

FAR Part 150 Noise
Compatibility Study Update

**PUBLIC
MEETING**

FEBRUARY 29, 2012



Ted Stevens
Anchorage
International Airport

Agenda.

- ▶ Introduction
 - Study Team
- ▶ Brief Explanation of FAR Part 150 and the Study
 - What is a Part 150 Study
 - Why Update Study
 - Relationship to FAR Part 161
 - Scopes of Services Summary
- ▶ Noise Metrics – DNL, SEL, Ldn, Time Above, etc.
- ▶ Potential Noise Monitoring Sites
- ▶ Questions/Comments



Introduction

- ▶ **Barnard Dunkelberg & Company**
TULSA, OKLAHOMA AND DENVER, COLORADO
- ▶ **Landrum & Brown**
LAGUNA NIGUEL, CALIFORNIA
- ▶ **Synergy Consultants**
SEATTLE, WASHINGTON
- ▶ **AECOM**
ANCHORAGE, ALASKA
- ▶ **CRW Engineering Group**
ANCHORAGE, ALASKA
- ▶ **Weber Air Cargo**
OVERLAND PARK, KANSAS



Who is Involved?

- ▶ Airport Management
- ▶ FAA
- ▶ Aircraft Operators
- ▶ Airlines
- ▶ Study Input Committee
- ▶ Airport Tenants
- ▶ Surrounding Neighborhoods
- ▶ Surrounding Jurisdictions
- ▶ Airport Users
- ▶ Other Interested Parties
- ▶ Consultant Team



Study Details.

- ▶ **Voluntary noise exposure and land use compatibility study.**
- ▶ **Identify existing noise exposure, identify potential future noise exposure, evaluate various alternatives to reduce the number of people affected by noise, and make recommendations as to viable noise abatement/mitigation measures to reduce the number of people affected by noise.**
- ▶ **It has a five-year planning horizon, generally.**



Study Details. *CONTINUED*

- ▶ The Study identifies and evaluates two components: *Aircraft noise and land use, both existing and future.*
- ▶ The Study consists of two distinct, but complementary elements: *Noise Exposure Maps and a Noise Compatibility Program.*
- ▶ The Noise Exposure Maps (NEMs) are accepted by the Federal Aviation Administration.



Study Details. *CONTINUED*

- ▶ **The Noise Compatibility Program (NCP) is either approved or disapproved by the FAA. Approved measures contained in the Noise Compatibility Program are eligible for Federal funding.**



Background.

- ▶ **Background on Previous Part 150 Study**
 - **NEMs Accepted in 2000**
 - **Noise Compatibility Program (NCP) approved in 2000**
 - **NCP allowed ANC to receive federal funding to implement a Residential Sound Insulation Program and other measures**
 - **ANC conducted a Ground Noise Study to respond to comments**



Airport Sponsor Constraints/Opportunities.

- ▶ **The Federal Government, through the Federal Aviation Administration, has limited the Sponsor's ability to implement noise controls.**
 - **Can't control of aircraft in flight**
 - **Limited control of funding for noise mitigation funds**
 - **Can't control over noise emissions at "the source"**
 - **Significantly limits airport Sponsor's implementation of noise restrictions**



Airport Sponsor Constraints/Opportunities. *CONTINUED*

- ▶ Airport Sponsor must provide access to all airport users and cannot discriminate against any user, but can pass reasonable noise rules/regulations that do not affect access to the airport.
- ▶ FAR Part 161 sets limits on this authority.



Why Update Study?

- ▶ **Airport Must Have Current Noise Exposure Maps to Receive Federal Funding for Noise Mitigation—Existing Maps 10 years old.**
- ▶ **Change in Aircraft Fleet Mix**
- ▶ **Aircraft Noise Levels Reduced**
- ▶ **Change in Aircraft Activity Levels**
- ▶ **Updated Noise Model**
- ▶ **Changes in Airfield Development**



FAR Part 150 Elements.

- ▶ Study Mobilization
- ▶ Inventory of Existing Conditions
- ▶ Forecasts of Aviation Activity
- ▶ Existing Noise Exposure Contour
- ▶ Future Baseline Noise Contour
- ▶ Existing and Predicted Future Baseline Noise Intrusions
- ▶ Future Noise Compatibility Alternatives
- ▶ Future Land Use Alternatives
- ▶ Noise Exposure Maps
- ▶ Noise Compatibility Program
- ▶ FAA Approval



Study Process.

- 1** *Inventory of Existing Conditions*
- 2** *Noise Monitoring*
- 3** *Generate Existing & Future Base Case Noise Contours*
- 4** *Noise/Land Use Effects - Develop Feasible Alternatives*
- 5** *Evaluate Feasible Alternatives*
- 6** *Combine and Narrow Feasible Alternatives*
- 7** *Recommend Alternatives for Implementation*
- 8** *Prioritize Recommendations*
- 9** *Develop Noise Exposure Maps*
- 10** *Develop Noise Compatibility Study Program*
- 11** *Public Hearing and Adoption*
- 12** *Submit Program to Federal Aviation Administration (FAA)*
- 13** *FAA Accepts Noise Exposure Maps*
- 14** *FAA Approves Noise Compatibility Study Program*



Unique Elements.

- ▶ **Use of Supplementary Metrics**
 - **Sound Exposure Level (SEL)**
 - **Time Above Analysis**
 - **Number of Events Above 65 dBA**
 - **Flow Contours**
 - **Unique Fleet Mix**
- ▶ **Evaluation of Ground Run-up Noise**
- ▶ **Summer and Winter Measurements**
- ▶ **Community Involvement**



Noise Metrics.

- ▶ **DNL – Day-Night Noise Level**
 - **Existing Noise Contour—2009**
 - **Short-Term Contour—2020**
 - **Long-Term Contour—2030 for planning purposes**
- ▶ **SEL – Sound Exposure Level**
- ▶ **LdN – Same as DNL (LdN is the old terminology)**



Public Involvement and Comments.

- ▶ **Sign Up for Notices on the Study**
 - **At Meetings (by providing an email on sign in sheets)**
 - **On the Website (<http://anc150study.com/contact/>)**
- ▶ **Public Comments (Submitted at Meetings or on the website)**
 - **All comments received during the Study will be reviewed/considered during the steps of the process, and included in the final document for official review.**
 - **All comments received during the official public comment period and at the public hearing (at the end of the Study) will be included and responded to in the document.**



Comments and Additional Information.

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**THANK
YOU!**



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**COMMENTS/
QUESTIONS**

