

JOHN C. FREYTAG, P.E., FREYTAG & ASSOCIATES, LLC

Experience

Freytag & Assoc., LLC, 2009-Present

HMMH, 2007-2009

C.M. Salter & Associates, 1986-2007

Bechtel Group, 1976-1986

Education

M.S., Engineering, Stanford University,
Palo Alto, CA, 1976

B.S.M.E., Arizona State University,
Tempe, AZ, 1972

Graduate Business Studies, Golden
Gate University, San Francisco, CA,
1980

Affiliations

Registered Professional Engineer,
CA1980-present

Board Certified Member, Institute of
Noise Control Engineering, 1989-
present

Executive Member, Airport Consultants
Council, 1998-2007

American Institute of Architects, Affiliate
Member, 1988-2008

Editorial Advisory Board Member,
Airport Noise Report, 1999-2007

Senior Member, American Institute of
Aeronautics and Astronautics, 1995-
2008

Transportation Research Board,
Aviation Noise Subcommittee, 1994-
present

Member, Acoustical Society of America,
1985-present

Member, American Institute of Physics,
1985-present

American National Standards Institute
(ANSI), Standards Committee: Draft
ANSI S12.62, "Acoustics – Estimation of
outdoor sound propagation by
calculation" 2003-2008

Jack Freytag founded Freytag & Associates, LLC to provide expert consulting services in specific areas of acoustics using affiliated experts throughout the U.S. Until recently he also managed the southern California office of Harris Miller Miller & Hanson, the foremost transportation acoustics company in the U.S. As a Director with HMMH he was responsible for sound insulation projects for Los Angeles International Airport and supports other ongoing sound insulation projects in southern California and around the country.

Mr. Freytag has over 25 years of experience as an acoustical consultant and noise expert. His background includes expert witness in both state and federal courts, management of more than 40 FAA-sponsored sound insulation projects, management of environmental and community noise assessments, aero-acoustic research for NASA, management of several hundred architectural acoustics design projects, engineering of large industrial facilities, digital signal processing, and project management and engineering management of high technology business ventures. He has been a licensed pilot since 1966.

As a Director at Charles M. Salter Associates, Inc. for 20 years, he has served as expert witness, and was program manager responsible for business development and project management for acoustical consulting projects in aviation. He managed noise studies for civil and military airport clients, cities and counties, noise-impacted residents, land use litigation cases, and crash hazard potential studies. He also acquired and managed the Audio Forensic Center, a wholly-owned subsidiary company specializing in de-noising (for dialog recovery), gunshot analyses and authentication of audio and video recordings. He has been an expert witness on cases involving audio recordings, environmental noise, and audibility. He has also been the acoustical expert for the Discovery Channel programs.

From 1976 to 1986 Mr. Freytag held a variety of positions at The Bechtel Group as noise control engineer, venture capital analyst, manager of a 62-member CAD organization, project engineer for a large synthetic fuel project in New Zealand, and executive assistant to the vice-president of Bechtel's (then) 3,600-member petroleum division.

From 1974 to 1976 Mr. Freytag conducted experimental and theoretical aero-acoustics research at NASA-Ames Research Center for his graduate research work at Stanford University.

Representative Projects (with former employers) *Architectural,*

Environmental Industrial and Forensic Projects

- Project management of architectural, environmental and industrial acoustic projects. Architectural projects include schools, places of worship, conference centers, single and multi-family developments, and amphitheaters. Environmental projects include airports, and residential, commercial and industrial developments in the public and private sector. Work for three years at Bechtel was exclusively industrial noise control. In 1995 he purchased the Audio Forensic Center which he operated for six years analyzing and enhancing evidentiary recordings and providing associated acoustic expertise for criminal proceedings.

JOHN C. FREYTAG, P.E., FREYTAG & ASSOCIATES, LLC

Litigation Support and Expert Testimony

- Fulton County, GA, investigation of gunshot audibility in police homicide case, 2012.
- Minneapolis et. al. v Metropolitan Airports Commission, aircraft noise surveys and assessment leading to \$128M settlement for clients (the largest noise settlement in history).
- Arzu v. City of Hawthorne, investigation of emergency vehicle siren audibility prior to a collision. For the plaintiff.
- People v. Fuiava, investigation of which weapon fired first for the defendant in a death penalty case.
- City of Alameda et al v. Oakland International Airport, expert challenging the validity of Environmental Impact Report for Airport expansion. Cited and supported by California Supreme Court.
- People v. Reynoso, investigation and court testimony on evidentiary confession tape in a murder case.
- People v. Jack Cunningham, forensic simulation of gunshot audibility and court testimony in California murder trial.
- Polaris Amphitheater Concerts, Inc. v. City of Westerville drafted and defended noise ordinance against amphitheater noise in federal court (1995-1999).

Client Quote or Project Highlight

Regarding the Discovery Channel 'Death of Diana' audio simulation of the crash in the Paris tunnel:
"I expected this to work well, but not this well."

Television Programs

- Discovery Channel, Unsolved History:
 - “The Boston Massacre” (2001)
 - “Death of Princess Diana” (2003)
 - “JFK – Beyond the Magic Bullet” (2005)

Representative Publications and Presentations

- J. C. Freytag and E. M. Reindel, *Noise Level Reduction Measurement Methods for Sound-Insulated Structures*, NOISE-CON 2008, Dearborn.
- J. C. Freytag and Paul D. Schomer, *Minneapolis et al. v Metropolitan Airports Commission*, N.O.I.S.E. Summer Conference, Dulles, VA.
- J. C. Freytag and E. M. Reindel, *Noise level reduction measurement methods for sound-insulated structures*, TRB Summer Meeting, Key West, FL.
- J. C. Freytag and Paul D. Schomer, *Assessing the relative noise contributions from independent time-varying sources*, Noise-Con 2007, Reno, NV.
- J. C. Freytag and Paul D. Schomer, *What is “Quietude” in an Urban Area?* INTER-NOISE 2007, Istanbul, Turkey.
- J. C. Freytag, D. R. Begault and C. A. Peltier, *The Acoustics of Gunfire*, INTER-NOISE 2006, Honolulu, HI.
- J. C. Freytag, *Noise Insulation Performance of Buildings near Airports: Measurement Issues and Perspectives*, NOISE-CON 2004, Baltimore.
- J. C. Freytag, *Retrofit Sound Insulation: The Morning After*, INTER-NOISE 2002, Dearborn, MI.
- J. C. Freytag, *The Airport Noise Paradox: DNL Drops While Problem Grows*, Noise-Con 2001, Portland, ME.
- J. C. Freytag (co-author), *ACOUSTICS: Architecture, Engineering, the Environment*. (1998, William Stout Publisher).