

# Southern Skies

Volume 28, Number 2

Journal of the Southeastern Planetarium Association

Spring 2008



## Table of Contents

SEPA Officers.....	2		
President's Message .....	3	Silent Auction. ....	9
IPS Report .....	4	SEPA Conference 2009 .....	10
Editor's Message .....	5	Featured Planetarium .....	10
Small Talk .....	6	SEPA Conference 2010 .....	12
SEPA Circuits.....	7	SEPA Archive 2008 .....	14
SEPA Conference 2008 .....	8	News from SEPA States .....	20

*"Horse with No Name." See page 20 for info. Credit: George Fleenor*

## Officers of the Southeastern Planetarium Association

### President

Adam Thanz  
Bays Mountain Planetarium  
853 Bays Mountain Park Road  
Kingsport, TN 37660  
(423) 229-9447, Fax: (423) 224-2589  
Email: thanz@ci.kingsport.tn.us

### President-Elect

Jon Elvert  
Irene W Pennington Planetarium  
La. Art & Science Museum  
100 South River Road  
Baton Rouge, LA 70802  
(225) 344-9478; Fax (225) 344-9477  
Email: jelvert@lasm.org

### Past-President

Patsy Wilson  
Margaret C. Woodson Planetarium  
1636 Parkview Circle  
Salisbury, NC 28144  
(704) 639-3004, Fax: (704) 639-3015  
Email: wilsonpk@rss.k12.nc.us

### Secretary/Treasurer

Mickey Jo Sorrell  
Morehead Planetarium & Science Center  
CB#3480 UNC-CH  
Chapel Hill, NC 27599  
(919) 962-3300  
Email: sorrell@email.unc.edu

### IPS Council Representative

John Hare  
3602 23rd Avenue West  
Bradenton, FL 34205  
(941) 746-3522, Fax: (941) 750-9497  
Email: johnhare@earthlink.net

## Editorial Staff of *Southern Skies*

### Southern Skies Editor

James Sullivan  
Buehler Planetarium & Observatory, BCC  
3501 Davie Road  
Davie, FL 33314  
(954) 201-6681, Fax: (954) 475-2858  
Email: jsulliva@broward.edu

### Associate Editors

#### Technical Column

Robert Cruz  
Miami Space Transit Planetarium  
Miami Science Museum  
3280 South Miami Avenue  
Miami, FL 33129  
305-646-4200  
Email: rcruz@miamisci.org

### Associate Editors

#### Small Talk

Elizabeth Wasiluk  
Berkeley County Planetarium  
109 Ridge Road North  
Hedgesville, WV 25427  
(304) 754-3354, Fax: (304) 754-7445  
Email: isbeth4@hotmail.com

*Southern Skies* is the quarterly journal of the Southeastern Planetarium Association published for the purpose of communicating association news, reports, reviews, and resources to its members. Contents © 2008 by the Southeastern Planetarium Association and individual authors. Permission is granted to reprint articles in other planetarium, astronomy, or science related publications under the following conditions: 1. Attach a credit to the article stating, "This article was originally published in *Southern Skies*, journal of the Southeastern Planetarium Association;" and 2. Send courtesy copies of your publication to both the *Southern Skies* editor and the author.

# President's Message

Adam Thanz  
Bays Mountain Planetarium  
Kingsport, TN

Greetings to all of you. As you read this, you will most likely be busy with school groups and preparing for summer programming and activities. Some of you will be getting ready for some sort of day camp program. Some will be doing teacher inservice. For those of you planning a holiday trip, more than likely, it will either include or be totally immersed in space, astronomy, and/or the sciences. My wife and I are guilty of such pleasures. We traveled to France back in 1999 to see the total solar eclipse that was passing just north of Paris. We visited Paris for many days and saw lots of great museums and enjoyed the parks. Of course, we made day-long treks to both

of the city's large science museums and saw their respective planetariums. We also made sure we saw the many large sundials throughout the city. Amidst our stay, we went to Laon to see the eclipse, as it was very close to the center line. Of course, it was cloudy during totality. But, we saw the shadow pass over as we were on a plateau. It got "dark" during maximum and then the sky proceeded to clear up as the sun commenced through the post-eclipse umbral phases. But, as they say in the movie Casablanca, "We'll always have Paris."

Something we noticed on our trip that was very interesting was how different each of the two museums were, as well as how their theaters were operated. A difference in their approach created two different styles of programs, yet both were about the eclipse. The museums and theaters were also very different than their U.S. counterparts. I will quickly highlight some of the differences. The European shows ran longer and the technical level for a public program was higher. Patrons in their museums did not do the "quick glance at exhibits and run through the 'boring' museum" sprint. A person

Rates and submission formats for advertising space in SEPA's quarterly journal *Southern Skies* are:

Rates	Dimensions
\$100.	Full-page 7" wide x 10" high
\$50.	Half-page 7" wide x 4.5" high
\$25.	Quarter-page 3" wide x 4" high

These rates are per issue and in B&W copy. The entire back cover of our journal is also available either in B&W for \$125, or in color for \$150. A 10% discount to any size ad can be offered only with a year's (four issues) commitment of advertising. Ads accepted on a space available basis. Ads must be camera ready and conform to dimensions listed. Payment must accompany advertisement order, made payable to the Southeastern Planetarium Association (send payment to Secretary/Treasurer Mickey Jo Sorrell). The underlying mission of our advertisements is to promote resources, products, and services related to the planetarium profession. SEPA reserves the right to refuse advertisements.



SEPA President Adam Thanz

(Continued on page 16)



# IPS Report

John Hare  
ASH Enterprises  
Bradenton, FL

## 2008 IPS Conference- last minute reminder...

IPS 2008 will be hosted by Chicago's Adler Planetarium, June 27-July 2. For conference information visit the IPS website, <www.ips-planetarium.org> or contact:

Shawn Laatsch, IPS Membership Chairman  
<slaatsch@imiloahawaii.org>  
Phone 808-969-9735  
Fax 808-969-9748

## 2010 IPS Conference updates...

Alexandria, Egypt was chosen over Beijing, China and Saint-Etienne, France.

Please note that the conference dates have been shifted earlier due to the total solar eclipse that will occur on July 11, 2010. IPS 2010 is scheduled for June 26-30 and once again presents a "problem" in relation to the traditional SEPA conference time frame. Prospective 2010 SEPA conference hosts please note!

## Attention, Portable planetarium users...

IPS needs Portable planetarium contact persons for all regions. If you're a Portable user in the SEPA region and would like to serve as the SEPA Portable regional coordinator to IPS, please contact me or Susan Button, IPS Portable Planetarium Committee <sbutton@ocmboces.org>

For those of you attending IPS '08, I'll see you in Chicago! If not there, I hope to see you in Lafayette!

## Paul Campbell Fellowship Award Nomination Form

Nominees must have been a member of SEPA for at least ten years, and they must display qualities in each of five areas, as represented by the five-pointed star shaped award: integrity, friendship, service, knowledge, and vision. Please submit this form to any SEPA Council member.

Nominee's Name: \_\_\_\_\_  
Qualifications: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Editor's Message

James Sullivan  
Buehler Planetarium & Observatory  
Davie, FL

First, let me thank you for responding to my plea that you send in material. As you can see, this issue has material ... and lots of it.

Second, let me apologize to the fine folks in Louisiana. Jon Elvert did send in things on time for the last issue. I somehow did not include it. Please believe me, I want to print everything I get.

Please keep on writing. We are still looking for new column editors. We welcome Robert in this issue with SEPA Circuits. And please keep sending in pictures. I think they have been a welcome addition to our journal. I do sometimes stockpile pictures for

future issues, depending on space.

We can receive electronic files in most any format. Also, graphics can be received electronically or in hardcopy, including slides or photos, and will be converted to digital with sufficient resolution.

Submission deadlines: January 1 (Winter), April 1 (Spring), July 1 (Summer), October 1 (Fall).

Thanks to BCC and its wonderful printing department for assistance.



## SEPA Membership Form

Please send your check to SEPA, c/o Mickey Jo Sorrell, Morehead Planetarium & Science Center, CB#3480 UNC-CH, Chapel Hill, NC 27599.

\_\_\_\_ One Year, \$25 (\$15 outside SEPA geographical region)

\_\_\_\_ Two Years, \$40

Name \_\_\_\_\_

Organization \_\_\_\_\_

Planetarium \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State / Zip Code \_\_\_\_\_

Voice Phone \_\_\_\_\_

Fax Phone \_\_\_\_\_

Email Address \_\_\_\_\_

Staff Position \_\_\_\_\_

IPS Member? Yes \_\_\_\_\_ No \_\_\_\_\_

Contribution to Scholarship Award Account: \$ \_\_\_\_\_

# Small Talk

Elizabeth Wasiluk  
Hedgesville High School Planetarium  
Hedgesville, WV

As I write this, I just finished doing a planetarium program for some grandparents and a precocious three year old. I opted to celebrate "International Day of Planetaria" a couple of days later, so I wouldn't have to come in extra on a Sunday. I decided to show them the classic movie "Let's Go to the Planetarium" narrated by Pat Boone. I hadn't seen the program in a very long time and was quite surprised to see how well it held up after all these years. It even accurately predicted the move to digital planetaria. Afterwards I did a basic star identification program.

As a smaller planetarium, and a one-person operation, I am deeply concerned about trying to promote the facility. I also teach an astronomy class to high school students and this takes up a great deal of my time. I don't even have secretarial support. Some days I wonder how I do what I do.

Here are some issues I am dealing with at the moment:

**IPS or SEPA?** Which meeting should I go to? I haven't been to IPS since Wichita. I would like to go, but costs are tremendous. I only get \$500.00 a year

to attend conferences. That means wherever I go I have to fork over money of my own and gas costs are great right now. Also falling into the mix are astron-



omy programs for teachers. These often pay the cost of travel and graduate credit that gives me a raise in pay. These are attractive in that they often pay me where as a planetarium convention is extremely useful, but in less tangible in monetary ways. Summer is only so long. How do I choose? How did you make your decision or are you managing to go to both?

**Lack of space.** I have a twenty foot dome and two tiny storage areas, one of which is my office. The school is overcrowded and there is nowhere I can put anything new. The classroom outside my door, I cannot use. I have been told that I have to travel to one of the portables next year to teach and cart everything over there, plus, instead of teaching first thing in the morning and being free to run the planetarium, I have to teach at the prime time when groups are coming to visit the planetarium. How do you deal with your lack of space in your facility? Does anything impinge on you doing planetarium programs?

**Publicity.** As much as I try to get to promote the planetarium, every time I try to do publicity or do a public program for the planetarium, I get a group of people who say, "I didn't know there was a planetarium inside Hedgesville High School." And it never fails that whenever a run of programs finishes, someone calls and asks, "When is the planetarium open to the public?" Like, where were you last week? What is the best way to promote your facility? E-mail, snail mail? Newspaper, radio, television? Jon Elvert at the planetarium in Baton Rouge, LA did a really nice paper on publicity and I am going to look it up and read it for tips in past proceedings.

**Technology issues.** I just got a new computer. It was just plunked down and I have to try and figure out how to use it. Plus, should I get rid of my slide projectors and go digital? Where does the money come from? How digital should I go? What to keep and what to get rid of? What is cost effective for a small planetarium that works? There are days when I just want to keep what I have and say I have a planetarium from the golden age of planetaria in the seventies. Kind of like those one room school houses from the 1800's. Hey, folks, how quaint, this is the way it was before everyone went digital.

(Continued on page 18)

# SEPA Circuits

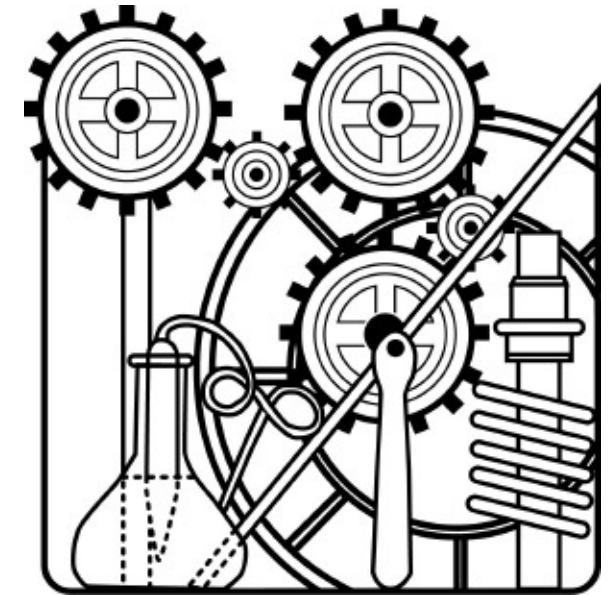
Robert Cruz  
Miami Space Transit Planetarium  
Miami, FL

Greetings all! My name is Robert Cruz and I'll be writing a tech column here in Southern Skies. Allow me to tell you a little about myself. I am the Assistant Operations Manager at the Miami Space Transit Planetarium in Miami, Florida. My professional background is in auto mechanics and telephony having trained under GM while working as an auto tech and then as a central office technician when I went to work for Bellsouth. My hobbies center around amateur radio and vintage vacuum tube audio gear. I'm a pretty well rounded geek so to speak!

In this issue I'll be showing you how to make your own video projector shutter out of stuff you can find in any well stocked junk bin. This project not only lends itself to video projectors but can also be used to shutter other light sources. Video projectors are a hot topic in planetariums and we all can't afford to buy the latest and greatest. This project might be what some of you where looking for to give lower priced units a shutter.

Here's what you'll need aside from the usual workshop items....

- (2) junked single disc cd or dvd players that have a working loading tray **OR**
- (2) junked cd or dvd rom drives that have a working loading tray mechanism. Whether or not they can actually read a disc doesn't matter. (this is the best choice)
- (1) DPDT (double pole double throw) momentary switch
- (1) suitable power supply
- (2) power connectors with 6" or so long leads from a computer power supply (if using cdrom drives)



Thin sheet aluminum or cardboard (depends on your application)

Basically what we are going to do is use the cd loading drawer mechanisms as shutters. CD/DVD computer drives are the best choice since they already come in a standard compact shape and have standard power connectors. The mechanism from a home CD/DVD player can also be used but requires more work to remove and may require some creative thinking to mount.

If using a computer drive you'll need to disassemble it by first removing the top cover. This cover is usually held on by a few small screws. You'll need to locate the motor that drives the tray in and out. See figure 1. This is a small motor about the size of a quarter and maybe 0.5"-1" thick. Don't confuse it with the motor that spins the disc. Once you have

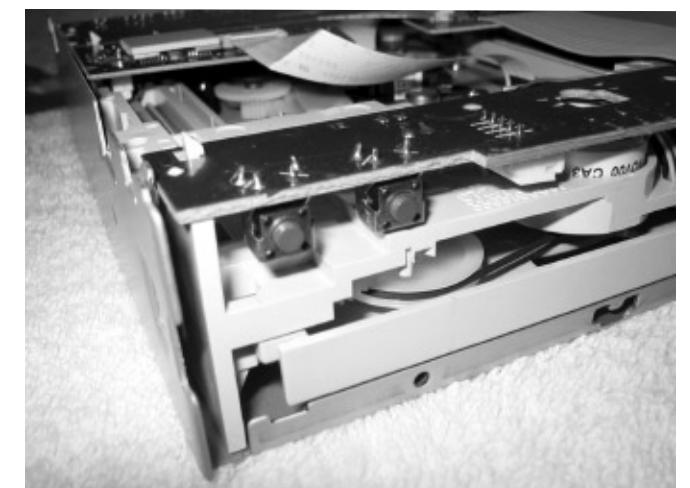


Figure 1

(Continued on page 17)



# SEPA Conference 2008

**Dave Hostetter**  
**Lafayette Natural History Museum & Planetarium**  
**Lafayette, LA**

It's almost time for this year's SEPA conference, to be held at the Lafayette Natural History Museum & Planetarium in Lafayette, Louisiana! I hope you will be able to join us from Tuesday, July 22 - Saturday, July 26, 2008 for a conference in Cajun country. Please note those dates - *the conference is in July this year, not June.*

The conference registration fee is \$175 per person. The theme is the old Cajun expression "*Laissez les bons temps rouler!*" - "Let the good times roll," or in a planetarium context, "Making astronomy fun." What do you do to make astronomy fun for the people you serve?

Among the conference highlights will be trips to a public observatory and to Mulate's famous Cajun restaurant, a Messier Shootout, and all your great papers and presentations. Speakers will include Dr. Paulette Hebert from Oklahoma State University (formerly of the University of Louisiana-Lafayette) and Chair of the International Dark-Sky Association's Education Working Group. Dr. John J. Caldwell from York University in Toronto, a scientist working with the Kepler Mission set to launch next year, will be our banquet speaker.

The conference hotel will be the Holiday Inn-Lafayette, located near the I-10/I-49 interchange about a 15 minute drive from the museum. Room charges will be \$98 per night single or double, plus a 12% tax. Conference rooms will be held at this rate through July 7, 2008.

Lafayette can be easily reached by car, and Lafayette Regional Airport (LFT) is served by American Eagle, Continental Express, Delta Connection, and Northwest Airlink.

Lafayette has a subtropical climate. You can expect July to be *very* hot and *very* humid, and afternoon thunderstorms are common. Happily, except the observatory trip, we will spend most of our time indoors.

I hope to see you there!

**Hotel**  
Holiday Inn-Lafayette  
2032 NE Evangeline Thruway  
Lafayette, LA 70501

Room rate: \$98 + 12% tax, single or double, available at this rate if reserved by July 7.

Some rooms open to the inside of the building and others open to the outside, and smoking/non-smoking rooms are available. Specific room type requests and special needs are honored whenever possible but are not guaranteed.

Hotel reservations can be made through the "Easy Book" link on the SEPA web site, or by calling Holiday Inn Reservations at 1-800-448-2296. The Holiday Inn-Lafayette front desk number is 337-233-6815. Be sure to reference the Southeastern Planetarium Association to get the proper rate. Remember that you must make your reservation no later than July 7, 2008!

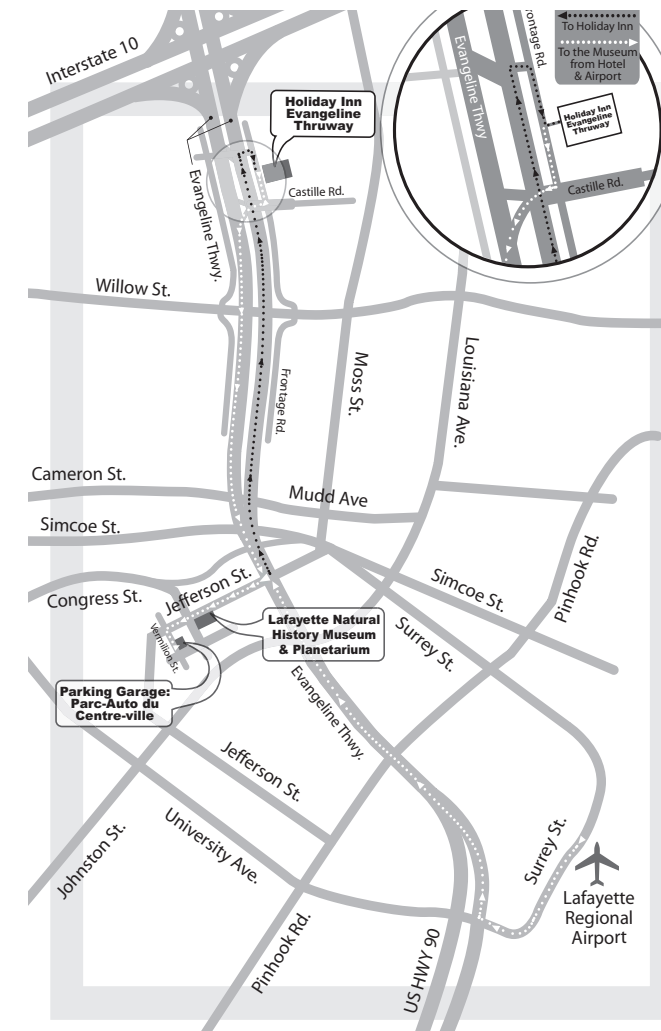
**Museum Contact Information**  
Lafayette Natural History Museum & Planetarium  
433 Jefferson Street  
Lafayette, La 70501  
337-291-5544 (museum phone)  
337-291-5464 (museum fax)

David E. Hostetter (general information)  
Curator of the Planetarium  
337-291-55547 (office phone)  
dhostetter@lafayettegov.net

Charlotte Guillot (door prizes and paper presentation schedule)  
Assistant Planetarium Curator  
337-291-5495 (office phone)  
cguillot@lafayettegov.net

Dexter LeDoux (for technical needs)  
Exhibit and Planetarium Technician  
337-291-5460 (office phone)  
dledoux@lafayettegov.net

Dawn Edelen (for travel needs)  
Education Curator  
337-291-5548 (office phone)  
dedelen@lafayettegov.net



# Silent Auction

**Dave Maness**  
**Sharpe Planetarium**  
**Memphis, TN**

Friends and colleagues: I hope some of you missed having the Silent Auction, back at the Triple Conjunction conference in Wheeling. Unfortunately after corporate downsizing, I wasn't able to attend that conference. Although there were kind folks on the committee willing to make it happen, we decided that there were just too many complications to fit it into an already full conference schedule. Well, now I'm back, and so is the auction.

In case you are new to the group, this is a fun activity we do to help other planetarians by supporting the SEPA Scholarship fund. We are raising money so that someday (hopefully soon) one of our colleagues will benefit in the future from a little financial help to attend a professional workshop or a SEPA conference. To all those who provided items in the past, I cannot thank you enough.

As of the time of this writing, the fund account balance stands at \$1,622.00. As I have said before, I think our ultimate goal should be to get this account to a level from which we can provide a significant grant by using the interest alone and leave the principal intact. That all depends on us and (of course) interest rates. So, we still have a long way to go. As has been tradition, we will again hold a silent auction to benefit this fund. To maybe help make it faster and more fun, this year's auction will have a twist. Certain items will be available as a raffle, for \$1 per ticket or 6 tickets for \$5. Drawings will be held at the banquet.

What we need from the membership (as always) are your contributions of items or services that you would be willing to provide to the highest bidder.

(Continued on page 18)

# SEPA Conference 2009

## Save the Dates for SEPA 2009

**Kris McCall**  
**Sudekum Planetarium and Adventure Science Center**  
**Nashville, TN**

The staff of the Sudekum Planetarium and Adventure Science Center are extremely pleased to announce that the new Sudekum Planetarium will be your host for the Southeastern Planetarium Association conference June 16 through 20, 2009. The hotel will be the Millennium Maxwell House, just five minutes drive from Adventure Science Center. It will be a full meeting with papers, hours of dome time, vendors, and plenty of food.

Final details are being arranged, but it looks like registration should not exceed \$250. That sounds like a lot, because it includes a lot:

- Tuesday night reception/buffet
- Wednesday lunch
- Wednesday evening travel to observing site and dinner
- Thursday lunch
- Thursday dinner
- Friday lunch
- Friday evening banquet
- Saturday morning breakfast

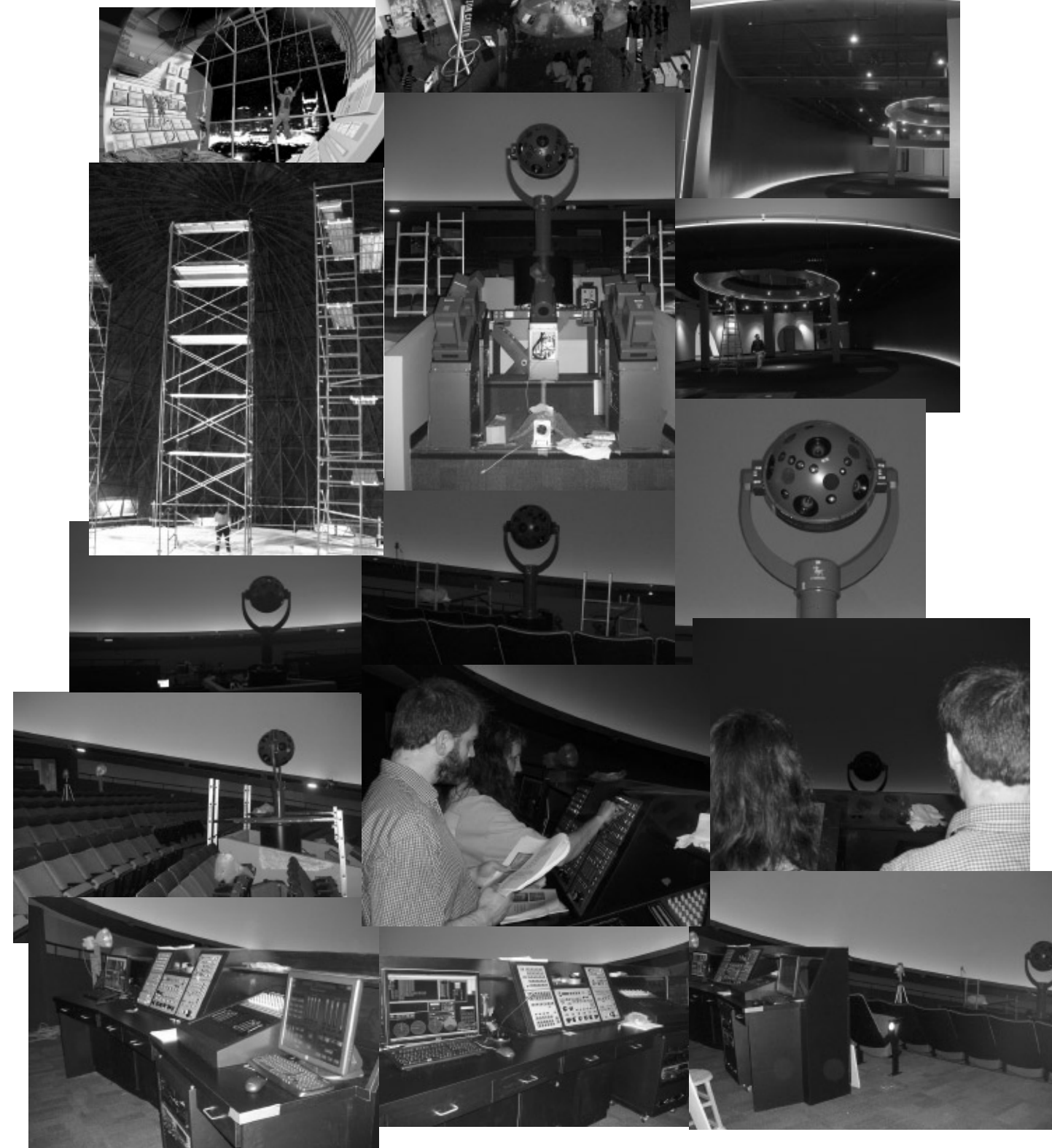
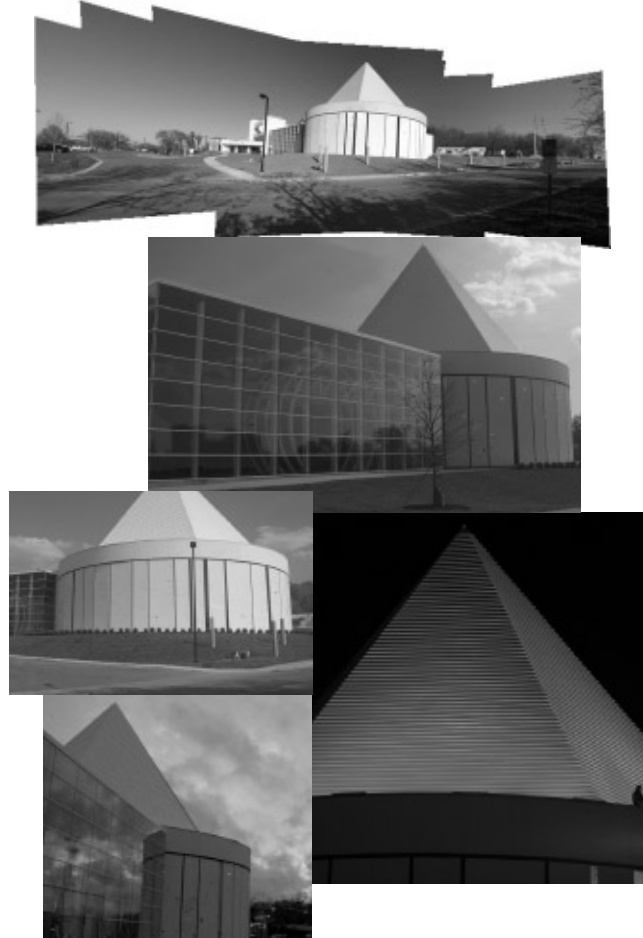
That's four evening meals, three lunches, one breakfast, breaks, buses to the observing site, and other expenses. The hotel rate is \$109 per night.

# Featured Planetarium

**Kris McCall**  
**Sudekum Planetarium and Adventure Science Center**  
**Nashville, TN**

As I write this, we are just three months from opening the first planetarium of its kind in the United States. Not only will the new Sudekum Planetarium be the largest planetarium in the fine state of Tennessee, it will be the first large planetarium in this country using both a GOTO Chiron optical-mechanical star projector seamlessly integrated with an Evans and Sutherland Digistar 3 using dual SXRD projectors.

Grand opening is June 28, 2008. It's gonna be out of this world!





# SEPA Conference 2010

## Bid for 2010 SEPA Conference

**Adam Thanz**  
**Bays Mountain Park & Planetarium**  
**Kingsport, TN**

We at Bays Mountain Park & Planetarium are proud to submit our facility's name to bid for the 2010 SEPA conference. We have reserved the dates of June 8-12, 2010 and registration should be in the \$200 range. Our commitment to you is that we will do whatever it takes to make sure that the event will be successful, educational, lots of fun, low cost, and gastronomically pleasing!

We feel that we have the perfect environment for hosting a SEPA conference. Our planetarium theater will be state-of-the-art, as well as unique. We plan for a variety of demonstrations of not only our own equipment, but also of other vendors and some planetarium programs as well. In addition, there will be space available for workshops and, of course, lots of wonderful presentations by you. Another great asset is our Park staff. They are known to get the job done and they epitomize southern hospitality. Only five minutes away is the MeadowView Conference Center. They have all the space we could ever need for presentations, banquets, and vendor area. The center also includes an exceptional resort and incredible food preparation. The N.E. Tennessee region is a delight. Situated in the heart of the Appalachian Mountains, we are immersed in cultural history and natural beauty. Read on for more details:

The Bays Mountain Planetarium is currently under a total refurbishment project and is due to complete in Fall of 2008. The heart of our theater will be a Zeiss ZKP4 optical star projector along with the Spacegate Quinto full-dome video system. We should be the second installation of this kind in the

U.S. and the first in the SEPA region. Due to its rarity in the states, it will be a unique experience for you to see and use this marvelous equipment. In addition, we will have installed an amazing 5.1 surround sound system, a new surface to our 40' dome, ECCS Advanced LED cove lighting, and 102 seats from GreyStone International. Couple all of this with our theater's history of creating our own content in-house, and you will be impressed with the results.



Bays Mountain Park is located in the north-east corner of Tennessee. We are closely surrounded by Virginia, Kentucky, and North Carolina. Bays Mountain is a city-owned nature preserve with over 3,500 acres. We have over 30 miles of hiking trails, a 44-acre lake, an observatory, and lots of animal habitats. Our animals include: wolves, bobcat, deer, river otters, birds of prey, raccoons, and a variety of reptiles, amphibians and fish. Oh, my! We have a multitude of venues that we can use for our conference. They include the Farmstead Museum: a large, log structure that houses century-old farm and home implements. The Herpetarium: a place that houses our reptiles and amphibians. The Amphitheater: a large, open-air arena surrounded by woods.

Only three miles down a neighborly road from the Park is the MeadowView Conference Center. Situated off Exit 3 on I-26, this is a world-class facility that includes many different-sized accommodations

from small meeting rooms to enormous exhibit halls that are used for boat shows and NASCAR events. All areas are carpeted, have plenty of electrical receptacles that are on separate breakers, and are fully secure. The area we will use for vendor displays is the larger of the two ballrooms. It has a ceiling height of 20 feet, has loading dock access, and can meet any need of our visiting vendors. In addition to its meeting rooms, there is the adjoining Marriott Resort with about 300 rooms available. 110 of them will be brand-new with all of the others being fully renovated. The resort is quite luxurious while still capturing the appalachian flavor of the region. Don't worry, we have locked in room rates to only \$109 a night, single to quadruple occupancy. They also provide many amenities, like an inexpensive airport shuttle from the Tri-Cities Airport (TRI) located 30 minutes away. As of 2008, the rate was \$15 each way, per person. Combine this with all transportation during the event being provided, and you won't need to rent a car for the week. The center is also home to exquisite food preparation. You will relish every meal. Other amenities include an 18-hole championship golf course, and much more.

As of this writing, all of your meals will be provided for. We feel it is important to take care of all of your needs while visiting us. We have a lot of experience in hosting a large event like the SEPA conference. We have been holding the regional star party called StarFest for 25 years. We also created and hosted the SAPS meeting last year. It was an Appalachian planetarium meeting that was very successful. We know what it takes to hold a large event.

Additional activities during the conference should include a visit to the Gray Fossil Site in nearby Gray, TN. This is a recently discovered Miocene site that is one of the premier sites in the world. Our visit will include viewing the site, the paleontological preparation area, and the brand-new facility that showcases its magnificent finds.

Your families are quite welcome to visit as there are many places of great interest nearby. Why not stay a few days before or after and enjoy the area yourself? If you fly in, you'll be arriving at the newly remodeled Tri-Cities Airport (TRI). It is 30 minutes away in Blountville, TN. Its carriers are: Delta Connection, Northwest Airlink, U.S. Airways Express, and Alle-

giant Air. The weather in early June is quite moderate with an average low of 60°F and high of 83°F.



The history of our region is quite rich. The adjoining city of Bristol is known as the birthplace of recorded country music. Related is the Carter Family Fold, a famous music venue that highlights local bluegrass, gospel, and country music. Nearby Jonesborough is the home to the International Storytelling Center. Not only that, it is the oldest town in Tennessee. Our area also has an incredible natural history. There are a number of caves that can be visited as well as the Smoky Mountains and the Appalachian Trail. We hope you choose Bays Mountain as your 2010 SEPA Conference site. From the brand-new, state-of-the-art theater, to the luxurious accommodations and the incredible region, you will truly enjoy your visit with us.

Thank you for your consideration.





# SEPA Archive 2008

**Adam Thanz**  
**Bays Mountain Planetarium**  
**Kingsport, TN**

Enclosed in this issue of your journal is a DVD that includes an archive of the year 2006 for the SEPA organization. Yes, I know it is late, but there have been many projects in my life at this time, and thus the delay. The majority of the archive covers the conference that was held in Cocoa, Florida in June, 2006. The other part includes official documents for SEPA. Aside from the usual by-laws and related documents, there are copies of the SEPA journal for the years 2006 & 2007. All documents included are in PDF or Word format so anyone can read or print the files regardless of availability of special software. A free PDF viewer is all that is needed.

When archiving the conference, I tried to record most of the presentations. If I was able to record a presentation, then the images and audio were included in a slideshow format on the DVD. If I was able to get the original Power Point file from a presenter, then those images were substituted for my video-based ones. This provided a much cleaner image. There are also some true video files on the DVD. DVD Studio Pro was used to handle the eight video tracks and sixty-five slideshows for this archive. It was quite a task!



Since there was about 18-20 hours of video recording and about 1000 still images taken by Mark Bennett, Robin Byrne, John Hare, Conrad Jung, Bobby Thompson, and myself, it was a challenge to include all the material I had collected. I think the video compression came out good due to the space available.

The DVD works like any other movie-style DVD. Use it in a DVD player or your computer with a DVD drive. The menus will guide you through the conference activities. The photos and documents are accessed by your computer through the DVD-ROM part of the disc. Make sure you don't miss these extra goodies. After many hundreds of hours of work, I hope you enjoy this DVD. If you have any comments or ideas, let me know.



*Adam at the helm!*

**A BAYS MOUNTAIN PLANETARIUM PRODUCTION**  
**THE CASE OF THE DISAPPEARING PLANET**

A radio announcement... an excited phone call... and our sly gumshoe, Skye Watcher, is on the case. Explore with Skye and discover what happened to the ex-planet Pluto as she tracks down clues that stretch back hundreds of years! Audiences will have great fun with this brand-new, unique program that looks into the changing status of planets in our Solar System.

We're proud to present this program for public leasing at an affordable price. You will receive all the digital content on DVD complete with video, soundtrack, digital still visuals, script, and much more.

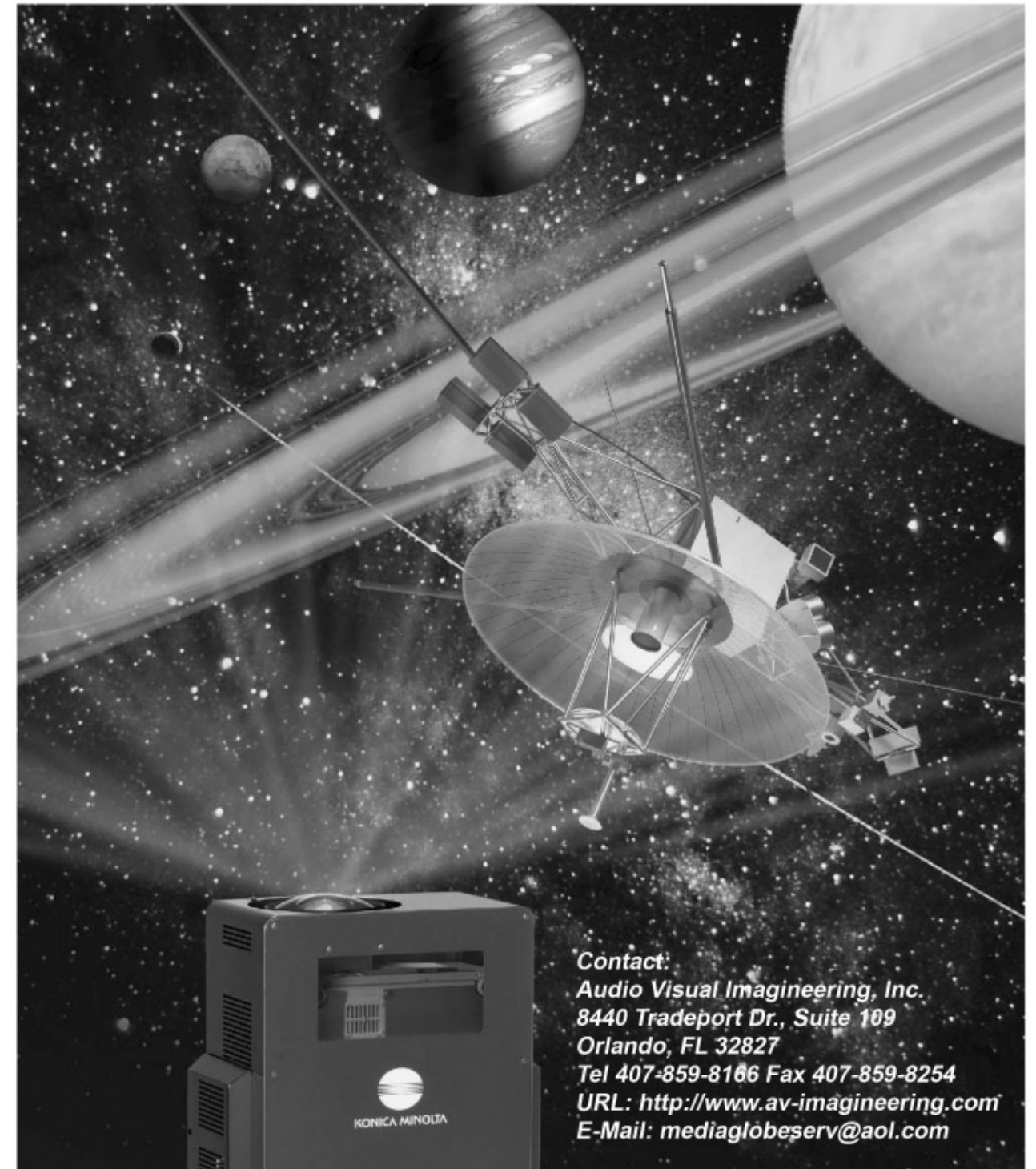
Permanent Domes: \$499  
Portable Domes: \$199

Nose out the details on our website: [www.baysmountain.com](http://www.baysmountain.com) or ring us up: (423) 229-9447



Explore the Universe with 3-D Astronomical Simulation  
A Compact and Powerful Full-Dome Projection System

## MEDIAGLOBE-II



**Contact:**  
**Audio Visual Imagineering, Inc.**  
8440 Tradeport Dr., Suite 109  
Orlando, FL 32827  
Tel 407-859-8166 Fax 407-859-8254  
URL: <http://www.av-imagineering.com>  
E-Mail: [mediaglobeserv@aol.com](mailto:mediaglobeserv@aol.com)

Minutes to learn - light years to explore!



would spend the time to work with an exhibit for 20 minutes or more. Live, interactive presentations for small groups were over an hour long and at a high level of understanding. (We attended one that was about conditioning and learning.) The exhibits themselves were different. I remember an entire set of examples of all the different types of electronic circuits. There was another on math theory. Being in Europe, exhibits on space programs were also different. They did not focus solely on the U.S. space program. They, of course, were focused on the French and E.U. programs. They also had about a 50/50 footprint for the U.S. and Russian programs. I know that not all patrons run through your museums. I also know that there are tons of great exhibits out there that challenge your visitors. It would be interesting to hear about your facility/museum. What do you do to challenge the interest and intelligence of your patrons? How do you fight mediocrity? Is there something you do in your theaters to add something special to aid in understanding? Write about it and send it in to James to include in the journal. It could be something to send to Betty for her small domes article. Remember, there are no small domes out there, only small minds (regardless of dome size). Stretch the minds of those that visit you.

As you saw in the previous journal, there were two very worthy candidates who put their names in the hat to run for SEPA president. I want to thank both April Whitt and Kelly Herbst for considering this position. I would also like to thank John Hare and Mickey Jo Sorrell for putting in their names to continue their excellent work for SEPA as IPS rep. and Secretary/Treasurer, respectively. If anyone else would like to put their names in for any of these positions, please do and contact someone from Council. You have until the pre-business meeting at the conference in Lafayette, LA held in July, 2008.

I would like to thank Kelly Herbst for heading up the 2010 conference search. I know that she has worked hard in finding a facility that is desiring to put in a bid to host the 2010 conference. She has inquired into many facilities so far and will continue to do so. Again, if you desire putting in your facility for a bid, please contact someone in Council. You have until the pre-business meeting to do so.

The 2008 conference is soon approaching. There

is information about this on SEPA's website, [www.sepadomes.org](http://www.sepadomes.org). It is being held on July 22-26, 2008 in Lafayette, LA. We normally hold our conference in June, but since IPS is in our usual date slot, SEPA has agreed to adjust our dates to not conflict. I personally think that the 2008 SEPA conference is going to be great. Dave Hostetter and his crew have been working hard on creating a schedule of events that is interesting, educational, and lots of fun. There will be plenty of presentations along with some special activities. And, of course, great food! The price of registration and hotel stay will also be very palatable for most of your budgets. I hope to see all of you there!

The story continues on the progress of our log home construction. As I write this, there has been noticeable progress. The basement has been framed in, the trusses are in place, the subfloor is in, the logs have been stacked, and the beams over the first floor are up! It's starting to look like a house now and we're very excited. Because we're astronomers, we made sure we have an observing area picked out so we can see a little below Polaris to polar align our telescopes. (The most obscured part of our sky is to the north.) We also are continuing to look for a small, free, working star projector for the second story part of our turret that will double as a planetarium. Since we have our college students over to observe, we wanted to provide a better environment for this.

That is all for now. If you have anything to share, please send it to James to include in the journal. Photos are also a great asset for the journal. If you can, please attend the conference in Lafayette, LA. You'll be surprised as to how much you can learn. It will be lots of fun and is always great to meet up with others like yourself. See you in Louisiana!



Work continues on our home. The roof and loft area are not yet installed. The turret is on the left side of the image.

found the motor you'll need to get to the wires for the motor and liberate them from the circuit board. Some motors may have a thin ribbon soldered directly to it. At this point you can splice into the wires to the motor or you can de-solder the old leads and solder new leads to it. Soldering new leads is the better way but may require a little more disassembly of the drive to be able to get into it.



Figure 2

Next you will need to take the salvaged power connector you got from a pc power supply and plug it into the power connector on the drive. Inside the drive the connector will appear as four thick metal pins that go straight to the circuit board. See figure 2, right side of image. There are four thick metal pins in a row soldered to the circuit board. Take an X-acto knife, Dremel tool, or other cutting tool and cut the leads on the circuit board that go to where the power connector pins are soldered. You may have to check both sides of the board as multi-sided boards are common. This is where you will now be soldering the leads from the motor. Its important to cut these traces if not you will surely get a nice cloud of stinky burnt electronics smoke!

Solder the motor leads to the circuit board side of the connector. Use the red/black pair on every drive you modify and this will keep things "standardized" so you can mod several drives and have them on hand for quick swap out. You should now be able to hook a 5 or 6 volt dc supply to the red and black leads and run the tray in and out by flipping the wires around. Keep in mind that there is no stop on the transport. Once it hits the end of its travel, if you continue to

apply power, the motor continues to try to run.

If you're using the tray mechanism from a home cd/dvd player you'll need to remove the mechanism from the unit. This isn't a task for someone that has never worked on home electronics as it requires quite a bit of disassembly. The loading tray on some units may have a decorative bezel that has to be removed before you can liberate the mechanism from the faceplate of the player. Once the mechanism is out, the task is fairly easy. Locate the drawer motor and hook a pair of wires to it. Using a 5 or 6 volt supply you should be able to run the tray in and out by flipping the polarity.

The loading trays have big holes in them where the laser used to shine through and the spin motor would contact the disc. The holes need to be covered. If you're not dealing with a lot of heat you can simply glue cardboard cut to size on the tray. If heat might be an issue you can use thin aluminum or brass stock. You need to make sure that your cover doesn't interfere with the loading tray operation. The tray will have an indentation for the disc, use it to your advantage. For adhesive I have used RTV silicone with no issues. Just be sure to clean the surfaces to be glued with alcohol and make sure they are nice and dry before gluing.

Next you will need to extend the trays on both drives and figure out how to mount them on a piece of wood or sheet metal. The idea is to mount both mechanisms so that the trays overlap and both cover the same area when fully extended. You will need to offset the two units so that the trays will overlap and not collide into each other. See figure 3. The reason for using two units is redundancy. If one unit fails, your shutter will still work so you can get through your show until you can fix the second unit.

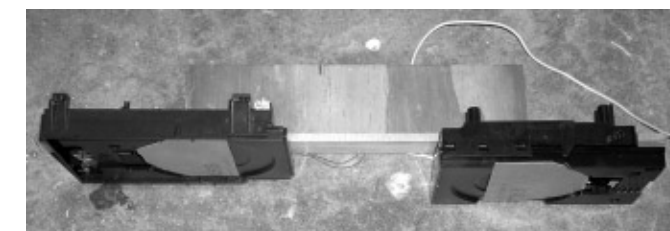


Figure 3

Next comes wiring. You will need to run wires from your trays to the switch and to the power supply. You



*Silent Auction (Continued from page 9)*

In the past we have offered books, games, artwork, crafts (including a hand tooled, astronomy themed leather belt), musical CDs, and even an actual piece of space memorabilia. So think it over and let me know if you plan to bring something along to the conference in Lafayette. Knowing what to expect ahead of time will help me plan the space requirements. Also, let me know if you would like to help out on the SEPA Scholarship committee.

I have provided a form for you to use in describing the item(s) you bring for auction and for my records. If you have an item you want to donate but cannot make it to the conference, then send it to me. If it is not too big for my car, I will try to get it there. As usual the auction will take place in the mingling time before the banquet. Thanks again for your participation as an item provider, bidder, raffle ticket buyer, or all three. I hope to see you in Lafayette.

**SEPA SILENT AUCTION ITEM**

If you cannot bring the item, draw a picture or paste a photo here (if you think it will help with the sale.)

Item:

---

---

---

Description:

---

---

---

---

---

Offered by (Your name):

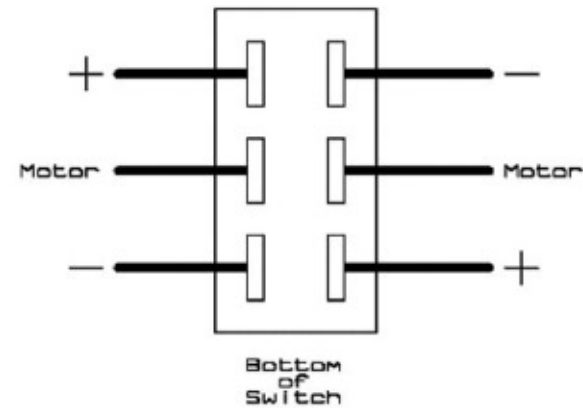
---

Preferred mode of contact information (Phone, Mail, Email, Fax, Telegram, Pony Express, or other)

---

*SEPA Circuits (Continued from page 17)*

will need a momentary DPDT switch. Wire the switch as per diagram on figure 4.



The wiring from the switch will then go to the power supply. The power supply can be an old toy train DC supply or even a "wall wort" type plug in. You are ideally looking for a supply with 1 amp or more output at about 6v DC. It must be DC and about 6v. 12v is too much and will quickly kill the little motors so don't try it.

Once all assembled you should be able to plug the power supply in and flip the switch and run the shutter doors in and out. Next step is to mount your shutter in front of your projector and make your install permanent. Feel free to extend the wires as needed. You may have to bump the voltage up a little to compensate for long cable runs.

Have fun!

*Small Talk (Continued from page 6)*

**Has your planetarium ever attacked you?** Once when I was in Nebraska, the old A3P planetarium console gave me a shock. Recently, I was pulling a ladder out to work on the star projector and pulled the wires from an old talent meteor projector and it bonked me on the head big time. Got a cut and scared the nurse and the cafeteria ladies when I went to get ice. Lucky that the nurse was there, since we share her with other schools and she isn't always here. Got a nice bruise and cut, but luckily no stitches. Hmmm. Never considered planetarium work dangerous before. Have you ever had a mishap in the dome to share with Small Talk readers?

*(Continued on page 19)*

*Small Talk (Continued from page 18)*

It was the third year of the "Globe at Night" program. Did you or anyone else participate? Has light pollution gotten worse or better in your area? I had students participated for the third year. This year they could see their results immediately after they posted them. Go here for details and to check out the maps yourself at <http://www.globe.gov/GaN/analyze.html>

This school year we were graced with two total lunar eclipses. The first was way back in August 2008 when it occurred the day after school started. The second one was better timed for the people on the east coast. Even so, my buddy on



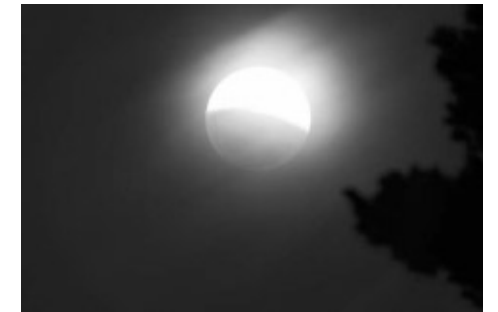
GeoGraphics Imaging & Consulting

- Custom Animations Available
- Large Variety of Astronomical Animations
- Special Effect Animation Disks (Starting at \$695.00)
- Featuring the talents of Joe Tucciarone

Traditional Star Shows & Content      Full Dome Star Shows & Content

www.geographicsimaging.com      7803 25th Ave W. Bradenton, FL 34209  
Ph (941) 920-0246 Fax (941) 794-6877

the west coast, Conrad Jung from Chabot Observatory, took some photos and I will share them with you here.



Quick, what is the largest optical telescope on Earth? Could it be the new binocular telescope in Arizona? Learn more about it by going here: <http://www.npr.org/templates/story/story.php?storyId=88241050>

The new computer has turned my world of deafness, into sound, since it is the first one I ever had having sound. So do you use podcasts or other internet sound in your programs? Tell me how. Share your favorite pod or vodcasts on astronomy or planetaria with Small Talk.

Remember this is supposed to be a dialog. Do you have any issues of interest to small planetaria (Small size, budget, staff, etc)? This is your forum. Send me things to share. Otherwise it is just me blabbering on incoherently.



# News From SEPA States

## ALABAMA

contact: Mitzi Adams  
Wernher von Braun Planetarium  
Huntsville, AL  
mitzi.adams@nasa.gov



### The Von Braun Astronomical Society Huntsville, AL

Mitzi Adams reports: The Von Braun Astronomical Society (VBAS) now does four programs per month; of these, three are repeated (e.g., Exploring Mars will repeat three times in April) with the fourth reserved for special guests who discuss more technical topics (e.g., Black Holes). Society programs are on Saturday evenings and begin at 7:30 p.m. (<http://vbas.org>). On April 19, volunteers from the Society will be present at an annual Earthday event, celebrated at Huntsville's Hays Nature Preserve (<http://www.ci.huntsville.al.us/recreation/hayesnature/>). Members will take H-alpha telescopes for solar observing, various astronomy materials, and will have a display on Light Pollution (International Dark-Sky Association <http://www.darksky.org>).

### Planetarium University of North Alabama

Mel Blake reports: I arrived as new director on Jan 4th and I have been trying to start a renewal of the planetarium and observatory. I succeeded in obtaining funds for a new telescope for the observatory and we hope it will arrive over the summer. We have started twice weekly tours for the public including a planetarium show and observing session and a

"Space Mission of the Month" with cooperation from the folks at NASA. This month we discuss Chandra, next month SOHO and in May, hopefully GLAST, which will launch then. We did a lunar eclipse program in February, but only saw the last half of the eclipse. We now have a new website, which I built from scratch, <http://www2.una.edu/planetarium>. Future plans include a celebration of Astronomy Day on May 10, a first time event for us. We will offer planetarium shows all morning/afternoon, solar observing with my H-alpha telescope, and stellar observing in the evening. A special event, also in the evening, will be a visit from Dr. Robert Preece, Principal Investigator for the GLAST Burst Monitor.

I am applying for grants to renew our equipment, observatory dome, to obtain light boxes, fill our empty display cases and to acquire some interactive kiosks for people waiting for shows. If anyone has suggestions for these items, I am happy to get advice. Before my arrival in January, we obtained a new control system for the A3P Spitz. If anyone wants the old controller or knows someone who might, let me know and we can arrange something.

Anyhow, there's lots of work ahead to make us a first-rate small planetarium.

## FLORIDA

contact: George Fleenor  
GeoGraphics Imaging and  
Consulting, Bradenton, FL  
Jetson1959@aol.com



### GeoGraphics Imaging and Consulting Bradenton, FL

George Fleenor reports: The cover is an image I took for fun while I was visiting a friend's vacation home at the Arizona Sky Village.

Details:

Name: *Horse with No Name* (Get it? I was in the desert. Sorry, I couldn't resist.)

Nikon D-300, ISO 3200, 19 mm f - 3.5, 60 secs

Photo taken from inside the living room looking over the coffee table (with horse statue) towards the Chiricahua Mountains at the Arizona Sky Village near Portal, AZ. The image could have easily been named the "Dog and Horse." Can you see why? I was laying on the couch one night, looking out the picture window, when the photograph idea hit me. I also made a pan out of the 3 windows stitched together the way it looked from inside the room (without the horse - of course). This is exactly how the sky looked from the living room! The house is for rent for those who wish to see a truly spectacular sky and star field. Call or e-mail me for more info if needed.

### Schoolhouse Children's Museum & Learning Center Boynton Beach, FL

Erich Landstrom reports: Thanks to a \$2500 donation from Hunter's Run, the Schoolhouse Children's Museum will inspire curiosity and imagination in a new generation of skygazers through the lens of our new Celestron Professional Computerized CPC 800 XLT telescope. The amateur astronomer will be using a top-end telescope with GPS tracking, Star-Bright opticals, and a remote control to over 40,000 celestial objects.

The grand unveiling of this magnificent magnifier will be at sunset on Saturday, April 19th during the Museum's Earth Day celebration. The donation is a continuation of support Hunter's Run has given to the museum's environmental education projects. In 2005, the community gave money to fund an annual Pioneer Demonstration Garden, a living exhibit that gives children and families the experience of gardening 100 years ago.

Free evening astronomy programs will continue once a month throughout the summer, with opportunities to use the telescope as well as age-appropriate activities and demonstrations for ages 4 through 12. Museum director of operations Kelsey Harris and NASA certified instructor Erich Landstrom will lead educational activities along with telescope viewings, storytelling, and crafts for little ones. The NASA Jet Propulsion Laboratory Solar System Educator Program (SSEP) is a nationwide network of master teachers who lead educator workshops on

incorporating NASA materials with state standards-aligned, hands-on, and inquiry-based into classroom activities.

Children can turn this scope to other worlds and see amazing detail on the lunar landscape and storms on Jupiter cloud tops; see the Galilean satellites and the Cassini's Division in the rings of Saturn, and resolve details on the surface of Mars and the Sun. Even distant Uranus and Neptune are within their reach. Better still, observers will be able to take digital still pictures with the StarShoot Solar System Color Imager. The museum will then email their picture from outer space to their home computer.

### Buehler Planetarium Broward Community College Davie, FL

Susan J. Barnett reports: The Buehler Planetarium & Observatory is running public shows four days a week. The weekend shows and monthly specials include *Magic Sky*, *The New Cosmos*, *4000 Years and Home*, *Japan: Reflections in Time*, and *Celestial Navigation*.

We continue to rotate shows on Wednesdays, and these shows include *The People*, *To Worlds Unknown*, *2061: Secrets of Mars*, *Egyptian Skylore*, *Endless Horizon* and *Solar Spectacular*.

The Buehler Observatory has viewing four times a week. It has free public observing Wednesday, Friday, and Saturday evenings. In addition, we observe the Sun on Wednesday afternoons. We usually have one telescope set up to view sunspots, and watch flares through a Hydrogen-Alpha filter on another.

### Planetarium Calusa Nature Center Fort Myers, FL

Carole Holmberg reports: Joseph Jules LaVigne, 44, passed away on December 13, 2007 in Montana due to complications from sleep apnea. Joe worked at the Calusa Nature Center Planetarium in various capacities from 1990 - 1998. He was active in local astronomy, an amateur astronomer for 31 years and a telescope maker for 28 of them. He was also a

former present of both the Naples Astronomer Club and the Southwest Florida Astronomical Society, and writer/narrator/producer of Skywatch, a weekly radio series. A memorial gathering was held for Joe at the Calusa Nature Center Planetarium on February 28th. For further information about Joe, or to share your memories, please visit his memorial website at [www.JoeLavigne.net].

ongoing daily school and scout shows.

Dr. Martha Haynes of Cornell University gave an exciting presentation on ALFALFA: The Hunt for Starless Galaxies in January. Using the large radio telescope at Arecibo, she and other astronomers and students search for “dark” galaxies consisting mostly of dark matter and some hydrogen. You can download a podcast of her presentation by visiting our physics web site at: <http://cost.georgiasouthern.edu/physics/colloquia.html>

In February, Cory Rosenberger, Planetarium Assistant, explored astronomy fact vs fiction in popular science fiction movies. The public was also treated to a total lunar eclipse outdoors following the presentations and star shows.

March brought us Dr. David Helfand of Columbia University presenting “How Superman Saw the Stars” on x-ray astronomy. Orbiting x-ray telescopes have revealed the hottest and most violent regions of the universe. Visit our planetarium web site to see podcasts of all our public speakers in the future at <http://cost.georgiasouthern.edu/planetarium/index.html>

We are looking forward to our next huge event for the public on April 26, 5 - 9 pm, our award winning Astronomy and Space Day 2008. There will be star shows, *The Planets* SEPA show, every hour, as well as many hands-on astronomy activities and displays. Outdoors, there will be solar viewing and after dark, telescopic viewing of Saturn and more thanks to members of the Statesboro Astronomy Club and Oglethorpe Astronomical Association.

In May we will have our planetarium doors open in celebration and live NASA TV viewing of the Mars Phoenix landing with activities and more. During the summer, we will be giving science and astronomy workshops for students as well as our continuing educational shows for groups. Many, many thanks to Chris Lowder, Cory Rosenberger, and planetarium interns Blanton and Jake for their hard work in keeping the planetarium shows and events up and running while I have been out having both knees replaced and working from home. I can't wait to get back with my new “bionic” knees and to be able to attend SEPA conferences again!

**LOUISIANA**  
contact: Jon Elvert  
Pennington Planetarium  
Baton Rouge, LA  
[jelvert@lasm.org](mailto:jelvert@lasm.org)



**Irene W. Pennington Planetarium  
La. Art & Science Museum  
Baton Rouge, LA**

Jon Elvert reports: In early January we closed our theater for the installation of a Sony SXR full-dome video system from Sky-Skan, which replaces a Barco CRT system. The grand re-opening was held on 18 January with a series of DS2 and Digital Universe demonstrations followed by a reception and a preview of our new public shows *Extreme Planets* and an in-house production - *Digital Universe* - a live tour de force through the universe. We are keeping our Minolta Infinium star projector and will continue to integrate this instrument into our programming.

**Lafayette Planetarium  
Lafayette Natural History Museum  
Lafayette, LA**

Dave Hostetter reports: Busy getting ready for SEPA 2008! Check out the info earlier in this issue.

In Lafayette our autumn program was *Mars Update*, the 15 minute segment from Sudukum combined with a live segment about constellations and the 2007 opposition of Mars. In January we switched over to *Discover the Night Sky*, a constellation show that includes some now obsolete constellations from the late 18th Century to be shown in conjunction with our Museum-wide exhibition celebrating the life of the Marquis de Lafayette. In early February we started the SEPA *The Planets* show.

For several years we have set up telescopes at a local Christmas light festival, showing celestial objects and talking about light pollution. This past season, we arrived to discover that several temporary halogen lights had been installed pointing directly at our

telescopes! Vega was one of the 5 stars (by actual count!) we could see early in the evening, and people got a look at the nearby “double double” in Lyra. Fortunately Mars rose just before the “double double” set behind buildings. Overall, about 350 people looked through our telescopes in about 2 1/2 hours -- a good night despite the lights.

Planning continues for the SEPA conference in July and we hope to see you there!

**St. Charles Parish Library Planetarium  
St. Charles Parish Library  
Luling, LA**

Gary Meibaum reports: The Saint Charles Parish Library Planetarium in Luling, LA is happy to announce the installation of its new MEDIAGLOBE II projector. Yes we were one of the first to embrace the MG I back in '03, but we were so impressed with the capabilities of the MG II that we chose to upgrade. This means that we have a perfectly good MG I for sale. It is in excellent working order and comes with the entire compliment of standard shows from Konica Minolta. Contact me for further information. 985-785-8471. We are presently running *Black Holes* from Clark and are very happy with the quality of this show. The *Seasonal Stargazing* shorts from Loch Ness Productions are a work-horse for our constellation shows. For this summer, we plan to bring back a classic Hansen show, *Dawn of Astronomy* for a short run. It will be interesting to see how well the material connects with today's planetarium visitor. Please note that my new email at the library has been changed to: [gary.meibaum@stcharles.lib.la.us](mailto:gary.meibaum@stcharles.lib.la.us)

**Dayna and Ronald L. Sawyer Space Dome Planetarium  
Sci-Port Discovery Center  
Shreveport, LA**

Greg Andrews reports: We've had some wonderful events take place at the Dayna and Ronald L. Sawyer Space Dome Planetarium. In January Sci-Port hosted a Madden '08 game tournament in the Space Dome. We have an open pit area so we set up chairs, tables, and big-screen TVs and the con-

**GEORGIA**  
contact: David Dundee  
Fernbank Science Center  
Atlanta, GA  
[david.dundee@fernbank.edu](mailto:david.dundee@fernbank.edu)



**Fernbank Science Center Planetarium  
Atlanta, GA**

David Dundee reports: The theater starts its 41st year. We are currently playing *Ring World 2* and for children *Sky Dreams*.

After 30 years at Fernbank, David Dundee retires from Fernbank and is taking on a new position at TELLUS: Northwest Georgia Museum of Science. He will be taking charge of the planetarium, observatory, and hall of transportation. Museum is under construction and will open this fall. The planetarium will be a 40 foot dome 120 seat fully digital facility.

**Georgia Southern Planetarium  
Statesboro, Georgia**

Becky Lowder reports: This has been an incredibly busy and exciting time for our university planetarium. After our last December 07 shows and final exams, our planetarium underwent a huge renovation. Staff and students of the physics department volunteered over the holiday break before classes started in January to build our own new seating. The original hard fiberglass “harvest gold” seats were replaced with comfortable bench seating with automated reclining backs. I'll submit an article on our entire project with photos in the next issue of *Southern Skies*. Our spring semester brought many wonderful speakers for our public events, as well as our




testants played over a course of two Saturdays. For the final game, we turned on our LCD projector, and wow! Even on a 40-ft dome, the graphics were outstanding, and the figures were huge.

February brought with it Black History Month and the significance of the Big Dipper in *Follow the Drinking Gourd* song was discussed even though there are some ongoing debates on the translation of the song.

March means Spring Break. Need we say anymore! Additionally, I participated in Astronomy From the Ground Up for their mid-February to mid-March session. It was really informative and provided a host of activities I can share with staff, school groups, and the general public. For those of you looking for Astronomy activities, AFGU is a great workshop to participate in.

One of our missions this year is to promote Astronomy, and the next couple of months, April and May at the time of this article, are providing us wonderful ways to do that. We have Star Parties hosted by either Sci-Port or our local Astronomy club; we have National Astronomy Day; we have a Mars Polar Lander Landing Party being planned out; and we have a guest speaker coming into town. Astronaut Duane "Digger" Carey will be speaking on April 11th at Sci-Port! To top it all off, we began developing a new category of programs to offer to our school groups for the next school year, and the category is...Astronomy!

**NORTH CAROLINA** 

contact: Patsy Wilson  
Woodson Planetarium, Salisbury, NC  
wilsonpk@rss.k12.nc.us

**Morehead Planetarium and Science Center  
University of North Carolina  
Chapel Hill, NC**

Mickey Jo Sorrell reports: We are excited as we move toward our long-awaited planetarium renovation,

now slated to begin January 2009. The newly-renovated star theater will include a Sky-Skan definitive full-dome digital system complete with Sony SXR-D projectors and a 5.1 surround sound system under a new 63' diameter AstroTec dome. Current plans are to reopen in January 2010. Meanwhile, the Morehead production team is extremely busy creating new full-dome shows for the renovated theater.

We are also preparing for the renovation of the rest of the building which should follow in a few years. To that end we have completed an interpretive master plan and we are working with architects to achieve a building that serves diverse tenants including MPSC, UNC Visitors' Center, and the Morehead-Cain Foundation. Meanwhile school groups and visitors continue to find delight in our rich programming, from astronomy to archaeology.

MPSC will participate again this year in the UNC Earth Week activities with a special free program entitled *Our Vanishing Night*. The planetarium presentation, revealing how light pollution robs us of our heritage of a natural dark sky, will be followed by walking tours of campus and downtown to look at the good, bad, and ugly of our current lighting installations. Participants can return to Morehead for stargazing around the large sundial on our front lawn.

The newest exhibit at MPSC is *Ancient Carolinians*, an interactive exhibit focusing on the earliest known settlement in North Carolina, 12,000 years ago. Visitors can learn how modern day archaeologists reveal the stories hidden in these artifacts found on the banks of the Yadkin River.

**Millholland Planetarium  
Catawba Science Center  
Hickory, NC**

Curt Spivey reports: The Millholland Planetarium continues its remarkable success! I am delighted to report that as of February 6, we have already surpassed 10,000 visitors! And that is just the walkup, regularly scheduled general public planetarium shows. If you count the hoards of school

kids and our evening laser shows, we are well in excess of 25,000 people who have been to our 65 seat theater! So, does the Sun still shine outside? I haven't seen the real one in a while...

As of this writing, we have just added *The Secret of the Cardboard Rocket* to our public show schedule. It joins *SETI*, *Black Holes: the Other Side of Infinity*, *Enchanted Reef*, and our current night sky show *Catawba Sky* in our public lineup. Needless to say, our schedule is rather convoluted until June 13, when *Black Holes* and *Reef* go away and the excellent *Astronaut* premieres. That's due to promises made to sponsors prior to our opening - after June we'll settle down into a nice four show rotation.

Speaking of shows, we are getting three new productions for the 2008/2009 fiscal year: *Molecularium: Riding Snowflakes*, *Infinity Express*, and the terrific *Heart of the Sun*.

Our laser shows continue to be wildly popular. Our once-a-month plan seems to be the perfect balance between supply and demand. We have picked up a media sponsor for next year's entire run, too. Free ads! Yea!

Congrats to Roger Joyner and the folks at the Natural Science Center of Greensboro who have joined our MediaGlobe II family! I'm glad to see our community of these great systems continue to grow.

Lastly, in other big news, we have confirmed that Dr. Seth Shostack, head of the SETI Institute, consultant on our SETI show and the inventor of the Electric Pickle will be here Saturday, August 2! If you are in the area, Seth is an EXCELLENT speaker - hope you can attend. Contact me if you'd like more details. See you in Louisiana!

**PARI StarLab  
Pisgah Astronomical Research Institute  
Rosman, NC**

Beth Harris reports that she, Christi Whitworth and Mike Castelaz facilitated a School of Galactic Radio Astronomy (SGRA) workshop at the Schiele Museum in November and one at the North Car-

olina Museum of Natural Science in Raleigh in February. There was also an overnight SGRA workshop at PARI in December. More recently they held an advanced workshop at PARI where participants learned to make light curves for binary stars from images taken on SkyNet. They are preparing to do a set of workshops for ROBOTS centered on the sun - both how it works and ways to capture and use its energy.

Bob Hayward says he and Christi are in the midst of preliminary planning for the Carolina Association of Planetarium Educators (CAPE) meeting August 25-26 at PARI. Stealing (with permission, of course) an idea from Adam Thanz who organized the first Southern Appalachian Planetarium Social (SAPS) meeting at Bays Mountain last year, they want it known that all planetarians, not just those in the Carolinas, are welcome. The meeting will include reports from both the IPS and SEPA meetings so this will be particularly valuable for planetarians who did not make it to either or both of those. Sponsors of the CAPE meeting are Learning Technologies, Inc., and Kensington House Ltd. (Jim and Shirley Smith) who not only are providing financial support but also will be at the meeting with all the latest LTI goodies. The meeting will include at least one of the contesting Cosmic Lesson Teams from LTI's "Digital STARLAB" contest. Information on the CAPE meeting will be mailed in early July but go ahead and mark August 25-26 on your calendars for a great time under dark skies in the middle of the Pisgah National Forest. For more information contact Christi cwhitworth@pari.edu or Bob rhayward@pari.edu, 828-877-6348, www.pari.edu.

**Margaret C. Woodson Planetarium  
Horizons Unlimited, Rowan-Salisbury Schools  
Salisbury, NC**

Patsy Wilson reports: We are nearly finished with our first grade season having served all first grade students in our county and many from surrounding areas. The ever-popular, *Friendly Stars* from Bays Mountain Planetarium is highly engaging and greatly enjoyed by this age student.


In mid-March we sponsored our second, major

public opening of the school year, Earthstock 2008. It was an interesting day with a wide array of events. We had student inventors, a day-old calf (inside the building!!), snakes, organic milk, baby ducks, recycled products and more. The laser show, *Legends of the Night Sky: Orion* was presented to two full-capacity audiences. Later that evening, we premiered Pink Floyd's *The Wall*.

We are finally at full staff and are ready to gear up for the next school year. We plan to continue the regular third Saturday public openings throughout the summer. This is really the only opportunity for us to present astronomy material to the public. It is a great time to educate and update the community about the latest missions and discoveries.

One of the special groups we serve regularly is Timber Ridge Treatment Center, a wilderness-type program for troubled teenage boys. In mid-April, Patsy Wilson will be recognized at their annual open house with a "Friend of the Camp" citation.

**SOUTH CAROLINA**  
 contact: Glenn Dantzler  
 Settlemyre Planetarium, Rock Hill, SC  
 dantzler@chmuseums.org



**DuPont Planetarium  
 Ruth Patrick Science Ed. Ctr. , USC  
 Aiken, SC**

News from the DuPont Planetarium: The DuPont Planetarium at the Ruth Patrick Science Education Center (RPSEC) on the campus of the University of South Carolina Aiken had a very successful viewing on February 20th of the last total lunar eclipse until 2010. We did some free advertising and caught the attention of the local media. A local TV station parked outside of our planetarium and spent the evening doing live television interviews with people in attendance.

For the past year, we have been working on our newest production, *To the Moon and Beyond*. The main theme of the show is space exploration through

the personal experiences of three generations of a family. After an introduction about the space race and some of the early accomplishments of the U.S. and the U.S.S.R., the show joins a young girl, Carol, and her dad as they witness the launch, lunar landing and safe return of the Apollo 11 mission. The narrator describes some of the interesting experiences and the scientific advances gained through the Apollo program. The audience then goes forward in time to the present day where they join a middle school class that is about to have a guest speaker. The mother of the teacher is Carol who is now a NASA scientist. Dr. Bradford discusses her role with NASA and plans for future missions to the Moon and beyond. At the end of the show, the audience goes forward in time to a future date where a young woman sends a message back to Earth from her outpost on Mars. She sends the message to her mother, Dr. Carol Bradford.

In March, the planetarium presented, *Mission to Mars*, which is a local production. This show follows a standard, live, night sky presentation. The taped show begins as the night sky presentation ends with a question from an "audience member." *Mission to Mars* continues as an interactive discussion between the "audience member" and the "planetarium presenter." The show presents information about a number of missions to Mars including information about the rovers. We also presented *Journey Into the Living Cell* from the Buhl Planetarium and Carnegie Science Center.

During the month of April, the public had the opportunity to view two different shows at the DuPont Planetarium. *In My Backyard* from the Calgary Science Centre and *Cruising Through the Constellations*, one of our own productions, were available. These same shows were also available for visiting school groups.

In May, we will debut our new production, *To the Moon and Beyond*. We will have a quiet opening on the first weekend of May to work out any "kinks" in the show. On May 9th, we will have a VIP showing for our two sponsors. Washington Savannah River Company, which operates our local Department of Energy Nuclear Plant was one of our financial sponsors. We also wrote a proposal and received a grant from the Porter Fleming Foundation. This is

a local foundation that supports the arts, humanities and education in the Central Savannah River Area of South Carolina and Georgia.

We will celebrate National Astronomy Day on May 10 with a more visible and advertised public opening of the new planetarium show. We have partnered with a local radio station that will have a live broadcast from our location. Our Earth and Sky Night will feature a variety of telescopes made available by the members of the Astronomy Club of Augusta. We will also feature a robotics demonstration from the nationally competitive M'Aiken Magic Robotics team. The team is composed of students from various high schools in Aiken County.

**TENNESSEE**  
 contact: Kris McCall  
 Sudekum Planetarium  
 Nashville, TN  
 krismcCall@adventuresci.com



**Bays Mountain Planetarium  
 Kingsport, TN**

Adam Thanz reports: Greetings from East Tennessee! Jason and I are very busy getting the theater ready for our major refurbishment. We closed our doors back at the beginning of March, 2008. We have spent many a day and night removing all of the equipment, including the seats, booths, and old automation wiring. It's amazing how things collect in 37 years! When you read this, we should be underway in our project tearing down walls, putting up new ones, installing a new, sloped floor, and lots of other dirty work. Then, we'll be installing a 5.1 surround sound system, new surface for our dome, carpeting, Zeiss ZKP4 & Quinto, ECCS LED advanced cove lighting, seats from GreyStone, and other miscellaneous lighting. If all goes well with our timeline, we'll be the second facility in the U.S. to have the Zeiss ZKP4 & Quinto and the first in the SEPA region!

We are also proud to put out a bid for the 2010 con-

ference. We are working hard on a great schedule that will highlight our very special region, its history, and our spectacular, new facility. Please see our bid in this journal. Voting will take place at the 2008 conference in Lafayette, LA.

Jason Dorfman is the chair of our 2008 StarFest event and he is doing a great job. StarFest is a regional star party that attracts amateur astronomers and planetarians throughout the southeast U.S. It is our silver anniversary this year. Yes, 25 years of StarFest at Bays Mountain. As such, Jason is pulling out the stops and has increased the dates to include Friday night as well. Put it on your calendars, October 24-26, 2008. Registration is by prepayment only. Registration forms will be sent out in August. Contact Jason if you want to be on the mailing list. It will be great fun and very low cost since it includes everything for the weekend.

**The Warp Factor Five Planetarium at Heritage High School, Blount County School System  
 Maryville, TN**

Thomas R. Webber reports: The Heritage Planetarium just celebrated its first anniversary after being closed undergoing an eight-month renovation. The facility upgraded to a Konica Minolta Mediaglobe I and II and a custom-made Skylase laser projection system. In addition, seating was changed from circular to unidirectional and an additional light block was added at the main entrance.

We now have five programs that are available to schools visiting on field trips, from *Secret of the Cardboard Rocket* from the Clark Planetarium to the National Space Centre's *Astronaut*. All programs include a survey of the current night sky. The response to our upgrades has been very positive, particularly to the animation capabilities during live star shows.

During the past year we have had over 25,000 visitors - not bad for a 67-seat theater! We focus primarily on schools, but we do offer public shows on Friday nights, rotating between planetarium shows, laser shows, and our newest addition, animated music. One of the pioneering efforts we are work-



ing on is the merging of laser shows with all-dome animation and cove effects. Such an endeavor makes laser shows more of an immersive and exciting experience.

The Heritage Planetarium will be hosting a mini-conference on Saturday, May 31st. Several shows will be previewed and food will be provided. If you are interested in attending, please contact Tom Webber at (865) 984-8548 or webbert@blountk12.org.

**Planetarium  
Craigmont High School  
Memphis, TN**

Kris McCall reports: Longtime planetarium director at Craigmont High School in Memphis, Tennessee, Duncan Teague retired on February 29, 2008. Duncan served as President of the Southeastern Planetarium Association in the late 1970s. He also served as Treasurer of SEPA for many years as well as edited and published the SEPA Journal *Southern Skies*.

**Sharpe Planetarium  
Pink Palace Museum  
Memphis, TN**

Dave Maness reports: I have moved from Virginia to Memphis and I'm in my second month of being gainfully employed. I am a full time planetarian again! As the new Supervisor of the Sharpe Planetarium, I am tasked with bringing it back to life, after 3 years or more of very limited operation. I am learning the ropes, meeting a lot of nice coworkers, and putting together a slate of school programs that begin on April 1. No fooling! Groups can see them through May 23.

I only have Saturday staff, at this point. Hopefully the city will see fit to let us start the hiring process to fill at least one new full time position; probably someone who has a strong technical background. Look for a job announcement at some point. Since this is a municipal operation, I don't know when I will get approval to begin the search. One of the primary requirements is that the person hired must live in Memphis.

I am trying to arrange it with my weekend staff to cover programs for me, the week of the SEPA conference. Dave Hostetter has already contacted me to see if we want to do the silent auction again. I certainly want to. So folks should start looking around for things to bring or send for the auction. Hopefully you will see a page in the Journal with the standard Auction Items form.

Former Sharpe staff Roy Foppiano and Edwin Faughn have been a big help. They have also made me feel welcome to the area. Just today (March 29) Edwin Faughn and Roy Brister introduced me to the Coon Creek fossil outcrop. Anyone interested in geology should definitely visit this site. I tripled my personal fossil collection in just an hour of digging.

Lastly I want to thank all of you who helped me during my period of under employment. There are too many of you to list. Even if it was just a few words of encouragement, which you probably didn't think was much. It meant and still means more to me than you will know. Thank you.

Things are looking up.

Edwin Faughn reports: Just wanted to let you know that my artwork is now on exhibit in the main lobby of the Pink Palace. It is in conjunction with the grand reopening of the Sharpe Planetarium. I don't think it cost anything to just see the exhibit in the lobby. It is scheduled to be there through the summer of this year.

Anyway, hope you get a chance to see it and have a great day!

**Sudekum Planetarium  
Adventure Science Center  
Nashville, TN**

Kris McCall and Drew Gilmore report: See elsewhere in the issue for Featured Planetarium and Save the Date for SEPA 2009.



**Chesapeake Planetarium  
Chesapeake Public Schools  
Chesapeake, VA**

Dr. Robert Hitt reports: Not much new news. We are still operating at full capacity for both school and public shows this year. Our public program is free of charge and full almost every public night. This seems to indicate that we are offering programs that the general population finds both interesting and informative. Our telescope is used each clear public night and everyone is blown away by the view of Saturn. This summer we will have a new roof placed on the building and this will finish a major renovation along with new heating and AC units on the roof. (Now if they can just stop them from leaking!)

This summer I will travel within 8 degrees of the North Pole to photograph my 13th total solar eclipse. These eclipse trips always spark interest in the students that visit the planetarium as they get to see first hand a major solar event. Anyone interested in viewing some of the photos of the last three solar eclipse trips should visit the planetarium's web site located at <http://eclipse.cps.k12.va.us/departments/planetarium/index.html> or locate the website by using Google and searching for "Chesapeake Planetarium"

Wishing all in SEPA the best.

**Virginia Living Museum Planetarium  
Newport News, VA**

Kelly Herbst reports: Spring is normally the very busy time for school programs, but the cost of gasoline and buses is keeping many schools away. Still, we're doing a fair lot of school programming, which is fun.

Plans for upgrading our aging theater proceed at the customary snail's pace. Money rarely moves quickly. But we are hopeful to be making some serious progress in the coming weeks. One thing that will begin is yet another round of major cleaning in the theater...I wonder what we will find this time? Last time we cleaned, we found an old Mercury-era spacesuit! Any guesses as to where in my theater Jimmy Hoffa might be buried (there's a lot of space under the control console...)?

We finally made the painful decision to sell our wonderful old Celestron 14-inch SCT. The old girl has been stored in the bowels of our new building for more than 3 years, and we finally proved conclusively that we would just never be able to get her back into service...in order to move her, we'd need a cart so big it wouldn't fit through the doors! Fortunately, she's gone to a wonderful home - a long-time friend and supporter of our museum, who plans to build an observatory on some family land in memory of his parents and sister. She'll be well loved and well used, and that makes us happy. Also making us happy is that with the proceeds from the sale we'll be able to trick out a nice 10" Meade SCT for mobile use, and purchase some much-needed new computer equipment. A happy ending all around.

The decision has been made for us to remain closed throughout most of the summer so we can concentrate our limited staff availability into summer classes. We are also planning an exciting family overnight with a dinosaur theme (guess who's coming to our changing exhibit gallery! Mr. T. Rex and all his pals!) which should be a ton of fun. We also have 4 different summer classes for grades K - 5 planned, so we'll be busy indeed!

Sadly, I'm going to miss the July SEPA conference. Our summer schedule is determined far in advance, and I was not expecting a change in conference dates to July. So while you all are enjoying Louisiana, I'll be teaching an all-day grade 2-3 summer camp! While I can't be there in the flesh...I'll confess I do have plans to make my presence felt nonetheless! That should keep you all wondering! :

**Planetarium  
Radford University  
Norfolk, VA**

Rhett Herman reports: I arrived at Radford University in 1996 and found that there was a small but fairly nice planetarium in place. The 24-foot diameter dome was one of the few solid domes extant, and the Goto star projector gave extremely sharp images on this dome. However by 1999, since the place was hardly used for anything other than the occasional astronomy class or Scout group sky tour, the vultures were hovering closer and closer.

To make a long story short I obtained a show, the Bishop Museum and NASA's *The Explorers* and started showing it to anyone who would show up. A trickle of people started coming at first, with publicity being handled mostly by word of mouth. After a while K-12 classes heard that a planetarium was in their area. At the same time I acquired more shows and improved the facilities (projectors, sound, etc.). They started calling for field trips and the number of visitors slowly grew.



credit Lora L. Gordon, Radford University

Our planetarium is in a hallway on the ground floor of our building without much else around. It used to be painted a really painful shade of "eggshell yellow." Several years ago I worked with our Physics & Astronomy Club to hang drywall and paint it dark blue. I also got an art professor to do a mural of the evolution of the universe (in some sense) from a very, very crude sketch that I made. He (John O'Connor) did a great job in doing things way better than I had imagined.



credit Rhett B. Herman, Radford University

After a couple of years of planetarium-only field trips I looked at expanding things a bit. I knew one of our chemistry professors, Dr. Francis Webster had started taking a chemistry magic show that he had developed to local K-12 classrooms. He agreed to add his show to the planetarium show for the visiting groups. At times a geologist could be talked into showing the groups some rocks and minerals, with the "coprolite" being the hit of that presentation. And on occasion a biologist would devote some time to giving a short tour of things like our in-the-hallway transparent-walled beehive.

In the summer of 2005 I finally got everyone together to try to make this a more formal offering. The Geology Department had gotten a small museum up and running and the Biology Department had hired a greenhouse coordinator who would be able to give tours of that facility. Another chemist took over the on-campus shows and worked to make things better and more hands-on. We also added some physics demonstrations so that we could do things like make the visitors' hair stand on end with the always-fun

Van de Graf generator. And when it was clear we decided to set up a telescope with a solar filter to show them the sun was a happenin' place.

Just to give it a name we decided to call it a "Science Day" for the visiting groups. The driving idea behind this was to do our part to help stem the current, tragic decline in science education.

The first year we did this--which was only during the fall of 2005--we had a total of about 100 students take advantage of the whole Science Day tour. While there were still other groups who did come only for the planetarium show, I was more interested in the larger picture. The numbers kept improving. In the calendar year 2006 we registered 626 Science Day visitors. In the year 2007 we had 901 visitors.

In less than three months so far this year we have already had 350 Science Day visitors, with over 300 more visitors already scheduled in over the next 6 weeks (as I write this). So far we have only run these during the school year but we hope at



credit Rhett B. Herman, Radford University

some point to be able to offer these Science Days over the summers. Our goal there would be to reach out to K-12 students in their various summer camps.

All of this started with our little planetarium, with its solid homemade dome, a bad paint job, no real sound system and no (yes, it really is z-e-r-o) budget. We are doing our part for science education, helping out in our own small way in our little corner of the world.

**Thomas Jefferson HS Planetarium  
Richmond, VA**

Leslie Bochenski reports: I've had a busy spring with 3rd and 4th grade students learning the phases of the moon and the reason for the seasons. It never ceases to amaze me how kids so young can already have some pretty crazy misconceptions about these simple topics. I don't know if it comes from their parents or teachers, but I've had more than one youngster ask if people 'really' went to the moon, or if it was all a 'fake'.

I'm looking forward to moving up a few grade levels in April. That's when I cover planets and star maps with 6th and 9th grade students.

**Hopkins Planetarium & MegaDome Theater,  
Science Museum of Western Virginia  
Roanoke, VA**

Mark Hodges reports: We are currently showing *Mr. Rogers Neighborhood*, this is a free show with paid admission to the museum and is doing very well. Also showing is *Visions of a Spring Night* our seasonal show for spring. In the Megadome theatre we are showing *Lewis and Clark-Great Journey West*.

For more information call 1-540-342-5726.



# Bowen *Technovation*

designers of electronic media

7999 East 88th Street Indianapolis, IN 46256  
317.863.0525



## Applications

- 5.1 / 7.1 AstroFXAudio Systems
- AstroFXAurora Specialty LED Lighting
- AstroFXCommander Master Control Systems
- AstroFXCreator Production Workstations
- ExhibitFX Interactive Lobbies & Exhibits
- Digital & Optical Projection Systems
- Domed Theaters & Flat Screens
- 3D Stereoscopic Theaters



## Services

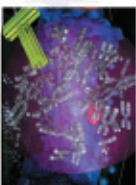
- Consulting, Design, & Engineering
- System Provision & Installation
- Training & Support
- Acoustic & Noise Control Planning
- 5.1 / 7.1 Audio System Calibration & Tuning

[www.bowentechnovation.com/planetarium](http://www.bowentechnovation.com/planetarium)  
[www.bowentechnovation.com/exhibit](http://www.bowentechnovation.com/exhibit)

Providing unique visitor and educational experiences since 1985



## Technology for Domed Theaters and Exhibits



Indianapolis, IN

IUPUI Informatics

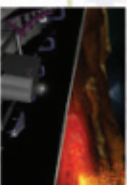
Internet II HQ 3D Theater



Shanghai, China

Shanghai Museum of Science and Technology

40' Domed Theater



Virginia Beach, VA

Tidewater Community College Planetarium

125 seat, 40' Planetarium



San Jose, CA

Independence High School Planetarium

Planetarium Audio & Video Systems



Nashville, TN

Adventure Science Center

Interactive Exhibit & Planetarium Systems



Chicago, IL

Planetarium Audio Systems & 3D Theater

Adler Planetarium