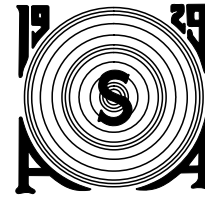


STUDENT DESIGN COMPETITION 2009



PRESENTED BY:

THE TECHNICAL COMMITTEE ON ARCHITECTURAL OF
THE ACOUSTICAL SOCIETY OF AMERICA,
THE ROBERT BRADFORD NEWMAN STUDENT AWARD FUND, AND
THE NATIONAL COUNCIL OF ACOUSTICAL CONSULTANTS

ANNOUNCEMENT AND DESIGN SCENARIO

The Acoustical Society of America's Technical Committee on Architectural Acoustics, with support from the Robert Bradford Newman Student Award Fund and the National Council of Acoustical Consultants, is sponsoring a student design competition to be judged and displayed at the 157th meeting of the Acoustical Society of America to be held in Portland, Oregon, from 18 May through 22 May 2009.

The Student Design Competition is intended to encourage students in the disciplines of architecture, engineering, physics and other curriculums that involve building design and/or acoustics to express their knowledge of architectural acoustics and noise control in the design of a facility in which acoustical considerations are of significant importance.

PARTICIPATION AND REGISTRATION

Entries may be submitted by individual students or by teams of a maximum of three students. Undergraduate and graduate students are encouraged to participate. Teams comprised of students from different institutions are welcomed. A faculty sponsor is required.

The Competition will be held as a poster session during the Portland meeting of the ASA. However, attendance of the conference is not required for entry in the competition. Students are encouraged to attend the conference and should note the availability of student transportation subsidies.

To register for the competition, email your intention to participate to *studentdesigncompetition@gmail.com* by 20 April 2009. Indicate the names of all team members and their affiliated academic institution(s). Indicate the name and email address of the faculty sponsor. The email address used for registration will be the single point of contact for the entire team.

PRESENTATION FORMAT AND SUBMISSION PROCEDURE

Entries are to be poster presentations. Submissions shall be presented on up to three (3) separate display boards with maximum dimensions of 22x28 in. (56x71 cm) per board. The conference language is English.

Design and layout of the submissions should account for the presentation style. The font size, amount of narrative text, and number of graphs should be appropriate for poster viewing. A thoughtful viewing and analysis of the presentation should be possible in 4 to 6 minutes. Separate design details, calculations or other documentation may not be attached to the boards; such information will not be reviewed by the judges.

In an opaque envelope affixed to the back of EACH display board, provide the name, address, phone, email addresses, school affiliation and advisor/sponsor of all participating team members.

Please package display boards securely to prevent damage during shipping.

For entry in the competition, entries must be received not later than Monday, 11 May 2009 at the following address:

ASA Student Design Competition 2009
c/o Daly-Standlee and Associates, Inc.
4900 SW Griffith Drive
Beaverton, OR 97005
Attn: Mr. Kerrie Standlee

JUDGING AND AWARDS

The submitted poster presentations will be judged by a panel of practicing design professionals. The judges will include acoustics consultants and may include architects and theater consultants.

Entries will be evaluated on technical merit, design vision, adherence to the design scenario, and effectiveness of presentation.

An award of \$1,250 will be made to the individual or team with the entry chosen as "First Honors". Commendation awards of \$700 will be made to four individuals or teams of other outstanding entries. Awards are funded through a grant from the Wenger Foundation and by the Newman Student Award Fund.

QUESTIONS AND CLARIFICATIONS

Questions regarding the competition requirements or clarifications about the design scenario may be directed to the organizers through *studentdesigncompetition@gmail.com*. Questions and answers deemed to potentially affect all entries will be copied to all participants.

DESIGN SCENARIO

A small college is planning a new building to house an interfaith chapel and community outreach center. Your team has been hired by the University to advise on the conceptual design for the project.

The building program is intended to include:

- A 400-seat Chapel to be used for worship services and some concerts
- A Multi-purpose room to accommodate 200 patrons seated at round 8-person-tables
- A catering kitchen with direct access to the multi-purpose room
- An office suite for college chaplains, religious program directors and building management, to include eight private offices and open office space for ten support staff.
- Lobby, restrooms, and information desk

PROJECT SITE

The college is located in a tropical location and the new building is intended to be sited on a bluff near the coast. The chaplains have expressed desire that the Chapel have natural light and views of the ocean.

The project site is 2.5 kilometers from the island's airstrip. Propeller planes and regional jets frequently use the airport.

INTERFAITH CHAPEL

The chapel will be used for variety of religious services and meditative events. Freedom from disturbances from outside will be very important to the success of the building. Rain noise (from the location's predictable late afternoon showers) and aircraft noise (from the arriving and departing planes to the nearby airport) are of particular concern.

The college's small music department will use the Chapel for chamber music concerts and choral concerts. A stage platform that accommodates 20 instrumentalists or 40 standing singers is necessary. Offstage piano storage is needed. A pipe organ will not be included in the project. The Chapel will be used for worship styles and concerts that will vary from gospel chorus with amplified instrumental accompaniment, praise band, and *a cappella* choral music.

The main floor of the Chapel should accommodate a flat floor area with movable seating to allow for participatory dance and seating in-the-round for up to 125 seats.

MULTI-PURPOSE ROOM

The Multi-purpose Room will be used for a range of gatherings, including student activities, meetings, and dinners. A catering kitchen should be located immediately adjacent for providing food service for dinner events. The kitchen should have a separate service entrance.

The Multi-purpose Room should be distinct from the Chapel lobby, to allow concurrent use of the Multi-purpose Room and Chapel.

Due to the constrained project site the multi-purpose room must be located directly below the Chapel.

TECHNICAL REQUIREMENTS

Design competition entries should emphasize the general building acoustics design, including room acoustics, noise control of building services, and acoustic isolation between spaces. While the architectural design and accommodation of building services is integral to the design of a functional building, the focus of the presentation should be the acoustic design.

Successful presentations will specifically address the following:

- Acoustic isolation from aircraft noise
- Acoustic isolation of rain noise
- Acoustic isolation between the stacked Multi-purpose Room and Chapel
- Room planning for the Chapel, including dimensional relationships and room volume.
- Acoustic finishes for the Chapel, addressing the varying program needs
- Acoustic finishes for the Multi-purpose Room
- Background noise criteria for critical spaces
- Supply and return air strategy for the Chapel

While the design of the building ventilation and electrical systems is very important to the acoustical success of a project, it is not necessary for the presentations to indicate in detail the mechanical and electrical system design. Presenters should address conceptual noise and vibration control procedures relating air movement and electrical systems.

END OF ANNOUNCEMENT AND DESIGN SCENARIO