



TWEED
NEW HAVEN
AIRPORT

Tweed New Haven Airport Authority (TNHAA)

Environmental Stewardship Committee (ESC)

Minutes of June 18, 2024 via Zoom

Attendance

Members in Attendance: Tom Rafter, Michael Jones, Jeremy Nielson, Linda Hennessey, Rose Chatterton, Giovanni Zinn, Kenneth Dagliere, Chuck Licata, Justin Donaldson and Carlos Eyzaguirre.

Members Absent: None.

Others in Attendance: Malena Zanjani.

Agenda

1. Approval of Minutes from April 16, 2024 Meeting
2. New Haven EAC Recommendation: Goats Update
3. Noise
 - a. Noise Website Update
 - b. Sound Insulation Phase Update
 - c. Avelo Departure Procedure
 - d. LNAV Departure Procedure
 - e. Public Meeting with ATC
4. NREL and NASA Involvement
5. Air Quality Monitoring Update
6. Next Meeting – Date, Time, Topics

Minutes

Call to Order:

Chairman Rafter called the meeting to order at 2:05 PM. The first agenda item was the approval of the minutes from the previous Environmental Stewardship Committee (ESC) meeting held on April 16, 2024. Ms. Chatterton moved to approve the minutes, and Mr. Licata seconded the motion. Chairman Rafter asked if there was any discussion. Hearing none, he called for a vote. The minutes were approved unanimously.

New Member Introduction:

Chairman Rafter introduced Justin Donaldson, a new member from New Haven, and welcomed him to the committee. The committee members then made their introductions.

Vegetation Management:

Chairman Rafter addressed a previous recommendation from the New Haven EAC about using goats for vegetation management. Mr. Nielson provided an update on this initiative, stating that despite extensive outreach to farms, they encountered challenges. They conducted site visits with two interested parties, but one found the time commitment too extensive, and the other cited high legal risks due to the airport setting.

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Chairman Rafter noted an alternative being explored: the use of electric mowers. Mr. Nielson elaborated, stating they had purchased a commercial-grade electric trimmer and were considering a blower. They faced challenges due to the heavy weight of battery-powered equipment. They are also evaluating quotes for electric zero-turn mowers and exploring financing options due to the high cost of these machines.

Ms. Chatterton expressed skepticism about the goat idea, suggesting the committee focus on electric equipment. She highlighted concerns about the logistics and practicality of housing and managing goats. Mr. Nielson acknowledged the complexity and investment required for using goats, including fencing, shelter, and water access. He agreed that electric equipment might be a more viable solution.

Ms. Chatterton emphasized the importance of avoiding toxic sprays and maintaining the airport's and neighborhood's appearance. Mr. Nielson clarified that the airport does not use fertilizers, herbicides, or insecticides on grass areas, with the exception of the fence line, which requires maintenance to prevent damage.

Chairman Rafter concluded that while the exploration of using goats was appreciated, the committee would move forward with electric equipment for vegetation management.

Noise Website Development:

Chairman Rafter introduced the next agenda item, requesting an update from Mr. Jones on the new noise website. Mr. Jones reported that Jones Payne is developing the noise website, with initial functionality expected by the end of the month and enhanced search capabilities by July 15th. The website will allow users to input their address to see where they fall within the noise contours.

Mr. Licata raised a question about public understanding of contour maps and noise levels. Mr. Nielson explained that the new website will initially be like the current one but will be updated in phase two to provide detailed explanations on home eligibility and FAA program details. Mr. Jones added that Jones Payne provides a community liaison to address specific questions and emphasized the importance of evolving the website based on feedback to ensure it is informative and user-friendly.

Mr. Dagliere asked about the determination and potential expansion of noise contours and funding per household. Chairman Rafter clarified that the contours are not a radius but are based on noise impact studies. The current and projected contours impact approximately 24 to 50 homes. The FAA program provides funding based on specific noise impact assessments, which can exceed the previously mentioned \$8,700. Mr. Jones further explained that the \$8,700 referenced a prior community benefit package and that funding for noise insulation is determined separately based on the actual needs of the impacted homes.

Ms. Chatterton inquired about the community liaison, Prudence Perry, and her role in assisting residents. Mr. Jones confirmed that Prudence Perry remains the liaison and that her contact information will be available on the new website. Ms. Chatterton also suggested including a FAQ section on the website to assist users who are not tech-savvy. Mr. Jones agreed to ensure that such resources are included to help users navigate the site effectively.

Residential Sound Insulation Program (RSIP) Update:

Chairman Rafter provided an update on the next phase of the Residential Sound Insulation Program (RSIP). Jones Payne was selected to manage this phase, and the FAA has identified funding for 12 homes,

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which must first be investigated and qualified. Additional funding will be sought for more homes in subsequent phases. Although a specific start date for the inspections has not been set, the program is moving forward.

Ms. Chatterton asked if any of the residents who requested new noise meters at the annual meeting are part of the initial 12 homes. Mr. Jones and Chairman Rafter were unsure but noted that the comments and requests from the community meeting are recorded and being tracked online. The Authority is working to follow up on these items, including implementing a new Avelo departure procedure to reduce noise and exploring an LNAV departure procedure with local air traffic control.

Ms. Chatterton raised a concern about informing the public about the upcoming public meeting on July 9th with local air traffic control. Chairman Rafter and Mr. Jones assured that efforts would be made to disseminate the information widely through social media, the Tweed website, and outreach to attendees of previous community meetings. They emphasized the importance of ensuring community awareness and participation.

NASA NREL Application Update:

Chairman Rafter introduced the next item on the agenda and asked Michael Jones to provide an update on the NASA NREL application. Mr. Jones reported that Tweed New Haven Airport had an opportunity to apply to be part of a national program run by the National Renewable Energy Laboratory (NREL) and NASA. This program focuses on airport electrification nodes (AE nodes) and aims to study the future of airport electrification and how airports can serve as energy nodes for their communities. Tweed New Haven was selected as the only Part 139 commercial airport in the country to participate in this study, along with Winchester, VA, a general aviation or regional airport.

The study involves collaboration with United Illuminating and Eversource to gather data on the airport's current electrical usage. The goal is to explore the potential for airports to contribute to community energy resilience through microgrids or other renewable energy sources. The program will also investigate the electrification of aircraft, including electric vertical take-off and landing (EVTOL) vehicles, which are expected to play a significant role in sustainable aviation. Mr. Jones highlighted that EVTOLs are currently being commercialized, with companies like Jobi, Archer, and Midnight testing these electric air taxis. NASA's involvement focuses on propulsion and vertical takeoff technology, and the study will create a digital twin of the airport to model and scale future electrification efforts.

Chairman Rafter emphasized the environmental benefits of EVTOLs, noting their low noise footprint and low to no emissions, which contribute to sustainable aviation and decarbonization goals. In response to a question from Mr. Dagliere about the financial benefits of sharing energy with the community, Mr. Jones explained that the primary goal is to find ways for airports to support their communities by providing excess energy. While there is no direct financial benefit to the airport, the focus is on doing the right thing and contributing to community resilience and sustainability.

Air Quality Monitoring Update:

Chairman Rafter asked Mr. Zinn to provide a quick update on the air quality monitoring. Mr. Zinn reported that a network of 11 air quality monitors has been installed across the city. These monitors will provide real-time data accessible through a dedicated website and the manufacturer's website. The Purple Air monitors only allow users to view data from the past seven days, but they have developed a

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system to continuously download and publish the data for longer periods. This enables anyone to access and analyze air quality data from New Haven for up to three months.

Mr. Licata inquired about the possibility of installing monitors on the East Haven side of the airport, given the flight paths. Mr. Zinn explained that while the current monitors were funded by New Haven city funds, the monitors are relatively inexpensive (\$200-\$300 each), and individuals can purchase and install them at their residences. The data from these private monitors is the same as the city's, although the city's system offers extended data availability.

Ms. Chatterton asked if the equipment used is like that used in a study by Tufts University researcher Dr. Huda. Mr. Zinn confirmed that the monitors measure particulates using laser-based sensors, which are common tools for this purpose. He was not certain about the exact type of equipment Dr. Huda used but believed the principles were similar.

Mr. Dagliere asked if the city's ongoing monitoring would be compared with Dr. Huda's study. Mr. Zinn clarified that the city's effort is focused on continuously generating and providing open data for public use, rather than conducting a specific study. However, the data could be analyzed and compared by anyone, including Dr. Huda. Chairman Rafter added that the airport is looking into implementing HEPA filters.

Next Meeting and Adjournment:

Chairman Rafter announced that the next meeting is scheduled for August 20th at 2:00 PM. He called for a motion to adjourn. Mr. Dagliere motioned, and Ms. Chatterton seconded. The meeting adjourned at approximately 3:00 PM.

Action Item Summary

- ***Action Item – Mr. Nielson to continue exploring alternative options for vegetation management, focusing on electric equipment.***
- ***Action Item – Mr. Jones to investigate adding a FAQ to the new noise website to assist users.***
- ***Action Item – Mr. Rafter to confirm proper outreach with Andrew King regarding the local Air Traffic Control Meeting scheduled for July 9th.***
- ***Action Item – Mr. Rafter to investigate the feasibility and implementation of HEPA filters.***