

The Cathedral Church
of
St. Michael the Archangel
Springfield, Massachusetts



The Pipe Organ

Historical Review & Renovation Plan

AUSTIN ORGANS, INC.

ORGAN ARCHITECTS AND BUILDERS

◆ Since 1893 ◆

Timeline

St. Michael's Church was constructed in 1861, and the new organ built by the preeminent Boston firm, E&G.G. Hook as its opus 309. Note that just a few years later, in 1864, Op. 334 was constructed in Mechanics Hall Worcester- which remains the largest, unaltered instrument of the period in this country. In 1876, they constructed their largest instrument of 101 ranks at the Cathedral of the Holy Cross in Boston, their Op. 801. As we know, St. Michael's became a Cathedral Church when the diocese was established in 1870. The E & G.G. Hook instrument was situated in an elegant black walnut case which remains today. Although rather modest in scale, compared to other instruments of the company, it likely made a pleasant account of itself in what was then a very generous acoustical environment. That said, the tonal resources were rather limited to choral accompaniment, and limited congregational support.

In 1928, a contract was signed with the Canadian firm of Casavant Frères. This instrument, their Opus 1323, would be more than triple the size of the existing organ, with the addition of an independent chancel instrument. The new organ was extremely orchestral in scope and generously appointed in rather weighty, unison tone. Most stops were carried out an extra octave at the treble (73 pipes) to allow super-coupling without loss of upper pitches.

In the mid-1950's, a local builder (presumably the "Carter Brothers", who also maintained the Symphony Hall organ) performed various alterations and repairs to the instrument. Aside from spot-releathering, it is unknown what further work was accomplished. In c.1967, the newly-formed Berkshire Organ Company performed a rather major set of changes to the instrument, including a new (supply house) windchest in the chancel Swell, and tonal revisions to the gallery organ. It is interesting to note that the foreman in charge of the project at this time, was Berkshire's voicer, Ted Gilbert.

By 1983, Ted was on his own, and embarked on a rather comprehensive overhaul project. The tonal specification (character) of the instrument was substantially revised. The organ was therefore made much, much louder! The project included installation of a partially solid-state control system, and in-house renovation of the 1929 gallery console. The keyboards were sent to Jack Nelson, in Little Compton RI for restoration. New electric stop controls connected to a rudimentary solid-state combination action were fitted to modified stop jambs, and a supply-house pedalboard was fitted to the console. Also part of the project included installation of a "new" chancel console, built of the bits of the previous chancel console. Apart from these changes, the gallery console remained unchanged in external appearance, or of much greater concern: *internal wiring and controls*.

In 1996, while preparing for a wedding (assisting then-organist, Alice Maleski) I heard a gurgling sound when I engaged the chancel Oboe stop. Opening the chamber door, we were greeted with a sheet of water cascading down from the ceiling – directly into the chest. Fr. Karl Huller asked me to prevent further damage, and prepare an estimate. The chest was repaired, pipes cleaned and returned to service. That summer, there was a recital hosted as part of the AGO Regional Convention. A Canadian performer played the Mendelssohn Sonata in F-Minor. A review of the performance by OHS Historian of note, Barbara Owen, declared "The organ at St. Michael's Cathedral is easily the loudest, harshest sound in all of New England". Fr. Huller (who had been a member of the AGO and read the aforementioned article) asked what could be done to alter this perception. So, during the Cathedral renovation in 1997, much of the organ pipework needed to be removed to escape damage due to dust and various other issues. While in the American Classic Organ shop, then located in Indian Orchard, a great deal of reparative voicing was accomplished to reach the current tonal blend.

At the same time, a two-manual console was gifted to the Cathedral for installation in the current location in the chancel, as the former chancel console was removed to the new chapel to serve as part of the new instrument installed therein. There was much discussion with Fred Piquette regarding our concerns about the condition of the wiring throughout the organ. He allowed us to rewire the cable from the gallery to the chancel, but not within the chambers. Pledging that this would be addressed in the future. As a result, the organ continues to play from cloth-covered cables from 1928.

During Lad Pfeifer's time at St. Michael's, several chests were releathered: The chancel Great, gallery Great, Swell, and Positiv. Remaining work includes the Choir and Pedal main chests. Stops were added to the organ at this time, and several reservoirs were releathered. The condition of the gallery console has continued to deteriorate.

Specifications

*St. Michael's Roman Catholic Church
Springfield, Massachusetts*

E. & G.G. Hook Opus 309 1862

2 manuals, 25 stops, 30 ranks

GREAT ORGAN

8' Open Diapason	56
8' Melodia	44 tc
8' Stop Diapason Bass	12
8' Dulciana Treble	44 tc
8' Dulciana Bass	12
8' Bourdon	56
8' Viol d'Amour	56
4' Flute à Cheminée	56
4' Principal	56
2 2/3' Twelfth	56
2' Fifteenth	56
Sesquialtera (4 rks)	224
8' Trumpet	56

COUPLERS *e*³*c*

Swell to Pedals
Great to Pedals
Swell to Great
Tremulant
Bellows Signal
Pedal Check

SWELL ORGAN

8' Open Diapason	56
8' St. Diapason Treble	44 tc
8' St. Diapason Bass	12
8' Keraulophon	56
8' Bourdon	56
4' Flute Harmonique	56
4' Principal	56
2' Flageolet	56
Cornet (3 ranks)	168
8' Trumpet Treble	44 tc
8' Trumpet Bass	12

PEDAL ORGAN

16' Dbl. Open Diapason	25
16' Double Dulciana	25
8' Violoncello	25

GREAT

16' Double Diapason 73
 8' Diapason (large) 73
 8' Diapason (medium) 73
 8' Diapason (small) 73
 8' Hohl Flute 73
 8' Rohr Flute 73
 8' Gemshorn 73
 4' Octave 73
 4' Principal 73
 4' Harmonic Flute 73
 2' Fifteenth 61
 III Harmonics 219
 V Mixture 365
 16' Double Trumpet 73
 8' Trumpet 73
 4' Clarion 73
 Sub
 Unison Off
 Super
 Chimes SO
 Célesta CH

CHANCEL GREAT (encl)

8' Diapason 73
 8' Melodia 73
 8' Dulciana 73
 4' Principal 73
 4' Wald Flute 73
 8' Trumpet 73

CHANCEL SWELL

8' Diapason 73
 8' Stopped Diapason 73
 8' Viola di Gamba 73
 8' Voix Céleste 73
 4' Traverse Flute 73
 8' Oboe (French) 73
 Tremulant

CHOIR

16' Double Dulciana 73
 8' Open Diapason 73
 8' Melodia 73
 8' Quintadena 73
 8' Dulciana 73
 8' Unda Maris 73
 4' Lieblich Flute 73
 4' Violina 73
 2 2/3' Nazard 73
 2' Flageolet 61
 1 3/5' Tierce 61
 8' Clarinet 73
 8' Orchestral Oboe 73
 Tremulant
 SubCélesta CH
 Chimes SO
 Célesta 61
 Célesta Sub --

SWELL

16' Bourdon 73
 8' Diapason (large) 73
 8' Diapason (small) 73
 8' Flute Harmonique 73
 8' Stopped Diapason 73
 8' Viola di Gamba 73
 8' Voix Céleste 73
 8' Aeoline 73
 4' Principal 73
 4' Flauto Traverso 73
 2' Piccolo 61
 V Cornet 365
 16' Double Trumpet 73
 8' Cornopean 73
 8' Oboe (French) 73
 8' Vox Humana 73
 4' Clarion 73
 Tremulant

SOLO

8' Stentorphone 73
 8' Gross Flute 73
 8' Viole d'Orchestre 73
 8' Violes Célestes II 146
 4' Fugara 73
 V Cornet de Violes 365
 16' Tuba Magna 73
 8' Tuba Mirabilis 73
 8' French Horn 73
 4' Tuba Clarion 73
 Chimes 25

PEDAL

32' Double Diapason pf
 16' Open Diapason 32
 16' Bourdon 32
 16' Violone 32
 16' Gedeckt SW
 16' Dulciana CH
 8' Flute (Open Diap) 12
 8' Bourdon 12
 8' Violoncello 12
 4' Flute (Open Diap) 12
 32' Contra Trombone pf
 16' Trombone 32
 8' Trumpet 12
 4' Clarion 12
 Chimes SO
 Célesta CH

CHANCEL PEDAL (encl)

16' Bourdon 32
 8' Flute 32
 8' Stopped Flute 12

GREAT ORGAN (4-3/4" wind)

16' Double Open Diapason	61
8' Montre	61
8' Open Diapason	61
8' Bourdon	61
8' Gemshorn	61
4' Principal	61
4' Flûte Ouverte	61
2' Fifteenth	61
III-IV Mounted Cornet (tc)	168
III Fourniture	183
IV-V Plein Jeu	268
16' Double Trumpet (ext)	12
8' Trumpet	61
Chimes	25 tubes

CHOIR ORGAN (3-1/4" wind)

8' Flûte Harmonique	61
8' Dulciana	61
8' Unda Maris	49
4' Spitzflöte	61
2' Flute	61
8' Cor Anglais	61
Tremulant	

POSITIV ORGAN (3-1/4" wind)

8' Prinzipal	61
8' Rohr Gedeckt	61
4' Oktave	61
2 2/3' Nazard	61
2' Superoktav	61
IV Scharf	244
16' Dulzian	61
8' Krummhorn	61

CHANCEL GREAT

8' Open Diapason	61
8' Bourdon	61
4' Principal	61
2' Fifteenth	61
III Fourniture	183
8' Trompette	61

CHANCEL SWELL

8' Gedeckt	61
8' Viole	61
8' Viole Céleste	49
4' Flûte	61
2' Hohlflöte	61
III Cymbale	183
8' Oboe	61
Tremulant	

SWELL ORGAN (4-1/2" wind)

16' Bourdon	61
8' Open Diapason	61
8' Rohrgedeckt	61
8' Viole de Gambe	61
8' Voix Céleste	61
4' Principal	61
4' Koppelflöte	61
2 2/3' Twelfth	61
2' Fifteenth	61
1 3/5' Tierce	61
1 1/3' Larigot	61
IV Plein Jeu	244
16' Bombarde	61
8' Trompette	61
8' Hautbois	61
8' Vox Humana	61
4' Clairon	61
Tremulant	

SOLO ORGAN (8" wind)

8' Quintaton	61
8' Pontifical Trumpet	61
8' French Horn	54
Harp	49 bars
Glockenstern	
Nachtingall	

PEDAL ORGAN (4-1/2"-6-1/2" wind)

32' Contra Bourdon	32
16' Montre	32
16' Violone (Dbl O.D.) GT	
16' Dulciana (ext CH)	12
16' Bourdon (ext)	12
16' Quintaton (ext SO)	12
8' Principal	32
8' Bass Flute (ext)	12
5 1/3' Quint	32
4' Choral Bass	32
4' Rohrflöte	32
IV Fourniture	128
32' Contre Bombarde	32
16' Bombarde (ext)	12
16' Double Trumpet (GT)	
8' Posaune (ext)	12
4' Clairon (ext)	12
4' Shalmey	32

CHANCEL PEDAL

16' Bourdon	32
8' Bourdon (ext)	12

GREAT ORGAN (4-3/4" wind)

16' Double Open Diapason	61
8' Montre	61
8' Open Diapason	61
8' Bourdon	61
8' Gemshorn	61
4' Principal	61
4' Flûte Ouverte	61
2' Fifteenth	61
III-IV Mounted Cornet (<i>tc</i>)	168
III Fourniture	183
IV-V Plein Jeu	268
16' Posaune (ext)	12
8' Cornopean	61
8' Pontifical Trumpet	<i>Solo</i>
Chimes	25 tubes

CHOIR ORGAN (3-1/4" wind)

8' Flûte Harmonique	61
8' Dulciana	61
8' Unda Maris	49
4' Spitzflöte	61
2' Flute	61
8' Cor Anglais	61
8' Bombarde (<i>ext.</i>)	<i>Pedal</i>
Tremulant	

POSITIV ORGAN (3-1/4" wind)

8' Prinzipal	61
8' Rohr Gedeckt	61
4' Oktave	61
2 2/3' Nazard	61
2' Superoktav	61
IV Scharf	244
16' Dulzian	61
8' Krummhorn	61
8' Pontifical Trumpet	<i>Solo</i>

CHANCEL GREAT

8' Open Diapason	61
8' Bourdon	61
4' Principal	61
2' Fifteenth	61
III Fourniture	183
8' Trompette	61

CHANCEL SWELL

8' Gedeckt	61
8' Viole	61
8' Viole Céleste	49
4' Fugara	61
2' Hohlföte	61
III Cymbale	183
8' Oboe	61
Tremulant	

CHANCEL PEDAL

16' Bourdon	32
8' Bourdon (ext)	12

SWELL ORGAN (4-1/2" wind)

16' Bourdon	61
8' Open Diapason	61
8' Rohrgedeckt	61
8' Viole de Gambe	61
8' Voix Céleste	61
4' Principal	61
4' Koppelflöte	61
2 2/3' Twelfth	61
2' Fifteenth	61
1 3/5' Tierce	61
1 1/3' Larigot	61
IV Plein Jeu	244
16' Bombarde	61
8' Trompette	61
8' Hautbois	61
8' Vox Humana	61
4' Clairon	61
Tremulant	

SOLO ORGAN (8" wind)

16' Montre (<i>Pedal</i>)	29
8' Major Diapason (<i>ext</i>)	12
8' Flute (<i>ext Bourdon</i>)	29
8' Quintaton	61
16' Bombarde	<i>Pedal</i>
16' Posaune	<i>Great</i>
8' Pontifical Trumpet	61
8' Bombarde	<i>Pedal</i>
8' Cornopean	<i>Great</i>
8' French Horn	54
8' Bason (<i>ext. Dulzian</i>)	<i>Choir</i>
Harp	49 bars
Glockenstern	
Nachtingall	

PEDAL ORGAN (4-1/2"-6-1/2" wind)

32' Contra Bourdon	32
32' Lieblich Bass	<i>composed</i>
16' Montre	32
16 Violone (<i>Db/ QD</i>)	<i>Great</i>
16' Dulciana (<i>ext Choir</i>)	12
16' Bourdon (<i>ext</i>)	12
16' Quintaton (<i>ext Solo</i>)	12
8' Principal	32
8' Bass Flute (<i>ext</i>)	12
5 1/3' Quint	32
4' Choral Bass	32
4' Rohrflöte	32
II Grave Mixture	<i>extract</i>
IV Fourniture	128
32' Grand Cornet, V	<i>composed</i>
32' Contre Bombarde	32
16' Bombarde (<i>ext</i>)	12
16' Cornopean	<i>Great</i>
8' Bombarde (<i>ext</i>)	12
4' Clairon (<i>ext</i>)	12
4' Shalmey	32

COUPLERS and CONTROLS

Great-Great 16 (unison off) 4
Swell-Swell 16 (unison off) 4
Choir-Choir 16 (unison off) 4
Chancel Great ON Choir (off Great)
Chancel Swell ON Choir (off Great)

Great to Pedal 8
Swell to Pedal 8 & 4
Choir to Pedal 8 & 4
Positiv to Pedal 8 & 4
Solo to Pedal 8 & 4
Chancel Great to Pedal 8
Chancel Swell to Pedal 8
Automatic Pedal (Great)

Swell to Great 16-8-4
Choir to Great 16-8-4
Positiv to Great 16 & 8
Manual Transfer (French)

Solo On Great
Solo On Swell
Solo On Choir
Positiv off Choir
Positiv on Great
Positiv On Swell

MIDI on Pedal
MIDI on Choir
MIDI on Great
MIDI on Swell

12 General Pistons, duplicated on toe studs
6 each Divisional pistons (Choir/Pos, Great, Swell)
4 each Division pistons (Chancel Great, Swell, Gallery Pedal)

Reversibles

Great, Swell, Choir, Positiv, Solo to Pedal
Swell-Great, Choir-Great, Swell-Choir

Identical consoles – gallery and chancel. (moveable) Shared combination action memory access
Solid State Organ Systems, MULTISYSTEM
Fiber optic interface for data between divisions and chancel console
999 levels of combination action memory, set in multiple libraries
Piston Sequencer (Next/Previous)
Record/Playback
Transposer +/- 7 half-steps
iPad interface
Remote Tuning

The Austin Console

One of the most critical ingredients in organbuilding is the console, for it alone unites the musician with the music. The console should submit to the performer's will, resulting in an instinctive partnership for music-making. Its design, therefore, is absolutely fundamental.



A fine Austin console makes an organist feel at home; the touch is natural, the response positive and the usual controls are in familiar places. Only the best materials are selected for durability and appearance; knobs, tabs and pistons engaged with precision and ease. Our consoles have set industry standards since the nineteenth century... In fact, the Austin console was used in 1932 to form the AGO standard for console design and its dimensions still stand for reference.

For St. Michael's Cathedral, we are building two new consoles will enhance the church sanctuary yet look as though they were of the church design from the beginning. Our drawknobs, manual clavier, pedalboards expression shoes, in fact nearly

that part



every component on the modern Austin console is manufactured or a patent design of the Austin name. The design is unique, but in every practical way it is standardized to allow the organist to feel comfortable quickly when sitting at any given Austin console for the first time. An adjustable bench and adjustable music rack, if desired, further the ergonomic advantage we strive to achieve with the design of our



consoles. Our lighting is all provided by LED sources, and operated by a separate switch from the organ's blower control.

All Couplers and stop controls are designed in collaboration with the Cathedral representative musicians. With a modern control system, many different possibilities are available for these controls. Other console accessories are available at no additional charge, such as clock, transposer, timer, piston sequencer system, record/playback, MIDI, etc.

The MultiSystem

The control, MIDI and Capture Combination systems that we have specified for the organ will be constructed by Solid State Organ Systems, according to designs specific for St. Michael's Cathedral. The MultiSystem is the flagship organ control system that Organbuilders have used throughout the world for nearly 25 years. It is fair to say that a majority of the high profile organs in Britain and North America use SSOS control systems exclusively. The ongoing support from SSOS is excellent, and not to be undervalued.

