Problems Facing the Reuter Organ

Our current organ was built by the Reuter company and commissioned in February 1971. Since then it has served the congregation well, but it is now in the very last phase of its usable life. Several organ builders, acousticians, and organ consultants have assessed our organ and our sanctuary. Here’s what we learned from them.

Non cased pipes in different locations can’t form a coherent sound due to the vastly different paths they must travel.

Pipes
The deepest problem with the Reuter organ is structural. The main divisions of the pipes are in three very separate places, making it impossible for them to speak together properly. Spread-out pipes are always out of tune with each other; they lack cohesion and do not blend well. Ours, too, are a mix of open pipes that you can see and enclosed pipes behind the grille in the chancel: they are simply never able to work together to their greatest capacity.

The Reuter pipes are factory alloys. Most pipes are made of zinc, which is an inferior metal for organ pipe sound. Zinc devalues an organ. They lack fundamental tones (critical for congregations and choirs to hear their pitches), and emphasize odd-numbered partials. “Partials” is the scientific term for overtones. When an organ pipe follows the natural properties of sound, the partials sounding above the fundamental pitch stack up like a pyramid. With zinc, only every other partial is emphasized (odd numbered partials), creating a Swiss-cheese hollow sound, instead of a warm, richly developed sound.

Can we recycle any pipes? Bass pipes are the most expensive due to their size, but our organ builders do not recommend using the Reuter bass pipes due to their inferior material (zinc), and the fact they are heavily mitered (bent to fit under the ceiling). The pipes would have to be straightened, which would cost as much as making new pipes.

Wind Chests
The wind chests are old, noisy, and make a sharp snap of wind that does not serve the pipes or the music well. These problems are endemic to electro-pneumatic organs.

Location
The organ is too large to move into a new configuration that would make sense musically and be acceptable visually.

Electronics
The electronic components in the organ are over 40 years old, and they urgently need replacement. The wiring has been patched together with duct tape. And the leather pouches that encase the ends of the pipe have dried out and cracked. In one instance the nipple from a baby’s bottle has been used as a temporary replacement.

Functionality
As a result of this slow and irreversible degradation, 30 percent of the organ cannot currently be used. The organist must work around certain stops and certain pipes that simply do not work. As time passes more and more of the organ will be rendered non-functional.