

Aviation Noise & Emissions Symposium

March 1-3, 2020
Mission Valley Marriott
San Diego, California



Hosted By

UC Davis
Air Quality Research Center



Welcome

Welcome to sunny San Diego for the 34th annual Aviation Noise & Emissions Symposium!

Unique in bringing together national and international stakeholders, this symposium has for three decades offered a venue for insightful and productive discussions on ways to reduce impacts from aviation noise and emissions.

This year our Technical Program Planning Committee has developed a program focusing on successful efforts within each segment of the aviation industry to mitigate aircraft noise and emissions. Symposium sessions also will provide the most current findings on the effects of aircraft noise on health, details of legislation aimed at reducing aviation noise and emissions, guidance on working on behalf of communities seeking to reduce aircraft noise impacts, and updates on exciting new aviation noise abatement technologies.

Our goal is to have speakers share real-world experiences that attendees can learn from and apply to their own aviation noise and emissions issues. Those making presentation at this year's symposium in San Diego join us from as near as across town to as far as across the broad Atlantic to share their knowledge and experience.

Our stellar Program Planning Committee is excited to bring you back to Southern California where you can interact and network with the diverse audience that attends the symposium: from airport staff to researchers; from government regulators to vendors of technologies, services and solutions; and from concerned community members to established community groups.

So, enjoy your stay in the beautiful city of San Diego. We look forward to an exciting symposium.

- Sandra Hall, Symposium Manager

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Sunday, March 1st

Pre-Symposium Trainings

12:30 - 4:15 PM

Noise 101

Hosted By: Greg Maxwell,
Casper & Steve Alverson,
Environmental Science
Associates

12:30 - 4:15 PM

FAA & Environmental Reviews 101

Hosted By: John Brandt,
The MITRE Corporation &
Ryan Weller, Federal
Aviation Administration

Afternoon Group Meetings

4:30 - 6:00 PM

Airport Noise Officer Annual Meeting

Hosted By: Sam Tan, DFW
International Airport & Sandy
Lancaster, DFW International
Airport

4:30 - 6:00 PM

Community Group Meeting

Hosted By: Jennifer Landsmann,
Sky Posse Palo Alto, Gene
Reindel, HMMH & Don Jackson,
The MONA Project

Monday, March 2nd

7:00 AM Check-in and Breakfast

8:10 AM **Plenary Presentation**

Better Together ... Seriously!: Observations on Collaboration to Address Aviation Noise & Emissions

Dennis Probst, San Diego County Regional Airport Authority

8:55 AM **Successful Practices to Improve Community Engagement**

Chaired By: Jason Schwartz, ABCx2 & Ian Jopson, National Air Traffic Services

Effective Engagement and Consultation for Airspace Change - Gordon Ferguson, Heathrow Airport

An Adaptive and Collaborative Approach to Airspace Change - Jonathan Bagg, NavCanada

Successful Community Engagement - John Stewart, Heathrow Association for the Control of Aircraft Noise

FAA's Noise Complaint Initiative (NCI) Overview - Terry English, Federal Aviation Administration

10:30 AM Break with Exhibitors

11:00 AM **Noise & Emissions Legislation: The 2018 FAA Reauthorization Act Panel Discussion**

Chaired by: Veronica Bradley, Airlines for America & Jennifer Landesmann, Sky Posse Palo Alto

Janet McEneaney, Queens Quiet Skies

Melinda Pagliarello, Airport Council International

Don Scata, Federal Aviation Administration

Craig Wilsey, Boeing Research & Technology

Jose Alonso, Collins Aerospace

12:20 PM Lunch



1:20 PM **Assessing Health Effects of Noise & Emissions**

Chaired By: Justin Cook, HMMH & Mary Ellen Eagan, HMMH

National Sleep Study and the Effects of Aircraft Noise on Sleep: Results of Two Pilot Field Studies - Mathias Basner, University of Pennsylvania School of Medicine

Long-term aircraft noise exposure and the risk of hypertension in national US studies - Junette Peters, Boston University School of Public Health

New recommendations from WHO regarding aircraft noise annoyance is not supported by existing evidence - Truls Gjestland, SINTEF

2:20 PM Break with Exhibitors

2:50 PM **Non-acoustic Factors in Aircraft Noise Impacts**

Chaired By: Jason Schwartz, ABCx2 & Anne Kohut, Airport Noise Report/Aviation Emissions Report

The Implications of Non-acoustic Factors for Airport Communication and Engagement - Paul Hooper, Manchester Metropolitan University
From Annoyance to Understanding: Initiatives to address Community Annoyance - Robyn Connelly, Greater Toronto Airport Authority

Addressing aircraft noise annoyance - Why non-acoustic factors matter - Dirk Schreckenber, ZEUS GmbH, Center for Applied Psychology, Environmental and Social Research

Incorporating Non-Acoustic Factor in Aircraft Noise Regulatory Policy - Sanford Fidell, Fidell Associates Inc.

4:05 PM **Emerging Airspace Entrants**

Chaired By: Yolanka Wulff, Community Air Mobility Initiative, Dave Carbone, LGN Aviation Policy Group & N.O.I.S.E.

Environmentally Sustainable "Green Speed" - Gene Holloway, Aerion Supersonic

Shaping a Sustainable Future for Aerospace: The Path to Electrification - Dahlia Pham, AMPAIRE

Adding the Third Dimension to Urban and Regional Transportation - Yolanka Wulff, Community Air Mobility Initiative

Urban Air Mobility and Local Communities: Sharing insights and continuing the dialogued from NASA / Deloitte Community ConOps Effort - Matt Metcalfe, Deloitte

5:20 PM Welcome Reception

Tuesday, March 3rd

7:00 AM Check-in and Breakfast

8:00 AM Aviation Noise Officers Presentation

Sam Tan, *Dallas/Fort Worth Airport*, Sandy Lancaster, *Dallas/Fort Worth Airport*

8:35 AM Air Traffic Noise & Emissions Management in Practice

Chaired By: Jorge Rodriguez Cifuentes, *MITRE Corporation* & Jennifer Lewis, *Metropolitan Airports Commission*

Aircraft Noise Management at Helsinki Airport - Samu Tuparinne, *Finavia*

The O'Hare Fly Quiet Runway Rotation Program: It's Development, Testing, Approval and Implementation - Arlene A. Juracek, *O'Hare Noise Compatibility Commission* & Rebecca MacPherson, *Federal Aviation Administration*

Continuous Climb and Descent Operations in Europe: Successes, Challenges, and Way Forward - Rachel Burbidge, *EUROCONTROL*

9:50 AM Aircraft Operation Strategies for Reducing Noise & Emissions Impacts

Chaired By: Veronica Bradley, *Airlines for America* & Steve Alverson, *Environmental Science Associates*

United Airline's Efforts in Noise Reduction - Melinda Franklin, *United Airlines*

Delta Air Lines' Efforts in Noise Reduction - Kallie Glover, *Delta Air Lines*

Jet Blue's Efforts in Noise Reduction - Sara Bogdan, *Jet Blue*

10:50 AM Break with Exhibitors



11:20 AM Aviation Emission Reduction Efforts

Chaired By: Robbie Gross, *KB Environmental Sciences Inc* & John Pehrson, *CDM Smith*

Size Distribution and Resolution of Aircraft and Roadway Ultrafine Particles in Communities Located Near and Under Flight Paths - Elena Austin, *University of Washington*

Flying to Zero: Opportunities for Reaching Zero Net Carbon Emissions at Airports - Brendan Reed, *San Diego Airport Authority*

Striving for Zero: LAX Ground Support Equipment Emissions Reduction Program - Tami McCrossen, *Los Angeles World Airport*
FAA CLEEN Program Overview - Chris Dorbain, *Federal Aviation Administration*

12:35 PM Lunch

1:35 PM Climate Change & Aviation

Chaired By: Eric Lu, *Ramboll*, Brendan Reed, *San Diego County Regional Airport Authority*, & Rachel Burbidge, *EUROCONTROL*

Climate Change and Aviation - Decarbonisation and Adaptation - Rachel Burbidge, *EUROCONTROL*

Development of a Climate Resilience Plan - San Diego International Airport - Ralph Redman, *San Diego County Regional Airport Authority*

Sustainable Aviation Fuel: What is it? - Megan Boutwell, *Stillwater Associates*

Lessons from Sustainable Aviation Fuel Development - Melinda Franklin, *United Airlines*

2:50 PM Break with Exhibitors

3:20 PM A Green Renaissance in General Aviation - Latest Trends, Research and Future Outlook

Chaired By: Alex Gersen, *National Business Aviation Association* & Gabe Andino, *Teterboro Airport*

Effective Rotorcraft Noise Abatement Operations - Eric Greenwood, *Penn State University*

Electric Aircraft and Solar Airports: Near Zero Noise & Emissions - Scott Burgess, *Eco-Aviation Foundation*

Challenges and Solutions in General Aviation - Gabe Andino, *Teterboro Airport*

4:00 PM Symposium Concludes

Thank you Program Committee

Steve Alverson, Environmental Science
Associates

Gabe Andino, Teterboro Airport

Veronica Bradley, Airlines for America

Dave Carbone, LGN Aviation Policy Group &
NOISE

Justin Cook, HMMH

Alex Gertsen, National Business Aviation
Association

Robbie Gross, KB Environmental Sciences Inc

Anne Hollander, Montgomery County Quiet
Skies

Ian Jopson, NATS

Anne Kohut, Airport Noise Report/Airport
Emissions Report

Jennifer Landesmann, Sky Posse Palo Alto

Jennifer Lewis, Metropolitan Airports
Commission

Xiaobo Liu, Port Authority of New York and
New Jersey

Eric Lu, Ramboll

Mike McKee, Denver International Airport

John Pehrson, CDM Smith

Brendan Reed, San Diego Airport Authority

Jorge Rodriguez Cifuentes, MITRE

Jason Schwartz, ABCx2

Sam Tan, DFW International Airport

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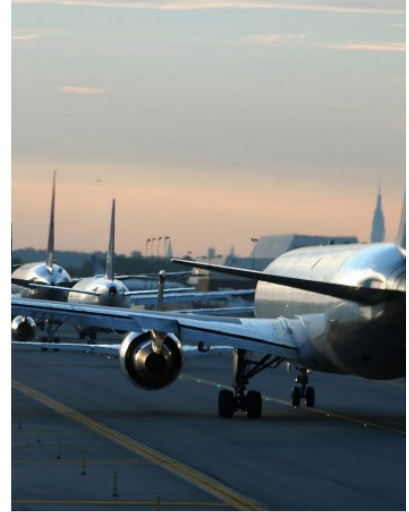
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EMS delivers environmental intelligence for operational efficiency and sustainable growth.



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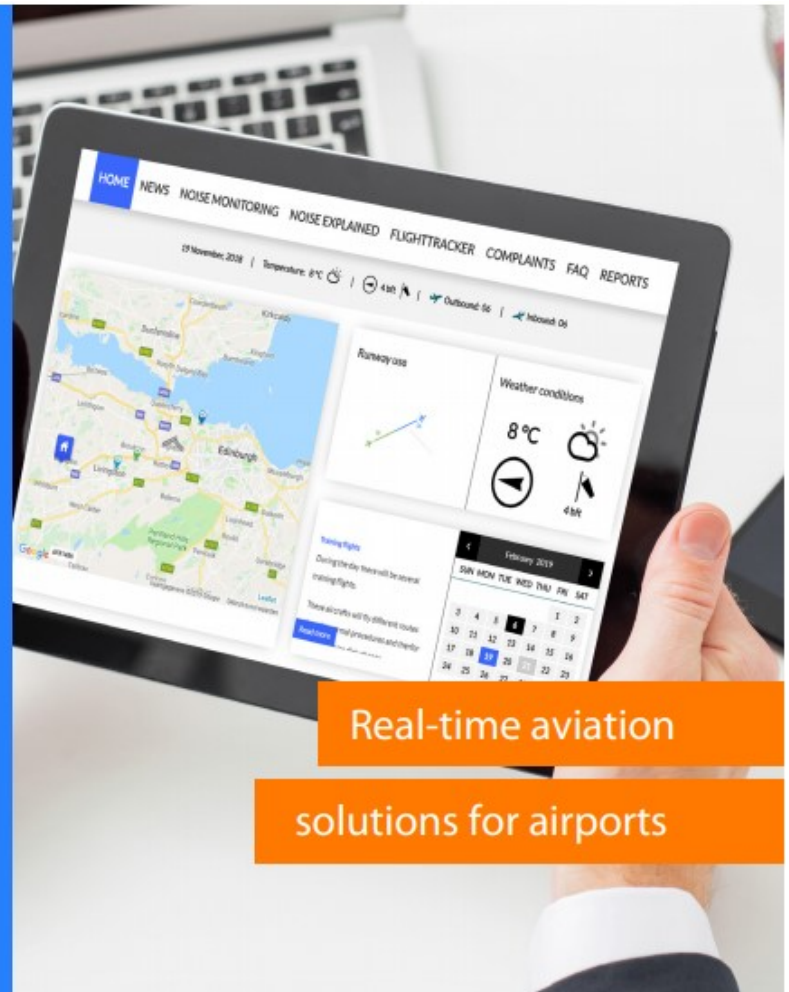


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