



HISTORIC MONUMENT

NATIONAL CATHEDRAL

As part of an effort to strengthen this historic monument's ability to serve as a center for social ministries, worship, music, exhibits and religious education, acoustic expertise was needed to address the nave's use for special music concerts. While the reverberant acoustics of the Cathedral's nave were appropriate for choral and orchestral music, the space did not offer the clarity and intimacy for live performances expected by concert goers.

AD conducted a feasibility study to explore options to improve the Nave's natural acoustic performance to better support special music concerts. Options included a demountable concert enclosure that could easily be erected and removed to improve the natural acoustics for choir and orchestra performances in the Nave. Cost aspects and logistic aspects weighed heavily into which systems were most appropriate.

The study and report included sound measurements and assessments of existing acoustic environment and audience sightlines to the performers. Existing concert lighting system also received attention to assure that there were no conflicts with the demountable concert enclosure. Demountable platforms for the musicians were considered in improving both the acoustics and sightlines to the performers from the seating on the main floor of the nave. Options were developed for demountable sound reflecting elements around the performance area and conceptual plans drawn up for rigging these elements and how they could be moved and stored when not in use.

Acoustic design also entailed close collaboration with audio and AV system upgrade designs to assure appropriate integration of sound system performance with the Nave's natural acoustics.

CLIENT

Washington National Cathedral

LOCATION

Washington, DC

PROJECT TYPE

Study / Renovation

COMPLETE

2002

SEAT COUNT

4,100

CONTACT

Mark Huffman
Washington National Cathedral
202.537.6219

SCOPE

Acoustics
AV Systems