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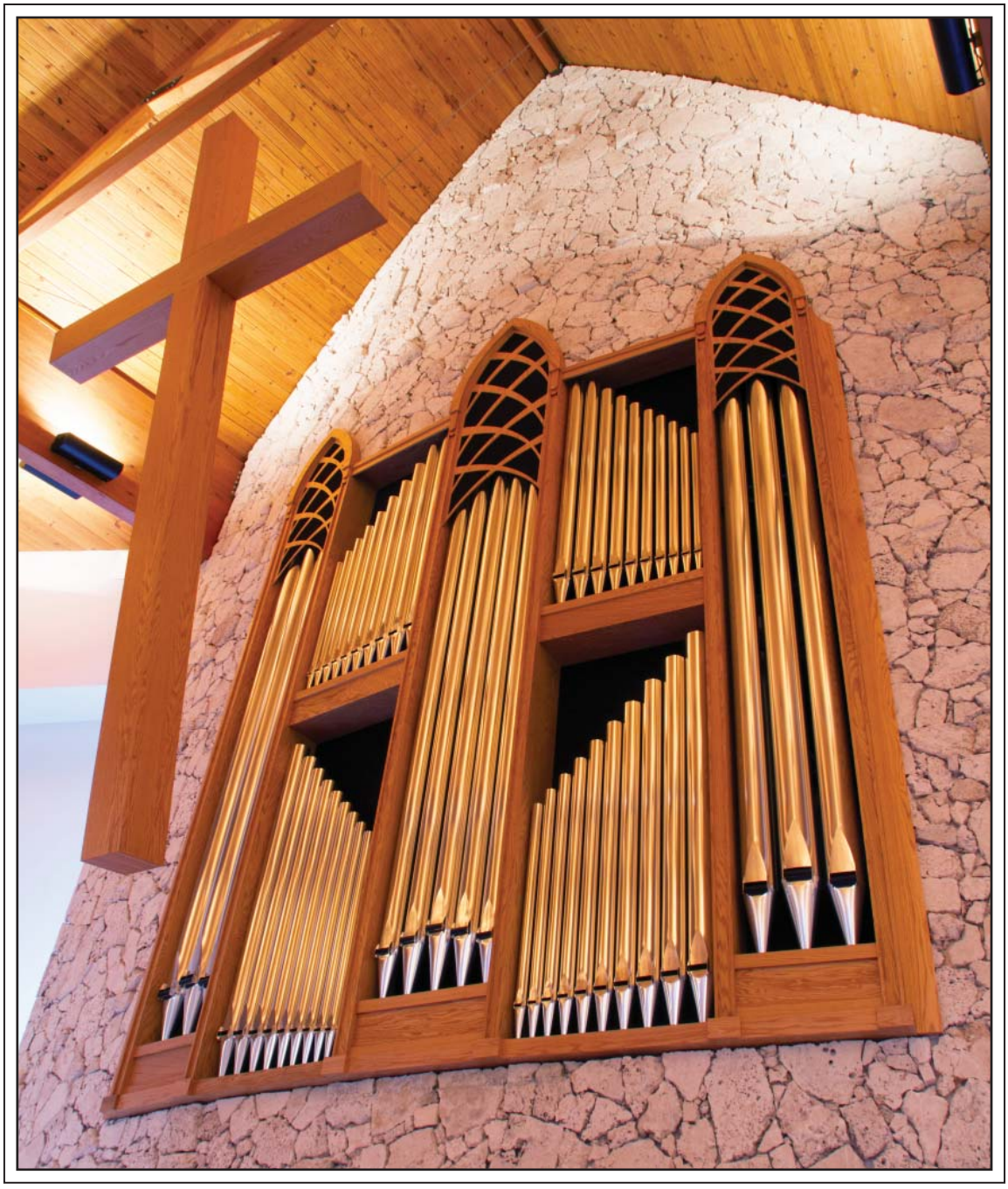
APRIL 2013



Advent Lutheran Church
Melbourne, Florida
Cover feature on pages 26-27

A. E. Schlueter Pipe Organ Company, Lithonia, Georgia
Advent Lutheran Church, Melbourne, Florida

Advent Lutheran Church in Melbourne, Florida is a relatively young church, founded in 1982; services were first held in a realtor′s office. From these simple beginnings, this vibrant ministry has continued to grow in an unbounded manner. When the present sanctuary was built in 2003, they could not fund a pipe organ, but importantly made future provision for an instrument in their new sanctuary. The space provided for the pipe organ and the chamber was sealed closed in the front rock wall of the church.

In 2010, a pipe organ committee was formed. Their study included not only engineering and cost factors, but also the ability to pay for the organ without impacting the operating budget. In 2011, a special congregational meeting was held to approve the purchase of a pipe organ from the A.E. Schlueter Pipe Organ Company, with installation to coincide with the 30th anniversary of the church founding.

When I first visited Advent Lutheran with our Florida representative, Herbert M. Ridgely Jr., I found we were blessed with a sanctuary where consideration had been given toward good acoustics and favorable placement for the organ. The front wall of the chancel is a solid concrete wall that lofts from floor to ceiling and is faced with native limestone. Beginning 11 feet off the floor was a 20′ x 20′ opening into the organ chamber. The floor for the organ was a solid poured concrete slab capable of holding the tens of thousands of pounds of weight required for even a modest-sized instrument.

There are two choir lofts on the right and left sides of the sanctuary. The traditional choir is housed on the left side. The opposing niche on the right side is a space occupied by the accouterments needed for contemporary worship.

With the side locations of the choir lofts, and a sanctuary with more width than depth, our concern was that some choristers or congregants would be "around the corner" from the straight-on frontal exposure of the organ as it speaks into the sanctuary. We wanted to avoid an instrument that emphasized one division over another dependent upon where you were seated.

To provide more uniformity of speech, we planned the removal of the sidewall sections to the left and right of the organ chamber. Adjacent to the side openings were angled wall surfaces that we knew would reflect and refract the sound from the side alcoves behind the chancel wall and into the room. These openings were finished with open, ornamental, oak grilles. In the chamber interior we placed the Great and Positiv windchests off-axis from the direct center, so they would be able to speak from the sides as well as the front exposure. The Swell division of the organ is laid out in a side-by-side configuration across the rear of the organ chamber. This minimizes the depth of the enclosed division and allows it to be spatially projected forward in an unimpeded manner to acoustically sit beside the pipework of the Great and Positiv. The result of the additional chamber openings and divisional placement is that the full resources of the organ are evenly heard throughout the room without any significant divisional bias.

A constant challenge in organ building is having enough space in width, depth and height. In this instance the internal chamber had "too much of a good thing" in terms of height. The loft inside the organ chamber went well over 25 feet above the top of the frontal opening, creating a significant tone trap that had to be addressed. The solution was to continue the Swell expression box roof over the Great and Positiv. The roof section was built with heavy timbers and made exceedingly thick, which provided an upper surface that was designed to be a refractory angle of incidence across a broad frequency spectrum to focus the organ resources out of the chamber. The end result is an even, coalesced diffusion of sound both inter- and intra-divisionally.

View of sanctuary, new pipe organ, and console (photo credit: Judy Vaughn)

The organ case is built from hand-selected rift-sawn red oak, with a light-colored natural finish to match the church's interior furnishings. The individual vertical segments of the façade and case are divided into multiple pipe flats that follow the radius of the front wall curvature. In this manner, the façade "bows" rearward from the cross to emphasize it as the central theme in the chancel.

The pipe shades at the top of the

The console has built-in casters for mobility (photo credit: Judy Vaughn)

A. E. Schlueter Pipe Organ Company

GREAT—Manual II (unenclosed)

16′	Sub Principal (1-12 from Ped 16′)	49	pipes
8′	Principal	61	pipes
8′	Bourdon	61	pipes
4′	Octave	61	pipes
4′	Nachthorn	61	pipes
2′	Super Octave	61	pipes
II	Cornet TC (Pos)		
IV	Mixture 1⅓′	244	pipes
16′	Oboe TC (Sw)		
8′	Trompette (Sw)		
8′	Festival Trumpet (Pos) (non-coupling)		
	Zimbelstern	9	bells
	Chimes (prepared for)		

SWELL—Manual III (enclosed)

16′	Gedeckt (ext)	12	pipes
8′	Rohr Gedeckt	61	pipes
8′	Gamba	61	pipes
8′	Voix Celeste TC	49	pipes
4′	Principal	61	pipes
4′	Koppel Flöte	61	pipes
2⅔′	Nazard TC	49	pipes
2′	Flageolet (ext)	24	pipes
1⅗′	Tierce TC	49	pipes
IV	Plein Jeu 2′	244	pipes
16′	Oboe TC		
8′	Trompette	61	pipes
8′	Oboe	61	pipes
	Tremolo		

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Looking up at the gentle arc of the facade pipes and casework (photo credit: Judy Vaughn)

pedal towers are evocative of the concrete lace that holds the stained glass within the windows of the church. The polished surfaces of the organ façade pipes play on light in such a way that the façade takes on natural soft, even hues, melding with the church interior. The pipework in the organ façade contains the independent 16′ Principal, and bass registers of the 8′ Principal and the 4′ Choral Bass.

We designed a terraced, drawknob console for this instrument. In addition to providing excellent sightlines for the organist to see both the choir and the congregation, its lowered profile makes it less dominant against the furnishings in the chancel. The console, including the built-in castors for mobility, is a diminutive 47½″ tall. The console is built of red oak with a mahogany interior. The interior stop controls are turned of hardwoods with engraved inserts that were custom finished to match the bone and walnut keyboards. The keyboards are fitted with tracker touch.

Ever concerned with ease of registration and ergonomics, we were very careful in our design of the console interior. The drawknob and coupler controls are placed in the traditional locations with the Pedal and Swell stops on the left jambs, and the Great and Positiv on the right jambs. The stops are sequenced by pitch and family, with the primary division choruses aligned to be even to the manual into which they draw. The drawknobs feature oblique heads aligned on straight terraces, and angled inwards toward the performer, making the stops easy to see and draw because the stops on each terrace are within easy reach of the performer.

For the combination system and relays, we used the new 8400 system from the Syndyne firm. All of the features that one comes to expect on a modern console control system are present—from multiple memories, to programmable crescendos, programmable sforzandos, blind checks, transposers, etc. The system allows centralized control for the combination system, playback/record, MIDI, and other functions, in a single integrated touch screen. One can save or import combination memories from and to an external USB drive, which provides infinite options to the performer. The screen and USB interface allows testing, configuration, and upgrades for the builder without the need for an external computer.

The organ chests are a combination of Blackinton-style electro-pneumatic slider chests and electro-pneumatic unit action chests for unit and duplex stops.

The main manual chest winding system makes use of traditional spring-and-weight, ribbed regulators, and floating lid regulators that are fed from a large, central plenum. The enclosed reeds are provided with separate regulators to allow a pressure differential from the flue stops and permit independent tremulant control. All of the windchests are individually fitted with tunable concussion bellows for fine regulation. This allows stable winding that still maintains a presence of life.

Wind pressures on the organ are 3 ½″ Great, 4″ Swell flues, 5″ Swell reeds, 2 ¾″ Positiv, 3″ Pedal and façade, and 8″ for the Solo 8′ Festival Trumpet. The tremolos are electro-mechanical to provide a quiet, gentle, even undulation when the tremulants are engaged.

Prior to designing a stoplist, I find, as an organbuilder, it is incumbent to worship with the congregation. This cannot be a one-time event, as a church's liturgy as it moves through the year is a rich pageant which cannot be conveyed, but has to be personally experienced to put the worship service in your own eyes, and more importantly your own ears. Personally, I find it illuminating to look into the eyes of the congregants who have asked me to build an organ for them. It instills me with the gravity of the task at hand and becomes a constant that I draw on throughout my working with the church.

As I designed the stoplist, I envisioned an instrument where all of the resources could be considered for use in every service. I wanted a large enough specification to provide a rich palette of color and weight. It was important to avoid any sounds that were strident or overwhelming, as they didn't have a place or use in this setting with this congregation. The ideal stop design would emphasize reliance on chorus massing to bring about larger stop dynamics which build upon one another. The goal was to design a specification that would allow gentle, sculpted voicing.

Because of the German origins of the Lutheran church, I knew there would have to be an inclusion of the "Werkprinzip" in the specification. However, I also felt strongly that a single nationalistic focus would have been too limiting for this congregation. Ultimately the design of the instrument included many tonal facets that allow the organ to be a faithful purveyor of music from many periods, styles, and nationalities, in a cohesive, eclectic manner. Those who are familiar with our collective body of work will find present the balance of clarity and warmth that we seek in all of our instruments.

As we designed the principals, flutes and strings in this instrument, we employed differing construction and materials in conjunction with careful scaling. The varied use of wood, metal, open, semi-open, stoppered, cylindrical, conical, and other variations, allow each flue stop its own unique voice and timbre.

The organ is centered around the clean, robust principal chorus of the Great division. The 16′ Sub Principal of this division transitions from the façade into the slotted pipes of a Geigen Principal, which allows a thinner, defined register to ground the Great chorus. This stop is duplexed to provide an 8′ foundation for the Positiv principal chorus, and allows doubling of the 8′ line when coupled to the Great. The Great 8′ Bourdon and 4′ Nachthorn, in addition to being lovely solo voices, are valuable as thickening agents to the Great principal chorus, without overshadowing it. The enclosed Swell reeds are duplexed to the

Advent Lutheran Church, Melbourne, Florida

POSITIV—Manual I (unenclosed)

8′	Geigen (from GT 16′)	
8′	Holzgedeckt	61 pipes
8′	Erzahler	61 pipes
4′	Prinzipal	61 pipes
4′	Spitz Flöte	61 pipes
2⅔′	Nasat TC	49 pipes
2′	Oktav	61 pipes
1⅗′	Terz TC	49 pipes
1⅓′	Quint (ext)	12 pipes
II	Glockenspiel (wired from mutations)	
8′	Krummhorn	61 pipes
16′	Festival Trumpet TC (non-coupling)	
8′	Festival Trumpet (in Sw enclosure)(non-coupling)	61 pipes
	Tremolo	

PEDAL

32′	Harmonics (wired harmonic series)	
32′	Acoustic Bass (resultant)	
16′	Sub Principal	32 pipes
16′	Subbass	32 pipes
16′	Gedeckt (Sw)	
8′	Octave (ext)	12 pipes
8′	Subbass (ext)	12 pipes
8′	Gedeckt (Sw)	
4′	Choral Bass	32 pipes
4′	Rohr Gedeckt (Sw)	
III	Mixture (wired)	
16′	Posaune	32 pipes
8′	Trompette (Sw)	
4′	Oboe (Sw)	

Three manuals, 36 ranks

Inter-manual Couplers
Great to Pedal 8′, 4′
Swell to Pedal 8′, 4′
Positiv to Pedal 8′, 4′

Swell to Great 16′, 8′, 4′
Positiv to Great 8′

Positiv to Positiv 16′
Positiv Unison Off
Swell to Positiv 16′, 8′, 4′

Swell to Swell 16′
Swell Unison Off
Swell to Swell 4′
Positiv to Swell 8′

MIDI Controls
Programmable as preset stops, with record/playback)
MIDI on Pedal
MIDI on Great
MIDI on Swell
MIDI on Positiv

Combination system
Touch screen interface, with over 500 levels of memory
General thumb pistons 1-10
General toe pistons 6-10
Great divisional pistons 1-5
Swell divisional pistons 1-5
Positiv divisional pistons 1-5
Pedal divisional toe pistons 1-4
Thumb and toe pistons: GT-Ped, Sw-Ped, Pos-Ped
Programmable Sforzando and Crescendo
Manual Transfer
USB drive

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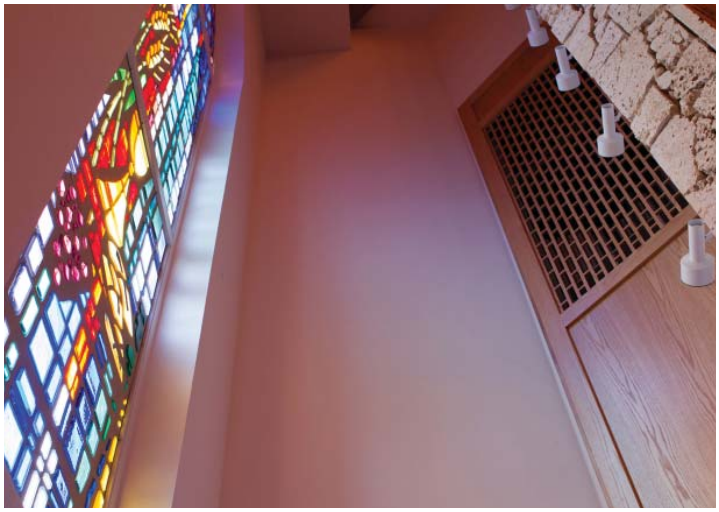
Terraced console with oblique, turned pau ferro drawknobs (photo credit: Judy Vaughn)



The wooden grilles behind the outside edge of the stone wall provide additional tone openings on each side (photo credit: Judy Vaughn)

Great, which provides dynamic control of these stops by their enclosure.

The mixed media of wood, metal, stoppered, and open construction, continues into the flutes of the Swell *Cornet decomposé*.

These stops envelop one another and become almost svelte in their combined voice. The Swell cornet is countered with a secondary principal-based Cornet in the Positiv division. In a departure from common practice, the individual Positiv mutations are placed on unit actions, which allow use of these stops at a variety of pitches and combinations. This becomes very useful for color and ornamentation and also facilitates the beginnings of building weightless mixture texture in the organ divisional ensembles by drawing these independent fifths.

For this instrument, we chose to employ strings of opposing qualities in the Positiv and Swell divisions. The Positiv 8′ Erzahler has a gentle broadness with a subdued edge-tone. It can support the most quiet and contemplative of moments in the service, and yet has enough body that when coupled with the 8′ Holzgedeckt, provides the foundation for the Positiv principal chorus. In the Swell division, the gambas with their thinner scales, roller beards, and slotting have a keen and incisive, harmonically rich voice. These stops leave little doubt that they are strings and have a very distinctive edge-tone. The 8′ Gamba when drawn with the 8′ Rohr Gedeckt provides the foundational weight for the Swell principal chorus, and a compounded color that would be analogous to an independent 8′ Violin Diapason.

With their large dynamic, the majority of the reeds were placed in the Swell enclosure. The 8′ Festival Trumpet is moderately scaled on relatively high wind pressure. With its thinner scaling and placed under expressive control, it can be registered into the full Great and Positiv choruses as a thinner ensemble reed when the expression box is closed. With the box open, it is an incisive, tightly drawn color that can bring a blaze to a solo line. The Swell reeds include a double tapered Oboe with lift lids and a large vowel cavity at 16′ and 8′ pitch, which balance against the éclat and fundamental of the large-scaled 8′ Trompette.

The unenclosed manual reed on the organ is the 8′ Krummhorn in the Positiv division. It is built of brass with flared lift caps. By itself it is a very useful solo and/or ensemble stop, with the nose tone of a regal class of reed. It also effectively couples with the 8′ Holzgedeckt to provide a stop eerily reminiscent of the woody voice of a fine clarinet.

The Pedal division is grounded with three independent 16′ stops, including a large 16′ Posaune. It is a very complete pedal, with the *gravitas* to support the full *forte* of this instrument. The Pedal stops were given a forward position to eliminate shading and to allow gentler voicing. The result is a buoyant and harmonically rich pedal, where the inner voice is ever present. In addition to the independent registers, there are a number of manual-to-pedal duplexes which broaden the available weight and color choices.

The organ tonal finishing was accomplished by a team consisting of Arthur Schlueter III, Pete Duys, John Tanner, Bud Taylor, and Marc Conley. The organ was first used for worship in December 2012 and was dedicated on January 20, 2013 by organist Peter B. Beardsley.

Every organ project has those individuals without which the project could not have been possible. In addition to thanking every single member of the congregation, the church council, and the organ committee, I personally want to single out senior pastor Reverend David Jahn, organist Lori Jahn, executive assistant to the pastor Carol Stanton, and organ committee co-chairs Pat Fuller and Jack Clark, for their very direct, hands-on work with our firm throughout this project.

Organ building is not the work of one person, but is a plurality or culmination of talents. We are very fortunate to have so many talented craftsmen and craftswomen at our firm. Our staff includes Arthur Schlueter Jr., Arthur Schlueter III, Shan Dalton, Marc Conley, Patty Conley, Bud Taylor, Robert Black, Dallas Wood, Al Schroer, John Tanner, Pete Duys, Barbara Sedlacek, Patrick Hodges, Jay Hodges, Kelvin Cheatham, Jim Sowell, Bob Weaver, Ruth Lopez, Micheal DeSimone, Bill Zeiler, Chad Sartin, Steven Bowen, Jeff Moore, and Herbert M. Ridgley Jr.

If you would like more information on this instrument and our firm, I invite you to visit the Schlueter Pipe Organ Company website at www.pipe-organ.com, write to me at A. E. Schlueter Pipe Organ Company, P.O. Box 838, Lithonia, GA 30058, or feel free to reach me at my personal email address: art3@pipe-organ.com.

—Arthur E. Schlueter III

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