

SOUTHERN SKIES

Volume 15

Number 1

Winter 1995

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Journal of the Southeastern Planetarium Association

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Southern Skies

Volume 15

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A Message From Your President

Greetings from Nashville!

I hope that all of you had a safe and happy holiday season. Unfortunately it never seems to last long enough, and now it is time to get back to work. In my case, that also means taking on the duties of President of the Southeastern Planetarium Association. As I mentioned at the conference during which I was elected, I am honored to have even been considered. Our organization is a magnificent example of diversity with a tremendous free flow of ideas; not to mention some of the friendliest people on the planet.

* * * * *

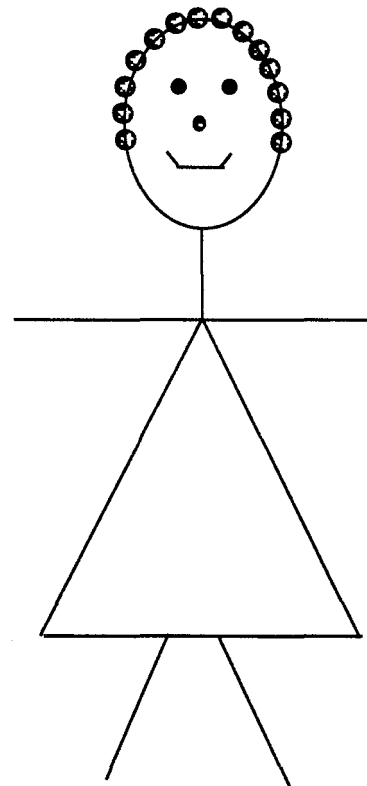
I would like to take this opportunity to thank Richard McColman for his service as SEPA President over the last two years. I am sure that I will have plenty of chances to seek out his wisdom as an elder statesman during my tenure in this office.

We should all also thank Linda Hare for serving as secretary/treasurer for the last several years. She has certainly kept us aware of delinquent dues and lapsed membership. Now, if you have complaints (er, questions) contact Duncan Teague at the Craigmont Planetarium in Memphis.

If anyone has opinions, suggestions, or criticism about the direction or operation of SEPA please do not hesitate to contact me directly. I may do a lot of things, but I don't read minds. As President, I will make the best decisions possible, but your input is always welcome and encouraged.

* * * * *

This SEPA Journal, *Southern Skies*, under the fantastic direction of Linda Hare, is one of the best benefits of membership. It is especially valuable in that it offers more than a listing of programs playing at affiliated



Kris McCall
Sudekum Planetarium, Nashville, TN

institutions. Next to the IPS Journal, *The Planetarian*, it is a great source of information about all aspects of Planetarium life. This exchange of ideas would not be possible without the contributions of the members of SEPA, especially the column editors.

I know for a fact that many of my colleagues have suggestions for more exciting or interactive programs, OR shortcuts for technical improvements, OR an amusing anecdote that would make even the most beleaguered dome-dweller smile. If that person is you, send all that stuff to Linda Hare so it can be shared with everyone. Linda makes sharing information really easy by printing her address and phone number in the front of this publication.

When planetariums are spread so far and wide, the vehicle of communication in the form of the Journal is crucial to our very existence. It really helps alleviate the isolation that many feel when their closest planetarium neighbor is hundreds of miles and hours of driving away. It is the free flow of ideas and experiences that makes tedium bearable, keeps us fresh, and helps us grow. In other words, please contribute to your Journal.

* * * * *

This past year saw many exciting events: the solar eclipse, Comet Shoemaker/Levy 9, and the Apollo 11 anniversary, just to name a few. It is often said that the American public is apathetic toward astronomy and that most would rather watch television than the sky. So, imagine our surprise when almost seven hundred people came to the Planetarium to see comet impact sites through telescopes when the sky was ninety percent cloudy. Lucky for us, the clouds parted, in just the right place at just the right time, and everyone was thrilled to see the dynamic nature of the Universe.

As a result, this facility has received more public inquiries than ever before. It is crucial that the planetarium, whether at a museum, part of a university, or in a school system, serve as a community resource. Often, helping the third grader with a solar system question is as valuable as giving school or laser shows.

I have observed several instances where planetarians or astronomers at observatories are less than receptive to dealing with the press or public. Maintaining an open invitation to all generates a strong, positive image and goodwill in both the public and private sectors.

The perception of the planetarium as an educational center, opportunity for family entertainment, and a place that welcomes all who wish to explore the Universe is especially important in light of the recent changes in Congress. The museum community as a whole is deeply concerned about future funding prospects.

This situation is also a good reason for the solidification of a national planetarium mouthpiece. I understand that some affiliates do not like the idea or format of the National Planetarium Council. However, if

someone would like to suggest an alternative, then let them put a proposal on the table. Grumbling without offering solutions accomplishes nothing. In recent months, I have caught wind of at least one other proposition. If you can help to strengthen the voice of planetariums in the United States, then we need to hear from you.

* * * * *

Another issue that always seems to elicit vociferous responses from all sides is that of vendors as members, and their voting rights. A little bird told me that some people would like to visit this issue once again. If you have any recommendations regarding this debate, let me hear from you.

It has also been suggested that SEPA hold its elections in non-IPS years since some people don't attend both meetings in the same year, and as a result do not get to vote. Other possible solutions to this dilemma would be to allow voting by proxy or having everyone vote by mail. There are pros and cons to all of these alternatives, but maybe we can arrive at an equitable solution, if we decide that there even needs to be a change in the first place.

Last, but not least, don't forget about the conference in Macon in June. I know that Carole Helper, Jim Greenhouse, and the rest of their team have a good meeting planned. After the Journal, these annual get-togethers are great. They recharge the old batteries and give us new incentive and enthusiasm to tackle the many tasks that always seem to be at hand. A tentative agenda for the conference should appear elsewhere in this edition of the Journal, or in the next one.

This brings up another question. We need bids to host the SEPA conference in 1997. It may seem like a long way away, but it will be here before you know it. I really don't want to be twisting arms and chasing people down at the meeting in Macon to get bids. Think about it, ask previous hosts for insight, and then take the plunge. Submit a bid to host the 1997 conference.

Enough of this posturing already. Now that I have stirred up the coals, I need to get back to the budget, the school shows, fixing the planets, etc. Until next time, may you have clear skies and pinpoint stars.

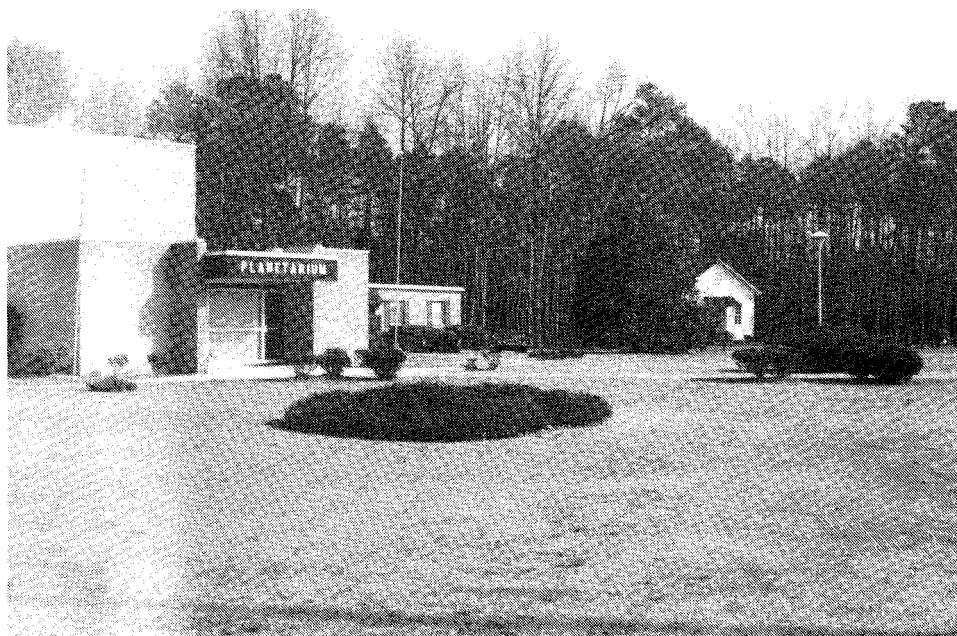
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FEATURED PLANETARIUM

**Edited by Dave Hostetter
Lafayette Natural History
Museum & Planetarium
Lafayette, Louisiana**



ROBESON PLANETARIUM

**Lumberton, North Carolina
Contributed by James A. Hooks
Planetarium Director, 1968 - 1997**

In the sixties, several outstanding educators envisioned the establishment of a planetarium for Robeson County. The resulting complex was due to a cooperative effort by six local Boards of Education along with funds from Title III of the Elementary and Secondary Education Act. The Planetarium and Resource Center became a reality in January of 1969, and until 1989, was supported by those systems. Following the merger of those systems into one, the remaining system - the Public Schools of Robeson County - has continued to support the Planetarium.

The planetarium has unidirectional seating for 75 people and utilizes a Spitz model A3PR which allows it to present programs of the highest quality, developed by the staff as well as by other planetaria. It has a collection of catalogued slides that cover art, people, and all areas of astronomical education.

Several years ago, a catwalk was built behind and around the dome, accessed by a spiral staircase, it accommodates three banks of projectors which project on a three screen format using 1.4" lenses to project extra large images. Special effects projectors - some of which are homemade and others purchased from Joe Hopkins Engineering - are located in this area. There are six extra projectors for pans, a large screen Video projector, and a 16mm projector. All are controlled by AVL equipment using program "Procall5" on a HYUNDAI computer.

Several people who have seen the catwalk platform have been impressed by how the limited space is utilized. It is difficult to explain how it was built, but visitors are welcome to inspect it.

Adjacent to the planetarium is a restored one-room school house representing the efforts of many citizens to preserve an era in American education which produced the country's great leaders of both the past and the present. While education in a school of this type was difficult, it introduced many proven methods of teaching.

In 1983, the Planetarium Director initiated an effort to establish a Science and Technology Center. In 1986, House Bill 473, introduced and passed in the North Carolina Legislature, allowed the Robeson Planetarium, Science and Technology Center to become an important part of education in the county. It now has many exhibits as well as a satellite dish that receives NASA television broadcasts on a daily basis.

In 1993, the Planetarium hosted a reception for Astronaut William S. McArthur, the pilot for the STS-58 Space Shuttle Columbia which had completed the longest space mission to that time. He served as Grand Marshall for the Lumberton Christmas Parade and later signed and autographed NASA pictures for the many individuals in attendance at the planetarium reception.

In October 1994, the Robeson Planetarium hosted Dr. William S. Shurr, author of the book entitled "New Poems of Emily Dickinson". Considered an authority on Ms. Dickinson, he has written other books on her and her works as well as books on other American writers. While at the Planetarium, he conducted a lecture and autographed copies of his books. It was a very successful program for both the author and the planetarium.

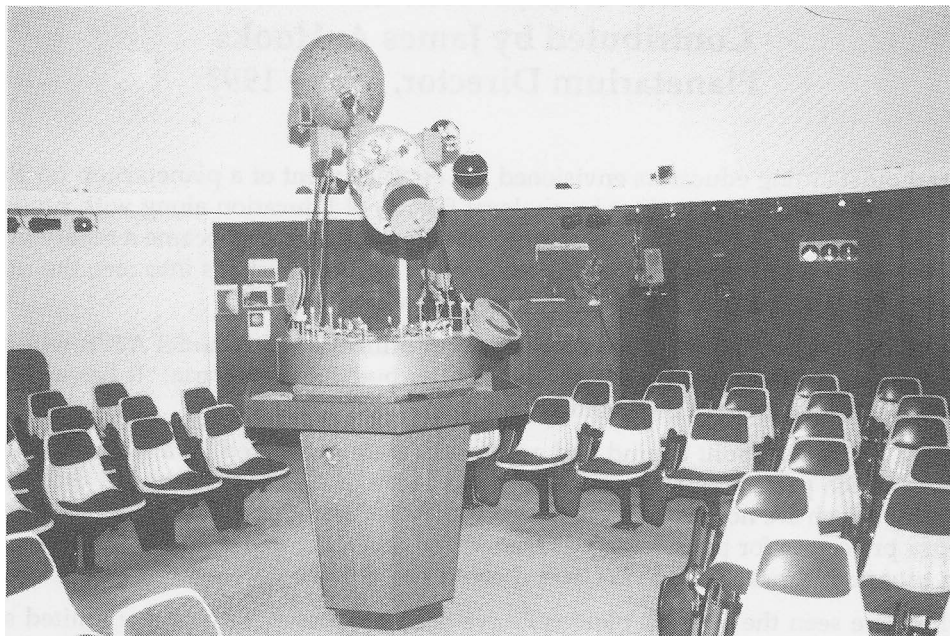
The Robeson Planetarium conducts seminars and workshops for teachers and supervisors with selected areas of Astronomy and methods of Astronomical investigation presented. Teachers receive two hours of college credit.

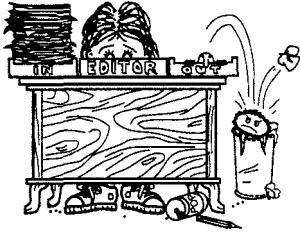
The facility is utilized by nearby Pembroke State University on a regular basis for Astronomy courses directed by the Planetarium Director.

Recognition of the planetarium's importance to the local community, has enabled us to receive excellent publicity from television, radio, and area newspapers.

One of the events that I am most proud of happened in January of 1970. Representatives of 17 planetaria from across the Southeast met at the Robeson Planetarium to discuss the formation of an organization which would focus on their common goals. At a subsequent meeting in Atlanta in June of that year, the Southeastern Planetarium Association (SEPA) was born.

These facilities represent the past and the future. We opens our doors to the student population and the general public, averaging 18,000 to 22,000 visitors a year. Our school programs have been developed by the director, while other programs have been purchased and/or modified to correspond to the educational concepts that are presented in the local educational system.





EDITOR'S NOTE

This is a note that is very difficult for me to write (especially after all of the good things that Kris McCall has to say in her President's Message). As most of you know, I have started a new job as the Executive Director of the International Laser Display Association. I have discovered, in the short time that I have held this position, that it is far more time consuming than I had thought it would be. And, since I have great hopes of helping the ILDA organization grow over the next few years, I don't see my work load diminishing.

Thus, I am afraid that I am going to have to resign my position as *Southern Skies* editor. I have had many mind battles with myself over this decision, and I am afraid that my mind finally won out over my heart. I want to remain a contributing member of SEPA, but will have to find another way of doing it.

If you, or anyone you know of, is at all interested in taking over the editing of *Southern Skies*, please get in touch with me or Kris McCall. The job takes a fairly large commitment time-wise, but is very rewarding when the finished product goes out.

You would have great people to work with! Everyone whose name appears in this particular journal is to be congratulated. I will personally be forever in their debt. Because of my time commitment to ILDA, I did not have the time to get reminders out to the contributing editors about the deadline. To my great pleasure, all of them got their articles to me (sans bitching) in a very timely manner.

Another project that I will be working diligently on over the next several months, is preparations for a wedding. Our daughter, Page, will be wed to Mark Howard, a fellow planetarian and Sepaite, on June 10th. As the wife of a planetarian (lo these many 32 years), I tried to warn both of my daughters not to get involved with a planetarian. This one has not heeded my warning. I'm really glad she didn't! Mark is a great guy, and our entire family welcomes him with open arms.

Let me hear from you if you have the itch to become an editor. I'll help you scratch it by answering any questions you have. I certainly don't want to dissuade anyone, but you have to be forewarned, it does take time.



To join S.E.P.A., or to renew your S.E.P.A. Membership,
simply fill out this form and mail with \$15.00 to:
Southeastern Planetarium Association
Duncan Teague, Secretary/Treasurer
Craigmont Planetarium
Craigmont High School
3333 Covington Pike
Memphis, TN 38128

Name _____

Position _____

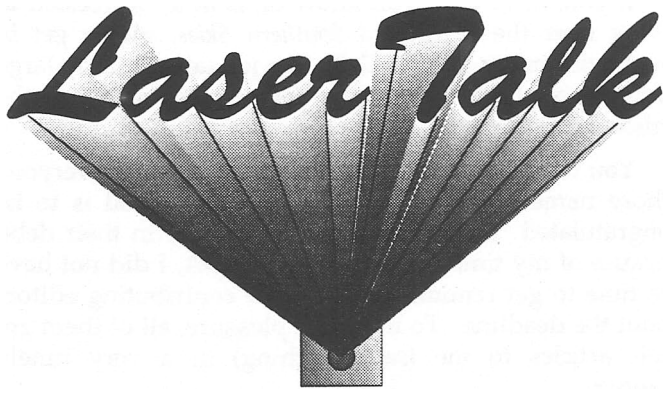
Facility _____

Business Address _____

Mailing Address (if different) _____

City _____ State _____ Zip _____

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LASER TALK
by Mark Howard
Buehler Planetarium
Davie, Florida

Welcome, once again, to *Laser Talk*. In this column we have heard from a variety of professionals in the laser display industry, many of them planetariums. This should not be surprising, since this is, after all, a planetarium publication. Since many of us produce and/or present laser shows at our facilities, *Laser Talk* was created as a means of reporting on recent developments on interesting applications of laser displays in planetarium theaters.

As the technology which drives laser displays has become more sophisticated, so have the displays themselves. Applications for laser displays now extend well beyond the dome and are used in many different entertainment venues including night clubs, theme parks, and corporate trade shows. As this sophisticated technology becomes more affordable, even hobbyists are getting in on the action. Unifying all of these companies and individuals involved in producing laser light displays is an organization called the International Laser Display Association (ILDA). Incorporated as a not-for-profit organization in May 1987, ILDA consists mainly of companies which produce or present laser shows, and their suppliers (i.e. software and hardware manufacturers).

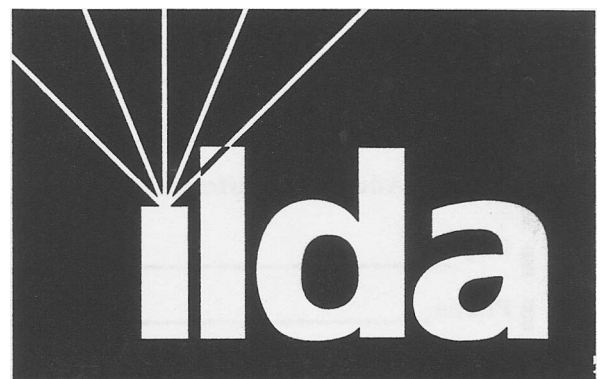
Recently, a new non-profit category was added to the membership list. This category includes planetariums and science centers. Since laser displays have their roots in planetariums, it seems only natural that we be included among the others. Membership in this category has increased considerably over the past two years, due in large part to the tireless efforts of Jack Dunn, Director of

Mueller Planetarium in Lincoln, Nebraska. In addition to his duties at the planetarium, he chairs ILDA's planetarium and science center committee. This past November, the Mueller Planetarium became the second planetarium to host ILDA's annual meeting. (The first planetarium host was the Bishop Planetarium in Bradenton, Florida, in 1990.)

As an organization dedicated to fostering communication within the laser entertainment and display industry, ILDA is important to planetariums involved in laser display, providing a means of keeping up to date with the rapid growth of this exciting field. In addition to its annual meeting, ILDA publishes the *Laserist* magazine and a newsletter *LaserTalk*, each of which covers a broad range of topics dealing with laser displays including ethics, safety and regulation, technology, music rights, public awareness, marketing, insurance, and show design.

By pooling resources, ILDA members have achieved much more than any one member could have done alone. The organization has attracted the attention of laser manufacturers, many of which now offer white-light lasers, color balanced especially for laser display applications. Scanner manufacturers too are aware of ILDA and the special demands its members place on scanning products (i.e. high speed and accuracy). This translates into higher quality, more attractive, more profitable laser displays for your planetarium theater. ILDA also serves as a marketplace. Fellow members may also be your customers.

ILDA is of great benefit to each of its members. In order for you or your institution to benefit you must **participate**. The first step toward this end is to become an ILDA member. If you perform laser shows, or if you incorporate laser special effects in your theater, then ILDA is for you. For a free information packet and membership forms, please contact ILDA's Secretary, Page Hare, at 305-424-3959. Page also has information on the 1995 ILDA conference, November 12 - 15, hosted by Laser Production Network, in Miami.





Astro-Video Review

ASTRO-VIDEO REVIEW

by Mike Chesman
Bays Mountain Planetarium
Kingsport, Tennessee

The *Great Comet Crash of 1994* will long be remembered. I'm sure your facility was inundated with tons of questions about collisions from space. I hope you used that opportunity, not only to address the subject of comets, but also our more common celestial visitors - meteors. The Jupiter event was a great lead-in to August's Perseid Meteor shower.

At our outdoor *StarWatch* programs we have many chances, each year, to acquaint the public with meteors. To help train our volunteers for these sessions, we always look for interesting material that will provide them with good information to pass on to our visitors. With that in mind, I recently purchased a two-tape set entitled *Meteorites*, from the Astronomical Society of the Pacific. The videos represent two programs that were aired on The Learning Channel. They have now been released, by Atlas Video, to the home video market. Each show is 42 minutes in length and probably could have been more economically put out on a single tape. However, some of you may prefer the convenience of having each episode on a separate tape. In any case, the set is inexpensive and within the budget of any school, astronomy club, or library.

All planetarians should find these tapes a useful information source. The subject is covered with great clarity and features comments from many researchers from around the globe. The program's originally were produced by the Austrian Broadcasting Corporatio,

which probably accounts for the rather nice international flavor of these documentaries. As an example, we get Eugene Shoemaker discussing Meteor Crater in Arizona, and Keizo Yanai of Japan's Polar Research Institute commenting on a lunar meteorite specimen found in Antarctica.

My favorite segments of each tape are the numerous accounts of meteorite falls from around the world. Most include location filming. We are shown the most famous specimens from meteorite collections in a number of museums. As an example, the story of the Cape York Meteorites is typical of what we find on these tapes. We start at a Copenhagen geological museum, where a 3.5 ton specimen remained a stellar attraction until 1963, when a larger 20 ton iron was put on display. We learn that both are part of a fall at Cape York, Greenland, that has netted 20 meteorite fragments totaling 58 tons. This fall took place roughly 3,000 years ago. The story continues with the tale of an even larger 34 ton fragment which was retrieved from Greenland by polar explorer Robert Peary. It took three trips, beginning in 1894, to dig out the specimen. It was finally hauled to a Brooklyn port in late 1898. Yet it wasn't until 1907, that the giant iron stone was moved into New York's American Museum of Natural History. This entire event is nicely documented with numerous vintage photos.

Get this set! Unless you have done extensive studies on meteorites, you are sure to glean some new information from this set of tapes. Only a minor amount of material is repeated in both programs.

METEORITES

(Two videotape set)

Tape 1 - Menace From The Sky

Tape 2 - Witnesses From Beyond The Times

Available from

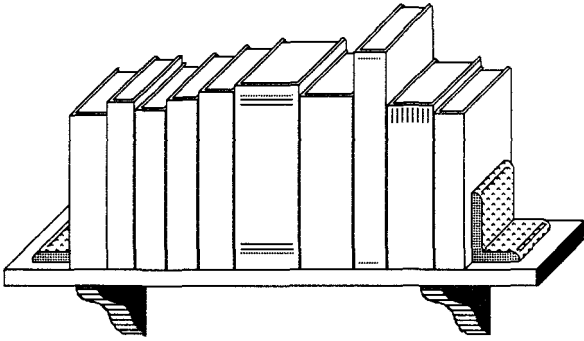
Astronomical Society of the Pacific

390 Ashton Avenue

San Francisco, CA 94112

(\$39.95 plus \$5.00 shipping)





REVIEWS

Edited by Patrick McQuillan
Alexander Brest Planetarium
Jacksonville, Florida

Lost Moon: The Perilous Voyage of Apollo 13

by Jim Lovell and Jeffrey Kluger
Houghton Mifflin Company
New York, New York, 1994
378 pages

ISBN 0-395-67029-2

Reviewed by Patrick McQuillan

I figured this would be a good book to start off the new year because it is sort of a travelog, and I spent most of the end of last year preparing for, and then traveling to, a strange new place. But, I really am not doing justice to this book by referring to it as a "travelog", because the story of Apollo 13 can hardly be summed up in that way. This is the story of the American spirit triumphing over potential failure: of heroism, both from the astronauts and the ground crew, and more basically, the story of three men just trying to get home.

I enjoyed this book for several reasons. First, I got to personally meet Jim Lovell at a book signing in Grafton, Virginia (not far from NASA Langley Research Center where many astronauts trained for parts of the lunar landings). Mr. Lovell was a very pleasant and friendly fellow. I happened to be wearing a shirt with the Alpha Phi Omega (a national coed service fraternity) logo on it. He noticed the shirt and said that he too had been a member of that organization in college. This gave us a common bond that set off a short conversation about college, majors, jobs, planetariums, and his book. So,

when I read the book, it had more meaning to me because it was not just about some astronaut having a perilous voyage, it was about a fellow fraternity brother having a perilous voyage.

Second, as I was reading this book, I was preparing to move to a new state and a new job. Granted, although there are a few folks who would say that traveling down Interstate 95 in a moving van with a car in tow is infinitely more dangerous than a little Moon trip, I wasn't leaving the Earth and traveling to the Moon and back. I can, however, identify with some of the feelings that Mr. Lovell experienced on his trip.

Most of all, I enjoyed this book because it is quite frankly a great book. We all know what happened with Apollo 13, and what the outcome was. But, this book was so well written that I couldn't put it down. I had to keep reading to find out what would happen to these three men.

This book is written in the third person, and tells the story of Apollo 13 as remembered by Jim Lovell, as well as the story of all of the people involved in this short bit of American history. The reader gets a look at what the ground crew was doing and feeling; a glimpse of how Jim Lovell's family was dealing with the situation; and of course how the astronauts were feeling. There are also several chapters spaced throughout the book that tell a few stories from Jim Lovell's life before April of 1970. This works well because you get the feeling that Mr. Lovell is thinking back on his life in the few free moments that were available on that voyage.

I would highly recommend this book to anyone who has an interest in the space program, American history, or who just wants to read a good story. The book is being made into a movie that is supposed to star Tom Hanks as Jim Lovell. Mr. Lovell recommended that I read the book before seeing the movie, and I pass that on to you.

* * * * *

In conclusion, if you have read any good books lately drop me a line and tell me about them. This may save you from writing a book review when I call you and try to appeal to your good nature (o.k., o.k., BEG!). I can be reached at the Alexander Brest Planetarium, at the Museum of Science and History in Jacksonville, Florida, or by e-mail. If you are ever past this part of Florida by all means stop in and say hello. You might even locate a woodchuck or two over here, or at least a reasonable facsimile.





SMALL TALK

**Edited by Elizabeth S. Wasiluk
Berkeley County Planetarium
Hedgesville, West Virginia**

It's one of those 'tween times. You know the ones I mean. It's between Christmas and Easter, winter and summer, etc. You've just put away the wise men from your holiday show and are planning to start the new year off with...what?

Are you someone who keeps/breaks/makes/doesn't bother to make New Year's resolutions? If so, write me the information.

Are you one of those suffering from post-holiday let down? What do you do to start the creative juices going again? Share your solutions and I'll print some of your ideas.

I can't help you with January. Besides wishing for lots of snow to close school, or doing another "Focus on Orion the Hunter" constellation program, do you have any ideas of something seasonally related? Are you planning on doing the "What's Happening in the Sky in 1995" again, or have you come up with something different?

I'd also be interested in hearing how the other half lives. I live near the northern boundary of SEPA, and snow is just not a reality for many of you. Maybe snow is a real problem because it keeps your attendance figures down. Or maybe you pray for it so you can get some much needed work done. Please let me hear from you about this.

Are there any programs you've always wanted to do but never could get them together? List some here, and we'll see what we can do to help you make them a reality.

February is "Black History Month". I have a wonderful poster, on black astronauts and astronomers, called "Black Stars in Orbit" that I hang on my wall for the entire month. It would make a great planetarium program. Has anyone out there ever done a program such as this? If so, share the information with us. Tell us what your program was like. I hear a video exists with this theme.

"Women Hold Up Half the Sky" is an ancient Chinese saying. A neat statement isn't it? It comes from "The Baltimore Charter for Women in Astronomy". I received a copy of it last year while I was attending the American Astronomical Society's "Astronomer For a Day" program.

"The Baltimore Charter for Women in Astronomy" was devised by women in the American Astronomical Society to try and place in writing the feelings of what women and men thought could be called subtle discrimination in the astronomical workplace.

That ancient Chinese saying probably holds true for SEPA. How many women planetarium directors can you name? For three years ('94, '95, and '96) our SEPA gatherings will have been hosted by planetariums directed by females. Yet, this isn't true of all the regions. Many facilities are still dominated by men. At our gatherings on the regional and international levels women often seem outnumbered and minorities are simply not present. Any idea why?

At IPS this past year, there were many stories of inequality. One told of a woman, who had been with a facility for a long time, being let go because of a budget constraint, only to be replaced by two new male employees at a later date. Another was the case of a job having to be eliminated where two people of the same seniority are employed, and the woman is the one to lose the job.

I don't know if these were discrimination, or if there were legitimate reasons for the terminations and hirings, but many of these stories seemed to involve a woman.

I would ask if you felt we needed a charter such as the Baltimore one, but after attending a meeting to the formation of the charter at the AAS meeting last year, I was amazed at the many women and men who shared terrible stories of how discrimination is still going on untapped in many subtle and not-so-subtle ways. From that sharing session and current chatter on the AAS bulletin board, it seems the charter is a standard that many ignore. One of those "nice on paper" items.

What about (if you teach astronomy, as well as run the planetarium) the number of female students in your classes?

Last year I had only one, and this year there are none in the advanced astronomy classes. I saw several of you had ideas and programs designed to attract more female students to science, math, engineering, and astronomy. Care to share the rationale behind these programs and/or ideas that you think might help?

I've heard stories about people running programs on woman astronomers called "Ladies Of The Night", and women getting mad about men putting up pin-up photographs in their workspace. This doesn't bother me, should it? How do you feel about female discrimination in the planetarium field? Does it exist? Do you have a specific story to relate? (You don't have to be female to relate it.) At the AAS meeting, many men told stories about female colleagues and wives. I won't use any names if you don't wish me to.

Sometimes we hear tales of reverse discrimination. Have you ever heard someone say, "We're looking for a female for this position."? Isn't that equally wrong? What are your feelings?

This discussion at the AAS meeting spawned a whole separate discussion about spouses who do and don't work in the same field. One woman related the story of going through great pains to secure an astronomical job with her husband at the same facility, then went through an ugly divorce and now has to work side by side with her ex-husband whom she cannot stand! It's a strange world!

Anyway, in case you haven't figured it out - March is coming up and it's "Woman's History Month". Have you ever done a program about woman astronomers and not called it "Ladies of the Night"? If so, write and tell me about it. In fact, jot me something/anything in the months that follow and send/phone/fax it to me so that I can avoid these dialogs with myself.

This edition of *Southern Skies* should be filled with stories of where you went to watch the eclipse, if you did go somewhere.

I stayed here and showed people the sky from Potosi, Bolivia, and passed out star maps so people could identify planets and constellations that were up at eclipse time. Surely not as much fun as your actual trip there. If you haven't already sent in your eclipse stories for this issue, do I have a place for you to send them.

Here's hoping I hear from some of you soon!



IPS REPORT

by John Hare
IPS Council Representative
Bishop Planetarium
Bradenton, Florida

Election results for IPS officers are in, and the winners are:

President Elect - Thomas Kraupe, Munich, Germany
Secretary - Lee Ann Hennig, Alexandria, Virginia
Treasurer - Keith Johnson, Reno, Nevada

Keith Johnson continues as Treasurer. Other officers will assume office on January 1, 1996.

Don't forget, the 1996 IPS Conference is scheduled for Osaka, Japan in July. Final dates and an agenda have yet to be determined.



SEPA '95
June 20 - 24
Mark Smith Planetarium
Macon, Georgia
#####

SEPA '96
Sudekum Planetarium
Nashville, Tennessee
#####

THIS SPACE AVAILABLE
FOR YOUR FACILITY
PUT A BID IN FOR
SEPA '97

THE MYTHOLOGY OF THE MOONS OF JUPITER

by Dennis J. Cowles
Louisiana Nature Center
New Orleans, Louisiana

Have you ever been in this situation: You're in the planetarium giving one of your wonderful lectures about the splendors of the Jovian system, complete with the latest HST image down-loaded from the Internet, the most current information regarding the Jovian aurorae, the most fashionable theories about Jupiter-Io interaction, the best computer-enhanced Voyager images of the moons, etc., when one of the audience members asks: "Where do all of these weird names come from?"

Pause - "Uh, well, we name things after mythological beings and characters."

"But WHICH ones? I mean, I know who Jupiter is, but who is Io, or Ganymede? And what do they have to do with Jupiter, anyway?"

"Umm, well, er...uh, yeah, uh....In the next picture we see..."

This article will relate some of the mythology behind those weird names of some of the moons of Jupiter. This article is by no means comprehensive or exhaustive, and there are many variants of the myths that I relate here. If you find a variant that you prefer, by all means use it. This article does not cover all of the moons, because I haven't (yet) found the information. If I do find it, I will try to pass the information along. If anyone out there does have the dirt, let us know! The stories are not given in any specific order. Of course, use your own judgment when relating any of these myths to the general public.

The name Jupiter comes from the Roman name for the Greek god Zeus, as I am sure that everyone already knows, and in this article I refer to Zeus, rather than Jupiter. Interestingly enough, the names of the moons are (usually) taken directly from the Greek, rather than from the Latin, although I strongly suspect that the Latin names are identical.

Zeus' father was a titan named Cronus. Cronus became the master of the world, by overthrowing his father Uranus. As Uranus died, he predicted that one of the sons of Cronus would also overthrow him. To prevent this from happening, Cronus would swallow the children that his wife Rhea bore him, in order: Hestia, Demeter, Hera, Hades, and Poseidon. Rhea was naturally

incensed at the ingestion of her brood, and decided to take action. She bore Zeus in secret, and presented Cronus with a stone wrapped in swaddling clothes. Cronus (apparently a rather unobservant fellow) swallowed the stone, believing that he had swallowed the infant Zeus. Zeus was cared for by the ash-nymph Adrastea, her sister Io, and the goat-nymph Amalthea. They fed Zeus and kept him safely hidden from Cronus. After Zeus became Lord of the Universe, he set Amalthea's image among the stars as Capricornus. He also borrowed one of her horns, which became the cornucopia, or horn of plenty, which is always filled with whatever food or drink that its owner desires.

After Zeus had grown, he went to see the titaness Metis, who described how to get Cronus to throw up Zeus' brothers and sisters. (Since they were gods, they weren't killed even though Cronus had swallowed them!) Zeus and his mother Rhea provided Cronus with a concoction that made him throw up all of the people that he had eaten (and the stone), and Zeus led his siblings in the overthrow of Cronus. Since Zeus was instrumental in freeing everybody, they decided that Zeus should be the new Lord of the Universe. Zeus married his sister, Hera (just as his father Cronus married his sister Rhea). Zeus had many lovers, and Hera was insanely jealous.

One of the lovers of Zeus was Europa. While she was tending her father's cattle, Zeus transformed himself into a white bull and joined the herd. Europa saw the bull, and began to lavish attention on him. Eventually, she climbed on his back, and he slowly made his way down to the shore, where he suddenly ran into the sea, and quickly swam away with Europa on his back. When they came ashore, Zeus ravished her beside a willow thicket. She bore him three sons, one of whom was King Minos of Crete.

Pasiphae was another lover of Zeus, but she is best known for being the wife of King Minos. Minos angered Poseidon by not sacrificing a bull that he had agreed to sacrifice to him, and Poseidon retaliated by making Pasiphae fall in love with a bull. Pasiphae had Daedalus fashion a mock cow, so that she could indulge in her unnatural passion for the bull. As a result, she gave birth to the Minotaur, a monster with a bull's head and a human body.

One of the failures of Zeus' record of conquest was Sinope. Zeus fell in love with her and relentlessly pursued her. He finally promised her any gift that she wanted in return for her favors, and she craftily chose virginity, which Zeus granted. Her sister Thebe was not so lucky, and was unable to resist his advances.

Leda was companioned by Zeus while he was in the form of a swan, and she laid an egg, from which were hatched Helen (of Trojan War fame), and the twins Castor and Pollux (who later became the constellation Gemini).

The nymph Callisto was one of the hunting companions of the goddess Artemis. Artemis demanded perfect chastity from her companions, since she expected nothing less from herself. Zeus seduced Callisto, and when Artemis noticed that she was pregnant, she became enraged. She changed Artemis into a bear and shouted to her hunting pack to chase her down and kill her. She would have lost her life, if Zeus had not noticed her plight, and rescued her. He later set her image in the stars as Ursa Major. (A common variant on the story says that Hera found out about Callisto, and Zeus turned her into a bear to hide her, but Hera found her anyway and threw her into the sky.)

Ganymede, son of King Tros (who gave his name to Troy), was considered by many to be the most handsome man alive. Zeus desired Ganymede as a bed-fellow, disguised himself as an eagle, and kidnapped Ganymede from the Trojan plain, and had his way with him. Zeus later compensated King Tros for his loss, and assured him that his son was immortal, and was the cup-bearer to the gods. Hera was certainly greatly insulted by this, and the insult to her daughter Hebe as well, the previous cup-bearer to the gods. Hera vexed Zeus so much on this topic that he placed Ganymede in the sky as the constellation Aquarius, the Water-Bearer.

* * * * *

I hope that someone will find this article useful. I think that the mythology is every bit as interesting as the astronomy. You are free to use these, or not, as you see fit. Again, there exist variations on these stories, and you may want to find some of those and use them instead. I would recommend either "The Greek Myths" by Robert Graves, or Bulfinch's "Mythology". (I used Graves for this article.)

I would like to thank the Planetary Society (especially a lady named India) for their assistance in researching this article.



NOSTALGIA

Ed. This was taken from Southern Skies, Summer 1981.

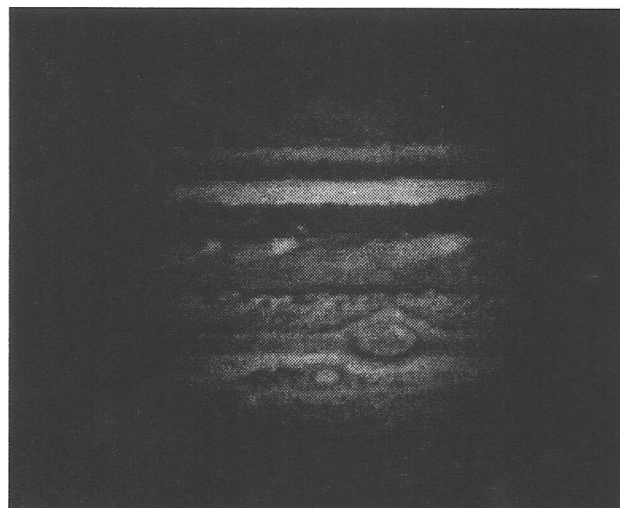
MOVES

During the latter part of December, Ray Shubinski left the Charlotte Nature Museum Planetarium in Charlotte, NC, to become the Director of the Memphis Pink Palace Museum Planetarium in Memphis, TN.

As of January 1, Sue Griswold (formerly Sue Smith) left the Settlemyer Planetarium in Rock Hill, SC, to become the Director of the Charlotte Nature Museum Planetarium.

As of January 15, Louise Morris, formerly Sue Griswold's assistant at the Settlemyer Planetarium, became the Director of the Settlemyer Planetarium in Rock Hill, SC.

Would you believe! As of January 30, 1981, Bill Lazarus has terminated his employment at the Gibbes Planetarium. He has established his own computer consulting services, known as AA Computer Services, and is devoting all his efforts to this venture. When asked what AA stood for, he said, "Nothing! AA just gets me first listing in the telephone book." Sounds like Bill, doesn't it.



MEMO

DATE: Before April 1, 1995

TO: All SEPA Members

FROM: Southern Skies - Assistant Editors

MESSAGE: Please get in touch with us with information you would like to see included in upcoming issues of Southern Skies.

ASTRO-VIDEO REVIEW

Mike Chesman

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LASER TALK

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DIGITAL COSMOS

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Fax: 304-754-7445



DIGITAL COSMOS

Edited by Mike Cutrera
Bishop Planetarium
Bradenton, Florida

Astronomica CD-ROM 1994

by Hyper-Quest, Inc.
330 S. Pineapple Avenue
Suite 202
Sarasota, Florida 34236
(813) 365-9800
\$69.95

Reviewed by James Wicker
Bishop Planetarium
Bradenton, Florida

The hot new astronomy education CD-ROM *Astronomica* hits stores in a few weeks. This interactive adventure, published by Hyper-Quest, Inc., teaches concepts of astronomy through an entertaining game. The disk is divided into three parts: the quest, a reference encyclopedia, and a trivia quiz.

The interactive game opens with a video sequence showing an erie museum/planetarium/observatory in a thunderstorm. The player learns that a mad scientist, Dr. Mayer, has built a supercomputer that calculates the fate of the universe. This computer has overloaded. Foreseeing catastrophe, the astronomer's daughter, Sara, asks for the player's help. After another sequence, the player must find and reset ten astronomy exhibits scattered around the museum. Here, the player must consult the encyclopedia for hints and answers. In the

opening puzzle, for example, the player must match pictures, like asteroids and star clusters, to their appropriate scale, ranging from the Earth-Moon system to the entire universe.

The encyclopedia, tailored to the game, brims with facts laying foundations in astronomy. Most of the articles are brief and to the point, but the reference also has a search feature that lets the player collect facts on various topics. Also, The text is also sprinkled with illustrations and NASA shots, bringing the ideas to life.

From the puzzles and museum sequences to the still images, the graphics in *Astronomica* make eyes pop and mouths drop. 3-D artwork and 2-D animation, accompanied by mood music, keeps the player interested. Even though the game is aimed at pre-teens, the special effects draw older players. The music animation, video sequences, and story line cast a spell of wonder which is very addictive. All of this multimedia magic, however, requires good computer hardware: a Performa 600 or better for Mac, or a 386 or better for PC, both running at least at 33 MHz. *Astronomica* is a good investment that gives students hours of entertainment while learning about the universe around them.

* * * * *

* * A WORD FROM MIKE * *

In the next issue, I have lined up a review of the new version (2.0) of the Voyager II dynamic sky simulator software (by Carina Software) for the Mac. If you have purchased this new software, or use other software in your sky simulations/research/presentation work, please send me your thoughts, reviews, etc. for publication. We can all benefit from your impressions of this software in our future purchase decisions! Likewise, if you have any news, suggestions, etc., about anything in the digital realm pertaining to our field, again, don't hesitate to send it to me!

I am still plugging away at investigating on-line communication routes/locations/costs for SEPA, so don't give up yet...we'll get there soon! Until then, may your pointers be bright!



A "NATURAL" METEOR SHOWER EFFECT

by Richard McColman
Morehead Planetarium
Chapel Hill, North Carolina

Jeanne Bishop of the Westlake Schools Planetarium in Westlake, Ohio, has often written and spoken about the need for planetariums to present simulated astronomical phenomena accurately. Failure to do so, she argues, will promote major misconceptions in the minds of our audiences. One of Jeanne's favorite examples of this involves the special effect presentation of meteor showers. In fact, some meteor shower projectors have a rate of over 10,000 meteors per hour! This rate tends to mislead many planetarium visitors into believing that they'll witness a super-energetic spectacle whenever viewing a meteor shower in nature. No doubt, some find the real event disappointing as a result of this misconception.

Quite a few years ago, the late Tony Jenzano (who started his planetarium career as a technician at Morehead Planetarium, and later became planetarium director), designed and built a meteor shower projector that largely overcomes this problem. Unlike other designs, this one produces a more realistic effect by projecting more randomly spaced and timed meteors, with a rate much closer to that seen in nature. The effect is also quite simple to build, only requiring three AC motors, a long focal-length lens, and small assortment of other mechanical, optical, and electrical parts.

The original Jenzano effect (which, amazingly, is still in use at Morehead today) utilizes the Sirius bright-star projector from an old Zeiss planetarium instrument. However, an even brighter variant of this can be easily constructed, and without an expensive and precision-engineered device such as the Zeiss/Sirius projector. The substitute optical assembly can be constructed using a 7 to 9-inch (175-225 mm) focal-length lens, a metal or plastic tube, a low voltage lamp, a small IC chip socket, some black paint, and a black construction paper light baffle. It is important to choose a lamp with a tiny filament, as its projected image will actually become the "meteor". I've found that a lamp from a dual-AA-battery "Mini-Maglite" works quite well, as its filament measures a mere 1 mm in length. Using the long lens, the projected filament image looks like a slightly elongated point of light. Two pins of an 8-pin IC chip socket can be used as the connection for the lamp. Of course, the inside of the tube is painted flat black, and the

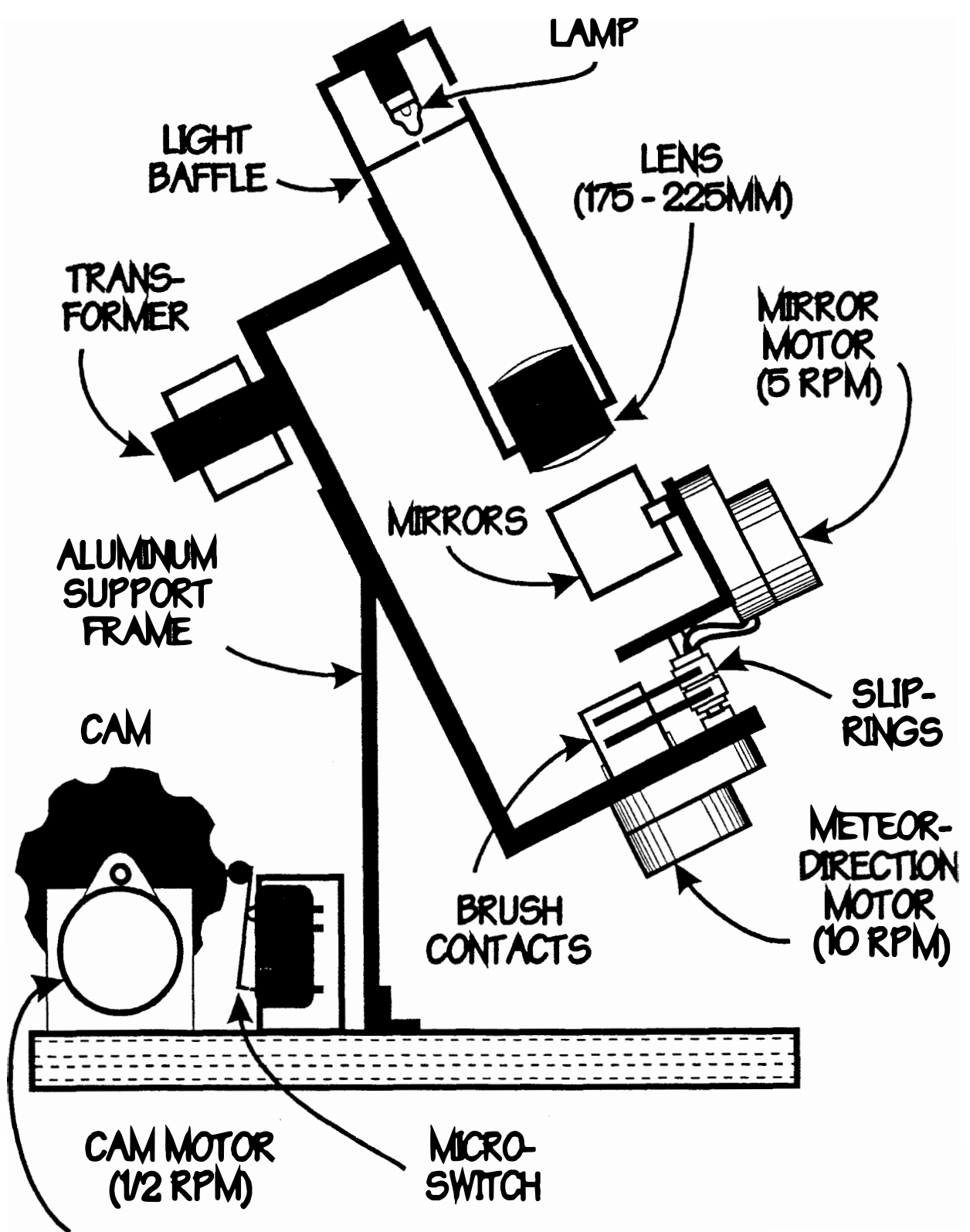
light baffle--cut to fit the inside of the tube with a small hole in the center--is mounted in the tube just ahead of the lamp. This keeps scattered light off the inner walls of the tube. By the way, the "lamp" end of the projector tube will ultimately point up toward the radiant of the shower.

This "meteor projector" is then aimed downward into an assembly of two small front-surface mirrors, which are cemented back-to-back and attached to the shaft of a 5 RPM AC motor. A black-paper tube (not shown in the drawing) is attached to the mirror-motor mount bracket, surrounds the spinning mirrors and lower projector-tube end, and has a cutout in one side, allowing for visible meteor motion away from the radiant only. (The exact size and shape of this "masking tube" is a little hard to describe precisely, but a little experimentation will soon provide a suitable arrangement.)

A 10 RPM AC motor rotates this assembly about the extended center axis of the meteor projector tube--altering the orientation of the mirror axis, and thus changing the direction of the moving meteors. In order to pass current to the mirror motor, a small slip-ring and contact arrangement must be constructed around this rotational shaft. Used (but serviceable) brush contacts from a planetarium projector can be used for this. The slip rings can be constructed using small hard-copper plumbing sweat-couplings fitted over and epoxied to a center-drilled acrylic plastic or other suitable non-conductive rod. Before mounting the couplings over the insulator rod, the motor-connect wires are soldered to the edges of the couplings. Also, a channel is filed down the length of the insulator rod to accommodate the wires, which will pass underneath the slip rings. This entire assembly can then be slid over and attached to a coupling shaft which connects the meteor-direction motor to the mirror-motor mount bracket. Ultimately, some sort of protective insulated cover should be attached around the slip-ring assembly to keep probing hands out of harm's way--given this is part of a 120-volt circuit.

The optical assembly and dual-motor assembly are coupled via a large U-shaped mount with enough breadth for the mirror motor to clear the bracket as it is spun around by the meteor-direction motor. The U-mount can be fashioned from soft-grade aluminum bar--the same type that is readily available in most hardware stores--and bent using a vise and large pliers. The contact brushes for the mirror-motor slip rings are also fixed to this U-mount via a suitable non-conductive mounting block. This entire assembly is supported by a plywood base and an upright aluminum support--again made from bent aluminum bar, and the step-down transformer for the lamp can be mounted somewhere on this assembly.

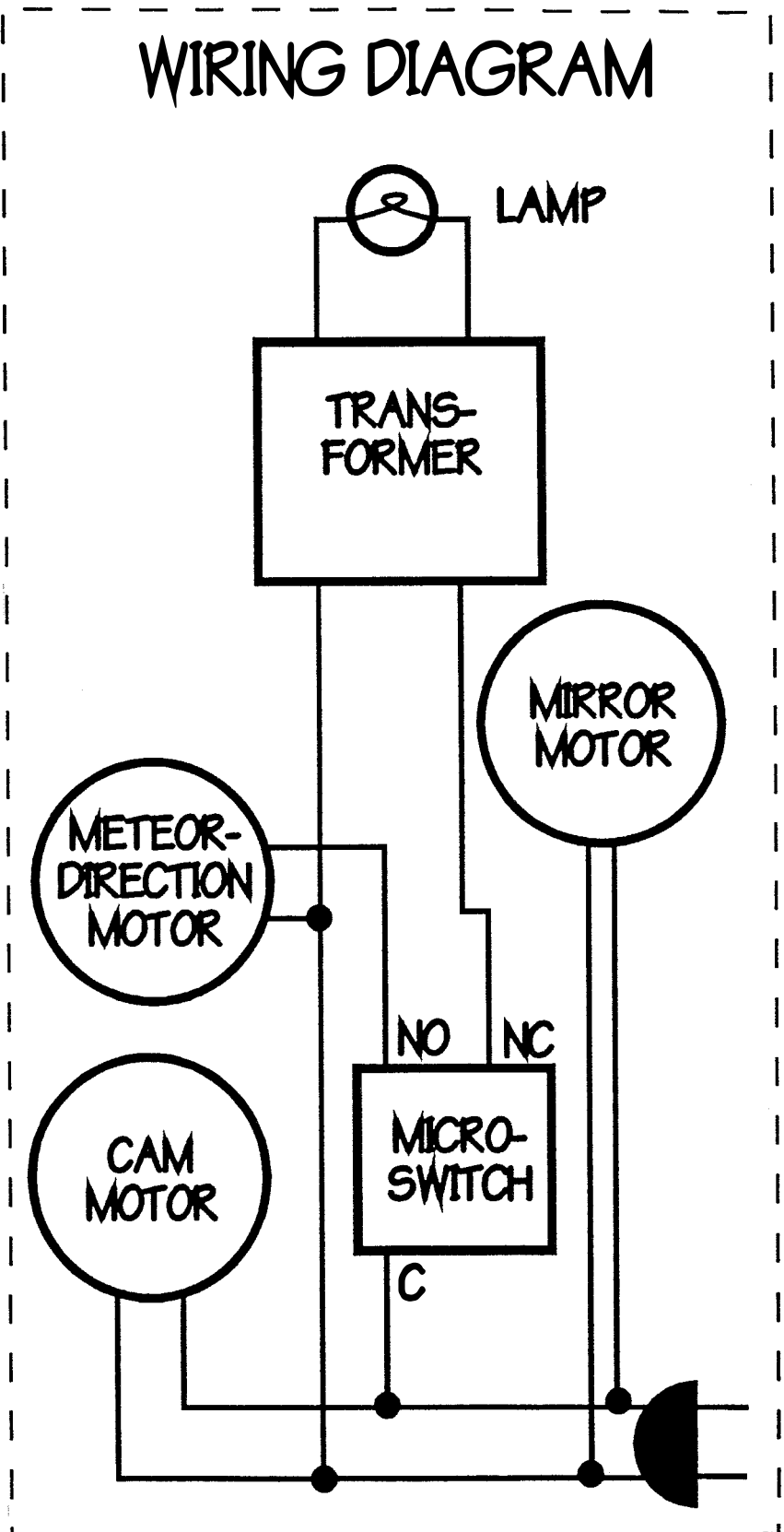
A third motor (1/2 RPM) can be mounted onto the plywood base, and is used to drive a cam with eight irregularly-spaced lobes against a microswitch. This



microswitch alternates activation of the lamp and the meteor-direction motor, while the mirror motor runs continuously with the effect.

The wiring of the assembled projector can be done per the wiring diagram, with final hookup to the control system requiring only a switched AC outlet. (Note that the slip-ring assembly—which isn't depicted in the wiring diagram—is placed in series between the mirror motor and the AC line.) The choice of the small 2.5 volt Mini-Maglite lamp presents one more interesting twist to the electrical design, as it's often difficult to locate a step-down transformer with a secondary rating in that voltage range. In such a case, you can go with a 6-volt transformer (or one secondary-side of a 12-volt center-tap transformer) and wire a rheostat in-series between the transformer and the lamp. A rheostat in the 20 to 40-ohm range should do nicely. I recommend keeping the voltage to the lamp down to no more than 2 volts, which should increase the life of the lamp considerably. In fact, 2 volts to the Mini-Maglite lamp looks plenty bright in a large dome, so small dome folks may wish to dial-in an even lower voltage (higher resistance) on the rheostat.

This effect can be placed in a variety of locations in a dome, but works particularly well close to the center of the planetarium. Though the projected "meteors" are only points of light rather than streaks or trails, the "persistence of vision" characteristic of the human retina effectively turns each moving point into a trail. This projector will scatter meteors over most of the dome, and at a rate which is not much greater than that seen during a very active event in the real night sky. The result is a very natural representation of a meteor shower—and one which won't generate gross misconceptions in the minds of your audiences.



NOSTALGIA

THE ORIGINS OF SEPA: AN INTERMITTENT FAMILY OUTING

**By Jane P. Geoghegan (Hastings)
Richmond, Virginia**

Ed. This is a continuation from page 20 of the Fall 1994 issue. It was taken from Southern Skies, February 1981.

In February and March of 1971, we began to announce that we did, indeed, exist. We sent letters to every State Department of Education in the Southeast, asking for the location of every school planetarium. We told the planetarium salesmen to begin their missionary work. We sent an announcement to Sky and Telescope magazine.

By the end of March, our list of potential members had grown to 88. When we gathered in June of 1971, in Atlanta, we had 54 people. We had arrived! The unofficial officers from the last Atlanta meeting were made official, adding Jack Horkheimer as Newsletter Editor. At our business meeting, we selected Jim Hooks our official SEPA representative to ISPE. Our first committee, on "Professionalism" was formed. We had an impressive list of special guests and member speakers: "The Creation of the Universe", by Dr. Wesley Krogdahl, University of Kentucky; "Oceanography in the Planetarium", by Jack Gross; "Planetarium Approach to Navigation", by Roland Jones; "Conceptual Astronomy: An Emotional Method", by Jack Horkheimer; "A Standardized Test in Elementary Astronomy", by Edward Guilbert; "Planetarium Presentations for the Deaf", by John Burgess.

If you're new to SEPA, maybe you don't know all these people, and I certainly don't intend to run down a yearly list of speakers in this recount of the "early years of SEPA", but just note the topics. They represent what these SEPA people were "into" at the time; just as now, they tell us "where we're at" when we "do our thing".

That's how we got started. With a viable constitution approved after a mailed balloting, and with a few bucks to tide us over from year to year, we were in business. Early on, we realized that the most important reason for our existence was to keep in touch. It's that simple. Our first newsletters, Jack Horkheimer's three twenty-five page "Southern Skies", highlighted our facilities and us, along with interesting articles. In 1972, Jack Gross agreed to act as a clearing house for job information. Like any organization, we began to establish what we now call "SEPA traditions". In 1973, in Miami, the first slide copier appeared at a conference, and we had our first "special effects" workshop. We

established a Professional Ethics Committee. We discussed having SEPA and ISPE together in even-numbered years, when ISPE meets. We rejected the idea; we wanted our own meeting, just us!

In fact, sometimes we just can't let one meeting a year do. Richard Knapp had a mini-workshop in Chapel Hill for us; Jack Gross hosted one at Bays Mountain in Tennessee. The Florida folks and the Virginia folks have begun to have their own regular meetings; 25 people came to Hampton, Va., in November of 1980 to watch the Voyager Saturn pictures at Langley-NASA come in.

Our main supportive vehicle, however, was, and is, the ANNUAL MEETING. Sometimes the conference chairman packs the time schedule really tightly. But we love it. Our most famous SEPA tradition is: WE SHOW UP FOR ALL SCHEDULED ACTIVITIES, NO MATTER HOW LITTLE SLEEP WE HAVE HAD THE NIGHT BEFORE. Jim Seebach, conference chairman in Charlotte in 1976, was made embarrassingly aware of this tradition. We had had an extremely long day: all-day meetings, a dinner, and an after-dinner speaker. It was 11:00 P.M. Jim had scheduled a planetarium show after the dinner speaker, not realizing how late we would be. We were to drive in our cars to the planetarium and meet him there for the show. Jim figured that no one would show up, as it was so late, so he dallied around, leisurely helping the speaker put equipment in his car, etc. He then decided that maybe he should drop by the planetarium to see if anyone was there. He found 30 people, patiently waiting, sitting on the curb in front of the planetarium! From then on, we have said that this SEPA tradition is a "midnight planetarium show", to be scheduled at the conference. Actually, there's more to it than that. Those 30 people showed up because they knew Jim had planned something for them, and SEPA people don't let each other down. Besides, one never knows if he might miss something; a special adventure arranged by the planetarium conference chairman.

And such adventures! If you were there, you won't forget:

*touring Mammoth Cave, in Kentucky, June, 1977, with the Bicentennial Martian and Don Hall;

*nine, count them, nine planetarium shows at Cocoa Beach in 1979, complete with live monsters, unbelievably realistic and scary as hell;

*the state of the art: a fish-eye view of the desert, shown in Jackson, Miss., in 1980;

*downtown Atlanta: a gee-whiz adventure all by itself. The fabulous "Midnight Sun" restaurant. We like Atlanta so much we keep coming back: 1970, 1971, 1972, 1977. Remember the Zebra Lounge?"

NOSTALGIA

*one hundred grown people running their fingers around the rims of water glasses to hear them "ring" during the elegant formal meal at the "Cascades" restaurant in Williamsburg, during the joint NASA-MAPS-SEPA meeting in 1974, while the high-level NASA guest speaker, next on the program, wondered if he should leave, then, before his speech;

*fifty, yes, that's fifty Spanish girls playing guitars in the courtyard of a fantastic Italian Renaissance palace, in Miami, in 1975. Frank Jettner being upstaged by a raccoon. How about "Moon over Miami", a three-hour boat ride on the Island Queen in 1973?

If you missed some of these adventures, don't let it happen again. You're a SEPA person now.

SEPA people are SEPA people even before they know it. Consider this: the first meeting in February, 1970, in Lumberton, before we were SEPA. I had driven there, alone. I didn't know but two other planetarium people in the world. I checked into the motel around dark (conference was the next day). I decided to try to get something to eat. It was 7:00 P.M., the Holiday Inn restaurant was closed for the evening. Several of us ran into each other in the lobby. We were hungry. Jim Hooks, our conference chairman, showed up. "I will take you to this neat place to eat," he said. We went with him. It wasn't open. Undaunted, he said, "I know where there's a place". We went. We ended up at the only open door in Lumberton: the bowling alley-pool hall-hangout for all of Lumberton's late night (after 8:00) finest. We sat on stools at the lunch counter watching the cook-waitress-cashier draw heavily breaded, frozen chicken legs out of the freezer and plunk them into the ancient grease ("only hot food I got", she said). I thought: "What am I doing here?", followed by, "What is the meaning of life?".

It's ten years later now, and I know "what I'm doing here", (I'm still working on the second question). I'm one of the SEPA people, and that's what we do. We get together occasionally in all sorts of bizarre and interesting settings and "do our thing". The settings change, the personnel change, the scenario remains the same. I sincerely hope that twenty years from now, SEPA people still find an excuse to get together and share: our ideas, our frustrations, our profession, our fun, us.

EDITOR'S NOTE: It was during the 1977 conference in Atlanta that the SEPA membership voted to change the constitution to allow officers of the organization to hold office for two years instead of one, and the term of office to begin in January of odd years rather than during

the June conference. This was to allow the President and other officers more time in office to accomplish their goals and also to allow the President (who is SEPA's representative to the IPS Executive Council) to serve a term of office consecutively with the IPS term of office. It was at the 1977 meeting that the membership voted to have Bill Lazarus look into the possibility of SEPA becoming incorporated. Through a lot of work on Bill's part, SEPA became incorporated in South Carolina on May 15, 1978.

PAST PRESIDENTS

6/70 - 6/72	JIM HOOKS
6/72 - 6/73	JACK GROSS
6/73 - 6/74	JOHN BURGESS
6/75 - 6/76	PAUL CAMPBELL
6/76 - 6/77	JACK FLETCHER
6/77 - 6/78	BILL LAZARUS
6/78 - 6/79	JIM SEEBACH
6/79 - 6/80	JIM SUMMERS

PAST SECRETARY/TREASURERS

6/70 - 6/73	JANE GEOGHEGAN
6/73 - 6/75	JIM SUMMERS
6/75 - 6/77	BOB TATE
6/78 - 12/80	PHIL GROCE

PAST CONFERENCE SITES AND CHAIRMEN

- 1970 - Atlanta, GA - ANDREW OLSEN
- 1971 - Atlanta, GA - JULIUS STAAL
- 1972 - Atlanta, GA - JOHN BURGESS
- 1973 - Miami, FL - JACK HORKHEIMER
- 1974 - Hampton, VA - JAC K FLETCHER
- 1975 - Miami, FL - JACK HORKHEIMER
- 1976 - Charlotte, NC - JIM SEEBACH
- 1977 - Atlanta, GA - JOHN BURGESS
- 1978 - Bowling Green, KY - PAUL CAMPBELL
- 1979 - Cocoa Beach, FL - MIKE HUTTON
- 1980 - Jackson, MS - DICK KNAPP



NEWS FROM SEPA STATES



ALABAMA

FLORIDA

George Fleenor
Bishop Planetarium
Bradenton



The **Bishop Planetarium** is currently running *Just Imagine*, an original production of the Sudekum Planetarium. After the first of the year, the planetarium and museum expanded its programming. Two additional laser shows are offered during the week, in addition to running two starshows each day. *The Sky Tonight*, a live seasonal star walk, is also offered three times during the week. The museum and planetarium are now open seven days a week! Normally we have been closed on Mondays and used this time for maintenance. The planetarium staff has also been moving into its newly expanded facilities. These facilities include a new sound room, recording booth, electronics shop, and offices. All of the other production areas were also renovated which makes production a lot easier and better organized. The planetarium also has switched to the ADAT digital format and is currently reprogramming all shows accordingly. The planetarium also hosted FLORPLAN in October. Over fifty planetarians state wide met for a full days activities and enjoyed sharing ideas with each other. The day concluded with get-together at a local pub which is within a short walking distance of the planetarium. (Sorry, there is no Woodchuck available in Bradenton.)

Jon Bell, Planetarium Director at **Indian River Community College in Fort Pierce**, reports that a new show will be presented in his theater beginning January 27. The show is *Welcome to the Universe* (a different program from the 10 minute presentation he wrote for Joe Hopkins Engineering last year). Another program that is already started is a series on local public radio, WQCS. *Skywatch* is a one-minute update on sky events that Jon writes and narrates five times a week, and which airs at noon each weekday. Meanwhile, Jon will be helping out the college's drama department by taking on the role of King Pellinore in the musical *Camelot*, which will run for two weeks in mid-February. "I know it has nothing to do with planetariums or astronomy - let's just say I'm moonlighting, o.k.?"

The **Alexander Brest Planetarium** at the Museum of Science and History in Jacksonville is looking forward to the new year and the new planetarium director. Patrick

McQuillan was hired as Planetarium Director starting the beginning of January. Mr. McQuillan was formerly assistant director of the Virginia Living Museum's Planetarium in Newport News, Virginia. For all of you trivia buffs out there, the Virginia Living Museum was the former home of another Florida planetarian - Jon Bell. The Alexander Brest Planetarium is keeping the new director busy. School shows are in full swing; two public shows are being run alternately seven days a week: *More Than Meets the Eye*, and *Larry Cat in Space*; and a full load of AVI's laser shows are running on weekend evenings.

From the **John Young Planetarium** in Orlando comes news from Paul Trembly of a ground breaking ceremony for the new Orlando Science Center on December 6, 1994. Expected opening date is March 1997. The planetarium just opened *Lifestyles of the Stars*, and is currently running AVI's *Pink Floyd Shines On in 3D*. The next starshow to open in June will be *To Worlds Beyond*.

The **Calusa Nature Center Planetarium** in Fort Myers received a grant from a local patron this past fall. Joe LaVigne reports that with this money they were able to purchase two Alesis ADAT digital VHS players, and are currently in the process of redubbing and reprogramming astronomy and laser programs to the new digital format. Laser imagery has improved dramatically with this change, and the audio quality of all programs has improved as well. Grant monies were also used to get some long needed repairs made to the Spitz 512 projector, and to purchase two new astronomy programs. *The Secret of the Cardboard Rocket* premiered in January. Grant monies will also be used for the development of a light pollution exhibit and a laser demonstration exhibit. Prokofiev's *Peter and the Wolf* produced by Laser Fantasy International will be premiering in February, and a good response is expected from the classical music lovers in the area.

The **Saunders Planetarium** in Tampa has continued to be busy even during the construction phases of the Museum Of Science and Industry's expansion. The \$35 million project will triple the size of the present facility while adding a 350-seat IMAX Dome theater. Although there are plans for opening portions of the new building earlier, it will be 100% completed in mid-1995. On November 17, nearly 2000 school children and volunteers constructed a 10⁻⁶ scale model of Earth, 42 feet in diameter. On February 4, *STAR TREK: Federation Science* opened at MOSI. The \$1 million exhibit will allow visitors to explore physics, practical astronomy, and physiology. Other interesting additions will include the principles behind propulsion systems, medical science, and life support. To add to the experience of the exhibit, on May 13 & 14, James "Scotty" Doohan will be at the MOSI-sponsored STAR TREK Convention. Finally, 1995 might be the year The Saunders Planetarium moves into

the 1990's. A \$150,000 proposed grant would renovate and upgrade the planetarium and the GTE Challenger Learning Center. This should happen just in the nick of time, since Al Peche reports that the planetarium expects 100,000+ visitors this year. Happy New Year to everyone from the staff of The Saunders Planetarium!

From the **Museum of Arts and Sciences** in Daytona Beach, Roger Hoefler reports that they have experienced a natural disaster that other SEPAites (Dave Hostetter, etc) have experienced - FLOODING! Tropical storm Gordon took no mercy on the planetarium. The entire theater and much of the museum were completely standing in several inches of water. The Minolta projector and console were spared. They did, however, discover that the Minolta cables are waterproof! After fanning the theater for a week, they were able to clean the carpets and reopen! Roger says he did learn one beneficial fact that he would like to pass on to other planetarians who live in possible flood zones - Don't mount circuit boards low to the floor. It seems that their circuit boards narrowly escaped water damage by just a few inches!

The **Buehler Planetarium** in Davie is currently running the Oregon Museum of Science and Industry's *Orion Rendezvous: A Star Trek Adventure*. Patrons, as new cadets enroute to STARFLEET Academy, join the crew of the USS ANTARES as Commander Geordi Laforge guides them on a thrilling journey of exploration. The planetarium is also running several laser shows including *Laser U2* and *Laser Floyd*. The starshow *Larry Cat in Space* is offered twice a week.

continues to be made on the Martin Marietta Space Station mock-up, but the opening date has been pushed back to November 1995. A tentative design for a 50 foot planetarium/large film format theatre has been accepted by the City of Kenner, and city officials are now looking into ways to finance this project.

The **Louisiana Nature and Science Center** in New Orleans recently merged with the Audubon Institute. Mark Trotter, Planetarium Curator, and Dennis Cowles, Assistant Curator, are now part of a much larger organization. They just finished production of an alternative laser show, and report a successful premier. The alternative show joins the other laser shows in regular rotation: *Pink Floyd's Dark Side of the Moon*, *Led Zeppelin*, *Aerosmith*, *Best of Pink Floyd*, *Rush*, and *Metallica*. Mark and Dennis plan to produce two new laser shows in 1995. The LNSC Planetarium's public show schedule consists of: *The Sky Tonight*, *The Little Star That Could*, *Planet Patrol*, and the *Oldies Laser Show*. The exhibit area of the Nature Center will be turned over to Mark for the first part of 1995, to be filled with space stuff, and Dennis is putting together a wall display on astronomy for the planetarium. Dennis is planning to attend the Lunar and Planetary Science Conference in March, and may have something interesting to report.

According to Dave Hostetter, the **Lafayette Natural History Museum Planetarium** is still in limbo since no decision has yet been made by the city government concerning its future. A decision is expected in the near future. In the meantime, presentations are still being made in their portable planetarium. A recently acquired piece of Canyon Diablo meteorite has been quite popular with planetarium patrons. Dave has also been working on a teacher workshop for first through eighth grade teachers in conjunction with the Southwest Education Development Laboratory in Austin, Texas.

Gary Meibaum, at the **St. Charles Parish Library** in Luling, is currently presenting *Winter Skies*. Several new presentations are being put into place for the upcoming year. Work is also under way on expanding the library adjacent to this facility.

David Mayeux reports the following from the **Louisiana Arts & Science Center Planetarium** in Baton Rouge. The space show for December was *Christmas Sky Stories From the Bayou*, which is sort of a cajun constellation show having to do with the constellations of the Christmas season. In January and February they will be showing *The Martians Are Coming*. Of course, this is the Mars show set to coincide with the February opposition of Mars. The staff has also been presenting evening *Stargazes* and daytime *Sungazes* to the public, both of which are quite popular. The Challenger Center has finally opened. This facility allows students and the public to work in an environment similar to actual space missions.



GEORGIA



KENTUCKY



LOUISIANA

Michael Sandras
Freeport-McMoRan Daily
Living Science Center
Kenner

The **Freeport-McMoRan Planetarium and Observatory** was showing *'Tis The Season* and *The Sky Tonight*, *Winter Tales*, with several new presentations in the works. This facility will also be used in conjunction with the University of New Orleans to present several non-credit astronomy courses over the next year. Progress



MISSISSIPPI

**Gary Lazich
Davis Planetarium
Jackson**

Jackson's Russell C. Davis Planetarium presented *Season of Light* (from Loch Ness Productions), *The Alien Who Stole Christmas* (from Brevard Community College), and *LASER VISIONS: A Fresh Aire Christmas* (also from BCC) as its holiday offerings. The planetarium closed for two weeks in January so that Minolta technicians could service the seventeen-year-old star projector (which has been showing signs of age). Winter programming will include a reprise of the popular Hansen Planetarium feature *The Secret of the Cardboard Rocket*, and a Jackson premiere of Loch Ness Productions' *The Cowboy Astronomer* timed to coincide with the Dixie National Rodeo in February. In April, pending approval by the American Astronomical Society, the Planetarium will join four other Jackson area sponsors to host Pennsylvania planetarium director Laurence Marshall for a series of Harlow Shapley lectures.

The Rainwater Observatory and Planetarium in French Camp has completed refurbishment of their Goto S-2 projector, and is now presenting programs. The Center housing the planetarium also has a TV monitor, a VCR, two slide projectors, and a donated Dell computer. Up the hill at the Observatory, a new Meade 12" LX-200 has replaced the old 10" LX-5. Its pointing accuracy should enable CCD imaging of objects, while its computer interface should permit remote control via Voyager II software. By spring, all observatory outlets should be powered by line voltage - just in time for the third Mid-South Regional Stargaze, scheduled for April 27 - 29. Guest speakers confirmed include: Lisa DuFur (on Project SPICA activities for teachers); NASA's Jim McMurtry (on the future of NASA space astronomy); Gerrit Verschuur (on an alternate cosmology based on intergalactic magnetism rather than gravitation); and, Jack Horkheimer (on the comet that killed Cleopatra).

NORTH CAROLINA

**Cyndi Zeeger
Woodson Planetarium
Salisbury**



North Carolina, South Carolina, and Virginia museums were invited by Georgie Searles and her staff to the North Carolina Museum of Life and Science in Durham, North Carolina, for the Museum Educator's Second Regional Conference on September 14, 1994.

Planetarium educators present were: Tom Hocking, Morehead Planetarium, and Cyndi Zeger, Woodson Planetarium. Both Tom and Cyndi shared teaching ideas with other educators.

Woodson Planetarium's fall programs include: *Larry Cat in Space*, as a culmination of a variety of hands-on moon activities for third graders; *More Than Meets the Eye*, and a live fall sky for fourth graders; and, *A Planetarium Rocket Ride*, the continuation of last spring's successful planet excursions. Kindergarten students will begin visiting the planetarium for a look at *Backyard Stars* later in the fall season.

Kelly Planetarium and Omnimax Theatre at Discovery Place has a full line-up of programs for the fall season, including: *Africa the Serengeti*, *To The Limit*, *Antarctica*, *Tropical Rain Forest*, and *Ring of Fire* in the Omnimax Theatre. *Frontiers in Space* and *Star Seekers* are playing in the Space Voyager Planetarium.

Morehead Planetarium has a variety of shows available this fall. *Sky Rambles* encourages the audience to ask all those questions about the sky that until now they were afraid to ask. Well-known narrators take the Chapel Hill audiences through the planet Earth's wonders and galactic wonders in *Seven Wonders of the World*, and on a journey through deep sky objects in *The Orion Rendezvous: A Star Trek Voyage of Discovery*. A children's show, *The Little Star That Could*, is also playing this fall. Special programs include a family telescope short course, and a Saturday excursion to an airport to learn the basics of aeronautics.

SOUTH CAROLINA

**Rick Greenawald
Hooper Planetarium
Greenville**



Glenn Dantzler at the **Settlemyre Planetarium** in Rock Hill reports that the recent donation of a VCR, and the money for a Nutmeg controller card, will give the theater video tape capabilities for the first time. These items were donated by a physicians group in Rock Hill. Glenn is also hoping to get the final go ahead on a four segment panorama system for the theater. If all went well these systems were installed over the Christmas holidays. The final item from Rock Hill is that school attendance is up by 45 percent this year, thanks to an agreement with the local school system that sends fifth graders to the planetarium.

The report from the **Gibbes Planetarium** in Columbia is also good. It seems that Jeff and Todd's evil twins have departed. Jeff Guill says that they will be doing a Mars watch from the end of January through February. During this time they will run *The Mars Show* and the Melton Observatory will have Mars observing sessions. The staff

is gearing up for girl scout badges again in March, and Starlab has been booked up through the end of the year. Jeff also reports that a Challenger Center is going to be opening in the Columbia area in the near future.

Jim Brown of the **Stanback Planetarium** in Orangeburg reports that he is working on something big. Jim didn't want to divulge what it is yet, as he is still in negotiations. However, if all works out, we should all know what the big project is by the next issue of the journal.

Here in Greenville, I keep plugging along. I have lost my planetarium educator, Rex Smith, to outreach programs which he will be in charge of. There have been no staff additions, nor are any realistically expected, therefore I do the job alone. I will have the use of two staff persons to present school programs two days a week, the other three days are mine. I hope to be able to pick up the pace of production by using the two non-teaching days to the fullest. For the first time, we ran a Christmas show, *Season of Light*, this past holiday season. Attendance was very disappointing, probably due to the fact that there has been little cooperation by our local newspaper in getting the word out, and the lack of money for advertising. I guess we'll just hope that over the years it will gain a cult following. As we enter the new year it should get very interesting around here as the school district eyes a major reorganization. Just what this might mean to the planetarium, I don't know. However, it could result in major changes for the whole science center --- only time will tell.

TENNESSEE



Kris McCall
Sudekum Planetarium
Nashville

The **Sudekum Planetarium** in Nashville has a lot of irons in the fire. They are currently in production or development on three different programs. One is an exciting new children's show that will teach basic rocket physics, highlight the great distances in space, and touch briefly on the planets in the solar system. It will also feature the opportunity for audience participation and at least two original songs.

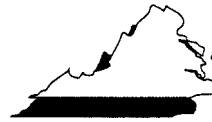
Phil Groce recently completed a script for a mini-show called *Moonwitch* to be produced by Bowen Music Productions. Sudekum artist, Jim Chapman, will be doing the art for this program. No release date has been announced as this goes to print. Phil Groce is also writing a script called *Worlds In Motion*, which will address how objects, from spaceships to galaxies, move in space. More on this in the future.

In the fall of 1994, someone donated a ten foot satellite dish and mount to the Cumberland Science Museum. Eventually this will go up on the roof of the Planetarium. Meanwhile, a local HAM enthusiast is also looking for the necessary electronics to make the dish operational.

In December, the board of Cumberland Museums voted to temporarily close Grassmere Wildlife Park, the sister institution of the Cumberland Science Museum. A special committee will examine operational options and consider some restructuring of the entire organization. Meanwhile, the Sudekum Planetarium continues to have good attendance and ship shows across the country.

Plans are underway for the conference to be held in Nashville in 1996. Watch this space for details.

VIRGINIA



WEST VIRGINIA



Elizabeth Wasiluk
Berkeley County Planetarium
Hedgesville

Elizabeth S. Wasiluk of **Berkeley County Planetarium in Hedgesville**, and Larry Brown of the **Dwight O. Connor Planetarium in Parkersburg** were colleagues at Harvard University for the 1992 SPICA workshop, but they were rivals in the recent Hedgesville/Parkersburg game played at Parkersburg this season. Despite a valiant effort by new planetarium assistant Frank Aliveto as a running back on the Hedgesville team, Parkersburg was triumphant...28 - 13.

Steve Mitch of **Benedum Planetarium in Wheeling** will be hosting the GLPA meeting October 26 - 29. After previously hosting a MAPS meeting, and now GLPA, will Steve ever come to the realization that West Virginia is a part of the SEPA region? Stay tuned.



FREE - LUMILINE LAMPS

The Bishop Planetarium in Bradenton, Florida, has a large quantity of blue, red, and yellow 60 watt, 18" style lumiline lamps to give away. If you can use these lamps, they are free, but you do have to pay for shipping. Just contact John Hare.

Note: Most Spitz dimmer cove systems will not handle 60 watt lamps. These may require installation of a higher wattage dimmer.

FREE CATALOG! Make Science Come Alive!

Valuable resources for K-12 science teachers: Colorful classroom posters, catchy bumper stickers, and award-winning magazines are highlighted in this 34-page catalog from the American Chemical Society. Bring the excitement of science to your classroom with *WonderScience* and *ChemMatters* magazines; videotapes on safety, demonstrations, and careers; and reference books, all designed to make your job easier. Call (202) 872-4382 for your free catalog.

Travel Grants are available for high school chemistry teachers from the American Chemical Society (ACS). The grants will support the awardees at either an ACS or NSTA regional or national meeting in 1996. Each awardee is required to present a session on a program or product of the ACS Office of High School Chemistry, such as the U.S. National Chemistry Olympiad, *ChemCom*, *ChemSource*, Project SEED, or career materials.

The maximum grant available is \$500, which can be used to cover expenses including mileage, air fare, hotel accommodations, food, and presentation supplies. The application deadline is July 1, 1995, for travel to a meeting in 1996. To obtain an application call (202) 872-6328, or write to: American Chemical Society, Education Division, Room 806, 1155 Sixteenth Street, NW, Washington, DC 20036.

The V. M. Slipper Committee of the National Academy of Sciences announces funds available in 1995 for the improvement of public education in astronomy.

During 1995-96 the V. M. Slipper Committee will have a modest amount of funds (\$4,500) to award for projects that enhance the public's understanding of astronomy.

For further information:

Dennis Schatz, Chairman
 V. M. Slipper Committee
 Pacific Science Center
 200 Second Avenue North
 Seattle, WA 98109
 Phone: 206-443-2001
 Fax: 206-443-3631

SUMMER INSTITUTE IN PLANETARIUM-ASTRONOMY EDUCATION

The Spitz, Inc. - West Chester University Summer Institute in Planetarium-Astronomy Education will take place on July 17 through 21 (Institute I) and July 24 through 28 (Institute II). The Institute consists of two (2) independent one-week courses, designed to provide participants with the necessary back ground to successfully operate a planetarium in an educational environment. Enrollment is open to all members of the planetarium community. Each course may be taken separately or as a series.

Institute I is designed especially for those who feel their preparation in naked-eye astronomy subject matter is inadequate.

Institute II stresses the educational use of the planetarium as a "classroom".

For further information:

1995 Summer Institutes
 Spitz, Inc.
 P.O. Box 198
 Chadds Ford, PA 19317
 Attention: Mona E. Coldiron
 Phone: (610) 459-5200
 Fax: (610) 459-3830

STARLAB CONFERENCE

The Mid Atlantic Planetarium Society will sponsor a Starlab conference on May 19, 1995 at Raritan Valley Community College in North Branch, New Jersey.

Designed for classroom teachers who are using Starlab, the conference will focus on lessons and techniques beyond the basic introduction to constellations.

The presenters are experienced Starlab teachers from schools and museums ranging from Maine to Virginia, and Indiana to New York.

Date: Friday, May 19, 1995

Time: 8:30 AM - 4:00 PM

Fee: Approximately \$50.00, including lunch.

Attendance limited to the first 60 participants

Registration Deadline: April 1, 1995

For more information:

M.A.P.S. '95
 Planetarium Dept.
 Raritan Valley Community College
 P.O. Box 3300
 Somerville, NJ 08876
 Phone: 908-231-8805
 Fax: 908-231-8810



WINTER

1995

ISSUE

**Linda Hare, Editor
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