# COTC Organ Refurbishment Project Congregation Presentation 2/28/16

How did they get a 16 ft. pipe into the upstairs room for storage (1990)?





Project started in 2013 by Andrea Thomas

She thought the Great division was weak.

Needed a new principal and possibly a mixture.

Console was showing its age; it was needing more frequent repairs.

Some pipes in the Swell division would no longer play, and the maintainer could not fix them.

Refurbishment seemed to be the answer.

Andrea got approval from the vestry to pursue refurbishment (May 2013).

A cost target was established.

Andrea asked Bill Simpson to help.

We visited a couple of organ installations in Dallas, and learned about some organ builders (May 2013).

Andrea sent requests for proposals to three organ builders (June 2013).

The RFP described refurbishment, and included options (wish list) for a new principal, new mixture, computerized console, replacement of the Festival Trumpet, and the possibility of showing some visible pipes.

Andrea resigned her position as organist (June 2013).

Rev. Boonzaaijer asked Bill Simpson to continue the project.

Rev. Boonzaaijer formed an Organ Committee; Bill Simpson, Orchestrator (October 2013).

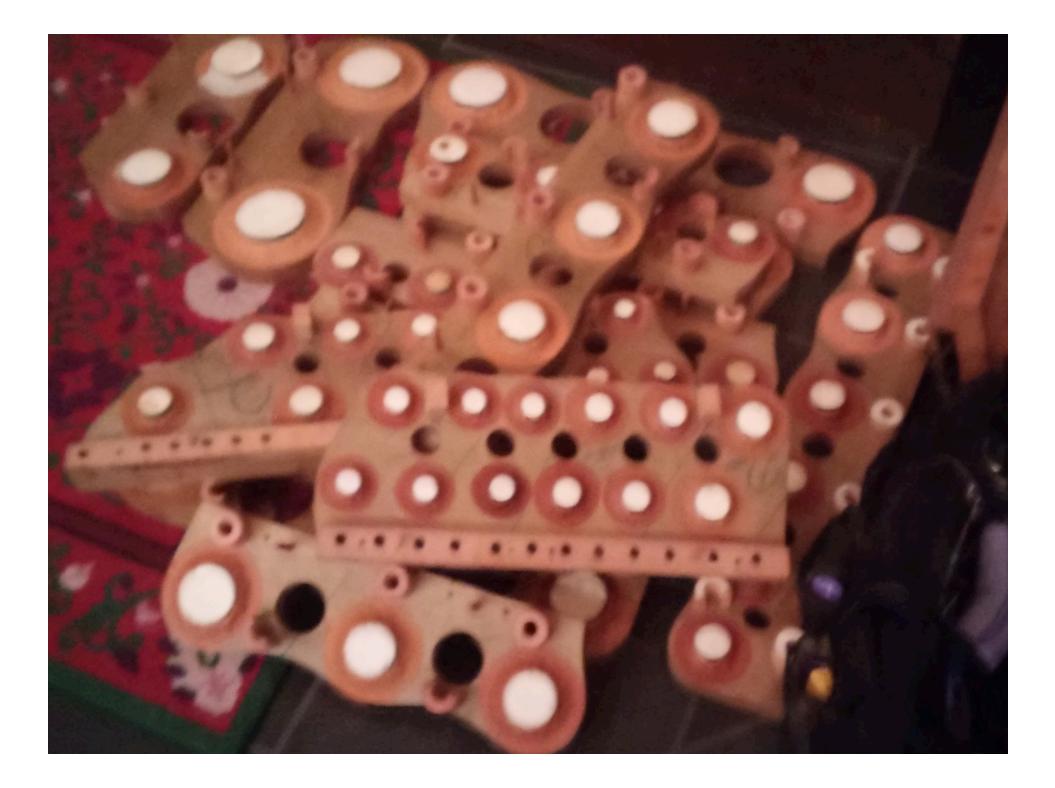
Two refurbishment proposals were received, but cost was out of range (October 2013 and February 2014).

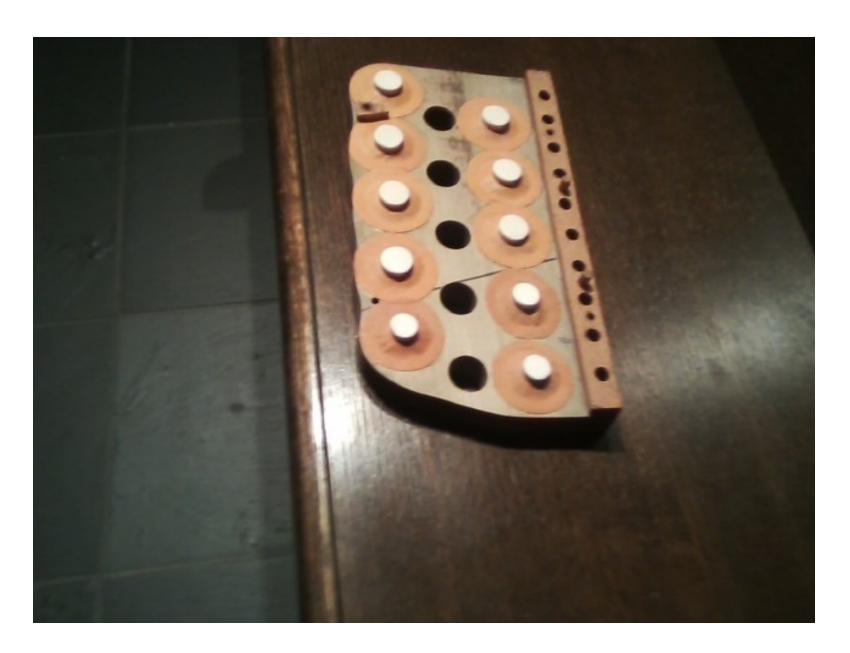
Two more RFPs were sent late 2014. Two proposals were received. One recommended scrapping the pipe organ and purchasing a digital electronic organ.

However, Pipe Organ Specialties' proposal individually priced all refurbishment issues including the options, and was within budget. Contract with POS was signed in June 2015.

Work began in July 2015. POS team began by removing pouches from the Choir division, and taking them to Laurel, MS, (their headquarters). They returned later to reinstall releathered pouches in the Choir division (August 2015).

Pouches from the Great and Pedal divisions were also removed and releathered (August 2015).







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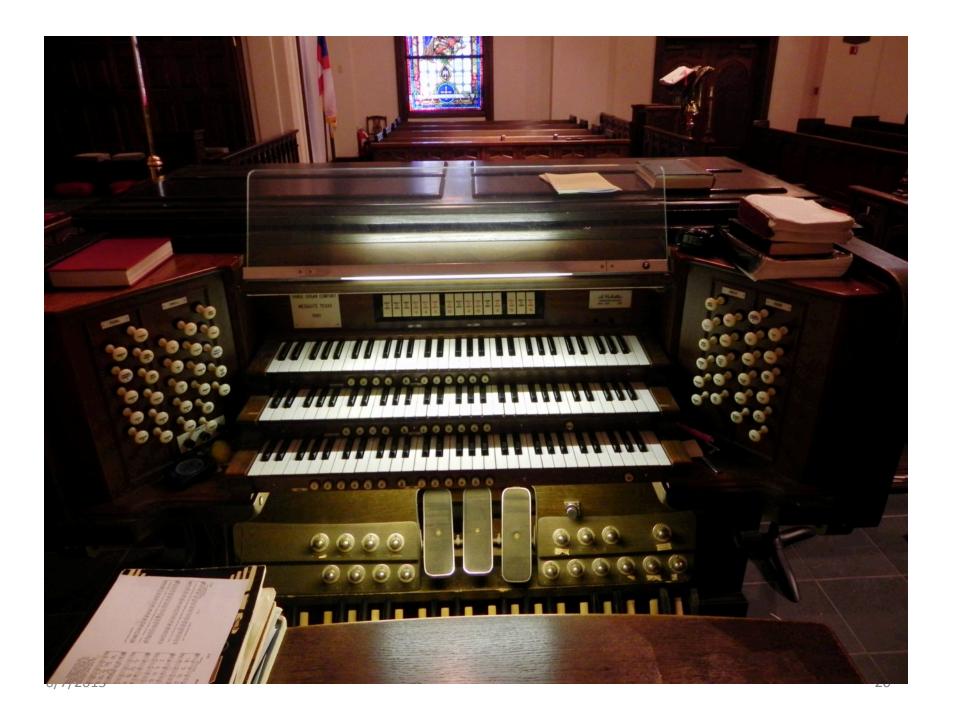


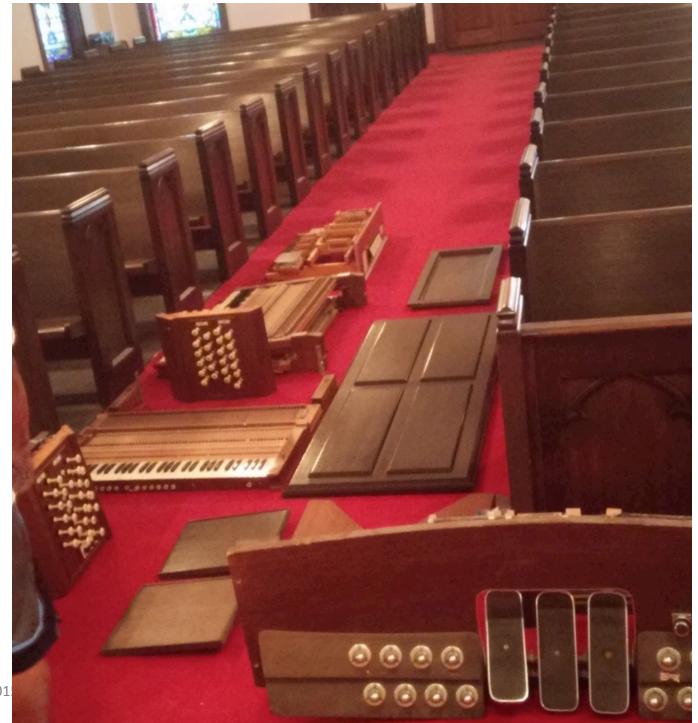




Console was dismantled, and taken to Laurel for update (August 2015).









More visits by POS team involved removal of pouches from the Swell division, reinstallation of pouches in the Great division, and removal of some reservoirs for refurbishment (September and October 2015). POS team refinished all the woodwork for the console (in Laurel). New keyboards, draw knobs, draw knob activators, modern electronics, were purchased, and installed for complete refurbishment of the console.







6/7/2015

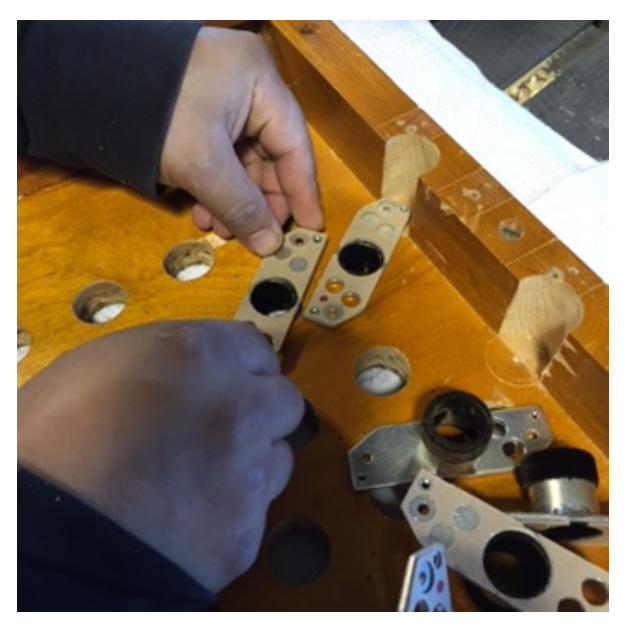


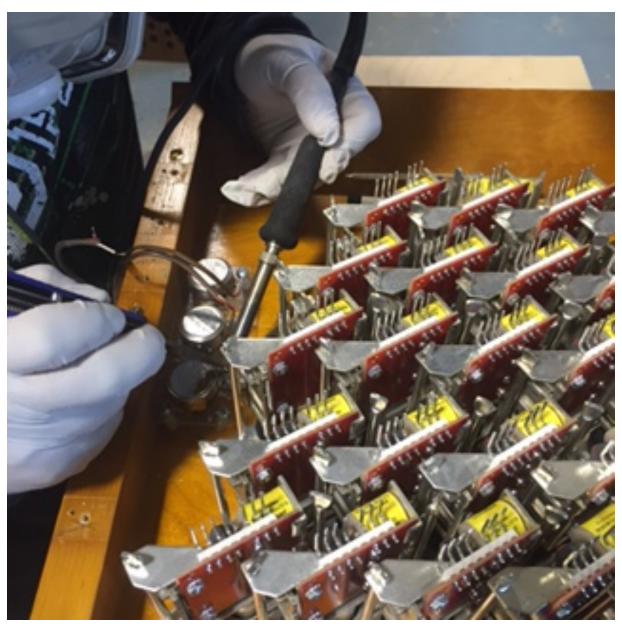


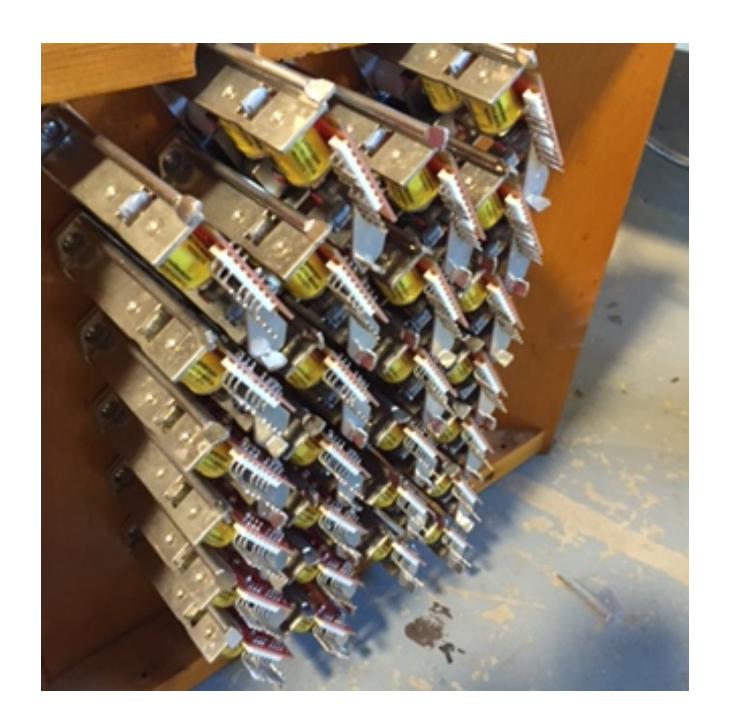




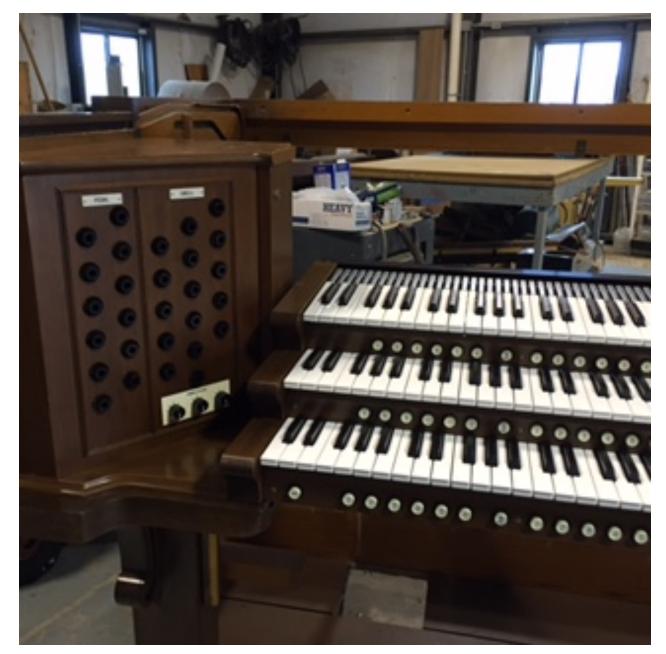










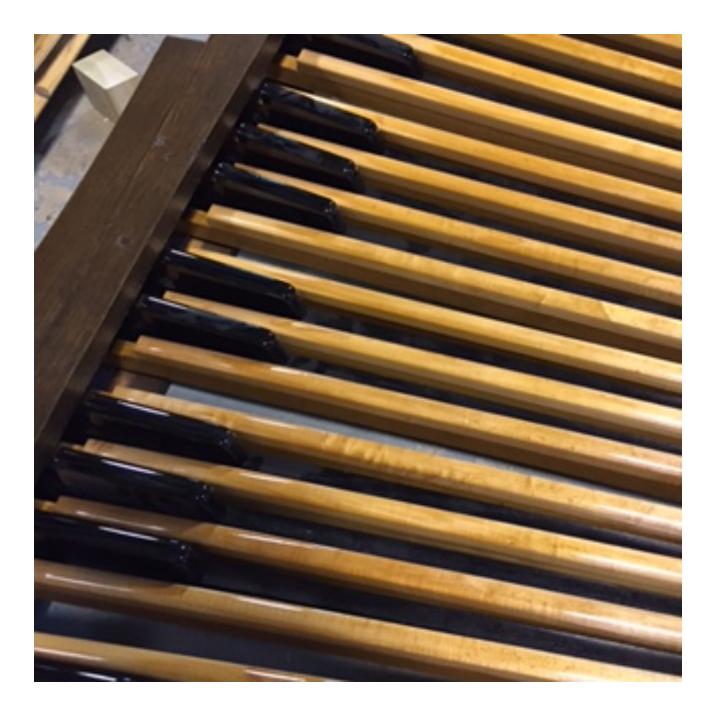












### Plans for the future include:

Completion of releathering of pouches for the Swell division, and reinstallation.

Reconnection of the console to windchests

Pipe organ Playable for services soon.

Mixture installed.

Festival Trumpet installed.

New Principal for Great division with some visible pipes installed.

Project complete (July 2016)

### Why does the Refurbishment cost so much?

Pictures shown in this presentation are only samples of the items POS has dealt with.

### Console

Peterson ICS-4000 combination action and coupler system

Peterson AC control system with switch

Peterson drawknob units with engraved ivory colored heads and black stems

Peterson coupler tilting tablet assembly with new molding

3 new keyboards with tracker touch and membrane contact assemblies

Pedals will be refinished and mounted with new 4 wire silver contacts All new wiring throughout

2 Peterson expression shoes with built in contacts

Peterson crescendo shoe with encoder

60 amp dedicated DC power supply

New main cable from the console to the organ chambers (CAT 5 network)

### **Relay System**

New Peterson ICS-4000 relay system for the organ specification

New main chamber cables

New windchests to relay cables

2 – 40 amp DC power supplies, one on each chamber panel

#### **Swell Chamber Renovation**

Releather 2 pitman windchests with 10 stops:

Replace 718 pneumatic valve pouches with highest quality pneumatic leather

Replace 718 valve pads with new felt and leather pads

Replace 718 valve springs

Replace all paper and cork on the pouchboards

Replace all shifter assemblies and paper covers

Replace all pitmans and seats

Releather 2 primaries for the above windchests, 73 notes each:

Replace 146 pneumatic pouches with highest quality pneumatic leather

Replace 292 primary valves with new felt, leather, and phenolic disc assemblies

Replace 146 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Releather the 44 note pedal borrow unit action

Releather the 2 stop action's 13 pneumatic assemblies:

Replace 13 pneumatic valve pouches with highest quality pneumatic leather

Replace 26 valve assemblies with new felt, leather, and phenolic disc assemblies

Replace all paper and cork

Releather 2 bass offset windchests with 30 notes total

Replace 30 pneumatic valve pouches with highest quality pneumatic leather

Replace 30 valve pads with new felt and leather pads

Replace 30 primary valve pouches with highest quality pneumatic leather

Replace 60 primary valves with new felt, leather, and phenolic disc assemblies

Replace 30 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Remove all pipes 4' and smaller and clean the pipes, windchests, and rack boards Repair any damaged rack boards

#### **Choir Chamber Renovation**

Releather 1 pitman windchest with 8 stops:

Replace 572 pneumatic valve pouches with highest quality pneumatic leather

Replace 572 valve pads with new felt and leather pads

Replace 572 valve springs

Replace all paper and cork on the pouchboards

Replace all shifter assemblies and paper covers

Replace all pitmans and seats

Releather one 73 note primary for the above windchest:

Replace 73 pneumatic pouches with highest quality pneumatic leather

Replace 146 primary valves with new felt, leather, and phenolic disc assemblies

Replace 73 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Releather the stop action's 8 pneumatic assemblies:

Replace 8 pneumatic valve pouches with highest quality pneumatic leather

Replace 16 valve assemblies with new felt, leather, and phenolic disc assemblies

Replace all paper and cork

Releather 4 offset windchests with 68 notes total

Replace 68 pneumatic valve pouches with highest quality pneumatic leather

Replace 68 valve pads with new felt and leather pads

Replace 68 primary valve pouches with highest quality pneumatic leather

Replace 136 primary valves with new felt, leather, and phenolic disc assemblies

Replace 68 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Remove all pipes 4' and smaller and clean the pipes, windchests, and rack boards

Repair any damaged rack boards

#### **Great Chamber Renovation**

Releather 1 pitman windchest with 7 stops:

Replace 427 pneumatic valve pouches with highest quality pneumatic leather

Replace 427 valve pads with new felt and leather pads

Replace 427 valve springs

Replace all paper and cork on the pouchboards

Replace all shifter assemblies and paper covers

Replace all pitmans and seats

Releather one 73 note primary for the above windchest:

Replace 73 pneumatic pouches with highest quality pneumatic leather

Replace 146 primary valves with new felt, leather, and phenolic disc assemblies

Replace 73 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Releather the stop action's 7 pneumatic assemblies:

Replace 7 pneumatic valve pouches with highest quality pneumatic leather

Replace 14 valve assemblies with new felt, leather, and phenolic disc assemblies

Replace all paper and cork

Releather 3 offset windchests with 56 notes total

Replace 56 pneumatic valve pouches with highest quality pneumatic leather

Replace 56 valve pads with new felt and leather pads

Replace 56 primary valve pouches with highest quality pneumatic leather

Replace 112 primary valves with new felt, leather, and phenolic disc assemblies

Replace 56 valve wires with chromed threaded wires

Replace all leather nuts and felt washers

Remove all pipes 4' and smaller and clean the pipes, windchests, and rack boards

Repair any damaged rack boards

#### Two reservoirs and tremolo

Releather gussets and reinforcements with new high quality chrome tanned leather

Replace canvas side strips as necessary

Replace or repair curtain valves as necessary

Recover the tremolo, replace all pneumatics and perishables, and adjust

#### Clean 3 sets of reeds

Wash all resonators inside and out

Polish all shallots and tongues

Replace wedges as necessary

Replace tongue weights as necessary

Assemble and regulate

#### **Furnish and install**

A new 16 stage Peterson shade motor and controller

#### **Blower Room**

ONE STATIC RESERVOIR:

Releather gussets and reinforcements with new high quality chrome tanned leather

Replace canvas side strips as necessary

Replace or repair curtain valves as necessary

CLEAN the blower room

### **New Pipes and Windchests:**

New 8' Festival Trumpet, 61 pipes, 56 Reeds, 5 Flues 4"scale
Voiced like Aeolian-Skinner Festival Trumpet
Sample to be approved before final voicing

New Great 16' Principal, 73 pipes, 32 scale
Plays on the Great at 16' and 8'
1 – 24 painted zinc, 25 – 73 spotted metal
1 – 12 arranged diatonically on either side of the nave front walls
New windchests for the above display pipes
New Oak casework shells for the above windchests
New rack supports for the above display pipes

New Great IV Fourniture, 244 pipes, 1 1/3' New windchest for the above pipes





