

The

PEPE DELUXÉ  
presents:

# reat Stalacpipe Organ

The largest musical instrument in the world



Paul Malmström unearthing the largest musical treasure in the world.

**D**eep down in the heart of the **Beautiful Caverns of Luray**, Virginia, lies the largest musical instrument in the world: "**The Great Stalacpipe Organ**". In the main cathedral-like chamber and the vast outlying areas of the caverns, ancient stalactites are played instead of organ pipes.

Each and every stalactite has been tuned by a grinding process to concert pitch. The Organ's full-fledged four-keyboard console controls rubber-tipped mallets attached to solenoids. These mallets strike the stalactites, bring forth remarkably pure and musical tones.

It took over 50 years and the most Deluxé of all music groups to compose and record the **first ever original tune** for The Organ. The title of the tune is "*In the Cave*", and it was performed by the writer himself, Pepe Deluxé's **Paul Malmström** in February 2011.



## The genius father of the Rock Giant

The Great Stalacpipe Organ was conceived in the 50's by a mathematician, organist and Pentagon electronics scientist named **Leland W. Sprinkle**. According to *Meccano Magazine* Sprinkle's son **Robert** hit his head on a stalactite, producing a pleasant, deep note that inspired Sprinkle to invent the instrument.



The attendees of IBM Scientific Computation Forum - August 1948, Mr. Sprinkle in the middle.



Finding stalactites approximately on pitch with good tones.

## the peculiar needs of

the subterranean installation

From 1954 to 1957 Sprinkle spent every spare-time minute developing and building the original version of The Organ. Basically, the music is produced by rubber-tipped mallets striking stalactites Sprinkle has carefully selected. First he had to find, with a little help from a set of tuning forks, beautiful sounding stalactites. Since no wiring or metal can come in contact with the vibrating "pipe", the chosen stalactites had to be near a neighboring formation, where the plungers were assigned. Then each and every stalactite had to be tuned to exact pitch by grinding it at the tip to shorten it. Sometimes the amount taken off was quite a chunk,

sometimes only a fraction of an inch. The gauge used here was not tuning forks but a set of **precision tube oscillators**, to which each note was compared directly and brought to exact concert pitch.

When the stalactites were in tune, Sprinkle mounted the various sized mallet assemblies with tailor-made solenoids. These solenoids are fired by a burst of direct current. Shooting forward, the mallets strike the stalactites and then rapidly sprung back to cocked position, resulting in **clear, vibrant and musical** tones.

All the solenoids are controlled by a four-keyboard console. It

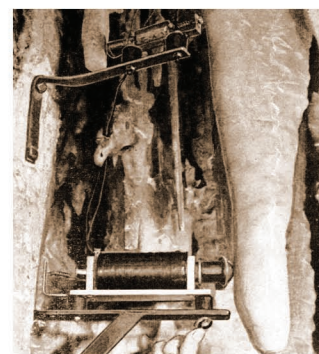


Final tuning done with the aid of an electronic oscillator ...



... and skillful grinding to bring it up to exact pitch and often better tone quality, too.

was manufactured to order by the **Klann Organ Supply Company**, the oldest pipe organ supply house in North America. The console was constructed especially to meet the peculiar needs of the subterranean installation, including the low temperature and high humidity.



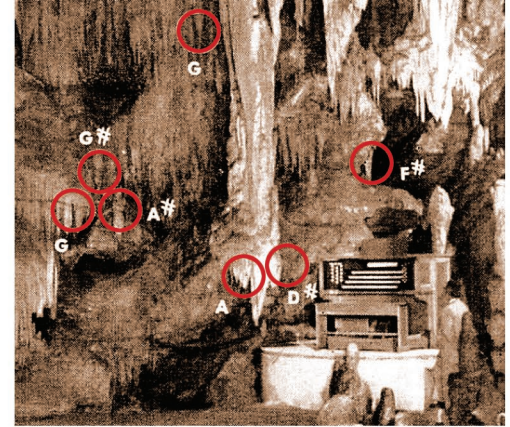
Solenoid-triggered mallet strikes stalactite a sharp blow to produce the tone.

## Pepe meets the Stalacpipe Organ

We first heard of the Stalacpipe already in 2005 on *“The 365 Days Project”*, a sonic mother lode of cool, strange and often obscure audio selections. In his short essay describing a road trip to Luray Caverns, **Keith Lo Bue**, a surrealistic US pop artist wrote that “Leland’s maverick spirit had birthed an amazing instrument deep under the earth” and “how incredible it would be for a modern composer to write something for this most singular of instruments.”



The Organ is connected to various stalactites with over five miles of wiring.



The Stalacpipe console, with circled stalactites carefully selected for their tone and pitch.

**14 000 square meters**

What was even more intriguing was the fact that the instrument is HUGE. It covers an area of approximately **14 000 square meters**, making it slightly larger than the **Boardwalk Hall Auditorium Organ in Atlantic City** (recognised as the largest musical instrument ever constructed by Guinness Book of Records).

Never shying from a challenge, we decided to get in touch with the Luray Caverns folks to see if they were interested in getting the first ever composition for the original heavy rock instrument.



The name “Stalacpipe” was coined from “stalactite” and “pipe” by Paul Hume, a radio host, professor of music and distinguished music critic for the Washington Post.

**365**  *days*

The 365 Days Project: over 200 people sharing from their stash of aural treasures.

Marketing Director **John Shaffer** had both good and bad news for us. The good news was that they loved the idea. The bad news was that The Organ was in a terrible shape, and it was slowly going thru a completely and thorough renovation, and that it was very unlikely that the instrument was going to be ready before the completion of the album (*Spare Time Machine*) we were working on at that time. Naturally we were disappointed but figured that maybe the Time just wasn’t right.

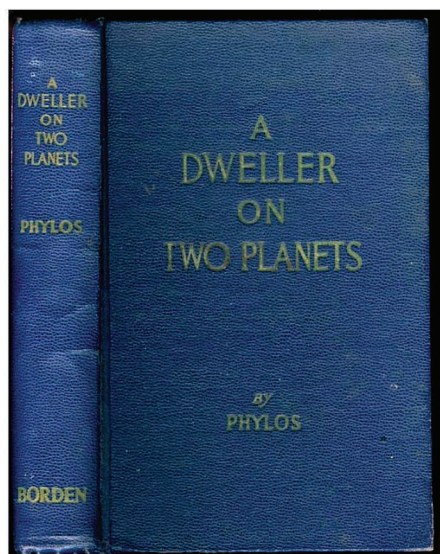
A few years later fate brought us *“A Dweller on Two Planets”*, a strange and esoteric book concerning itself mainly with wonders of and life on Atlantis. The author **Frederik S. Oliver** started writing the book in 1883, five years after the discovery of Luray Caverns. In the book Mr. Oliver describes Incalithlon, the **great temple of Atlantis**:

“Instead of straight walls, or alcoves, or the ordinary arrangement of interiors, the enormous auditorium was in faithful semblance of a **cave of stalactites and stalagmites.**”

and

“As we turned away, an Incala, who had been present, began playing on the **great organ** of the temple; then the silences of the vast auditorium responded as no human voice could make them do.

--On the winds the bells' deep tones are swelling--



“A Dweller on Two Planets”, one of the most important texts of the 19th Century Atlantis canon.

It didn't take us long to realize that we simply had to write a concept album based on the book and there was no way we could let this chance get away: the perfect time and purpose for the first ever Stalacpipe composition. We knew that Luray Caverns' engineer **Larry Moyer** had been working hard on The Organ and John was sure it would soon be ready for us. As the instrument is, as Keith Lo Bue puts it, "chaotic and muddy and claustrophobic and spacious and completely gorgeous", all the previous recordings of it made ever since the late 50's were studied in order to better understand its behavior. Armed with this knowledge and the

inspiration from "A Dweller on Two Planets" Paul locked himself in his writing chamber and didn't emerge until the composition "*In the Cave*" was ready. The batteries in Paul's portable **Nagra** reel-to-reel were charged, a plan how to record The Organ was drawn (again using knowledge from previous sessions) and the performance outfit prepared. We were ready!

The Stalacpipe Organ was not. In fact we managed to compose, record, mix and even master the album "*Queen of the Wave*", and the Stalacpipe still wasn't ready. Desperation started to creep in but we fought back and had faith in

Larry's abilities to overcome obstacles that would vanquish a mere mortal. Finally in December 2010 we got the first proper test recording and green light from Larry, and about a month later, **6 years, 3 months and 25 days** after the initial contact the D-day dawned in all its glory.



C'est Suisse, et très, très précis". The travelin' gentleman's recorder.



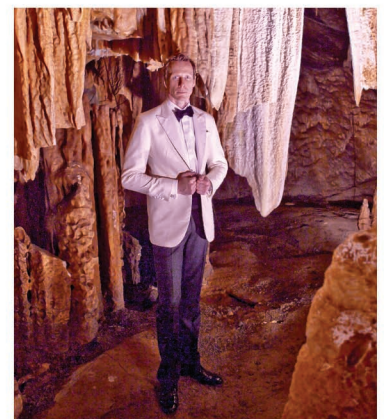
Larry Moyer resurrecting The Organ.



Stalacpipe music, to be enjoyed in the comfort of a dry, warm home.

Dressed in **black pants**, a **white smoking jacket** and wearing a **bow tie**, Paul took a train from New York to Virginia. Arriving in Luray, he got a bit of a surprise: as it was a National Holiday, the Caverns were open to public! This meant that he and Larry had to make the recording while a large and curious audience was following what they were doing, especially as the tour guides were introducing Paul as "the composer of

a completely new tune for the Stalacpipe Organ". After a few unsuccessful attempts Paul and Larry managed to record two good takes that I later edited together to create the master recording. Listeners with sharp ears might be able to detect some distant chatter of the audience witnessing the historical moment: the music that had been imprisoned, for eons in silence, darkness and hardness, was now finally released!



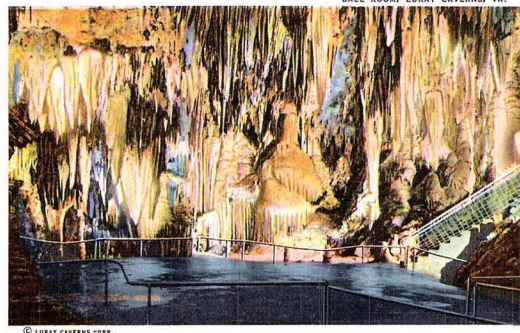
Paul in the cave backstage, ready for the performance of a lifetime.



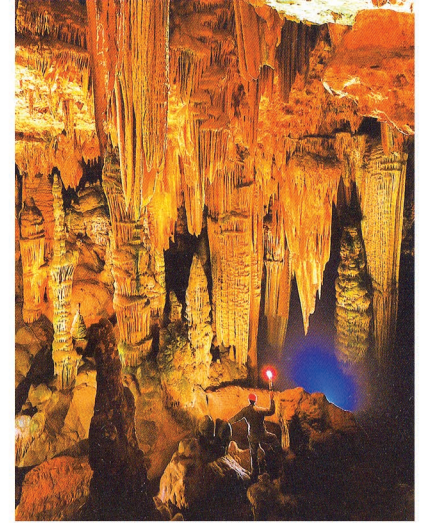
In August 13, 1878 Mr. Andrew Campbell, the discoverer of the cave, was lowered by a rope into the dark and mysterious Chambers of Silence.

### The Home of the Organ

The Luray Caverns were discovered in 1878, and shortly thereafter were opened to the public. Their great extent was not then known, or even dreamed of; and not until thoroughly equipped exploring parties had penetrated seemingly endless chambers and labyrinthine passages were their boundless riches disclosed and made accessible to visitors. No other caverns are known in which there can be found such an infinite variety of quaint, curious, and wonderful formations. Queer shapes present themselves at every turn, aping grotesquely the objects of the outer world,



The 64-foot high Ball Room, where many a dance and wedding reception were held and later the Stalacpipe was built in.



The mind fails to grasp the grandeur revealed in such a majestic manner, until it gradually accustoms itself to the fantastic shapes, the almost perceptible silence and the weird influence of this subterranean realm.

now suggesting some growth of animal life, now resembling some familiar vegetable formation, or taking the shape and form of some creation of man. Fantastic, grotesque, beautiful, weird, grand, and superb, are words which find expression on the lips of everyone who gazes upon the treasures of this "house not made with hands." The Persian monarch's desire—a new pleasure—is secured at length to the world in the Caverns of Luray!



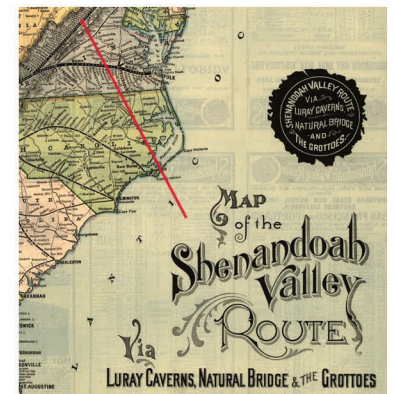
"Cave House", the convenient modern entrance to the caverns.

aping grotesquely the

## objects of the outer world



Ladies mounting The Organ. It is a real experience in stereophonic sound to stand in the heart of the instrument and listen to harmonic or cathedral effects roll in from all directions.



"No one has traveled wisely who has not seen the Beautiful Caverns of Luray."