John-Paul Buzard Pipe Organ Builders, Champaign, Illinois

Maxwell Street Presbyterian Church, Lexington, Kentucky, Buzard 2009–2010 renovation

Hayes Barton United Methodist Church, Raleigh, North Carolina, Buzard Opus 39, June 2010

I am proud to showcase a recently completed new organ, and a renovation project successfully accomplished by our service and tonal departments, to give a glimpse into the depth of our firm, and the differing types of projects that we regularly and successfully undertake.

Some years back THE DIAPASON featured a renovation project of ours at First Presbyterian Church, also in Lexington, Kentucky. Word of the success of this project quickly sped through the community, and we were contacted by Maxwell Street Presbyterian Church's music director, Clif Cason, about the possibility of giving their 1963 Rieger tracker action organ a mechanical and tonal "going over." He and the parishioners at Maxwell Street Church liked the transparency and vigor of the organ's neo-Baroque style, but weren't convinced of the inharmonic noise in the flue voicing, nor the unstable and thin-toned reeds. The organ exhibited mechanical symptoms which signaled that work was necessary, and we discovered that the organ was impossible to tune, or keep in tune.

All of us had a turn to inspect this organ: general manager Charles Eames, tonal director Brian Davis, service department director Keith Williams, service department foreman, David Brown, and I. We discovered that the pallets had been covered in a foam-rubber substance, which was becoming sticky and gooey. Additionally, the felt bushings in the keyboards and pedalboard had worn to a point at which the action was clattery. The organ leaked wind inordinately, especially where the pull-down wires exited the slider chests' pallet boxes.

We re-covered the pallets with felt and leather. All the deteriorated leather purses at the pull-down wires were replaced with felt punchings held down by small lead weights. Keyboards and pedalboard were restored, tracker "combs" that had been removed were replaced, small "bleed" holes were drilled into the slider chests' tables, and the action was re-hung and balanced properly. Since re-regulating the action and eliminating the flaws we found in our initial inspection, we have discovered that many of the steel needle-axles that act as a bearing for the actions' squares have worn and will on occasion jump out of their bearing clevises. Replacement of these axles will be a future maintenance operation.

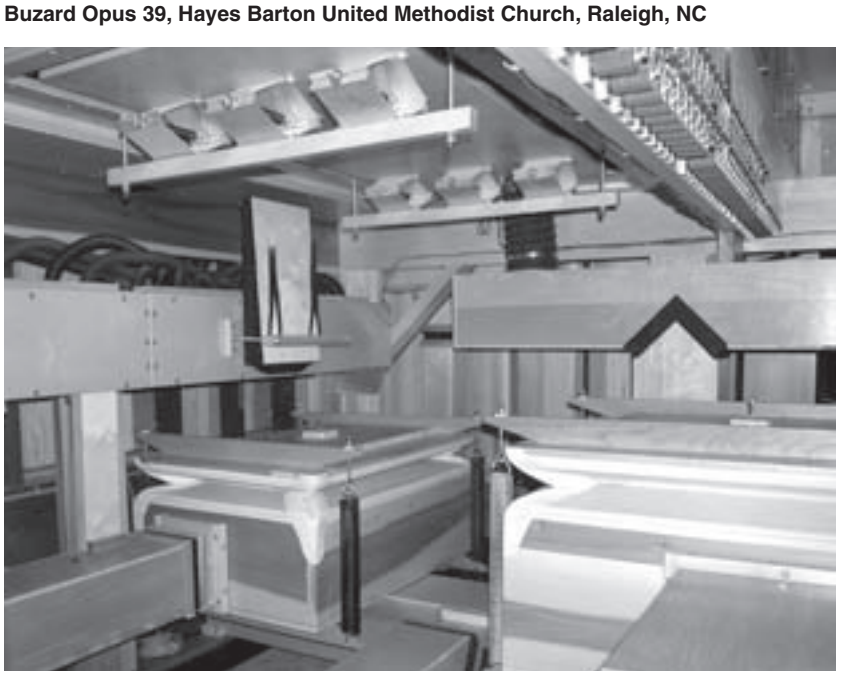
Tonally, the organ was not a happy instrument. Years of heavy cone tuning had done its damage, especially to the small mixture pipes in the organ. Tuning scrolls on façade pipes and the larger flue pipes on the chests had been rolled down too far, and could not tune flat enough. Throughout, the sound was noisy, with a disproportionate amount of speech articulation, scratchiness in the tone, and in many of the small mixture pipes, quick speech to the point of overblowing an octave. The reeds' resonators were too short to couple to the pitches that the reeds' tongues were producing, contributing to a thin and unstable tone. We all concluded that the existing flue pipes could be physically restored and the voicing amended for a significantly improved musical result. However, the reed pipes needed to be replaced.

Our tonal director, Brian Davis, came to us from Visser-Rowland & Associates and was not only intimate with the techniques of flue-regulation voicing, but also significant achievements in neo-Baroque reed making that had been made by German reed pipe maker Roland Killinger in the late 1960s. These developments produced neo-Baroque reeds of excellent tone and tuning stability, even though voiced on very low wind pressures. Ironically, just as Mr. Killinger's experiments began to produce results, the neo-Baroque trend ended, and few of these new reeds were ever made—until this project.

All of the organ's pipes (except the largest wood pipes screwed onto the case sides) came back to our workshop for cleaning, repair, and re-voicing. The damage to the small pipes by heavy cone tuning was too significant to warrant restoration of the cone-tuning system, so we installed stainless steel tuning slides on the smaller pipes, and restored (in many instances replaced) the scrolls on the larger pipes. While we had the pipes out we also removed the toeboards to vacuum clean the chest tables and sliders, and to manufacture toeboard overlays and new racking for the new reeds. We observed that the organ used modern-style spring-loaded slider seals, except that from about middle "C" on up these sleeves were sealed with diaphragms of pneumatic leather—all of which were ripped and leaking. No wonder this organ could not be tuned, and no wonder former technicians simply bashed and bashed those poor little pipes sharper and sharper with their tuning cones—because they weren't receiving enough wind, because of the leaking leather! New slider seals sans leather replaced the originals. Not surprisingly, now the organ can be tuned, and stays in tune.

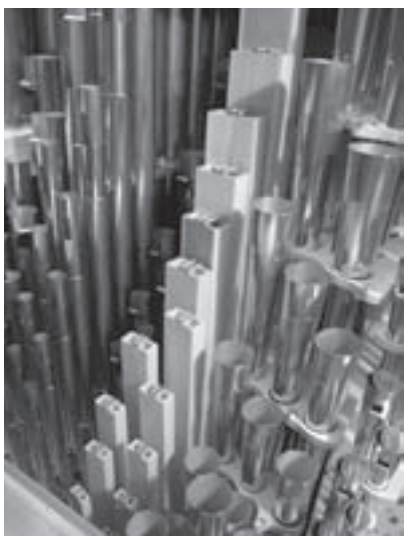
In order to get as much sound from the relatively small-scaled 16′ Subbass pipes (stamped "Lieblich" by the way), the corrugated tubing connecting the toe holes on the chest to the toes of the pipes screwed onto the case was re-

Buzard Opus 39, Hayes Barton United Methodist Church, Raleigh, NC



Hayes Barton organ Opus 39 winding system under Swell

Maxwell Street Rieger organ restored keyboards



Hayes Barton organ Opus 39 Flute Coelestis

Hayes Barton organ Opus 39 showing complicated ceiling geometry

Maxwell Street Rieger organ Hauptwerk showing new reeds

Hayes Barton organ Opus 39 close up of the Great façade

Hayes Barton organ Opus 39 console

placed with larger diameter tubing, and we installed "lifters" onto the pallets, so that the pedal action would be able to open the pallets farther.

There was a half-length 16′ Posaune in the Pedal, but it was of such small scale, producing no fundamental pitch, that we opted to place a nicely scaled 8′ Trompete in its place. Music director Clif Cason envisions a second phase of the project to install a new full-length 16′ Posaune in the back of the organ, and a Pedal 16′ Offenbass in additional cases alongside the existing instrument. This may be tied into a long-hoped-for chancel renovation and re-configuration project.

The re-installation of the organ took approximately two weeks, and tonal finishing occupied three weeks. The result is a phenomenally clean, clear, transparent, buoyant, musical sound. The reeds are full and round, the direct result of Roland Killinger's research from the 1960s. This organ, and our rebuilt organ at First Presbyterian Church, will be featured in the AGO regional convention to be held next summer in Lexington.

It is possible to work faithfully in a style that may not be one's own when renovating an existing instrument. But this takes complete subrogation of one's self from the tonal and mechanical equation. Our firm has the depth and experience to successfully undertake such a project, while at the same time developing our own personal style of modern organbuilding. Many know that I'm a romantic at heart. One of my colleagues said to my son at the recent AGO convention (to paraphrase) "It's because of your father, that we can build modern romantic organs."

The new organ at Hayes Barton United Methodist Church in Raleigh, North Carolina came about because the wonderful people on the organ committee had a romantic and emotional reaction to our organs at All Saints Episcopal Church in Atlanta, Georgia, and Williamsburg Presbyterian Church in Williamsburg, Virginia. They asked their consultant, Keith Shafer, why they needed to listen to any other builders' instruments after hearing ours, because they knew in their hearts that they had fallen in love. But they followed the consultant's discipline, and hearing others confirmed their impression of heart. They had to have a Buzard organ in their church!

Their organ project was coupled with a tremendously successful sanctuary renovation project, in which the visual and acoustical environments were transformed into a dignified, lively and holy place of worship. Organist David Witt spent endless hours coordinating architects, contractors, and consultants. The interior designer was Terry Byrd Eason and the acoustician was Dana Kirkegaard.

Engineering this instrument of 43 stops and 52 ranks was one of the greatest physical challenges for executive vice-president Charles Eames (also a Visser-Rowland alumnus). Every inch of roof gable, every nook and cranny of former organ chambers, and a space above a newly developed sacristy became home for the instrument, all of which can easily be reached for maintenance and tuning.

The warmth and breadth of the tonal palette encompasses a dynamic and lively Principal chorus as the backbone of the instrument, as well as flute, string, and reed choruses. No two stops of the same class are identical, which translates into tremendous tonal variety. The organ can accompany a single small child, through a choir of 100. And, the improved acoustics coupled with our voicing allows one to feel the sound all around oneself, and that one is always supported in singing.

During our last week of tonal finishing in early June, son Stephen came down to Raleigh from his last summer at Westminster Choir College in Princeton, New Jersey, and played an impromptu concert for the members of the church's building and organ committees. Playing for about half an hour, the clarity of the Principal choruses was highlighted, then the softer, suave voices in the Swell and Choir as well as the lyrical reeds; then the organ's orchestral nature shone in the Willan *Introduction, Passacaglia, and Fugue*. All agreed that they never thought pipe organs could sound this way.

Yes, I am a romantic at heart, a professional of mind, perhaps a pragmatist and dreamer all rolled into one. But so is everyone else on my staff, and we would love nothing more than to be a part of your worshipping community, whether it involves building you a new pipe organ, or renovating an instrument you have, with which you want to fall in love again.

—John-Paul Buzard

Maxwell Street Presbyterian Church, Lexington, Kentucky
1963 Rieger Orgelbau, Austria, mechanical action, 21 stops, 30 ranks
2010 renovations John-Paul Buzard Pipe Organ Builders, Champaign, Illinois. Completed October 15, 2010

HAUPTWERK Manual I
55mm wind pressure

8′	Principal	61 pipes
8′	Röhrflöte	61 pipes
4′	Octave	61 pipes
II	Sesquialter	122 pipes
2′	Blockflöte	61 pipes
1⅓′	Mixtur V	305 pipes
16′	Röhrschalmei	61 pipes°
8′	Trompete	61 pipes°
	II–I 8′	

POSITIV Manual II
55mm wind pressure

8′	Holzgedeckt	61 pipes
4′	Principal	61 pipes
4′	Koppelflöte	61 pipes
2′	Octave	61 pipes
1⅓′	Quint	61 pipes
⅔′	Scharff IV	244 pipes
8′	Krummhorn	61 pipes°
	Tremulant	

PEDAL 55mm wind pressure

16′	Offenbass (° prepared for)	
16′	Subbass	44 pipes
8′	Octavbass	32 pipes
8′	Subbass	32 notes
4′	Gemshorn	32 pipes
2′	Rauschpfeiffe III	96 pipes
16′	Posaune (° prepared for)	
8′	Trompete	32 pipes°
4′	Schalmei	32 pipes°
	Tremulant	
	I–P 8′	
	II–P 8′	

(° denotes new pipes)

John-Paul Buzard Pipe Organ Builders, Champaign, Illinois
Hayes Barton United Methodist Church, Raleigh, North Carolina
Three manuals, 43 stops, 52 ranks, electric-slider action
Completed June 2010

GREAT (4-inch wind pressure)

16′	Lieblich Gedeckt	61 pipes
8′	Open Diapason	61 pipes
	polished tin in façade	
8′	Viola da Gamba	61 pipes
8′	Flûte Harmonique	61 pipes
	polished tin in façade	
8′	Bourdon	61 pipes
4′	Principal	61 pipes
4′	Spire Flute	61 pipes
2⅔′	Twelfth	61 pipes
2′	Fifteenth	61 pipes
1⅓′	Mixture IV	244 pipes
8′	Trompete	68 pipes
	(doubled flue trebles)	
8′	Tromba (Pedal)	
4′	Tromba Clarion (Pedal)	
8′	Major Tuba (Choir)	
	Tuba Solo (melody coupler)	
	Tremulant	
	Cymbalstern	14 bells
	Chimes (digital)	
	Great-Great 16-UO-4	
	Swell-Great 16-8-4	
	Choir-Great 16-8-4	

SWELL (4-inch wind pressure)

16′	Gedeckt Pommer	43 pipes
	(1–18 from Great)	
8′	Violin Diapason	61 pipes
8′	Stopped Diapason	61 pipes
8′	Salicional	61 pipes
8′	Voix Celeste	61 pipes
8′	Flûte Cœlestis	86 pipes
	(Ludwigtone)	
4′	Principal	61 pipes
4′	Harmonic Flute	61 pipes
2⅔′	Nazard	61 pipes
2′	Recorder	61 pipes
1⅗′	Tierce	61 pipes
2′	Full Mixture IV	244 pipes
16′	Bassoon	85 pipes
8′	Trompette	68 pipes
	(doubled flue trebles)	
8′	Oboe	61 pipes
4′	Clarion (ext Bassoon)	
8′	Major Tuba (Choir)	
	Tremulant	
	Chimes (digital)	
	Swell-Swell 16-UO-4	

CHOIR (4-inch wind pressure, except as noted)

8′	English Open Diapason	61 pipes
8′	Flûte à Bibéron	61 pipes
8′	Dulciana	61 pipes
8′	Unda Maris	49 pipes
4′	Principal	61 pipes
4′	Block Flute	61 pipes
2′	Doublette	61 pipes
1⅓′	Larigot	61 pipes
1′	Fourniture IV	244 pipes
8′	Clarinet	61 pipes
8′	Tromba (Pedal)	
4′	Tromba Clarion (Pedal)	
8′	Major Tuba	61 pipes
	25 inch wind pressure	
	Tremulant	
	Chimes (digital)	
	Harp (digital)	
	Celesta (digital)	
	Choir-Choir 16-UO-4	
	Swell-Choir 16-8-4	

PEDAL (4-inch wind pressure, except as noted)

32′	Double Open Diapason (digital)	
32′	Subbass (digital)	
32′	Lieblich Gedeckt (digital)	
16′	Open Diapason	32 pipes
	wood and metal in facade;	
	1–6 12-inch wind	
16′	Bourdon	44 pipes
8′	Open Bass	44 pipes
	polished tin in façade	
8′	Principal	44 pipes
	polished tin in façade	
8′	Bourdon (ext)	
8′	Violoncello	32 pipes
	polished tin in façade	
4′	Choral Bass (ext)	
4′	Open Flute (ext)	
16′	Trombone	85 pipes
	7-inch wind pressure	
16′	Bassoon (Swell)	
8′	Trumpet (ext)	
4′	Clarion (ext)	
8′	Major Tuba (Choir)	
	Chimes (digital)	
	Great-Pedal 8-4	
	Swell-Pedal 8-4	
	Choir-Pedal 8-4	

Photo credit: John-Paul Buzard

800/397-3103
www.Buzardorgans.com