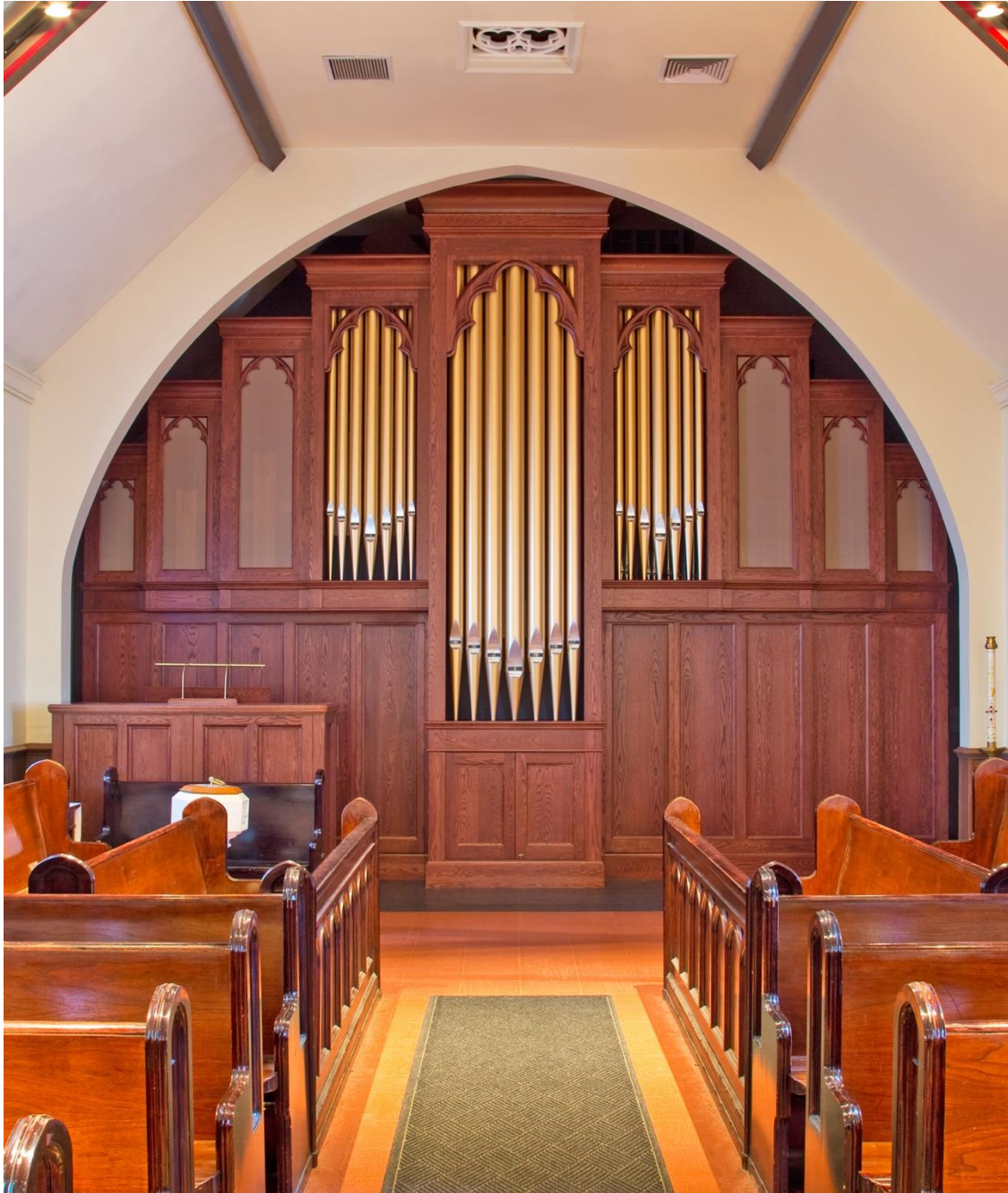


**Schoenstein & Co.,  
Benicia, California  
Grace Episcopal Church,  
Hartford, Connecticut**

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**Schoenstein organ, Grace Episcopal Church, Hartford, Connecticut**

## **A Symphonic Church Organ??**

What does “symphonic organ” mean? The definition of this often-misunderstood term is best prefaced by what it is not. The symphonic organ does not attempt to imitate precisely the instruments of the symphony orchestra. It is not designed specifically to render orchestral transcriptions. It is not a refined theatre organ! The term “symphonic” does not relate to specific sounds, but rather to an overall versatility in musical performance. Most will agree that the modern symphony orchestra is the ideal instrumental medium for interpreting musical images both emotional and intellectual. Shouldn’t an organ have these qualities?

In 1993 we completed our first symphonic-style organ for Wynne Chapel of Highland Park Presbyterian Church in Dallas, Texas. At 30 stops, 35 ranks, it was certainly a miniature in comparison to Yale University’s Woolsey Hall organ of 142 stops, 197 ranks, which is considered by most to be the premier American symphonic organ. Located in a small chapel and almost entirely enclosed, the Dallas organ was able to give the effect of a very large comprehensive instrument without excessive loudness. We thought we had gone as far as we could in miniaturizing the symphonic concept.

As part of his research on the Aeolian-Skinner Organ Co., Jonathan Ambrosino visited First Presbyterian Church in Spartanburg, South Carolina. Their chapel needed a companion to the Aeolian-Skinner in the church. Jonathan, having heard our Wynne Chapel organ, suggested that they might like something along the same lines although there was room for only 15 ranks. Holt and Marcia Andrews, associate music directors, contacted us and initiated an absolutely fascinating challenge, which we fulfilled in 1996.

The vital question we addressed for the Spartanburg project was, “what is the musical job to be done?” Why does a church, let alone a small chapel, need a symphonic-style instrument? After receiving hundreds of letters from organ committees over the years suggesting all the things they wanted their new organ to do, it became obvious to me that in most situations a symphonic-style instrument is exactly what they need. Above all, a church organ must wear well, and that means having a variety of tone under effective expression. This is especially vital in accompaniment, which is the church organ’s biggest single job.

## **Thinking like an Orchestrator**

To start the design process, I tried thinking of each stop in an organ as a player in an orchestra. How do orchestrators reduce instrumentation and still produce a symphonic effect? The model for this, of course, is Hollywood and the great studio orchestras for pictures, radio, and recordings. Throughout the “Golden Age” of Hollywood music from the early ’30s to the early ’60s, orchestras limited by budget and studio size were able to produce effects in a wide variety of repertoire, sounding like an ensemble twice the size. How did they do it? A typical set-up would be: one flute (doubling piccolo), one oboe (doubling English horn), four players (doubling a combination of saxophones, clarinets, bass clarinet, flute, oboe, and bassoon); one horn; three trumpets, two trombones, tuba; piano, harp, percussion (one traps and one mallets/tympani); eight violins, three violas, two ’cellos, and two double basses.

What does this show us? First, the huge string section and full woodwinds of the symphony orchestra can equal the brass and produce a mighty ensemble *ff*. In the reduced instrumentation, the brass section has to take the stage and be the power center. Second, there is at least one of every symphonic tone color including the three that always make a small orchestra sound big—horn, harp, and tympani. Using different tone colors than one would find in a traditional chamber orchestra of the same size gives the illusion of a much larger ensemble. The use of doubling, which we might compare to unification in an organ, adds even more variety with only slight additional expense. Third, to produce solid bass, the tuba is generally written with the double basses rather than with the brasses.

Here is how we adapted these ideas to the organ.

### Tonal Qualities

**1. Diapasons.** The most important element of organ tone is the diapason. Even in a small organ it is best to have two contrasting characters of diapason tone and at least one well-developed chorus. However, in small rooms or dry acoustics, powerful upperwork can be very unattractive.

**2. Trumpets.** The ultimate power of the full ensemble is the organ's "brass"—8' and 16' tone representing the trumpet and trombone of the orchestra. In smaller acoustics, power is best achieved with unison tone of great warmth and intensity. The proper character is usually achieved through high wind pressure.

**3. Flutes.** Of prime importance is vividly differentiated tone color including mutations and one powerful, open solo flute.

**4. Strings and hybrids.** What seems a luxury is really practical—two celeste stops: a pair of genuine orchestra strings, and a pair of soft ethereal voices. Most small organs rely on one compromise celeste pair to do these two very different jobs. Such stops usually tend toward flute or diapason tone. Although they may be attractive, they do not elevate an instrument into the symphonic class. Keen strings are absolutely necessary, but so are the less assertive, *dolce* tones. Both should be represented, and the string pair should be full compass to low C.

**5. Color reeds.** Normally a small organ would have just one-color reed, such as an oboe. To enter the symphonic class, a contrasting tone such as clarinet is more important than a second mixture, for example. Color reed tone is useful in both solo and accompanimental roles.

**6. Powerful Pedal bass.** The symphonic organ has representatives of each tone color in the Pedal department. A Bourdon is not enough; there must also be open flue tone and reed tone to provide clarity, point, and drama. If possible, 32' tone should be included.

**7. Effective expression.** A symphonic organ must be able to produce a crescendo from *ppp* to *fff*. It should also be able to produce full organ effects at less than full organ volume. Part of this has to do with the proper terracing of voices, but solid expression boxes with responsive shades are vital, too.

**8. Contrasting expression.** There must be at least two divisions under expression for an organ to start claiming symphonic status. In a small instrument, as many voices as possible should be under expression. In the symphonic concept, unexpressive voices are a luxury normally reserved for large instruments. In some cases layout demands that certain voices be unexpressive, for example where the Swell must be behind the Great, but this should be an exception.

A full exposition of these ideas was presented in an article with several sample stop lists titled “Organ Design and the Kraft Music Hall” in the October 2002 issue of *The Diapason*. Since then, in addition to Antiphonal divisions at First-Plymouth Congregational Church, Lincoln, Nebraska, and Park Cities Presbyterian Church, Dallas, Texas, we have completed similar instruments for Georgetown University and our organ at Christ and St. Stephen’s Church in New York City, which was given a thorough narrated demonstration on YouTube (search “Schoenstein Tonal Demonstration”).



North side of organ in erecting room showing Swell (left) and Inner Swell (right)





Angle view of the façade and console

### **Grace Episcopal Church, Hartford, Connecticut**

Our latest instrument along these lines is blessed with the most ideal environment an organbuilder could wish. The room is small seating only 112 but has a very pleasant, appropriately resonant acoustic producing clarity along with warmth of tone. The organ is situated on the main floor at the west end projecting straight down the nave. There are no transepts. The choir is in stalls at the rear of the nave. The liturgy is Anglo-Catholic with an excellent music program headed by Kyle Swann, who is also Lecturer in Opera at Yale University School of Music.

The organ is entirely enclosed with the exception of the open wood Double Diapason, a wonderful luxury in an instrument of this size. The Great chorus is 8' Diapason, 4' Principal, and 2' Mixture. Although it is most desirable to have an independent 2' Fifteenth, choices must be made, and we elected instead to have a Celeste to the Corno Dolce, which is a tapered hybrid stop of flute quality with a tinge of string edge. It is unified at 16' and 4' pitches. The Harmonic Flute uses the Corno Dolce as a common bass, the break point of which is very hard to determine by ear. The Clarinet offers a strong contrast to the Swell Oboe Horn.

The doubling principle is carried into the Swell where we have a Salicional, which is a small-scale diapason unified at 8'/4'/2' pitch, a wood Stopped Diapason, a highly contrasting narrow-scaled metal Chimney Flute, and a Tierce. The capped Oboe Horn is a very versatile color reed. Two orchestral-style strings and a 16'/8' Tuba Minor, which is in the trumpet family but of darker tonal character, are under double expression within the Swell. In hymn playing, for example, it is possible to introduce the 8' Tuba Minor without notice while playing only the 8' Diapason and 4' Principal on the Great. A dramatic Full Swell effect can be achieved with ease. The same is true with the strings that change to a mild, almost Aeoline character with both boxes closed and then bloom smoothly as they are brought into full power.

A major element of playing flexibility comes from a third manual that borrows stops from both the Great and the Swell. These are both Solo stops and ensemble stops for maximum contrasting possibilities with either Great or Swell. In addition, a few stops from the Great appear on the Swell and vice versa.

The Pedal has four 16' stops representing each tonal family: diapason, flute, string-hybrid, and reed, a luxury not usually found on organs this size, but important in the symphonic concept.

The instrument was completed on June 26, 2017, and will be heard in a dedicatory recital by Thomas Murray on October 29, 2017. The priest-in-charge is the Rev. Rowena J. Kemp, and the director of operations in charge of preparing the installation site was parishioner Tom Phillips. This was a project we enjoyed thoroughly, especially due to the strong cooperation, encouragement, and enthusiasm of the entire parish.

Schoenstein website: [www.schoenstein.com](http://www.schoenstein.com)  
Grace Episcopal Church website: <http://gracehartford.org>

— *Jack M. Bethards*  
*President and Tonal Director*  
*Schoenstein & Co.*  
Photo credit: Louis Patterson



Console

### **GREAT (Manual II, expressive)**

16' Corno Dolce 12 pipes  
8' Open Diapason 61 pipes  
8' Harmonic Flute 42 pipes  
(Corno Dolce Bass)  
8' Corno Dolce 61 pipes  
8' Flute Celeste (TC) 49 pipes  
8' Vox Celeste (II – Swell)  
4' Principal 61 pipes  
4' Corno Dolce 12 pipes  
2' Mixture III 166 pipes  
8' Tuba Minor (Swell)  
8' Clarinet 61 pipes  
Tremulant  
Great Unison Off  
Great 4'  
(Mixture does not couple)

### **SWELL (Manual III, expressive)**

16' Bourdon (wood) 12 pipes  
8' Salicional 49 pipes  
(St. Diapason Bass)  
8' Stopped Diapason (wood) 61 pipes  
8' Gamba † 61 pipes  
8' Vox Celeste † 61 pipes  
8' Flute Celeste (II – Great)  
4' Salicet 12 pipes  
4' Chimney Flute 61 pipes  
4' Flute Celeste (II – Great)  
2 $\frac{2}{3}$ ' Nazard (From Chimney Flute)  
2' Fifteenth 12 pipes  
1 $\frac{3}{5}$ ' Tierce (TC) 42 pipes  
16' Bass Tuba † 12 pipes  
8' Tuba Minor † 61 pipes  
8' Oboe Horn 61 pipes  
Tremulant  
Swell 16'  
Swell Unison Off  
Swell 4'  
† In separate box inside Swell.

### **SOLO (Manual I)**

#### ***Solo stops***

8' Open Diapason (Great)  
8' Harmonic Flute (Great)  
8' Oboe Horn (Swell)  
8' Clarinet (Great)

16' Bass Tuba (Swell)  
8' Tuba Minor (Swell)

#### ***Accompaniment stops***

8' Corno Dolce (Great)  
8' Flute Celeste (Great)  
8' Gamba (Swell)  
8' Vox Celeste (Swell)

#### ***Ensemble stops***

8' Salicional (Swell)  
8' Stopped Diapason (Swell)  
4' Salicet (Swell)  
4' Chimney Flute (Swell)  
2 $\frac{2}{3}$ ' Nazard (Swell)  
2' Fifteenth (Swell)  
1 $\frac{3}{5}$ ' Tierce (Swell)  
Solo 16'  
Solo Unison Off  
Solo 4'

### **PEDAL**

32' Resultant  
16' Double Diapason 32 pipes  
16' Corno Dolce (Great)  
16' Bourdon (Swell)  
8' Open Diapason (Great)  
8' Corno Dolce (Great)  
8' Stopped Diapason (Swell)  
4' Octave (Great Open Diapason)  
4' Flute (Great Harmonic Flute)  
16' Bass Tuba (Swell)  
8' Tuba Minor (Swell)  
4' Clarinet (Great)

### **COUPLERS**

Great to Pedal  
Great to Pedal 4'  
Swell to Pedal  
Swell to Pedal 4'  
Solo to Pedal  
Solo to Pedal 4'  
Swell to Great 16'  
Swell to Great  
Swell to Great 4'  
Solo to Great  
Great to Solo  
Swell to Solo

## **MECHANICALS**

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