Llandaff Cathedral

A behind the scenes look at the building of a 21st-century cathedral organ.

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When I was a choirboy in the 1960s, many of us would go off for a week or two in the summer on a residential RSCM course. These were held, as they still are, in a number of venues, usually schools with large chapels or attached to large churches or cathedrals. All these places came to acquire reputations of one sort or another: 'another outbreak of food poisoning at School again this year' one boy would report, or 'the headmistress came in to St's unexpectedly and found us running up and down the out-ofbounds main staircase' reported another. A third might say 'Had a fantastic time at Llandaff this summer: beautiful place and a stunning cathedral'. It was that third comment, by a school-friend of mine, which fixed Llandaff in my mind as one of those 'must-visit' places.

In later years I read the history of the Llandaff organ and its mixed fortunes. Here it is in a nut-shell: the 1861 Gray & Davison organ was removed in 1900 and sent to Usk (where it famously remains); in 1900, Robert Hope-Jones built a 33speaking stop new instrument with help from Norman & Beard; subsequently enlarged (in 1902, 1914 and 1924 – all by Norman & Beard then Hill, Norman & Beard); rebuilt completely in 1938 by HNB with new upperwork, action and console; severely damaged by a land-mine during WWII; rebuilt in 1958 by HNB with new casework by George Pace and a Positive Organ in a concrete flying-arch in place of a screen. It had four manuals and 65 speaking stops, being designed tonally very much in the HNB idiom of the 1950s/60s. In about 1987, Rushworth & Dreaper replaced the electrical systems.

Perhaps it is best to say that the Llandaff organ was 'not distinguished'. Certainly it never managed satisfactorily to escape its Hope-Jones origins nor its near destruction in WWII. In the 1990s

the Cathedral and its then organist, Dr Michael Smith, decided that a new organ, in new cases, was the only wise option. Research into new organs around the UK was undertaken by Dr Smith and then (after his retirement) by his successor, Richard Moorhouse, and Canon Graham Holcombe; the decision was eventually taken to replace the organ with a brand-new instrument by Nicholsons of Malvern.

Nicholsons' work has now been going on for more than a year and the organ is well on its way to physical completion in the cathedral. Organists' Review was invited by Nicholson's Managing Director, Andrew Moyes, to have a 'sneak preview' of the work, so having to be in Cardiff to lecture on the IAO Regional Day last October offered the ideal opportunity for me to spend an afternoon at Llandaff clambering around the organ. I will write about the tonal side of the instrument once it is complete and 'settled-down'; what follows is a behind-the-scenes look at the concept and how it is being realised.

The first major decision was, of course, where to site the organ. The decision was made to ignore the flying bridge (leaving entombed the 1958 Positive – never in tune because of its position, and dreadfully dangerous to reach), to place the organ in the pair of arches either side of the choir stalls, and to grace it with new cases. The cases were designed by Nicholsons and by Simon Platt, an architect specialising in organ cases and famed for such ingenious and beautiful creations as the nave organ cases in Brussels Cathedral.

The tonal concept is that of a comprehensive eclectic instrument with a distinct leaning towards the traditional British cathedral organ style: thus the mixtures are not particularly high-pitched, the scales are broad, the wind pressures

generous and the provision of foundation stops luxurious. A study of the specification (see over) will soon reveal that nothing that one might reasonably wish for is absent. There is even a West Great chorus to ensure good projection down the nave.

The Great has a complete diapason chorus, up to seven ranks of Mixtures, ensuring a rich and full ensemble. Open flutes at 8 & 4 (though it's a shame the 8ft Harmonic Flute does not have its own open bass, in the French manner), a stopped 8ft flute and a string, plus a tierce for colouring the choruses or using with the Twelfth as a Sesquialtera – all these ensure colour and flexibility. The 16/8/4 chorus of sonorous reeds, rather in the Hill tradition, will form a fine climax to the department and make sure it is powerful enough to fill the Cathedral. The West Great chorus, up to big fiverank Mixture, will help lead the largest of nave congregations without the player having to resort to the Great reeds — and thus spare the ears of the Llandaff choirs, sitting between the two main cases.

The Swell also is a very complete department, even including the rare 16ft Contra Salicional. The Vox Humana one might expect to find here is located on the Solo. The two Mixtures will doubtless fulfil the same functions as in the Nicholson Swell at Southwell, where the 15.19.22 is a restrained 'accompanimental' Mixture, the 19.22.26.29 being larger, fuller and brighter, mainly for use with the Swell flues as a secondary chorus to the Great. Note that the reeds are again distinctly 'British' - no Trompette or Clairon here.

The Choir is similarly luxurious, starting with a 16ft Lieblich Bourdon which finds a useful second home on the Pedal. An 8ft Diapason-based chorus (8/4/2/III) forms the backbone of the

Llandaff Cathedral specification

GREAT	
Double Open Diapason	16
Open Diapason I	8
Open Diapason II	8
Harmonic Flute common	8
Stopped Diapason bass	8
Gamba	8
Principal	4
Wald Flute	4
Twelfth	$2^{2}/_{3}$
Fifteenth	2
Seventeenth	13/5
Fourniture 15.19.22.26	IV
Sharp Mixture 26.29.33	III
Contra Posaune	16
Posaune	8
Clarion	4

WEST GREAT	
Principal	8
Octave	4
Superoctave	2
Mixture 15.19.22.26.29	V

CHOIR ORGAN	
Bourdon	16
Open Diapason	8
Bourdon	8
Principal	4
Chimney Flute	4
Nazard	22/3
Fifteenth	2
Blockflute	2
Tierce	13/5
Larigot	13/5
Mixture 19.22.26	III
Cremona	8
Tremulant	

SWELL ORGAN (enclosed)	
Contra Salicional	16
Open Diapason	8
Stopped Flute	8
Salicional	8
Voix Celestes (t.c.)	8
Principal	4
Nason Flute	4
Fifteenth	2
Mixture 15.19.22	III
Oboe	8
Tremulant	
Plein Jeu 19.22.26.29	IV
Double Trumpet	16
Cornopean	8
Clarion	4
Swell Octave	
Swell Unison Off	
Swell Suboctave	

Mixture Compositions	
GREAT ORGAN	
Fourniture IV	Sharp Mixture III
1. 15-19-22-26	1. 26-29-33
13. 12-15-19-22	10. 22-26-29
25. 8-12-15-19	19. 19-22-26
37. 1- 8-12-15	28. 15-19-22
	40. 12-15-19
	50 8-12-15

SWELL ORGAN	
Plein Jeu IV	Mixture III
1. 19-22-26-29	1. 15-19-22
10. 15-19-22-26	19. 12-15-19
22. 12-15-19-22	43. 8-12-15
37. 8-12-15-19	
49. 8-12-12-15	

37.	8-12-15-19
19.	8-12-12-15
ED	AL ORGAN
Mixt	ure III
1.1	15-19-22

SOLO ORGAN (enclosed)	
Contra Gamba	16
Viole d'Orchestre	8
Violes Celestes (t.c.)	8
Hohl Flute	8
Octave Viole	4
Harmonic Flute	4
Harmonic Piccolo	2
Vox Humana	8
Cor Anglais	8
Corno di Bassetto	8
Tremulant	
Orchestral Trumpet	8
Tuba (unenclosed)	8
Solo Octave	
Solo Unison Off	
Solo Suboctave	

PE	DAL ORGAN	
Double Open Wood	A	32
Open Wood	A	16
Violone		16
Open Diapason	(Great)	16
Gamba	(Solo)	16
Bourdon	В	16
Echo Bourdon	(Choir)	16
Quint	В	$10^{2}/_{3}$
Octave	A	8
Principal	C	8
Bass Flute	В	8
Fifteenth	C	4
Mixture 15.19.22		III
Contra Trombone	D	32
Bombarde	E	16
Trombone	D	16
Double Trumpet	(Swell)	16
Bombarde Clarion	E	8
Trumpet		8

COUPLERS
Solo to Great
Swell to Great
Choir to Great
Solo to Swell
Solo to Choir
Swell to Choir
Solo to Pedal
Swell to Pedal
Great to Pedal
Choir to Pedal
Great Reeds on Solo
West Great on Solo
Great Reeds on Pedal
Great & Pedal Pistons Coupled
Generals on Swell Toe Pistons

WEST GREAT
Mixture V
1. 15-19-22-26-29
11. 12-15-19-22-26
21. 8-12-15-19-22
31. 1- 8-12-15-19
45. 1- 8-12-12-15
CHOIR ORGAN
Mixture III
1. 19-22-26
16. 15-19-22
31. 12-15-19
49. 8-12-15
Manuals CC to C (61 notes). Pedals CCC to G (32 notes).

Note: Items in italics are 'prepared for' until funds become

available

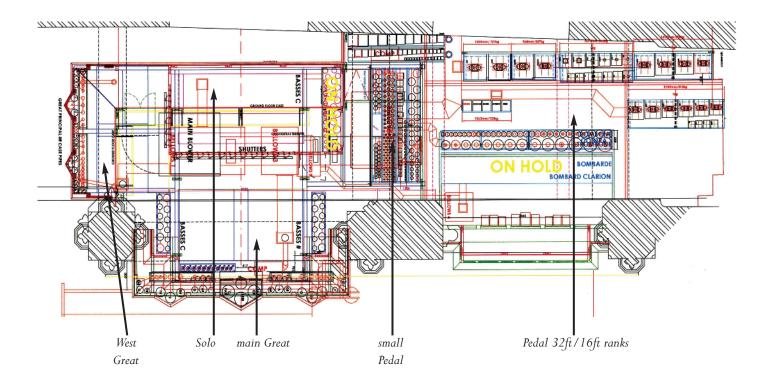
department, together with a cornet decomposée plus Larigot and an 8ft Cremona, a stop which will act as a Cromorne when required leaving the enclosed Solo Clarinet to handle the expressive Romantic roles.

The Solo department is mainly enclosed, though the unenclosed Tuba is the only stop due to be installed for the present, whilst the cathedral seeks funds for the remainder. When the enclosed registers are installed, they will form the most complete modern Solo organ built anew in the UK for many a year: a string chorus 16/8/8/4, a Hohl/Harmonic Flute chorus 8/4/2, three imitative reeds and a fiery Orchestral Trumpet quite a department. Let us hope that donors flock to help the Cathedral fund this vital portion of the scheme.

The same lack of funds prevents the Pedal Bombardes 16/8 from being installed at this time, though their lack (and that of the prepared-for 8ft Trumpet) may scarcely be felt as there is in addition a generous-scaled 32/16 Trombone rank and the Swell Double Trumpet borrowed to the Pedal. Open Woods 32/16/8 (imported from the USA and standing proudly against the North wall in highly polished poplar) join a Violone (south case front pipes) and its near twin, the Open Diapason (north case pipes – shared with the Great 16ft Open), plus a Bourdon at 16/8, a Principal 8/4 and a Mixture (notice the low pitch – 15.19.22). All in all, this is an 18-stop Pedal department of huge potential.

The most recent Nicholson organ of this scale is at Bridlington Priory, which has rapidly received great acclaim from all who have heard or played it. At Bridlington the whole organ is situated in two and a half bays north of the Chancel. At Llandaff there is plenty of space both north and south of the chancel, so the organ is accommodated in two bays on either side – spacious indeed.

A study of the drawings will readily reveal how the organ is laid out. The western bay on the north side contains the Great behind the lower portion of the lofty casework, facing south, with the Solo box on the same level behind it. To its west is the West Great chorus, behind the westward facing case at the head of the north aisle, where it can



'see' 50% of the nave. East of the Great and Solo, in the next bay, is the bulk of the Pedal Organ: the 32fts and main 16ft ranks are on the floor, the soundboards for the higher-pitched stops being mounted at Great/Solo level. On the south side of the chancel (not shown), behind the main case in the westerly bay, is the Choir (unenclosed), behind which is the large Swell-box. West of that, speaking west up the south nave aisle, is the heavy-pressure Tuba. East of it, in the next bay, is an elevated platform on which sits the console. The player will hear the organ from the same position as the chancel console in St Paul's Cathedral: Richard Moorhouse, the Cathedral Organist, was previously Assistant Organist at St Paul's, so he should feel at home!

There are two complete wind systems and four (currently three) blowers - one large-capacity, medium-pressure blower and one small-capacity, high-pressure booster each side. Control is by a comprehensive system of double-rise and single-rise weighted reservoirs, compensators and Schwimmers. Pipe materials are spotted metal, zinc and plain metal, with high percentage tin for the large number of case pipes. Shortly after my visit in late October last year the remainder of the pipework was installed, along with the console.



The main Great flues, speaking South; also the Great reeds, behind which is the West Great



The North case and larger Pedal ranks

The two 16ft cases are cleverly mounted high by Simon Platt, so that from the nave they can be 'read' with the concrete bridge and Epstein Majestas. In fact, the majority of the pipework speaks below these two 16ft cases, out of the 'brustwerk' cases, as can be seen in the casework photograph. In due course, the Pedal pipework will be clothed with its own simpler case, opposite the console on the other side of the chancel. The timber used throughout the organ is mainly poplar, with oak for the cases; quite a few of the heaviest load-bearing areas are supported with steel girders.

Tonal regulation is being carried out as you read this. Only after that will we all discover whether this huge mechanical and technical achievement is also a wonderful musical instrument. From all that I have observed, the auguries are auspicious.

Photographs and drawing courtesy Nicholson & Co. Ltd.

The Church of Our Lady Immaculate, Whitstable,

A 4 rank Compton organ originally built for a Baptist Church in London has been overhauled and installed here. It has been equipped with a new transmission system and multi channel piston system together with some modest adjustment to the stop list. The new oak casework was designed by us and made in our own workshop.



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