



THE DAR LIBRARY LAY LIGHT RESTORATION



As part of the three-fold President General's Project, "Preserve the Past, Enhance the Present, Invest in the Future," efforts to restore the DAR Headquarters buildings have focused on a number of critical enhancements, specifically roof repairs. In the first 18 months of the Wright Administration, two major roofing projects were completed successfully. Plans were under way to begin the next phase of exterior roof work when a series of unique events revealed a serious problem with the most recognizable "roof" of the entire Headquarters complex.

The magnificent glass ceiling of the DAR Library is the most emblematic interior architectural feature of the DAR Headquarters buildings. The ornate design, which includes 25 individual glass frames, each measuring approximately 8 feet by 9 feet, allows natural light to fill the Library. This delicate interior glass feature is a "lay light," while the translucent pyramidal structure exposed to the elements on the roof above it is a "skylight."

This signature design element is original to the Memorial Continental Hall building. Construction began in 1905 and was finished in 1910 with the completion of the lay light. Originally designed as an auditorium to hold the National Society's

annual Continental Congress, the space became the home of the expanding DAR Library collection in 1950. Interestingly, Edward Pearce Casey, the architect of Memorial Continental Hall, earlier had designed the interior of another famous library, the Library of Congress, complete with its own stunning lay light.

The DAR Library lay light has awed Daughters and the public alike for more than 100 years. However, a thorough investigation in the fall of 2011 revealed the lay light to be in an advanced state of deterioration. After a rare 5.7 magnitude earthquake struck the Washington, D.C. area, causing damage to many historic buildings, including DAR Headquarters, an experienced group of architects and

glass experts were brought in to inspect the lay light. While they found that the lay light was not seriously damaged specifically by the earthquake, its overall condition was extremely precarious.

A preservation team composed of experts in historic preservation contracting, architectural design, structural engineering and leaded glass work identified a number of serious problems that only a comprehensive rehabilitation and restoration of the lay light can resolve. If these issues are not addressed immediately, the lay light will continue to deteriorate rapidly, posing a danger to DAR members, staff and researchers who use the DAR Library.

Because the lay light panels are situated horizontally, the forces of gravity are constantly pulling downward on the glass. This stress, combined with the deterioration of the metal joints, or zinc comes, holding the panels together, greatly weakened the structure. Solar exposure from the skylight overhead heats the air above the lay light, causing the glass and metal to expand and contract. Over time, the panels warped and the zinc comes pulled away from the glass, leading to cracks. Further exacerbating the problem are corroded zinc and solder joints, which could make it easier for broken glass to come loose from the panels and fall to the floor of the Library.

Poor ventilation allowed moisture to build up between the lay light and skylight, contributing to the corrosion and softening of the zinc comes. The cupola that sits atop the skylight is inadequately equipped to withstand heavy, blowing rain that can then lead to water leakage above the lay light. Years of leakage have resulted in dirt buildup—evidenced by the brown staining on the center panel—which



is the problem most visible when the lay light is viewed from below.

The lay light investigations revealed many specific structural issues, but other elements also will need to be addressed in order to better maintain the lay light in the future. Improved access to the attic area between the lay light and the skylight must be created through a new entry hatch built into the skylight. Reinforced walkways and a “lifeline” harness system must be installed to prevent maintenance personnel from falling through the lay light. Repairs to the skylight cupola and ventilation system will help keep rainwater out and draw hot air out of the space to moderate temperature conditions surrounding the lay light.

The scope of the required work is more extensive, and the need more immediate, than any building restoration project at DAR Headquarters in recent years. The work is likely to cost approximately \$1.6 million and take up to a year to complete.

Despite other critical building projects still in need of attention, restoring the DAR Library lay light is now the top priority of the President General’s Project restoration efforts.

Currently, the lay light preservation team is refining its recommendations for restoration approaches. The Executive Committee is carefully considering the options to determine the best course of action based on historic preservation, schedule and cost. While the restoration work will certainly impact the research area of the Library, all are confident that the Library will be able to remain open to researchers. Scaffolding primarily will affect the appearance of the Library, with only minimal impact on the accessibility of the Library materials.

This critical effort to restore the DAR Library lay light to its original historic beauty, as well as to secure its safety, will be an immense undertaking. DAR members as well as others who treasure the historic

DAR buildings and genealogical research center are encouraged to support the effort in any way they can. More information about how the lay light restoration efforts may affect researcher access to the DAR Library will be provided as it becomes available. Please visit www.dar.org/laylight for more information and updates on the DAR Library Lay Light Restoration Campaign.

Ways to Support the DAR Library Lay Light Restoration

- **Contribute to the President General’s Project:** Donations of any amount will help support the lay light restoration as well as other important restoration projects at DAR Headquarters.
- **Sponsor a Lay Light Panel:** Any individual or group can contribute \$40,000 to sponsor the restoration of one of the 25 individual lay light panels and be recognized on a special plaque to be located in the DAR Library.
- **Share Sponsorship of a Lay Light Panel:** Any individual or group can contribute \$10,000 to share sponsorship of a lay light panel and be recognized on the lay light plaque.
- **State Sponsorship of a Panel:** Many states have pledged to sponsor a full or partial panel and members can contribute any amount toward their state’s effort.

* For questions or more information, contact the Office of Development at 1 (800) 449-1776, development@dar.org or visit www.dar.org/giving.

