

BACK TO THE FUTURE

The Aviation Noise & Air Quality Symposium

Palm Springs
March 5-8
2006



PROGRAM COMMITTEE

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- **Jean-Luc Drapier**, DGAC, France
- **Mary Ellen Eagan**, Harris, Miller, Miller & Hanson
- **Ken Feith**, Environmental Protection Agency
- **Dan Frazee**, San Diego Airport
- **Jeff Gilley**, National Business Aircraft Association
- **Geoff Gosling**, Aviation System Planning Consultant
- **Mark Hansen**, Federal Express
- **Emily Hopkins**, Bay Area Air Quality Management District
- **Sabrina Johnson**, Environmental Protection Agency
- **Mo Keane**, Federal Aviation Administration
- **Mike Kenney**, KB Environmental
- **Peter Kirsch**, Kaplan Kirsch & Rockwell
- **Anne Kohut**, Airport Noise Report
- **Tom Lowrey**, Transport Canada
- **Dick Marchi**, Airports Council International - North America
- **Lourdes Maurice**, Federal Aviation Administration
- **Arlene Mulder**, Mayor Arlington Heights, IL
- **Steve Pflaum**, McDermott, Will & Emery
- **Virginia Raps**, Landrum & Brown
- **Dom Sepulveda**, Pratt & Whitney
- **Ben Sharp**, Wyle Laboratories
- **David Southgate**, Department of Transport and Regional Services, Australia
- **Rudy Steinthal**, Teterboro Airport
- **Armando Tovar**, Raleigh-Durham Airport
- **Mary Vigilante**, Synergy Consultants
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- **Megadata-PASSUR**, Tuesday Breakfast
- **Rannoch**, Wednesday Breakfast
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- **OPEN** – Tuesday Break and Wednesday Break

SPONSORSHIPS STILL AVAILABLE!

Please join us in helping to make this a wonderful event by sponsoring a break.
Contact Helen Bassham at (510) 665-3628, hbassham@berkeley.edu



ABOUT THIS SYMPOSIUM

This is the premiere gathering for getting the latest information about environmental efforts in aviation. Airport staff, engine manufacturers, government regulators, researchers, communities from around airports, and policy makers come together in one location to discuss the noise and emissions impacts of aviation activity and how best to address them.

This symposium provides:

- the latest updates on regulations, legal precedents and technology
- an important venue to meet the experts and debate the issues
- insights about what works, what doesn't, and what's on the horizon
- informal relationship building and networking with peers and colleagues
- exposure to additional resources that can help you do your job more effectively
- four pre-symposium tutorials to help bring you up-to-speed on the basics

Who should attend

- Airport managers, environmental departments and operations staff who work with noise or air quality issues
- Government agencies concerned with regulating aviation activities and or assessing environmental impacts
- Community groups concerned about the environmental impacts of aviation on their neighborhoods
- Airline representatives from environmental departments
- Industry engineers who research, design, and build engines, aircraft and the tools used to measure, analyze and mitigate noise and emissions from aircraft
- Consultants and lawyers working in the environmental or aviation arenas
- Academics, researchers and policy analysts interested in aviation and environmental issues



PALM SPRINGS

February in Palm Springs is like summer everywhere else. The city derived its Spanish name from the ancient healing mineral waters. Today the Indian tribe runs a Spa Resort Casino on the original mineral springs, across the street from our meeting hotel.

In the 1920's Palm Springs was transformed from a sleepy village to become Hollywood's playground, where Gable, Garbo, Sinatra, Hope, and the Marx Brothers came to enjoy "The Springs." The feel of Old Hollywood still lingers among the bougainvilleas and the balmy night air. A quaint village atmosphere survives in the lively mixture of Spanish mission and mid-century modern architecture, inviting you to stroll among the shops, galleries, and eateries.

Numerous unique attractions make the city a prime destination for world travelers—including a fine Desert Museum, an Air Museum, the famous Follies, health spas, casinos and more than 90 golf courses. Take the aerial tramway from the desert floor to an alpine forest at more than 8,500 feet for spectacular views of the mountains and valley below. Nearby you can explore the Indian Canyons featured in Frank Capra's 1935 classic "Lost Horizon." The unique desert mountain vistas provide a magnificent backdrop to outdoor activities. Renowned Joshua Tree Park is only a one-hour drive away.

For more details about the many attractions in the Palm Springs area and transportation options—we suggest you visit this website:

www.desert-resorts.com



GETTING THERE

Palm Springs International Airport is served by several commercial airlines including Alaska, American, Northwest and United as well as commuter airlines—America West Express, American Eagle, Skywest, United Express, and USAir Express. At present RT fares from Chicago direct to Palm Springs run about \$550.

You can also consider flying into Ontario Airport (a one-hour drive away) or Los Angeles International or John Wayne Airport (a two-hour drive away). Interstate Highway 10 will take you directly to Palm Springs. For specific driving directions—consult www.mapquest.com

OUR CONFERENCE HOTEL

This year we will be holding our symposium at the Hilton Resort, located just two blocks from the main boulevard in the center of town. Mention “Back to the Future” to reserve one of our blocked rooms at the special discounted rate of \$159. By staying at our hotel you will help us to control conference costs.



The Hilton Palm Springs Resort
400 E. Tahquitz Canyon Way
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ARTIST

FRANK R. PAUL (1884–1963) is sometimes called the “father of modern Sci-Fi illustration.” During the time that Lindbergh crossed the Atlantic, Frank Paul drew starships encircling the earth. His work influenced a generation of science fiction writers including Arthur C. Clarke and Ray Bradbury. Paul was educated in his native Vienna and studied in both Paris and New York as an architect, where he was discovered in 1914 by pulp magazine editor Hugo Gernsback. Thus began a 50 year career as an illustrator for such pulp classics as “Amazing Stories,” “Science Wonder Stories,” and “Air Wonder Stories.” Paul was guest of honor at the first World Sci-Fi convention in 1939, and today new fans discover his work. A website tribute maintained by artist Frank Wu showcasing Frank Paul’s design work can be found at: <http://www.frankwu.com/paul1.html>

SUNDAY, MARCH 5

PRE-SYMPOSIUM TUTORIALS

NOISE 101: AN INTRODUCTION TO AVIATION NOISE

- 1:00–1:50 **Noise Metrics and Sources**
• WILLIAM ALBEE, *Wyle Laboratories*
- 2:00–2:50 **The Regulation of Aviation Noise**
• STEVE PFLAUM, *McDermott, Will & Emery*
- 3:00–3:50 **The Effects of Aviation Noise on People**
• ROB ADAMS, *Landrum & Brown*
- 4:00–4:50 **The Economics of Noise**
• GEOFFREY GOSLING, *Aviation System Planning Consultant*

AIR QUALITY 101: AN INTRODUCTION

- 1:00–1:50 **Airport Sources of Air Emissions**
• MIKE KENNEY, *KB Environmental Sciences*
- 2:00–2:50 **Airport Operations in AQ Plans**
• *Bay Area Air Quality Management District*
- 3:00–3:50 **The How-To's of Air Quality Evaluations**
• PAMELA VANDERBILT, *CH2M Hill*
- 4:00–4:50 **Emissions Trading & Mitigation Strategies**
• GEORGE SIPLE, *CDM*





GA 101: AN INTRODUCTION TO ENVIRONMENTAL IMPACTS AT GENERAL AVIATION AIRPORTS

- 1:00–1:50 **Introduction to GA and Working With a Noise Advisory Group**
• RUDY STEINTHAL, *Teterboro Airport*
- 2:00–2:50 **Regulations Governing GA Airports in the U.S.**
• MIKE McCLINTOCK, *Mead & Hunt*
- 3:00–3:50 **New Environmental Studies in Los Angeles**
• PATTI TUBERT, *Los Angeles World Airports*
- 4:00–4:50 **Biz Jets and the New Landscape for GA Airports**
• JEFF GILLEY, *NBAA*

NOISE 401: ADVANCED TOPICS IN NOISE MODELING

- 1:00–1:50 **Airspace Modeling: The INM vs. NIRS**
• BOB MILLER, *HMMH*
- 2:00–2:50 **AEDT Advances**
• LOURDES MAURICE, *FAA*
- 3:00–3:50 **TNIP – A New Noise Management Software Tool**
• DAVE SOUTHGATE, *Department of Regional Transport, Australia*
- 4:00–4:50 **Modeling Supplemental Metrics with INM v. 6.2**
• *Volpe*
- 6:00–8:00 **WELCOMING RECEPTION**
Sponsored by
HARRIS, MILLER, MILLER & HANSON and
KAPLAN KIRSCH & ROCKWELL

MONDAY, MARCH 6

PLANNING FOR RENEWED GROWTH

8:30–9:00 **REGISTRATION**

CONTINENTAL BREAKFAST

Sponsored by LOCHARD

9:00–9:15 **WELCOME & INTRODUCTIONS**

9:15–10:00 **KEYNOTE ADDRESS**

“Back to the Future”

- ANTONIO R. VILLARAIGOSA, *Mayor of Los Angeles (invited)*

10:00–10:30 **BREAK**

10:30–12:00 **GENERAL SESSION I**

Why Care? Because Noise & Air Impacts are Increasing as Growth Returns

Moderator: MAYOR ARLENE MULDER, *City of Arlington Heights & O'Hare Noise Compatibility Commission*

The Positive Economic Benefits of Sustainable Aviation

- *Southwest Airlines*


Recent Efforts to Address Sustainable Aviation in Europe

- EMMANUEL FLEUTI, *Flüghafen Zurich*

Community Plans vs Airport Plans

- TODD PORTUNE, *Hamilton County Ohio (invited)*





1:30–3:00

BREAKOUT SESSION I – NOISE

The Naples Decision – A 360 Degree View

Moderator: RUDY STEINTHAL, *Teterboro Airport*

- PETER KIRSCH, *Kaplan Kirsch & Rockwell*
- DAVID BENETT, *FAA*
- TED SOLIDAY, *Naples Airport*

1:30–3:00

BREAKOUT SESSION I – AIR QUALITY

SIPS, Emissions and Climate Impacts

Moderator: GINNY RAPS, *Landrum & Brown*

The Importance of Getting Airports Involved in SIPS

- JANET KIELER, *Denver International Airport*

‘Particulate’ is an Adjective and ‘Particulates’ is not a Word

- RALPH IOVINELLI, *Federal Aviation Administration*

The NOx Global Prototype

- TED THRASHER, *CSSI*

3:00–3:30

AFTERNOON BREAK

Sponsored by WYLE LABORATORIES

3:30–5:00

GENERAL SESSION II

Three’s A Crowd—Accommodating Increased Demand with Smart Solutions

Moderator: LOURDES MAURICE, *Federal Aviation Administration*

How the Next Generation Air Transportation System Institute Will Address Environmental Issues

- CARL BURLESON, *Federal Aviation Administration*

The Community Benefits Agreement at LAX

- PATTY TUBERT, *Los Angeles World Airports*

Modeling Impacts of NGATS

- TERRY THOMPSON, *Metron Aviation*

6:00–8:00

RECEPTION AT PALM SPRINGS AIR MUSEUM

Sponsored by

LANDRUM & BROWN and

BAY AREA AIR QUALITY MANAGEMENT DISTRICT



TUESDAY, MARCH 7

INNOVATION AND NEW TECHNOLOGY

8:00–8:30 **CONTINENTAL BREAKFAST**
Sponsored by MEGADATA/PASSUR

8:30–10:00 **GENERAL SESSION III**
Innovative Land Use Scenarios
Moderator: BEN SHARP, *Wyle Laboratories*

**Land Use Planning Guidelines for New Airports
in Canada**

- BRAD ROBERTSON, *Toronto Airport Authority*

**Land Use Planning Based on Flight Path Corridors:
The Canberra Airport Debate**

- NOEL McCANN, *Canberra International Airport*

**Planning for a New Sustainable Airport in
Nantes, France**

- YVES GARRIGUES, *Directeur de l'Aviation Civile Ouest*

10:00–10:30 **BREAK**

10:30–12:00 **GENERAL SESSION IV**
Air Traffic Control – Strategies and Stratagems
Moderator: SABRINA JOHNSON, *EPA*

Air Traffic Control in the National Airspace System

- CARMINE GALLO, *Federal Aviation Administration*

**How Does Airspace Re-Design Work? Coordinating
Airspace Redesign with Environmental Impacts**

- JAWAD RACHAMI, *Wyle*

**Case Study: The NY-NJ-PHL Redesign Project and
It's Environmental Impacts**

- STEVE KELLY, *Federal Aviation Administration*
- MO KEANE, *Federal Aviation Administration*



1:30–3:00

GENERAL SESSION V

Technological Efforts on the Horizon

Moderator: JOHN LEYERLE, *John Wayne International Airport*

Coming Soon to a Future Near You—Very Light Jets (VLJ) and the SATS

- GUY KEMMERLY, *NASA (invited)*

Quiet Technology Demonstration 2

- BILL HERKES, *Boeing*

Market-Based Environmental Impact Mitigation Around Airports

- *Eurocontrol*

3:00–3:30

AFTERNOON BREAK

Sponsorship open

3:30–5:00

GENERAL SESSION VI

FAA's Center of Excellence Research Findings

Moderator: RICHARD MARCHI, *Airports Council International – NA*

Land Use and Complaint Patterns

- GRAY EIFF, *Purdue University*

A Cost-Benefit Analysis of Aviation

- IAN WAITZ, *MIT*

Supersonic Aircraft Metrics

- VIC SPARROW, *Penn State University*



WEDNESDAY, MARCH 8

NEXT STEPS . . .

8:30–9:00 **CONTINENTAL BREAKFAST**
Sponsored by RANNOCH CORPORATION

8:30–10:00 **GENERAL SESSION VII**

The Health Effects of Aviation: Recent Findings

Moderator: EMILY HOPKINS,
Bay Area Air Quality Management District

A Study of Aircraft Noise and School Effects in West London

- STEPHEN STANSFELD, *Queen Mary University of London*

A Cross-National European Study of Aircraft Noise and Children's School Performance

- JA KNOTTNENUS, *Health Council of the Netherlands (invited)*

Hazardous Air Pollutants (HAPS) Data Revisited

- CHOWEN WEY, *NASA*

10:00–10:30 **BREAK**

10:30–12:00 **BREAKOUT SESSION II – NOISE**

Best Practices for Noise Monitoring Systems

Moderator: DAN FRAZEE, *San Diego International Airport*

Results of the Airport Noise Monitoring System Survey

- GENE REINDEL, *Harris Miller Miller & Hanson*

SAE A-21 Airport Recommended Practices for Noise Monitoring Systems, ARP

- VINCE MESTRE, *Mestre Greve & Associates*

Applications of Airport Monitoring System Data to Solve Noise Problems

- MIKE RIKARD-BELL, *Lochard*

10:30–12:00 **BREAKOUT SESSION II – AIR QUALITY**

Recent Developments in Airport Air Quality Management

Moderator: MIKE KENNEY, *KB Environmental*

Commercial Jet Emissions Tests at Oakland

- STEVE CHURCH, *California Air Resources Board*

Preliminary Findings of Air Quality Impacts at T.F. Green Airport in Warwick RI

- BARBARA MORIN, *Rhode Island Department of Environmental Management*

Analysis of Hazardous Air Pollutants (HAPs) at Airports

- KEN MITCHELL, *USEPA Region IV*

12:00–1:30 **LUNCH**

1:30–3:00 **GENERAL SESSION VIII**

Evaluating Community Impacts

Moderator: JEAN-LUC DRAPIER, *DGAC*

Evaluating an Airport's Impact on a Community

- TBA

Las Vegas Reactions to Airspace Re-Design

- JEFF JACQUART, *Las Vegas*

Drawing a Line in the Sand for Policy Limits?

- SCOTT BENSON, *City of Minneapolis (invited)*

3:00–3:15 **BREAK**

3:15–4:30 **Envisioning the Model Airport of Tomorrow**

- ARMANDO TOVAR, *Raleigh-Durham Airport*
- JOE ANNUNZIO, *City of Niles Illinois*
- MARY VIGILANTE, *Synergy Consultants*



REGISTRATION INFORMATION

- Symposium pre-registration is required
- Continental breakfast, snacks and receptions are sponsored—no fee required
- Pre-symposium Tutorials require a separate registration fee
- Registration Forms must be received NO LATER THAN February 11, 2006
- Register ONLINE www.techtransfer.berkeley.edu/conferences
- Register by FAX or mail
- Please let us know by February 18th if you need to send a substitute

PAYMENT OPTIONS

- **Check:** Make check or money order payable to UC REGENTS and remit with registration form.
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- **Tel:** (510) 665-3466
- **Email:** registrar@techtransfer.berkeley.edu

For sponsorship and exhibitor opportunities or special needs please contact Helen Bassham at (510) 665-3628, hbassham@berkeley.edu

CANCELLATION POLICY

- If cancelled on or before January 13th – 80% refund
- If cancelled January 13th-Feb 17th – 50% refund
- No cancellations will be accepted after February 17, 2006 (Substitutions will be allowed)

REGISTRATION FORM

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FEES (please be sure to check all that apply)

SYMPOSIUM (AV-01) Mon. March 6 – Wed. March 8, 2006

Standard Registration \$750 _____
Government, Academia & Non-Profit Groups \$550 _____
Air Quality Management Agencies, Community Groups \$295 _____

PRE-SYMPOSIUM TUTORIALS Sun. March 5, 1-5 pm

CHOOSE ONE ONLY

concurrent sessions } **Noise 101 – An Introduction (AV-03)** \$95 _____
 } **Air Quality 101 – An Introduction (AV-09)** \$95 _____
 } **General Aviation (AV-10)** \$95 _____
 } **Advanced Topics in Noise Modeling (AV-11)** \$95 _____

TOTAL _____

Please help us by checking special events you plan to attend:

Sun. Evening Welcoming Reception No Fee _____
Mon. Evening Reception No Fee _____

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BACK TO THE FUTURE

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