

President's Message

Wow, did two years fly by! It seems like a few months since I was humbled by your vote of confidence. I'll try hard to not let SEPA down.

In a fine start to my term, I was surprised to read in the IPS President's message that Virginia is not in the SEPA region. Hm. Is that going to be a problem? I recall another SEPA president from Virginia, so it must be okay. Maybe no one will notice. Kidding aside... many of you know Virginia is one of the states that overlaps another region. Some northern Virginia planetarians find it easier to attend MAPS conferences. Taking advantage of my location, I'm a full voting member of MAPS as well as SEPA. Hm, again. Technically, I could run for president of both organizations (muuhaha!) Today the east coast tomorrow the world, right pinky? Oh well, running is easier than winning. Not to worry. I can't think of any reason I would want to dilute this experience by adding another organization on top of it. It will be all I can do to keep this one running smoothly. I have always been a SEPA person first, and I want to focus on the organization that gave me my start.

It makes me think back to my first SEPA conference in '81 at the Pink Palace museum and Sharpe Planetarium in Memphis. I was a relative newbie to the planetarium field. I had just come off my first year of full time planetarium work, after working in my college's planetarium for at least six years. (I was on the five year plan and then added a year for graduate studies.) I remember in Memphis being greeted warmly by Linda Hare, Carol Hopkins, and others in this friendly group. That really set the tone for my SEPA experience. The warmth SEPA gives members, and especially newcomers, is a tradition I hope and believe will continue. I want to thank all who have helped and continue to welcome and help newcomers along the way. A special thanks goes to Carol Helper, Dennis Cowles, and others who worked hard to organize a special newcomers greeting at conferences. This is a nice beginning of what I hope will be a great professional experience for all of them.

In the next two years we'll have chal-

lenges to face and new ideas to try. How will changes in technology effect our jobs in the future? Will people still come to planetariums when information is so readily available on TV and the Internet? What can we do to assure this? Maybe we should plan panel discussions on this topic. The planetarium is the world's first and best virtual reality device, and people will continue to come to us.

SEPA supports its members in many ways. Several organizations endow a fund from which money is available to help needy, deserving members attend conferences or workshops. I would like to see SEPA look into the same thing in some form. I picture a fund from which we can award grants up to \$250-\$500 each (depending on available funds) to needy applicants. Funds can be raised for this on an ongoing basis through tax deductible donations and special events at conferences like silent auctions. We're a creative bunch. I'm sure there will be many other ideas. I plan to bring it up at our business meeting for discussion. If there is support, I may then ask for volunteers to serve on a committee to work on this idea. This committee should find out if this would affect our legal status and then advise us on developing the details for the application and selection processes, as well as any follow up.

Next, one of the great benefits to our membership has been the Members Guidebook project spearheaded by Mike Chesman. I continually find it useful. It could be even moreso.

What? You say you haven't opened it? The reason for that could be that you haven't submitted your information. Yes, there is a catch. The condition for receiving future updates is a submission to the guide book and sending in your registration page from the front of the book. The information needed amounts to about two text pages and a couple of photos.

This helpful book would be far more useful if it included all members. If you haven't submitted your information, then

David C. Maness
President
Peninsula Planetarium
Newport News, Virginia



this means you! Do I have to list names? The more individuals, vendors, and planetariums included, the more valuable this book will be to all of us. So please take a few moments to write up and send in the information to Mike Chesman, Bays Mountain Planetarium, 835 Bays Mountain Road, Kingsport, Tennessee 37660.

The copy is divided into two sections. The first is your professional background called For the Record. This consists of whatever you want to write about your involvement in astronomy, education, and the planetarium field in 300 words or less. Another section called Just for Fun is exactly that. Include interesting facts people aren't likely to know about you, like birthplace, family, hobbies, and interests in 150-200 words. The last section is about half a page about your facility. Mike also needs your birth date, a digital photo of you, your planetarium, observatory, or museum building, and the year you joined SEPA. Is that so hard? Send it in soon or expect some personal phone calls. (Is that a promise or a threat, Mr. President? Answer: Yes!);)

We have an exciting conference coming up June 26-29 at Eastern Kentucky University's Hummel Planetarium in Richmond. It's a joint conference, and it's not only an opportunity to bring southern colleagues together but also a chance to meet a number of people from the northern part of the country. As you probably know, Great Lakes Planetarium Association members will be joining us this time. I'm sure we'll show them the southern hospitality on which we so pride ourselves.

Since we'll have several more attendees than usual, I expect it will take many volunteers to be session monitors, gofers, etc. I expect SEPA people will come forth as usual to help make this one of the best conferences ever. Please see the conference Website for more information at: <<http://www.planetarium.eku.edu>> or the SEPA Web site at <<http://www.sepadomes.org>>.

Thinking about the upcoming conference reminds me of a bit of business that needs to be taken care of before then.

(continued on page 24)

IPS Report

A new President has assumed office in IPS with the coming of the new millennium. Martin Ratcliffe, formerly of the Armagh Planetarium, Northern Ireland, and the Buhl Planetarium, Pittsburgh, and now director of the new Cyberdome in Wichita, brings a strong forward-looking influence to the organization.

Past President, Dale Smith in his two years in office, literally travelled around the globe in his successful efforts to bring new and far-flung affiliate member organizations into the IPS fold. Martin has a hard act to follow but has a dedicated and hard-working complement of officers, committees, and affiliate representatives to assist him in the efforts.

Also assuming office on January 1st were Lee Ann Henning, Secretary, and Shawn Laatsch, Treasurer. Both ran unopposed. Jon Elvert, of the Lane Planetarium in Eugene, Oregon, was elected to the position of President Elect.

The next IPS conference will take place in Morelia, Mexico, July 14th-18th, 2002. Registration information will be available

before the end of the year. Now is not too soon to mark your calendars and begin thinking about attending.

For those who read Spanish, a link to information about the Morelia conference can be found at the IPS Website <www.ips-planetarium.org/> I'm sure an English version will be available soon.

IPS will conduct its off-year council meeting at the Vatican Observatory, October 20th-21st. Among the many items of business that will be discussed and transacted will be the site choice for the 2004 IPS conference.

Three sites are in contention: Oakland, California <www.chabot.space.org>, Melbourne, Australia (Website not listed), and Valencia, Spain <www.cac.es>. A detailed description of the invitations will be published in the next issue of Southern Skies.

As your representative to IPS, I will be available at the SEPA/GLPA 2001 conference and am always reachable by e-mail <jlhare@aol.com> to discuss any and all aspects of IPS.

New Astronomical Discovery: Universe Revolves Around SON, not Sun

I used to think the discovery of a new planet by the Hubble Space Telescope was exciting. I used to think the Earth revolved around the star at the center of our solar system. Boy, was I ever wrong. The whole Universe revolves around my new grand SON, Ryan James Sullivan. He looks at me with big blue eyes, he smiles sort of and I'm under his spell.

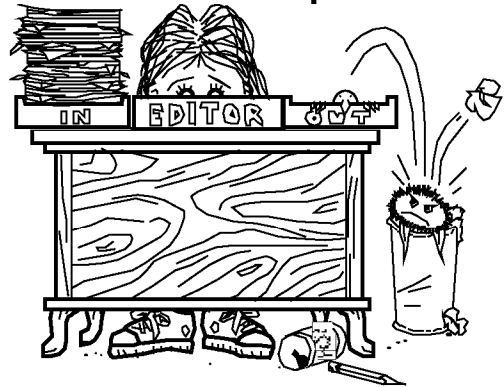
Ryan is a big boy. He was 10 lbs. 2 oz. at birth, and he was 21 ³/₄ inches tall. He's got my daughter's eyes, my son-in-law's ears, my wife's charm, and my appetite. I look at him with the same reverence and awe I have for the Cosmos.

Our 26 ¹/₂ year old Planetarium has some new looks, and most of them are due to the untiring efforts of our newest staff member Donna R. Thomas. She has spent many hours revising and expanding our Web presence, and she has made it look great. That's not just my assessment. Some of our colleagues have told us how very impressive it looks. Please read Donna's comments about our changes in the Tennessee state news section.

Once again, I'm at a loss to explain the lack of regular material in this issue of Southern Skies. It's really a slim issue. Several regular features weren't submitted, and that's not necessarily the fault of an associate editor. If/when you are asked for information that will be included in your journal, please respond in a timely manner. To quote our past president, "We're all adults, here. The deadline is printed in each issue. We shouldn't have to be reminded."

With this issue of Southern Skies I'm sending a second dues invoice for those who haven't yet remitted dues for calendar year 2001. Please mail me your dues before the Richmond, Kentucky meeting. Don't send them to the conference host.

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	
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Area	Fax	
Position		
E-mail address		

Small Talk

Elizabeth Wasiluk
Small Talk Editor
Berkeley County Plan-
etarium



In October I got a chance to travel with Rod Martin of William Brish Planetarium in Hagerstown, Maryland to attend the Maryland State Meeting hosted by Shaun O'Brien and Cheryl Bauer of the Albert Einstein Planetarium at the Air & Space Museum in Washington, D.C. You may be wondering about the Maryland state meeting and why, I, a West Virginian planetarian, was at a state meeting that wasn't even held in Maryland. Well, last year, Rod Martin hosted the Maryland state meeting and since it is about 30 miles away, I went. Washington, D.C. is 90 minutes away from me and I guess no body else offered to host the meeting.

There were many nice paper sessions, including one on estimating large numbers using the starry sky and toilet paper tubes. We were also treated to a couple of planetarium programs and all in all Cheryl and Shaun are to be commended on hosting a great state meeting. Even though the million family march was on in D.C., we had no trouble at all getting in and out of the city on the metro.

November was a arduous month for me. After living 13 years in the same place, I was forced to move as my building was being sold. (You know someone told the Apollo 13 astronauts that the number 13 wasn't unlucky either.) I had thought about buying a cabin in the woods, but heck, I already have one that I rent out to authors as a second income and I just didn't want another one.

Finding a place to live is difficult on such short notice in the Eastern Panhandle. Not much available in the city, and everytime I tried to look at a new apartment, I was told it was rented over the Internet to someone else moving here, sight unseen! I even had to pay for credit checks and police reports to be forwarded to future landlords. Got fingerprinted a couple of times as well. I've never had to do this before. Could it be my SEPA reputation is out?

Finally I found a place more money and much smaller than my current place. When I was finally all set to move, not only did it rain all day, but my mom was rushed to intensive care at the same time

in Niagara Falls, New York with congestive heart failure, chronic bronchitis, and pneumonia. I was expecting movers any minute and couldn't just drop everything to be with her.

I finally managed to drop off the keys on my way to BWI on the Saturday before Thanksgiving. My mom was on a ventilator, and she had had to be revived twice. Having been through all of that, she looked remarkably well. Her doctor recommended that she have a tracheotomy done, but said that there were risks attached to it. She was gagging with the tube down her mouth, so nervously I approved and it was done the Wednesday before Thanksgiving. I am happy to say she is doing much better and she is back at the nursing home she lived at prior to getting sick. She didn't look good at Christmas, having the flu on top of trying to get well from the November illness.

This episode with my mom made me want to be closer to her.

It is an eight hour drive to Niagara Falls from here. I began to wonder maybe I should give up my job and move back to New York?

What would I do there? I worked in every planetarium there is to work in the Western New York area. Here I have tenure, a nice planetarium, even if it is a bit outmoded, and I feel appreciated. As much as I like teaching astronomy, I don't think I'll be able to do it in New York. Thus began my Dark Night of the Soul. What should I do?

The thought that I would leave a profession that I so dearly love seemed a bit devastating! Some people suggested that I should move my mom here. But she so dearly loves where she is at right now. Besides, she is a difficult to place patient with health problems compounded with a severe mental illness. She is in the health care system in New York, and that seems to work for her.

Also, I now had a more expensive place to live that was smaller and had to put stuff into two different storage units rather than throw it out. Lots of astronomy stuff that I just couldn't part with. I'll have to go through it someday. Plus our health

care plan went up at work and our salaries didn't, so it was like taking a cut in pay. Get a second job? In what free time? I was beginning to get really depressed and worried that I would have less time and money to visit my mom.

Maybe I could work the summer in a planetarium? Anybody out there interested in an experienced planetarian working the summer doing star shows in your facility? Write, phone, or fax and I'm your gal. Hey, can you find me a temporary place to live as well? Just think, extra help in summer when all those tourists descend on your facility and you'll have extra help you won't have to teach the constellations to. Keep me posted.

Yes, Virginia, I did see the partial solar eclipse. At Berkeley County Planetarium I did a program on the eclipse for people to teach them how to view it and passed out commemorative eclipse glasses to view the eclipse safely. Rod Martin called to say that he had Hanukkah eclipse glasses. One of my eclipse planetarium programs got cancelled due to snowfall. The week before school broke for Christmas, we got three and a half days off due to snow and a power failure. Best Christmas gift I could ask for. It's a wonderful job, somebody's gotta not do it.

I actually viewed the eclipse from Hamilton, Ontario, Canada in the parking lot of St. Patrick's Catholic Church where I went to mass on Christmas Day. It turns out a fellow parishioner, Colin and his wife Pauline were there all set up to shoot pictures with his 10 inch Meade equipped with a solar filter. I was there with free eclipse glasses to pass out to folks and #14 welders glasses and my sunspotter all of which fit conveniently inside my Christmas luggage. Travel Tip: Dirty underwear makes great cushioning material. Turns out that Colin is a member of the Royal Astronomical Society of Canada. I sure hope he sends me some pictures. We were blessed with perfectly clear sky, a 58% partial, and some nice sunspots. I could have done without the 17 weather, but hey, that's what thermal underwear is for.

Colin's pastor really made out. As a thank you for letting us use the parking lot, Colin gave him a Royal Astronomical Society of Canada calendar. If you are more familiar with the Society's Handbook, take time to see the calendar, as it is filled with great astro shots all taken by RASC's members.

Three cheers for USA Today putting partial eclipse pictures on the front cover of their paper with photos taken by an amateur astronomer. They could have been a bit bigger, however.

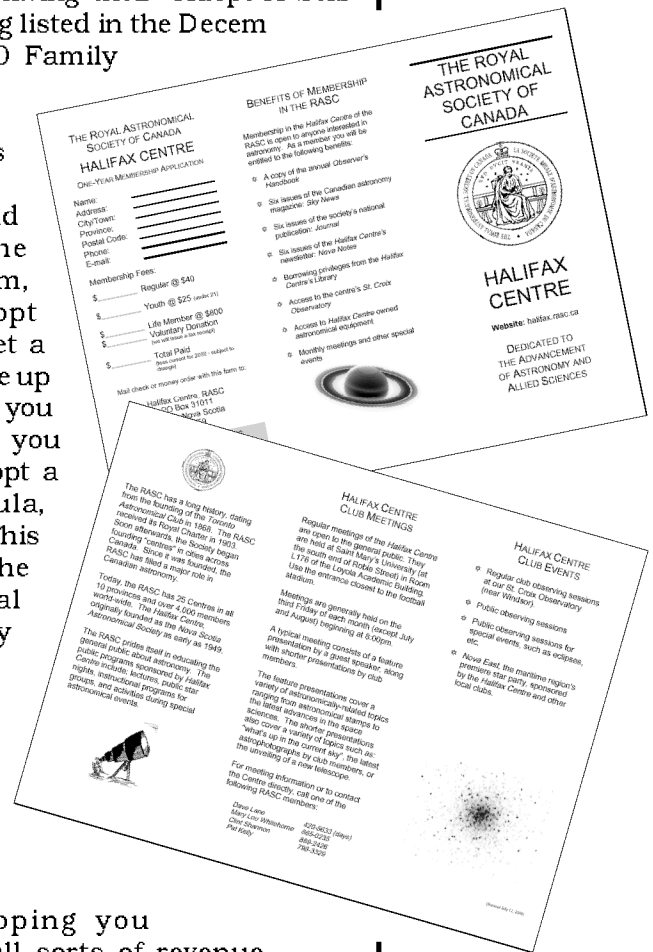
Finally, hats off to the planetarium in Orlando for having their Adopt A Star program being listed in the December 17, 2000 Family Circle magazine as a great Christmas present. Basically a fundraiser for the planetarium, you can adopt a star and get a neat little write up on the object you adopted and you can even adopt a galaxy, nebula, planet, etc. This sure beats the International Star Registry and explaining to people why nobody who really works in astronomy calls that star Doris.

Here's hoping you brought in all sorts of revenue from your SOB show and all goes well for you in the true new millennium.

Isn't it amazing that the same people who called the year 2000 the start of the new millennium are now correcting themselves?

They probably just wanted an excuse to party again.

Small Talk
continued



Above: Royal Astronomical Society of Canada membership brochure

Book Review

Dragonfly: An Epic Adventure...

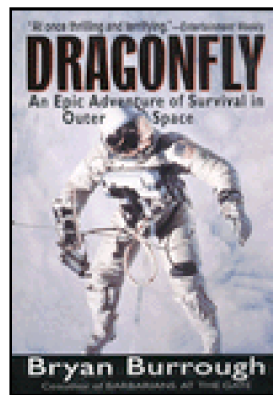
Patrick McQuillan
Book Review Editor
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Just before Christmas I was searching for a book to read while on vacation in the Bahamas. Your first thought might be, Why do you need a book to read while in the Bahamas? It s the Bahamas! Have fun. Party. Enjoy the island! Read when you get home.

Well, yes, I agree. However, the place we were staying on Grand Bahama Island was far (10 miles) from the city night life. This is both good and bad. We were on a nice, sparsely populated beach (good). But you had to drive to get to the night life (bad). It was relatively quiet and relaxing (good). It

was relatively quiet and relaxing (bad). In anticipation of having free quiet time in the evenings and knowing I had to write something for this column, I wanted a good book in my hands. I also figured that while Grand Bahama does have the NASA tracking station that tracked both Ham the monkey s and Alan Shepard s flights and even though the main building of the tracking station is now a public library, I couldn t review the library.



Dragonfly was recommended to me by my assistant. He had recently read it and said he could not put it down. I was familiar with the book, and it was on my list of books to review at some point. Plus we are a Star Station One™ site, so I figured that the book would be good to read for background information for talks. Thus with a copy of the thick (527 page) book crammed in my carry on bag (along with the camera, film,

new underwater camera, passport, etc.), I boarded the plane to paradise.

Dragonfly chronicles the Shuttle Mir joint mission program. The author interviewed astronauts, cosmonauts, mission control staff in the U.S. and Russia, and folks involved in building and outfitting the spacecraft. The book is a fascinating and very scary look at a program I m sure most of us felt was an easy, well thought out next progression into the final frontier. Read this book and your view of the space program will be drastically changed.

It is hard to sum up all the great things detailed in this book. The ISS might not be on the road to completion today if it were not for the Clinton administration wanting to block the sale of Russian rocket engines to India and if Dan Goldin, et al., had not suggested offering Russia the carrot of full partnership on what became the ISS. The entire ISS program literally came down to the Clinton administration desperately needing something anything with which to tempt the Russians.

The difficulty negotiating with a former Soviet Republic left Russia dangerously short of Kurs automated docking systems. They were dismantling them from Progress resupply ships so they could be returned to Earth and reused. Each time a Progress burned up on re entry, Russia would lose a Kurs system. I was worried to hear during the Expedition One mission to ISS, that when the Russians had problems with the Kurs system on the Progress resupply ship not automatically docking, they were going to remove it from the Progress and return it to Earth to determine the problem. I am sure the overriding factor in that decision was the chance to reuse it on a future flight.

Potentially the greatest space accident of all time (in orbit and Apollo 13 not withstanding) was caused by the Russian automated docking system. In case you missed the point, the ISS uses the same docking system used on Mir that caused the collision that almost killed both the residents and the Mir program.

We often regard the space programs of the United States and Russia as cutting edge technology. It is rocket science after

Dragonfly:
An Epic Adventure of Survival in Outer Space
by Bryan Burrough
Harper Collins Books,
New York, New York
©1998
527 pages
ISBN 0-06-093269-4

Reviewed by
Patrick McQuillan

Book Review

The Little Book of Stars

The Little Book of Stars is just exactly that, a little book about stars. The author takes a journey through time, bringing the reader along explaining and diagramming the process involved in star, galaxy, and planet formation.

It is not a book about the myths and stories of the constellations. It will not tell readers where to find them, or of all the interesting things found inside their confines. This book simply and elegantly informs the reader of stellar formation, evolution and death.

Each chapter of the book builds onto itself, beginning first with what fusion is and ending with the search for extra solar planets. The author informs on how to classify stars based on size, temperature, and luminosity. Variable stars are also visited and explained in simplistic detail. Gravity, the strong and weak forces, and electromagnetic forces are introduced as players in the cosmic dance.

Astronomical history cannot be avoided when dealing with star classification, there are sections of history explaining the meaning of the Hertzsprung Russell diagram. Instructions on how to use one are specified. History of the classification scheme, magnitude scales, and alchemy is mentioned. There are few equations in the book to distract the reader. There are a few that are needed, however, and they illustrated the needed point beautifully.

There are many pictures included in the book that would be absolutely spectacular in color. The color images would add much more meaning to the reader. When addressing a hot, white O star, show one; when addressing a cooler, red G star, show a red star. Black and white images can only take a reader so far. It really makes little sense to explain to a reader what the spectral class of a star means, and then show that star if they can not see that it is truly a red star.

There are several Hubble Space Telescope images of planetary nebulae, clusters, and a supernova remnant that would be better shown in color. Color pictures won't make or break this good book, but would definitely add to it.

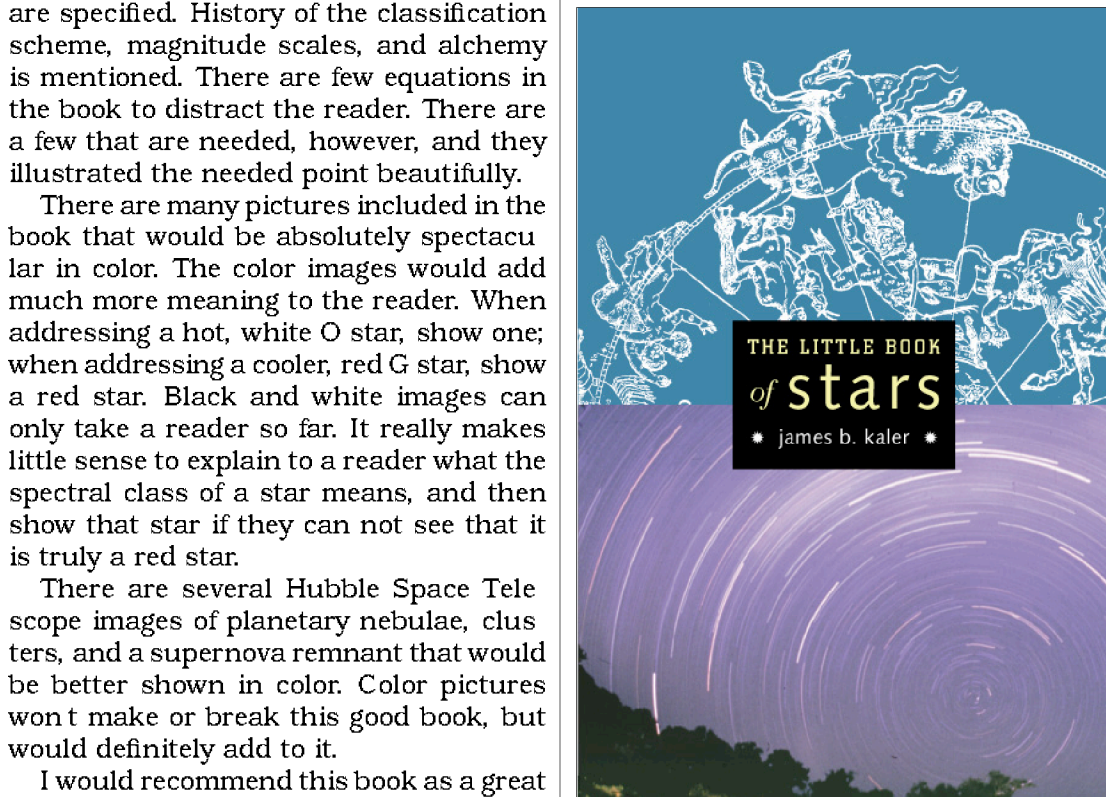
I would recommend this book as a great

introduction to astronomy. The author assumes that the reader knows very little about the greater world around them. Because of this basic assumption the technical terms are wonderfully explained in sufficient detail so as not to leave the reader feeling confused.

The author tells the story of galaxies, stars, and planets as a story. He includes humor, good analogies and the right amount of lightness setting the reader up to understand what they see when gazing up at a star lit sky.



Patrick McQuillan
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Alexander Brest
Planetarium
Jacksonville, Florida



The Little Book of Stars
by James B. Kaler
Copernicus Books,
©2001
180 pages
ISBN 0387950052

Reviewed by
Sarah McDonald,
Planetarium Educator

News from SEPA States

George Fleenor
Bishop Planetarium
Bradenton, Florida

Alexander Brest Planetarium, Jacksonville

Patrick McQuillen reports that they are busy with shows, repairs, and additions.

High on the list of activities in the winter was a long awaited visit from Zeiss to repair our planetarium projector. Several of the slip rings needed replacement so that we could use all the functions of the projector. Also, the lamps and motors are no longer produced so they were replaced with newer models. The lamps were replaced with a model that should provide us with brighter stars, a nice benefit. The planetarium was closed from January 9 30 while these repairs took place.

But that doesn't mean the staff got a three week vacation. We had plenty of other things to do outside the planetarium. Every day of the school year we teach two two hour classes on Moon phases, tides, and ISS. Every 6th grader in Jacksonville will see this program. Also, while the planetarium is closed we were doing solar observing daily (weather permitting) and more Star Station One™ demos.

Laser shows continue to draw crowds. We are currently running Laser Country and Garth Brooks on Friday evenings and the Beatles and Led Zeppelin on Saturday evening. Weekdays we run Laser Fun, a variety show geared to families.

We sold a lot of eclipse glasses for the December 2000 partial eclipse. After an article appeared in the local newspaper on December 23rd, we had a line of people out the door wanting eclipse glasses. We quickly sold out (1000 pairs) and turned several hundred people away.

Our winter/ spring planetarium programs will be The Sky Tonight, our live tour of the current night sky, and Bear Tales and other Grizzly Stories. Bear Tales is a family oriented star show that points out lots of constellations. It is sold by JHE, and it was written by Jon Bell. This is our third time running it, and it is always well received by visitors.

By the time you read this, we'll have a fully functioning planetarium projector. I will let you know how it turns out.

Bishop Planetarium, Bradenton

George Fleenor reports: Thank goodness

our season has arrived, and all of the snowbirds and tourists are visiting our facility. We are seeing a major increase in attendance, and the recent snap of cold weather has driven several additional beach visitors in doors. Typically we see this type of increase with rain, but, as we all know, rain is bad for astronomy. Cold air, though I am no longer used to it, is much better and allows us an opportunity to do our thing with larger audiences. I hope it stays cold for the rest of the winter season.

The down side to the cold weather is the fact that, due to the museum renovation, we do not have any heat in the building. Brett, Kelly, and I are all running around with jackets and mittens trying to stay warm. Good planning on the architect's behalf, I might add. I thought that south Florida was supposed to be warm!

We did something rather unusual for the 2001 Super Bowl in the planetarium. The St. Petersburg Times contacted us and asked if we would be game for an unusual photo opportunity in the planetarium. The photo was to depict what the Super Bowl might look like in 100 years, and of course it was taking place somewhere else in space. The photo would be used as the cover for a Super Bowl magazine with inside credits going to the Bishop Planetarium. With the love I have for astronomy and football, how could I say no?

The Times rented an actual futuristic space suit from Hollywood and had a make up artist dress up a female model. A brightly polished aluminum football with flashing red lights was suspended from fishing line 6 feet above the planetarium floor, along with the model on scaffolding. This was to ensure that they would be submerged into the planetarium's projection area. Needless to say the photographers were not accustomed to photographing in such environments and they refused to use Photoshop to any extent. They wanted a real shot instead of a combined Photoshop image.

While they were doing their shots, I shot my own over their shoulder. (We had them at a great disadvantage, since this

is what planetarians are accustomed to.) We combined them later in Photoshop the way we thought it should look. I am sure you will see the results at this year's conference.

They were impressed with what we did over their shoulder. Brett and Kelly did a great job in Photoshop assembling and masking the images I captured.

The entire photo session lasted about five hours. We provided the star field, All Sky, globular cluster, and scaffolding. We think that it should provide an outstanding opportunity to capitalize on free advertising. We'll keep you posted on the results.

Currently we're running The Explorers of Mauna Kea from Bishop Museum Planetarium (South), daily at 1 p.m., seven days a week. Saving the Night and A Brief Mystery of Time, a Laser Fantasy International/ Charles Hayden (Boston) Planetarium Production, are presented at 4:00 p.m. daily through March. The matinee laser show features Space Rock in January, and we planned to open a new show, A Space Odyssey, featuring the music of Jonn Serrie, in February. This show, presented daily at 2:30 p.m., will run through April.

Our Saturday morning family star show for January featured Trip thru Space, and we hope to open Sol and Company from the Morehead Planetarium in February. Rusty Rocket's Last Blast is scheduled for March followed by Bear Tales and other Grizzly Stories in April.

Our nighttime Skies Over South Florida continues to feature Saving the Night followed by a live tour of the evening sky. The Tonite Show, an observatory/ telescope program, follows at 8:30 p.m., weather permitting.

On the light pollution front: things were a little quiet due to the holidays, but I plan on stirring things up again soon. I will be headed out to the IDA conference in March and hope to come back with more information to assist in changing local ordinances. We have posted permanent pamphlet holders at the entrance/ exit of the planetarium and keep them stocked with the IDA information sheet #122 and IDA membership information. It appears a lot of people are picking them up, and, hopefully, combined with Saving the Night, they are becoming more educated on proper lighting techniques. Find us on the Web at <www.sfbmp.org>. Buehler Planetarium & Science Center,

Davie

Susan J. Barnett reports: Having survived the election, the recount, and the holiday season, we are looking forward to the new millennium.

We offer public shows four days a week. The current weekend children's show is Rusty Rocket's Last Blast, and we are running A Dozen Universes, also. Wednesday afternoons have several public performances, with rotating shows to serve our college's students. New to the rotation is Magellan: Report from Orbit.

We produced Light Years from Andromeda for presentation in January. In February, we had an original production on African Sky Lore for Black History Month. For Women's History Month (March), we are producing Women Hold up Half the Sky.

Construction still continues on the new Buehler Observatory. The dome should be on soon. Florida bureaucracy is almost as bad with construction as with elections.

Buzz Aldrin Planetarium, West Palm Beach

Erich Landstrom reports: Now through May 13, 2001, the South Florida Science Museum in association with the Texas Museum of Natural History and the International Museum Institute of Texas present: The Secrets of Egypt, featuring Tutankhamun Wonderful Things from the Pharaoh's Tomb. An ancient civilization, a modern mystery, and only science can help solve The Secrets of Egypt. In conjunction with the Egypt exhibit, the Buzz Aldrin Planetarium presents Astronomy of Great Pyramid from the South African Museum in Cape Town, every day at 1:00 p.m. The greatest of all the pyramids and still today one of the largest of all structures on the surface of the Earth is that of Pharaoh Khufu. Using the planetarium's sky to look back 4,500 years, as well as using modern photographs, we explore how and why the Great Pyramid was built to a far deeper astronomical purpose.

Also until Memorial Day, the first ladies of laser light rule the dome in our new laser concert Ladies of Laser. Hear the voices of pop's favorite females, including Brittany Spears, Christina Aguilera, Jennifer Lopez, Shania Twain, and more set to laser light as dazzling as the divas themselves. Our power pop is sponsored by MIX 102.3 FM daily at 3 p.m. and Fridays at 6 p.m. Backstreet's Back and ♀NSync is Larger

News from SEPA States
continued

George Fleenor
Bishop Planetarium
Bradenton, Florida

George Fleenor
Bishop Planetarium
Bradenton, Florida



NASA Astronaut
Edgar Mitchell

Than Life in our laser light show at 4:00 p.m. on weekends during Laser ✨NSync/Backstreet Boys. All programs are from FirstLight Laser Productions; tickets are \$4 per person

Sunday, January 28, 2001 was the 15th anniversary of the explosion of the space shuttle orbiter Challenger while in flight. With the resulting loss of life of seven astronauts, including teacher in space Christa McAuliffe, the SFSM and the village of Royal Palm Beach held a remembrance at Lakeside Challenger Park in Royal Palm Beach, Florida on Saturday, January 27, 2001 at 11:30 a.m. This service was an outdoor assembly to rededicate the park and unveil plaques with the astronaut's names on memorial stones.

The SFSM celebrated the 30th anniversary of the Apollo 14 landing on the Moon Monday, February 5, 2001 with our guest of honor, Commander Edgar Mitchell, USN. As lunar module pilot of the LM Antares, astronaut Mitchell walked on the Moon with Alan Shepard during the Apollo 14 mission January 31 February 9, 1971. Dr. Mitchell spoke at 2:00 p.m. about his adventures, and kindly agreed to a book signing of his publications. Copies could be purchased in the museum's gift store; no returns were allowed, but museum membership 10% discount applied to purchases. Dr. Mitchell was not able to personalize copies. Call me at the museum at 561 832 1988 if you would like his autograph but could not attend.

On Valentine's Day SFSM and the Astronomical Society of the Palm Beaches sponsored viewing of Venus at the Palm Beach County Public Library from 6:00 p.m. until the library closed. Telescopes were available to show the planet of the love goddess, Venus and the rings of golden Saturn. We saw the night in shining amor, Perseus, flying across the sky to his love, Andromeda.

For Floridians who bought or received a telescope, a workshop covered learning to how to use one well, buying the right accessories, and suggestions for viewing projects. The workshop included handouts; refreshments and a coupon for free admission to the Night Sky over the Palm Beaches program at Aldrin Planetarium.

The annual Drop It, Build It, Fly It competition will be held in Dreher Park on Saturday, April 21. The SFSM and the Florida Engineering Society of Palm Beach County will test the engineering skills of junior high and high school students in

the creative ways. Some of these are the following: an egg drop from four stories without scrambling the yolk; constructing a wooden bridge that is lightweight and can support up to 100 pounds; and sending paper airplanes aloft to see how far they travel in linear flight. Cash prizes go to the top three winners in each category.

In my role as a NASA JPL Solar System Educator, the SFSM continues its program that offers a fresh approach to lesson plans, teaching materials, and methods. These exciting Saturday inservice workshops are free to teachers.

January 20: Rockets & Rovers:

Teachers take a look at the exploration of Mars and the Moon through astronauts and robots as they build and launch their own model rockets and meet astronaut Edgar Mitchell, who walked on the Moon during Apollo 14!

March 10: Martian Math:

Teachers take a look at microgravity mathematics problems on the International Space Station, Moon, and Mars for elementary and middle school students.

May 19: Small Bodies, Deep Impacts!

Educators examine asteroids, comets, meteors and other impact hazards, and our methods of detecting and deflecting them, including LINEAR, STARDUST, CONTOUR, and Deep Impact missions.

Over the summer and fall of 2001, the SFSM main exhibit will be AirPlay. AirPlay is a set of highly interactive exhibits which allows visitors to develop an intuitive understanding of how air moves, how moving air affects objects in its path, and how, in return, objects affect the movement of air. The exhibition is specifically designed to allow visitors to make discoveries about air both in very active and in subtle ways.

Air blowers propel bright yellow foam balls through air mazes. An anaconda length section of transparent hose provides a tube tunnel to demonstrate how air moves through tubing, angles, and tees. Model sailboats move along a tabletop from the force created by a bank of fans; and an air cannon shoots a puff of air all the way across a room.

The Montshire Museum of Science in Norwich, Vermont, developed AirPlay as part of the TEAMS (Traveling Exhibits at Museums of Science) Exhibit Collaborative, with funding from the National Science

Foundation.

In conjunction with the AirPlay exhibit, the Buzz Aldrin Planetarium presents Explorers of Mauna Kea from the Bishop Planetarium. Some of the biggest and best telescopes are located at the summit of the largest volcano on Earth, Mauna Kea, in order to get away from the air play of clouds, humidity, pollution, and city lights. With the telescopes atop the Big Island of Hawaii, visitors can explore the Universe of nebulae, clouds, comet comas, and extrasolar planetary weather.

Calusa Nature Center and Planetarium,
Fort Myers

Jill Evans reports that the staff is ready and waiting for the next stage of improvements to the dome. Jon Frantz of ECCS will be coming soon to install the new automation system for our star projector.

Our new slide projection system is working very well, and we're working on reprogramming our shows as well as getting two new shows in the stacks. We just finished our first astronomy class for the public in quite awhile, and it was very successful. We hope to have more to offer throughout the year. Once our new system is in place, we can begin our normal offerings again and we are all looking forward to an updated dome!

The Poinciana Planetarium,
Boynton Beach

David Menke reports: The Poinciana Planetarium closes each year for the holidays, for spring vacation, and for the summer. We just completed our first semester, I've had the best time this past term as the astronomy teacher at this elementary school, which is a math/ science/ technology magnet school. I haven't had this much fun in 20 years, and I don't have to work weekends or evenings.

We held one star gazing evening for 5th graders and their parents on December 1st. It was a fabulous success, and it was a sell out.

Our 700 students were prepared to observe safely the December 25th partial solar eclipse. Each student in grades 1-5, made their own solar eclipse shoe box pin hole viewer, and the kindergartners got a shoe box to take home with instructions on how to make one. In the spring we look forward to future events.

Several teachers have become very interested in participating in FlorPlan meet

ings, and perhaps, later in SEPA, also. Seminole Community College Planetarium,
Sanford

Laurent Pellerin reports the Seminole Community College Planetarium received a fantastic Christmas present. Faced with the very likely prospect of closing within the year due to the lack of replacement parts for our antiquated automation and sound systems, we were granted new life through a \$65,000 grant from the Buehler Trust Foundation, with another \$40,000 in matching funds to come later in 2001. We will be closing this summer after all, but only to renovate our equipment for a grand re opening in the fall!

We will be upgrading our old BCC operating system (Dorks) to Jon Frantz's East Coast Control System, as well as changing out our four track reel to reel decks to Bowen's hard drive sound system (no more tapes!) We will also be getting a Barco projector and replacements for some of our worn out speakers. On the production end, we will be getting our very own film printer, which, with the audio and graphics software we already have, will allow us to produce new shows 100% digitally. It will also allow us to grant requests we have gotten from other planetaria to export our shows, since copies of our shows can be printed from my PC to film and CD just as easily as to paper. When the matching funds are received later, we will be adding dissolvable pans and all skies to our inventory as well.

New equipment, under warranty. No more repairs or working around irreparable equipment. This is new territory for me.

In the meantime, we'll run our regular alternating shows Tonight's Sky and Myths in the Night. Our Saturday night feature will be The 13th Sign: Facts vs. the Myths of Astrology. (I've received several requests for this show, and I hope to make it one of the first available for sale after the renovations.)

We're starting production of a grand re opening show, Lunacy. Given the popularity of the Moon with the public and the fact that it's the one nighttime object light pollution has yet to diminish, we expect it to be very successful. The show will look at theories of the formation of the Moon and the history of meteor impacts resulting in its current appearance. The program will include the use of video tapes of actual

News from SEPA States
continued

George Fleenor
Bishop Planetarium
Bradenton, Florida

meteor impacts that I recorded using a 26 SCT during the Leonids of 1999, the Apollo missions, the phases of the Moon, and of course, a brief tour of the major maria and craters.

All in all, 2001 looks to be very bright for the SCC Planetarium.

Hallstrom Planetarium, Fort Pierce

Jon Bell reports that things have been busy as usual. Kelly Quinn, who began her career as an astronomy student of Jon's here, has gone on to a full time job with George Fleenor and his staff at Bishop Planetarium, and her terrific assistance has been sorely missed at Hallstrom.

Jon's being in charge of the college's Biology department has resulted in an unexpected windfall: one of the bio lab instructors, Sherry Bowen, also has a background in physical science and will help out (Ten hours a week, but it's a start!) in the planetarium. Sherry is also a Star Trek aficionado like Jon. (I think she was President of the Federation at one point, said an awestruck Bell.) The two

should have lots to talk about.

The fall show was The Rockets Red Glare, a live multimedia presentation that featured the current evening sky, plus a 40 year retrospective on the space program. The show topic was suggested by Indian River Community College's 40th anniversary committee and gladly acted upon by Bell. The last time an administrator ordered me to do a particular show, it was Death of the Dinosaurs in 1989. This was despite the fact that I had already written a first draft of a 20 years on the Moon program. (Gotta love those dinosaurs!). This latest directive rights an old wrong and demonstrates that there is justice in the Universe!

Star of Wonder was presented in December. This particular show was written by Jon and produced by the Virginia Living Museum and Bishop Planetarium in Bradenton in 1989. A new revamped show is being discussed for next year.

Hallstrom will showcase SEPA's Saving the Night production this winter, albeit

George Fleenor
Bishop Planetarium
Bradenton, Florida

Jim Cherry Memorial Planetarium, Atlanta

On December 25th, Dave Dundee, April Whitt, and observatory volunteer Steven Jaret answered questions from the media and showed a few visitors the solar eclipse through filtered telescopes, even though the Science Center was officially closed for the holidays. School programming resumed after winter holidays with Explorers of Mauna Kea debuting for 6th 7th grade audiences. Two public programs about Egypt, one for adult age audiences and one for families with young children, opened for Black History month: Stars of the Pharaohs for adults began on January 31, and Of Stars and Pyramids for children opened on March 3. Both were written/produced in house.

The Science, Engineering, Mathematics and Aerospace Academy (SEMAA) program hosted students on Saturday mornings in the fall and winter semesters, and summer curriculum is being re written for NASA by Fernbank staff. Star Station One™ activities continue with demonstrations in the exhibit areas on Saturdays during February and March and Tuesday lectures in the planetarium.

Astronomer Dr. Richard Williamson retired from Fernbank on March 1st, and headed off to Emory University to continue

teaching and research. We'll miss the afternoon chocolate breaks!

Georgia Southern University Planetarium,
Statesboro

Becky Lowder planned a busy and exciting new semester of events. Here's the winter/spring schedule of public events that started off the new millennium.

Friday, January 12, 7:30 p.m.

Capturing a Bit of Stardust

Friday, February 2, 7:30 p.m.

NEAR Shoemaker on Asteroid Eros

Friday, March 2, 7:30 p.m.

The Explorers of Mauna Kea.

Star shows of the current night sky were shown at each event as well as telescopic viewing of the real sky if skies were clear.

The Statesboro Astronomy Club will meet following presentation/telescopic viewing. Saturday, April 7 from 10:00 a.m.

4:00 p.m. is Astronomy and Space Day, GaSoU's largest event of the year to celebrate astronomy and space! Attractions include real Moon rocks from the Apollo missions and meteorites on loan from NASA, a meet and talk with astronomers from the GaSoU Department of Physics, lots of hands on astronomy and space activi

Jim Greenhouse
& Carole Helper
Mark Smith Planetarium
Macon, Georgia

ties for all ages, star shows of the current night sky on the hour and NASA/ JPL videos, telescope, and astronomy/ space displays, free astronomy and space activities to take home, and safe telescopic solar viewing of sunspots, if skies are clear.

Educational school shows began January 8th for the new semester. Here is what is being offered:

Pre K 1st Grade

Space Songs Tour of the Solar System/
live star show

2nd 12th Grade/Adults

Live Solar System Tour/ star show

4th 12th Grade/Adults

The Explorers/ live star show

4th 12th Grade/Adults

Explorers of Mauna Kea/ live star
show

6th 12th Grade/Adults

Hubble Space Telescope/ live star
show

6th 12th Grade/Adults

Star Date: Ancient Horizons

They also show Saving the Night as a pre show or as the main event when requested. It is a wonderful show that has been really enjoyed! It hopefully has made their visitors realize what they have been missing and how to correct it by using proper lighting. Two planetarium interns will be joining Becky this semester to teach, and they will assist with some of the shows.

Fort Discovery, Augusta

A new distance learning initiative from the NSC Starlab training program was broadcast from the National Guard Distance Learning Classroom at Fort Discovery September 8th 9th and September 22nd 23rd. Ms. Cheryl Zimmerman, developer and trainer for the Starlab program, coordinated and taught the newly designed training modules to teachers at Dabney Lancaster Community College in Rockbridge, Virginia. Staff members and Fort Discovery volunteers were trained simultaneously at the Fort Discovery site. The training was funded with a grant written by Ms. Becky Hill, a classroom teacher in Natural Bridge, Virginia. Ms. Hill, NSC Starlab Certified since 1994, served as facilitator for the Rockbridge site.

Bradley Observatory, Decatur

Lectures in the 2000 2001 academic year are focusing on the interconnections

between astronomy and the liberal arts.

February 9: Is the Universe Speeding Up?

Arthur Bowling, associate professor of physics and astronomy, physics department chair

March 9: Cosmic Chemistry

Helene Dickel, University of Illinois at Champagne Urbana

April 6: The NASA Long Range Strategic Plan

Jon Morse, Center for Astrophysics and Space Astronomy, University of Colorado

May 11: Art and Astronomy

Christopher De Pree, assistant professor of astronomy, director of Bradley Observatory

Bradley Observatory and Planetarium are open to the public the second Friday of each month during the academic year, September December and February May. Admission is free. Doors open at 7:30 p.m. A brief public lecture and slide show follows at 8:00 p.m. After the lecture refreshments are served, and guests may attend a planetarium show or gaze through the telescopes (weather permitting). The historic 30 Beck Telescope is now available to the public on open house nights.

The lecture and planetarium show are geared towards both children (8 years and older) and adults. Each academic year, the Bradley Observatory hosts two Equinox Concerts featuring college musicians performing music at the times of the autumnal and vernal equinoxes. Concerts are free.

Mark Smith Planetarium, Macon

Jim and Carole were working on Christmas day for the partial solar eclipse. Santa stopped by to pass out eclipse glasses, and about 200 people took time out from their holiday celebration to see the Sun through a filtered telescope, burn holes in things with a magnifying glass, and enjoy punch and cookies. Carole and Jim want to extend a special thanks to the hourly employees who helped work the event.

The Little Star that Could was the planetarium feature until March, and then Lunar Odyssey began. Dinosaurs will once again return to the Museum of Arts & Sciences this summer. The planetarium was awarded a grant to help buy new equipment and renovate the planetarium

News from SEPA States
continued

Jim Greenhouse
& Carole Helper
Mark Smith Planetarium
Macon, Georgia

Freeport McMoran Planetarium and Observatory, Kenner

Unfortunately we still do not have a final design for the new space theater. The architect, however, stated that everything should be ready by the time you read this. In the planetarium we showed HPS's *The Sky Tonight* and *Winter Tales* and *Lochness Productions' Tis The Season*. We have also been showing several of our own productions as well.

As of late, we have been doing a lot of presentations for the public including solar viewing and various talks on the history of the U.S. manned space program. We have also been contacting NASA's Stennis Space Center in Mississippi in an effort to publicize each other's facilities.

Our Young Astronaut Program continues to do well, and recently we have once again begun planning for this summer's *Space Quest* to be held at the University of New Orleans.

St. Charles Parish Library Planetarium, Luling

I've been invaded not by aliens, but by our Library's Technical Staff. In mid November the Planetarium was closed to provide a work area while our Tech Services Department undergoes renovation. As of this writing the work had still not started. My 20 foot facility now has 7 desks, 2 processing tables, 5 computers, accompanying staff and lots of books. It didn't appear that I would be able to reopen until sometime in late January. In the meantime I got to do duty on the bookmobile. I wonder if anyone else has had such experiences?

Lafayette Natural History Museum Planetarium, Lafayette

Autumn 2000 was a busy time! In September and October we ran a live constellation program called *The Night Sky Game*, the twist being that visitors could take a brief quiz at the end with anyone getting all the answers right becoming eligible for a drawing to win a pair of 7 x 50 binoculars. About 50 people qualified and the winner was selected the first week of November. For the rest of that month we presented a live program about the December 25 eclipse, entitled *Last Eclipse of the Millennium*.

Our building project continued to make progress, to the extent that preparations began for moving the museum to its new

site! As a result our eclipse program ended on November 28th, and school programs ended on November 30th. That same night we had a reception, telescope night, and our last two planetarium programs in our original building. Overflow audiences for both programs got a look at winter constellations, a review of celestial events expected while the planetarium is closed during 2001, and a demonstration of video imagery of the Moon and Sun such as we expect to do in the solar/ video observatory planned for the new site. They also viewed a CD ROM tour of the new building itself.

The planetarium closed the next day, December 1, and JHE arrived to remove the star machine on December 4th and 5th.

Planetarium staff and volunteers will continue public programming from now through our grand opening in the spring of 2002 primarily doing star parties and sidewalk astronomy. We will have H α and solar visual telescopes at the local Children's Museum on December 30th for that facility's annual New Year's at Noon celebration, with about 600 people expected to attend. Since the Children's Museum is directly across the street from the planetarium's new location, we hope this will be the first of many successful joint programs. On February 1st we had a star party under relatively dark skies at a neighboring parish's library branch, and on February 3rd we did our first planetarium free class on using a telescope.

Because Astronomy Day this year conflicts with a major Lafayette festival, we will celebrate early on March 31st with solar viewing from the museum grounds during the afternoon and a star party and telescope fair at a local park that evening. This very successful event last year brought together a lot of local amateur astronomers who otherwise wouldn't have met each other, allowing the public to observe through telescopes ranging from 60 mm - 10 inches in diameter. This year's Astronomy Day will probably mark the first public use of our new 13.1 inch Dobsonian reflector.

Audubon Louisiana Nature Center New Orleans

Effective February 1, 2001 the Louisiana Nature Center (LNC) became known as the Audubon Louisiana Nature Center. This name change reflects the fact that the LNC merged with the Audubon Institute

Michael Sandras
Freeport-McMoran Plan-
etarium
Kenner, Louisiana

more than six years ago. The Audubon Institute also operates the Zoo, Aquarium, IMAX Theater, and other science related facilities in New Orleans.

Assistant Planetarium Curator Dennis Cowles is living in Orleans, France and studying is brains out. He is tentatively planning to attend the March planetarium meeting in Sri Lanka because the airfare from Paris isn't very expensive. He plans to return to his planetarium duties in June, hopefully in time to attend the joint SEPA/GLPA conference.

Planetarium Curator Mark Trotter has recently produced and premiered a new planetarium program The Wonderful Sky which is targeted for pre k - 2nd grade.

This is the first recorded program at the LNC planetarium to use digital images exclusively. There are no slides in the show. That allowed not only still images but also QuickTime™ movies to be projected seamlessly throughout the program. The sound track of the show was recorded and edited

on a computer as well. All of this greatly simplified the production process.

We're still running an array of other programs. For the public we're offering: The Sky Tonight, Cosmos, and The Family Laser Show. For school groups we offer, in addition to the above, Planet Patrol: Solar System Stakeout, The Little Star that Could, a program on the seasons, a program on lasers, and a program on meteorites.

Recently installed was a new Fostex D108 hard drive digital recorder from Bowen Productions. We're very happy with the new abilities the machine offers.

After 13 years of running Laser Rock Concerts on weekend evenings, the last show was presented on December 16th, 2000. Although the shows were still making a profit, it was decided to move on to other programs and expand public offerings. Family oriented laser shows are still being presented on Saturday and Sunday afternoons as well as being offered to over

News from SEPA States
continued

Michael Sandras
Freeport-McMoran Plan-
etarium
Kenner, Louisiana

Craigmont Planetarium, Memphis

Craigmont Planetarium has not only a new staff member, Donna R. Thomas, but also a cool, new logo. The design, pictured here, was named a finalist and received a Citation of Excellence in the Logo/Trademark Design category of the Memphis ADDY Awards in February 2001. The ADDY Awards, sponsored by the American Advertising Federation, showcase creative talent in the advertising industry. Competition begins in over 200 local markets, and the winners proceed to 14 regional competitions and then to the national finals. For more information on the ADDY Awards or the American Advertising Federation, visit their Website at <www.aaf.org/awards/addys.html>.

Designer of the logo, Teri Rhodes White of the Memphis firm Good Advertising <www.goodadvertising.com> has worked in marketing for more than 15 years. For the past three years, she has focused on creative development for clients FedEx and Accenture. Her talents have been featured in the marketing programs of other major corporations, such as Dover Elevators, Anheuser Busch, and Kraft Food Ingredients.

She has contributed to many projects that have been honored for outstanding creative work, including the Best of Show, National Direct Marketing Award,

and multiple regional Communicographics Awards.

Teri has a Bachelor of Arts, Graphic Design degree from the University of Memphis. In an effort to enhance her ability to develop creative solutions that meet the unique needs of her clients, she is continuing her studies in behavioral psychology.

Craigmont Planetarium's newly redesigned Website <www.craigmont.org/planet.html>, features the new logo, which was originally designed for new business cards for the planetarium staff. Posters advertising the planetarium are next on the agenda for Teri and her creative team. For information about the planetarium or its programs visit our Website above or contact a member of our staff, either Donna Thomas <thomasd01@k12tn.net> or Duncan Teague <teagued1@k12tn.net>.

Donna has also spent considerable time recon-
ciling the planetarium's
study guides and evalu-
ation forms to include the



CRAIGMONT
PLANETARIUM

Donna R. Thomas
Craigmont Planetarium
Memphis, Tennessee

Dave Maness
Virginia Living Museum
Planetarium
Newport News, Virginia

Chesapeake Planetarium, Chesapeake

Dr. Robert Hitt writes that the Chesapeake Planetarium is in its 38th year of operation this school term, and he will have been its director for the last 31 years! That is a long time in a galaxy far, far away! My how time does fly, Bob remarked. He also said he would very much like to attend the Sri Lanka conference but will not have time.

Virginia Living Museum Planetarium Newport News

As our traditional holiday showing of Star of Wonder came to a close, I was in frantic production mode to install an adjusted version of Follow the Drinking Gourd from the New Jersey State Museum Planetarium and Raritan Valley Community College Planetarium. We had a great opportunity to cross promote with other local museums if we could come up with a program for Black History month (February). This was the only program to come to mind. I think I secured one of the very last copies, but check with them on that if you are interested.

The program as produced by them is definitely designed for children, so I needed to make adjustments for our mixed age public audience. I rewrote an introduction to strengthen the astronomical and historical nature of the show, but I left the very poignant story at the end intact. I even played guitar and sang a brief section of a Negro Spiritual for background music. The first audience stayed through all the credits. I'm not sure if that was a good sign.

Our first quarterly evening event was scheduled Friday February 2nd. The theme was Groundhog Day. They wouldn't let me change it to Woodchuck Day! We had a special live planetarium show, a guest speaker from SOHO to talk about the exciting research they have done on the Sun, and other displays, and activities. Also, the observatory was open for night time observations.

Fund raising continues for a new museum building. We're about halfway to our \$21 million goal. Work on the first section of additional trails and animal habitats is almost complete. I am still interested in talking with anyone who feels something about your theater works especially well. On the other hand, if there is something about your theater that you think could have been done better, also let me know.

We should all benefit from each others mistakes. We are still waiting for the city to begin installing the new turning lane and traffic control light.

In the spring, we hope to bring Carl Sagan's voice back to the planetarium with the return of Cosmos (the planetarium show, not the PBS television series). It is hard to believe it has been 20 years since that program came out. It has also been five years since the voice of that great science communicator was so prematurely silenced.

Visit us at <www.valivingmuseum.org>.

Planetarium at the Edge of the Universe
Richmond (Jane Hastings)
and
Starlab Mathematics & Science Center
Richmond (George Hastings)

George and Jane are into a heavy schedule of school programs. Coincidentally Jane is also doing Follow the Drinking Gourd but for third graders. She includes a nice discussion about gourds and how they can be used. She even gives each class a dried gourd (while supplies last) to take back to the classroom with them.

Hopkins Planetarium & MegaDome Theatre, Roanoke

Leslie Bochenski says they were closed three weeks in January for maintenance. The agenda included visits from Ash Enterprises to give the Spitz projector a once over and from SkyScan to finish a renovation project started two years ago. When they reopened January 20th, they had a new star show, Planet Patrol 2: The Star Stealers from Sudekum and MegaDome films Ring of Fire and Africa: The Serengeti.

Ethyl Universe Planetarium
Richmond

Eric Mellenbrink tells me that in the Ethyl IMAX Dome they will be showing the film Elephants through April 27 and T Rex: Back to the Cretaceous through June 8. Other films include Super Speedway which opens April 28 and runs through September 14 and Journey Into Amazing Caves opening June 9 and running through October 19.

Journey Into the Living Cell and Night Sky continued as the planetarium programs through February 28. On March 1st, they opened Native Skies, their second pro

Mir: End of an Era

On March 20, 2001 we will say farewell to an era of space exploration. The Orbiting Complex Mir, the Russian word for Peace, will re enter the Earth's atmosphere. It will be guided by rocket booster to crash into the Pacific Ocean somewhere between Australia and Chile.

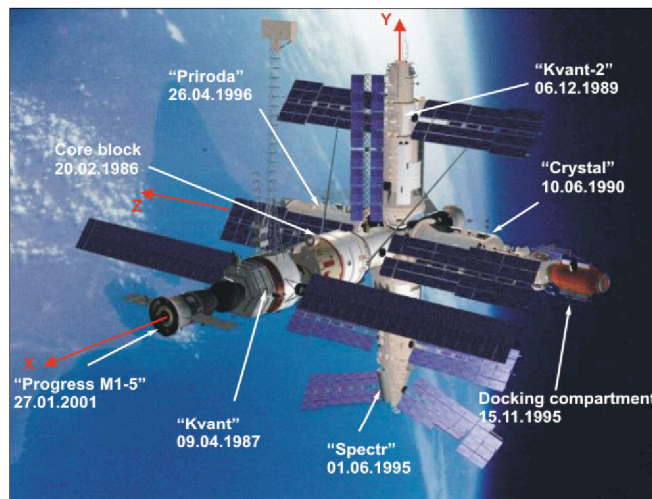
Most of the huge space station will burn up in the Earth's atmosphere, but up to 150 large chunks of metal could survive to crash and possibly cause damage on the surface of the Earth. Russia has taken out \$200 million in liability insurance in case fragments of the Mir space station cause loss of life or property.

In its final days it has begun to drift, rotate, and decelerate. Its daily average decline in altitude is 1.8 km, a little over a mile. When its altitude is 210 km, about 126 miles, the Russian Progress tanker will stabilize Mir's rotation and lower its perigee over the planned re entry area before a final maneuver to guide Mir to its fiery death over the Pacific Ocean.

Mir was the world's first permanent space station. Launched by the Russian Space Agency, this 120 ton modular space station has been orbiting 400 km, approximately 240 miles, above the Earth's surface since 1986.

Some 80 Soviet and American spacecraft have met up with and docked with Mir, and 60 cosmonauts and astronauts have worked aboard Mir. These men and women have done research on human endurance and health issues while living and working in space for extended periods of time.

Mir was also the home of the longest duration missions in space by a man and



Left: Mir Space Station against the backdrop of the Earth's surface; the first stage of Mir launched in '86 was the Core Block; next came Kvant and Kvant2 in '87 and '89; later came Crystal, Spectr, the Docking Compartment, Priroda, and Progress M1-5.

a woman. The man was a Russian doctor named Polyakov; he stayed for 438 days. The woman was NASA astronaut Shannon Lucid; she spent 180 days in space. Her mission took place in 1995. Lucid's main goal was to prepare for future long duration space missions.



Center: Astronaut Shannon Lucid on board Mir in 1995

Mir has begun to show its age. Some of its critical systems have failed, and mishaps have occurred with important components of the space station. One of the most spectacular was a fire that occurred on board the space sta

tion in February of 1997. An unmanned supply ship collided with Mir in June of that same year.

Mir has served well as a preparatory and research facility for the more ambitious International Space Station whose con

THE DEADLINE FOR THE NEXT IS
SUE OF SOUTHERN SKIES IS APRIL
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 NGC 2366, 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

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| <p>01 Central supermassive black holes in galaxies NGC 3377, NGC 3379, and NGC 4486B:</p> <p>03 SN1987A Fireball: One tenth light year long dumbbell structure expanding at six million miles per hour in supernova 1987A</p> <p>08 Changes in the nucleus of Comet Hale Bopp as it moves closer to the sun beginning in September 1995</p> <p>09.a Transition from spring and summer in Mars's northern hemisphere; photo taken shortly before opposition</p> <p>09.b Three photos of Mars taken six hours apart with 90° difference between images; photos taken shortly before opposition</p> <p>11 The Egg nebula in which stars are born and die violently; photo shows jets of gas being blasted into space</p> <p>12 A supermassive black hole located in galaxy M84</p> <p>13 NICMOS captures region of the Orion nebula filled with action as a center for the birth of new stars</p> <p>14 Supernova 1987A: different colors represent different elements in the ring</p> <p>15.a A view of Mars's cloud cover</p> <p>15.b Seasonal changes in Mars's north polar ice cap</p> <p>15.c Four views of Mars rotated 90° between images during summer in Mars's northern hemisphere</p> <p>16 The Cone Nebula: six baby sun like</p> | <p>stars surround their mother</p> <p>17 A collision between two spiral galaxies in the heart of galaxy Arp 220</p> <p>18 Fireworks near a black hole in the core of Seyfert galaxy NGC 4151</p> <p>19 STIS reveals an invisible high speed collision around a supernova</p> <p>20 Hubble pinpoints the optical counterparts of a gamma ray burst in a distant galaxy</p> <p>21 Hubble captures a volcanic eruption plume from Jupiter's moon Io</p> <p>22 A gamma ray burst blazes from a titanic explosion in deep space</p> <p>23 Hubble's look at Mars shows a canyon dust storm, cloudy conditions for Pathfinder's landing in July 1997</p> <p>24.a Dissipation of a large dust storm on Mars</p> <p>24.b Hubble shows dust and water ice clouds exhibit substantial daily variations</p> <p>25 Powerful telescopes discover the largest galaxy in the universe</p> <p>26 Hubble separates components in the Mira binary star system</p> <p>27 Hubble reveals huge crater on the surface of the asteroid Vesta.</p> <p>28 Hubble finds a bare black hole pouring out light.</p> <p>29 Hubble shows blobs of gas formed by some nova outbursts.</p> <p>30 Hubble keeps track of a fading gamma ray burst.</p> <p>31 Mars at the beginning of autumn in the Martian northern hemisphere.</p> <p>32 Hubble sees a neutron star alone in space.</p> <p>33 Hubble identifies what might be the most luminous star known.</p> <p>34.a Hubble reveals stellar fireworks accompanying galaxy collisions.</p> <p>34.b Detailed images of colliding galaxies.</p> <p>35 Hubble shows images of a blue straggler star.</p> <p>36.a Hubble tracks clouds on Uranus.</p> <p>36.b Hubble spots northern hemispheric clouds on Uranus.</p> <p>37 Hubble shows infrared view of moon, ring, and clouds of Jupiter.</p> <p>38.a Hubble sees supersonic exhaust</p> |
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| <p>01 COBE's infrared view of the Universe: three maps of the full sky seen in infrared light</p> <p>02 Distant supernovae: light sources determine universe's expansion rate</p> <p>03 Beta Pictoris: disk indicates planets, possible brown dwarf companion</p> <p>04 Jupiter aurorae: a curtain of light extends several hundred miles beyond Jupiter's limb</p> <p>05 Saturn's aurorae: curtains of light extend 1,000 miles above cloud tops</p> <p>08 Supernova 1987A: a collision between the expanding blast wave and circumstellar ring</p> <p>10 Serendipitous asteroids: HST images show curved trails of asteroids</p> <p>11.a Planetary nebula NGC 7027: a brief stage in the evolution of a medium mass star</p> <p>11.b Cotton Candy Nebula and Silkworm Nebula: phases of stellar burnout</p> <p>12 Star birth in barred spiral galaxy NGC 1808 possibly due to interaction with NGC 1792</p> <p>14.a Centaurus A: nearest active galaxy to Earth shows turbulent firestorm of starbirth</p> <p>14.b Centaurus A: tilted disk of gas at galaxy's core surrounds suspected black hole</p> <p>15 Stingray Nebula: Henize 1357, the youngest known planetary nebula</p> <p>16 NGC 1818: globular cluster of over 20,000 stars in the Large Magellanic Cloud</p> <p>17.a GRB 971214: gamma ray burst is most energetic event in the universe</p> <p>17.b GRB 971214: gamma ray burst; comparison of Keck Telescope and HST views</p> <p>18 Saturn: details of the clouds and hazes in atmosphere of ringed planet</p> <p>19 Possible first extrasolar planet ever</p> | <p>20 Four of NASA's proposed designs for the Next Generation Space Telescope (NGST)</p> <p>21 Galaxy NGC 4314: bright ring of starbirth around the galaxy's core</p> <p>22 NGC7052: galaxy with 300 million solar mass black hole in its center</p> <p>25 N81 in the Small Magellanic Cloud: a celestial maternity ward</p> <p>26.a Galaxy Cluster MS1054-03321: thousands of galaxies 8 billion light years from Earth</p> <p>26.b Supernova 1996CL: a March 1996 exploding star in galaxy cluster MS1054-0321</p> <p>27 Distant galaxy clusters: left, in Virgo; upper right, in Andromeda; lower right, in Taurus</p> <p>28 NGC7742: a small Seyfert 2 active galaxy probably powered by a black hole in its core</p> <p>29 Saturn: pastel yellows, browns, and greys distinguish cloud differences</p> <p>30 Sagittarius Star Cloud: HST peers into the heart of the Milky Way</p> <p>31 NGC7635, the Bubble Nebula: an expanding shell of glowing gas surrounding a hot star</p> <p>32.a Infrared views: left: faintest galaxies ever seen; right: objects 12 billion light years away</p> <p>32.b Deep field galaxy: left: visible light areas of starbirth; right, infrared disk structure</p> <p>34 Neptune: a look at the eighth planet's stormy disposition</p> <p>35 Uranus, August 8, 1998: its four major rings and 10 of its 17 known satellites; false color</p> <p>36 NGC6210 planetary nebula described as looking like a turtle swallowing a sea shell</p> <p>37 Quasar PG1115+080 and gravitational lens effect:</p> <p>38 Nebula M1-67 around star WR124: gas ejected into space at 100,000 mph</p> <p>39 NGC3132: southern hemisphere's Eight Burst or Southern Ring Nebula</p> <p>41.a HST deep field south: thousands of</p> |
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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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Below you'll find a brief description of all 42 images distributed in 1999. Numbers next to the descriptions are shortened versions of STScI press release numbers, e.g., 43a refers to PR 99 43a.

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

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| <p>01 M57 Ring Nebula: the sharpest view yet of this planetary nebula</p> <p>02 Combined deep view of infrared and visible light galaxies</p> <p>03 HD 141569: stellar dust rings of a star in the constellation Libra</p> <p>04 SNH1987A: self destruction of a massive star in Large Magellanic Cloud</p> <p>05.a Six images of a young stellar disk found in the constellation Taurus</p> <p>05.b Four images featuring disks around various young stars in Taurus</p> <p>06 NGC 1316: silhouette of dark clouds against a glowing nucleus of an elliptical galaxy</p> <p>07 Mars: visible, infrared light images; evidence of water bearing minerals</p> <p>08 Proxima Centauri: a detailed image of the Sun's nearest stellar neighbor</p> <p>09 GRB990123: fading visible light fireball in a gamma ray burster</p> <p>10 Six images showcasing different views of spiral galaxies</p> <p>12 Tarantula Nebula: multiple generations of stars in the brilliant cluster of Hodge 301</p> <p>13 Jupiter: images of the volatile moon Io sweeping across Jupiter's face</p> <p>14 Copernicus: the 58 mile wide (93 km) impact crater on the Moon</p> <p>16 NGC4650A: a polar ring galaxy</p> <p>18 Rings, arcs, and crosses as seen in</p> | <p>Hubble's top ten gravitational lens effect images</p> <p>19 NGC4603: magnificent spiral galaxy associated with Centaurus cluster</p> <p>20 NGC3603: various stages of the life cycle of stars in a giant galactic nebula</p> <p>21 AB Aurigae: a swirling disk of dust and gas surrounding a developing star</p> <p>22 Mars: a colossal polar cyclone</p> <p>23 N159: a turbulent cauldron of starbirth in Large Magellanic Cloud</p> <p>25 NGC4414: magnificent details in the dusty spiral galaxy</p> <p>26 NGC6093: a stellar swarm in a dense globular cluster</p> <p>27 Mars: the red planet at opposition during April-May, 1999</p> <p>28 MS1054-03: galaxy collisions in distant clusters</p> <p>29 Jupiter: an ancient storm in its atmosphere (The Great Red Spot)</p> <p>30 Giant star clusters near the galactic center</p> <p>31 HCG 87: a minuet of four galaxies</p> <p>32 HE2 104: small, bright nebula embedded in the center of a larger nebula</p> <p>33.a R136 in 30 Doradus: a grand view of the birth of stars</p> <p>33.b R136 in 30 Doradus: two detailed views of a highly active region of star birth</p> <p>34.a NGC1365: a barred spiral galaxy reveals a bulge in its center</p> <p>34.b Eight different views of the central bulges of spiral galaxies</p> <p>35 HH32: a magnificent example of a Herbig Haro object</p> <p>36 NGC2261: Hubble's variable nebula illuminated by R Monocerotis (R Mon)</p> <p>37 NGC2346: a butterfly shaped nebula</p> <p>38 NGC2440: planetary nebula ejected from a dying star</p> <p>39 OH231.8+4.2: the rotten egg nebula</p> <p>40 M32: hot blue stars deep inside a dwarf elliptical galaxy</p> |
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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

Please take a look at the Paul Campbell Fellowship award nomination form included in this issue. [It's on page 23. Ed.] This is SEPA's highest award of service. It is a five-pointed star. Each point represents a quality displayed by all award recipients: integrity, friendship, service, knowledge, and vision.

Think about those many members you have met over the years, and consider nominating someone who has been a member of SEPA for at least ten years. Council will need to look over the candidates this spring and decide to whom an award should be presented at the conference this year. We ask that submissions be in our hands by April 15. (That date sounds familiar for some reason.) Council will make its final decision by May 1.

Another interesting project has presented itself since our last conference. We have an opportunity to follow through on our previous production of *Saving the Night* with a possible new production telling the story of the Galileo spacecraft. If you attended that great conference in Winston Salem (Thanks again to Duke Johnson, Karen Osterer, and others.), you will recall the outstanding talk by Nagin Cox. Her energy and enthusiasm made it a night to remember. I hope we can work toward a

program that captures the feeling of her talk. The estimated cost of a full length production looks like it will be much more than most of us would attempt on our own, but George Fleenor says JPL and NASA are willing to help us find grants to cover the costs. Discussions will continue.

Speaking of George, I want to thank him for serving SEPA in such a fine fashion, and for leaving some huge shoes for me to fill. (Have you seen the size of his feet? Just kidding.) The state of the organization is about as good as I have seen it in 20 years. Among other things, under his leadership we now have a healthy bank account of over \$8,000, with which we may be able to do some great things. He also spearheaded the creation and distribution of the fine program *Saving the Night*, the demand for which doesn't seem to be fading very quickly. Thanks, George. Fortunately, he will hang around for another couple of years to help see that I don't screw things up.

The same goes for John Hare and Duncan Teague. They have both served so well and for so long, that I can't picture SEPA doing what we do without either of them. Both have served as president in past years. In case you are new to SEPA, John is currently IPS representative, and Duncan

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 21, NUMBER 1

JOURNAL OF THE SOUTHEASTERN PLANETARIUM ASSOCIATION

WINTER 2001

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SEPA/ GLPA Joint Conference 2001

We have a conference coming up June 26 - 30 at the Hummel Planetarium at Eastern Kentucky University in Richmond, Kentucky. This joint conference will include members of the Great Lakes Planetarium Association, so there should be a fair number of participants.

This promises to be a fine meeting packed with useful paper sessions, workshops, and talks. It is also an opportunity to speak with others in our same circumstances, with similar equipment, and problems. When we meet, it is great to see old friends, and we always end up sharing stories, ideas, and solutions to those problems. I have always felt it was well worth the trip.

Some planned activities include planetarium shows, vendor demonstrations, workshops, a southern style dinner at the Mule Barn, an astronomy update with world famous author Dr. James Kaler (among several other talks), a visit to the famous Shaker Village, and of course, hospitality rooms for socializing afterward.

These events and more await all those who join us for the SEPA/ GLPA Joint Conference 2001. Start thinking about papers or workshops you might like to present. Conference mailings will be going out soon. For more information check the conference Website via the link from SEPA's Website (thanks to Kenneth Moore) at

<http://www.sepadomes.org>.

I hope to see you all in June!

Dave Maness