



# GLOUCESTER CATHEDRAL



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We are pleased to have been commissioned to refurbish and renew the famous organ of Gloucester Cathedral. Work will commence in 2024, to be completed in time for the Three Choirs Festival at Gloucester in 2026.

The organ that Thomas Harris built for Gloucester Cathedral in 1666 has been rebuilt over and over again, each time reflecting different musical emphases. Sometimes these have reflected the changing musical needs of the cathedral, and sometimes wider trends in organ design.

The form of the forthcoming project to refurbish and renew the instrument has been reached with the hope that the instrument will provide inspiring support to the sung worship and liturgy of the cathedral today and in the future, and be wholly reliable.

Mechanically, the instrument will be entirely new: soundboards, chests, wind system, console, expression box, and so on. This will allow the tight internal space to be used most effectively. Replacing 140-year-old much-altered soundboards with new will make the instrument much more resilient to changes in humidity and will simplify the organ's mechanism considerably from the innovative but complex mechanism introduced in 1971.

Carefully refurbished, the ancient façade will retain its present proportions as restored in 1971, and its restored Harris pipes will continue to sing into the cathedral. Renewal of the organ's mechanism facilitates re-planning of the tonal scheme: most of the internal pipework, much of it revoiced many times in different guises, will be replaced by new pipework, in a scheme developed over a long period of discussion with the cathedral musicians. It had been hoped to retain in use the surviving internal Harris pipes, but the Cathedrals Fabric Commission for England (CFCE) ordered that these much-altered pipes should instead be retired, documented and placed on permanent display in the cathedral.

The tonal scheme has been developed with the cathedral's liturgical needs as the top priority: from accompanying a Tudor verse anthem or a modern set of canticles, or colouring the psalmody, to supporting any size of congregation in hymnody. We believe and hope that the resulting instrument will still be one that is stirring both to listen to, and to play.



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## PEDAL ORGAN

1.	Contra Bass	<i>from 3, polyphone</i>	32
2.	Sub Bass	<i>from 5, polyphone</i>	32
3.	Open Wood		16
4.	Open Diapason	<i>part from 49</i>	16
5.	Sub Bass		16
6.	Double Stopped Diapason		16
		<i>from 38</i>	
7.	Bourdon	<i>from 55</i>	16
8.	Quint	<i>from 5</i>	10 <sup>2</sup> / <sub>3</sub>
9.	Octave Wood	<i>from 3</i>	8
10.	Principal	<i>from 51</i>	8
11.	Bass Flute	<i>from 5</i>	8
12.	Stopped Diapason		8
		<i>from 38</i>	
13.	Fifteenth	<i>from 51</i>	4
14.	Flute		4
15.	Octave	<i>from 51</i>	2
16.	Piccolo	<i>from 14</i>	2
17.	Aliquot	<i>from 3 and 5</i>	VII
18.	Bombardon	<i>from 87</i>	32
19.	Bombarde	<i>from 87</i>	16
20.	Bombarde	<i>from 87</i>	8
21.	Contra Posaune	<i>from 47</i>	16
22.	Posaune	<i>from 47</i>	8
23.	Clarion	<i>from 47</i>	4
24.	Basson	<i>from 74</i>	16
25.	Basson et hautbois		8
		<i>from 74</i>	
26.	Hautbois	<i>from 74</i>	4

*I Nave on Pedal*  
*III Great to Pedal*  
*V Solo to Pedal*

*II Chaire to Pedal*  
*IV Swell to Pedal*

## CHAIRE ORGAN

27.	Open Diapason		8
28.	Stop Diapason		8
29.	Principal		4
30.	Nason		4
31.	Fifteenth		2
32.	Nineteenth		1 <sup>1</sup> / <sub>3</sub>
33.	Two & Twenty		1

*VI Tremulant*      *VII Great Reeds on Chaire*  
*VIII Nave on Chaire*    *IX Flute Harmonique on Chaire*  
*X Tuba Mirabilis on Chaire*      *XI Swell to Chaire*  
*XII Solo to Chaire*

## GREAT ORGAN

34.	Double Stopped Diapason		16
		<i>from 38</i>	
35.	Open Diapason		8
36.	Keraulophon		8
37.	Clarabel Flute		8
38.	Stopped Diapason		8
39.	Principal		4
40.	Open Flute	<i>from 37</i>	4
41.	Stopped Flute	<i>from 38</i>	4
42.	Twelfth		2 <sup>2</sup> / <sub>3</sub>
43.	Fifteenth		2
44.	Seventeenth		1 <sup>3</sup> / <sub>5</sub>
45.	Fourniture	<i>19.22.26.29</i>	IV
46.	Contra Posaune	<i>from 47</i>	16
47.	Posaune		8
48.	Clarion	<i>from 47</i>	4

## NAVE ORGAN

49.	Double Open Diapason		16
		<i>from 51</i>	
50.	Grand Diapason		8
51.	Open Diapason		8
52.	Octave		4
53.	Super Octave		2
54.	Grand Chorus	<i>12.15.19.22</i>	IV

*XIII Chaire to Great*    *XIV Swell Sub Octave to Great*  
*XV Swell to Great*      *XVI Swell Octave to Great*  
*XVII Solo to Great*

## SWELL ORGAN

55.	Bourdon	<i>from 58</i>	16
56.	Contre Viole	<i>from 59</i>	16
57.	Diapason Conique		8
58.	Cor de Nuit		8
59.	Viole de Gambe		8
60.	Dulciane		8
61.	Unda Maris	<i>A10</i>	8
62.	Prestant		4
63.	Flûte à Biberon		4
64.	Violette	<i>from 59</i>	4
65.	Nasard		2 <sup>2</sup> / <sub>3</sub>
66.	Doublette		2
67.	Octavin		2
68.	Tierce		1 <sup>3</sup> / <sub>5</sub>
69.	Progression Harmonique		II-V
		<i>19.22</i>	
70.	Contre Trompette	<i>from 71</i>	16
71.	Trompette		8
72.	Clairon	<i>from 71</i>	4
73.	Basson	<i>from 74</i>	16
74.	Basson et hautbois		8
75.	Clarinette		8
76.	Voix Humaine		8

*XVIII Tremulant*      *XIX Sub Octave*  
*XX Unison Off*      *XXI Octave*  
*XXII Solo to Swell*

## SOLO ORGAN

77.	Flute Harmonique		8
78.	Flute Harmonique	<i>from 77</i>	4
79.	Piccolo Harmonique	<i>from 77</i>	2
80.	Trompette	<i>from 71</i>	8
81.	Hautbois	<i>from 74</i>	8
82.	Clarinette	<i>from 75</i>	8
83.	Contra Posaune	<i>from 47</i>	16
84.	Posaune	<i>from 47</i>	8
85.	Clarion	<i>from 47</i>	4
86.	Bombardon	<i>from 87</i>	16
87.	Bombarde		8
88.	Bombarde Clairon	<i>from 87</i>	4
89.	Tuba Magna	<i>from 90</i>	16
90.	Tuba Mirabilis		8
91.	Tuba Clarion	<i>from 90</i>	4

999 general and 16 divisional piston memories

Electro-pneumatic key action  
 Electric stop action

61/32 compasses

## ACCESSORIES

*Great and Pedal combinations coupled*

8 toe pistons to Pedal Organ  
 8 toe and thumb pistons to Swell Organ  
 8 thumb pistons each to Chaire, Great / Nave, and Solo Organs  
 8 general thumb pistons  
 Setter and general cancel thumb pistons  
 Divisional cancel thumb pistons to all manuals  
 2 coupler thumb pistons  
 1 stepper advance toe piston  
 1 stepper reverse toe piston  
 6 stepper advance thumb pistons  
 1 stepper reverse thumb piston  
 Reversible toe pistons: *III, XV, 2, 18*  
 Reversible thumb pistons:  
*II-V, XI-XIII, XV, XVII, XXII, 2*  
 Stepper, operating general pistons in sequence  
 Manuals I and II exchange  
 Combination couplers: *Great and Pedal combinations coupled, Generals on Swell toe pistons*  
 Pedal divide (adjustable)  
 Balanced expression pedal to Swell Organ



## TONAL SCHEME

A stoplist gives no more than an indication of the tonal ethos and quality of an organ. So much depends on the acoustic, the player and the voicing. Judgment about the quality of the instrument should wait until it is heard completed, in situ.

We hope that the following comments will help explain some of what is intended for each department of the instrument.

### PEDAL

The triforium, home to a Double Open Wood 32' before 1971, has long been put to other use, so provision of 32' flue tone in a very tight space has proved to be a challenge. We have designed an evolution of the Compton-style Polyphone, with two separate actions that will permit it to speak at both *p* and *f*.

The division will be founded on the Open Wood 16', of enormous scale, that was added by Bishop nearly 200 years ago. This will have its 8' octave reinstated and be restored to optimum speech. A quieter extended Sub Bass rank will also be provided.

We have also included an open metal 4' flute, also available at 2', to be a useful register in solo and improvisation work.

The provision of a Nave on Pedal transfer offers further flexibility, allowing this division to be available on the pedals when not otherwise needed. The Grand Chorus mixture stop, for example, will be founded on the 16' harmonic series, and voiced in such a way in its bass that it balances the plenum of the Great and Swell.

The other 16' manual flues, and the Great and Swell reeds, will also be available on the pedals. The Bombardon rank will be very powerful, with French shallots, full-length down to 32' G and half-length with very generous scaling to 32' C.

### CHAIRE

The Chaire division, located entirely in the small Chaire case, is inspired by Dallam and Harris, and will be voiced very gently on light wind pressure. The scale, construction, and voicing style of the present Harris East Great Open Diapason 8' will be copied as the basis of the division. The flutes will be akin to a chamber organ, and the principal chorus to 1' light and silvery. The tapered Nineteenth is intended to be a useful colour, while the Fifteenth, Nineteenth and Two & Twenty will provide a small mixture combination when needed.



## GREAT

The Great division takes inspiration from our founder John Nicholson, who produced principal choruses of great musicality and vigour, and whose Keraulophon stops – so useful in Romantic registrations – were a speciality.

Principal-scaled mutations will be provided alongside two extended flute ranks – a Stopped Diapason and a Clarabel Flute. Extension has been adopted by necessity on grounds of space, but has proved highly effective and musical in organs such as those by Compton and Schoenstein & Co. Our adoption of extension in this instrument is considered – there is almost no extension in any of the principal choruses – and is based on the provision of versatility.

The Posaune rank at 16', 8' and 4' will be bright and powerful with Victorian colour.

## NAVE

In the 1971 instrument the soundboards were reconfigured so that the organ spoke clearly to the east and west. This effective idea will be perpetuated with a Nave division speaking west. Founded on a Double Open Diapason 16', the principal chorus includes a commanding Grand Diapason 8' and will be capped by a Grand Chorus mixture of IV-VI ranks, based on the 16' harmonic series. This small division will help support congregations in hymnody when the building is full, and means that the Great division can be effective in the Quire without dominating.

There will be a new roof on the organ to further aid tonal clarity around the building.

## SWELL

This is the department often found most lacking in the previous instrument. The accompaniment of the cathedral choir has been the uppermost consideration in developing this section of the instrument, which will include many gentle 8' registers, a 16' Bourdon rank (extended to provide a Cor de Nuit 8'), and a Contre Viole 16'.

The Diapason Conique 8' is a tonality which we recently provided for our new organ at Radley College. The Dulciane 8' and Unda Maris 8' will be gentle and silvery, with the Unda Maris slightly louder than the Dulciane so that it will work as an undulant against the bold and very French Viole de Gambe 8'.

The exclusive use of French nomenclature is purposeful, reflecting the inspiration of the many ravishing *orgues de chœur* in France. The principal chorus will be topped by a rich Progression Harmonique II-V which will gain an extra lower-pitched rank at every F# as it ascends through the compass. The mutations will be wide scale, complementing the other flutes in the division such as the rare Flûte à Biberon.

The reeds take the form of two extended ranks, a Basson/Hautbois and a Trompette, again dictated by space and the need for versatility. There will also be a Voix Humaine. All of these will have French domed shallots and will be of traditional French double-blocked construction and scaling, inspired by the great organ builder Aristide Cavaille-Coll. The Clarinette will be warm and woody, more in the style of 'Father' Willis.



## SOLO

In effect, the Solo division will be three stops: a Flute Harmonique, a Bombarde and a Tuba Mirabilis. The Swell and Great reeds will both be separately available for versatility. The Bombarde is the Trompette Harmonique that we provided in 2010, renamed.

The Tuba Mirabilis will be in the main case, hooded and pointing west. The Flute Harmonique will be a copy of the beautiful example on the Solo division of the Cavaille-Coll instrument from Manchester Town Hall, presently under reconstruction in our workshop.

### *Conclusion*

Appearances can be deceptive: this large stoplist is in many ways a moderate-sized three-manual organ with three solo ranks. The considerable number of speaking stops provided is simply to allow the greatest possible versatility in accompanying the cathedral liturgy and in other uses such as Three Choirs Festivals, recital use, etc.

As with all organs, the proof of the pudding will be in the eating, and we look forward to hearing and seeing the reaction to the organ in 2026.

James Atherton  
Head Voicer, Nicholson & Co. Ltd  
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