

## Consultation Summary

There are four organs at the Cathedral of Our Lady of Lourdes:

- (1) the Gallery Organ (1914), built by W. W. Kimball and Company in 1914;
- (2) the Transept Organ (1974), built by Don Gorman;
- (3) the Main Digital Organ and two consoles (1994), installed by the Allen Organ Company;
- (4) the Trompettes-en-Chamade (1994), installed by Lauck Organ Company.

### THE GALLERY ORGAN

The Gallery organ was installed in 1914 and the action was electrified in the 1950s. It was installed as a rather small instrument consisting of two manuals and 13 ranks. The stoplist is as follows:

GREAT *		SWELL		PEDAL	
8'	Principal	8'	Violin Diapason	16'	Bourdon
8'	Gamba	8'	Stopped Diapason	16'	Lieblich Gedeckt *
8'	Dulciana	8'	Salicional		
8'	Melodia	8'	Aeoline		
4'	Octave	4'	Flute Harmonique		
		8'	Oboe		

*\* indicates inoperative division or stop*

This organ is too small for the building and its tone inadequate to fill the nave. Even if it were fully functional, it would not meet the needs of the music program. It is apparent that much of the original leather used in the bellows and the action is original. Consequently, the most noticeable problems with this organ are related to its mechanical condition. The organ was originally built in 1914 and modified in the 1950s when the organ was converted from tubular-pneumatic action to an all-electric action. The deterioration of the original materials, including the leather, is becoming apparent with the increasing prevalence of mechanical failures. Since 2011, the following major components have failed:

- 1) Swell stop action (partially releathered on two occasions)
- 2) Great stop action (patched twice and then later releathered)
- 3) 16' Lieblich Gedeckt stop action (still inoperative)
- 4) Tremulant action will not turn off (although the main valve has been replaced)
- 5) Great windchest inoperative (D2 ciphering in all stops, caused by failing leather undetermined)
- 6) Great windchest valves exhibit signs of leaking, and no doubt will cause additional failures as the leather continues to deteriorate.

As is always the case, the cost of piecemeal repairs on any instrument does eventually does not make financial sense. Due to the complexity of the Kimball action, which the company abandoned by the 1920s, replacement of a single valve on the Great chest, for example, becomes increasingly expensive and releathering the entire chest becomes a more cost effective solution. The current organ technician has stated that he is unwilling to repair this windchest on a piecemeal basis due to the labor-intensive process of reinstalling one pneumatic only to have its neighbor then fail.

Before proceeding with a major restoration of the Kimball organ it is important to assess the viability of keeping this instrument. The following issues should be considered:

1. The instrument is too small for the building.
2. The mechanical action in the windchests is of an archaic design, not worthy of restoration.
3. The tonal concept of an organ built in 1914 does not begin to suit the needs of a comprehensive music program worthy of a cathedral.

The best use of this organ would be to incorporate its pipework (not its mechanism) into a larger instrument whose more comprehensive tonal design would be enhanced by the particular sounds of the Kimball.

The 1994 installation of the Allen digital organ was intended to compensate for the weaknesses inherent in the Gallery organ. However, the 1994 installation did not address the technical deficiencies in the Gallery organ. It is impossible for the sound of the Allen digital instrument to blend tonally with the Kimball pipework. See below for more information about Allen technology.

### **THE TRANSEPT ORGAN**

The Transept Organ was installed in 1974 by Donald Gorman. The organ is located off the center axis of the Cathedral nave in the West Transept. The location of this organ was chosen in order to place an organ up front to accompany the cantor and to promote the singing of the congregation. It is a relatively small organ consisting of two manuals and 13 ranks. The stoplist is as follows:

GREAT		POSITIF		PEDAL	
16	Gedackt	8	Spitzgamba	16	Gedacktbass
8	Principal	8	Spitzgamba Celeste	10 2/3	Quintbass
8	Gedackt	8	Rohrflote	8	Principal
4	Octave	4	Principal	8	Gedackt
4	Rohrflote	4	Gedackt	5 1/3	Quintflote
2 2/3	Nasat	2	Octave	4	Choralbass
2	Super Octave	1 1/3	Nasat	IV	Mixture
2	Rohrflote	1	Siffloite	16	Trompette
1 3/5	Terz	IV	Octave Mixture	8	Trompette
III-IV	Mixture	8	Trompette	4	Trompette
16	Trompette	4	Clairon		
8	Trompette				

While a number of the stops have a pleasant tone, the overall design of the organ has considerable deficiencies which significantly reduces its effectiveness:

- 1) The pipework is not enclosed, it is entirely exposed. This lack of expressive quality requires that the organist add and delete stops to attempt to provide what an enclosure of a pipework would provide (dynamics). In the case of accompanying a cantor, soloist, or choir up front, the organist is relegated to using just a few stops or relying completely on the digital Allen stops.

- 2) It is not possible to keep the organ pipes in tune. The lack of enclosure around the pipes allows their exposure to broad temperature swings influenced by the nearby outside wall and the drafts from the nearby main entrance to the Cathedral, resulting in “temperature swings” which result in The Transept Organ being out of tune with the Gallery organ and the digital Allen voices.
- 3) Tuning access to the pipework is severely limited by the very compact layout of the pipework. This compact layout was done primarily for visual reasons. Some of the pipework is inaccessible without removing other pipes to reach them. Given the temperature problems and pipe layout, this results in limited use of this resource.
- 4) One should consider the visual aesthetic of the cantilevered, unenclosed Transept Organ case which is dissonant with the Classical Cathedral aesthetic. If the functionality of this organ is improved, its visual design must also be upgraded.

## **THE ALLEN DIGITAL ORGAN AND CONSOLES**

The Allen Organs were installed in 1994. Only 20 years later, the Allen sounds are now dated and will continue to be further so as digital technology continues to improve.

This installation added many digitally-sampled stops to the Cathedral organs. These stops include digital samples (2 to 7 per stop), which are then applied to the 61 notes of the keyboard. A digitally sampled organ can be compared to going to a buffet where tiny morsels of food are sampled, which do not make up a complete meal. It is imitation sound which neither breathes nor blends. These sounds are played back through speakers hidden behind both the Gallery and Transept Organs. In addition, the 1994 installation replaced the two original consoles (one with the Gallery organ, and one downstairs with the Transept organ) with two identical Allen consoles from which the organist can play any of the organs. (For example, an organist can play any combination of the Transept, Gallery, and/or Allen organs.)

In 1994, the aforementioned shortcomings in both the Gallery and Transept organs had already been noticed. At the time, it seemed that adding Allen digital stops would be a cost-effective means of expanding the tonal palette of the combined organs. The Allen technology uses 1980s-1990s vintage computer sampling technology to digitally replay recorded organ sounds. While the stoplist was expanded, none of the technical deficiencies inherent in the Cathedral instruments were addressed, and these deficiencies still exist. These deficiencies are becoming apparent once again with the recent repairs that have had to be performed.

The Allen Organ’s sound sampling technology is based on obsolete 1980s computer technology, and regardless of when you purchase a digital instrument, the sounds and technology become obsolete within a matter of a few years. For example, the flute pipe samples do not accurately resemble the speech of true flute pipes. The initial speech of the samples is too pronounced, and the sustained tone has an audible digital buzz. This harshness is far from the sweet and mellow sound of true flute pipes. The difference between the Allen samples and true pipes is most evident in the Allen’s reed

pipe samples. These samples were added to make up for the lack of reed pipe stops in the Gallery organ (reed stops—trumpet, oboe, bassoon, etc.—are a necessary element for most organ literature). However, in the case of the Allen stops, the initial attack is digitally manipulated and the result sounds rubbery and fake. This inaccuracy is true in many of the Allen's digital samples.

### **SUMMARY & RECOMMENDATIONS—**

The following are in accord with myself and Robert Carr, Cathedral Music Director:

The Cathedral is witnessing considerable growth in both the Parish and its music program. The Cathedral Choir has seen an increase in membership. The forthcoming Diocesan Youth Choir promises to be another area of musical and spiritual growth, forming future generations.

A cathedral organ should be capable of supporting and sustaining the worship of the diocese, and a prominent instrument to increase the civic and cultural visibility of the Cathedral. It should be the best possible organ that the cathedral can afford.

I am acquainted with the following cathedral instruments in the United States:

1. Cathedral of Our Lady of the Angels, Los Angeles, California
2. Cathedral of Light, Oakland, California
3. St. Mary's Cathedral, Portland, Oregon
4. St. James' Cathedral, Seattle, Washington
5. St. Cecilia Cathedral, Omaha, Nebraska
6. St. Paul's Cathedral, Pittsburgh, Pennsylvania

The above are Cathedrals which I have personally visited and am aware of what they have accomplished with their pipe organs. Each has realized that digital technology was not the way to go with their fine music program. Pipe organ projects between \$1.5 million and \$3 million are represented above. The Cathedral of Our Lady of Lourdes deserves no less.

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