



BTV Noise Compatibility Program Update – Technical Advisory Committee

October 17, 2017

 **The Jones Payne Group, Inc.**
Architects, Planners, and Information Managers



HARRIS MILLER MILLER & HANSON INC.

Introductions

- City of Burlington – airport owner
- Consultant team
 - Jones Payne Group (JPG)
 - HMMH
- Technical advisory committee (TAC) members

TAC Committee Organizations

Participating

- Army Guard Burlington Airport Commission
- Burlington International Airport
- Chittenden County Regional Planning Commission (CCRPC)
- City of South Burlington
- City of Winooski
- Community College of Vermont
- Essex Junction
- FAA (Air Traffic Manager)
- FAA (New England Regional Office)
- Greater Burlington Industrial Corporation (GBIC)
- Heritage Aviation (FBO)
- South Burlington Business Association
- South Burlington School District

- St. Michael's College
- Town of Essex
- Town of Williston
- VTANG
- Winooski School District

Invited

- City of Burlington
- Town of Colchester
- Town of Hinesburg
- Town of Richmond
- Town of Shelburne

Agenda

- Welcome, overview and purpose of the TAC
- Feedback from the June public open house
- Public Forum and Comment Period
- NCP table of contents review
- NCP Ch. 1 - Introduction
 - Purpose
 - Part 150 Overview and History
 - Roles and Responsibilities
 - Land Use Compatibility
 - FAA Noise Compatibility Program Checklist
- Preparation and overview for next meeting
 - Chapter 3- Existing NCP
 - Avigation easements
- Anticipated schedule

Purpose of the Technical Advisory Committee

- The TAC is advisory to the City solely for purposes of the BTV Part 150 Study, including:
 - Review of study inputs, assumptions, analyses, documentation, etc.
 - Input, advice, and guidance related to Noise Compatibility Plan (NCP) development

Purpose of the Technical Advisory Committee

- The City shall respect and consider TAC input, but must retain overall responsibility for the Part 150 Study and NCP recommendations
- The TAC and City recognize FAA is responsible for accepting Noise Exposure Map (NEM) and NCP submissions and for approving NCP measures

Purpose of the Technical Advisory Committee

- TAC members represent the interests of their organization and/or constituents
- TAC members are expected to provide two-way communication between the City and their organizations / constituents

Feedback from the public open house

Noise Compatibility Program (NCP) Open House held at Airport Mezzanine on June 14, 2017 from 6 – 8pm

- Attendance of approximately 100 community members (52 signed in)

Discussions were framed at the three stations to discuss various elements of the Part 150 programs:

- Part 150 History
- NCP goals and options
- NCP potential land use measures

Generally community members were interested in:

- Learning where their homes fall in current contours and what the future contours may look like
- What programs may be available to them in the future and the time frame for those programs

Feedback from the public open house

The community expressed interest in:

- Continuing land acquisition or sales assistance/purchase assurance, general feedback that the F-35 was going to cause too much noise to remain in neighborhood
- Starting sound insulation as soon as possible
- Prioritizing sound insulation for the Chamberlin School
- The community wants to remain in the current neighborhood

The community expressed that they would not want to see implemented:

- A long range land acquisition program, extension of the current land acquisition program

Feedback from the public open house

Equal number of community members provided interest towards land acquisition ending, as community member having interest in extending land acquisition to include their properties.

Most were in favor of sound insulation, and those that were interested in land acquisition were intrigued by the idea of sales assistance/purchase assurance as a second option.

Public Forum and Comment Period

NCP Document – Draft outline

- Chapter 1
 - introduces the purpose of the Part 150 NCP Update and provides an overview
- Chapter 2
 - accepted Noise Exposure Maps (NEMs) and land use information
- Chapter 3
 - describes the existing NCP and approved measures
- Chapter 4
 - presents the new recommended measures to the BTV NCP
- Chapter 5
 - presents the analysis of NCP measures
- Chapter 6
 - describes public consultation

Chapter 1: Introduction – Overview

Regulatory framework

- Aviation Safety and Noise Abatement Act (ANSA, 1979) authorized FAA to regulate noise compatibility planning
- Regulation established as 14 CFR Part 150
- Participation is voluntary, but is the primary means by which airports can obtain FAA support, including funding, for noise-related projects

When can it be updated? What triggers updates?

- NEM
 - A change in the operation of the airport would establish a substantial change non-compatible use
- NCP
 - Changes in airport layout, unanticipated changes in the level of airport activity, and non-compliance with the NCP
 - Meets the needs of the airport and the community.

Chapter 1: Introduction – Overview

Historical perspective – why is BTV updating the NCP?

- Current NCP approved by FAA in 2008
- Current program includes voluntary acquisition of the most affected properties and relocation of residents
- City of Burlington and other municipalities wish to pursue mitigation measures beyond land acquisition
- FAA support of new measures requires approval of an updated NCP

The goal of this NCP update is to provide additional options, beyond land acquisition, that reduce non-compatible land use within the regulatory framework of Part 150

Chapter 1: Introduction – 14 CFR Part 150

Title 14 of the Code of Federal Regulations Part 150 (Part 150) “Airport Noise Compatibility Planning”

- Sets forth standards for airport operators to use in
 - documenting noise exposure around airports and
 - establishing programs to minimize noise-related land use incompatibilities.
- Provides airports with technical and procedural guidance
- One component of determining eligibility for federal noise abatement funds

The FAA oversees the Part 150 process on behalf of the federal government.

Chapter 1: Introduction – 14 CFR Part 150

- Voluntary FAA-defined process for airport noise studies
- Two major components
 - **Noise Exposure Map (NEM)** – FAA “accepts”
 - Detailed description of airport layout, operations, noise exposure, land uses, and noise/land use compatibility for the study year and a forecast year
 - **Noise Compatibility Program (NCP)** – FAA “approves” individual measures
 - Noise abatement measures to reduce noise exposure
 - Land use mitigation measures to address existing non-compatible uses
 - Land use control measures to prevent new non-compatible uses
 - This study is an NCP update only, based on the 2015 NEM
- Public involvement is a critical consideration
 - Consultation is required with users and land use control jurisdictions
 - Input is sought from all interested parties

Chapter 1: Introduction – BTV Part 150 History

- **1990 (March)** – FAA accepted NEM for 1989 and 1993 conditions
- **1990 (July)** – FAA approved NCP in July 1990
- **1997 (June)** – FAA accepted NEM update for 1997 and 2002
- **2006 (November)** – FAA accepted NEM update for 2006 and 2011
- **2008 (June)** – FAA approved NCP revision
- **2015 (December)** – FAA accepted NEM update for 2015 and 2020
 - Currently the “official” NEM on file with FAA
- Tonight’s meeting represents the first Technical Advisory Committee meeting of the current NCP update

Chapter 1: Introduction

– Roles and Responsibilities

City of Burlington, VT

- Airport owner and operator
- Responsible for conducting the NCP analysis, submitting for approval, and implementing approved measures
- Consulting team retained to conduct technical work and prepare documentation related to the NCP process

Federal Aviation Administration (FAA)

- Determines whether the NCP process has met Part 150 requirements

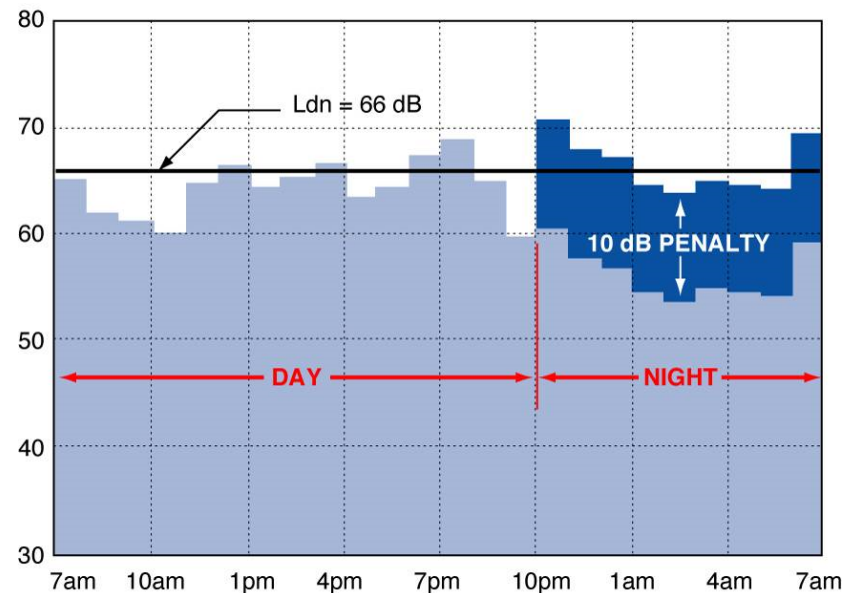
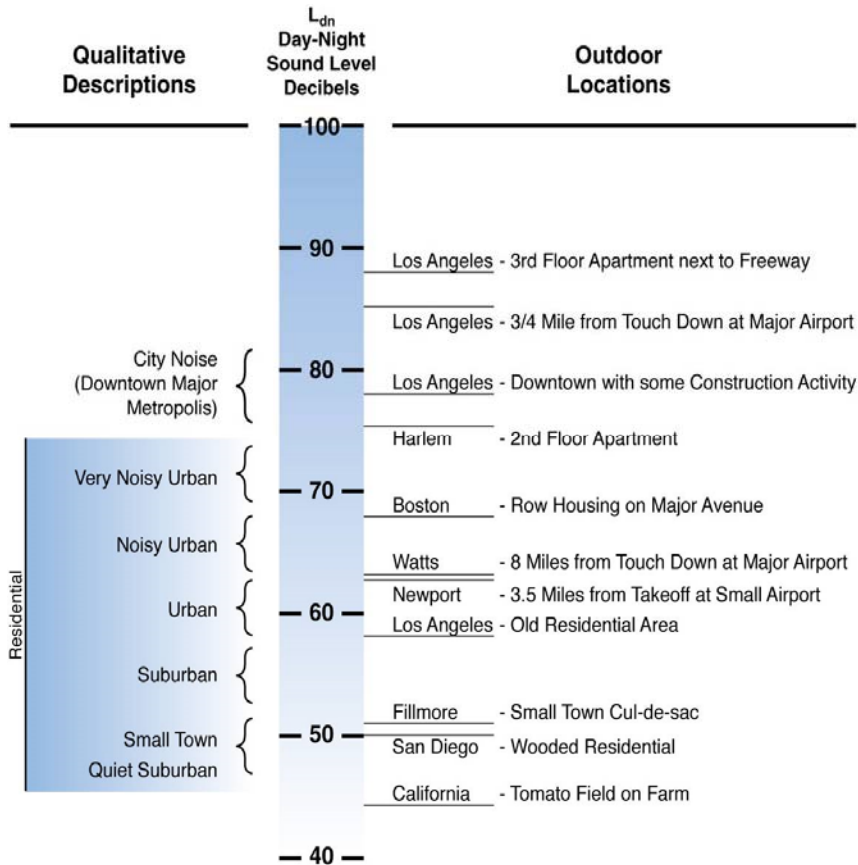
Technical advisory committee (TAC)

- Provides representation for stakeholder organizations, including local jurisdictions, airlines, local business interests, the FAA, and the BTV Sound Mitigation Committee (SMC)

Chapter 1 – Sound Terminology

- A-weighted decibel (dBA)
 - Reflects the manner humans hear different pitches of sound
 - All federal agencies have adopted dBA for environmental studies
- dBA can be used for different units of measure, like maximum and average
- Day–Night Average Sound Level (DNL or Ldn)
 - Cumulative sound measure
 - Equal to steady level that contains same energy as the actual time-varying sound
 - Increases sounds from 10 p.m. to 7 a.m. 10-fold
 - Used by all federal agencies that deal with aviation noise

Chapter 1 – Sound Terminology



Chapter 1: Introduction

– Land Use Compatibility

- 14 CFR Part 150 provides guidelines (Appendix A, Table 1) for compatibility based on categories of land use:
 - Residential Use
 - Public Use
 - Commercial Use
 - Manufacturing and Production
 - Recreational
- Note: All land uses are considered compatible by Part 150 if exposed to an annual-average Day-Night Average Sound Level (DNL) of less than 65 dB
- Complete table reproduced in Chapter 1; excerpts follow

Chapter 1: Introduction

– Land Use Compatibility

Land Use	DNL <65 dB	DNL 65-70 dB	DNL 70-75 dB	DNL > 75 dB
Residential	Compatible	Incompatible (1)	Incompatible (1)	Incompatible
Mobile home park	Compatible	Incompatible	Incompatible	Incompatible
Transient lodgings	Compatible	Incompatible (1)	Incompatible (1)	Incompatible (1)

(1) Measures required to achieve 25 to 30 dB of noise level reduction for aircraft noise from outside to inside. “Transient lodgings” include, but not limited to, hotels and motels

Chapter 1: Introduction

– Land Use Compatibility

Land Use	DNL <65 dB	DNL 65-70 dB	DNL 70-75 dB	DNL > 75 dB
Schools	Compatible	Incompatible (1)	Incompatible (1)	Incompatible
Hospitals and nursing homes	Compatible	25	30	Incompatible
Churches, auditoriums and concert hall	Compatible	25	30	Incompatible

(1) Measures required to achieve 25 to 30 dB of noise level reduction for aircraft noise from outside to inside. “Transient lodgings” include, but not limited to, hotels and motels

Chapter 1: Introduction

– FAA Part 150 Checklist

- Provides a list of items to review before submitting the NCP to the FAA
 - Submission contents
 - Consultation, including public participation
 - Noise exposure maps
 - Consideration of alternatives not submitted for approval
 - Alternatives recommended for implementation
 - Provision for revision of documents

Chapter 3: Existing NCP - Overview

- Operational measures
 - Airport infrastructure
 - Flight paths, runway use
 - Voluntary actions
- Monitoring and review
 - Review status of NEM and NCP and update if changes warrant
 - Flight track monitoring: review of flight radar data
- Land use measures
 - Voluntary land acquisition
 - Sound insulation
 - Easements
 - Real estate disclosures

Avigation Easements

- Avigation Easements are a legal document between the owner and the Airport Sponsor that is conveyed in exchange for something of value.
- Easements acknowledge:
 - The right of aircraft flight over or near a property
 - May also include the light, emissions and other items
 - May also include prohibition of obstructions (trees, towers)
- Can be given in exchange for noise mitigation such as:
 - Sound Insulation
 - Land Acquisition
- Can be in exchange for a monetary sum which is determined by:
 - Previously determined lump sum or
 - Percent of appraised fair market value
 - Method and or value must be approved by FAA

Avigation Easements

- Easements are attached to the property and continue with the land after the sale of a home.
- Easements deem as a compatible land use under Part 150
- Provides disclosure to future owners
- Examples of easements utilized in New England will be emailed next week for review.
- Easement and the recommended language will be discussed at the next TAC meeting.

EASEMENT

THIS EASEMENT made this ____ day of _____, 2016, by and between _____ of New Haven/East Haven, Connecticut, and their successors or assigns hereinafter referred to as the "Grantor(s)", and Tweed-New Haven Airport Authority, a public instrumentality and political subdivision of the State of Connecticut created under Connecticut General Statutes Sec. 15-120g et seq., as amended, hereinafter referred to as the "Grantee".

WITNESSETH:

WHEREAS, Grantee is charged with the management and operation of Tweed New Haven Airport; and

WHEREAS, certain real property is owned by Grantor(s), in fee simple, commonly known as **Address, City**, Connecticut and more particularly described in Exhibit A attached hereto and made a part hereof, and referred to as the "Property";

WHEREAS, the Property meets certain interior noise level criteria and lies within certain noise zones commonly referred to as those areas above Day Night Average Sound Level of 65 decibels, as depicted on the Official Noise Contour Map of the Airport ("2017 Future DNL Contour") dated November, 2012 and available for review and inspection at the Airport's administrative offices, 155 Burr Street, New Haven, CT 06512; and

WHEREAS, Grantee is offering a residential sound insulation program for the Property to reduce aircraft noise experienced by Grantor(s) in the interior of the structure located on the Property; and

WHEREAS, Grantor(s) have elected to receive, and Grantee has agreed to provide, sound insulation on the Property, more particularly described in Schedule 1 attached hereto and made a part hereof; and

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged by Grantor(s), Grantor(s) hereby grant and convey and assign to Grantee, a perpetual easement more particularly described as follows:

1) The real property subject to the grant of easement hereinafter described is an airspace parcel ("Airspace Parcel") above the surface of the Property having the same boundaries as the Property and extending from the surface upwards to the limits of the atmosphere.

TAC Preliminary Topics and Schedule

TAC Meeting 2

December 5, 2017

NCP Ch. 2 – accepted NEM

Updated land use inventory

NCP Ch. 3 – Existing NCP approved measures

Easements

TAC Meeting 3

January 2018

NCP Ch. 4 – Part 1

- Airport operation measures
- Monitoring and review elements
- Land use measures – sound insulation

TAC Preliminary Topics and Schedule

TAC Meeting 4

March 2018

NCP Ch. 4 – Part 2

- Land use measures – sound barriers/buffers
- Land use measures – sales assistance / purchase assurance
- Land use measures – real estate disclosure
- Land use measures – land acquisition and relocation
- Land use measures – easement acquisition

TAC Meeting 5

TBD if needed

TBD if needed

TAC questions and comments

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