

Derby & District Organists' Association

Registered Charity No. 510567

Newsletter



Cotswold Glory in Stone and Sound

Towns and villages in the Cotswolds are famed for the beautiful mellow stone architecture of their buildings which include many churches. The ancient town of Cirencester, with its elegant streets, fine market place and wonderful Parish Church of St John the Baptist, can justly claim itself as the 'Capital of the Cotswolds'. During my days training to be a teacher, I was fortunate to spend a term in the town, teaching physics at the then Grammar School, but I lost no opportunity to soak up the atmosphere of the Parish Church with its vibrant musical life. I remember well the Director of Music, Mark Foster, whose wisdom and encouragement guided my early steps in choir training. During October the [Organ Club](#) organised a visit to Cirencester, so, after many intervening years, I seized the opportunity to reacquire myself with a landmark of my early career.

One enters the church through a modest side door from the south porch, and suddenly you find yourself marvelling at a vast space in breadth and height. I had quite forgotten how stunning was this space, one of cathedral proportions.

The glorious perpendicular architecture reflected the tremendous wealth of Medieval wool merchants, with several chapels crowned with fan-vaulting. At the east end of the huge open space of the south aisle stands the case housing the Great organ, an innovation of the 2009 rebuild by Harrison and Harrison. Like many ancient churches, the church has housed a succession of organs placed in various parts of the church. A new organ by Samuel Green was placed on a screen across the chancel archway in 1790. In 1865 it was moved to the west end of the north aisle, only to be rebuilt two years later at the east end of the north aisle by Gray and Davison who also enlarged it and housed it in a new case designed by Sir Gilbert Scott.

Towards the end of the 19th century the church sought a more powerful and versatile instrument and in 1895 'Father' Willis was commissioned to build a new three-manual instrument with tubular-pneumatic action. The organ was moved yet again, this time to occupy space in

DDOA Events 2021

Monday 22nd November

Annual General Meeting at St Matthew's Church, Darley Abbey (See page 8)

DDOA Events 2022

Plans include the Derby Organ Day and visits to Birmingham, Walsall, Lincoln, Cambridge and Staffordshire.

Concerts & Recitals

Friday 5th November 1.00pm

At Derby Cathedral. Lunchtime Recital by 'Up and Coming' local young musicians.

Saturday 6th November 6.30 pm

at St John the Evangelist Church, Mill Street, Derby DE1 3HZ

Derby Bach Choir *Judas Maccabeus* – Handel

[Tickets £15](#), Students £5, Under 16s free.

Saturday 13th November 7.30 pm

at St John the Evangelist Church, Mill Street, Derby DE1 3HZ

Sitwell Singers Bach Choir 'I was glad' Jongen, Vaughan Williams, Parry

[Tickets £12](#), Under 16s free.

Sunday 21st November 2.45pm

at Kingswood Methodist Church, Lambourne Drive, Wollaton, Nottingham NG8 1GR.

James Muckle Memorial Organ Recital

Given by Cathy Lamb (Lichfield Cathedral School). Refreshments.

Free admission, Retiring collection.

Your Newsletter



Thank you to members who have expressed their views on covering the costs of the Newsletter. The committee has decided that the option of receiving the paper copy by post should be covered by a £5 supplement to the annual membership subscription. So for 2022 standard subscription remains at £15, subscription with paper newsletter will be £20.

Photos: Cirencester Parish Church, restored by Harrison and Harrison in 2009. Left: The Gilbert Scott case on the south side of the chancel. Right: The new Great case in the south aisle.

the St John's Chapel, its present position, behind the Scott case in the south chancel arch. Unfortunately, unlike its predecessors which spoke well into the nave from the north aisle, the Willis organ projected poorly into the nave and the Great could drown out the choir in the chancel. The choir got a slightly better deal in 1908 when Norman and Beard moved the Choir division to an elevated position on the north side of the chancel, facing the Scott case. Later in 1955 the instrument was further enlarged by Rushworth and Dreaper, but the new stops and the revoicing of the old resulted in loss to the 'noble character' of the former Willis instrument. I guess that this reflected the post-war re-awakening in Britain of interest in Baroque sounds, pioneered in the new Royal Festival Hall organ. This is the instrument that I got to know in 1965; it had a pleasing sparkle but the sound was still very much confined to the chancel. Also, with the console buried below the rather overbearing Scott case, it was difficult for the player to appreciate the sound fully, with the exception of the choir division on the opposite side of the chancel.

Come the new millennium, the church engaged in a comprehensive restoration to the fabric of the building. Amongst many improvements, a completely new stone floor with underfloor electrical heating was installed throughout the interior. Many schemes were considered for the rebuilding of the organ, which by then had developed many faults as well as still suffering the systemic problem that the pipes most useful



Medieval pulpit with organ cases in the background

to the congregation spoke into the chancel, whilst the quieter stops, useful for choir accompaniment, spoke towards the congregation in the nave. The Harrison and Harrison scheme successfully reversed this situation by planting the Choir division in the Scott case in the south chancel and transferring the Great to a new case facing the nave from the east end of the south aisle. The console is now situated on the north side of the chancel.

During our visit, Organist and Choirmaster, Hugo Kennard, demonstrated how this worked; the Choir division is now well suited to choir accompaniment, but only 50% of its sound reaches the nave. Meanwhile the Great speaks well into the nave, allowing 50% of its sound to be heard in the chancel. The Swell box is in the heart of the organ with shutters facing both west towards the nave and north towards the chancel.

Accessory stops on the console allow these to be controlled either separately or together. Crucially, the Willis voice has been restored; the thirty or so original Willis ranks have been meticulously restored and complemented by new ranks in the Willis style. The resulting instrument with four manuals and sixty-three speaking stops is a joy to hear and to play. Hugo concluded his demonstration by playing *Cortège et Litanie* by Marcel Dupré, a wonderful piece for visiting a huge variety of tonal colour in the organ. During the performance many of us perambulated the building to savour a unique three-dimensional

experience of sound worthy of the great cathedrals of Europe – truly thrilling.

Equally thrilling was the opportunity for members to play, taking turns in the customary way. The console was very comfortable and despite a daunting array of stops, the combination pistons were beautifully graded to give smooth transitions in registration. The specification may be viewed [here](#).

This was a wonderful organ day out which also included visits to lovely organs in the daughter church of Watermoor and the nearby villages of Ampney Crucis and Down Ampney (birthplace of R. Vaughan Williams). Now that Covid restrictions have been loosened, the [Organ Club](#) has revived its monthly visits to organs to a variety of locations throughout the country.

Laurence Rogers



Console on north side of chancel.



Hugo Kennard plays *Cortège et Litanie* by Dupré

Recent Events

Music at Modwen's

The September recitals at St Modwen's, Burton-on-Trent, completed the 2021 series of twelve recitals. As in previous years, I have counted myself very fortunate to have been able to hear superb performances by exceptionally talented musicians. The whole series has raised £1,700 for the organ fund - a wonderful sum thanks to the generosity and expertise of the players and to the many regular supporters.

Alexander Binns opened the second half of the series with a delightfully mixed programme that catered to all of the themes of the series, 'Melody, Rhythm and Whimsy'. Included in his programme was a piece by Tarik O'Regan, *Colimaçon*, which is without doubt one of the most exciting new pieces for the organ that I have heard in many years. The word 'colimaçon' refers to the spiral nature of a snail shell which gives a hint to the structure of the piece - a novel concept and one that is realised in a most ingenious way. Inevitably, one considers the name Tarik O'Regan and wonders: his mixed Irish and Arabic heritage offers a wonderful blend of two very different cultures that are reflected in his music - this is a name to watch for as Tarik's music is approachable and beautifully structured. Alex's performances were everything one would expect of such an accomplished player - clearly articulated phrasing allied with a subtlety of interpretation one can only find in a true musician.

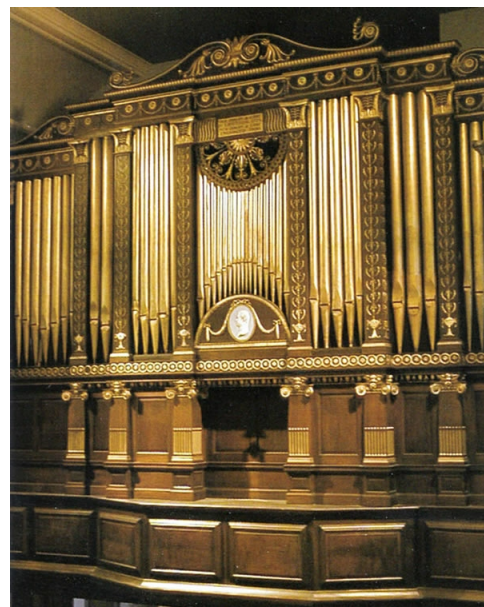
Cathy Lamb has appeared in each series at St Modwen and, as ever, offered a superb programme that included a beautifully controlled and registered performance of Bach's *Passacaglia and Fugue in C Minor*, Gounod's *Funeral March of a Marionette* (the melody of which is firmly associated with Alfred Hitchcock in the minds of a certain generation) and *Trois Pièces* by Alain. This last can be difficult to register on an English organ; fortunately, the mutations, fiery reeds and mixtures at St Modwen are equal to Alain's style in each of the three pieces. I might add that I have never heard anyone play

Litanies with such speed and precision - it was a stunning performance and a fitting conclusion to Cathy's recital. Our Editor has commented that he has never heard a finer performance of *Litanies* whose momentum never once faltered but flowed inexorably towards its fantastical conclusion.

DDOA member **Mary Cobbold** travelled from Sheffield to offer an interesting selection of pieces and to make her first appearance in the St Modwen series. Her wide-ranging programme covered works from four centuries and included several pieces not heard before at St Modwen, most notably Edwin Lemare's *Allegretto in b minor* and *Cantilène in A minor* by Theodore Salomé, who appears to be undergoing something of a revival as this is the third appearance of one of his works in this series. These two pieces were well registered on the colourful, though limited resources of the St Modwen organ, and demonstrated a fine balance between accompaniment and melody.

As with a number of the players, **John Keys's** recital was the first he had played in public in nearly two years, though it was abundantly clear that he had not lost his deft touch at the keyboard. Included in his programme were two pieces from Op. 150 by Saint-Saëns, *Allegretto, No. 4* and *Allegro Giocoso No. 7*. The individual style of each piece was thoughtfully captured, presenting a nice foil to John Rutter's *Gaelic Blessing*, which John had transcribed as an organ piece - with Mr Rutter's blessing. In similar vein to the Saint-Saëns, John offered two pieces by Elgar, *Chanson de Nuit* and *Chanson de Matin*. It would be far too easy to dismiss works such as these as 'popular', though that would undervalue both the elegance of the compositions and the skill necessary to make them work successfully on the organ. My thanks to John for drawing out the simple beauty of these enchanting pieces.

The trio of organists from Lichfield Cathedral was completed by the final recitalist in our series, **Martyn Rawles**, who opened his programme with a work by Neil Cox, *Creation Dance*, a wild



St Modwen's organ situated in the western gallery. A brief history and specification of the organ appeared in the [March 2015 newsletter](#).

composition, quite unfettered in any way. I imagine that Cox's pupils at Lancing College would have loved it as it has the same primal energy and fecundity as Stravinsky's *Rite of Spring*. This was contrasted by some immaculately executed Frescobaldi - *Bergamasca*, from *Fiori Musicali* - and was something of a revelation as this was the first time I had heard Frescobaldi played on the St Modwen organ; the pieces worked exceptionally well. JS Bach's *Contrapunctus XI* from *The Art of Fugue*, transcribed by Ambrose Porter, offered a glimpse of the master's incredibly fertile and well-ordered mind and was contrasted by the lighter and delightful *Humoresque* of Antonin Dvořák. Martyn closed his programme in fine style with Henri Mulet's *Carillon-Sortie*.

During the four years of my tenure at St Modwen's I have heard many stunning performances of works that I have loved since childhood. I have also been fortunate that so many of the recitalists have introduced new works to me, sifted from amongst many, but judiciously chosen to represent the best for the future of organ music and its appeal to a wider public. I believe that we all understand the organ is a fickle mistress and doesn't tolerate fools gladly, but that same fickle mistress also allows a wide range of new possibilities for the understanding and appreciation of organ music by a broader public. I look forward to the opportunities and challenges offered in the 2022 recital series.

Tony Westerman

Annual Lunch 23rd October

The annual social event was held at midday this year and was well supported by members who gathered in a friendly convivial atmosphere. Our guest of honour was our own member, Alex Binns, the Director of Music at Derby Cathedral. Alex was effusive in his thanks to the Association for the warm welcome he and his family received since they arrived in Derby just two years ago.

Alex went on to tell the story of his career pathway which had led to Derby. Beginning as a choirboy at Halifax Parish Church, he was soon entranced by the wondrous instrument and would linger after Evensong to listen to the organist practising while all the other boys played football in the church hall. The state grammar school that he attended provided a rich musical environment with five choirs and numerous ensembles. Alex would play voluntaries at annual carol services.

After leaving school, Alex won organ scholarships at Leeds and Windsor before settling down to academic study at the Royal Academy of Music, five years in all. The wall-to-wall buzz of music making there provided some of his happiest years. After graduation he became Assistant Director of Music at St Edmundsbury Cathedral, and of course thence to Derby.

It was great to sample Alex's skill as raconteur; his story was peppered with amusing anecdotes: the seven-hour organ lesson in Paris, the winking at the audience in a master class with Olivier Latry, the vacation tour with the European Youth Orchestra, and so on. We discovered in questions afterwards, that an accomplished violinist in that orchestra, Dora, later became his wife.

John Maxwell-Jones, standing in for our Chairman, who unfortunately could not attend due to illness, expressed the thanks of us all for Alex's engaging talk and also for his energising presence in the committee.

Laurence Rogers



Your Association

The ER Stow Legacy

It is some while since details of the generous legacy have appeared in the Newsletter, largely because of the restrictions placed upon meetings and planning by the Covid-19 menace.

Members will recall that the legacy was to be used in six principle ways: the purchase of a box organ; the provision of support for the restoration of mechanical organs of the sort that Ed himself might have worked on; financial help for pianists to become organists; financial support for organ recitals; funding for a bi-annual lecture on organ building, and a Bursary for an organ student at the Royal Birmingham Conservatoire (RBC).

Despite Covid, quite a lot has been achieved: the box organ, currently being built by Robin Jennings, should be complete by December of this year; funding has been formally offered to one church for the restoration of their pipe organ, with a second church currently looking at resolving funding problems; the first pupil to benefit from the teaching programme is developing the necessary skills, and our first Bursary has been awarded to Elli-Mae McGlone, a student who has commenced organ studies with Daniel Moulton at the RBC this term.

Planning for a **Derby Organ Day 2022** based in the cathedral is underway; a sub-committee has been working hard to assemble an exciting programme of events that will appeal to a national audience. This is proving to be challenging, now that everyone is rebuilding their performance schedule. Hopefully, I shall be able to offer more information about this at the Annual General Meeting.

Tony Westerman

Ben Bloor, prizewinner

Congratulations to former Derby Cathedral chorister and organ scholar, Ben Bloor, who has won second prize at the prestigious Concours international d'orgue du Canada - CIOC. We always admire Ben's playing when he returns to the Derby area, most recently in the lunchtime recital series at St Modwen's, Burton-upon-Trent, and it is great to hear yet more news of his developing profile in the organ world.

Forgotten Composers

Graham Craft has written, responding to the Editor's invitation in the September *Newsletter* to share ideas of organ music by composers whose names are less prominent these days. He commends the *Animus catalogue* which on inspection contains publications by a host of names that many members will recognise from earlier times. In particular, Graham commends some personal favourites:

Shorter Organ Works Vols.1 & 2 by Robin Milford (1903-59). 19 pieces which include original compositions, hymn preludes and arrangements of his own chamber works. Try *Traveller's Joy* based on a Pavane.

A Coleridge-Taylor Organ Album S. Coleridge Taylor (1875-1912). 7 pieces by a composer better-known for his chamber music and choral works.

Pam's Pieces by Adrian Self (b.1952) A manuals-only collection of 18 hymn preludes framed by an *Overture* and *Postlude*. Try *Fulda*.

In fact, based in Cumbria, Adrian Self, former organist of Cartmel Priory, is the owner of *Animus Music Publishing*. Do check out www.animusi.co.uk; you will be amazed by the quantity of choral and organ music available.

Please see also Denis Littleton's article on 'Obscure Composers' on page 6.

Sale of music

We have received this message from Adrian Bonsall:

I would like to thank you for advertising the 'Music Morning' on 4 September where my late father's huge collection of music related items were made available to his musical friends and associates. On the day we collected donations of just under £100 which has been sent to The Ouseley Church Music Trust, which my sister and I believe was fitting bearing in mind our father's love of church choral music.

There is still a lot of sheet music (piano and choral), CDs and books left so if anyone who missed the event is interested in viewing them they are welcome to contact me. (*via the Editor*).

An Historic Gem and Royal Birthday Present - Margaret Eades

While visiting Carisbrooke Castle on the Isle of Wight in September, I came across an unexpected little gem, a 3-stop chamber organ, comprising Stopped Diapason, Flute and Regal, dating from 1602. According to tradition, the organ belonged to Princess Elizabeth, Charles I's daughter. Charles and his youngest two children, Prince Henry and Princess Elizabeth were imprisoned at Carisbrooke before he was moved back to London, where he was eventually executed.

The organ's first owner was thought to be the Earl of Montrose. His monogram and coat of arms decorate the highly carved and decorated organ case. It is thought the organ was built in 1602 by the Flemish builder E. Hoffheimer. Another inscription on the case is a quotation from Psalm 150 in Flemish, "Praise the Lord with stringed instruments and organ"

Princess Beatrice, Queen Victoria's youngest daughter who latterly made her home at Carisbrooke Castle was given this instrument as a present for her 80th birthday in 1937. She had been Governor of the Isle of Wight for many years and the present was given by subscription by local people.

It is not known whether Beatrice played the instrument, but the local

organist did on this occasion, and now visitors are treated to a recording of Purcell's *Trumpet Tune* and *Lilliburlero*. The instrument is thought to be one of the oldest pipe organs still in working order in the country and is one of many fascinating exhibits in the museum.

Margaret Eades



When the carved oak grill doors are open, three ranks of wooden pipes are revealed in double rows. Some are of square section whilst others are turned. The ornate resonators of the regal pipes are turned and have conical bores.

Association News

Margaret's interesting discovery of a chamber organ provides an appropriate reminder that the DDOA has commissioned a four stop box organ as one of the provisions of the Edmund Stow legacy. The builder, Robin Jennings, is highly respected, having made continuo instruments for a number of internationally famous musicians and orchestras, as well as church instruments. (See his [website](#) for examples of his work.) Our instrument is a copy of the chamber organ he built for

Trinity College, Cambridge. The case is of oak, which will be stained to match the woodwork in Derby Cathedral. Work has reached an advanced stage and should be complete before Christmas. Robin has provided these progress photographs showing the beautiful quality of the materials and his superb craftsmanship. The specification is as follows:

8' Stopped Diapason
4' Principal
4' Chimney Flute
2' Fifteenth

The action mechanism is moveable in such a way as to allow transposition between A415, A440 and A466.

The instrument will remain the property of the DDOA but will live in Derby Cathedral and will be mounted on rubber castors to allow easy movement within the Choir.



Some Obscure Composers - Denis Littleton

Over the years, I have occasionally run across composers, whose music, for some reason has fallen out of fashion. I have usually heard the piece on a CD and thought "I could manage that". Then the problems start.

Back in the days before the wonderful IMLSP (a website where all sorts of obscure music resides, from which the desired piece can be downloaded), the first port of call would be the local music shop, who would almost invariably not be able to find the piece, or Allegro Music in Birmingham who had a better hit rate, but are now sadly defunct. Even with IMLSP there are still pieces which are impossible to get hold of.

I think my first foray into getting obscure music was following a trip to Germany where I heard a couple of chorale preludes by **Johan Gottfried Mützel** (1728-1788) who came from Mölln. John Henderson's "Directory of Composers for the Organ" gave me the publisher and the rest was relatively straightforward, apart from a couple of phone calls to Germany – it's a good job the German publisher's English was better than my German, and having to find an office services company to find a fax machine (remember them?). The music duly arrived and it turned out to be a facsimile of the manuscript which I found impossible to get on with, so that was a waste of effort. I gave the music to a French organist whose music-playing horizons ended in about 1800, who had never heard of Mützel, and he played it at sight.

Charles Ferlus (French 1829-1892) contributed to a collection called "Tressor des Chapelles", in particular there is a rather operatic "Offertoire", if you don't like Lefebure-Wély, stop reading now. I heard this on a CD by André Isoir. The music shop route produced nothing, nor did IMLSP which had come into being by now. The publisher no longer existed, so I tried the Bibliothèque Nationale in Paris. Their website is not the most user friendly I have ever come across but I did manage to find the "Tressor des Chapelles". At least I found a catalogue entry, the whole collection has works by 10 different composers, Ferlus contributed

volume 4. There was also a price list giving a per page amount for copying or scanning. I sent in an order and a request for the *Offertoire*, and an estimate of the amount of scanning needed, in my best French. What came back was a pdf of the whole thing, all 10 composers worth and it only cost me €10. It must have taken someone hours to scan all of that. It is now available on [IMLSP](#). In the course of all this I found another little gem in the form of "Andante pour benediction suivi d'une Sortie" by **Charles Ponsan**, another name hardly on everyone's lips, another piece which would be equally at home in the opera house.

On a visit to France I bought a CD from an organist which had some pieces by **Albert Périlhou** (1846-1936), a pupil of Saint-Saëns. Like many French composers he wrote a *Livre d'Orgue* consisting of 6 volumes. The pieces on the CD all came from volumes 3 and 4. [IMLSP](#) had volume 5, the Bibliothèque Nationale had volumes 1, 2, 5 and 6. I e-mailed the publisher, who replied that their entire archive had gone to the Bibliothèque Nationale. The Bibliothèque Nationale could not find volumes 3 and 4. So far then, this quest has failed.

If anyone out there has volumes 3 and 4 of Périlhou's *Livre d'Orgue*, please get in touch. Similarly if you have the "Marche Triomphale" by Hocmelle or the *Grande Offertoire* by Donizetti.

Denis Littleton



Johann Gottfried Mützel (1728-1788) was a German composer and keyboard virtuoso. Like Bach he became a court organist and harpsichordist at the age of nineteen. In 1750 he was given leave from his post at Schwerin to become a student of Bach in Leipzig. It transpired that he was the last of Bach's pupils, beginning study only three months before the master's death. In that time he notated a number of the blind composer's final works, including parts of the *Orgelbüchlein*. He was present at Bach's deathbed and took over his duties for nine weeks. Subsequently he was much travelled, meeting many composers, including C.P.E. Bach with whom he maintained a lifelong friendship and correspondence.

Acknowledgements to Wikipedia where you can read [more](#).

YOUNG ORGANISTS' CORNER

In previous *Newsletters* this column has addressed questions about modern organ composers and organ building. Please look at the next page for another article on organ design.

It would be good to receive requests for further topics. Even better, it would be great to receive contributions from experienced members. Potential topics might include the transition from piano to organ, an introduction to registration, or perhaps a favourite organ stop.

Editor

To Celebrate the Life of
Dr James Yeoman Muckle

6th November 1937 – 8th December 2020

Memorial Organ Recital

Kingswood Methodist Church
Lambourne Drive, Wollaton, Nottingham NG8 1GR

given by

Cathy Lamb

Head of Performance Music
at Lichfield Cathedral School

Sunday 21st November 2021
2.45pm – 3.30pm

Complimentary refreshments
The retiring collection will be donated to **Scope**.

“Loud organs, his glory, forth tell in deep tone”

So go the words of the well-known hymn, a line much relished by organists ready to unleash a chorus of reeds and (if available) a 32-foot pedal stop! Adding stops is the most obvious way of making the organ sound louder, but this isn't necessarily so; organists who know their stops will also know which ones will be most effective.

How many stops does an organ need to adequately fulfil its function? For many organists it always needs at least another one! Sometimes it is desirable to add to the variety of tonal colour, but quite often poor acoustics or a disadvantaged organ location create a fundamental need to make the organ louder. Paul Hale, in his talk reported in the July *Newsletter*, gave examples of several organs where there was a history of a succession of rebuilding projects, each attempting to compensate for the perceived shortcomings of the previous.

The quest for a louder organ has been tackled in a variety of ways. Employing a greater wind pressure might seem an obvious method, but unfortunately this course of action has the major side effect of altering the tone, generally making it sound blander. Another strategy is to augment fundamental organ tone by providing more 8 foot ranks. In Britain this has been tried several times during the past two hundred years but it has usually failed for reasons that become obvious if one considers the physics of sound production and perception. The brutal fact is that you need ten pipes to produce twice the sound of one. I was startled when I first discovered this, but see 'Mathematical interlude' for a summary of the reasons.

So what is a presently acceptable approach to the problem? In assessing how many stops are needed for the Great organ in a given space, John Norman, in *Organ Works*, has proposed a rough calculation based on the volume of the building and the reverberation time. For a typical parish church with a reverberation time of 1.5 seconds, the answer is six stops.

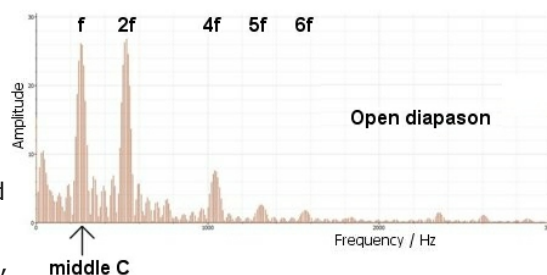
You must add more if the reverberation time is less or if the organ is “entombed in an organ chamber”, and further allowance must be made for the sound absorption properties of certain surfaces, furnishings and a full congregation!

Whatever the number of stops, the design of a tonal structure is a key issue for determining the loudness. In this, the familiar pattern of stops at different pitches denoted by 8', 4', 2²/₃', 2' has a dominant influence. The pattern replicates the sound spectrum of a single pipe in which a family of 'harmonic' frequencies, multiples of the fundamental, are naturally present. If we map the pitches of the harmonic frequencies on to a keyboard, the 8', 4', 2²/₃', 2' pattern is clearly evident. So adding a 4' Principal stop or a Twelfth stop, or so on, can be viewed as strengthening the natural harmonics of the 8' rank. Bolstering the sound spectrum like this is a perfectly 'natural' way of increasing loudness.

A further bonus to the loudness accrues from the physical phenomenon of beats which naturally occurs when two frequencies sound simultaneously. In addition to the two sounding frequencies, the ear perceives a third 'beat frequency' corresponding to the numerical difference between the sounding frequencies. Thus when 8' and 4' stops are drawn the beat frequency is $2f - f = f$, i.e. the same as the 8' frequency. Similarly, when 4' and 2²/₃' stops are drawn, the beat frequency is $3f - 2f = f$, again reinforcing the 8' frequency. Of course this can only happen when all the pipes are perfectly in tune, which explains why an organ often sounds louder when it has just been tuned.

Whilst these principles can help us understand how to create loudness, we cannot ignore the magnitude of the absorptive effect of surfaces in the building; unfortunately carpets and seated gatherings of people readily soak up the sound of the finest voiced organ!

Laurence Rogers



Frequency spectrum for an Open diapason pipe sounding middle C. In addition to the fundamental frequency f (262 Hz) a series of simultaneously sounding harmonics of varying amplitudes is evident.



The pitches of natural harmonics align with familiar organ stops: 8' Diapason, 4' Principal, 2²/₃' Twelfth, 2' Fifteenth, 1³/₅' Tierce etc.

Mathematical interlude

One of the most remarkable properties of the human ear is its ability to detect sounds at extremes of loudness and softness: as loud as a full organ yet as quiet as a heartbeat. The main reason for this versatility is that it responds to sound energy in a 'non-linear' fashion. A tiny increment of sound energy may be easily detectable when the volume of sound is very quiet but would be imperceptible at a very loud volume which would require much larger increments to produce the same perceptible effect.

It is this *proportional* rather than *numerical* increase that makes the scientific measurement of loudness require subtle mathematics. This is achieved in the *decibel* measure of loudness which works with ratio changes as opposed to simple numerical differences in sound energy. The upshot of this is that to double the perceived loudness you need a 10-fold increase in the energy. On the decibel loudness scale, (based on powers of 10) adding 10 dB multiplies the energy by a factor of 10 and doubles the perceived loudness.

The unfortunate consequence of this is that if you want to make an 8 foot tone twice as loud, you need ten such pipes to create the 10-fold increase in sound energy. Adding one duplicate rank merely doubles the energy but only increases loudness by about 3 dB.

Forthcoming DDOA Meeting

ANNUAL GENERAL MEETING

Monday 22nd November 7.30 pm at St Matthew's Church, Darley Abbey DE22 1EF

Followed by Social and refreshments

Summary of the Minutes of the DDOA AGM December 7th 2020

The full Minutes are available separately, and at this [link](#).

The meeting was held remotely via *Zoom* and attended by 13 Members

1. Apologies Richard Brice, Michael Anthony, Mike Thompson, David Johnson

2. Minutes of Last AGM Proposed by Denis Littleton & Seconded by Laurence Rogers these were accepted as a true record of the meeting.

3. Matters Arising David Shooter is now living at Normanton Lodge in South Normanton.
Tony Westerman will send him a card from the Association.

4. Chairman's Report

Thanks to Stephen Alliss, Head Tuner with Harrison & Harrison, who gave a talk after the 2019 AGM.

Events: February: The Vienne Day in was a great success.

March: Visits to organs at Repton, Newton Solney, Winshill went ahead just before lockdown

April to July events had to be postponed.

September: Tom Corfield's talk on practising techniques was very well received and appreciated.

CATO events were suspended during lockdown.

Thanks to the committee and its officers for their strong support.

The Association received a legacy of £100k from the estate of the late Ed Stow and much work has been devoted to its administration and planning for its fulfilment.

The national decline of churches, congregations, and availability of organists was noted.

A sense of purpose for the Association to hand on our organ heritage to future generations is undiminished.

5. Treasurers Report

Overall, there was a surplus for the year of £206.36, and closing reserves of £2910.42.

The subscription level of £15 is adequate to cover the running cost for the year so no change is necessary for the coming year. Arrangements for the management of the Ed Stow legacy were explained.

The 2019 Accounts were Proposed by John Maxwell-Jones and Seconded by Andy Storer.

Chris Darrall was proposed as Auditor by Tony Westerman and Seconded by Terry Bennett.

The unchanged subscription rate was proposed by Margaret Eades and Seconded by Stephen Johns.

The Chairman thanked Gillian for her work and all the extra work with dealing with the bank change and Legacy.

6. Secretary's Report

Membership of the association remains steady with currently 80 members. During the year, sadly, three have died but we have welcomed four new members including two students.

7. Newsletter Editor's Report

In the absence of events to report upon, the Editor is grateful for a good number of members stepping up to help bridge the gap with news, views and articles on a wide number of topics and experiences. The Editor has now created for the DDOA website an index allowing articles and reports published in newsletters within the past decade to be easily traced.

8. Change to Constitution

The Chairman outlined the reasons for the proposed changes to the constitution in line with receiving the legacy money. Two new clauses need to be inserted to protect future members of the committee and use of the money. All were in favour.

9. Hon. Life members

The Chairman wished to nominate Terry Bennett to become an Honorary Life Member of the Association for his long standing work on the committee and as the Diocesan Organ Advisor. All were in favour.

10. Election of Officers. Chairman; Anthony Westerman, Vice-Chairman; John Maxwell-Jones, Treasurer & Gift Aid Secretary; Gillian Chatto, Secretary; Andrew Storer, Newsletter Editor; Laurence Rogers, Other Members; Margaret Eades (Past Chairman Ex-officio), Tom Corfield, Alex Binns, Richard Brice, Denis Littleton.

11. AOB

Alex Binns offered to help get the Association a better presence on social media.

Trevor Morris wished to thank Laurence Rogers for the Video link that he made of the September event.

It was suggested that we look at setting up a members only section on the website.

Items of news or articles for the January / February edition of the *Newsletter* should reach the Editor by **Monday 13th December**, either via e-mail: DDOAnews@gmail.com or by post: Dr Laurence Rogers, 24 St.David's Crescent, Coalville, Leicestershire LE67 4SS. The Secretary, Andy Storer, may be reached via mail@derbyorganists.co.uk
Please visit the DDOA Website www.derbyorganists.co.uk for information about Association activities, past editions of the newsletter, photo gallery and many special features of local interest.