

President's Message

Spring is a busy time for everyone. I'm sure you are all as heavily into school programming and other related activities as I am. Our new exhibit building is starting to rise from the ground. Part of our new parking lot is complete and we no longer need to park on the other side of our lake (really more of a pond.) It was an interesting trek though, across the sometimes frozen water, watching Canada geese and other wildlife deal with the winter weather. That is over now. The geese have started their move back north and the weather is beginning to give us some hints of what is to come. This time of year always seems to be the time that everyone gets back to business, even though we would rather think of summer. So let's get to it.

By now most of you will have received your conference package and heard the news of the change. To the chagrin of everyone involved, construction delays have made it impossible for our host to conduct a conference in June. Phil Groce had done an excellent job planning this meeting, but without a completed dome on which to show products, vendors were reluctant to provide financial support for the meeting. The Louisiana Arts and Science Center (LASC) decided they could not absorb several thousand dollars in losses. After much discussion LASC decided to cancel our June meeting this year. SEPA Council decided not to accept their suggestion to postpone the conference until September.

Because of an excellent suggestion from Eric Mellenbrink in Richmond, Virginia, we asked LASC if they would like to host in 2003 instead, and they said yes. LASC Director Carol Gikas assured me that the 2003 conference would be every bit as good as that planned for this year and if possible even better. Eric then checked with his facility about their moving the 2003 Richmond, Virginia conference to 2004, and happily they agreed to the change.

Because our By laws require the yearly gathering in person of a quorum (one quarter of members) for the purpose of electing officers as well as handling other business items, we needed an alternative meeting site. So, SEPA Council decided to hold its

business meeting in Wichita, Kansas, just prior to the IPS conference. Be it known therefore, that we will hold a luncheon meeting at the conference hotel Sunday, July 28 at 1:00 p.m.

I hope you are planning to attend this conference. It is very important that we have a quorum of full voting members present. As I understand our By laws, full voting membership is granted to SEPA dues paying planetarium professionals who reside in the designated states. This includes any vendor who provides substantial service to the planetarium community and resides within the designated states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, or any U. S. territory off the southeastern coast. In case we do not have a quorum, the By laws do give SEPA Council the power to take any action deemed necessary at any time, including the appointment of persons to fill vacant positions on Council, but I'd prefer not to do it that way.

As a result of all of this, one of the business items I will propose at our meeting is that we add an item to Article 4 Section 3B that would allow us to conduct our elections through the U. S. mail.

Here is a possible wording: [4] In the event that a quorum is not present at the designated business meeting in an election year, election of officers may be conducted through a mailing of ballots to the voting membership.

Something like this should allow for ballots to be sent to the membership by mail in situations like we have this year. As we learned last year, exact wording may be changed at the business meeting before a vote is taken.

Speaking of elections, another business item is the election of officers. In this issue you will find profiles of candidates for SEPA office. Please read them and be prepared to vote at the business meeting. This is a very fine slate of candidates. The candidates for President Elect are Patsy Wilson and Duke

David C. Maness
President
Peninsula Planetarium
Newport News, Virginia



Johnson. Duncan Teague and John Hare have agreed to run again. They are all well known and long time members in good standing. They have accomplished great things for SEPA and for their respective institutions or businesses.

My thanks to committee members Dave Hostetter, Jack Fletcher, and Carole Helper for doing the work on this. It will certainly be a tough choice.

Some members did not receive notice of the change in our conference in a timely fashion. An up to date and complete e mail list would have been a big help. If you know of a member who hasn't received SEPA information, they may have forgotten to send in dues for 2002, or there may be a problem with the address in our data base. If you suspect such a problem, contact SEPA Secretary Treasurer Duncan Teague soon to check on membership status and addresses (including e mail). His address,

e mail, and phone number are prominently displayed in this issue.

The times are very different from just a few years ago. There seem to be many planetarians under stress. Several have lost their jobs recently or for various reasons are seeking employment elsewhere.

This is one reason that I brought up the idea of SEPA's creating a fund for scholarship grants. I asked a committee to discuss the idea and come up with a formal proposal which the membership may move and vote on this summer. I asked them to look into application and eligibility issues, how we might fund the program, use of the grant money, and possible follow up reports from the recipients.

I want to assure you I am not talking about spending money already in SEPA's account. I don't want this to become

(continued on page 30)

IPS Report: SEPA@IPS

For those of you who read the last issue of Southern Skies, this will seem like familiar reading. This year's IPS meeting in Kansas has suddenly taken on a greater significance with the cancellation of the SEPA conference. As you probably know, SEPA will hold its annual business meeting Sunday afternoon, July 28 in Wichita. We need a quorum to conduct official business, and with bi annual elections and By laws changes to be voted on, this year's meeting is of great importance. I urge you to attend the Wichita meeting if possible.

The 2002 International Planetarium Society (IPS) Conference will be held July 28 - August 1 at the Exploration Place, Wichita, Kansas.

Dr. Alan Dressler will be presenting the IPS Banquet lecture entitled The Next Generation Space Telescope: Exploring the Birth of the Modern Universe. In addition, Dr. Carolyn Porco, Imaging Team Leader on the Cassini Mission to Saturn, will speak at the Tuesday luncheon. Other exciting speakers are also planned. Details are available on the Web site.

Due to the short amount of time to plan the conference, arrangements for a post conference tour have been given to an outside company. An exciting itinerary has

been put together: visiting the Very Large Array in Socorro, New Mexico, the National Solar Observatory in Sunspot, New Mexico, the Lodestar Astronomy Center in Albuquerque, and the UFO Museum and Research Center in Roswell, New Mexico. (There's a planetarium there too!) More details are in the conference packet.

The IPS2002 Conference web site is: <www.exploration.org/ips2002>

The host's mailing address is as follows:

IPS 2002
c/o Exploration Place
300 North McLean Blvd.
Wichita, Kansas 67203

Here are some important telephone numbers and e mail addresses for more conference information:

(316) 266 4288 (voice)
(316) 266 4257 (voice)
(316) 263 4545 (fax)

Delegate Registration:
<ipsregistration@exploration.org>

Vendor Registration:
<ipsvendors@exploration.org>

Local Organizing Committee:
<ipsloc@exploration.org>

Editor's Message: Crisis Management

I'm really distressed over the lateness of this issue. I don't like mailing Southern Skies to you barely in time to make the 60 day deadline for notifying members about important association business.

This issue had to be delayed because of the conference crisis SEPA's Council had to resolve through the medium of a conference call. Faced with no possibility at all of conducting our annual business meeting in Baton Rouge in June, we had to decide whether to accept a postponement until September or wait until 2003.

For many of us September 2002 was not a viable option, since we have budgets that operate on a fiscal year basis. Having one meeting this September and another in June 2003 would require funding out of town travel to two functions in the same fiscal year. If your funds are as tight as mine, there's no way you can attend both events.

IPS's July Conference will serve to fulfill the requirement of our By laws to hold an annual business meeting and the requirement that we conduct our elections in

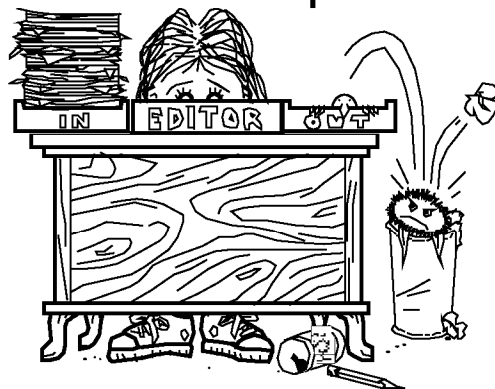
person and not by mail.

SEPA President Dave Maness had to wait until suggestions came in and details were worked out about the July alternate business meeting to send in his quarterly message.

We all have lots of good reasons why we're getting this information to you in such untimely fashion. We resolved this crisis with the best solution we could develop. That's why SEPA pays the Council the big bucks, right?

For one time only, I will postpone the deadline for the summer issue of Southern Skies to August 1 instead of the usual July 1. I expect the only person who will meet even this late deadline will be Elizabeth Wasiluk. Please try to make this deadline

Duncan R. Teague
Secretary/Treasurer
Southern Skies Editor
Craigmont Planetarium
Memphis, Tennessee



Mike Cutrera

Send your \$25.00 check made payable to SEPA to the following address:
Craigmont Planetarium, 3333 Covington Pike, Memphis, TN 38128 3902

Name		
Planetarium		
Organization		
Address		
City		
State	Zip	
Area	Voice	
Area	Fax	
Position		
E-mail address		

Small Talk

Elizabeth Wasiluk
Small Talk Editor
Berkeley County Plan-
etarium



As I write this we are on spring break. All is quiet here. I came in to finish a few things one of which is this article before heading off for Cleveland and the Rock and Roll Hall of Fame.

When I last wrote this column, I had the ability to use the Internet in the planetarium. Come 2002, however, the technician from Regional Educational Service Association took my computer away, brought it back the next day, and it has worked perfectly since. The files had become corrupted, and he needed to restore them. He had seen many viruses and wondered if the events of Sept. 11 had anything to do with that. Since that time the Internet along with e-mail has been restored. The e-mail isn't as good as it used to be. I don't have as many fancy editing capabilities as I used to, but at least I have e-mail restored.

The computer classes designed a Web site for Berkeley County Planetarium. You can visit our Web site at: <http://boe.berk.k12.wv.us/501/Planetarium/stars%5B1%5D.htm>.

I am hooked. I have joined a Web community. This began in the summer of 1999, when I picked up a kids science fiction book. It was part of a series, and I got hooked, reading one book after another. I wondered if I were the only adult to find these books so fascinating.

I did a Web search and found a Web community where people discuss science fiction literature of all sorts. Not only did I find that I wasn't the only adult who was interested in reading these books, but also I learned about other things and started lurking there whenever I got a chance.

At the beginning of this year I got up enough nerve to become a registered member. I was amazed at how much you can learn about people from the messages they post on the discussion board. I started sharing information with a teenager in Austin, Texas about science fiction literature and astronomy in general.

I was amazed how well the community is run by volunteer moderators who ban people who use profanity or break other rules of the community and censor material not meeting established community

standards.

I also got involved in the real life attached club in Baltimore and got to meet some interesting people with whom I had previously been corresponding who live within my region. I was surprised. They broke the stereotype of the kind of people most think one meets on the Internet. Most were very nice and very shy. I linked my planetarium to their Web site.

Since August, I have met and corresponded with people around the world. I have learned to use instant messaging and have a new e-mail address strictly for Web community business. I even got into a fight over, of all things, the Roche limit, with an engineer online. Dr. Jay Pasachoff settled the battle. You may be able to read our discussion at the address <http://boards.theforce.net/message.asp?topic-5917538>

I have since tried to get in on the discussions at Sky & Telescope, but they seem to not be as current or as well monitored as the ones in my Web community.

Speaking of web communities, one of my students, Randy Stanton, researched and found out that there are astronomy Web communities as well. Go to <http://communities.msn.com/browse?Catid.299>

I really enjoyed reading the review in the last issue of Southern Skies book section on Brother Astronomer: Adventures of a Vatican Scientist by Br. Guy Consolmagno. This was my Easter season reading, and I bought a copy for a friend. I like the book so much, I have given it as a gift on three separate occasions. If Patrick's review last issue hasn't convinced you to pick up a copy of this book, I hope I can this issue. It is truly great.

Now that I have my e-mail restored, you have no excuse not to drop me a line with information on what you would like me to cover in my future Small Talk columns. My e-mail address is ewasiluk@access.k12.wv.us.



NSpace?

Check one, check two, check one, check two. [tap, tap, tap] Is this mic working?



You would suppose that pop star Lance Bass often checks microphones. As of March 2002, however, this pop star has been checked to determine if his physical aptitude is up to the challenge of a visit to Space Station Alpha in November. Lance Bass, however, is not the only contender for the spot aboard the Soyuz spacecraft.

American Lori Garver and an unidentified Polish national are also prospects for the trip. After the United States and the Russian space programs have conducted thorough examinations of all the candidates, they will announce who the winner is going to be.

No matter who the next space tourist may be, this individual will be only the third private citizen to go into orbit with the International Space Station's expert space crews. The previous visitors were an American, Dennis Tito, in 2001 and a South African, Mark Shuttleworth, in May of this year.

The chance to ride a taxi to the high frontier is an incredible opportunity that comes with an equally incredible price tag. The cost for the trip is estimated at roughly \$20,000,000 a hefty sum to pay for a ten day joy ride (October 22nd - November 1st).

This seems extreme for a quick trip around the world, but the cost is necessary to defray the expenditures of Russia's space program. Bass likely doesn't have

that kind of cash lying around, but if he becomes the candidate selected for the journey, his recording company will foot the bill.

How economical is this trip to space and back? It's not that difficult to calculate, if you can find the circumference of a circle.

The diameter of the Earth is approximately 7,600 miles. The Space Station's altitude is about 240 miles. We need to double that number because the Space Station is that high above both of the hemispheres of the Earth.

The orbit's diameter is then 8,080 miles. Multiply the diameter by π to discover the distance the astronauts travel in one orbit - 25,370 miles. Multiply that distance by the number of orbits they will travel in ten days - 160. That gives us a total of the 4,059,392 miles to travel.

Now we divide the cost of the trip \$20,000,000 by the total number of miles in the journey. That gives us an average of \$4.93 per mile - about the cost of an exhilarating rollercoaster ride at a theme park, but with a lot more thrills and a more spectacular view.



Amanda Dawn Campbell
Junior Intern
Craigmont Planetarium
Memphis, Tennessee



Digital Cosmos: The Digital Universe



Paul Tremblay
Digital Cosmos Editor
Orlando Science Center
Planetarium
Orlando, Florida

For this issue of Southern Skies I have reviewed Digital Universe, a product from Syzygy Research & Technology <<http://www.syz.com/>> I will say up front that the software is currently only available for the Macintosh platform, but a Windows version is under development. I tested it on a 500 MHz G4 running Mac OS 9.0.4. You need as a minimum Mac OS 7.5 or higher, a 90 MHz PowerPC, 16 Mb of RAM, 5 Mb hard disk space (20 Mb recommended), and a 2X CD ROM drive. The Windows version is being developed for Windows 95/ 98 and is currently in beta testing.

The box says that this package is An advanced astronomical simulator for the 21st century. That is a fairly accurate description. It is a very impressive software package. To start with, it has the entire Hubble, Hipparcos, and Tycho catalogues for its object database. From all the objects in this database, the user can view and call up information on about 20 million of them. Of course the user can add new objects as they are discovered. Its date range is 100,000 BC to 100,000 AD, with a very high degree of accuracy. Also the software allows the entry of precession, proper motion, nutation, aberration, and refraction. I should say that it has professional levels of accuracy as this software has been used by Irish archaeoastronomer Paul Griffin to confirm of the world's oldest known solar eclipse recorded in stone, November 30, 3340 BC. <[ca/3340eclipse/> There are also instructions for duplicating this eclipse, and it looked very impressive when I ran it.](http://www.astronomy.</p></div><div data-bbox=)

One of the most important aspects of any astronomical software package is the ease with which the user can enter their location. With Digital Universe, there are over 1000 cities all over the planet from which to pick. For me, this is an area where I don't want to have to spend lots of time entering data. Just pick it off a list and go. Of course, for those cities not on the list, you can enter latitude and longitude, and all the cities allow altitude to be entered, if it isn't already listed.

Included in the box was a note that clearly states that after installation the first thing you should do is run the Upgrade from Internet feature to insure that you have the most current version. While this sounds nice, it is not as easy as it sounds. The software creates what it calls a Revision File, sends that file to Syzygy, who in turn sends a custom upgrade file back to you.

I tried to upgrade, but our Mac kept giving me firewall notice, so I was never able to complete the upgrade. I do know for a fact that the problem is in our firewall and not with Syzygy, so this should not be a problem for most users. [It was no problem for me. Ed.] I prefer a simple go to the Web site and download the update approach, rather than this sending of files back and forth. Even without the upgrade, however, the version I had was great.

Looking at the menus, you can print charts, copy and past text, set your display options and environment, switch between local sky and planetarium mode, export animations and reports, call up the encyclopedia, choose your views, find objects, and ask for help.

Printed Charts are another good indication of software's abilities. Again Digital Universe shines. The charts are downright beautiful. I was never able to get a legend to print on the charts, but that is a minor detail.

Display options are the standard choices you would expect: toggle the grids, show horizon line, twilight, object features on/off, object names, etc. Nothing unexpected

or missing here. Likewise, the environment settings allow for the high precision calculations. One of the more interesting settings is temperature and pressure entries for calculating refraction. I have never seen high end settings offered in such an easy way before.

Local sky mode is used for viewing the night sky as seen from Earth. Planetarium mode eliminates the horizon and prevents objects from ever setting.

Reports and Animations are another area where software can fall flat. This one doesn't. Name the report that you want, and the software can probably create it. There are no preset reports; the user can pick what information is printed from lists of things such as date/time, rise/set, transit, parallax, etc. Any event can be captured as a QuickTime® animation. Useful for Web sites and lectures.

The encyclopedia of astronomy is a great resource. Included is an introduction to astronomy, a dictionary of terms, biographies of famous astronomical people, object descriptions, and detailed information on over 5000 spacecraft and satellites. This in itself is a fantastic package. Educators will find this to be well worth the price of the software.

The star field display is excellent, with objects being rendered in their proper location and at proper size. On the box there is a display of zooming in to the Orion Nebula showing this very nicely. I was able to zoom in on individual moons, and as I did so, a coordinate grid would appear over the moon. (This was also true of planets.) Zoom is done either by changing the field of view from the menu, or by dragging a zoom box around an object.

I did have a display issue while zooming. Every time I would zoom, I would get the new view as well as the old view superimposed on top of each other. Perhaps the update would have fixed this, I do not know, but it did make it difficult to see. Ignoring this, I was able to move

around and zoom in and out with ease.

Of course you can display labels and constellation lines, IAU boundaries, and the like. And to make all of this very easy there is a floating toolbox on the screen. This is a window with toggles for all the things that the user needs most: labels, planets, stars, deep sky, trails, etc. A second toolbox contains movement controls.

Simulations are almost a requirement these days, and Digital Universe comes through with flying colors. I was able to duplicate Dr. Griffin's ancient eclipse and took a look at several upcoming events. Set up was no more difficult than most other programs of this type.

Included with the software is a program called 3D Stars. And as you might have guessed included in the box were a pair of red/blue 3D glasses. 3D Stars is described as a virtual spaceship. Using simply single key commands, you can fly through the universe in 3D. The effect was stunning on our Mac, and everyone I asked to try it was impressed.

Other than the upgrade procedure and the strange display issue with zooming, there is really nothing wrong with this software unless, like me, you are a die hard Windows user. For those with Macs, when you have finished reading the SEPA journal, go buy a copy of the software. It runs \$149.95 Canadian (roughly \$95USD). There is a demo available on the Web site as well as very good screen shots. You can read other reviews of the product, and download sample animations. We Windows users will just have to wait for a while.

SkyChart III
continued

Right: The "Location" dialog box from SkyChart III



Universe Calling:

Per Ardua Ad Astra: A History

by Jon U. Bell
March 30, 2002
Sung to the tune
"Nottingham Ale"

Audience: All ages, especially college astronomy students

Author's note:
I wrote this for my students and included many of the people discussed in their astronomy textbook. But of course there are still more verses to write.

Preamble:	The stars in the sky that we see every night, Their beauty inspires us a heavenly sight! They shine down upon us from light years away And someday we hope to be going their way!
Chorus:	So look to the stars; tell me what do you see? The heavens unfolding, a great mystery; The Universe calling, cross in fin i tee, Per ardua ad astra they beckon to me!
Ancient:	Stonehenge was built on the plains of Sals bree, A calendar temple, three thousand B.C. Sunrise o'er heelstone, the solstice in June, Eclipse of the Sun and eclipse of the Moon!
Greek:	Pythagoras said, Listen: the tune of the spheres! Plato told Ari, Save that which appears. Hipparchus made charts and gave star magnitudes, Ptolemy's book met some dark interludes.
Middle Ages:	In Baghdad the Caliph he gathered the best, There learn eds deciphered the great Almagest! And abbots and monks in their monast er ees Wrote down and recorded the ancient world s deeds!
Renaissance:	In Poland a cleric was having some fun; Copernicus said Earth did go round the Sun! And on Hveen a man built a great observat ray He measured the stars did the Dane Tycho Brahe! [pronounced, Hvane]
Kepler:	Kepler he had him a thought most profound, The orbits of planets are not all that round; Velocity varies with distance, sayeth he, P square equals A cubed, elliptically!
	On the last chorus, substitute, Per aspera per ardua, (By hope to the stars), for Per ardua ad astra (By hardship to the stars)
Galileo:	A telescope built in the year sixteen nine Gave Galileo a view simply divine! The moons of great Jove were laid out on display, The phases of Venus, the moon rough and gray!
Newton:	In Cambridge an apple did fall from a tree, Sir Isaac then noted the force gravity; The moon s like an apple, the great Newton said, It falls round the Earth, just not on my head!
Herschel:	In Bath William built him a good telescope, Discovered a world and it gave him great hope; Herschel did count all the stars he could see And found out the shape of our great Galaxy!

Cannon: Annie Jump Cannon quite often did see
 Dark spectral lines at Harvard Observa tree;
 She catalogued them hot to cool by degree,
 O B A F G K M, won t you kiss me!

Einstein: Einstein the genius addressed gravity,
 You re not what you seem, just what can you be?
 Everything s relative, space time is curved,
 To travel the speed of light seems quite absurd!

old limerick: There once was a brilliant young lady named Bright,
 Her speed was much greater than that of light.
 She set out one day in her usual way,
 And thus she returned on the previous night!

1920: Our sun s halfway out in the great Milky Way,
 Eight K P C, Shapley told Curtis one day;
 Curtis retorted, Those spirals you see,
 They re galaxies and not nearby nebulae!

Leavitt: Leavitt has cepheids in mind as she thinks,
 They brighten and dim as they swell up and shrink;
 The brighter they are then the slower they tick,
 I ve found thus a much larger measuring stick!

Hubble: To measure the distance to M 31,
 A cepheid was needed, a dim dying sun;
 Ed said to Milton, Let s see what you ve got,
 And Humason gave Hubble a variable dot!

Big Bang: The cosmos expandeth, sayeth Father LeMaitre,
 And Hubble concurred but Hoyle countered, What rot!
 Then red shifts were found that provided the proof,
 The galaxies fly, Einstein said, I did goof!

Chandra: Chandrasekhar did establish his goals
 For white dwarfs and neutron stars and for black holes:
 One point four, two point four, mass of the sun,
 Determines the fate in the end of each one!

Cosmic BR: Penzias and Wilson worked hard at Bell lab
 To lose telephone noise they thought they d take a stab,
 Dickey was looking, but they got there first
 And found the great voice of the whole Universe!

Bell pulsar: Jocelyn Bell worked with radio scopes
 She studied the squiggles of stars with high hopes
 A regular pulse, could it be L.G.M?
 No, just the quick beat of a neutron star gem!

Superclusters: Huchra and Geller, their students as well,
 Discovered the places where galaxies dwell;
 Great walls and voids John and Margaret did chart,
 A stick man revealed by their red shifted art!

Peculiars: Quasars are distant and brilliant, said Schmidt,
 Hawking said, Black holes radiation emit,
 Galaxies crash and collide as they go
 It s amazing how much we now know we don t know!

At the end of the song,
 you should repeat the
 chorus two times more.

Dear Members of SEPA Council:

After a great deal of consideration and weighing of all factors including delegate and vendor participation, vendor funding, and the execution of programs, we strongly feel that it is in the best interest of SEPA and LASC to move the currently scheduled SEPA conference from June 25 - 29 to Sept 24 - 28.

To be honest, we were misled by the general contractor on the readiness of the Pennington Planetarium to host the SEPA conference during the June dates. Up through March, the general contractor insisted that the facility would be ready. In reality, the construction schedule has slipped to the point that we cannot even guarantee that we will have stars to show or seats in which to sit by June 25th. On Friday, April 5th, we called an emergency meeting with the general contractor, the architectural firm, and officials of the City of Baton Rouge. Based upon that meeting, we concluded that we would not have a planetarium in a stage which we could show. We have discussed this setback with the major vendors/ donors to the conference. Their consensus is that if their technologies cannot be shown or demonstrated at the conference, they see no reason to financially support (sic) the conference as scheduled in June in a manner that would allow the conference to pay its costs. Given the closeness to IPS and their financial obligations to that conference, the contacted vendors agreed that it would be better to move the conference and show a finished planetarium complete with the latest technologies.

An informal and small survey of planetarians also indicated that they would consider the SEPA conference more valuable if delegates could see a finished planetarium with the latest technologies. A majority of the people also indicated that having the conference in September presented little conflict with their school program obligations.

So rather than risk a conference with little vendor support and little to show, we strongly feel that it is in the best interests of SEPA and LASC to delay the conference. As a result of the April 5th meeting, we have contacted the hotel, the speakers, and the off site venues and have secured them for the September dates as proposed. We have lost nothing from our original

June program and face no penalties. In fact, our speakers and our off site venues preferred the September dates.

As for the people who have already registered, we will contact them directly and return any registrations requested. As for people who may have booked advanced air tickets, we will allow them to deduct up to \$100 in change fees or penalties from their new registration fees. Because the LASC facilities will be finished, we can significantly reduce our financial obligations for media equipment rental and hotel meeting spaces and use these savings to cover any such reimbursements as necessary. With more than 60 days notice, there are generally no penalties with most airlines.

With your permission, we would like to immediately mail (sic) the revised schedule and new registration forms this week. We would also post the new schedule on DOME L and the SEPA Web site. Philip Groce will travel to both MAPS and IPS and make presentations on the new September conference dates. Anticipating this change, we have been sitting on the vendor mail outs since April 1st. That mail out is ready to go out immediately and is attached along with the new schedule.

We realize that this is a difficult decision, but LASC feels that it has no choice. Carol Gikas has stated that either we move it to the September dates, or we simply cancel the conference altogether. She will not obligate LASC to a conference which could lose a substantial amount of money without adequate vendor funding. We are certain that SEPA would comply with this assessment, since our organization cannot afford to make up the short fall.

We sincerely apologize for any inconvenience or criticism this change may cause and look forward to hosting an even better conference in September.

Respectfully submitted,

Carol Gikas
Mike Sandras
Philip Groce

News from SEPA States

George Fleenor
Bishop Planetarium
Bradenton, Florida

Buehler Planetarium & Science Center, Davie

Susan J. Barnett reports: The Buehler Planetarium and Observatory is running public shows four days a week. The week end shows and monthly specials include Light Years From Andromeda, Our Place In Space, Light Hearted Astronomer, Magellan: Report from Venus, and The Cowboy Astronomer.

We continue to rotate shows on Wednesday, and these shows include The People, Ancient Horizons, The Explorers, Clouds of Fire: The Origins of Stars, The Secret of the Cardboard Rocket and The Mars Show.

Hallstrom Planetarium, Fort Pierce

Jon U. Bell (the Singing Astronomer) reports that renovation work has begun on an old 24" reflecting telescope that was built by the college's astronomy and physics instructor, Dr. Tom Embry, back in the mid 80s.

Tom had the help of a few other NASA type folks, and what they came up with was a Springfield Cassegrain instrument mounted to a trailer that's right, this is a bit mobile telescope that was put together for viewing of Halley's Comet.

After the comet came and went, the telescope went into storage and suffered a bit of neglect over the years. Tracking controls had never been developed, and at the time the college had another instrument, a 14" Cassegrain, permanently emplaced within an old NASA rocket tracking dome that had been donated to IRCC and affixed to the old Science Center roof.

When the Hallstrom Planetarium was built in 1992-93 as part of the new Science Center, the dome and 14" instrument were taken down, and no provisions were made for the construction of a new observatory. Now, with the infusion of new blood into the local astronomy club, the Treasure Coast Astronomical Society, and the freeing up of some of Jon's extra work obligations (i.e., he is no longer chairing the Biology Department), the 24" scope was being readied for new first light on April 20, when TCAS and IRCC host Astronomy Day for the Florida Treasure Coast.

The winter's run of Rob Landis Through

the Eyes of Hubble, produced by Martin Ratcliffe and the Buhl Planetarium and adapted by Jon, was very well received; every showing was a full house. Now production has begun on Daughter of the Stars, which Jon wrote for JHE several years ago; it features many Native American Indian sky stories, with beautiful silhouette style artwork by Joe Tucciarone. Daughter opened on April 26 and continues through the first weekend of June.

The Orlando Science Center, Orlando

Paul Trembly reports: All sorts of interesting happenings are occurring in Orlando. CEO Kim Cavendish resigned at the end of February. She has taken the CEO position at the Ft. Lauderdale museum in order to be closer to family. With luck, by the time you read this we will have a new CEO. We have no idea what changes this will mean for our facility at this time. There are strategic plans being discussed but nothing that I can share at this time. Once someone is aboard you will no doubt see an announcement made through ASTC.

The show Worlds in Motion was slated for an April 20 opening. This show features our first attempts at producing our own 3D models. Sky Skan completed the installation of our Digital Video server and Non Linier editing workstation. Coupled with our new Graphics workstation, we won't have to rely on outside sources as much as we used to.

The video system is a fantastic tool. If anyone is in town and would like to see it, give me a call, and you would be more than welcome to stop by. For our next show we will be dusting off and old favorite Case of the Missing Dinosaurs. Dinos is scheduled to open in August.

In the Observatory, we have added a second telescope under the dome. Piggy backed to our 10" refractor is a 5" Mak that will be used with our Planet Cam to provide a constant video feed during observing. We'll put a monitor in our main lobby when observing is going on. As people enter the building, they'll be greeted with a view of what's going on upstairs.

Filmwise we currently are running

Grand Canyon, and the Cirque Du Soleil film Journey of Man. After that we will have India: Kingdom of the Tiger, followed by Louis & Clark.

Space Transit Planetarium, Miami

The Miami Space Transit Planetarium hosted the spring state meeting on Saturday, April 13, 2002. FLORPLAN is an unofficial meeting of Florida Planetarians that meets twice a year to tour various facilities around the state and to discuss hot topics and other planetarian concerns. The meeting is informal and open to anyone who works in or with planetariums and related fields.

Jack Horkheimer, Mark Bennett, and staff were great hosts and had a full day planned for all of the participants. The morning started out in the usual way with coffee and doughnuts, etc., with the exception of the bagels. What else would you expect from Jack and staff but some unique twist to the food? They provided us with Einstein Bagels, and everyone felt more intelligent after their consumption. After the dome crawl we watched the Adler Planetarium production of Seeing the Invisible Universe followed by lunch at Scotty's on Biscayne Bay. This was a delightful setting on the waterfront with exquisite views.

After lunch we returned to the facility for a tour of the Wildlife Center and rooftop

observatories. Following our facility tour we headed back into the planetarium theater for the 30th anniversary celebration showing of Child of the Universe. Wow, it is hard to believe that it has been 30 years since I first saw this presentation run at the Bays Mountain Planetarium in Kingsport, Tennessee. For those who don't know about Child of the Universe, it was perhaps the first full scale, multi media planetarium program ever run under a dome that included theatrics and a stimulating, thought provoking script. It was truly a blast from the past, and I'm so glad that I got to see it in the Master's (aka Jack's) dome. Seeing this production in its original setting, produced and directed by the author, had great meaning for me and respect for its influence and contribution towards our evolution in this profession.

This was my first trip to the Miami facility and I wish that I had visited much sooner. I have lived in Florida for over 18 years and never could find the time to slip away from my own dome to enjoy the domes of others, except for the occasional FLORPLAN here and there. Thanks Jack, Mark, and staff for a job well done! Where will the next FLORPLAN meeting be held next fall?

News from SEPA States
continued

George Fleenor
Bishop Planetarium
Bradenton, Florida

Jim Cherry Memorial Planetarium Atlanta

Along with many other planetariums, Fernbank's school show attendance has dropped off somewhat, but public attendance is still strong. An increase in planetarium ticket prices took effect at the beginning of the year, so the staff is doubly pleased at the increase in revenue as well as visitors. The planetarium is now open weekends that used to be school system holidays like Thanksgiving and the one right before Christmas.

Dave Dundee hosted a local television station in the observatory in March to publicize the 20th anniversary release of ET, The Extraterrestrial. A fun time was had by all.

In April, a children's show, Flying Carpets & Shooting Stars, opened with stories from the Islamic world about the night sky. The show played through May. The adult show continued through May, called Ancient Islamic Astronomy. Both of

these shows compliment the big exhibit of ancient artifacts from Syria at the Fernbank Museum of Natural History through the summer.

Summer shows at Fernbank are two in house productions: Other Moons for the general public, and Happy Birthday Moon for families with young children. SpaceStation Fernbank, a three week summer day camp for rising seventh graders ran for three weeks in June. Four teams of students learned the skills and techniques needed to complete a simulated mission on the International Space Station.

Girl Scout programming is on the rise. April Whitt and Aerospace Educator Debi Huffman have offered several Aerospace Badge workshops, and more Space Explorer and Sky Search badge workshops are scheduled this year. Late in the month of April, several camp in events were piloted, as Fernbank gears up to offer them in the future.

Dr. Ed Albin is piloting remote observ

Jim Greenhouse
& Carole Helper
Mark Smith Planetarium
Macon, Georgia

Jim Greenhouse
& Carole Helper
Mark Smith Planetarium
Macon, Georgia

ing with Fernbank's 36" telescope. Several groups of students around Georgia have already operated the telescope from their own schools, and taken images with a CCD camera, during both day and evening observing runs. If you're interested in participating in this project, send him a note at <ed.albin@fernbank.edu>.

Angela Sarrazine was joyfully welcomed as Fernbank's newest astronomer on June 3. Angela has been teaching AP Physics in Gwinnett county and is finishing her doctorate at Indiana University.

We hope to see some SEPA buddies at the International Planetarium Society Conference in Wichita, Kansas at the end of July.

Rollins Planetarium, Young Harris

Kent Montgomery reports that the Rollins Planetarium at Young Harris College will be closed in May to replace the Spitz 512 projection system with the new Goto model 812—the first installation of this model in the world. The Spitz 512 projector was installed in 1978 and has served faithfully for the past 24 years. The Spitz projector is being sold to Ash Manufacturing. The cue lighting system is being replaced with an East Coast Control Pleiades system. The planetarium is expected to complete renovations in June of this year. That same month, it will reopen presenting the show Images of the Infinite created by Adler Planetarium.

Mark Smith Planetarium, Macon

Carole Helper has been laid off after almost ten years in Macon. She was part of a reduction in force that eliminated five full time positions and let go several part time and hourly employees. She already has a couple of job prospects in other parts of the country. Everyone here misses her.

Jim Greenhouse has also left Macon to become the Planetarium Supervisor at the Sharpe Planetarium in Memphis, Tennessee. He changed positions in May.

Yuri's Night World Space Party was thrown on the evening of April 12. A local band performed live in front of the museum, and there was dancing in the parking lot. Access to a Web chat room was available in the lobby, and Mars Orbiters were made and swung about.

Astronomy Day in Macon was May 11. A speaker from the University of Georgia presented an interactive talk about extraterrestrial life. The Middle Georgia Astronomical

Society showed off observing equipment, and all five visible planets were shown through telescopes at Brown's Mt.

The current show is More Than Meets the Eye. Starting in May, WSKY and The Little Star that Could will be shown again during the Beakman's World exhibit. Explorers of Mauna Kea will start in August.

Observatory Curators Alton Basilico and Charles Woodward just completed renovations of a 10" Newtonian telescope which is showing great views of the planets. They are also repairing the observatories 14" and 10" Schmidt Cassegrains.

The Museum of Arts & Sciences seeks a creative, energetic person with at least three years teaching experience in astronomy to manage the 118 seat planetarium with its 40" dome and Minolta MS 10 Star Projector.

Responsibilities would include production and presentation of all planetarium/astronomy programming, including graded school programs, public shows, use of observatory, classes and special events, minor maintenance and repair of planetarium equipment, and scheduling and managing part time staff and volunteers. A bachelor's degree is required. General experience with various telescopes and other astronomical equipment and specific experience with an East Coast Controls automation system is preferred. Some weekend and night work is required.

Send cover letter, resume and three references to Mary Ann Ellis, Museum of Arts & Sciences, 4182 Forsyth Road, Macon, Georgia 31210.

Georgia Southern Planetarium, Statesboro

Becky Lowder reports on recent events:

April 6, 10 a.m. – 4 p.m. was Astronomy and Space Day 2002. There were lunar and meteorite samples on loan from NASA, rockets, telescopes, star shows, solar viewing, and hands on activities for all ages.

April 19, 7:30 p.m. featured a talk on Killer Asteroids? Dr. Ben Zellner, Georgia Southern Physics Professor and Astronomer, discussed the possibility of an impact from space, how we are searching for them, and what would happen if one hit Earth.

The planetarium will be closed to the public during the summer, but four special science teacher workshops and Georgia Southern Summer Science Camps will get

Freeport McMoRan Science Center Kenner

The Freeport McMoRan Science Center Planetarium currently runs two shows: Quest for Space and Saving the Night/Dark Sky Astronomy. Quest for Space is our in house production delving into the origins of astronomy and space flight and is intended as a companion piece to our tour of Space Station Kenner™, an exhibit centered around the full scale model of Martin Marietta's space station proposal to NASA in the 1980s. As you know Saving the Night is the SEPA produced show written and narrated by David Levy dealing with light pollution. As this is a shorter show, we have coupled it into a double feature with another in house production called Dark Sky Astronomy. As you have probably guessed, this deals with mostly deep sky objects which can only be seen in non light polluted areas. The shows complement each other well, we think.

Unlike most places, we decided to do a Yuri Day instead of a Yuri's Night. We also decided to do it Saturday, April 13. With presentations, a film, a guest speaker from the Mars Society, and a planetarium show, it was quite an ambitious event for us. Mike Sandras has been appointed JPL Solar System Ambassador for the state of Louisiana and has been doing some outreach in that capacity. He also attended a NASA educators workshop at the Marshall Spaceflight Center in Huntsville at the end of January and early February. He had nothing but good things to say about it.

Tom Finicle has been having fun with our Young Astronaut program this year with a very interested group of kids. This month they will get to ride our full motion flight simulator. As a bonus, the manager of the simulator is a retired aircraft engineer and has agreed to speak to the group and field questions on aviation.

Work continues on our new space theater and we hope it will continue as well as it has gone so far.

Lafayette Natural History Museum & Planetarium, Lafayette

The Lafayette Natural History Museum & Planetarium continues with its building project. We still hope to begin moving in very early June and to open with the MarsQuest exhibit in October. While there is still much work to be done in the new building, we are getting very close to the end of the construction phase. As I write

this, JHE is in the new planetarium beginning installation of planetarium equipment. Suddenly the dome is beginning to look like a planetarium and feel like home. After being closed for over a year, it feels great to be dealing again with planetarium stuff.

We had hoped delegates to the SEPA conference in Baton Rouge would be able to visit us on the pre conference trip that was being planned. The place would have been a mess we would literally still be moving stuff from the old building to the new one but you would have found it interesting to see what a building project looks like at the very end. Meanwhile, we're still packing and planning.

Despite the chaos, we still get some programming done. We had two very successful using a telescope classes in January and February, and a great star party for the February 20 occultation of Saturn. It was the prettiest night of the year, with such great seeing that unusually clear views were possible.

As if the occultation and the 40th anniversary of John Glenn's Mercury flight weren't enough, the visitors also got a great look at ISS and good telescopic views of a passing weather balloon. Planned for Astronomy Day we did solar viewing in the afternoon and had a star party in the evening. It was followed on May 4 by a planet party at a local park.

In early April Lafayette had about six inches of rain. As we were vacuuming the usual 30 gallons of water out of the planetarium, we hoped we were doing that for the last time!

St. Charles Parish Library Planetarium Luling

In the backwaters of the swampland of southeastern Louisiana we are going hi tech. Our Library Board has just approved the money for a complete refurbishment of our 26 year old star theater. Out goes our old but trustworthy Viewlex Apollo and in comes the brand new Minolta MediaGlobe Digital Projector. Our yellowed cracking dome gets an overhaul too along with new carpet and real planetarium seating, not the plastic moveable chairs we have had since our opening. Needless to say that our work is cut out for us to be ready to receive the MediaGlobe in late September. I am very much enthused by being on the cutting edge of technology rather than its trailing edge.

News from SEPA States
continued

Dennis Cowles
Audubon Louisiana Nature
Center Planetarium
New Orleans, Louisiana

Audubon Louisiana Nature Center Planetarium, New Orleans

Dennis Cowles reports that he is extremely busy, just waiting for the lull to come in early June. He has been working with the education coordinator at his facility to put together a science teacher symposium for the New Orleans metropolitan area in fall 2002. Planetarium Educator Hollie Boylston attended a NASA Educator's Workshop at the Marshall Space Flight Center in February, and returned with a lot of interesting ideas and a lot of new professional contacts. A bit of good news: Dennis has been awarded a grant from the AAVSO and NASA to attend a high energy astrophysics workshop in Hawaii. The HEA workshop runs from June 30 - July 6 and includes the annual AAVSO meeting, paper sessions, a July 4 luau/barbecue, a tour of the big island of Hawaii, a visit to Volcanoes National Park,

Dennis Cowles
Audubon Louisiana Nature
Center Planetarium
New Orleans, Louisiana

and a tour of the observatories on Mauna Kea! The meeting concludes with watching the sunset at Mauna Kea Visitor Information Station (altitude 9200 feet) followed by observing.

Volunteer led monthly solar observing continues to impress visitors. Thankfully the Sun is obliging enough to be very active at the moment, and the weather demons generally smile upon the planetarium when the solar telescope comes out. The same weather demons, however, summon those fluffy white aerial monstrosities to interfere with the monthly observing sessions that Dennis conducts.

In the first four months of 2002, only two of the sessions took place. The back up plan, however, seems to be agreeable to most of the staff, when the weather doesn't cooperate, the planetarium staff goes to Dennis' apartment and attacks the bar. In the middle of all of this, Dennis continues

SciWorks Planetarium, Winston Salem

Duke Johnson and Ralph White report: We are running shows with our third back up system. Cassette to the rescue. As astronomically unlikely as it seems, both our ADAT machines decided to go on vacation at once. Tension is high and nails are few.

With the state of North Carolina in its continued financial funk, we have been informed that the last several months of state funding and a percentage of our city funding will be withheld. The city is also threatening 50% cuts for next year. The new policy is to cut hours for everyone. Luckily, we haven't yet had to resort to reducing staff.

On a more positive note, we have installed a daily public sky tour, seasonal in orientation, which has been met with some success. Public outreach observing sessions, one of which is conducted

Duke Johnson
SciWorks Planetarium
Winston-Salem,
North Carolina

quarterly at a local state park, continue to attract participants. Over the last two years, however, the Forsyth Astronomical Society has considered a name change to the Rain Making Society as it seems to rain at least 75% of the time that observations are scheduled. This is in addition to the fact that we are in a fairly severe drought!

We finished our spring laser show run a few weeks ago. It began a bit lethargically but ended with us packed and turning folks away! We ran the new Pink Floyd show, Echoes, to a good response. There were also the expected and feared last minute technical difficulties that invariably accompany such events such as fog machine problems and strobe repairs. Fortunately, the ADAT machines held out for the entire run only to give up the ghost several days later!

We are considering adding some variation to our sky tours in the form of galax

Roper Mountain, Greenville

We have just opened a new building which includes an observatory annex. This consists of a new and well equipped classroom with live feeds from the 23" refractor, and a fine new metal shop for repairing and upgrading telescope equipment. I've needed it for 15 years.

We also included a new telescope deck with some pipes and wedges to allow for quick mounting of our Cassegrain instru

Glenn Dantzler
Settlemyre Planetarium
Rock Hill, South Carolina

ments. Current program offerings include Lunar Odyssey and Worlds in Motion from Sudekum in Nashville and Explorers of Mauna Kea from the Bishop in Hawaii. We will be doing an in house program for the fall. As yet untitled, it will deal with environmental and health issues for young people. It will run for visiting school groups.

Dupont Planetarium, Aiken

The Dupont Planetarium at USC Aiken

recently has been showing More Than Meets the Eye and Voyager Encounters for public and school programs. School groups have also had the opportunity to see the popular Larry Cat in Space.

The Ruth Patrick Science Education Center Observatory has undergone some renovation. The observatory housing the Bectel Telescope, a 16 Meade LX200, has been in place for just over a year. Because of the high walls of the observatory, it was impossible to observe objects low on the horizon.

A structural engineer was consigned to build a structure to raise the telescope. Part way through the project, the engineer left the area, which prolonged the installation. The telescope has now been raised about three feet to enable viewing of more of the night sky. The final step in the process will be to install a new floor so that people can have easier access to the telescope.

The Dupont Planetarium and the Augusta, Georgia astronomy club hosted their annual spring star party on National Astronomy Day. A celebration of Earth Day was included and the event was named, Earth and Sky night. A variety of hands on activities were offered in addition to planetarium shows and observing through a number of telescopes. Over 500 people attended the activities.

Settlemyre Planetarium, Rock Hill

We have had a busy school year and anticipate a busy summer. We have also been showing Mauna Kea on weekends as well as Carolina Skies and a children s program. We will be showing children s programs all summer on Thursdays and Fridays as well as a weekend lineup of shows. Our fall programming will include Star Stealers and also a return of Mauna Kea. I am happy to say we went an entire school year with out a single breakdown of any equipment not even a slide projector. Who d a thunk it? Thats it from Rock Hill, and have a great summer.

Dooley Planetarium, Florence

The Planetarium at Francis Marion University in Florence, South Carolina continues to operate. Founding Director Ed Dooley died in the spring of 2000. Later that year, the planetarium was named the Dooley Planetarium to commemorate him. It is now under the direction of Professor John Mattox. Free public programs continue to be given on second and fourth Sunday afternoons of each month. Many school groups continue to visit. The new Website is <<http://astro.fmarion.edu/planet/>>.

Bays Mountain Planetarium, Kingsport

Spring has indeed arrived in our part of the state. Unseasonably warm weather has brought folks to Bays Mountain Park in great numbers to enjoy the outdoors. The planetarium benefited from this situation with large crowds participating in our April 20 Astronomy Day event. Over 500 people attended free planetarium shows, amateur astronomy displays, or viewed through our telescopes.

One highlight was a special evening talk by Paul Lewis from U.T. Knoxville. They ve just completed a run of Charles Messier and His Catalogue, a show written by new staff member, Mark Provence. Adam Thanz is wrapping up production on Summer Splendors. The show centers around a family on vacation and their quest to learn about the summer sky. Adam has put great effort into this program producing a lot of the graphics himself, assembling all the audio, and his wife, Robin, provided the main narration.

Mike Chesman has been less involved with day to day duties at the planetarium due to his commitments with exhibit development for the park. He has been busy leading construction of an Edmontosaurus skeletal excavation for a new paleontology display. Check out the facility s Web site <www.baysmountain.com> to view some of the above mentioned activities taking place at Bays Mountain. Of special interest to all planetarians is a show for younger children being made available in the DVD format. The program is based on Bays Mountain s tried and true school program The Friendly Stars. It features a new fully animated cartoon style. The staff and a local animator have been assembling the program for the better part of a year. The program was produced in Lightwave and includes really nice artwork. The show requires only a basic DVD player and the star projector to present. Contact the Bays Mountain folks if you d like to know more about how to purchase this program.

Mike Chesman
Bays Mountain Planetarium
Kingsport, Tennessee

Heritage Planetarium, Maryville

Planetarium director, Tom Webber, has been intensely promoting his facility to the local community for the past year. He has announced that a successful fundraising this year brought in over \$30,000. Tom is having his Minolta star projector fully automated by East Coast Control Systems. The theater will also be upgraded to include a Bowen Astro FX for video and a DVD Player. Congratulations on your good fortune, Tom.

Teacher Resource Discovery Center, Knoxville

Paul Lewis has been named a NASA/ JPL Solar System Ambassador for 2002. He has been lecturing around the East Tennessee area to schools and organizations to spread the latest word about missions current and past. If you ever get a chance to visit his resource center you'll be amazed at the variety and quantity of materials he has assembled for teachers to use. The latest word is that he'll be moving the whole kit and kaboodle into a smaller space on campus. Paul is actually looking forward to this as an opportunity to reorganize everything and make the whole operation more efficient.

This summer the resource center along with the Planetary Geosciences Institute is putting together a Space Sciences Workshop 2002 for 7-12 grade educators from East Tennessee. The workshop will run daily from July 29-August 2. Each teacher will get to build a six inch telescope kit that is being included along with a number of teaching modules for their classes. He expects to be able to give each teacher a meteorite and a tektite too. Each day will consist of morning lectures and afternoon hands on labs and demonstrations. Sounds like a great program.

Craigmont Planetarium, Memphis

Duncan Teague reports that Craigmont Planetarium has revived and updated an astronomy education program that is narrated entirely in French. The star show was originally produced by the Wagner College Planetarium in New York. The program gives French students a very different context in which to practice their language skills. Its premiere was Monday, April 29.

Participants in the development of this innovative program included 1990 Craigmont High graduate James Kuhn, French

instructor at Fayette Ware High School in a neighboring county, and narrator and native French speaker Fanou Tizaghti, a University of Memphis student and an intern at WHBQ TV Fox 13. Craigmont Planetarium staff members and students completed the audio visual work for the star show.

First year students of French can appreciate the program if they study the script before viewing the star show. Second year students will need only a list of astronomy related vocabulary words. Third year students should not need any special advance preparation.

Work on this program involved the use of some new technology we had never used in star show production. Instead of doing the traditional cut and splice editing of the reel to reel quarter inch tape that was used to record the master soundtrack, we used a new digital audio processor and edited the audio on a Macintosh computer.

The Onkyo MSE U33HB is a cute little device that accepts analog sound input from a tape deck or another sound source and digitizes the sound before it's recorded to the computer's hard drive. This technique processes all the audio outside—not inside—the computer's electronically noisy internal environment.

The included software, a limited version of Bias Peak, allows for easy editing of the digitized soundtrack. We found it simple to eliminate the sounds of the microphone being bumped and paper being shuffled during the recording. It was also a matter of extracting, cutting, and pasting to add music to the beginning and the end of the narration. (We decided not to have music underneath the narration because it would have made the words harder to understand for the audience.)

We replaced a static slide of the solar system with three minutes fifteen seconds of digital video edited in Apple's iMovie software. Our planetarium interns timed very accurately the section of the program in which the narrator describes the Sun and the planets. Then we used iMovie to edit video from one of our Sky Skan Special Effects Laser Discs. Each clip, edited with field ($\frac{1}{30}$ of a second) accuracy, matched the pace of the narration perfectly.

The most low tech part of the show was some slides of Paris taken from a 1983 vacation to that city. These images brought back fond memories, and so will the successful incorporation of new technology

Chesapeake Planetarium, Chesapeake

Dr. Robert Hitt recently returned from a trip way down south where he relaxed and enjoyed views of the Southern Cross. Now it is back to teaching, teaching, and more teaching.

He has a new DVD computer so that he can create mpeg2 files on his new Hewlett Packard recorder for use in school programming. He has Sky Scan Spice automation and a McBride removable hard drive. That and the True Space Graphics program allows him to wrap flat map images around a virtual sphere and manipulate the images.

He is looking forward to the school year winding down.

Virginia Living Museum Planetarium, Newport News

In March we brought back our popular production of Bear Tales and Other Grizzly Stories distributed by Joe Hopkins Engineering. In June we will install a new production of A Solar Celebration. As the title suggests, this program deals with the Sun and how it effects us and other living things on planet Earth.

We just completed another quarterly evening event on Friday, May 10. This was our Space Day event. Once again our guest speaker was me. I talked about new views on the universe showing and interpreting nearly 80 photos from the Hubble Space Telescope.

Construction was officially begun on our new building with Ground breaking on April 10. This was attended by our new Governor and many other VIPs. Already the foundation is being laid and walls are going up. Work on the additional trails is complete. Many animals have already been moved to their new outdoor habitats. The turning lane is complete and traffic control light has been installed but not enabled as yet.

The completion of our new building will almost triple our exhibit space. Unfortunately the board of directors has decided to postpone the construction of the planned 50 foot planetarium theater. This may need to wait the coming of a generous donor who wants to name the facility.

The opening of the primary building is tentatively scheduled for some time in 2004.

Visit our Website at the address <<http://www.valivingmuseum.org>>
Hopkins Planetarium,

Science Museum of Western Virginia, Roanoke

Hopkins Planetarium & MegaDome Theater

Mark Hodges and his two part time staff members are showing Visions of a Spring Night in the planetarium. The Summer Show, coming soon, will deal with the current summer night sky. The Megadome film offering is Wildfire: Feel the Heat. The exciting film Thrill Ride: The Science of Fun will be opening June 1 and will run through the month of October. Cirque Du Soleil opens November 1.

Mark hopes to attend a conference again sometime in the future. He doubts that there will be money available for professional development this year, however. His e mail address is <mhodes@smwv.org>.

Ethyl Imax Dome and Planetarium, Richmond

Eric Mellenbrink reports that the summer IMAX films are Lost Worlds: Life in the Balance (which is about bio diversity); and Thrill Ride: The Science of Fun (the physics behind amusement park rides). In the fall they will have the traveling exhibit Titanic Science, developed by the Maryland Science Center along with the IMAX film Titanica.

Our summer planetarium show is Hubble/ Night Sky, look at some of the recent Hubble images and the current evening sky from central Virginia. In the fall we will open a new in house planetarium production Rocks in Space.

We will be closed June 10 14 and June 17 21 to replace their main theater control system. They plan to run films on the weekends during the closedown. After over 19 years of good service from our MC 10, we will be replacing it with a new components from East Coast Control Systems.

THE DEADLINE FOR THE NEXT ISSUE OF SOUTHERN SKIES IS AUGUST 1. SEND SUBMISSIONS ON A 3.5 DISK OR VIA EMAIL ATTACHED FILE TO DTEAGUE2@MIDSOUTH.RR.COM OR TEAGUED1@K12TN.NET

HST's Greatest Hits of '96

Duncan Teague
 DT Publishing
 3308 Bluemont Drive
 Memphis, TN 38134-8454

The Space Telescope Science Institute (STScI) provides slides of Hubble images to individuals within regional affiliates who arrange to duplicate and distribute them. At our '96 conference, I was designated to receive and coordinate STScI materials and make them available to SEPA members.

Below you'll find a brief description of all 40 images distributed in 1996. Numbers next to the descriptions are shortened versions of STScI press release numbers, e.g., 21a refers to PR 96 21a.

The entire set of 40 slides is \$50, including postage and handling. Send your check or purchase order to the address at left.

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| <p>01.a Hubble's deepest ever view of the universe, revealing 1,500+ extremely faint galaxies in various stages of their development</p> <p>01.b Sample galaxies from the same Hubble deep field</p> <p>02 The inner region of a warped dust disk around Beta Pictoris once hidden because of the star's glare</p> <p>03 An image of the Egg Nebula taken by WFPC2; it shows the emergence of mysterious searchlight beams from behind a dying star</p> <p>04 The first direct image of a star other than the Sun: Betelgeuse.</p> <p>05 In more detail than has ever been seen before, the process a star like the Sun goes through when it dies</p> <p>09.a In clear, detailed pictures the first ever images of Pluto's surface; four views</p> <p>09.b Pluto surface map</p> <p>10 Gravitational lens effect captures image of primeval galaxy</p> <p>11 Images of globular cluster Mayall II, consisting of 300,000 old stars, in orbit around the Andromeda galaxy</p> <p>13.a The Helix Nebula, NGC 7293 showing collision of gases near a dying star</p> <p>13.b Helix Nebula detail with cometary knots surrounding the dying star</p> <p>14 A view of Comet Hyakutake that focuses on the near nucleus region of the comet</p> <p>15 Three layers of Uranus's atmosphere</p> | <p>taken with infrared filters; both clear and hazy layers created by a mixture of gases</p> <p>16 Image taken of Saturn where its rings appear edge on because of the position of the Earth in Saturn's orbital plane</p> <p>17 A view of several star generations found in the central region of the Whirlpool Galaxy</p> <p>18.a A rare view of Saturn's rings seen just after the Sun had set below the ring plane</p> <p>18.b A series of 10 images of several small moons orbiting Saturn</p> <p>21.a NGC 1365, a barred spiral galaxy located in the Fornax cluster</p> <p>21.b NGC 4639, a spiral galaxy located in the Virgo cluster</p> <p>22.a The Crab Nebula and a detail of the pulsar in its center</p> <p>22.b Sequence of three images showing changes in the Crab Nebula pulsar</p> <p>23.a Huge, billowing pair of gas and dust clouds in Eta Carinae</p> <p>23.b Expansion of Eta Carinae debris</p> <p>25 Hubble's 100,000th exposure captures an image of a distant quasar</p> <p>27 A vast nebula, NGC 604, which is known for a great starbirth region</p> <p>29.a 18 gigantic star clusters which may be building blocks for a new galaxy</p> <p>29.b Blue sub galactic clumps which may be galaxies under construction</p> <p>30 Jupiter's moon Io passing above turbulent clouds</p> <p>31 Clusters of stars and a fishhook shaped cloud of gases found in NGC2366, a giant star forming region</p> <p>32 Changes in Jupiter's auroral emissions</p> <p>33 Views of weather on opposite hemispheres of Neptune</p> <p>34 A Martian dust storm around the edge of the north polar cap</p> <p>35.a A survey of quasar host galaxies</p> <p>35.b A quasar caught in the act of colliding with its companion galaxy</p> <p>36.a Supersonic comet like objects in the Cartwheel Galaxy</p> <p>36.b Cartwheel Galaxy composite image</p> <p>36.c Cartwheel Galaxy illustration</p> |
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HST's Greatest Hits of '97

The Space Telescope Science Institute (STScI) provides slides of Hubble images to individuals within regional affiliates who arrange to duplicate and distribute them. At our 96 conference, I was designated to receive and coordinate STSci materials and make them available to SEPA members.

Below you'll find a brief description of all 40 images distributed in 1997. Numbers next to the descriptions are shortened versions of STScI press release numbers, e.g., 09a refers to PR 97 09a.

The entire set of 39 slides is \$48.75, including postage and handling. Send a check or purchase order to the address

01	Central supermassive black holes in galaxies NGC 3377, NGC 3379, and NGC 4486B:	17	stars surround their mother
03	SN1987A Fireball: One tenth light year long dumbbell structure expanding at six million miles per hour in supernova 1987A	18	A collision between two spiral galaxies in the heart of galaxy Arp 220
08	Changes in the nucleus of Comet Hale Bopp as it moves closer to the sun beginning in September 1995	19	Fireworks near a black hole in the core of Seyfert galaxy NGC 4151
09.a	Transition from spring and summer in Mars's northern hemisphere; photo taken shortly before opposition	20	STIS reveals an invisible high speed collision around a supernova
09.b	Three photos of Mars taken six hours apart with 90 degree difference between images; photos taken shortly before opposition	21	Hubble pinpoints the optical counterparts of a gamma ray burst in a distant galaxy
11	The Egg nebula in which stars are born and die violently; photo shows jets of gas being blasted into space	22	Hubble captures a volcanic eruption plume from Jupiter's moon Io
12	A supermassive black hole located in galaxy M84	23	A gamma ray burst blazes from a titanic explosion in deep space
13	NICMOS captures region of the Orion nebula filled with action as a center for the birth of new stars	24	Hubble's look at Mars shows a canyon dust storm, cloudy conditions for Pathfinder's landing in July 1997
14	Supernova 1987A: different colors represent different elements in the ring	24.a	Dissipation of a large dust storm on Mars
15.a	A view of Mars's cloud cover	24.b	Hubble shows dust and water ice clouds exhibit substantial daily variations
15.b	Seasonal changes in Mars's north polar ice cap	25	Powerful telescopes discover the largest galaxy in the universe
15.c	Four views of Mars rotated 90 degrees between images during summer in Mars's northern hemisphere	26	Hubble separates components in the Mira binary star system
16	The Cone Nebula: six baby sun like	27	Hubble reveals huge crater on the surface of the asteroid Vesta.
		28	Hubble finds a bare black hole pouring out light.
		29	Hubble shows blobs of gas formed by some nova outbursts.
		30	Hubble keeps track of a fading gamma ray burst.
		31	Mars at the beginning of autumn in the Martian northern hemisphere.
		32	Hubble sees a neutron star alone in space.
		33	Hubble identifies what might be the most luminous star known.
		34.a	Hubble reveals stellar fireworks accompanying galaxy collisions.
		34.b	Detailed images of colliding galaxies.
		35	Hubble shows images of a blue straggler star.
		36.a	Hubble tracks clouds on Uranus.
		36.b	Hubble spots northern hemispheric clouds on Uranus.
		37	Hubble shows infrared view of moon, ring, and clouds of Jupiter.
		38.a	Hubble sees supersonic exhaust

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	The entire set of 40 slides is \$50.00, including postage and handling. Send a check or purchase order to the address at left.		
01	COBE's infrared view of the Universe: three maps of the full sky seen in infrared light	20	Four of NASA's proposed designs for the Next Generation Space Telescope (NGST)
02	Distant supernovae: light sources determine universe's expansion rate	21	Galaxy NGC 4314: bright ring of starbirth around the galaxy's core
03	Beta Pictoris: disk indicates planets, possible brown dwarf companion	22	NGC7052: galaxy with 300 million solar mass black hole in its center
04	Jupiter aurorae: a curtain of light extends several hundred miles beyond Jupiter's limb	25	N81 in the Small Magellanic Cloud: a celestial maternity ward
05	Saturn's aurorae: curtains of light extend 1,000 miles above cloud tops	26.a	Galaxy Cluster MS1054-03321: thousands of galaxies 8 billion light years from Earth
08	Supernova 1987A: a collision between the expanding blast wave and circumstellar ring	26.b	Supernova 1996CL: a March 1996 exploding star in galaxy cluster MS1054-0321
10	Serendipitous asteroids: HST images show curved trails of asteroids	27	Distant galaxy clusters: left, in Virgo; upper right, in Andromeda; lower right, in Taurus
11.a	Planetary nebula NGC 7027: a brief stage in the evolution of a medium mass star	28	NGC7742: a small Seyfert 2 active galaxy probably powered by a black hole in its core
11.b	Cotton Candy Nebula and Silkworm Nebula: phases of stellar burnout	29	Saturn: pastel yellows, browns, and greys distinguish cloud differences
12	Star birth in barred spiral galaxy NGC 1808 possibly due to interaction with NGC 1792	30	Sagittarius Star Cloud: HST peers into the heart of the Milky Way
14.a	Centaurus A: nearest active galaxy to Earth shows turbulent firestorm of starbirth	31	NGC7635, the Bubble Nebula: an expanding shell of glowing gas surrounding a hot star
14.b	Centaurus A: tilted disk of gas at galaxy's core surrounds suspected black hole	32.a	Infrared views: left: faintest galaxies ever seen; right: objects 12 billion light years away
15	Stingray Nebula: Henize 1357, the youngest known planetary nebula	32.b	Deep field galaxy: left: visible light areas of starbirth; right, infrared disk structure
16	NGC 1818: globular cluster of over 20,000 stars in the Large Magellanic Cloud	34	Neptune: a look at the eighth planet's stormy disposition
17.a	GRB 971214: gamma ray burst is most energetic event in the universe	35	Uranus, August 8, 1998: its four major rings and 10 of its 17 known satellites; false color
17.b	GRB 971214: gamma ray burst; comparison of Keck Telescope and HST views	36	NGC6210 planetary nebula described as looking like a turtle swallowing a sea shell
18	Saturn: details of the clouds and hazes in atmosphere of ringed planet	37	Quasar PG1115+080 and gravitational lens effect
19	Possible first extrasolar planet ever	38	Nebula M1-67 around star WR124: gas ejected into space at 100,000 mph
		39	NGC3132: southern hemisphere's Eight Burst or Southern Ring Nebula
		41.a	HST deep field south: thousands of

JPL '98 Slides

NASA JPL has sent us the following slides for the Galileo Mission and others. Slides are \$1.25 each.

P 35036B	Launch of Galileo on STS 34 Atlantis	P 47935	Io Glowing in the Dark
P 35213	Deployment of Galileo and IUS	P 47961	Ganymede s Nippur Sulcus
P 37218	Venus Colorized Clouds	P 47970	Ganymede Color Global
P 37327	Moon: Western Hemisphere	P 47971	Io in front of Jupiter
P 37539	Infrared Image of Low Clouds on Venus	P 47972	Changing Volcanoes on Io
P 37593	Earth: Ross Ice Shelf, Antarctica	P 48035	Stereo View of Ganymede s Galileo Region
P 37630	Global Images of Earth	P 48040	Natural and False Color Views of Europa
P 40449	Gaspra: Highest Resolution Mosaic	P 48063	Thunderheads on Jupiter
P 41383	Gaspra Approach Sequence	P 48112	Ganymede Uruk Sulcus High Resolution Mosaic Shown in Context
P 41432	Moon: North Pole	P 48113	Ganymede Galileo Regio High Resolution Mosaic Shown in Context
P 41474	Earth: Northeast Africa and the Arabian Peninsula	P 48114	Jupiter s Great Red Spot
P 41493	Earth: False Color Mosaic of the Andes	P 48122	Two views of Jupiter s Great Red Spot
P 41508	Earth: Moon Conjunction	P 48127	Ridges on Europa
P 42501A	South Polar Projection of Earth	P 48145	Io: Volcanically Active Regions
P 42964	Asteroid Ida: Five Frames Mosaic	P 48188	The Main of Ring of Jupiter
P 44130	Asteroid Ida: Limb at Closest Approach	P 48231	Callisto Crater Chain at High Resolution Shown in Context
P 44131	Ida and Dactyl: Enhanced Color	P 48236	Europa: Ice Floes
P 44297	High Resolution View of Dactyl	P 48293	Callisto: Scarp Mosaic
P 44520	Asteroid Ida Rotation Sequence	P 48294	False Color Mosaic of Jupiter s Belt Zone Boundary
P 44542	Comet Shoemaker Levy 9 Fragment W Impact on Jupiter	P 48299	Asgard Scarp Mosaic
P 47058	Ganymede: Comparison of Voyager and Galileo Resolution	P 48445	True Color Mosaic of Jupiter s Belt Zone Boundary
P 47065	Ganymede: Mixture of Terrains and Large Impact Crater in Unuk Sulcus Region	P 48496	Color Global Mosaic of Io
P 47162	Full Disk Views of Io (Natural and Enhanced Color)	P 48526	Europa Ice Rafts
P 47179	Three Views of Io	P 48527	Closeup of Europa s Surface
P 47182	Jupiter s Great Red Spot	P 48532	Mosaic of Europa s Ridges, Craters
P 47183	Dark Bands on Europa	P 48584	Io s Sodium Cloud
P 47194	Live volcano on Io	P 48698	E4 True and False Color Hot Spot Mosaic
P 47196	False Color Great Red Spot	P 48700	Jupiter Equatorial Region
P 47903	NIMS Ganymede Surface Map	P 48952	Jupiter s White Ovals, True and False Color
P 47905	Five Color Views of Io	P 48954	Ancient Impact Basin on Europa
P 47906	Europa In Color	P 48956	Active Volcanic Plumes On Io
		P 48439A	The Mars 98 Lander
		P 48440A	The Mars 98 Lander
		P 48494A	The Mars 98 Orbiter/Lander
		P 48495A	The Mars 98 Orbiter/Lander
		P 48567	Dr. Peter Tsou holds Aerogel
		P 48589	Stardust Spacecraft
		P 48691	Deep Space 1 Spacecraft

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The set of 42 slides is \$52.50, including postage and handling. Send your check or purchase order to the address at left.

- 01 M57 Ring Nebula: the sharpest view yet of this planetary nebula
- 02 Combined deep view of infrared and visible light galaxies
- 03 HD 141569: stellar dust rings of a star in the constellation Libra
- 04 SNH1987A: self destruction of a massive star in Large Magellanic Cloud
- 05.a Six images of a young stellar disk found in the constellation Taurus
- 05.b Four images featuring disks around various young stars in Taurus
- 06 NGC 1316: silhouette of dark clouds against a glowing nucleus of an elliptical galaxy
- 07 Mars: visible, infrared light images; evidence of water bearing minerals
- 08 Proxima Centauri: a detailed image of the Sun's nearest stellar neighbor
- 09 GRB990123: fading visible light fireball in a gamma ray burster
- 10 Six images showcasing different views of spiral galaxies
- 12 Tarantula Nebula: multiple generations of stars in the brilliant cluster of Hodge 301
- 13 Jupiter: images of the volatile moon Io sweeping across Jupiter's face
- 14 Copernicus: the 58 mile wide (93 km) impact crater on the Moon
- 16 NGC4650A: a polar ring galaxy
- 18 Rings, arcs, and crosses as seen in

- Hubble's top ten gravitational lens effect images
- 19 NGC4603: magnificent spiral galaxy associated with Centaurus cluster
- 20 NGC3603: various stages of the life cycle of stars in a giant galactic nebula
- 21 AB Aurigae: a swirling disk of dust and gas surrounding a developing star
- 22 Mars: a colossal polar cyclone
- 23 N159: a turbulent cauldron of starbirth in Large Magellanic Cloud
- 25 NGC4414: magnificent details in the dusty spiral galaxy
- 26 NGC6093: a stellar swarm in a dense globular cluster
- 27 Mars: the red planet at opposition during April-May, 1999
- 28 MS1054-03: galaxy collisions in distant clusters
- 29 Jupiter: an ancient storm in its atmosphere (The Great Red Spot)
- 30 Giant star clusters near the galactic center
- 31 HCG 87: a minuet of four galaxies
- 32 HE2 104: small, bright nebula embedded in the center of a larger nebula
- 33.a R136 in 30 Doradus: a grand view of the birth of stars
- 33.b R136 in 30 Doradus: two detailed views of a highly active region of star birth
- 34.a NGC 1365: a barred spiral galaxy reveals a bulge in its center
- 34.b Eight different views of the central bulges of spiral galaxies
- 35 HH32: a magnificent example of a Herbig Haro object
- 36 NGC2261: Hubble's variable nebula illuminated by R Monocerotis (R Mon)
- 37 NGC2346: a butterfly shaped nebula
- 38 NGC2440: planetary nebula ejected from a dying star
- 39 OH231.8+4.2: the rotten egg nebula
- 40 M32: hot blue stars deep inside a dwarf elliptical galaxy

JPL '99 Slides

JPL 19 12	NASA/ JPL	P 48045CC	Ready for transport
JPL 25125	Model of Sojourner	P 48154Bc	Pathfinder mated to rock et
JPL 27089AC	Cassini arrival and orbit	P 48155Ac	Launch 12/ 4/ 96, 2: 11 a.m.
JPL 27089BC	Cassini interplanetary trajectory	P 48155Bc	Petal closing at KSC
JPL 27748	Thermal vacuum testing	P 48156	Full stack mated to booster
JPL 28046BC	High gain antenna	P 48313BC	Cassini in the space center
JPL 28162AC	Cassini assembly	P 48505AC	Huygens probe
MGS 001	Scientists assemble MGS	P 48505BC	Huygens probe
MGS 002	Scientists assemble MGS	P 48565	Titan IV launch
MGS 003	MGS configuration	P 48597	Cassini ready for shipment
MGS 004	MGS orbit around Mars	P 48630	Saturn tour trajectory
MGS 005	Launch of MGS	P 48664	Cruise stage at KSC
P 23062	Saturnian clouds	P 48702	Pathfinder on Mars
P 23209	The Saturn System	P 48707	Cruise stage, spacecraft
P 23925	Saturn ring spokes	P 48753	E.D.L. sequence
P 41101	Huygens descent profile	P 48824	Sojourner and Pathfinder
P 42810AAC	Huygens, exploded view	P 48827	The airbags by Sojourner
P 42810AC	Huygens probe interior	P 48841	Sojourner touchdown
P 43538	Saturn: Rings and Moons	P 48842	APXS studies Barnacle Bill
P 43560	Mars global view	P 48845	Twin Peaks
P 43836	Scientists home countries	P 48847	The rock Yogi
P 43862	Pathfinder landing	P 48866	Barnacle Bill mosaic
P 43966AC	Spacecraft, country flags	P 48871	Rover s APXS at work
P 44233	Mars landing area	P 48877	Wedge and Flattop
P 44293Ac	Cruise stage	P 48878	Near Barnacle Bill
P 45424	Hugens probe release	P 48889	Barnacle Bill and Yogi
P 45893AC	Saturn, Titan s landscape	P 48891	360 b&w panorama
P 46225AC	Mapping Titan	P 48893	Yogi and rover tracks
P 46278	The Cassini mural	P 48894	Sagan Memorial Station
P 46356	Cassini with Huygens	P 48901	Sojourner wheelie on Yogi
P 46427	Petal deployment, Mars Yard	P 48902	Rover s view of rocks, lander
P 46428	Airbag inflation test	P 48908	The Rock Garden
P 46506AC	Saturn as seen from Rhea	P 48909	Martian terrain, Wedge
P 46507	Saturn orbit insertion	P 48911	Sojourner, Wedge
P 46507AC	Cassini enters Saturn orbit	P 48912	Forward ramp Twin Peaks
P 46586	Cassini orbital tour	P 48913	The Rock Garden
P 46620	Pathfinder landing	P 48914	A closer view
P 46655	Science targets	P 48915	The rover petal
P 46656	Enceladus and Iapetus	P 48916	Twin Peaks
P 46898BC	Cassini s trajectory	P 48917	Martian terrain
P 47340AC	Propulsion module	P 48918	Barnacle Bill, Yogi, Couch
P 47936CC	Huygens probe installation	P 48919	Sojourner, Barnacle Bill
P 47991	Pathfinder arrival at KSC	P 48920	Couch on the horizon
P 47992Ac	Cruise stack arrival at KSC	P 48921	The rock Yogi
P 47992Bc	Sojourner checking at KSC		
P 48012DC	Transporting Cassini		
P 48045BC	Cassini fully assembled		

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NASA JPL has sent us the following slides for the Mars Pathfinder and Cassini/Huygens missions. Slides are \$1.25 each

Candidate for President-Elect:

A long time ago, in a galaxy (called North Dakota) far far away, a family took their young son of 7 to a planetarium show. I was amazed at the way the sky changed color as day turned into night and back again. Then there were the stars thousands of them. With this event began my fascination with the universe.

As an elementary student, I read any astronomy information that I could find and soon became an avid science fiction addict as well. My favorite books were always about space. My life on our family farm combined with the sparse population of the state gave me numerous opportunities to enjoy the real night sky. We actually worked in the field late at night with nothing but the light of the moon. On moonless nights there were often northern lights to amaze and delight us. Meteor showers also provided a great reason to be out late at night.

We were fortunate enough to be living near enough to Valley City State University one of the best teacher's colleges in the U.S. I graduated with a double major in mathematics and chemistry and a minor in physics. During my last several years there, a few students and I, in conjunction with my astronomy professor brought the planetarium back into service doing live shows for school groups. The excitement was great as we produced Voyager II to Neptune just as the first slide sets became available. Many winter nights were spent outside the planetarium with a C8. I tried not to stay out more than a few hours if the temperature was less than 10 below 0 F.

I spent 1991 teaching math and science in the Jamestown public school system and found out that I had received the Buehler planetarium internship for 1992. The year that followed gave me all the tools necessary to be successful in the field. I had attended Floor Plan but nothing could have prepared me for my first or second or third SEPA conferences.

Stopping in Winston Salem on my way home at the end of the internship, I interviewed for the position of Planetarium Coordinator at SciWorks. I've been there ever since. As I advanced to Planetarium Director and then Director of Programs, I kept working hard to improve our planetarium presentations, build special effects, upgrade systems, and advance astronomy education. Since we are part of a larger science center, we have tried to integrate astronomy related classes and programming into other museum classes and summer camps.

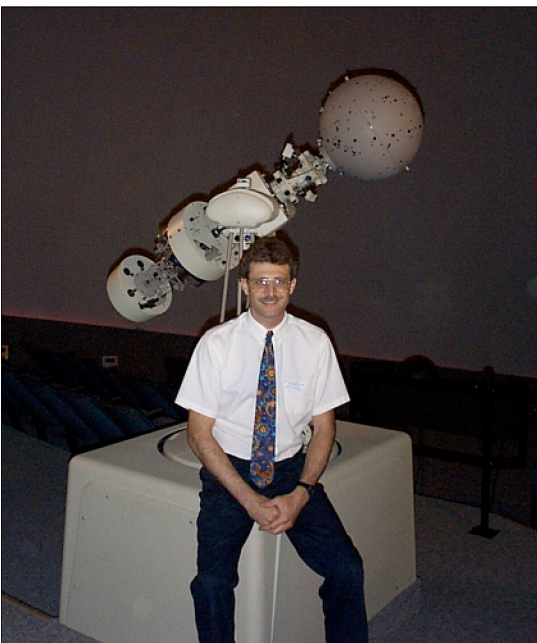
My other duties have allowed me to gain experience in project management, grant writing and program evaluation. Under most circumstances I act as spokesman for our museum but one of the more unnerving of those experiences I had was doing the live morning weather cold for our local Channel 12.

For years, I have spent countless hours performing all aspects of planetarium operation, presenting papers, conducting workshops, working with our local astronomy club conducting public observations, and teaching astronomy classes for Forsyth Technical Community College and Surry Community College.

SEPA has been very helpful to me for the last nine years. It has been here that I have found people of great spirit and insight that have been very willing to help in any way possible. It was a lot of fun (a lot of work) and a great privilege to host the SEPA 2000 conference. It is indeed a special community that can give assistance so freely, a community of which I have been proud to be a part.

Accepting the nomination to run for SEPA president takes me a step closer to being able to give something back to this fantastic organization. I look forward to our challenges as we try to keep the spirit of astronomy and space alive in the minds of each other and our visitors. We must continue to educate the public and local government about light pollution and find ways

SEPA candidate for President-Elect Duke Johnson
SciWorks Planetarium
Winston-Salem,
North Carolina



Candidate for President-Elect:

I became interested in astronomy education when I started working at Horizons Unlimited in the fall of 1991. Prior to that, I was a classroom teacher in the upper elementary grades. In 1994, I began assisting in the Margaret C. Woodson Planetarium, and two years later I became the director.

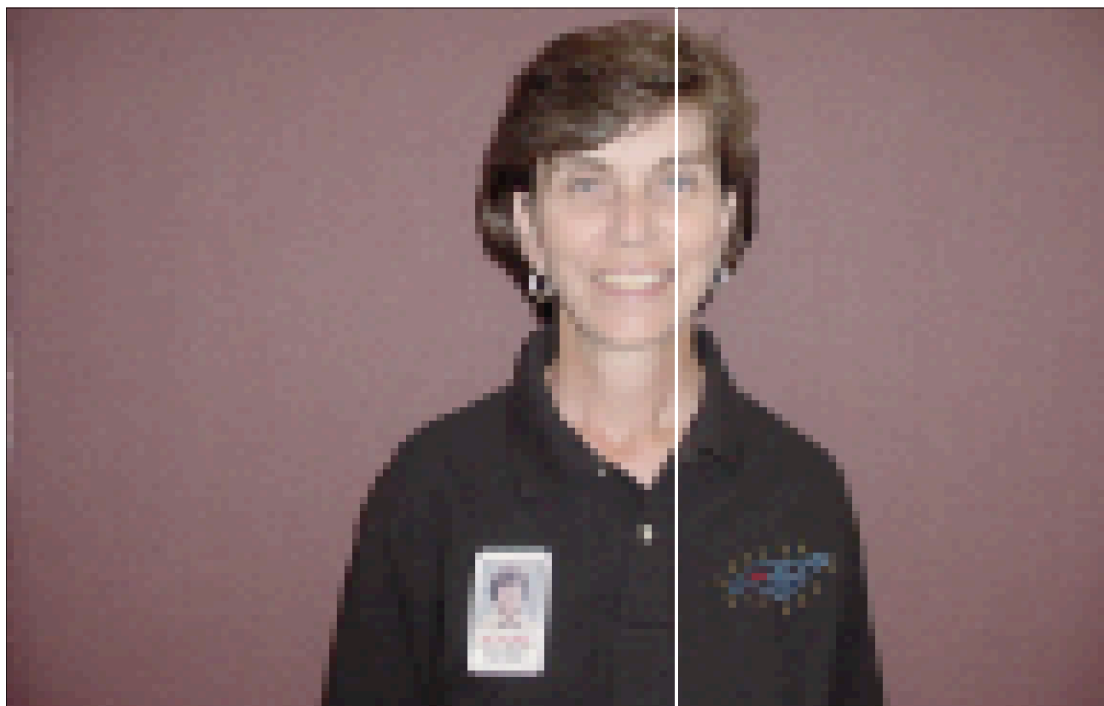
Our operation is a one woman show with the exception of one trained staff person who can substitute as the need arises. For the most part, I teach all the space science programs at Horizons Unlimited. The opportunity to do something I love teach and expand my knowledge in a field that holds great interest for me astronomy is a rare gift.

I first joined the Southeastern Planetarium Association in 1994, and I have enjoyed getting to know my fellow planetarians in the southeast. I have attended five SEPA conferences throughout the area, and I presented a paper at one of them. I always take away so much information that is important as I strive to enhance astronomy education in my school district. It is energizing to be a part of such a dynamic group.

My participation in SEPA has primarily been in the role of quiet observer. I am, by nature, an organized person with a flair for tending to the details, but my leadership style includes working hard for an organization without drawing a lot of attention to myself. If I were to be elected President of SEPA, I would spend a great deal of time asking questions and preparing myself to fill the role adequately. It is important to me that SEPA continue to be a source of renewal, information, and expansion for its membership. There are several projects that I would promote:

1. Update of our member s guidebook
2. Web page enhancement
3. Production of another show for SEPA members
4. Using CD ROM media to record and distribute materials from SEPA conferences.

Thank you in advance for your support of my candidacy. Even being nominated is a humbling experience. Best of luck to Duke Johnson, a well qualified candidate and



SEPA candidate for President-Elect Patsy Wilson
Margaret Woodson Planetarium
Horizons Unlimited Salisbury, North Carolina

Candidate for IPS Representative:

John Hare
Ash Enterprises
SEPA IPS Representative

I've been involved in the planetarium profession since the early 1960s. While I was at the Abrams Planetarium at Michigan State University, I helped with the initial organizing of IPS. Since leaving my position as Director of the Bishop Planetarium back in 1996, I have continued to be active in the professional business of a large number of planetarium organizations. I continue to present talks, workshops, and papers that deal with a variety of topics of interest to the planetarium community and regularly attend planetarium meetings in North America and elsewhere.



Professional Organizations:

International Planetarium Society (IPS) (Since 1971)

Historian 1990

Southeastern Planetarium Association (SEPA) (Since 1979)

President 1985 1986

IPS Council Representative 1984 86, 1993

Middle Atlantic Planetarium Society (MAPS), member since 1996

Great Lakes Planetarium Association (GLPA), member since 1996

Great Plains Planetarium Association (GPPA), member since 1996

Rocky Mountain Planetarium Association (RMPA), member since 1997

Pacific Planetarium Association (PPA), member since 1998

Southwestern Planetarium Association (SWAP), member since 2002

Professional Recognition:

IPS Fellow, 1986 present.

IPS Service Award, 2000.

SEPA Paul Campbell Fellowship Award, 2001.

I would like to have the opportunity to continue to serve as IPS Council Representative for SEPA. Thanks for your vote!

Candidate for Secretary-Treasurer:

I have been married for 34 years to the former Judy Bousson, a speech/ language pathologist. We have two daughters. Katherine, a software engineer and mom, married Dr. Andrew Sullivan in 1999. Christine is principal singer and company manager of the entertainment cast of Silversea Cruises ship Silver Cloud.

I graduated from the Massachusetts Institute of Technology where I earned a Bachelor of Science degree in Chemical Engineering and Humanities in 1968. I earned a Master s degree in Elementary Education from the University of Memphis in 1970.

After teaching physical science and physics for four years for the Memphis City School System, I became Director of the Craigmont Planetarium which opened in 1974. I have been a member of SEPA since 1975, serving as President Elect from 1981 82, President from 1983 84, Past President from 1985 1986, and Secretary Treasurer and Southern Skies Editor since 1995. In 1981 I received a SEPA Special Achievement Award for co hosting the SEPA Conference in Memphis, and in 2001 I was honored with SEPA s Paul Campbell Fellowship Award.

On three separate occasions the NASA Ames Research Center in California has awarded me grants to produce and distribute star shows to select nationwide planetariums. I wrote and produced On the Shoulders of Giants, the story of the Pioneer Venus spacecraft mission to Venus, in 1978 and Saturn: Gateway to the Stars, the story of the journey of the Pioneer 11 spacecraft, in 1979. In 1983 I wrote and distributed The Age of Space, a program that celebrated the 100th anniversary of the birth of Robert Goddard.

I have been involved with three PBS elementary science series for television. I wrote scripts for and appeared in one episode of The Scientific Bureau of Investigation and four episodes of The Science Corner. In 1981 I served as writer/ host for an internationally distributed PBS series called Vantage Point.

In 1987 my student produced newsletter Skylights was recognized by Compute! magazine as the outstanding business publication produced with the desktop publishing software Newsroom. In 1996, two of my students placed fifth in the national Thinkquest competition for their Web site The Online Planetarium Show, and in 1997 two new students won the Thinkquest international first place award for their Web site Mission to Mars.

I started an electronic publishing and computer consulting business in 1993. D T Publishing specializes in newsletters and educational journals. I have also been teaching Macintosh applica



Duncan Teague
Craigmont Planetarium
Memphis, Tennessee
SEPA Secretary-Treasurer

a drain on our funds. I want it to be a separate account that we can use creative methods to fund. The committee did come up with ideas for eligibility criteria, application procedures, and funding. Again, I do not propose that we simply shell out money from SEPA's account. I would like us to set up a separate account and work on creative ways to replenish the funds continually.

We may offer the grant when funds are at a minimum level within the account so as to not accrue service charges. At the business meeting, I will likely ask for a motion from the membership to authorize SEPA's Treasurer to set up an account into which we would put funds raised from various sources to be used for this purpose when and only when sufficient funds are present.

As I mentioned last time, we are now free to choose the direction our next SEPA program production will go. With the conference problems, I haven't had time to deal with this lately. As always, we are open to suggestions. We could continue to pursue the Galileo show idea or go with an entirely different idea. I would like to have some suggestions to present for a straw poll during the business meeting. Please send them to me soon. Also, if there are any other items to be presented by the

general membership, please let me know them before the conference so that we can put them on the agenda and plan the time requirements.

We will also be considering sites for the 2005 conference in the near future. Mike Sandras has wisely suggested that in the future we have a conference site committee to whose job it is to be the first point of contact for prospective hosts. In case the situation develops (as has recently) that we have no conference bids, it will be their job also to seek out future conference sites and twist arms if necessary. Now is the time to consider this. Please consult your respective administrators about the possibility of hosting a conference. Let me know as soon as possible about your bid, and be prepared to make a short presentation at our next meeting. A possible three way joint conference is still being discussed for Wheeling, West Virginia in 2007. More information may be presented at our July meeting.

Mike Chesman is still working on the SEPA Guidebooks. If you haven't received one of these helpful references, it could be due to a failure to send in your information. I believe Mike will be bringing the undistributed booklets to the conference. If you want one, we will give higher priority to those who have submitted an entry.

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:

Southern Skies

VOLUME 22, NUMBER 2

JOURNAL OF THE SOUTHEASTERN PLANETARIUM ASSOCIATION

SPRING 2002

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LASC Planetarium as of April 15, 2002

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