i>Yes, but not by July 1<sup>st</sup></i>	Expect to accept both formats starting in September; see FAA plan for further details
7. Will your Administration participate in the regional testing periods? Provide focal Point	<i>If Possible, Yes. Will discuss during meeting.</i>	Test periods: 1) 17/04/12-19/04/12 2) 15/05/12-17/05/12 3) 12/06/12-14/06/12

# ***FAA En Route/ANSP Testing Schedules***

<b><u>Center</u></b>	<b><u>System</u></b>	<b><u>ANSP</u></b>	<b><u>Date</u></b>
FAA Testbed	ERAM	Mexico	April 25/26 (Tentative)
Los Angeles	ERAM	Mexico	Late June/Early July
FAA Testbed	ERAM	Canada	Late June/Early July
Miami	ERAM	Cuba	July (Tentative)
FAA Testbed	HOST	Mexico	Late June/Early July
FAA Testbed	HOST	Cuba	Late June/Early July
FAA Testbed	HOST	Canada	Late June/Early July

# ***FAA Oceanic/ANSP Testing Schedules***

<b><u>Center</u></b>	<b><u>System</u></b>	<b><u>ANSP</u></b>	<b><u>Date</u></b>
FAA Testbed	ATOP	Canada (CZQX)	March 8,2012
FAA Testbed	ATOP	New Zealand	April 2012 (Tentative)
FAA Testbed	ATOP	All	TBD

# ***FAA Flight Plan Filer Testing Schedules***

<b><u>Center</u></b>	<b><u>System</u></b>	<b><u>Filers</u></b>	<b><u>Date</u></b>
FAA Testbed	ATOP	CSC Duats	Dec 2011
FAA Testbed	ATOP	TBD	April 2012
FAA Testbed	ERAM	TBD	May 14, 2012
FAA Testbed	HOST	TBD	June 2012
FAA ZHN	OFDPS	TBD	June 2012
FAA ZAN	ATOP	TBD	???

# ***Publications***

<b>Questions</b>	<b>Answer</b>	<b>Remarks</b>
1. Has your administration published an AIC for the NFPL? If so, please indicate date	<i>No</i>	So far, notification has been through web site. Planning NOTAM and other notices by June.
2. Has your administration published regulations for the implementation for the NFPL?	<i>No</i>	Publication changes are in process. See FAA plan for description of changes.
3. Has your administration published procedures for filing, coordination and information changes (FL, ETD, route, speed, etc.) regarding the FPL?	<i>Yes</i>	Draft guidance is published on the web site, open for comment.
4. What type of publications on transition actions, trials and other information (posters, videos, folders, etc.) has been scheduled by your Administration to be issued regarding the NFPL?	<i>See Next Slide</i>	See next slide
5. Identified any main concern to develop and issue these publications.	<i>[List]</i>	Provide details

# Publications Planned

- Web site- provides amendment, briefings, FAA guidance
- FAA ICAO Interface Reference Guide- describes details of expected message content
- NOTAM- (our version of an AIC) provides notice of requirement to file the new format by November
- Test registration form- allows filers to sign up for testing
- Quick Reference Guide- summarizes the new data and publicizes the coming change

# Contingency Measures

Questions	Answer	Remarks
1. What type of subjects for local/national contingency measures have been defined in the NFPL implementation?	<i>1. Readiness of Filers 2. Readiness of ANSPs 3. Readiness of FAA</i>	See Next Slides
2. Has your Administration conducted coordination with the adjacent FIR or ATS Units for contingency purposes?	<i>No</i>	Need to discuss this.
3. What type of specific issues you suggest should be included in a regional contingency plan?	<i>How to decide when to exit transition mode</i>	Need to discuss this.

# *Contingency Measures*

- Readiness of filers, other ANSPs
  - Will monitor test results, filing during transition, filing at transition to NEW
  - Prepared to remain in transition mode as necessary
- Readiness of other ANSPs
  - Will coordinate with neighbors and task forces
  - Continue to assess readiness
  - Prepared to remain in transition mode as necessary
- Readiness of FAA
  - Updated legacy Host system for sites not on ERAM
  - Monitoring ERAM deployment of build with 2012 FPL- must ensure it is successfully deployed to sites planning to be on ERAM
    - Sites at IOC but not ORD can fall back to the legacy system
    - Sites that have declared ORD must be on the 2012 FPL software build

# Switchover Plan

Questions	Answer	Remarks
<p>1. ICAO proposes the switchover to the implementation of the NFPL format at 6 UTC of 15 November 2012, has your Administration define any time different from this? If so, please specify</p>	<p><i>Yes- Slightly different</i></p>	<p>Would like to ask all users to begin filing NEW only on 12 November.</p>
<p>2. What local/national switchover plan has been defined for the implementation of the NFPL format?</p>	<p><i>Enter transition mode when <u>all</u> centers ready to accept NFPL.</i></p> <p><i>Exit transition mode to NFPL only mode when no PRESENT flight plans are being received.</i></p>	<p>See FAA Plan attached to IP-01.</p>
<p>3. Has your Administration conducted coordination with the adjacent FIR or ATS Units for switchover to the NFPL format?</p>	<p><i>Yes</i></p>	<p>Preliminary discussions have been held, will have more detailed discussions as we move closer</p>

# ***Letter of Agreement and other operational issues***

<b>Questions</b>	<b>Answer</b>	<b>Remarks</b>
1. Has your Administration updated the applicable Letters of Agreement (LOAs) for the NFPL format implementation?	<i>No</i>	Review of LOAs indicates no update necessary.
2. What are the planning activities that your administration has scheduled for updating the LOAs and other operational agreements for the NFPL format implementation?	<i>Not applicable</i>	
3. List any pending operational agreement that should be established for the NFPL format implementation, indicate target date to accomplish each of them.	<i>Not aware of any</i>	

# Training

Questions	Answer	Remarks
1. List the main target activities and dates regarding your training plan?	<p><i>Briefings to all operational personnel starting April 15, 2012</i></p> <p><i>In-depth training in field facilities starting July 1, 2012</i></p>	Attach Training Plan
2. Did the training plan include all parties involved? (AIS/ARO, ATCO, Technician, Users/operators, others)	<p><i>AIS/ARO: Y/N</i></p> <p><i>ATCO: Y/N</i></p> <p><i>Technicians: Y/N</i></p> <p><i>Users/operators: Y/N</i></p> <p><i>Others: [specify]</i></p>	FAA training includes Flight Services specialists Flight Data Repair Air Traffic Controllers and Supervisors
3. Has the training plan considered the contingency measures to be applied?	<p><i>Yes</i></p>	Striving to make contingency plan transparent as possible to controllers