

# DETROIT THEATER ORGAN SOCIETY

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## September Concert Changes

New Artist and New Date!

Due to illness, Bill Tandy, the artist originally scheduled to perform next month, has had to cancel his concert. Our concert committee chairman, Paul Jacyk, went to work and was able to book Mark Herman to perform for us. The concert date for September has been moved up one week to enable Mark to perform. The concert is now on Sunday, September 13, 2015. The doors to the Senate will open at 2:00 p.m., with the concert starting at 3:00 p.m.

We wish Bill Tandy a speedy recovery and look forward to having back on the schedule in the future.

Mark Herman is no stranger to the Detroit Theater Organ Society, having performed for us three times in the past.

Mark is the youngest person to ever be given the prestigious honor of being named the American Theatre Organ Society's Organist of the Year back in July of 2012.

Keeping a busy concert schedule, he performs over 30 concerts and silent film presentations each year across the United States and abroad.

Mark studied theatre organ with John Ferguson of Indianapolis, who is recognized worldwide for his skills as a teacher. His classical piano

studies were with Christine Freeman of Fort Wayne, Indiana. He earned a Bachelor of Fine Arts degree in Theatre Arts / Management from DePaul University in Chicago.

Currently residing in Los Angeles, he is President and Tonal Director of the Los Angeles Organ Company, the Allen Organ dealer for the Greater Los Angeles Area. He is in demand as a voicing specialist and tonal consultant for Allen Organs and is proud to be an Allen Artist, showcasing new Allen Organs in the US and beyond.

Make sure to mark your calendars for the date change so that you don't miss this concert.



SEPTEMBER ARTIST AND DATE CHANGE!

Mark Herman in concert

Sunday, September 13, 2015 3:00 p.m.

# A natomy of a Restoration

## Part 3: Re-Engineering & Restoration

Back in the day, there were three basic sizes of regulators available from Wurlitzer, and even in their most modest-sized instruments, you could likely find at least one example of all three. First, the 20" X 30" the smallest and still the most popular size. These were generally used for single-rank reeds, like Tuba Horn or Vox Humana, and in the smaller organs, the Tibia Clausa. Larger relays and bass offsets often used these, too. The middle size, being 26" X 35" could be found powering large scale Tibias, Diapasons and multiple rank chests, and the largest, 32" X 35" were often used on big Diaphonic Diapasons that extended to a 16' octave and multiple rank chests. Having said all that, Wurlitzer, like all manufacturers made the occasional exception just to get the \*&% thing out the door. In our case, not only was the 26" X 35" ideal for our use, but eminently available.

Once torn down, the regulator was ready for cutting down. To ensure accuracy, it was laid out on a computer before any shop work took place. After being given an exhaustive photographic study and all original measurements were documented, the careful cutting began. Originally, the top plate of the regulator had two additional cross-members for strength and

stability, but considering the reduction in size and the fact that they just got in the way of our redistribution of the valve components, we elected to eliminate them, without any concern for catastrophe. This also meant creating a new top inspection panel.

Because of the need for absolute precision, plotting the holes in the inspection panel for the three valves became one of the most challenging parts of the job. Both of the "trap door" pallet valves and the cone valve located in the bottom are connected to a rod whose movement is entirely controlled by the moving top of the regulator. When demand is placed on the regulator for more air, the top will drop accordingly, and when it does, it pushes downward on a series of rods that, one at a time, allow an increasing volume of air into the regulator, one small gulp at a time. Part of the genius of a theatre organ wind system that contains many small regulators instead of one large one is that they can not only exhaust, but refill quickly, depending on the requirements of the organist. Speed is absolutely paramount in the mechanical performance of a theatre organ, be it in the pipes, the chests, the swells or the regulators. It is truly remarkable to think that back when these in-

struments were initially built, the required performance standards of organists of that time were far below those we expect today, and yet the organs were (luckily) built then to handle anything we expect of them eighty years hence.

Church-type regulators are not only larger overall than those used in theatre organs, but the amount of "rise" is often higher, too, allowing for greater volume of stable air in reserve. That's probably why some people make the distinction between a regulator and a reservoir, but we need to remain mindful of the fact that the tremolos are so much a part of the sound of a theatre organ, and those larger regulators will not exhaust as quickly. In a theatre organ wind system, it's really all about a delicate balance between having enough stable air to play with the tremos off and a small enough capacity to dump the air out quickly so that the regulator will "shake" with the tremos on. Getting tremos to run predictably and reliably has often been called a black art...and for good reason.

For as much planning as there was for this project, there were still unknowns right up to the point of restoration. While we knew that we would have to build up a new valve bed with the redistribution of the valve "network," it wasn't until the

regulator was entirely torn down that we determined that it needed a new bottom plate, as well. With the large center hole for the static feed, one big rectangular and two circular exhaust holes, the original bottom plate resembled a slice of Swiss cheese more than a regulator. Certainly we could have pieced in chunks of the cut-offs from the same bottom plate, but that appeared to be a time-wasting effort that would potentially result in a lack of structural integrity, no matter how we joined it, not to mention butt-ugly. Therefore, new poplar, milled to the same thickness as the original was used. At that point, we simply applied the "what if?" rule to the thing. What if Wurlitzer had built this at the factory? What would they have done? From there, our job was made easier.

It's an understatement to say that there is so much hidden beneath the surface of a pipe organ. In this particular case, cutting the top plate revealed that the cross pieces were all originally doweled. The popular method used in the world today is known as "biscuit" joinery, preferred by zillions of craftspeople because of its convenience and speed. A power tool, specifically made for this purpose, known as a "plate joiner" cuts a narrow slot into the two adjoining pieces, glue is squirted into

### Upcoming Senate Events:

September 13 - 3pm - Pops Organ Concert featuring Mark Herman

September 26 - 8pm - Movie - Dirty Dancing

September 27 - 3pm - Boogie Woogie/Ragtime with Bob Milne & Kerry Price

October 3 - 8pm - Movie - Curse of the Demon & Evil Dead (Double Feature)

October 18 - 3pm - Pops Organ Concert featuring Ken Double

October 13 - 8pm - Silent Movie - Phantom of the Opera

November 15 - 3pm - Pops Organ Concert featuring Nathan Avakian

both slots and a compressed oval piece of birch wood (i.e. the "biscuit") is shoved into them. Once additional glue is applied to the abutting surfaces, the two pieces are drawn together and clamped. Quick and easy. It's good for many applications, but it lacks the strength and stability of plain old wood dowels needed for a purpose such as this. Even before cutting into the top, we decided that doweling was the way to go, and in fact, we bought a new doweling jig at our favorite specialty lumberyard for just this purpose. This type of joinery is perhaps most commonly used in the framework of wooden furniture.

For the top inspection plate, new poplar was selected and joined with birch biscuits. We don't vilify the use of this method of joinery. On the contrary, in fact, but here's where judgement based on common sense and experience comes into play. The inspection panel doesn't take on nearly the stress of the top and bottom plate, plus it's held down and in place with screws, so we felt confident of joining with birch biscuits. On most regulators built by other companies, one has to remove the entire inspection panel in order to adjust the cone valve, whose height is critical to efficient control of the regulated air. Wurlitzer simplified by adding a small plate on the top of the large one that is easily removed. The cone valve is attached to this small plate, and can be easily adjusted while the air is on. This speeds things up dramatically. Likewise, the two pushrods can be accessed easily through small plates of their own. We chose only to restore the originals, transferring them from the old inspection panel to the new one. Completing the transfer of Wurlitzer technological philosophy, the "relief" valve was also moved over to the underside of the new inspection panel. This small hinged valve (another "trap door") serves to open up a relief hole if one of

the springs falls off or breaks. It relieves excess stress on the regulator and makes a lot of noise when it opens up, indicating distress. It's a rare occasion, but it does happen and when it does, regulators without these relief valves have been known to blow out.

It was a different story altogether for the new valve plate. This originally employed a groove joint; a variation of the commonly used dado joint. As implied, a groove or trench is cut into the side grain of a board, and the adjoining piece is cut to leave a protruding edge that matches up to the groove. Not only is it a strong joint (as in the way some bookshelves are mounted, or tongue-in-groove flooring is installed), but if done right, eliminates the possibility of air movement under pressure moving through the piece. Thick glue quite literally "seals" the deal.

Now we begin the actual releathering process, and that begins with the valve bed. First, the two "flap" valves are recovered. New wool felt is glued to the surface and new leather is glued over it. When coming into contact with the underside of the valve plate, the felt adds a little extra cushion to help seal the valve face tight and keep the two compressed air enclosures separate. When not being called upon to produce regulated air, it is of the highest importance for the regulator to remain as stable as possible. Any leaks from the static air below will slowly-but-surely increase the pressure inside of the regulated portion, creating all manner of hair-pulling problems for the organists and technicians, most of whom don't have that much to lose. In like manner, a new ring of felt is applied for the protruding edge of the cone valve to rest and seal against, and to some degree, acts as a shock absorber.

The next thing to address was the center moving portion of the regulator, the ribs. There are four pair of these, and while we

could easily recycle the two pair going the long dimension (35"), the two others needed to be not only cut down from 26" to 16", but beveled to emulate the originals. With a little trial-and-error, we were able to create a sled for the table saw that allowed us to cut the originals to the original bevel, and from there, only needed a minor amount of sanding before they were ready to return to service.

While you only see leather on the outside of the regulator, the actual moving hinge is a tightly woven cotton twill. Originally, Wurlitzer had small, almost interlocking hinges that were glued and tacked in place before the leather went on. This probably sped up a portion of their assembly line process to some degree, and the bean-counters felt they were doing their job by saving so much money on twill material. Those were the days when labor was cheap and materials were expensive. Today, we run the heavy twill straight across the entire length of the rib assembly, then glue and tack it in place. In doing these one at a time, there's hardly a savings of time or money in doing it the original way. Once the twill hinges are attached to the ribs, the assembly is glued to the inside bottom of the regulator. As they are drying, we add "blowstrips," which are long, rectangular pieces of scrap leather that are glued directly over any joints on the interior of the top and bottom plates in order to prevent any air leakage. Once everything's dry, the bottom is flipped upside-down and blocked up in a position above the top, which is also flipped upside-down and lying on the table. After establishing Ground Zero (i.e. making sure the two plates are absolutely parallel in all directions), the rib assemblies are glued to the top and allowed to dry overnight. From this point until the last piece of leather is glued in place and has completely dried, the regulator remains blocked fully open.

Those white leather strips you see on the outside of a Wurlitzer regulator are deer hide. Flexible, strong, plentiful and comparably inexpensive are not the only reasons why we think Wurlitzer used it, but those are good enough. Other types of leather can be found on the surface of regulators, and most probably work well enough. Over time, I think I've seen just about every kind of leather or rubber cloth used. Of those, I think that deer hide is about the best all-around regulator material for a variety of reasons. While there is a specific type of leather available for valve faces, we've had good luck with using the deer hide there, as we believe Wurlitzer did, as well.

Years ago, I knew an old auto body man whose mantra was; "Paint hides nothing. It's all in the prep." That's magnified significantly when you're dealing with a semi-transparent finish like shellac. While it was far from the worst original shellac finish we've ever seen on an old organ part, it was also far from the best. We were also concerned that the new pieces might not join in such a way that the adjoining surfaces were anywhere near perfectly parallel to each other. At first, we considered taking the top and bottom plates to our specialty lumberyard and having them plane about 1/32" of an inch off all surfaces. In our experience, doing only that can make a big difference in the appearance of the outcome. However, with careful planning and execution (plus that new doweling jig), they only required some light sanding.

Next issue, in the last of this four-part series, we will cover the unique way in which this unique regulator is mounted, how that was accomplished and rest of the upgrade of the wind supply to the console. Stay tuned!

Scott Smith



Left: Bottom Board.



Right: New Valve Plate, shown in "exploded" orientation.

Below: Underside of new valve plate, assembled with restored pallet valves and guides.



All Photographs by Joe Granger.



Above: Top side of new valve plate, showing pallet valves in re-oriented positions and mounted onto valve plate. We eventually elected to drill out a third exhaust hole for maximum efficiency.



Right: Completed regulator mounted on new trunk.

# Senate Theater, Detroit

**presents** Afternoon Concert, Historic Building, Historic Music

# Rathskeller Ragtime!



## Bob Milne & Kerry Price

**Sunday, Sept. 27, 2015 3:00 p.m.**

### SENATE THEATER

**6424 Michigan Ave., Detroit MI 48210**

1 block west of Livernois

Phone: 313.894.0850

More Info: 248.330.1169

***Free Fenced Parking Lot on Gilbert St. East of Theater  
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# Boogie Woogie and Ragtime Music at the Senate

A great concert event is coming up with two great artists playing Ragtime and Boogie-Woogie music on the piano on stage at the Senate Theater.

Bob Milne and Kerry Price, both highly-sought after musicians, will fill the air with won-

derful music on the afternoon of Sunday, September 27, 2015. The doors to the Senate Theater will open at 2:00 p.m., with the concert starting at 3:00 p.m.

Tickets can be purchased at the door, or in advance at [www.dtos.org](http://www.dtos.org). Please note that

this is not an organ concert, and is not included as part of the organ concert series.

Tickets will be available at the door for the price of \$18.00 per person. Free guarded parking available in the lot next to the theatre off of Gilbert. There will

also be supervised parking along Michigan Avenue in front of the building.

Come and enjoy a great evening of Ragtime and Boogie-Woogie music live on stage at the Senate Theater!

## Bob Milne

Odd as it may seem, the "finest ragtime/ boogie-woogie piano player on the planet," Bob Milne, began his musical career as a symphony French Horn player. But when he took up saloon piano-playing on the side, he discovered what fun entertaining his listeners could be.

Today he continues to have fun on the concert stage, and his audiences have fun with him.

His enthusiasm is contagious and he loves to share his knowledge, stories, and talent with people from all walks of life.

Known as a "Ragtimist" (a term he coined), Bob plays and

enjoys a wide variety of musical styles, including classical pieces and pop tunes.

He specializes in ragtime and boogie-woogie - styles that developed in America in the late 1800's and early 1900's, colorful styles that show off the piano and reach out to listeners, often making them want to dance.

Although highly acclaimed for his pianistic talents on the concert stage,

Bob still refers to himself as a "saloon piano player," entirely self-taught on the job, always striving to entertain whatever audience is present.

## Kerry Price

Singer, pianist, accompanist, music educator, and church musician - Kerry has been performing traditional Ragtime and Jazz styles as a pianist, vocalist and band member in southeastern Michigan since 1960.

Kerry has appeared on recordings of Mother's Boys Jazz Band and the Boll Weevils Jazz Band.

Now retired from teaching, Kerry finds plenty to do as the Music Director for the Pilgrim Congregational Church in

Bloomfield Hills, writing and performing original one-woman programs.

Kerry is still in local demand, playing Ragtime and a little Jazz and Sing-along in the tri-county area.

She occasionally serves as music director for area theater groups in Oakland County.

## Dakota Inn Rathskeller Background

Our concert features two seasoned veterans of the Rathskeller and its famous piano, Bob Milne and Kerry Price (and Kerry is still performing there!)

Dakota Inn Rathskeller

(17324 John R St, 2 blocks N of McNichols, [Dakota-Inn.Com](http://Dakota-Inn.Com)) is an authentic German restaurant in Detroit.

The Dakota Inn Rathskeller was opened on August 1, 1933 by Karl Kurz, and it continues

its fine 81-year tradition as a Detroit icon, currently under the leadership of his grandson, Karl E. Kurz.

Although we are unable to serve their sauerbraten, sausage and schnitzel in the theater lob-

by, we are honored to name this concert for this historic Detroit venue, and we will be honored if Karl can attend our concert.

## We need your help!

With more events at the Senate comes the need for more volunteers. Everything is needed from ticket sellers, ticket takers, concession stand workers, raffle table workers, clean-up crew, and everything else that needs done for each event.

Please contact Lance Luce, Michael Fisher, Dave Calendine or Kevin Werner if you are able to help.  
It would be greatly appreciated!

Be sure to check out the Detroit Theater Organ Society's website for the most up-to-date schedule.

Read past issues of the Newsletter or make reservations for practice time on the Wurlitzer.

Don't forget that the calendar for the theater is online. Check to make sure that the organ is available before making the trip down to the Senate.

Visit [WWW.DTOS.ORG](http://WWW.DTOS.ORG) for more information.

Visit our friends at the Redford Theatre for their classic film series and organ concerts

August 21 & 22—Forrest Gump

September 11 & 12—The King and I

September 25 & 26—The Three Stooges Festival

October 2 & 3—SILENT MOVIE—Metropolis—Accompanied live by Clark Wilson

October 9 & 10—The Night of the Hunter

October 16-18—Alfred Hitchcock Weekend

October 21—Back to the Future 2

October 23—Young Frankenstein

October 24—Son of Godzilla and Godzilla vs. Monster Zero

Full schedule of events, including times and prices, can be found on the web site

[WWW.REDFORDTHEATRE.COM](http://WWW.REDFORDTHEATRE.COM)

DETROIT THEATER  
ORGAN SOCIETY

*Over 50 Years of Entertainment!*

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WE'RE ON THE WEB!

WWW.DTOS.ORG

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## **2015 Concert Series**

September 13—Mark Herman

October 18—Ken Double

November 15—Nathan Avakian

December 6—John Lauter



photo: Lance Luce