

Cover feature

Berghaus Pipe Organ Builders, Inc., Bellwood, Illinois
St. John's Episcopal Church, Norwood Parish, Bethesda, Chevy Chase, Maryland

From the organbuilder

St. John's Episcopal Church, Norwood Parish, is located just minutes away from Washington National Cathedral on the border between Bethesda and Chevy Chase, Maryland. St. John's began in 1873 as a small mission congregation in what was then rural Bethesda. By 1895, the church had been elevated to parish status within the newly formed Diocese of Washington. Throughout its history, St. John's has been dedicated to "building community at the crossroads of faith and life." Today, the parish continues to honor this tradition by offering beautiful, liturgically oriented worship services and by providing a wide variety of programs that minister to the diverse needs of the congregation and community.

Prior to the renovation of St. John's 500-seat Georgian-style sanctuary, the nave presented a feeling of light-filled openness, while the deep and narrow chancel appeared both dark and restrictive. In typical fashion, choir stalls were divided on both sides of the chancel, with the high altar placed against the front wall. The existing organ consisted of three manual divisions with the Great, Swell, and Pedal installed in chambers along the east wall, and the Choir placed on the west wall. Throughout its history and despite the best intentions of the parish, the organ suffered several major incidents involving water damage. With the east wall of the chancel positioned directly beneath the bell tower, it was determined that the tower was, in fact, the root of the problem. Although the tower had previously undergone extensive renovation, water was continuing to find its way into the chambers. At the urging of then director of music Douglas Beck, an organ committee was formed and charged with the task of identifying possible solutions. The committee was also asked to investigate and recommend several organ builders. The committee also felt that it would be wise to engage an organ consultant and did so by involving Donald Sutherland from the Peabody Institute. The initial findings of the committee can be summed up in the following two recommendations. First, the repair of the existing organ would not represent a sound artistic or economic option. Second, a new instrument should not be returned to the existing chambers. Based on these parameters, the committee proceeded to identify a select group of organ builders and to ask each builder to submit their vision for an instrument that would not only meet the liturgical requirements of the parish, but allow the parish to further expand its role in offering artistic expressions of faith to the greater community.

As discussions continued relative to the placement of the organ, it became increasingly clear that installing the organ in any other area of the sanctuary would require changes to the structure of the building. It was also at this point that the clergy and many of the parishioners suggested that the parish consider a comprehensive renovation of the chancel. Given this suggestion, a second committee, called the Architectural Review Committee, was formed to oversee the process and to investigate potential architects and contractors. With the selection of Kerns Group Architects and Forrester Construction, the "ARC" noted that a final decision regarding an organ builder should be made so that all parties could work in a collaborative fashion. On the recommendation of the organ committee, Berghaus Pipe Organ Builders, Inc. was selected to build the new instrument. Recognizing that the combined project including renovations to the building and the construction of a new pipe organ would require a significant financial commitment, St. John's



Façade



Console

vestry authorized the formation of a third committee to oversee the fund raising process. The combined efforts of the Organ Committee, Architectural Review Committee, and the Capital Campaign Committee were incorporated under the theme "Enhance, Renew, Rejoice!"

Early in the process of examining the space, it was determined that placing the organ in the gallery would be difficult and limiting. The lack of height and depth would require that the entire rear portion of the church be rebuilt. There was also a great deal of concern expressed about the necessity of moving the choir to the gallery. Although some members of the parish had initially favored this approach, they quickly grasped the complexities involved and shifted their support to the possibilities represented by the chancel. Above and beyond the issue of the organ, enhancing the worship space was an important ingredient in St. John's view that worship should involve a greater sense of community. One option was to open and enlarge the chancel, creating an inviting space for various forms of worship. Another was to bring the altar forward and install a new communion rail such that it would bring the communion experience closer to the congregation and enable more of those present to take communion at the rail. The ARC was also hopeful that natural light could find its way into the chancel so that the space would have the same warm, inviting feel currently attributed to the nave. This eventually led the architect to modify two of the former organ chambers and add skylights so that the chancel is bathed in soft, natural light. Another transforming suggestion involved moving the choir out of its traditional split arrangement and facing them towards the congregation. With the adoption of these suggestions, it was decided that the ideal placement of the new pipe organ was along the central axis of the building. The new organ would thereby occupy approximately 12 feet of the existing depth at the front of the chancel. This

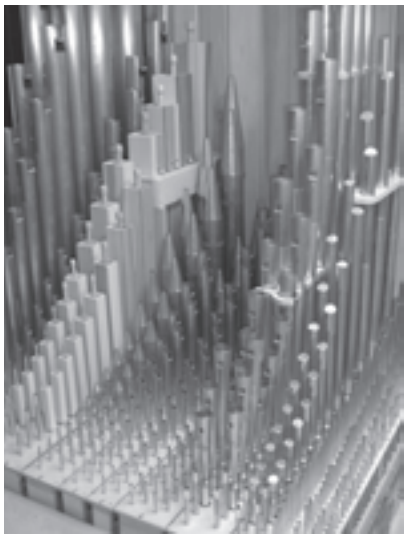
effectively moved the chancel forward placing parishioners, clergy, musicians, etc. in closer proximity. Obviously this change also provided the means for both music and the spoken word to be heard in a clear and full fashion.

St. John's began its journey to rejuvenate the life of the congregation not only by overhauling the chancel and replacing the organ, but also by enhancing and renewing their relationship with the Creator. Staying close to its roots as a mission congregation, the early parish embraced a low-church form of worship. In the 1970s, under rector William A. Beal, the congregation experimented with a variety of new worship styles, including the Episcopal Church's trial liturgies. This "new tradition" included the use of the 1979 Prayer Book. The move towards higher church expression continued into the 1980s and 1990s under Rev. Duane Stuart Alvord, and continues today under the leadership of the current rector, Rev. Susan M. Flanders, and the associate rector, Rev. Harrison West. The beautiful construction of the current worship form and the growing excellence of the music program as initially developed under the auspices of former director of music, Douglas Beck, and built upon by the current director of music, Anne Timpane, made it apparent that the new instrument would be required to provide ample support for congregational singing, but must also be an instrument that supports the Anglican choral repertoire. The organ committee's visits to a wide variety of instruments across the full spectrum of builders pointed to the fact that the parish desired an instrument of great breadth of tone and timbre, with a sound that would fill the space, but not entirely overpower it. It was also important that the organ contain the subtle stops necessary to accompany children's choirs while having the ability to uphold the congregation with a sense of majesty and power. However, it was also the desire of the former director of music

that the instrument should be French-inspired, both in its specification and in its appearance. Given the design of the building, we chose to represent the visual aspect of this request in the design of the console.

The new Berghaus pipe organ at St. John's Episcopal Church contains 58 speaking stops and 63 ranks over three manuals and pedal. The placement of the instrument along the central axis of the nave allows for optimal sound projection while enhancing the visual impact of the chancel space, most notably as natural light from the skylights reflects off the polished zinc façade. The painted, incised hardwood case is accented with solid walnut trim and gold-leafed pipe mouths. The case also features columns that emulate the columns found throughout the nave. The layout of the organ was intended to give each division its proper musical placement while providing easy access for tuning and service. The Grand-Orgue and Pédale are situated just behind and at the top of the façade, while the expressive Récit and Positif divisions are at the mid or impost levels. This arrangement establishes a leadership role for the Grand-Orgue and Pédale in accompanying congregational singing, while the Récit and Positif, placed at a lower level, are suitable for accompanying choral literature. Set at the very top of the case is a large semicircular arch that continues the barrel vault design of the nave, and allows for full projection of the Grand-Orgue chorus. While not strictly adhering to a particular historical period, the organ, both in terms of its stoplist and tonal approach, is a synthesis of the classical and romantic styles. This synthesis emphasizes a clear, singing quality in the individual stops, while providing depth and warmth when stops are used in combination. Each division contains a complete principal chorus, characteristic flute stops and a full battery of reeds that range from the very subdued to the fiery. Those who have experienced this instrument firsthand remark on how the organ increases in fullness as more stops are drawn. The favorable, but not overly reverberant acoustic is obviously helpful in this instance. The use of Berghaus custom slider and pallet windchests for the majority of the flue-work and for certain reeds allows for a natural, unforced sound that ensures favorable blending qualities and excellent tuning stability. Much of the pipework in the organ is scroll and cone tuned. Stops on slider windchests are voiced on 3¼" of wind, while the majority of the reeds are voiced on pressures that range between 3½" and 4".

The Grand-Orgue is based on a large-scaled 8' Montre constructed from 75% tin. This stop has a rich, full, singing quality, while at the same time providing articulation and clarity to the rest of the chorus. The 8' Gambe is a soft string with moderate sizzle. When combined with the full-bodied 8' Bourdon, it creates a secondary principal-like timbre. The 8' Flute Harmonique is an open flute throughout the compass and becomes harmonic at g32. It is well suited as a blending stop in the *jeux de fonds* combination, or as a solo stop when required by the Romantic repertoire. The 4' Flute Octaviante is a lighter and softer alternative to the 8' Flute Harmonique. Mutations in this division are based on principal scales and constructed from 52% tin. These stops are voiced to enhance the harmonic series present in the plenum. When used in combination with the flutes, the mutations provide a lighter, brighter cornet in contrast to the Mounted Cornet. The 8' Trompette is constructed from 52% tin, and contains English tapered shallots. Since the organ has a strong solo trumpet, this Trompette was voiced to blend with the flue stops within the division. The Mounted Cornet is scaled and constructed based on the French classical school. The 8' rank is a bourdon, with subsequent ranks being open. The 1½' rank is proportionally



Positif interior

the largest in scale. This stop, with its compass from c13 to g56, is musically successful in literature ranging from Byrd and Buxtehude, to Couperin and DuMage. The Trompette Royale is the organ's crowning solo reed. Voiced on 10" of wind, the stop contains resonators that are hooded for maximum projection. Overall, the Grand-Orgue sets the tone of the entire instrument. Its placement at the center of the long axis provides an ideal vantage point for strong musical leadership, particularly in accompanying congregational singing. One stop from the former instrument was used in the new instrument. A 16' mahogany Quintaton was extensively rebuilt and revoiced to add a light 16' timbre to the Grand-Orgue.

The musical demands of the Anglican service require that an instrument have a wide variety of voices and dynamic possibilities, particularly in music for choir and organ. Given this situation, entire tonal divisions were designed to work as a unified whole. The Positif Expressif is also based on an 8' Principal of 75% tin and is designed to function as a secondary chorus to the Grand-Orgue. The gentle and singing nature of these principals provides ideal color for Baroque and Renaissance literature. Because of its enclosed placement, the chorus is extremely useful in accompanying choirs and instrumental ensembles. Flute stops include an 8' Bourdon (wood) and a 4' Flûte à Fuseau. In contrast to the Grand-Orgue, the mutations of the Positif are scaled to blend well with flutes versus principals. The 2 2/3' Nasard relies on Koppeldedacks in its bass octave. The 2' Quarte de Nasard is essentially a hybrid stop, beginning as a light principal, then taking on a bright flute tone in the treble range. The four-rank 1' Cymbale is useful as a chorus mixture, as well as offering a bell-like timbre to lighter textures. The two reeds include a narrow-scale 8' Trompette designed to blend with the principal chorus and an 8' Cromorne, which can be used successfully in either classical or romantic repertoire.

The Récit contains a wide variety of stops, each with its own unique construction. The Salicional and Voix Celeste are small in scale and slotted to give the pair a decidedly French sound. The 8' Flûte à Cheminée features long, wide chimneys for optimal harmonic development. The 4' Flûte Conique is of the Spitzflöte variety and is made of 40% tin. Perhaps one of the most unique stops is the 2' Flûte à Bec, or Block Flute, which incorporates large-scale pipework. Another unique feature of the Récit is the ability to combine the 8' Flûte à Cheminée with the 8' Voix Celeste. The separation that exists between the two ranks provides the slow undulating pattern typically heard in flute celestes. Since an 8' Principal does not exist in this division, the five-rank, 2' Plein Jeu is designed to reinforce the 8' and 4' pitches at earlier points than generally found in typical mixture compositions. The 8' Trompette and 4' Clairon are fiery reeds in the Cavaillé-Coll style, featuring ring and nut construction and resonators of 70% tin. The 8' Hautbois is reminiscent of the English variety. The 16' Basson is voiced to add gravity to the Swell reed chorus while introducing a

lighter reed character in the Pédale. The entire reed chorus is placed at the back of the expression chamber with reeds voiced on 4" of wind.

The Pédale is based on the 16' Montre located in the façade. Given the variety of independent stops of varying dynamics and timbre, the Pédale division provides unusually full support for the demands of the manual divisions. The 32' Basse Acoustique is derived from the 16' Montre (unison) and the 16' Soubasse (quint). As an alternative to the 8' Pedal Octave, the 8' Cor de Chamois (Gemshorn) is suitable for giving the 8' line a more pointed emphasis, especially in Baroque combinations. The 32' and 16' Bombarde have wood resonators for maximum fundamental.

All aspects of the organ console, including the bench and music rack, were specifically designed for this instrument. The detail associated with the console complements not only the casework but many of the features that exist within the worship space. Since the director of music at St. John's is both organist and choir-master, the profile of the console needed to be low enough to allow the organist to direct the choir from the console. The low-profile French terraced design is constructed from solid walnut with added walnut veneers to insure the consistency of the grain pattern. Curved terraces are made from book-matched, burl walnut and are home to the oblique-face, pau ferro drawknobs. Stops are logically laid out with plenum and major reeds to the organist's right; flutes, strings, mutations, and minor reeds to the left. Keyboards with maple naturals and walnut sharps feature top-resistant touch for maximum responsiveness. To keep the console free of electronic clutter, the memory level, record/playback and clochette controls are contained in a swivel drawer located on the right-hand side of the console.

The blessing of the new Berghaus organ and the newly renovated chancel was presided over by Bishop John Bryson Chane of the Diocese of Washington. In attendance were representatives from the Lift High the Cross Capital Campaign, the Organ and Architectural Review committees, Kerns Group Architects, Forrester Construction, and Berghaus Pipe Organ Builders. The organ itself was dedicated on Saturday, May 10, and featured nine prominent organists from the greater Washington area.

The completion of the organ is the culmination of many years of planning, preparation, and hard work by the individuals and committees at St. John's, as well as the organ builder, architect, and general contractor. The result of this work is a grand worship space that uniquely fits the needs of the parish, and an instrument that will serve and inspire the congregation as well as the larger community for generations to come. Berghaus Pipe Organ Builders wishes to thank all those who helped make this project possible. We wish to thank The Reverend Susan Flanders, rector; The Reverend Harrison West, associate rector; Christine Walz-Dallaire, senior warden 2006-07; Ken Lee, senior warden 2007-08; Cynthia Stroman, organ committee chair; Suzanne Welch, architectural review committee chair and project manager; Bill Fry and Richard Saltsman, co-chairs of the Lift High the Cross capital campaign committee; Mike McConihe, chancellor; Douglas Beck, former director of music ministries; Anne Timpane, director of music ministries; Brian Briggs, parish administrator; and the many parishioners who gave of their time, talent, and treasure. Berghaus also wishes to thank Tom Kerns and Koji Hirota of Kerns Group Architects and Bassem Melham, Bill Morrisette, and Will Durham of Forrester Construction.

Berghaus Pipe Organ Builders also wishes to thank members of its staff for their countless hours and dedication to this project: Brian Berghaus, president David McCleary, director of sales and marketing Tonal design: Jonathan Oblander, Kelly Monette Visual design and layout: Steven Protzman

Voicing and tonal finishing: Kelly Monette, Jonathan Oblander, Mitch Blum

Construction: Stan Bujak, Chris Czopek, Steve Drexler, Jeff Hubbard, Trevor Kahlbaugh, Kurt Linstead, David Mueller, Daniel Roberts, Tim Roney, Paul Serresseque, Ron Skibbe, Jordan Smoots, Paul Symkowski, Mark Ber, Randy Watkins, Andy Schach.

—Jonathan Oblander
Tonal director
Berghaus Pipe Organ Builders

From the director of music ministries

In January 2007, St. John's signed a contract with Berghaus Pipe Organ Builders to build a new instrument that would fulfill and expand the music ministry's mission and vision:

to explore the journey of faith and life through music; unite parishioners . . . by embracing and cultivating talents and gifts . . . enliven liturgy and community, nourish the musical and creative spirit . . . ; inspire the people of St. John's . . . strengthening relationships with God and one another.

St. John's has had a pipe organ for more than 80 years. Organ music has enhanced important events in the life of the parish, from weekly worship services, to special holiday music, to baptisms, weddings, funerals and other occasions. However, progressive structural deterioration of the existing organ had caused significant wear and damage to the instrument's infrastructure. The organ became increasingly unreliable, and

so the decision was made not only to replace the instrument but also to think creatively about the chancel's architectural design. Taking into consideration the size of the room, the number of people that the room will accommodate, and the desired uses of the instrument, it was decided to place the new organ on the central axis of the church for optimal sound projection and flexibility within the space. Berghaus worked in conjunction with our architectural review committee to find a harmonious blend of the advantages and challenges associated with the organ placement and chancel reconfiguration. The result is our stunning new three-manual custom-made work of art.

Berghaus was chosen by our organ builder selection committee after extensive information gathering and evaluation of the proposals submitted by several prominent organ builders. Berghaus's excellent reputation, design philosophy, and character made them the stand out choice for St. John's. Their attention to detail, dedication to craftsmanship, and ability to work within our timeframe and cost considerations resulted in an instrument that is not a reflection of me, or Berghaus, but of St. John's and its parishioners.

Through the generosity of our donors, the work of Berghaus Pipe Organ Builders, and the talents of the guest organists who helped dedicate the instrument, we have built an instrument that will enrich our worship and give music to lift our spirits for year to come.

—Anne Timpane
Director of music ministries

GRAND-ORGUE – Unenclosed – Manual I. 3 1/4" wind pressure

16' Quintaton	61 pipes	existing, mahogany, revoiced
8' Montre	61 pipes	75% tin throughout
8' Gambe	61 pipes	1-12 zinc, 13-61 52% tin
8' Flûte Harmonique	61 pipes	1-12 zinc, 13-61 52% tin, harmonic @ g32
8' Bourdon	61 pipes	52% tin
4' Prestant	61 pipes	52% tin
4' Flûte Octavante	61 pipes	75% tin, harmonic @ c25
2 2/3' Quinte	61 pipes	52% tin
2' Doublette	61 pipes	75% tin
1 3/4' Tierce	61 pipes	75% tin
8' Cornet V	220 pipes	52% tin, c13-g56
1 1/2' Fourniture IV	244 pipes	75% tin (19-22-26-29)
8' Trompette	61 pipes	resonators of zinc and 52% tin
Tremblant		
16' Trompette Royale	1-12 from Ped	16' Bombarde; 13-61 from 8' Trompette Royale
8' Trompette Royale	61 pipes	hooded resonators, voiced on 10" wind
Clochettes		5 bells (with adjustable delay, speed, and volume)

RÉCIT EXPRESSIF – Enclosed – Manual III. 3 1/4" (flues) and 4" (reeds) w.p.

8' Salicional	61 pipes	1-12 zinc, 13-61 52% tin, slotted
8' Voix Céleste FF	56 pipes	6-12 zinc, 13-61 52% tin, slotted
8' Flûte à Cheminée	61 pipes	52% tin
4' Prestant	61 pipes	52% tin
4' Flûte Conique	61 pipes	40% tin
2' Flûte à Bec	61 pipes	52% tin
2' Plein Jeu V	305 pipes	75% tin (15-19-22-26-29)
16' Basson	61 pipes	resonators of zinc and 52% tin, 1-18 L/2
8' Trompette	61 pipes	resonators of 70% tin, parallel open shallots
8' Hautbois	61 pipes	resonators of zinc and 52% tin
8' Voix Humaine	61 pipes	resonators of 52% tin
4' Clairon	61 pipes	resonators of 70% tin, parallel open shallots
Tremblant		
8' Cornet V	—	(G.O.)
8' Trompette Royale	—	(G.O.)

POSITIF EXPRESSIF – Enclosed – Manual II. 3 1/4" wind pressure

8' Principal	61 pipes	75% tin throughout
8' Bourdon	61 pipes	poplar
8' Flûte Celestes II		(console preparation)
4' Octave	61 pipes	52% tin
4' Flûte à Fuseau	61 pipes	52% tin
2 2/3' Nasard	61 pipes	52% tin
2' Quarte de Nasard	61 pipes	52% tin
1 3/4' Tierce	61 pipes	52% tin
1 1/2' Larigot	61 pipes	52% tin
1' Cymbale IV	244 pipes	75% tin (26-29-33-36)
8' Trompette	61 pipes	resonators of zinc and 52% tin
8' Cromorne	61 pipes	resonators of zinc and 52% tin
Tremblant		
8' Cornet V	—	(G.O.)
8' Trompette Royale	—	(G.O.)

PÉDALE – Unenclosed. Wind pressure 3 1/4" except Bombarde (4")

32' Basse Acoustique	—	derived from 16' Montre and 16' Soubasse
16' Contrebas		(console preparation)
16' Montre (façade)	32 pipes	1-25 polished zinc, 26-32 75% tin
16' Soubasse	32 pipes	poplar
16' Quintaton	—	(G.O.)
8' Octave	32 pipes	75% tin throughout
8' Cor de Chamois	32 pipes	1-12 zinc, 13-32 52% tin
8' Bourdon	12 pipes	(extension of 16' Soubasse)
4' Basse de Choral	32 pipes	75% tin
4' Bourdon	12 pipes	(extension of 16' Soubasse)
2 2/3' Fourniture IV	128 pipes	75% tin (12-15-19-22)
32' Contre Bombarde	12 pipes	L/2 resonators of pine (extension of 16' Bombarde)
16' Bombarde	32 pipes	L/1 resonators of pine
16' Basson	—	(Récit)
8' Trompette	32 pipes	
4' Clairon	32 pipes	
8' Trompette Royal	—	(G.O.)