St Philip & St James, Holywood

THE ORGAN

Paul Hale

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THE ORGAN

Its history, from 1872 to 2024

by Paul Hale

(Organ Consultant to the church, 2017-24)

he organ at St Philip & St James began life as a modest-sized three-manual instrument made by the famous Hull firm of Forster & Andrews. Installed in 1872 (one of no fewer than thirty-five new organs they built that year) in a vaulted chamber to the south of the chancel, it was solidly constructed, of beautiful tone, and suitable for the accompaniment of the church choir in the chancel. The bellows were pumped by a large water engine beneath the floor, which survived in place until the organ was dismantled in 1962. This is the stop-list as proposed by Forster & Andrews and recorded in their Order Book (see overleaf for a facsimile, courtesy of Jonathan Wallace of Henry Groves & Son). F&A remained in business until 1956, having made 1,378 organs.

tes)	<u>Swell Organ</u> (56 no	otes)	<u>Choir Organ</u> (56 n	otes)
16	Bourdon	16	Lieblich Gedact	8
8	Open Diapason	8	Gamba	8
8	Gedact	8	Dulciana	8
8	Salicional	8	Gemshorn	4
4	Principal	4	Flauto Traverso	4
4	Fifteenth	2	Clarionet	8
$2^{2}/_{3}$	Harmonic Piccolo	2		
2	Mixture	III	Pedal Organ (30 no	otes)
III	Contra Fagotto	16	Open Dianacon	16
8	Cornopean	8	Bourdon	16
1		8	Violoncello	20
		4	VIOIOIICCIIO	0
	Tremulant			
	Accessories		Cost	
	Pneumatic lever to	the Great	£989	
well to Pedal Six composition pedals				
	Organ bench			
	Screen for the orga	inist		
Swell Octave to Great Pitch-pine casework				
Swell to Choir Front pipes decorated				
	tes) 16 8 8 4 4 2 ² / ₃ 2 III 8	tes) <u>Swell Organ</u> (56 nd 16 Bourdon 8 Open Diapason 8 Gedact 8 Salicional 4 Principal 4 Fifteenth 2 ² / ₃ Harmonic Piccolo 2 Mixture III Contra Fagotto 8 Cornopean Oboe Clarion Tremulant <u>Accessories</u> Pneumatic lever to Six composition per Organ bench Screen for the orgation Front pipes decora	tes)Swell Organ (56 notes)16Bourdon168Open Diapason88Gedact88Salicional84Principal44Fifteenth2 $2^2/_3$ Harmonic Piccolo22MixtureIIIIIIContra Fagotto168Cornopean8Oboe8Clarion4TremulantAccessoriesPneumatic lever to the Great Six composition pedals Organ bench Screen for the organisteatPitch-pine casework Front pipes decorated	tes) Swell Organ (56 notes) Choir Organ (56 n 16 Bourdon 16 Lieblich Gedact 8 Open Diapason 8 Gamba 8 Gedact 8 Dulciana 8 Salicional 8 Gemshorn 4 Principal 4 Flauto Traverso 4 Fifteenth 2 Clarionet 2 Mixture III Pedal Organ (30 nd 2 Mixture III Pedal Organ (30 nd Cornopean 8 Oboe 8 Clarion 4 Tremulant Maccessories Cost Pneumatic lever to the Great £989 Six composition pedals Organ bench Screen for the organist eat Pitch-pine casework Front pipes decorated

churced church 21 570 SWELL GREAT 1 Dounden 56 Double Diap. WIM 2 Phen Diap. Tw 2 Ken Diapason 5% 5% 3 Sal. 7 s.M. 56 3 Garyla 56 4 Gedach 4 Spolitflote 5% 5% 5 Frincipal Sincifial 5% 5 4 Harmond State Shar Sie 5% 56 6 sta Swelfth 5% 68 & Fifleenth 56 8 . Misture .s. 5% 168 5% 10 Srumpet 56 5% 5% CHAIR 1 JB.M 84 Gamba EDAL Dulciana, 11 2 apasm 3 Lichlich 30 Gerdac 30 Cremshorn. 4 3 W. intence Houto 30 5 martine Tolarion henulan 44 89 prin witine umatio Lever to Great Tal not to radiate so much Siver as in Dundrum Stry Dinches Policin & Jeda 3 7/23 4 Swell to Grea, lasino as Scoll to Cher 5 Maell octave to Great Serere for The The bine fase - Show Junes . Mexander Sig.

Major rebuilds in the Twentieth Century

By the end of the First World War, the Forster & Andrews mechanical ('tracker') action would have seemed distinctly old-fashioned to the organists of the time, with the pneumatic levers to the Great Organ distinctly noisy in operation and probably in need of releathering. The Sheffield firm of Albert Keates were called in during 1918 to rebuild the organ with tubular-pneumatic action and to remake or replace the console. This firm was founded in 1891 and eventually bought in 1950 by Wilfred Harris, forming Harris Organs of Birmingham. Keates replaced some of the Forster & Andrews pipework, revoiced much of the rest and provided a greatly enhanced Choir Organ. Why might this have been?

The reason might well lie in the position of the organ in the church and the type of organ Forster & Andrews were making in the late 1860s / early 1870s. Though the chamber was a reasonable size for a 31-stop organ, the arches from which the organ spoke into the chancel probably restricted its tone quite considerably; little would have spoken down the south aisle either, as large Pedal pipes probably blocked the larger arch there. At that period, F&A were making 'sweet-toned' organs rather than what came later – more powerful instruments which projected their tone in no uncertain manner. It is quite possible that although the organ was fine for choir accompaniment, it lacked much impact in the nave and would therefore not have led congregational singing effectively.

Albert Keates had trained with Charles Brindley (later of Brindley & Foster). Brindley was greatly influenced by the superb pipe voicing of the German organ-builder Schulze, who installed several monumental organs in the North of England during the 1860s. Forster & Andrews were later to come under the same influence, but Keates got there first, becoming known for the bright and powerful voicing of his organs, even employing one of the Schulze family (Karl). They seem to have been considered a particularly appropriate firm for rebuilding the Forster & Andrews here in Holywood. Keates was able to deliver more power out of the organ and also more variety in the flute and string ranks.

The Keates organ lasted well until it too, by the early 1960s, appeared old-fashioned and inflexible. The London firm of J.W.Walker was contracted to electrify the action and a more dramatic change was decided upon: to reconstruct the organ at the west end of the church in divided cases with many additional stops, the aims being (1) to give the congregation a strong lead from behind, (2) to provide suitable stops for the playing of the complete range of organ music, and (3) to make space for a good-sized choir vestry on the ground floor of the old organ chamber.

On the following page is the Walker drawing for the new cases, a copy of which resides in the church's Archives. The organ was completed in 1963, to the specification on page 8 of this booklet. The new console was situated at the front of the nave, on the south side, sunk as low as it could be.



Drawing by J.W. Walker & Sons for the new organ cases.



Bass pipes by Forster & Andrews and by Keates.

The decorated pipes were originally on display; they disappeared inside in 1963.

Organ Specification: J.W. Walker & Sons Ltd, 1963

Great Organ (61 notes)

1	Double Open Diapason	16	
2	Open Diapason No.1	8	
3	Open Diapason No.2	8	
4	Geigen Principal	8	
5	Hohl Flute	8	
6	Principal	4	
7	Gedeckt Flute	4	
8	Twelfth	$2^{2}/_{3}$	
9	Fifteenth	2	
10	Sesquialtera 12.17	II	
11	Scharf 22.26.29	III	
12	Trumpet	8	rank B
13	Clarion	4	rank B

Swell Organ (61 notes, enclosed)

Bourdon	16	rank C
Open Diapason	8	
Rohr Flute	8	
Viola da Gamba	8	
Voix Celeste (t.c.)	8	
Principal	4	
Wald Flute	4	
Fifteenth	2	
Mixture 19.22.26	III	
Oboe	8	
Tremulant		
Contra Fagotto	16	rank D
Cornopean	8	
Clarion	4	
	Bourdon Open Diapason Rohr Flute Viola da Gamba Voix Celeste (t.c.) Principal Wald Flute Fifteenth Mixture 19.22.26 Oboe Tremulant Contra Fagotto Cornopean Clarion	Bourdon16Open Diapason8Rohr Flute8Viola da Gamba8Voix Celeste (t.c.)8Principal4Wald Flute4Fifteenth2Mixture 19.22.26IIIOboe8Tremulant16Contra Fagotto16Cornopean8Clarion4

Choir Organ (61 notes, enclosed)

27	Open Diapason	8
28	Lieblich Gedeckt	8
29	Viole d'Orchestre	8
30	Dulciana	8
31	Gemshorn	4
32	Harmonic Flute	4
33	Nazard	$2^{2}/_{3}$
34	Harmonic Piccolo	2
35	Tierce	13/5
36	Dulciana Mixture 19.22	II
37	Orchestral Oboe	8
38	Clarinet	8
	Tremulant	

Choir Organ (continued)

39	Tuba	8	unenclosed, rank E
40	Trumpet	8	rank B
<u>Pedal Or</u>	gan (32 notes)		
41	Open Diapason	16	wood, rank F
42	Violone	16	wood, rank A
43	Bourdon	16	rank G
44	Echo Bourdon	16	rank C
45	Octave	8	wood, rank F
46	Violoncello	8	wood, rank A
47	Bass Flute	8	rank G
48	Twelfth	$5^{1}/_{3}$	rank G
49	Fifteenth	4	rank A
50	Octave Flute	4	rank G
51	Mixture 19.22.26.29	IV	
52	Ophicleide	16	rank E
53	Trombone	16	rank H
54	Fagotto	16	rank D
55	Tuba	8	rank E
56	Trumpet	8	rank H
57	Schalmei	4	

Couplers

Swell Octave Swell Sub Octave Swell Unison Off Choir Octave Choir Sub Octave Choir Unison Off Great to Pedal Swell to Pedal Choir to Pedal Swell Octave to Great Swell to Great Swell Sub Octave to Great Choir Octave to Great Choir to Great Choir Sub Octave to Great Swell to Choir Great & Ped Combs Coupled

Accessories

6 thumb pistons to each manual
1 general thumb piston
6 toe pistons to Pedal and 6 to Swell (duplicating thumb pistons)
Reversible thumb pistons for Great to Pedal, Swell to Great, Choir to Great
Reversible toe pistons for Great to Pedal, Swell to Great, Swell to Pedal
General Cancel
2 balanced swell pedals
Indicator lights for West End and Vestry
Pistons set at switchboard

Sixty Years Later

The 1963 organ was an impressive achievement, creating an instrument of power, colour, variety of tone, and subtlety of soft stops. Excellent for accompanying congregations, playing organ music and for concerts and teaching, the organ suffered only by being so far from the church choir that choral accompaniment was always something of a challenge.

For over sixty years this rebuilt organ provided, week by week, all that the parish could need from its organ. It is hardly surprising that, eventually, the multiple electrical components in the console and organ wore out – after all, what other complex piece of electrical mechanism dating from 1963 can be expected still to be in perfect working order in 2023?

The leather on the wind reservoirs and regulators dated from 1918 and 1963 and it, too, had dried and was cracking, allowing pressurised air to leak. Similarly, the many hundreds of small moving parts covered in very thin leather to keep them wind-tight were perishing. As a result of this, notes failed to play – very frustrating for the organist and confusing for choir and congregation. The timber of the 1872 and 1918 soundboards on which the pipes stood had split, allowing air to leak into pipes unbidden. The nearly 3,000 pipes were mostly in good condition but inevitably dust was beginning to clog the mouths of the smaller pipes, stoppers were coming loose and some pipes were sagging. Access for tuning and maintenance was a real challenge owing to a poor layout of some areas of the organ. The combination piston system on the console was inevitably limited because 'general pistons' were extremely costly in 1963 (so only one was provided), and the 'sequencer' and 'stepper' had not been invented. Pistons had to be set by using a large switchboard behind the music desk – out-dated technology where the switch contacts had become worn and unreliable.

Almost all of the necessary remedial tasks comprised standard 'wear and tear' work which does not represent a problem for organbuilders, though it does represent a large and therefore costly job, as both organ cases are packed with components and pipes, each pipe having its own electro-pneumatic mechanism to make it sound.

Whilst undertaking a full restoration, the opportunity was also taken to revisit the *sound* of the organ. Was the sound considered ideal in 1963 still the sound considered ideal in 2023? Not quite. The 1963 design was a 'child of its time', a period when so-called 'Baroque-revival' stops were being added to organs by the handful. J. W. Walker were at the forefront of this, and in the same year that the Holywood organ was built, installed what has become one of their most famous and successful organs, of similar size, in the church of St John the Evangelist, Islington, London. It was possibly no coincidence that at the same time, their team was carrying out a stylish rebuild of the 1887/1925 Gray & Davison organ in St Bartholomew's church in Dublin, one of the finest Dublin instruments. In 1963 they also undertook a complete rebuild along similar lines of the large 3-manual Willis organ in Manchester University's Whitworth Hall. Some of the stops Walkers added at Holywood have stood the test of time well; others rather less so. Only four stops have now been replaced: the almost inaudible Choir Dulciana Mixture, the poor Orchestral Oboe, Swell Lieblich Bourdon and the Pedal Schalmei, the latter two for reasons of space.

Following a detailed report this author wrote for the church in 2017, it was decided to appoint Henry Groves & Son of Nottingham to undertake the rebuild, aided on site by staff from Wells-Kennedy, the Lisburn-based firm who have tuned the organ for many years.

The soundboards on which the pipes stand were on their last legs so all were replaced with modern electro-magnetic soundboards, using only the upperboards and rackboards of the old soundboards. Most of the 1963 Walker electro-pneumatic chests for single ranks were converted to electro-magnetic action, too; others were restored. The wind system (haphazard and taking up much space, thus impeding access) was replaced by the space-saving wind regulators which are a Groves speciality. The organ was rearranged internally, only the Swell box and most Pedal 16ft pipes remaining in their 1963 positions. The Choir box was reduced to enclose just the strings and Clarinet ranks, so that the Choir pipework could be heard properly for the first time since 1963 (it had been more of an Echo Organ since then). The Great, Choir, Swell, major reeds and Pedal upperwork now all speak out clearly into the church. Not only is the volume and clarity notably enhanced, but the internal balances of stop combinations within the organ are now 'right' for the first time.

The fine Walker console was beautifully refurbished by Renatus of Bideford, with accurately-matched re-engraved stop-knobs where necessary, plus internal preparation for a 2-manual Chancel Organ, should that ever be commissioned. The Great and Swell stops exchanged sides, as – inexplicably – the Great had been on the left and the Swell on the right: the opposite of normal console layout. Renatus also designed and made the electrical switching system for the organ and the capture system for the combination pistons. In addition, they designed and made fretted panels for the sides of the two cases (see photograph on p.13), to let the sound out and improve their appearance.

The specification, as revised during the 2023-4 major rebuild, is as follows:

Henry Groves & Son Ltd, 2024

<u>Great Organ</u> (61 notes)			<u>Pipe ranks</u>
1	Double Open Diapason	16	А
2	Open Diapason No.1	8	В
3	Open Diapason No.2	8	С
4	Hohl Flute	8	D
5	Stopped Diapason	8	L
6	Principal	4	
7	Harmonic Flute	4	J
8	Twelfth	$2^{2}/_{3}$	E
9	Fifteenth	2	
10	Tierce	1 ³ / ₅	\mathbf{M}
11	Mixture 19.22.26.29	IV	E & S
12	Cornet 1.8.12.15.17	V	from Choir 30, 34,35,37,38
13	Trumpet	8	G
14	Clarion	4	G

<u>Swell Org</u>	g <u>an</u> (61 notes, enclosed)		Pipe ranks
15	Open Diapason	8	
16	Rohr Flute	8	
17	Viola da Gamba	8	
18	Vox Angelica (tenor C)	8	
19	Principal	4	
20	Wald Flute	4	
21	Fifteenth	2	
22	Mixture 19.22.26	III	
23	Oboe	8	Ι
	Tremulant		
24	Clarinet (Choir)	8	Ν
25	Contra Fagotto	16	Н
26	Cornopean	8	
27	Clarion	4	
<u>Choir Or</u>	gan (61 notes, stops 31,32,39 enclo	osed)	
28	Open Diapason	8	А
29	Harmonic Flute (2 ranks) *	8	J & R
30	Lieblich Gedeckt*	8	·
31	Viole d'Orchestre *	8	
32	Voix Celeste (tenor C) *	8	
33	Gemshorn	4	К
34	Gedeckt Flute*	4	L
35	Nazard*	$2^{2}/_{3}$	
36	Fifteenth	2	K
37	Harmonic Piccolo*	2	R
38	Tierce*	1 ³ / ₅	\mathbf{M}
39	Clarinet *	8	
	Tremulant		to * stops
40	Oboe (Swell)	8	I
41	Trumpet	8	G
42	Tuba	8	Q
<u>Pedal Or</u>	gan (32 notes)		
38	Open Wood	16	B [metal from 8ft C]
39	Open Diapason	16	А
40	Violone	16	Ο
41	Bourdon	16	Р
42	Quint *	10 ² / ₃	Р
43	Octave	8	А
44	Violoncello	8	Ο
45	Bass Flute	8	Р
46	Fifteenth	4	С
47	Hohl Flute	4	D
48	Mixture 19.22.26.29	IV	E&S
50	Ophicleide	16	Q
51	Trombone	16	G
52	Fagotto	16	Н

<u>Pedal Or</u>	gan (continued)		<u>Pipe ranks</u>
53	Tuba	8	Q
54	Trumpet	8	G
55	Clarion	4	Н

* the Quint acts as a 32ft Harmonics (12,17,19,^b21,23, from various ranks), when drawn with the Ophicleide.

Couplers

Swell Octave Swell Sub Octave Swell Unison Off Choir Octave Choir Sub Octave Choir Unison Off Great to Pedal Swell to Pedal Choir to Pedal Swell to Great Choir to Great Swell to Choir Great & Ped Combinations Coupled Generals on Swell Toe Pistons

Console accessories

6 thumb pistons to each manual; 6 general thumb pistons; 6 toe pistons to Pedal and 6 to Swell (duplicating thumb pistons); Reversible thumb pistons for Great to Pedal, Swell to Pedal, Choir to Pedal, Swell to Great, Choir to Great, Swell to Choir; Reversible toe pistons for Great to Pedal, Choir to Great; 3 Stepper advance thumb pistons and 1 toe piston; 1 Stepper retard thumb piston and 1 toe piston; General Cancel piston and Setter piston; 2 balanced swell pedals; Wi-fi with tablet for storing performances and other functions.









Swell pipework (1)



Swell pipework (2)



Right: three wind regulators, Trombone and Open Wood basses behind.



Tuba



Right: Choir pipework





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