



# Meeting Announcement

## Legislative Subcommittee

**Tuesday, September 14, 2021**

**12:00 p.m. – 1:30 p.m.**

**\*BY VIDEO CONFERENCE ONLY\***

Please click the link below to join the webinar:

<https://smcgov.zoom.us/j/96437737818>

Or Dial-in:

US: +1(669)900-6833 Webinar ID: 964 3773 7818

Note: To arrange an accommodation under the Americans with Disabilities Act to participate in this public meeting, please call (650) 363-4220 at least 2 days before the meeting date.

\*\*Please see instructions for written and spoken comments at the end of this agenda.

## AGENDA

**Call to Order**

**Public Comment on Items NOT on the Agenda**

## AGENDA ITEMS

### **1. Federal Legislation Update (Discussion and Action)**

- a. Update on Bills Introduced by Congresswomen Speier  
Kathleen Wentworth, Senior Advisor to Congresswoman Speier
- b. Oppose or Support: HR 4892 Bill Introduced – Proposed New Office of Noise Abatement and Control in the EPA
  - i. N.O.I.S.E. Supports Bill
- c. Information Only:
  - i. HR: 3684: Bipartisan Infrastructure Bill content for Airports, Airlines. Review Noise Compatibility Program for Opportunities.

Attachments:

- Jackie Speier's Legislation 2020-2021
- H.R. 4892: Re-establish the Office of Noise Abatement and Control in EPA
- H.R. 3684: Infrastructure Bill & Summary from Airport Perspective

### **2. State /Local Legislation (Discussion)**

- a. Roles of state and local governments on aircraft noise  
Eugene Reindel, HMMH

### **3. Information Only:**

- a. Ground-Based Noise Subcommittee Letter to Steve Dickson, FAA Administrator on GBN Recommendations.

Attachments:

- Ground-Based Noise Subcommittee Letter to FAA Director August 2021

#### 4. Future Topics (Discussion)

- a. Vertical Air Mobility Rulemaking
- b. Update to Title 21 or other State Legislation Opportunities.

Other Attachments:

- August 20, 2021 Airport Noise Report

#### **\*\*Instructions for Public Comment during Videoconference Meeting**

During videoconference of the Legislative subcommittee meeting, members of the public may address the Roundtable as follows:

##### **Written Comments:**

Written public comments may be emailed in advance of the meeting. Please read the following instructions carefully:

1. Your written comment should be emailed to [amontescardenas@smcgov.org](mailto:amontescardenas@smcgov.org).
2. Your email should include the specific agenda item on which you are commenting.
3. Members of the public are limited to one comment per agenda item.
4. The length of the emailed comment should be commensurate with two minutes customarily allowed for verbal comments, which is approximately 250-300 words.
5. If your emailed comment is received by 12:00 pm on the day before the meeting, it will be provided to the Roundtable and made publicly available on the agenda website under the specific item to which comment pertains. The Roundtable will make every effort to read emails received after that time but cannot guarantee such emails will be read during the meeting, although such emails will still be included in the administrative record.

##### **Spoken Comments:**

Spoken public comments will be accepted during the meeting through Zoom. Please read the following instructions carefully:

1. The September 14, 2021 Legislative meeting may be accessed through Zoom online at <https://smcgov.zoom.us/j/96437737818>. The meeting ID: 964 3773 7818. The meeting may also be accessed via telephone by dialing in +1-669-900-6833, entering meeting ID: 964 3773 7818, then press #.
2. You may download the Zoom client or connect to the meeting using the internet browser. If you are using your browser, make sure you are using current, up-to-date browser: Chrome 30+, Firefox 27+, Microsoft Edge 12+, Safari 7+. Certain functionality may be disabled in older browsers including Internet Explorer.
3. You will be asked to enter an email address and name. We request that you identify yourself by name as this will be visible online and will be used to notify you that it is your turn to speak.
4. When the Roundtable Chairperson calls for the item on which you wish you speak click on "raise-hand" icon. You will then be called on and unmuted to speak.
5. When called, please limit your remarks to the time limit allotted.

## REPRESENTATIVE JACKIE SPEIER - AVIATION NOISE BILLS - 2021

<p><a href="#">H.R.4931</a>  <b>SNORE Act</b>  Residential Noise Mitigation  <i>Serious Noise Reduction Efforts Act of 2021</i></p>	<p>To amend title 49, United States Code, to establish a program at San Francisco International Airport for purposes of soundproofing residential buildings in surrounding communities.</p>
<p><a href="#">H.R.4930</a>  <b>SHHH Act</b>  Continuation of the processing of NIITE and HUSSH Nighttime noise abatement flight departure procedures.  <i>Southbound HUSSH and NIITE Help Households</i></p>	<p>To require the Administrator of the Federal Aviation Administration to continue processing the proposed SFO NIITE Departure Southbound Transition and the OAK HUSSH Departure Southbound Transition, and for other purposes.</p>
<p><a href="#">H.R.4929</a>  <b>REST Act</b>  Access restrictions  <i>Restore Everyone's Sleep Tonight</i></p>	<p>To amend title 49, United States Code, to allow airports to impose an access restriction for certain hours, to assess certain penalties against air carriers or aircraft operators, and for other purposes.</p>
<p><a href="#">H.R.4928</a>  <b>RESPECT Act</b>  Requires FAA staff to answer questions upon request of a member of Congress.  <i>Responsive Employees Support Productive Educated Congressional Talk</i></p>	<p>To require the Administrator of the Federal Aviation Administration to respond to requests for information from Members of Congress, and for other purposes</p>
<p><a href="#">H.R.4927</a>  <b>NOTIFIED Act</b>  Requires FAA to notify public officials of proposed new or modified flight procedures.  <i>Notify Officials To Inform Fully and Impel Educated Decisions</i></p>	<p>To require the Administrator of the Federal Aviation Administration to notify the public of proposed new Performance Based Navigation Implementation Process flight procedures, and for other purposes.</p>
<p><a href="#">H.R.4926</a>  <b>LEAVE Act</b>  A state cause of action for ground-based noise or nuisance is not precluded by federal law.  <i>Low-frequency Energetic Acoustics and Vibrations Exasperate Act</i></p>	<p>To establish that no Federal statute is intended to preempt a cause of action against an airport maintained in any State small claims or superior court by any individual or city within 5 miles of an airport when an action is brought for noise or nuisance caused by ground-based noise in violation of a State statute as specified, and for other purposes.</p>
<p><a href="#">H.R.4925</a>  <b>F-AIR Act</b>  Directs the FAA to develop expanded plans and policy for use of airspace.  <i>Fairness in Airspace Includes Residents</i></p>	<p>To amend title 49, United States Code, to expand the priorities of the Administrator of the Federal Aviation Administration in developing plans and policy for the use of the navigable airspace.</p>
<p><a href="#">H.R.4924</a>  <b>APPRISE Act</b>  Aviation roundtable technical representative to participate in FAA flight design process  <i>All Participating in Process Reaching Informed Solutions for Everyone</i></p>	<p>To direct the Administrator of the Federal Aviation Administration to ensure representatives of aviation roundtables may participate in the NextGen performance-based navigation implementation process of the Federal Aviation Administration, and for other purposes.</p>

210903

# H. R. 4892

To reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

JULY 30, 2021

Ms. MENG (for herself, Ms. LEE of California, Mr. SUOZZI, Mr. GALLEGRO, Ms. BROWNLEY, Miss Rice of New York, Mr. SMITH of Washington, Mrs. CAROLYN B. MALONEY of New York, Mr. PETERS, Ms. VELÁZQUEZ, Ms. NORTON, Ms. TLAIB, Mr. SIRES, Ms. MOORE of Wisconsin, Mr. BROWN, Mr. LIEU, Mr. SARBANES, Mr. BEYER, Mr. SHERMAN, Ms. WILSON of Florida, Ms. NEWMAN, Mr. CASE, and Mr. NADLER) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### **SECTION 1. SHORT TITLE.**

This Act may be cited as the “Quiet Communities Act of 2021”.

### **SEC. 2. FINDINGS.**

Congress finds that—

(1) approximately 28,000,000 individuals in the United States are afflicted with some hearing impairment, and it has been estimated that 10,000,000 of those impairments are at least partially attributable to damage from exposure to noise;

(2) for millions of individuals in the United States, noise from aircraft, vehicular traffic, and a variety of other sources is a constant source of torment;

(3) millions of individuals in the United States are exposed to noise levels that can lead to sleep loss, psychological and physiological damage, and work disruption;

(4) chronic exposure to noise has been linked to increased risk of cardiovascular disorders, learning deficits in children, stress, and diminished quality of life;

(5) excessive noise leading to sleep deprivation and task interruptions can result in untold costs to society as a result of diminished worker productivity;

(6) pursuant to the Clean Air Act ([42 U.S.C. 7401 et seq.](#)), the Noise Control Act of 1972 ([42 U.S.C. 4901 et seq.](#)), and the Quiet Communities Act of 1978 ([42 U.S.C. 4901](#) note; Public Law 95–609; 92 Stat. 3079), the Environmental Protection Agency established and maintained an Office of Noise Abatement and Control, which has not received funding since 1982;

(7) responsibilities of the Office of Noise Abatement and Control included promulgating noise emission standards, requiring product labeling, facilitating the development of low-noise-emission products, coordinating Federal noise reduction programs, assisting State and local noise abatement efforts, and promoting noise education and research;

(8) because the Environmental Protection Agency remains legally responsible for enforcing regulations issued under the Noise Control Act of 1972 ([42 U.S.C. 4901 et seq.](#)), even though funding for the activities of the Office of Noise Abatement and Control described in paragraph (7) was terminated, and because that Act prohibits State and local governments from regulating noise sources in many situations, noise abatement programs across the United States lie dormant; and

(9) as population growth and air and vehicular traffic continue to increase, noise pollution is likely to become an even greater problem in the future, and the health and welfare of individuals in the United States demands that the Environmental Protection Agency, the lead Federal agency for the protection of public health and welfare, once again assume a role in combating noise pollution.

### SEC. 3. REESTABLISHMENT OF OFFICE OF NOISE ABATEMENT AND CONTROL.

(a) REESTABLISHMENT.—The Administrator of the Environmental Protection Agency (referred to in this section as the “Administrator”) shall reestablish within the Environmental Protection Agency an Office of Noise Abatement and Control (referred to in this section as the “Office”).

(b) DUTIES.—The responsibilities of the Office shall include—

(1) promoting the development of effective State and local noise control programs by providing States with technical assistance and grants to develop those programs, including the purchasing of equipment for local communities;

(2) carrying out a national noise control research program to assess the impacts of noise from varied noise sources on mental and physical health;

(3) carrying out a national noise environmental assessment program—

(A) to identify trends in noise exposure and response, ambient levels, and compliance data; and

(B) to determine the effectiveness of noise abatement actions, including actions for areas around major transportation facilities (such as highways, railroad facilities, and airports);

(4) developing and disseminating to the public information and educational materials relating to the mental and physical effects of noise and the most effective means for noise control through the use of materials for school curricula, volunteer organizations, radio and television programs, publications, and other means;

(5) developing educational and training materials and programs, including national and regional workshops, to support State and local noise abatement and control programs;

(6) establishing regional technical assistance centers to use the capabilities of institutions of higher education and private organizations to assist State and local noise control programs; and

(7) undertaking an assessment of the effectiveness of the Noise Control Act of 1972 ([42 U.S.C. 4901 et seq.](#)).

(c) PREFERRED APPROACHES.—In carrying out the duties of the Office under subsection (b), the Office shall emphasize noise abatement approaches that rely on local and State activities, market incentives, and coordination with other public and private agencies.

(d) STUDY.—

(1) IN GENERAL.—The Administrator shall carry out a study of aircraft noise and the effects of that noise on surrounding communities.

(2) CONTRACTS AND OTHER AGREEMENTS.—The Administrator shall enter into contracts or other agreements with independent scientists with expertise in noise measurements, noise effects, and noise abatement techniques to conduct the study under paragraph (1).

(3) CONTENTS.—The study under paragraph (1) shall examine—

(A) the selection of noise measurement methodologies by the Federal Aviation Administration;

(B) the threshold of aircraft noise at which health impacts are felt; and

(C) the effectiveness of aircraft noise abatement programs at airports around the United States.

(4) REPORT.—

(A) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator shall submit to Congress a report on the results of the study conducted under paragraph (1).

(B) REQUIREMENTS.—The report submitted under subparagraph (A) shall include specific recommendations on new measures that can be implemented to mitigate the impact of aircraft noise on surrounding communities.

(e) CONFORMING AMENDMENT.—The Noise Pollution and Abatement Act of 1970 (Public Law 91–604; 84 Stat. 1709) is repealed.

**SEC. 4. GRANTS UNDER QUIET COMMUNITIES PROGRAM.**

Section 14 of the Noise Control Act of 1972 ([42 U.S.C. 4913](#)) is amended—

(1) in subsection (b)—

(A) in the matter preceding paragraph (1), by striking “but not limited to”;

(B) in paragraph (2), by striking “sections 6, 7, and 8 of this Act” and inserting “section 6 or 8 of this Act, or section 44715 of title 49, United

States Code”; and

(C) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately;

(2) in subsection (c)—

(A) in the matter preceding paragraph (1), by striking “but not limited to” and inserting “in accordance with the Federal authority pursuant to this Act to regulate sources of noise in interstate commerce”;

(B) in paragraph (1)—

(i) in subparagraph (C), by striking “and,” at the end;

(ii) by redesignating subparagraphs (A) through (D) as clauses (i) through (iv), respectively, and indenting appropriately; and

(iii) by adding at the end the following:

“(v) establishing and implementing training programs on use of noise abatement equipment; and

“(vi) implementing noise abatement plans;”;

(C) by striking the undesignated matter following paragraph (5); and

(D) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately; and

(3) by redesignating subsections (a) through (g) as paragraphs (1) through (7), respectively, and indenting appropriately.

#### **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

There is authorized to be appropriated for the Office of Noise Abatement and Control reestablished under section 3(a) \$21,000,000 for each of fiscal years 2022 through 2026.

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**From:** [Emily Tranter](#)  
**To:** [Michele Rodriguez](#)  
**Cc:** [Eugene M. Reindel](#)  
**Subject:** Re: HR 4892  
**Date:** Thursday, September 2, 2021 11:59:45 AM

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**CAUTION: This email originated from outside of San Mateo County. Unless you recognize the sender's email address and know the content is safe, do not click links, open attachments or reply.**

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Michele- we have it as support on our legislative agenda

Sent from my iPhone

On Sep 2, 2021, at 2:33 PM, Michele Rodriguez <[mrodriguez2@smcgov.org](mailto:mrodriguez2@smcgov.org)> wrote:

Emily,

Does NOISE support or oppose the proposed legislation establishing a noise office in EPA? This item will go to the Legislative Subcommittee on Sept 14, so if you could provide a response by that date. Thank you.

Michele Rodriguez  
San Francisco International Airport/Community Roundtable Coordinator  
[Mrodriguez2@smcgov.org](mailto:Mrodriguez2@smcgov.org)  
650-241-5180

Please note: I work 20-hours per week, usually Monday – Thursday 8:00a – 1:00p

<[BILLS-117hr4892ih.pdf](#)>

**From:** [ACI-NA Government Affairs](#)  
**To:** [Michele Rodriguez](#)  
**Subject:** ACI-NA GOVT AFFAIRS UPDATES  
**Date:** Saturday, August 7, 2021 9:54:29 AM

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[View in a browser.](#)



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## SENATE INFRASTRUCTURE BILL UPDATES

The Senate voted on a procedural vote today to end debate on the [bipartisan infrastructure bill](#). This most recent vote gets us one step closer to passage out of the Senate which is expected later today or beginning of next week depending on other floor activity. The Senate may consider other amendments before final passage.

As a reminder, the bill contains \$25 billion in new general fund revenue over the next 5 fiscal years for airports and air traffic control facilities. Included in this funding is \$15 billion for airport formula grants, \$5 billion for a new airport terminal program, and \$5 billion for the FAA to improve air traffic control facilities, of which \$200 million is set aside for FAA-owned contract towers.

Additionally, among provisions to streamline and improve the DOT's Transportation Infrastructure Finance and Innovation Act (TIFIA) program, the bill expands TIFIA until September 30, 2025, to include PFC-eligible projects at airports, and makes such airport projects subject to FAA prevailing wage and Buy America requirements. It also caps at 15% annually the amount of TIFIA awards that may go to airports.

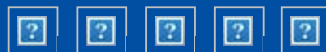
ACI-NA is monitoring the progress of the bipartisan infrastructure bill and will keep you informed of any updates.

***Please contact [ACI-NA Government Affairs](#) if you have any questions or concerns.***

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### **Airports Council International-North America**

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Infrastructure Bill Review

Airport-related topics identified:

Page	Section Number/Title	Content	Comment
492	Title II-Transportation Infrastructure Finance and Innovation (TIFIA)	(G) Eligible to receive a grant under the program airport-related project...	
499	Title II – Transportation Infrastructure Finance & Innovation. Transit-Oriented Development Project	15% of the amounts of the amounts to carry out the TIFIA program for that fiscal year. (B) Airport related project.	
636	6702: Local and Regional Project Assistance.		
1145	Infrastructure includes (iv) airports		
2237	Title V: Bioproduct Pilot Program	Construction Product includes the construction, maintenance, or preservation of ...airport construction project.	
2292	(b) Project Described: cost of more than \$750,000,000, carried out by a public entity, including local government, airport authority		
2626	Airport Terminal Program	Federal share of cost of project under this Act is 80% for large and medium hub airport	



August 24, 2021

Steve Dickson, Administrator  
Federal Aviation Administration (FAA)  
500 Independence Avenue, S.W.  
Washington, DC 20591

Re: Ground-Based Noise Recommendations

Dear Mr. Dickson,

The San Francisco Airport/Community Roundtable (SFORT) is in its 40<sup>th</sup> year of providing community noise reduction recommendations related to aircraft and airport operations from the San Francisco International Airport (SFO) to airport management, FAA staff, and airline representatives. The Roundtable Membership consists of 22 appointed and elected officials from the City and County of San Francisco, the County of San Mateo, and most cities in San Mateo County representing more than 2,000,000 people.

The Ground-Based Noise (GBN) Subcommittee, a subcommittee of the SFORT, investigates the sources of ground-based noise impacts from SFO. Recently a Ground-Based Noise Study was completed documenting the environs around the airport, the cause and effect of hills on noise, modeled ground-based noise levels, and noise mitigation. At its July 19, 2021 GBN subcommittee meeting, the subcommittee members voted to provide the following recommendations regarding ground-based noise for your consideration:

1. The FAA's Aviation Environment Design Tool (AEDT) should be updated to incorporate aircraft noise reflection and diffraction from terrain and manmade structures. This is crucial when generating noise contours for understanding how ground-based noise propagates.
2. The FAA should establish a framework for adopting FAA policy related to ground-based noise including an appropriate noise metric, weighting (such as "C-weighting") to adequately address community perception and airplane noise annoyance.
3. Requiring FAA to use C-weighting noise in the creation of noise contours.

When does the FAA expect the next update to AEDT? The Roundtable is interested in a pilot program to test ground-based noise relief measures at the airport. We would be happy to discuss the findings of the Ground-Based Noise Study, or the recommendations in the letter. Subcommittee Chair Ann Schneider and Roundtable Chairperson Ricardo Ortiz are available to discuss these recommendations in more detail at your convenience. Please direct your response to Angela Montes, SFO Airport/Community Roundtable Administrative Secretary, at [amontescardenas@smcgov.org](mailto:amontescardenas@smcgov.org).

Regards,

Ricardo Ortiz

## Ground-Based Noise Recommendations

August 24, 2021

Page 2 of 2

### Roundtable Chairperson

CC: Shannetta Griffin, Associate Administrator for the Office of Airports  
Raquel Girvin, Regional Administrator – Western Pacific Region  
Faviola Garcia, Supervisory Senior Advisor

# Airport Noise Report



A weekly update on litigation, regulations, and technological developments

Volume 33, Number 27

August 20, 2021

## Legislation

### SENATE PASSES INFRASTRUCTURE BILL THAT PROVIDES \$25 BILLION FOR AIRPORTS

On Aug. 10, the U.S. Senate passed the historic, \$1.2 trillion bi-partisan Infrastructure Investment and Jobs Act, which includes \$25 billion for airports, some of which could be used to fund airport noise mitigation projects.

According to a summary by Sen. Kyrsten Sinema (D-AZ), one of the bill's sponsors, the legislation (H.R. 3684) provides funding for:

- **Airport Airside and Landside Priorities:** The Act invests \$15 billion in priority projects at every airport in the United States. Such upgrades would include: runways and taxiways, safety upgrades, terminal development projects, noise mitigation, and multimodal transportation. This funding program provides flexibility for airports to address their specific needs, and is formula-driven, so the funds will go directly to the airports.

- **Airport Terminal Program:** The Act provides \$5 billion in competitive grants for terminal development and other landside projects. These resources en-  
(Continued on p. 109)

## East Hampton Airport

### 'RE-ENVISIONING' PROCESS WILL DETERMINE WHETHER EAST HAMPTON AIRPORT CLOSURES

In September, 20-year-long federal grant assurances that require the Town of East Hampton, NY, to keep its airport open will expire, moving control of the airport to the Town and opening the possibility it could opt to close the airfield where its efforts to restrict operations to reduce noise impact were stuck down by a federal appeals court in 2016.

Since May, the East Hampton Town Board has been actively engaged with airport stakeholders and the community in analysis and discussion about the airport's impacts and its future through a "re-envisioning" process.

On Aug. 17, the Board held the fourth work session in that process, which will continue into September. Presentations include reports by consultants in environmental resources, economic analyses, land use and zoning, and airport planning and operations, including diversion of flights.

"Consensus will be built on a common set of facts, areas where further study is needed will be identified, and public comment will be recorded, summarized by the consulting team and considered by the Town Board," Town Supervisor Peter Van Scoyoc explained in announcing the Aug. 17 work session.

(Continued on p. 110)

## In This Issue...

**Legislation ...** The historic Infrastructure bill passed by the Senate last week includes \$25 billion for airports, some of which could fund noise mitigation efforts - p. 108

**East Hampton Airport ...** With FAA grant assurances expiring in Sept., the Town Board's 're-envisioning' process will determine if airport closes - p. 108

**NASA ...** Agency tests one-megawatt electric motor that could help propel future, more environmentally friendly and economically sustainable aircraft - p. 109

**Legislation ...** NY Congresswoman Grace Meng reintroduces bill that would revive EPA's Office of Noise Abatement and Control, authorize \$21 million in funding for each of fiscal years 2022 through 2026 - p. 110

**News Briefs ...** UC Davis Aviation Noise & Emissions Symposium will be held as a hybrid event on May 1-3, 2022 - p. 111

## Legislation, from p. 108

sure terminal projects at all types of airports, including small hub airports, non-hub, and nonprimary airports will receive funding – guaranteeing that communities of all sizes benefit.

- **Air Traffic Control Infrastructure:** The Act invests an additional \$5 billion in grants for strengthening Air Traffic Control towers and infrastructure – much of which is decades-old and requires upgrades to house new equipment to better keep American travelers safe.

Sinema partnered with Republican Senator Rob Portman of Ohio to co-lead Senate negotiations with eight other Senators – four from each party – and the White House to craft the infrastructure bill.

It now goes to the House where Speaker Nancy Pelosi (D-CA) insists she will not introduce the infrastructure package for a vote until she receives assurances that all 50 Senate Democrats are on board with the rest of the Democratic party’s agenda regarding social, immigration, and climate policies.

## NASA

### NASA TESTS MACHINE TO POWER THE FUTURE OF AVIATION PROPULSION

*[Following is an Aug. 11 NASA news release.]*

A one-megawatt electric motor that could help propel future, more environmentally friendly and economically sustainable aircraft was tested during April and May by NASA and its industry and academic partners.

The center of attention is an electric machine that can work either as an electric motor to turn propellers or large engine fans, or a generator to produce one million watts of power – enough to power 760 average U.S. households.

NASA’s collaborators in this research include the University of Illinois at Urbana-Champaign (UIUC) and Collins Aerospace.

“NASA is committed to reducing the world’s dependence on fossil fuels for transportation through the air,” said Andrew Provenza, an aerospace research engineer at NASA’s Glenn Research Center in Cleveland.

“The technologies we are developing in electrified aircraft propulsion will reduce jet fuel burn and associated emissions,” Provenza said.

Studies by NASA and The Boeing, Co., have shown that machines that functioned as both motors and generators could reduce fuel burn for a wide range of aircraft sizes. To do so they must be lightweight, highly efficient, and able to pro-

duce one to two megawatts of power.

Two of these machines could fully power a six-passenger aircraft or assist jet engines on aircraft carrying at least 150 passengers – all while reducing fuel burn, noise, and emissions.

In 2014, NASA’s Environmentally Responsible Aviation Project funded UIUC to develop electric machine concepts that would function within electrified propulsion systems for large transport aircraft. Under a multi-year contract, UIUC built and tested individual machine components and then full prototypes.

Collins Aerospace was exploring related work under a NASA Research Announcement, so UIUC teamed up to use a Collins facility in Rockford, Illinois to test the new machine.

After significant rotor manufacturing issues that resulted in two rebuilds and lengthy delays, the machine was tested as a generator in April, running at partial speed with higher-than-rated power output for that speed.

Producing enough power is not the only metric the machine must meet. It must be able to produce enough power for its weight to be worth including on the aircraft. This is called power density.

Studies showed that this type of machine would need to be at least 96% energy efficient and produce at least 12 kilowatts (enough for about nine houses) for every kilogram it weighed.

UIUC’s machine exceeded both the efficiency and power density goals, producing 15 kilowatts per kilogram at over 96% efficiency.

“This motor is operating at a power level with a power density and efficiency better than any motor that we are aware of, even when considering those that are superconducting or cryogenically cooled,” said Provenza. “This is a major achievement and a significant step towards the realization of hybrid electric propulsion for large transport aircraft.”

Although a mechanical issue damaged the UIUC machine during testing before reaching full power and speed, the team demonstrated their approach for megawatt-scale machines could provide the high performance needed for transport-class aircraft.

The issue had been identified as a risk, and a newer design has already incorporated the solution.

NASA and The Ohio State University (OSU) have also worked on similar machines under a separate agreement.

It’s all part of the development of megawatt-class machines.

The UIUC and OSU machine programs have launched future work, and NASA plans to continue maturing new designs that are ready for flight vehicles. NASA is working hard to develop other technologies needed for electrified aircraft propulsion, including power electronics and fault management devices.

When the components are ready, it will be time for these systems to take to the sky.



## Legislation

### MENG REINTRODUCE BILL TO REESTABLISH EPA NOISE OFFICE

On July 30, Rep. Grace Meng (D-NY) reintroduced legislation that would reestablish the Environmental Protection Agency's Office of Noise Abatement and Control (ONAC) and require it to study aircraft noise.

The congresswoman introduced similar legislation in 2015, 2017, and 2019. None of those bills – nor other bills seeking to refund ONAC since it was defunded in 1983 in the Reagan administration – ever moved beyond the committees to which they were referred.

Meng's latest attempt to revive ONAC, the Quiet Communities Act of 2021 (H.R. 4892), would authorize ONAC to be funded at a level of \$21 million for each of fiscal years 2022 through 2026.

H.R. 4892 has 22 co-sponsors and would require the EPA Administrator "to conduct a study of aircraft noise and the effects of that noise on surrounding communities." The study must examine:

- The selection of noise measurement methodologies by the FAA;
- The threshold of aircraft noise at which health impacts are felt; and
- The effectiveness of aircraft noise abatement programs at airport around the United States.

EPA would be required to submit its noise study to Congress within two years with specific recommendations on new measures that can be implemented to mitigate the impact of aircraft noise on surrounding communities.

### *East Hampton, from p. 108*

These sessions, and the upcoming slate of workshops, he said, "are designed to allow ample opportunities for all stakeholders to be heard before the Town Board makes any decisions about the future of the airport. The board is seeking to identify key issues of concern and to gather input from the public as to the range of opinions, ie, whether the status quo is acceptable; whether a modified or closed airport would be preferable; or if some modification is desired, what would need to change."

Board members hope to make a decision on the airport's future by the end of the year.

"East Hampton looks forward to regaining local control of our airport to best reflect the needs of our community," Van Scoyoc said at the Aug. 17 work session.

Some 400 residents of East Hampton and surrounding communities attended the Aug. 27 work session to complain about aircraft noise and increases in traffic at East Hampton Airport.

Some suggested closing the airport entirely, stating the board should "shut it up or shut it down," but Town Board

Member Kathee Burke-Gonzalez said the town can't just "simply close the airport," The Southampton Press reported.

"Ms. Burke-Gonzalez said the board would take into consideration all of the comments made throughout the meeting, adding that there was no deadline for the board to make a decision on whether or not to accept FAA grants.

"We're not going to make one for the sake of making a decision," she said. "We'll be working with other airports, the federal government, and affected homeowners to find workable solution."

### Court Ruling Against Town

In a major victory for aviation interests and a clarification of the Airport Noise and Capacity Act, a federal appeals court on Nov. 4, 2016, issued a ruling barring the Town of East Hampton from enforcing all three use restrictions it adopted in 2015 to address excessive noise at East Hampton Airport during the busy summer tourist season (28 ANR 151).

A three-judge panel of the U.S. Court of Appeals for the Second Circuit upheld a District Court ruling preliminarily enjoining imposition of one of the airport use restrictions: a one-trip-per-week limit on operations of noisy aircraft during the summer season.

But the appeals court went further than the lower court and also struck the two remaining use restrictions: a nighttime curfew from 11 p.m. to 7 a.m. and an extended night curfew on noise aircraft from 8 p.m. to 9 a.m.

The Town enacted the restrictions without complying with the procedural requirements of ANCA [to conduct a Part 161 cost/benefit study], "which apply to public airport operators regardless of their federal funding status," the Second Circuit held.

The Town had argued that it was not subject to ANCA requirements because it was willing to forego future federal Airport Improvement Program (AIP) grant funding for the airport and because the FAA had stated in an unsigned legal opinion that the Town was not required to engage in lengthy ANCA review and approval process to adopt reasonable noise restrictions.

But the court rejected those arguments.

"ANCA's procedural requirements for local restrictions on airport access apply to all public airport proprietors regardless of their federal funding status," the ruling stated.

### Part 161 Won't Bring Meaningful Relief

In a May 11 presentation opening the airport re-envisioning process, Attorney William O'Connor of the Cooley law firm, who is helping guide the airport re-envisioning process, told participants that a Part 161 study is unlikely to result in meaningful relief beyond limited curfews. The process is too uncertain, lengthy, and costly, he concluded. He also saw little value in pursuing legislative efforts with a new Congress and administration, explaining that the timing and success of federal legislation is uncertain.

He noted that Town officials had two "positive" meetings with FAA in 2020 to discuss what options the Town had after



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the grant assurances expire. He said further discussions were contemplated with Biden administration political appointees.

The airport “Visioning” process, he said, will evaluate alternative uses for airport land and align alternative uses of the airport with Town objectives and residents’ interests.

According to Cooley:

- East Hampton Airport may legally close after the FAA grants assurances expire in September 2021;
- ANCA should not apply if the Town closes the airport and decides to reopen it in the future with restricted access as a public or private use airport.
- An FAA letter dated Nov. 6, 2020, defined the Town’s options for the airport’s future:

Negotiation of an agreement for mandatory restrictions on aircraft operators per Part 161; closure of the airport after the grant assurances expire and the reopening of the airport; complete closure of the airport after the grant assurances expire; or continue to operate the airport as a public use airport (status quo).

### *In Brief...*

#### **FAA Says Community Engagement Is ‘Robust’**

In a story in last week’s issue (33 ANR 104), ANR asked FAA why it does not include communities upfront in the design process of airspace revisions rather than putting the burden on them to propose ways to mitigate noise impact after the agency has implemented new flight paths, which is what happened in the FAA’s Northern California Metroplex project.

FAA’s initial response did not directly address that question. The agency has sent the following additional comment:

“Over the years, the FAA has refined its community engagement process. Today, we follow a robust engagement strategy that integrates input from communities, airports, and local elected officials.”

#### **Date Set for 2022 U.C. Davis Symposium**

The 2022 U.C. Davis Aviation Noise & Emissions (ANE) Symposium will be held on May 1-3, 2022, as a hybrid event: both at the U.C. Davis campus in northern California and as a virtual event.

The symposium Planning Committee is starting to develop the sessions and agenda for 2022 and is seeking new ideas for topics or presentations next year. Please send them by the end of August to Symposium Manager Sandra Hall; email: [sehall@ucdavis.edu](mailto:sehall@ucdavis.edu).

## **AIRPORT NOISE REPORT**

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