

## New Organs

### Leek Pipe Organ Company, Oberlin, Ohio St. Luke's Lutheran Church, North Baltimore, Ohio

The Leek Pipe Organ Company of Oberlin, Ohio has renovated the 1942 Schantz organ at St. Luke's Lutheran Church in North Baltimore, Ohio.

"All for the Glory of God" was Pastor Mineo's passionate call to his flock for the organ rededication service and the 115th anniversary celebration at St. Luke's Lutheran in North Baltimore, Ohio. The sounds of the organ and enthusiastic choir filled the church with celebration. As a member of the Northwestern Ohio Synod of the Evangelical Lutheran Church in America, St. Luke's serves a small but important area of North Baltimore, Ohio and surrounding cities. The city of North Baltimore is poised to grow into a key commercial center due to the recent addition of a CSX depot.

At the time that we performed an inspection on St. Luke's Schantz organ in early 2012, there were problems caused by deteriorated leather in the bellows and windchests, and an antiquated (the original) control system in the console. It was time to move forward with a thorough renovation of the instrument.

### Clearing the chambers

The organ is housed in a single chamber behind the choir loft in the church's rear gallery. The church itself is an A-frame structure with a pitched timber ceiling, which provides ample acoustic for the small instrument, despite its buried location.

We began the project immediately in order to meet the time requirements of the church's leaders and musicians. The first step involved removing all the pipes, bellows, windchests, and electrical systems from the chamber. The components were then shipped back to our shop in Oberlin, Ohio. After the chamber was entirely cleared, we went to work cleaning years of dust and debris—a job that is not much fun, but does help to guarantee that ciphers won't occur once the chests are re-leathered. We also installed a new lighting system in the chamber, replacing an unhelpful single 60-watt bulb in the middle of a large room.

Finally, we removed the organ console from the floor of the rear gallery with a hydraulic lift. Our cabinetmaker, Jeff Green, had to produce a platform for the console while it was still in the gallery, so that it could be correctly positioned to move from the floor of the gallery to the fork of the lift. Once strapped down, we were able to turn a handle on the lift and slowly lower the console to the ground. The unit also doubled as a dolly, which allowed us to easily roll the console out the door and into the truck.

Once all the components were back at the shop, we got to work re-leathering bellows and rebuilding windchests. Meanwhile, Solid State Organ Systems was busy at work designing a new control system.

### Bellows

Little has changed in (reliable) re-leathering since the beginning of organ building itself. We still use hyde glue and a traditional time-tested method of re-leathering at our shop. After the bellows is completely disassembled, we go about removing all the old leatherback, canvas, and glue. In order to ensure a good bond for the new canvas and leather, it is critical that every last spot of material is removed from the ribs, body, and lid of the bellows. Over the years we have developed a system to do this efficiently.

Once prepped, new canvas and leather is cut and applied. This is a two-person project: one person keeps the rag hot so that the glue stays activated for the other person, who ensures that the canvas and leather belts are properly placed. Once re-leathered, the bellows sit overnight to dry and be tested in the morning.

### Windchests

The organ is highly unified, but takes advantage of an electro-pneumatic pouchboard and lead tube system. One of the more challenging aspects of the renovation was replacing lead tubing. Such was a hallmark of earlier 20th-century Schantz windchests. Prior to this, Schantz built tubular-pneumatic organs, with long runs of lead tubing from console to windchests. The photos show before and after their replacement.

The original chest magnets, made of Bakelite, were replaced with new Reissner magnets. New runs of copper common line and escutcheon pins were also installed to ensure reliable operation. Finally, pouchboards were removed, stripped, and re-leathered. Our resident wood shop expert, Jeff, has designed a jig that ensures extremely reliable tolerances for the new leather pouches. Because of this, we never once had a cipher due to expanding and contracting of the leather, neither in testing prior to installation nor anytime thereafter.

### Pipework

While the windchests were being rebuilt, pipes were also being cleaned and repaired, and voicing was corrected when needed. The Stopped Diapason pipes were checked for overturned screws, cracks, and loose stoppers. Given the age of the instrument, the stoppers for this rank were complete re-leathered to ensure that tuning would remain stable following the installation. The pipes were, in general, in good shape so that not much repair was necessary.

### Console and solid-state system

The two-manual console has a horse-shoe-styled nameboard layout, which is typical of this vintage and builder. A brand-new solid-state control system was installed with compatible engraved stop keys. The rebuilt console is controlled by its own solid-state processor and has its own independent power supply. All console inputs are relayed to the pipes via a data cable linked to the organ chamber



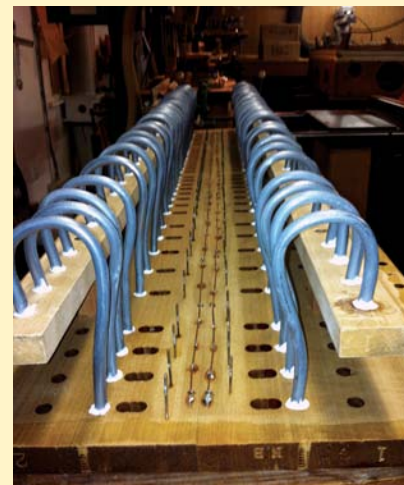
Completed console



Lead tubing, before



Organ chamber



Lead tubing, after

processor. This data cable contains only eight wires and replaces the bundles of hundreds of electrical conductors that were needed when the organ was built.

New chrome toe pistons were installed and a ten-level memory control included. The pedalboard was re-felted and all worn pedal keys were recapped with maple. New wiring was installed in the keyboards and the pedal contacts and the stop keys were wired out to a fused wiring harness. A new music light was integrated into the music rack to blend with the style of casework and new bench blocks were made for organists with long legs. After that, the console was tested in the shop prior to re-installation in the church rear gallery.

The console was returned to the church, hoisted back into the rear gallery with our convenient lift, and networked to a second solid-state system in the chamber. After wiring all of the windchests to the chamber planes, we completed an extensive testing and commissioning process to be sure that "all systems were go." After all the components were reinstalled in the church organ chambers, the organ was prepared for a test drive by the organist and official completion of the project.

The organ was rededicated with guest organist James Clouser during Sunday worship services on August 5, 2012. The service was filled with inspiring music and powerful preaching on community and the power of music. At the end of the homily, Pastor Mineo prayed an

enthusiastic litany, which moved the congregation to respond, "All to the glory of God!" The pipe organ too was poised to add its sounds for the glory of God for many years to come.

—Natalie Leek, vice president

James Clouser, organist/consultant

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Originally from Mumbai, India, Natalie Leek moved to the United States in 1991. She has a graduate degree in Business Management from Case Western Reserve University and over 20 years of experience in Human Resource Management and Marketing. Until 2008 she worked full-time as a senior assistant director of admissions at Oberlin College of Arts and Sciences. Since her marriage to James Leek in 2002, she has apprenticed with him for a year and also worked part-time in the company, in addition to her job at Oberlin College. She has worked hands-on with the pipe organs the firm services. As a 30-year yoga practitioner, she integrates the best of the east and the west in her work and life.

James Clouser attended Hiram College and the Cleveland Institute of Music, studying organ performance with Sandra Tittle and Todd Wilson, respectively. He is a member of the Cleveland AGO chapter and is currently serving a term on the chapter's executive committee. He holds the Guild's Colleague (CAGO) and Choir Master (ChM) certificates and won first prize in the 2003 AGO/Quimby Region V Competition for Young Organists. He has worked with the Leek Pipe Organ Company since 2007 in several different roles.

## Leek Pipe Organ Company

St. Luke's Lutheran Church, North Baltimore, Ohio

### GREAT

8' Open Diapason°  
8' Stopped Diapason\*\*  
8' Dulciana  
4' Octave°  
4' Flute°  
Chimes\*\*

### SWELL

16' Bourdon\*\*  
8' Open Diapason°  
8' Stopped Diapason\*\*  
8' Salicional  
4' Flute d'Amour°  
2½' Nazard\*\*  
2' Flautina\*\*

### PEDAL

16' Bourdon\*\*  
8' Dolce Flute\*\* (lower 12 notes are in an offset chest, and also act as the low octave of the Open Diapason 8')

° = from the Diapason 8'  
\*\* = from the Flute 16'

### Summary

8' Salicional 73 pipes  
8', 4' Open Diapason 85 pipes  
16'-2' Flute 97 pipes  
8 Dulciana 61 pipes  
Chimes 21 tubes

11 pistons (5 per manual + 6 general)  
Set and General Cancel  
Tutti piston  
2 reversible pistons needed  
Expression shoes: Crescendo, Swell

### Couplers

Great to Pedal 8, 4  
Swell to Pedal 8  
Swell 16-UO-4  
Great 16-UO-4  
Swell to Great 16-8-4