

Volume 4
Issue 1
2005

NEWSLETTER

D.L. SIMMONS AND CHURCH ORGANS COMPANY

Custom Organs for Chapel,
Cathedral, Auditorium, or Home.

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Waiting for the best can be frustrating. This is especially true when you are confident that what you are waiting for is already the best and any room for improvement seems small if not non-existent. But patience is not only a virtue, it is also wise. Much of this past year has been just this... waiting for the right time... waiting for the right place... waiting for the right choice... waiting for the best!

Don't get us wrong! We haven't been sitting at our desk tapping our fingers on the desk. This has been a very busy year. Although we have sold several new and used organs throughout the Southeast we are still waiting for that "just right" place to install a Phoenix Organ close to our home base in Fairhope, Alabama. As the fall approached, we seriously considered purchasing a Phoenix Organ as a demonstrator to use locally. Of course, this is not the best way to demonstrate an organ; it should be fully installed and voiced to allow the customer to get the real impression of what they can expect. Then there is the matter of do we buy a small two manual or a larger three manual for our demonstrator?

As we pondered these things, other events were transpiring that would have a tremendous effect on the remainder of the year and beyond. Along came Hurricane Ivan... Ivan the Terrible! We packed everything we could and headed for the hills. Really, we headed for the mountains of north Georgia to wait out this monster and see just what would be left when we returned. The eye of this behemoth passed directly over our home, yet we had only marginal damage: a few shingles missing, several trees down and a big mess to clean up. We were blessed compared to most.

The weeks it took to clean up and deal with re-

pairs and insurance companies (they were not very good neighbors!) gave us time to think about the best way to provide assistance to any damaged churches and how to get back to our own efforts to buy a demonstrator organ.



TYPICAL COASTAL DAMAGE FROM STORM SURGE

This time waiting provided the answer... ***we are offering a Phoenix Organ at our cost to any church close to our home of Fairhope, Alabama.*** This provides us with the demonstrator we need installed in a church and at the same time, helps ease the budget of a repair-laden church. We have one church in the process of considering this offer. We will offer this to only one church, but if you are interested in this offer for your church, please contact us as soon as possible. This is by necessity a first-come-first serve offer. Waiting can be a good and wise thing, but not in every instance... Don't wait this time!

Acting now could save your church many thousands of dollars. This offer is good to ANY church within a 1 - 1½ hour drive from Fairhope, AL. This includes an area from Biloxi, MS east to Navarre, FL, and north 80 miles. If you are outside of this area, you may still qualify for a substantial discount if you are in an area where we desire a demonstration installation.



Phoenix is at the top...

of the digital organ market! This may seem a bold statement considering the huge companies which are our competition, but we are finding that there is a fast growing and enthusiastic contingent of the best organist and knowledgeable organ committees that are discovering just that. When Phoenix is honestly compared one-to-one with any other organ in the market, Phoenix is always at the top.

Many experienced individuals have made just this kind of comparison. Some have made the comparison with the intention of proving that the organ builder they have always played would be the best only to be thoroughly swayed by the artistic sampling, voicing, and craftsman in the Phoenix. In an instant, converted to being an enthusiastic Phoenix supporter without a single word being spoken. The organ spoke for itself. This type of thing is happening frequently. In fact, we are finding that very close to 100% of all those who are serious purchasers of custom organs are choosing Phoenix after seeing, feeling, and hearing the Phoenix difference.

We receive many unsolicited responses from people after hearing and playing a Phoenix Organ. Here are a few.

Dennis Goward, of Arizona, Webmaster of Organchat, an organ chat forum, sent this to us this morning:

"Subject: Re: Liverpool Cathedral; From: "John Foss"
"Dear pipechat members, Yes - all three organs in Liverpool Cathedral are very fine! In addition to the 5 manual, the Phoenix Electronic is, without doubt, the best sounding electronic instrument I have played."

This comes directly from concert organist John Tuttle: "Dear Mr. Anderson: I've recently had a chance to try out your new instrument in Streetsville, and am very impressed. I'd like you to come to St. Thomas's, Huron Street in Toronto to see the Guilbault-Therien there, and give us a quote on: (1) The addition of a 32' flue and a 32' reed . (2) A Midi interface to allow recording of performances and the use of a midi-keyboard to facilitate some tuning chores."



Dr. Gordon Johnstone, chairman of examinations, Royal Canadian College of Organists:

"I recently had the pleasure of playing your new installation at Streetsville United Church, and enjoyed the organ very much. In looking over your Website to learn more about your organs, I was particularly interested in your four-manual model PD470...."

Darrell Ackmann, organist / composer:

"WOW! What a sound! Last night I played with the tuning temperaments and tried out Werckmeister and Silbermann and played some Bach. What a sound! I left off the 8' Diapason and just went with the 8' Gemshorn on the Great to not overload the fundamental pitch and when I used the Silbermann tuning, all the Bach stuff just came alive. All of the little episodes I played on the Choir and capped it with the Jeu de Clochette---it absolutely sparkled."

Posted to The Organ Forum.com --

SUBJECT - Re: The best electronic (pipe) organs.

"I agree with you on PHOENIX organs. I heard the Rodgers [134 speaking stops, 185 equivalent ranks and an audio system that includes 64 independent channels} at the Crown Center [6,200 seat auditorium at Pensacola Christian College] in Pensacola [FL], the largest Rodgers built (till '02) and [then] played a 55 stop 3m **PHOENIX** three days later and nearly fell off the bench. The Phoenix had GUTS and sounded so much like pipes I had to see the speakers. IT IS THAT GOOD!"

Phoenix has gathered accolades like this by their honest approach to organ building and organ sales. Phoenix strives at every level to provide the best quality available anywhere. Phoenix has developed their own wooden keyboards that are well balanced and use Opti-interrupter (contactless) keying. They have collected possibly the most artistic sample library found anywhere. The application of these long samples is straight-forward and honest... no technical tricks... using a multiple-loop that includes the beginning and ending speech of each pipe. Many builders add the same beginning and ending to their samples in a rank resulting a dull sound. By including more of this unique information in each sample greatly enhances the already impressive ensemble of the Phoenix. Is it no wonder that one organist commented, "the Phoenix has a more honest pipe sound."



Acoustics for Worship

A statement often made by knowledgeable organists and pipe organ builders is: "The acoustic is the number one stop".

Simply put, this means that no matter how good an organ may be, its success depends very much on the acoustic of the room in which it is installed. All too often churches purchase expensive, well-made organs (both pipe and electronic) only to be disappointed after installation due to an acoustic that fails to enhance church music. When the room acoustic is right an organ of inferior tone quality can even sound acceptable while an organ of outstanding tonal quality will sound absolutely thrilling.

(NOTE: We are devoting a large amount of space to this subject since we believe it is very important for churches to seriously consider how poor acoustics affect not just the organ, but the entire worship environment.)

Auditorium or Sanctuary?

An auditorium has only one acoustical function, and that is to project music produced on stage so that the audience can hear it clearly. A room used for worship, on the other hand, has two acoustical functions. The first is identical to that for auditoriums: to project the sound produced by the choir, soloists, instruments, and preacher. The second function is to provide an atmosphere that *encourages and supports congregational singing*. Both acoustical goals *must be achieved* if the building is to be successful and inviting for worship. Congregational singing is a coming together of everyone in a worship service. Poor acoustics can cause people to feel "alone" in even a large crowd.

Congregational singing is the most important church music, and the most important function of the organ is to lead and inspire the congregation in singing. For the congregation and organ to do their jobs well, they must have a suitable acoustical environment. Acoustics suitable for a worship room are vastly different than those for a living room, fellowship hall, or shopping mall. Carpet, for instance, can make a living room intimate and a fellowship hall quiet. But that same carpet in a worship room is as harmful to singing as an open window is to air-conditioning.

Congregational Singing

Individuals want to join in singing if they feel the company and support of their fellow worshipers. They will not participate if they feel conspicuous and feel as if only their voice is being heard. So, it is important that surfaces surrounding the congregation be non-absorbent to sound so that individuals can hear the rest of the group singing and feel that they are part of

the group.

Padded pew backs, padded walls, drapes, and -- above all -- carpet should be avoided. Even the carpet in aisles hurts the transmission of sound from one side of a congregation to the other. It also interferes with the congregation's hearing of the choir, since the aisle is one of the main channels of sound from the chancel (stage) down the length of the building. Aisle carpet may cover only a small portion -- say 10% to 20% -- of the total floor area. However, that percentage is a very important for the purpose of sound transmission, because people (which are VERY good at absorbing sound) already cover the other 80-90% of the floor. Carpet under the pews is sometimes advocated as a way to provide the same acoustics whether there are few people or a large crowd. The choir and organ may sound the same whether the floor under the pews is covered by carpet or by people, but the carpet still inhibits congregational singing.



Phoenix PD 355

When we sing we produce sonic energy called sound waves. It is detrimental to have that energy absorbed close to its source. Ask yourself this: Where do people enjoy singing the most; in a tile shower or in a closet full of clothes? The shower, of course! Why? Simple... they can hear themselves, so they feel confident to sing. To sing in an absorbent room is as frustrating as trying to look at pictures in a poorly lighted room. To sing in a live room is to experience the same joy that worshippers experienced during all the previ-

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ous centuries when the great hymns were written, when most churches were constructed of stone and wood.

Remember, when a sound is produced airwaves are put into motion (energy). Anything that is caused to vibrate or move by that airwave is “using up it’s energy”. In other words, anything that vibrates (like the billions of fibers in carpet or drapes) is converting the airwave’s energy into the vibration of the fiber, and the sound is instantly gone! This works right down to the surface finish choices. Flat latex paint actually absorbs more sound waves than glossy paint or varnish.

Choirs

Individuals are more likely to join choirs if the room is acoustically suitable for their singing. They won’t enjoy singing if they can’t be heard. The choir’s effect is greatest when its music sounds best. Also, the dynamics needed, from very soft to very loud, to effectively perform choir music is virtually impossible in a poor acoustic environment. It takes a great effort to sing, which inevitably results in a lessening of enjoyment by the singers.

Choirs need solid walls behind and at each side, a hard floor underneath, and a hard ceiling above. Also, a congregation can hear a choir better if the floor, walls, and ceiling between the choir and congregation are non-absorbent.

Young People

Lively rooms and lively music encourage young people to participate in worship; dry rooms intimidate them. Recording artists recognize the importance of ambience to sound: they add synthetic reverberation to their recordings with expensive sophisticated electronics trying to re-create what good acoustics do naturally.

Children and especially parents feel uneasy in a room where each sound seems exaggerated due to the absence of background sounds from the congregation. Once again we see that peculiar sense of “alone-ness” that can be caused by poor acoustics.

Sermon

It is hard to hear a speaker whose voice is absorbed rather than radiated. It sounds artificial, and is tiring to the ears, to hear the voice only through loudspeakers. It feels more natural, and our response to the words is greater, if we can hear a natural voice. The spoken word also needs solid walls, floor, and ceiling.

Reverberation

Organists will usually ask for a long reverberation time because it enhances the organ. Pastors, on the other hand, usually want a short reverberation time, as too much reverberation is associated with indistinct speech. The fault, however, is usually not too long a reverberation time but a pronounced resonance at a single frequency. Every room has its own characteristic resonance to frequencies. The goal should be to build a room which has an even response to all frequencies and which has very small resonance’s. This is a detail to be observed at this point: most buildings reverberate more at low frequencies than at higher ones, *and it is these low frequencies which are most helpful in supporting congregational participation*. It is these frequencies that are most absorbed by a “dry” room.

Speech intelligibility and amplification can be improved by placing a solid surface behind and above the speaker. We see from old pictures of very large buildings built before the time of electronics that pulpits always had a solid wall behind and a canopy above. They were never freestanding, or a great distance from a reflective back wall. Surprisingly, it is



more important to have such reflective surfaces than it is to have the speaker close to the listeners. All of these same considerations apply to singers.

Scientific Measurements

Laypersons usually hear only about half of what acousticians measure. That is, if an acoustician or musician says a room has 4 seconds reverberation, the ordinary person would say the same room has about 2 seconds, based on what is actually heard with the ears. The reason for the difference is the way reverberation time is measured.

Reverberation time (R.T.) is defined by acousticians as the length of time it takes a sound to decay 60 decibels. 60 decibels above the background noise level of a building is a very great amount. Acousticians fire a pistol or burst a balloon to generate a sound 60 decibels above the background noise level. Such a sound is roughly 2 times louder than a hand clap, and the R.T. measured or estimated by an acoustician is roughly 2 times greater than what we as lay persons hear. *The RT60 rating of most modern buildings is very poor.*

Electronic devices are not nearly as sensitive as human ears. We can clearly hear the *negative effect* carpet has on congregational singing, but that effect is im-

possible to measure electronically.

What a Church Should Ask For:

- Hard and stiff floor, walls, and ceiling;
- No carpet, drapes, and absolutely no "acoustical" ceiling (when this term is used to mean a sprayed-on absorbent material, ceiling tile or suspended tile.)
- Hard and stiff walls behind the organ, choir, and preacher.
- Organ and choir located on the central axis of the building and singing directly toward the congregation.
- Organ pipes (speakers) placed in a chamber with the largest ranks on the front and the smallest ranks behind, speaking down the central axis of building.
- Respect for your musician's position as a person knowledgeable about sound. The church's music is, indeed, sound of the highest order and importance, and its musicians deserve the greatest respect.

Microphones and PA Systems

The goal for acoustics in the worship space is for communication, both music and speech, to be *as natural -- as human and genuine* -- as possible. Since electronic amplification, no matter how well done, adds artificiality, it is good if the room is planned so as to require little electronic assistance. An important way to lessen the need for amplification is to provide solid, hard, reflective, non-carpeted surfaces beneath and behind the choir and preacher. These help to reinforce and project sound to the congregation, just as a solid, reflective ceiling.

To Make Amplified Speech Sound More Natural:

- Place speakers near the pulpit so that the congregation hears sound coming from the direction of the pulpit.
- Use "notch filters" so that amplifier does not amplify those frequencies at which the room is resonant.
- Amplify only the mid and high frequencies, the ones important to clarity of speech.
- If possible do not amplify the choir. It always sounds artificial. Accurate amplifica-

tion would require *many* microphones.

Ways To Improve Non-Amplified Sound:

- Solid (stiff, hard, non-absorptive) floor between preacher and choir and congregation.
- Solid wall behind choir. Helps to project sound toward congregation.
- Solid wall behind pulpit.
- Solid smooth ceiling above choir and pulpit.

Suggestions Regarding Building Materials

Walls must be sufficiently rigid to not absorb the long wavelengths of low frequency sound. Using two layers of 5/8" sheetrock instead of one will help, especially in choir area and organ chambers. Use wide studs closely spaced -- the taller the wall, the wider the studs. Thin (1/4") wall paneling should be glued to 1" material such as sheetrock or thick plywood, to

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O n the internet...

We are just a little more than excited about having our newly revised D.L. Simmons & Company web site up and running! Surf in for a visit at:

www.qualityorgans.com

There are always a few more things to do, but if you have access to the web, why not stop by and take a look. We think we have the most comprehensive source for information about quality church organs to be found anywhere.

We have recently added a Sheet Music Collection available for purchase. This is conveniently sorted by subject and church season. Also added recently is the new Emporium! You will find all things related to organs.... books... Cds.... DVDs.... and even grand pianos!

If you have any suggestions, we would be glad to hear from you. While you are there why not fill out our Church Survey. Click on the "Contact" key, fill in the blanks, and click the submit button. We would appreciate your input and will use the information to better serve you, our customers. Be sure to view the many pictures in the Installation Gallery for the Phoenix PD367, and a new Console Gallery that shows many fine consoles and console details of Phoenix Organs.



What? This section is for those that may not be familiar with all of the “organ” terms which they find when searching for any instrument and is presented in the hope that it will be a help in making that choice an easier task.

A.G.O. – American Guild of Organists. Following the standards and specifications they have set for console, stop controls, pedal, etc.

Antiphonal – An organ division placed in another location in the room from the main organ.

Capture System – This refers to the programmable memory in the organ that allows the organist to set stop combinations assigned to a particular piston for recall as needed. Capture systems can have as many as 99 memory levels and 4 to 12 pistons which give the organist over 1000 individual memory “slots”.

Celeste – Latin for heavenly. It consisted of two eight foot stops played simultaneously, having one of the stops tuned just slightly sharp of the other. Add a great warmth to the sound of the organ.

Console – This is the “control room” of the organ: the keyboards (manuals), stops, couplers, pistons, MIDI, pedals, and expression pedals.

Couplers – There are several types, but all do exactly what the name implies.

Intermanual couples any stops pulled on one manual to be played on another.

Intermanual enables a division to be played with itself at an octave higher or lower (Ex. Swell 16’ or Great to Great 4’). There is also the *Unison Off* which can silence a whole division. *Sub Couplers* operate at the 16 foot pitches, *Unison Couplers* at the 8’ pitches, and *Super Couplers* at the 4’ pitches. In general, couplers increase the ver-

satility of the organ.

Crescendo Pedal – Gradually adds pre-programmed stops, each added to the previous, as the pedal is pushed down, fully depressed is usually full organ.

Divided Expression – More than one expression pedal, usually one per manual allowing for control of volume for each division.

Division – A grouping of pipes controlled by a keyboard: Great, Swell, Choir, Solo, and Pedal.

Expression Pedal – Controls volume of divisions. On pipe organs it opens and closes shutters to a pipe chamber and on digital organs it controls not only volume levels but incrementally alters the sound so as to reproduce the “closed chamber” effect. Fully configurable on PHOENIX.

Finishing – The subjective process of adjusting the “sounds” of the organ, producing the character of the organ for the room in which it is installed. Involves voicing and tuning individual stops in a note by note process.

MIDI – Musical Instrument Digital Interface. A

device using an international standard developed for playing, programming and linking keyboard instruments; offers many options to the organist.

Manuals – Keyboards that are played with the hands. Sometime, up to five or six, but most organs have two or three.

Pistons – Push buttons just below the keys. When pushed they change the organ setting to pre-selected

stops, couplers, and MIDI.

Pipe/Combination Organ – The combination in one instrument of wind pipes with digital voices, usually the principal and flute ranks are wind.

Rank – A set of pipes (or pipe samples) with a uniform tone quality, with one pipe for each note on the keyboard or pedals.

Sampling – The complex process of carefully recording organ pipes maintaining all of the characteristics of the pipe rank. This process includes detailed processing of the raw recording to remove any unwanted noise, attending to the beginning attack and ending of each note, and tailoring a seamless loop from the long sample. This is as much an artistic process, as a technical process. This is



where Phoenix samples shine!

Sequencer – A device that records the stops and playing of the organ and plays this musical information as MIDI data, through the organ.

Temperament – A method of tuning the organ in which the spacing of intervals between half tones are adjusted. Several have been developed, but Equal Temperament is most common. Digital organs can change temperament at the touch of a button.

Toestuds - (toe pistons) - Located just above the pedals on the kneeboard or bolster. These will duplicate the control of the thumb pistons, like the capture and couplers, but may also control Tutti and reversibles such as control of individual 32' pedal stops.

Voicing – This is a complex process with every stop in the organ precisely adjusted for tonal quality, balance with other stops, wind pressure, etc..

Most of this is done at the factory, and usually only minor adjustments are needed on site.



Britson offers new line of standard model organs. This begins with the addition of the Britson D130 LRT, a new very affordable three-manual organ with a generous 38 speaking stops. Also new is the replacement of the discontinued Britson D105 LRT with either the Britson D104 LRT or the larger Britson D205 LRT. Britson also offers larger organs up to 5 manuals in



Britson D130 LRT



Britson 455 LDK

stock models and all custom specifications.

Models now offered include the D103 LRT, D104 LRT, D130 LRT, D205 LRT, D220 LRT, D320 LRT, D355 LDK, D455 LDK.

Please see our website or contact us by phone or mail

for more information on these organs:

<http://www.qualityorgans.com>
or call 1 (251)751-6722 [cell#]

prevent it from absorbing low frequencies. Foot noise is not a problem on solid floors such as those of masonry, but it often is objectionable on suspended wood floors that can accentuate foot noise. Rather than install carpet, make the floor solid: use two layers of underlayment instead of one; install insulation board between the floor layers; place the joists closer than normal; glue flooring directly to masonry floor. If carpet is absolutely unavoidable, use very thin, tightly woven commercial carpet without padding. The "acoustical" blown on ceiling finish that has been popular for many years is a common enemy of good acoustics and should be avoided. Suspended ceilings absorb a great deal of sound, and should be completely avoided! The rough surface absorbs high frequencies; the facts that the panels are small (2' x 4') and loose mean they absorb low frequencies. That is good for a supermarket, but having poor acoustics is fatal to congregational singing.

Because most organs are installed in existing buildings, there are normally limitations placed on the ideal situations described above. For this reason we recommend a serious consultation with an acoustician or at least an organist or organ builder with good knowledge and recognizable success in church work. This is a complex but important matter that with the correct decisions will be appreciated for generations to come.



Phoenix "Phacts"

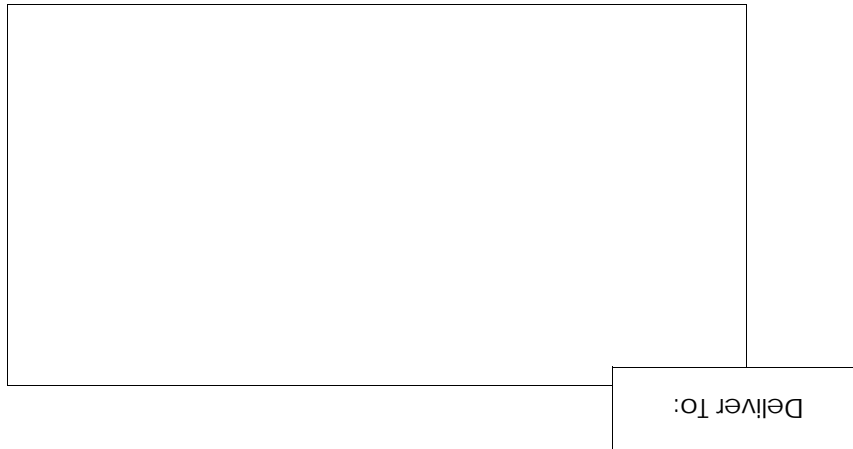
Phact #1) Phoenix Organs has the newest, most advanced, most configurative flexible, most stable, organ computer control/sampled system in the world.

Phact #2) Phoenix was designed from a blank sheet of paper by two engineers that both happened to be concert-level organists, and know what an organ should sound like, and what an organ should feel like... the ART of the organ.

Phact #3) Phoenix keeps proprietary parts to a minimum to make future service as simple as possible, but ALL the processing, sampling, and sound production boards are 100% original Phoenix (each printed-circuit boards is branded). Phoenix has no connection with any other organ company.

Phact #4) There is no difference in a Phoenix Organ Console and any other pipe-organ console: Solid select hardwoods, and select hardwood veneer furniture-grade ply. (Absolutely NO hardboard, MDF, or particleboard!)

Phact #5) Phoenix uses the same high level of sampling, processing, sound production, and voicing control in



D.L. Simmons & Company
8120 Dyer Road
Fairhope, AL 36532



every Phoenix, large or small, from a chapel sized 2 manual up to a cathedral sized 4 manual... same high quality throughout.

Phact #6) Phoenix builds only custom, hand-built organs, carefully designed to satisfy the individual customer.

Phact #7) Every Phoenix Organ can control winded pipe ranks, and was designed to do so... not just an after thought.

Phact #8) Phoenix offers possibly the best keyboards to be found anywhere in the world. The Phoenix all-wood keyboards with Opti-Interrupter keying are hand-built, adjustable, and extremely dependable. Keyboard contact problems of the past are now brought to -zero-.

Phact #9) Phoenix Speaker Systems are custom fit to each installation and are all custom designed and built in-house to the specific sound production needs of Phoenix Organs. Phoenix has a 20-year history of providing speakers systems specifically designed for organ sound production. This is a major reason for Phoenix's startlingly realistic sound (even in the lowest notes of the 32' pedal stops).

Phact #10) Because Phoenix Organs does not require dealers to maintain an expensive showroom with a required minimum stock of organs, and all the high overhead that goes along with this marketing model, the price for a custom-built Phoenix is almost always lower than our competitors "off-the-shelf" stock organs, and we can always offer more value per dollar.

D.L. SIMMONS AND
CHURCH ORGANS COMPANY