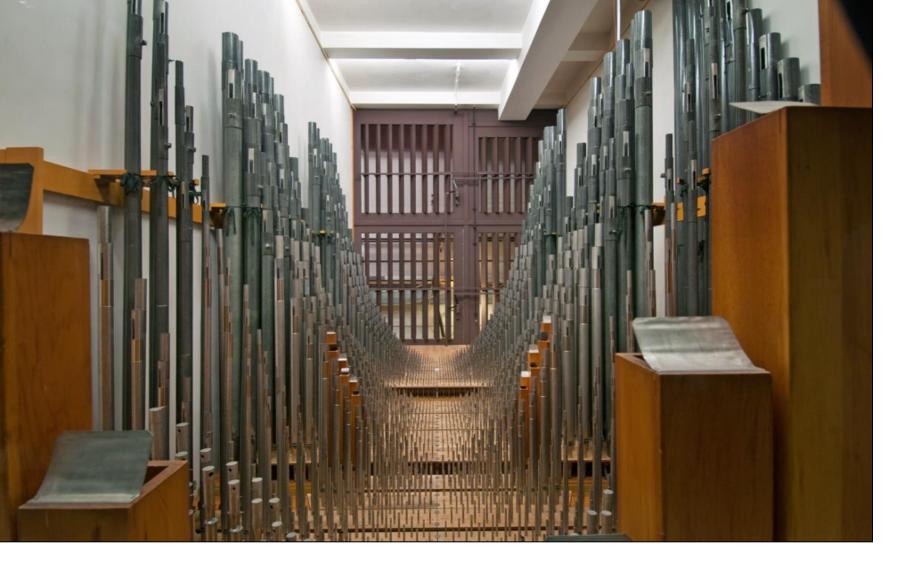


Organ



Behind the Scenes –

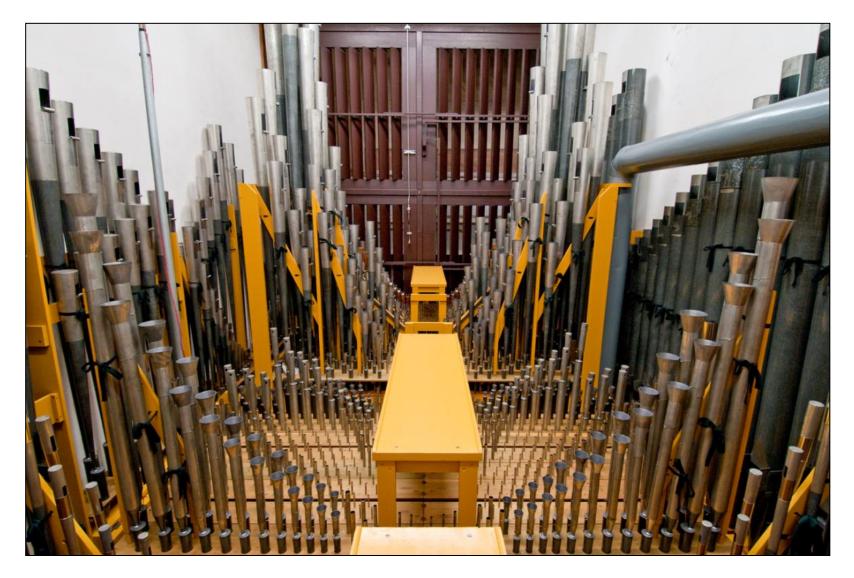
The Historic Aeolian Organ



The Longwood Organ has nine chambers that, together, measure 63 feet wide, 23 feet deep, and 40 feet tall. Five of these are visible behind glass walls. Four additional chambers and the blower system are hidden.



Above the East Pedal Division and out of view on the third floor is the Fanfare Division. It houses 4 ranks (sets) of trumpet stops totaling 292 pipes on very high (25") wind pressure. It is used sparingly to add military-like brilliance.



Above the Choir Division on the second floor is the Solo Division.

It has 1,692 pipes divided into 24 ranks (sets) of unusual tones. These are often used as solo voices to stand out above other divisions of the organ.

The Solo is played from the console's top keyboard.

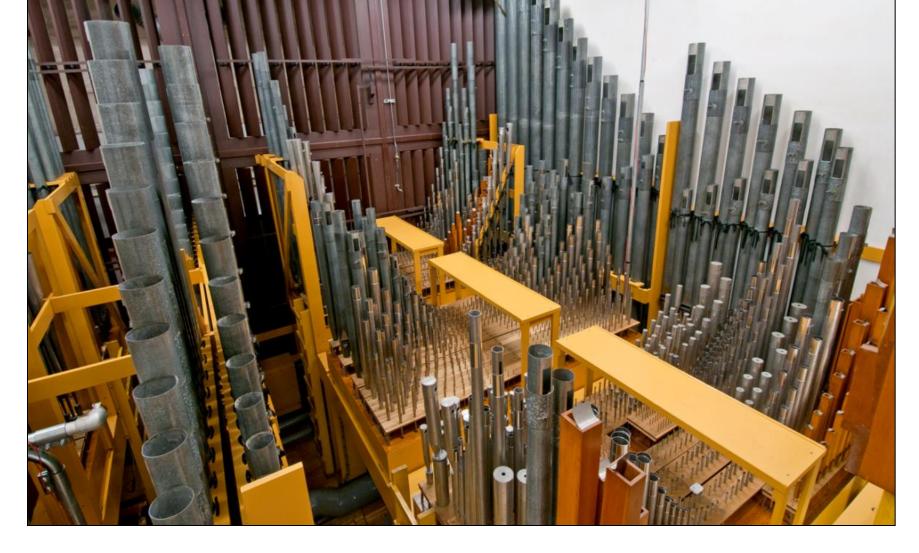


In the lower level the Blower Room powers the Longwood Organ.

Pressurized wind from 60-hp and 10-hp electric blowers flows into air reservoirs in the organ. A maze of stainless steel ducts channels leads from the main blower.

This secondary 10-horsepower motor drives a booster blower at 1200 RPM for those pipes that require higher pressures.





Above the Great and String Divisions on the second floor is the Swell Division, with more pipes than any other group. It is so named because historically in some organs this was the one section with moveable shutters to control ("swell") the volume. The Swell has 2,666 pipes divided into 38 ranks (sets) and is played from the console's third-from-the-bottom keyboard.



As the restorers work to reinstall renovated percussion instruments into the Percussion Division space is tight.





A large hammered brass gong is installed into the Percussion Division in August 2010. Below is a celesta, glockenspiel, and xylophone, all with horizontal resonators to amplify the sound.



The small space of the Percussion Division filled to capacity in November 2010.





The Weber grand piano is played from the organ keyboard by a vacuum-action player. The piano sits right next to the shutters in the String Division.



The Nightingale has two small pipes that blow into a reservoir of water and alcohol, to give a chirping effect like birds.

The Glockenstern is a set of 7 bells struck by 4 rotating clappers to give a festive effect, like Angel Chimes.



Although part of the Percussion Division these instruments are all located on the catwalk near the fabric wall.



A 2010 addition to the Longwood Organ is this set of tuned sleigh bells which play 25 notes, either singly or continuously shaken.