Session 13: Airspace Management: The New Frontier of Airport Noise

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Something Completely Different

• NextGen? Metroplex? PBN? ATO?

• Why Should I Care?

• What Is All of This?
Why Care?

- New Noise Issues
- Airlines WANT NextGen Procedures
- They can benefit airports
- Airports Must Deal With Different Part of FAA With Different Priorities
What is NextGen?

- Modernization of Airspace Management
  - Communications – voice and data
  - Weather reporting
  - Air traffic control tower management
  - More direct navigation
- Congress is deeply interested
Not the Same FAA

- Air Traffic Organization (ATO)
- ATO’s Goals
  - Improve Fuel Efficiency
  - Reduce Emissions
  - Simplify ATC Workload
- Not Used to Dealing with Airports or Communities
Regulation of flights

- Preflight
- Takeoff
- Departure
- Enroute
- Descent
- Approach
- Landing

- Airport Traffic Control Tower (ATCT)
- Terminal Radar Approach Control (TRACON) or Terminal Airspace
- Air Route Traffic Control Center (ARTCC) Enroute Airspace
- Terminal Radar Approach Control (TRACON) or Terminal Airspace
- Airport Traffic Control Tower (ATCT)
Descent Procedures

Performance based navigation

Source: http://www.faa.gov/nextgen/update/progress_and_plans/pbn/
Effects of PBN – Arrival corridors
RNAV Departure

LAX LADYJ SID
Replaces LAX CASTA SID
Departure RNAV Example

TWSND WP
(At or above 5,000" MSL and at or below 230 KTS)

New WP1
(At or above 4,000" MSL)
RNAV Arrival

SAN RNAV RNP RWY 27
With Historical Track Data

Google Earth
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Implementation: Metroplex

• Redesign of Airspace in Congested Areas
  – Arrival Procedures (STARs)
  – Departure Procedures (SIDS)
  – En Route Procedures
Metroplex implementation
Impacts of New PBN Routes

- New/Changed Routes
- More Concentrated Tracks
- New Altitudes
- New Procedures
PBN in Practice

Only 5% of traffic intercepts ZILUB

Most traffic deviates after the first waypoint and before OXYGN
Legal Provisions

- FAA Modernization and Reform Act of 2012
  - NextGen procedures
    - CATEX1
    - CATEX2
    - Overlays
- FAA Order 7100.41 (PBN implementation)
- FAA Order 7100.2J (airspace procedures)
- FAA Order 1050.1E (env. Review)
NEPA Review of PBN Procedures

• NEPA Provides Very Limited Role for Airports or Public

• FAA Presumes **NO** Impact for New Procedures per FAA Modernization Act of 2012 – Use a CatEx

• Metroplexes are using Environmental Assessments
NEPA Continued

• Noise Level Triggers
  – Presume **NO IMPACT** for Changes OVER 3,000’ AGL
  – Below 3,000’ AGL
    • **For DNL 65 dB and higher: +1.5 dB**
    • For DNL 60 dB to <65 dB: +3 dB
    • For DNL 45 dB to <60 dB: +5 dB
Airports Role in Metroplex

- See Order 7100,41
- Formal role, but uncertain implementation
- NEPA Process
- Community Involvement Manual
- Consulting
FAA/Airport Engagement

- ATO typically reaches out to airport
  - Inconsistent and differs regionally
- TAKE ADVANTAGE AND ENGAGE
- May influence decisions
- Will avoid surprises
What FAA Sees
What the Airport Sees
FAA/Airport Engagement

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Metroplex Litigation

- Phoenix
- Boston
- Northern California
- Southern California
Metroplex Litigation Issues

• Challenge FAA Expertise and Authority
• When to File Suit under 40 USC 46110
  – What is an “Order”?  
  – When is Implementation Complete?
• What Does NEPA Require
• NHPA
• Section 4(f)
Questions/Discussion