# LISTEN

# LIS•TEN (verb)

To pay attention to sound.

Quieting noise. Controlling vibrations. Creating peaceful places.

Since 1958 Polysonics has provided a broad range of noise and vibration services to bring quiet to an increasingly noisy world.

We eliminate the sounds you don't want, so you can hear the sounds you do.

# INTERIOR ACOUSTICS

- Performance Halls
- Theatre Spaces
- Sanctuaries
- Executive, Classified & SCIF Rooms
- Atrium/Lobbies
- Recital Halls
- · Broadcast/Recording Studios
- Historic Spaces
- Museums

# VIBRATION MODELING & ANALYSIS

- Building Vibration Modeling & Analysis
- Mechanical Equipment Isolation
- Footfall Modeling & Analysis
- Specialized Vibration Modeling & Analysis for Hospitals and Medical Research Facilities
- Industrial Machinery Diagnostics & Design

# MDU/HIGH RISE BUILDING NOISE

- Building Shell Analysis
- Noise Level Reduction Analysis
- HUD/IBC Noise Guidelines & Requirements
- Airport Noise Measurement & Modeling (INM)
- Building Roof Design

# TRANSPORTATION NOISE

- Traffic Noise Measurement & Prediction Modeling (TNM)
- Railway Noise Measurement & Modeling (HUD)
- Noise Barrier Design & Optimization
- Building Shell Design/Noise Level Reduction Analysis
- Airport Noise Measurement & Modeling (INM)
- Building Roof Design

## **TESTING & MEASUREMENT**

- STC/NIC/IIC/NC/RT60 Field Measurements
- Indoor/Outdoor Noise Measurements (Noise Level Reduction)
- Ground Vibration Measurements for Research Facilities, Labs, Hospitals, and Educational Facilities
- Industrial Machinery Measurement
- Traffic/Railway/Airport Noise Measurement

## MECHANICAL NOISE

- Air Handling Units Noise Control
- Corridor Air Supply Units Noise Control
- Cooling Tower Noise Control
- Emergency Generator Noise Control
- Booster Pumps Noise Control
- Elevator Noise Control



# OLD CONVENTION CENTER Washington, DC

This 10 acre site in Washington, DC is being redeveloped into a mixed-use site consisting of two office buildings, two apartment buildings, two condominium buildings, common and below-grade Polysonics' scope includes Noise Criteria (NC) for noise level of HVAC; Sound Transmission Class (STC) through walls, floors, windows, and doors; Impact Isolation Class (IIC) Coefficient (NRC) materials to absorb sound; Reverb Time (T60) to quantify reverberation in large spaces; and decibel level day night (Ldn) to quantify environmental

The project is anticipated to generate \$30 million a year in new tax revenue. The plan for the site is 300,000 square feet of retail space which includes restaurants, a grocery store, a variety of retailers; 1,377 units of housing, 70,000 square feet for hotel, 500,000 square feet of office space, a new library, public plaza and approximately 1,700 parking spaces.

# EXPERIENCE

# EX • PE • RI • ENCE (verb)

To directly perceive events and reality.

Design and Integration of audio and video components for any size project can be quite an imposing task. Polysonics will help sort through all the intimidating details to design the most comprehensive, fully integrated audio & visual solution possible for your specific system requirements.

## HOSPITALITY

- Audio Systems
- Video Projection Systems
- · Room Combining Systems
- Building TV Distribution Systems
- Digital Signage & Kiosks
- Guest room TV/Video on Demand
- Fitness Center Entertainment
- Large Center Entertainment
- BGM & Paging Systems
- Pool & Outdoor Entertainment
- Door Key Systems/Room Control

## **WORSHIP**

- · Performance Audio Systems
- · Speech Reinforcement Systems
- · Video Projection Systems
- Broadcast Camera Systems
- Video Production/Post Production
- Production and Broadcast Lighting
- Room Combining Systems
- Building and Campus-Wide Media Distribution
- Digital Signage/Kiosks
- Media Recording and Duplication Systems
- · Specialty Lighting
- Curtain & Rigging Systems

# THEATRE & PERFORMANCE

- Theatre Design
- Audio Systems
- Video Projection Systems
- · Theatre Production Lighting
- Rigging Systems
- Curtain Design/Layout
- Seating Layout
- Sightline Analysis
- Themed Architectural Lighting
- Film/Video Projection
- 5.1 & 7.1 Surround Systems

# THEMED ENTERTAINMENT

- Audio Systems
- · Video Display Systems
- 3D Video Systems
- 4D Effects
- Show Control Systems
- Ride Control Systems
- · Park-Wide Audio
- · Paging Systems
- Video Distribution/Storage
- · Digital Signage/Kiosks
- · Park-Wide Control Systems

# **ARENAS & STADIUMS**

- Performance Audio Systems
- Video Projection Systems
- Video Scoreboards
- · Digital Signage
- Paging Systems
- · Video Distribution
- BGM/Overflow Audio
- Press Feed Systems
- · Audio & Video Booth Control
- RF & Coach I/C Systems
- Production Intercom
- Audio/Video Delay Systems
- Truck Docks/Interconnect

# **MOTORSPORT VENUES**

- Performance Audio
- Video Projection Systems
- Video Scoreboards
- · Digital Signage
- · Paging Systems
- Video Distribution
- BGM/Overflow Audio
- · Press Feed Systems
- · Audio & Video Booth Control
- Production Intercom
- · Audio/Video Delay Systems
- Truck Docks/Interconnect
- Timing Loop



# Newton, IA

Working with the owner, design team and racing sanctioning bodies, Polysonics designed and specified all technical systems for the Iowa Speedway. These systems included systems for the grandstands and suites, property-wide data and telecommunications systems, broadcast and media interfaces, optic infrastructures, fiber timing and scoring systems audiovisual various presentation systems in the project's meeting spaces. The project was completed on time and under budget.



# COMMUNICATE

# COM•MU•NI•CATE (verb)

To convey knowledge or information.

Tele-Presence, High-Definition Video Conferencing, and Smartboard Technologies are just a few of the tools that Polysonics utilizes to help you share information. Our Design solutions remove barriers so you can connect with who you want, when you want.

# **CORPORATE**

- Conference Room A/V Systems
- A/V Control Systems
- Audio Tele-Conferencing (ATC)
- Video Tele-Conferencing (VTC)
- Tele-Presence
- Video Conference Camera Systems
- Speech Reinforcement
- Video/Media Distribution & Storage
- Simultaneous Interpretation
- Digital Projection
- Sound Masking
- Paging Systems

# **EDUCATIONAL FACILITIES**

- Classroom A/V Systems
- Classroom A/V Control Systems
- · Distance Learning
- Public Address
- School-Wide Paging Systems
- · Speech Reinforcement Systems
- School-Wide Media Distribution
- · Media Storage & Retrieval
- · School Wide Video Distribution
- Digital Signage & Kiosks
- · School Clock Systems

# **COLLEGES & UNIVERSITIES**

- Campus A/V Systems
- Campus A/V Control Systems
- Distance Learning
- Public Address
- Campus Wide Paging System
- Speech Reinforcement
- Campus Wide Media Distribution
- Campus Wide Video Distribution
- Digital Signage & Kiosks

# **COMMAND & CONTROL**

- · Large Format Display Systems
- Video Wall Design
- · Graphic/Screen Scrape Displays
- Multimedia Convergence
- Conference Room A/V Systems
- AV Control Systems
- Audio Tele-Conferencing (ATC)
- Video Tele-Conferencing (VTC)
- Tele-Presence
- Video / Media Distribution & Storage
- Paging Systems
- Sound Masking

# **GOVERNMENT**

- Conference Room A/V Systems
- A/V Control Systems
- Tele-Conferencing
- Video Conferencing
- Tele-Presence
- Video Conference Camera Systems
- · Speech Reinforcement
- Video/Media Distribution/Storage
- Simultaneous Interpretation
- Digital/Film Projection
- Sound Masking
- Paging Systems

#### COURTS

- Courtroom A/V Systems
- Courtroom A/V Control Systems
- · Jury Box Video Systems
- Sound Masking & Hush Systems
- Media Storage
- Media Distribution
- Court Recordation
- Video Production/Post Production
- Building-Wide Video Distribution
- Digital Signage & Kiosks



# NATIONAL ASSOCIATION OF REALTORS Washington, DC

Located on reclaimed Brownfields directly site facing the Capitol, this first LEED certified office facility in Washington, DC boasts 19 percent recycled content and high efficiency technologies. This building is designed for daylight to reach 98 percent of the interior space and is equipped with daylight sensors that automatically adjust the artificial light levels as natural daylight dims or increases.

Polysonics provided all the acoustical and audiovisual design criteria, including Video and Audio Teleconferencing and Presentation System Design to meet or exceed LEED criteria.



# NETWORK

# NET•WORK (verb)

To connect computers and telecommunications equipment.

At Polysonics, we provide data, telephone and technology solutions that allow for effective and efficient communication. With Registered Communications Distribution Design (RCDD) on staff, our designs are always fully integrated and modular. This provides not only the features you need today, but also the capability to meet the needs of tomorrow.

# DATA INFRASTRUCTURE

Polysonics provides plans and specifications for the location of all LAN outlets and the infrastructure/cabling required for a functioning, scalable data network

### DATA SYSTEM DESIGN

Polysonics evaluates current and projected Information Technology (IT) needs including storage, bandwidth, Personal/Local/Wide area networking requirements, topological considerations and scalability requirements. Polysonics data design solutions coordinate all hardware, software and infrastructure requirements to meet the needs of today and to provide scalability for the future.

# **PBX**

Polysonics provides plans and specifications for the location of all telephone outlets and the infrastructure/cabling required. If Private Branch Exchange (PBX) system is elected, Polysonics provides assistance to the owner in coordination of all Central Office (CO) lines to the building demark. If CO switching is selected Polysonics offers coordination of services between the owner and service provider.

### VOIP

Polysonics provides complete Voice-over-IP (VoIP) system design including all hardware, software, handsets, routing, and infrastructure to support a facility-wide VoIP Integrated system.

#### VOICE AND DATA

- POTS
- UPT/STP
- Coaxial Systems Design
- Fiber Optics Systems Design
- Virtualization/Thin Client Applications
- VoIP/PBX Systems Design

#### **NETWORKS**

- Unified Communications Systems Design
- WAN/LAN Systems Design
- WIFI Systems Design
- Cellular Repeat Systems Design
- Point of Sale Systems Design
- RF Repeat Systems
- Building Control Systems
- · Building Wide Room Control
- Door/Key Entry Systems



# McCONNELL PUBLIC SAFETY & TRANSPORTATION OPERATIONS CENTER

Fairfax, Virginia

Polysonics provided Fairfax County, Virginia with Design Consulting, Bid Documentation, and Construction Administration services for their new McConnell Public Safety & Transportation Operations Center (MPSTOC).

MPSTOC is one of the most technologically advanced and highly capable facilities of its kind in the nation.

This 120,000 square foot complex opened in the Fall of 2008 and houses the Communications Center of the Virginia State Police, Virginia's Department of Transportation Smart Traffic and Monitoring Center, as well as Fairfax County's Public Safety 9-1-1 Communications Center and Emergency Management Center

MPSTOC uses state-of-the-art audio, video, and related control systems to serve the county's public safety as well as the Virginia Department of Transportation (VDOT) traffic management system for Northern Virginia.



# PROTECT



To shield from exposure, injury, damage, or injury.

Polysonics designs fully integrated protection solutions to provide both peace of mind and efficiency in operation. Using the latest technologies, we design video surveillance, intrusion detection and access control systems to keep buildings safe & sound.

# **CLOSED CIRCUIT TV**

Polysonics provides designs and specifications for complete video surveillance systems including infrastructure, cameras, monitors, controls, security system interface and time-lapse recording capabilities.

# **DOOR ACCESS SYSTEMS**

Polysonics provides centrally controlled and monitored entry and egress systems including the design and specification of all infrastructure, hardware, and monitoring equipment to secure all desired spaces.

## INTRUSION DETECTION AND ALARM

Polysonics provides infrastructure layout and systems specifications for building-wide intrusion detection systems utilizing multiple detection techniques to insure security.

# SENSITIVE COMPARTMENTED INFORMATION FACILITIES

Based on Director of Central Intelligence Directive (DCID) 6/9, and DIAM 50-3, Polysonics provides Sensitive Compartmented Information Facility Designs for U.S. Security, Defense, and Intelligence programs.



THE PENTAGON Arlington, VA

Polysonics is currently engaged in a long-term renovation of the Pentagon.

As part of this project, Polysonics has authored the project design guide, defining the acoustical criteria for the facility. These criteria address the Secure Compartmented Information Facility (SCIF) requirements across multiple standards, based on room use, for privacy (STC), intelligibility (NRC) and background noise (NC).

Polysonics is familiar with SCIF requirements and has the design and construction management skills to ensure strict adherence. Our consultants are working closely with the design team to manage costs, working well within the budget constraints. Polysonics established the criteria and audio systems integration is providing all test and analysis services on completed scopes.

# MANAGE



# MAN• AGE (verb)

To exercise administrative and supervisory direction.

Polysonics will stay closely involved in your project from concept to completion. This close involvement helps minimize the opportunity for change orders, and ensures you are getting exactly what you expect each step of the way.

# **CREATIVE VISION**

Polysonics offers a project needs assessment that clearly defines the objectives of the project with a balanced perspective of space planning, aesthetics, performance, budget, and time. Polysonics contribution to the project's stated program of objectives serves as a guideline to assist future design phases.

# FEASIBILITY STUDIES

Polysonics offers in-depth analysis of every property and project approach considered to evaluate any or all of the following: Constructability, regulatory compliance, project timing, projected costs vs. benefits, product availabilities, and technical considerations.

# **CONTRACT ADMINISTRATION**

Our contract administration services help provide our clients with peace of mind. From Bid Qualifications, to Project Scheduling through Systems Commissioning and Final Punch, Polysonics offers services to manage contractors, schedule and budget.

# CONTRACTOR BID QUALIFICATION

Polysonics provides assistance in selecting a contractor to provide the materials and labor necessary to successfully complete the installation. This service includes providing the Owner with a list of competent and qualified contractors to review the bids solicited from the competing firms to verify that the bid adheres to the specification and satisfies the economic and functional requirements of the project.

# SYSTEM COMMISSIONING

On all scopes for which Polysonics design services have been retained, Polysonics provides verification and commissioning services for the system installation to ensure adherence to the specification and the stated design intent.



WESTIN LAGUNAMAR Cancun, Mexico

Polysonics provided Design and Project Management of the background music systems throughout the entire hotel complex, including the Pool Palaba Bar and Grill as well as the Starwood Vacation Ownership Sales Gallery areas. Polysonics is capable of handling and coordinating international resort projects where foreign languages and international drawing standards are required.