WELCOME!

NAPLES AIRPORT
PART 150 NOISE AND LAND USE COMPATIBILITY STUDY
14 CFR Part 150 Overview

- The Part 150 process is the Airport Sponsor’s mechanism to improve noise compatibility

- Methodology to prepare aircraft noise exposure maps and develop land use compatibility programs

- Noise studies must adhere to 14 CFR Part 150 guidelines to be accepted by FAA

- Why conduct a Part 150 noise study?
  - Determine existing and future noise around an airport
  - Evaluate the feasibility of flight procedure/land use changes
  - Education about the process and what can and cannot be done to address aircraft noise concerns
  - Submit recommendations to the FAA regarding noise reduction measures
14 CFR Part 150 Overview

Key Issues for this Part 150 Study

- NAA has strong history of industry noise leadership but a desire to examine whether any additional reasonable noise mitigation strategies can be implemented
- Jet activity has increased and will continue to grow
- Seasonal variations are masked by DNL
- APF noise exposure has generally decreased over time according to federal standards (14 CFR Part 150), but community concerns about aircraft noise continue

1978 First documented publication of noise abatement procedures
1987 NAA completes first formal noise study
1997 NAA submits Part 150 NEM and NCP updates to FAA
2000 NAA submits 2000 and 2005 NEM update to FAA
2010 NAA Submits 2010 and 2015 NEM update to FAA
14 CFR Part 150 Overview

Regulatory Framework

- **Federal law** sets aircraft noise standards, operating rules, the compatibility planning process, and limits an airport’s ability to restrict aircraft operations.
- **State law** sets forth zoning compatibility planning guidelines.
- **Local noise ordinances** set noise standards, but aircraft are exempt.

Who Can Regulate Airport Noise?

- **Federal Aviation Administration:**
  - Controls aircraft while in flight
  - Controls noise at its source (i.e., aircraft engines)
  - Certifies aircraft and pilots
- **Airport Proprietors/NAA:**
  - Very limited authority to adopt local restrictions
  - Responsible for airport infrastructure
- **Local Governments and States:**
  - Promote compatible land use through zoning
  - Require real estate disclosure
  - Mandate sound-insulating building materials
14 CFR Part 150 Overview

**PHASE I: NOISE EXPOSURE MAPS (NEMs)**

1. PROJECT KICKOFF
   - Define Key Issues
   - Detailed Study Design
   - Technical Advisory Committee Meetings
   - Public Workshop

2. INVENTORY
   - Technical Advisory Committee Meetings
   - Public Workshop

3. NOISE EXPOSURE
   - NEM Submittal to FAA
   - NEM Acceptance by FAA

**PHASE II: NOISE COMPATIBILITY PROGRAM (NCP)**

4. NOISE ABATEMENT ALTERNATIVES
   - Technical Advisory Committee Meetings
   - Public Workshop

5. LAND USE ALTERNATIVES
   - Technical Advisory Committee Meetings
   - Public Workshop

6. PROGRAMMATIC ALTERNATIVES
   - Technical Advisory Committee Meetings
   - Public Workshop

7. NOISE COMPATIBILITY PROGRAM
   - NCP Submittal to FAA
   - FAA APPROVAL
14 CFR Part 150 Overview

**Terminology**

- **Noise Contours** identify areas of equal noise exposure around an airport.
- **Noise Exposure Maps (NEMs)** depict noise exposure contours that identify areas of specific sound levels around an airport. NEMs also include a graphic depiction of geographical features and land uses that surround an airport.
- **Noise Compatibility Program (NCP)** evaluates noise abatement and noise mitigation options.
- **Noise Abatement Measures** can reduce aircraft noise levels by either using quieter aircraft or shielding noise sensitive areas; or instituting operational measures, such as changes in aircraft flight tracks.
- **Noise Mitigation Measures** can reduce the effects of aircraft noise on noise-sensitive land uses. These measures could include property acquisition, soundproofing, and land use control measures.
Day-Night Average Sound Level (DNL)

- 24-hour time weighted energy average noise level based on A-weighted decibels (dBA)
- Noise occurring between 10 p.m. to 7 a.m. is adjusted by 10 dB to account for the higher sensitivity to noise during nighttime hours
- FAA requires the use of DNL for airport noise assessments
- Average Annual Day aircraft noise exposure is calculated over a broad area and then depicted using contour lines of equal noise levels
Land Use Compatibility

Overview of 14 CFR Part 150

- Appendix A, Table 1 provides noise and land use compatibility guidelines
- Deems levels below 65 dB DNL to be compatible with all land uses
- Allows for adoption of appropriate local land use standards for land use compatibility planning purposes

The City of Naples and Collier County have adopted the DNL 60 contour as the threshold of significance
14 CFR Part 150 Overview – Land Use Compatibility

Land Uses
- Existing and Future Land Use
- Land parcel data
- Zoning
- Jurisdictional boundaries and neighborhoods

Noise Sensitive Uses
- Residential
- Places of worship
- Schools, colleges, and universities
- Libraries/cultural institutions
- Hospitals and residential healthcare facilities
- Daycare and assisted living facilities
- Historic properties
DNL Noise Contour Example (Southwest Florida International Airport)
14 CFR Part 150 Overview – Modeling

Noise Modeling

- Aircraft noise modeling allows:
  - Calculation of noise exposure at any point
  - Depicting annual average aircraft noise exposure
  - Predicting future aircraft noise exposure
  - Assessing changes in fleet mix and/or operations
  - Evaluating operational procedures

- FAA’s Aviation Environmental Design Tool (AEDT) Version 3B, will be used for the APF Part 150 Study.
14 CFR Part 150 Overview – Modeling

Model Inputs

- The Amount of Noise Exposure is determined by:
  - Aircraft types
  - Stage length
  - Number of average annual day operations
  - Nighttime weighting (1 nighttime operation = 10 daytime operations)

- The Noise Exposure Distribution is determined by:
  - Runway configuration and use
  - Flight track locations
  - Flight track use

- Other Factors
  - Meteorological conditions
Aviation Forecasts based on unconstrained conditions (i.e. projected demand with no facility limitations)
FAA Approval – May 9, 2018
APF Overview

- The airport served 112,800 operations in Fiscal Year 2019
- $8 million invested in noise abatement efforts since 2000
- The Airport is home to:
  - Flight Schools
  - Aircraft Charter and Sales
  - Air Ambulance
  - Corporate Aviation
  - Civil Air Patrol
  - Mosquito Control
  - Humane Society
1943
- Naples Army Airfield opens
- Air Corps Base for training bomber crews and fighter pilots

1947
- Airport is returned to the City and County
- Operated jointly until 1958

1969
- Naples Airport Authority formed

1978
- First documented publication of noise abatement procedures

1987
- NAA completes first formal noise study

2000
- NAA submits 2000 and 2005 NEM update to FAA

2010
- NAA submits 2010 and 2015 NEM update to FAA
Airport at a Glance

- Approximately 732 acres
- Runway 5-23
  - 6,600’ long X 150’ wide
  - 800’ displaced thresholds at each runway end
- Runway 14-32
  - 5,000’ long X 100’ wide
  - 128’ displacement at RW 14 end
  - 450’ displacement at RW 32 end
- SW-NE Turf Runway
  - 1,850’ long x 100’ wide
- Contract Air Traffic Control Tower
Existing Noise Program

- NAA strongly encourages users to observe quiet hours during the **Voluntary Nighttime Curfew of 10 p.m. to 7 a.m.**
- Preferential runway use during calm winds. Use Runway 5 for departures and Runway 23 for landing.
- Aircraft and helicopter flight tracks reduce noise over residential areas by flying over commercial areas.
- Engine Maintenance Run-ups prohibited from 10 p.m. to 7 a.m. Daytime run-ups are restricted to the center of the airport to reduce noise in the residential areas closest to the airport.
- Noise Comment Hotline available 24/7
- Pilot/Aircraft Owner Information and Education Program.
- Public Information Program to inform residents of key noise initiatives at the airport and to discuss ways to reduce the impact of airport noise.
Stakeholder Outreach

Opportunities to become informed or provide input:

Outreach
- Initial Kickoff Public Open House Meetings
- Technical Advisory Committee Meetings
- Small Community Workshops (groups of 10+ or -)
- Community Event Outreach
- NEM Public Open House Meetings
- Newsletters

Project Website (flynapes.com):
- Project Information
- FAQs
- Public Draft and Final reports
- Schedule
- Newsletters
- Upcoming meetings
- Links to other websites/resources
Technical Advisory Committee

Purpose and Objectives

- TAC members represent the interests of their organization and/or constituents
  - Review study assumptions
  - Provide technical feedback within the context of the Part 150 Study
- TAC members advise their organization and/or constituents of the TAC’s discussions
- NAA will respect and consider the TAC’s technical input, but retains responsibility for, and decision making on, the Part 150 Study
- TAC meetings are open to the public

TAC Members

- Community Representatives
  - NW, NE, SW and SE Quadrants
  - At-Large City of Naples
  - At-Large Collier County
- City Planning Department
- County Growth Management Division
- Greater Naples Chamber
- Naples Area Board of Realtors (NABOR)
- 5th Avenue Business Improvement District
- Naples Airport piston operator
- Naples Airport jet operator
- NCC Liaison
- NAA Liaison
- Naples ATCT Liaison
- FAA RSW TRACON Liaison
- FAA Airports District Office Liaison
Part 150 Overview - FAQs

Frequently Asked Questions

• Will the study “fix” all the noise issues around the airport?
  – No, overflights of residential areas are unavoidable and sensitivity to noise varies by person

• What type of noise monitoring will be conducted?
  – None, all analysis is modeling based which allows consistency and evaluation of future conditions

• Will the Study address concerns about safety, soot, or other concerns related to aircraft operation?
  – The Part 150 process focusses exclusively on noise and land use compatibility
# Project Schedule

## DRAFT Project Schedule Summary - Noise Exposure Map Report
### 14 CFR Part 150 Study for Naples Airport

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<td>Data Analysis and Validation</td>
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<td>Conduct Environmental Impact Analysis</td>
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<td>Conduct Noise Mitigation</td>
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## Project Management and Team Meetings
- Project Management Meetings
- Technical Advisory Committee Meetings
- Public Meetings and Public Review
- Information Sessions

**Updated January 14, 2020**

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**Task Duration**
- NAAE Review
- Public Review
- Final FAA Review

**TAC Meetings**
- Project Team Meeting
- Public Meetings
- FAA Acceptance Meetings
How to Provide Comments

You may provide written comments during this public workshop. Comment forms are available at this meeting to submit here or by mail to:

Naples Airport  
C/O Part 150 Study  
160 Aviation Drive North,  
Naples, Florida 34104

Please submit your comments by February 21, 2020.

Part 150 Study updates are provided on the Project website at:  

Thank You for Your Participation!