

# President's Message

The equinox has come and gone. It's late April, and here in Tennessee the world is finally beginning to explode in green and white and red and yellow and all the colors of the rainbow.

It is easy to overlook the outside world when one spends most of their time in the dark in a room with no windows. While Daylight Savings Time may seem silly to many in this profession, it is kind of nice to see the light of day when I leave work, usually well after 5 o'clock.

As time rushes head on toward the June conference, there are several crucial issues for members of SEPA to consider before coming to Nashville.

In the last journal you found proposed changes to the by laws regarding membership categories. These changes are intended to streamline and better organize the SEPA membership. Please review them carefully. If you have questions, you can contact Mike Chesman (Kingsport, TN) who chaired the committee that studied this difficult matter.

Meanwhile Frank Palma (Pensacola, FL) accepted the task of chairing a committee to nominate candidates for office for the elections that will be held during the business meeting at this conference.

It seems like we just had an election last summer. That was when Mike Chesman was voted President Elect to fill the vacancy created when Rick Greenawald abdicated the position to take a nifty job in southern Idaho.

Jane Hastings (Richmond, VA) and Carol Helper (Macon, GA) were chosen by Frank to assist in finding a few good people to lead SEPA into the next century. The candidates' biographies are also included in this journal. Take a moment to read about your colleagues. Even if you think you already know them, you may learn something new.

Bear in mind as you contemplate your decision, the person who is elected President actually serves SEPA for six years: two as President Elect (97-98), two as President (99-2000), and two as Past President (2001-2002).

At the business meeting we will also be voting on a site for the 1998 conference. As I write this I have one firm and one semi firm bid. If you think you want to take the challenge, please contact me as soon as possible. Knowing about your bid ahead of time means that it can be better presented to the membership. I cannot lie. It is a lot of hard work, but we are really looking forward to having every one come to Nashville this summer.

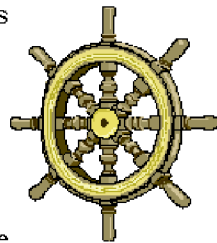
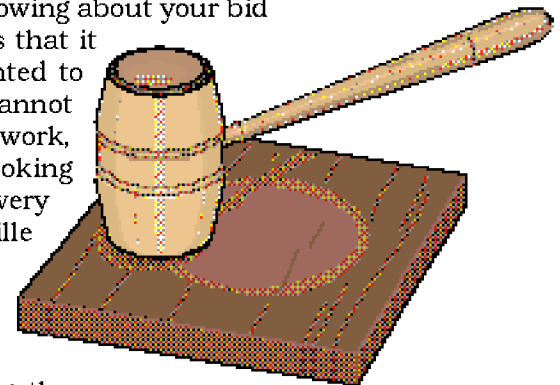
After all this talk about the official business that will be conducted during the conference, you might be having second thoughts about attending. In addition to the business meeting, there will be a multitude of papers, demonstrations, vendor presentations, and workshops. There will be plenty of informal, social, networking time including a twilight cruise on the Cumberland River.

There is also the neat field trip to the Arnold Engineering Development Center where we will tour space chambers, wind tunnels, and engine test facilities. Be sure to include all the requested information on the back of your registration form so we can get proper security clearance for all delegates who will be going.

Members may also be interested to know that since the pre conference mailing two more workshops have been added to the schedule. Mike Williams, a local storyteller will offer a one hour program on master storytelling and how to make the most of every word. There is a fee of \$5.00 per person for this session. Since it is not listed on the registration form, please write it in and add the appropriate amount of money.

Joe Hopkins (Bradenton, FL) and Rick Pirko (Youngstown, OH) also called to say they wanted to present a Baby Food Jar Basics demonstration workshop. It will not involve any building but will provide

Kristine K. McCall  
President  
Sudekum Planetarium  
Nashville, TN



(continued on page 2)

# Read Me: Proposed By-laws Changes

Mike Chesman  
President-Elect  
Bays Mountain Planetarium  
Kingsport, TN

If you have been following this past year's issues of *Southern Skies*, then you are aware that Council has appointed a committee to review SEPA's membership policies. The report from that committee was printed in the winter issue. During the business meeting at the Nashville conference this June we will be considering the following by-laws changes:

Current:

#### Article Two, Section 1B

Associate status can be granted to those persons or institutions interested in the aims of the Association but who do not fulfill the above requirements.

Proposed Change:

#### Article Two, Section 1B

Associate membership can be granted to those persons interested in the aims of the Association but who do not fulfill the above requirements.

Current:

#### Article Two, Section 1C

Patrons Individuals not necessarily in the planetarium field whose interest and support is beneficial to the Association.

Proposed Change:

#### Article Two, Section 1C

Supporting membership can be granted to institutions, businesses, benefactors, or other groups whose support is beneficial to the Association.

If these items pass, then a vote will be presented to establish a fee for the new Supporting membership category. The committee has suggested a minimum \$100 contribution for this class of membership.

Reprints of the appropriate newsletter articles, additional information from Council, and the above proposed by-law changes will also be provided in your conference packets in Nashville.

President's Message  
continued

attendees with a wealth of ideas for neat special effects that can be easily constructed using common materials. There is no charge for this session, but please indicate your preference on the registration form.

Regardless of all the planning of the host, the best conferences are those where everyone fully participates. Everyone should consider giving a paper. Share some brilliant invention, ingenious promotional gimmick, or humorous anecdotes with the rest of us.

This would be a great opportunity to show off some of the comet and eclipse pictures you took. How many thousands of people and how few telescopes did you have at your comet watch? How low was the temperature? You get the idea.

In the meantime, you might want to start studying for the Great Constellation Show Out. Jon Bell (Fort Pierce, FL

came up with this idea for a constellation bee. Using a laser pointer donated by the International Laser Display Association (ILDA), brave but knowledgeable contestants will have to point out objects or constellations for a distinguished panel of judges. The last person left standing gets the laser pointer from ILDA.

There is just one last thing. The Sudekum staff is working diligently to solicit lots of prizes. If your institution can contribute such as mugs, or other unique items, please bring them to the attention of the staff. All donations will be in the conference guide and prizes are awarded.

For now, I have to get this out to you very patient journal readers. I hope you enjoy *Southern Skies* in a new year. Cheers for Duncan. Reservations are reserved, meals are being planned, details are overwhelming, and we are awaiting for your registration in Nashville soon.



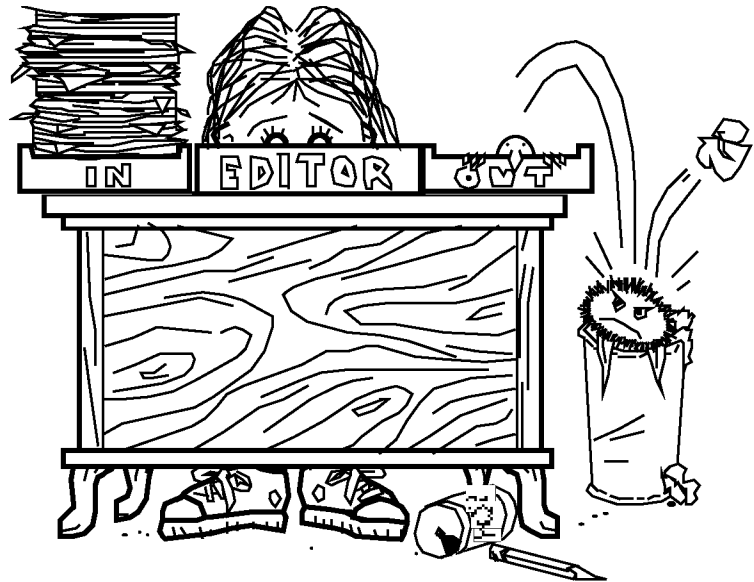
# Grammar's Slow, But She's

Only 39 of 114 1995 SEPA members have renewed for 1996. Several years ago we changed from paying our dues from conference to conference to paying our dues on a calendar year basis. I'm guilty of not putting a renewal form in the last issue of Southern Skies in 1995. I assumed everyone would notice the expiration date on the mailing label. But once I called to your attention that dues were payable immediately, only a few responded. As a result only those individuals who paid their dues or who are exempt because of a publication exchange with other affiliates are going to receive this issue. It's going to create a hardship on our conference hosts to send me a separate check for those who pay their dues at the time of registration.

Many of you who submit articles or reports to Southern Skies must, I repeat must, try harder to comply with deadlines. The deadlines are, to put this in a form planetarians can remember, the first of the month following each solstice or equinox. If that was not clear, the deadlines during the calendar year are January 1, April 1, July 1, and October 1.

If you submit articles to Southern Skies, thank you. A special pat on the back if you send a disk. It takes less time to translate a text file than it does to reformat text that comes over the Internet.

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



A final thought: the next deadline for Southern Skies is July 1.

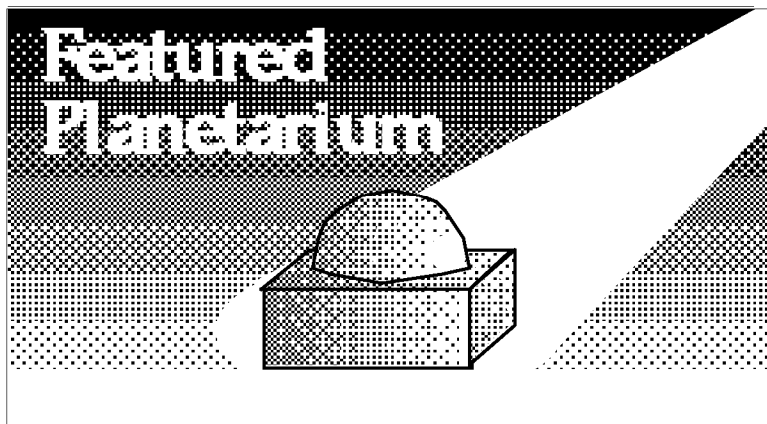
Send your \$15.00 check made payable to SEPA to the following address:  
Craigmont Planetarium, 3333 Covington Pike, Memphis, TN 38128 3902

Name			
Planetarium			
Organization			
Address			
City			
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# SciWorks Planetarium Winston-Salem, North Caro-

Dave Hostetter  
Featured Planetarium Ed.  
Lafayette Natural History  
Museum & Planetarium  
Lafayette, LA

The featured planetarium this issue is the SciWorks Planetarium in Winston Salem, NC. I learned from my daughter in Raleigh that the state tree of North Carolina is those short orange and white striped barrels on I 40. Ed.



Mike Cutrera

Duke Johnson  
Author  
SciWorks Planetarium  
400 W. Hanes Mill Rd.  
Winston-Salem, NC 27105

On a fateful day in November of 1992, a new planetarium joined a host of brothers and sisters at various locations around the world in bringing a sense of wonder about the heavens to thousands of people. For years, students had attended several planetarium shows under a 25 foot dome in a silo. This dome was then moved to SciWorks. After years of planning and hard work, a new day dawned for the SciWorks Planetarium when construction on a new 50 foot dome was completed.

Although there is some debate whether size is truly everything, I have heard that it can certainly make a difference (especially if it's used properly). The planetarium is part of a newly expanded and renovated Science Center, which includes 65,000 square feet of buildings and 31 acres of land.

Equipped with a brand new Spitz 512 star projector and an ATM 3 automation system, this planetarium set out to make a difference in astronomy education. Twenty slide projectors, numerous special effects, a video projector, three laser disk players, and more gave audiences of all ages a new appreciation for the world around them.

As we know, very few things in the planetarium field are static. The same has

been true of the SciWorks planetarium. Just a year after its birth, its growing pains started.

Like many growing children, it rebelled! It demanded a new laser system. This was probably just a phase, but its arguments were so coherent that the staff finally gave in. This ushered in not only a new laser system, but a significant upgrade to the sound system as well. A plethora of special effects later and the upgrade was nearly complete.

With all of the components in place, there still remained one more thing to be done. What else do all kids want... an earring! That would do it! But how do you pierce a dome? All that was needed was the help of a giant template, a router, and a few dedicated staff. By the end of the day, the dome was adorned with a bigger port hole than ever before. Within minutes of its completion, laser light sprang from the darkness things have never been the same.

Special presentations such as concerts under the stars and live sky tours continue to be popular with all ages. Although the quality of planetarium shows is usually good, more and more people are expressing interest in attending a presentation where a live voice from the darkness is able to direct their interest, interact with a wide variety of ages, and answer their questions whether complicated or simple.

New planetarium shows are opened on a quarterly basis with all of the retired shows making their way into archival trays which are available for school groups. Our current library contains 13 prerecorded presentations, as well as a live version entitled Planetary Movements, for more advanced students.

Current endeavors include partnering with the local school system to provide both student and teacher training. We are involved with the Problem Based Learning Initiative and are trying to find better ways to improve the way astronomy is taught in our grade schools and high schools. An astronomy class that reintroduces adults to the night sky and all its intricacies has proved popular.

Change has slowed, but we know,

# Small Talk

It's been tough getting out of the blue funk of my last column. I'm still bummed from McLaughlin Planetarium's closing in Toronto. Easter break is coming up, and I have a feeling of loss that I can't go catch a star show or laser show while I'm in the area visiting my Mom. I tried to console myself by catching the new planetarium at the Air and Space Museum in Washington, D.C. at the end of February, only to find that their much publicized grand opening didn't happen as scheduled.

With spring just around the corner, I decided to specifically look for upbeat news, things that will begin to uplift you from those post-Christmas blues that seem to linger until Easter, so here goes...

Despite the cutbacks to Buffalo, New York's Whitworth Ferguson Planetarium's operating schedule and budget, they are still going ahead with the third annual reunion of former staff and members of the associated astronomy club in June. This time I hope I can make it.

Speaking of Whitworth Ferguson, Paul Krupinski, formerly of there, as well as a former Strasenburgh Planetarium Intern is operating as Ancient Eye Productions with his own StarLab planetarium that is already bought and paid for. With Whitworth Ferguson cut back, he has plenty of business picking up the slack. Way to go, Paul! Now I can stop referring to him as the only out of work Strasenburgh grad.

You know, this buy your own portable planetarium deal is really catching on across the country. You may have read about Kris McCall asking Gary Likert of the Home Planetarium Association to talk with us. My own planetarium assistant, Matt Yost, has joined this organization and had been presenting me a whole host of do it yourself projects. If you plan on going to Nashville for SEPA, do catch Gary's talk, or, better still, check out the Home Planetarium Association by yourself at:

Gary Likert  
Home Planetarium Association  
1203 Highway 25  
Gallatin, TN 37066  
(615) 734 4147

April Whitt of the Jim Cherry Memorial Planetarium/ Fernbank Science Center in Atlanta had a wonderful paper and booklet of tips for people chasing their own portable planetarium. I am sure, if you wrote her, she'd send you a copy.

Speaking of April, she deserves a Way to go for the Live from the Stratosphere satellite broadcast she did in the fall. Hope you caught Bill Gutch turning infrared.

If you checked out page five of the Fall 1995 issue of Southern Skies, Nicole Hassold's Women of Astronomy, you saw in the photo Tania Ruiz, 1994 Harvard graduate and former astronomy student of Rod Martin, planetarium instructor at Washington County Planetarium in Hagerstown, Maryland. Tania and I were both in the Tri State Astronomy Club and had many adventures together including watching Voyager Neptune pictures come over the satellite dish and hanging out on Nantucket when she got a Maria Mitchell internship one summer.

I recently received proceedings of the GLPA meeting in Grand Rapids, MI and read with delight Shawn Laatch's story about becoming director of Arthur Storer Planetarium in Prince Frederick, MD. If you changed names and places, you could have any of our stories. It's great to hear of someone new and so deserving finding the hopefully perfect planetarium position. Way to go, Shawn! I hope it's turning out to be all you've wanted it to be.

Did I leave out any good news? I can't report it unless I hear about it from you. Phone, fax, or write me with your info.

children seldom stay satisfied for long. There's always a longing for few new slide projectors and special effects... anything to add to the spice of life. What new toys will be next? An LCD dome? A virtual real

ity theater? If I've learned anything in this business, the sky's the limit!

Elizabeth Wasiluk  
Small Talk Editor  
Berkeley County Planetarium



Featured Planetarium:  
SciWorks Planetarium  
Winston-Salem, NC  
continued



Jalie Phifer  
Morehead Planetarium  
Chapel Hill, NC

# Global Mythology, Part 2: The Spring Constellations

Global Mythology will be serialized in four parts within the 1996 issues of Southern Skies. Fall and circumpolar constellations plus a bibliography will appear in part four.

## LEO

1. (GREEK/ ROMAN:) Leo was a mighty lion who lived on the moon. His skin was so tough that nothing, not even sharpened swords, could hurt him. One night, Leo decided to come down to the earth. He plunged to the ground as a fiery shooting star, landing in the small town of Nemea. The fierce lion began killing people and terrorizing the Nemeans. This went on until the legendary strong man Hercules arrived to tackle the beast as one of his twelve labors. The two wrestled for 30 long days before Hercules finally managed to strangle the beast to death. Then Jupiter, the king of the gods, placed the fallen lion up into the stars for all to see. (P. 114 The New Patterns in the Sky, P. 80, Star Tales Ridpath, etc.)
2. (BABYLONIAN:) Leo was a large, fierce guard dog. The ancient Babylonians carried their goods by caravan, and they kept big guard dogs for protection against thieves. (P. 115 The New Patterns in the Sky)
3. (BRAZIL:) The Taulipang natives, who live in northern Brazil, picture Leo as Tauna, their god of thunder and lightning. When thunderstorms arise, as they often do in the tropics, the Taulipang believe that Tauna is beating the clouds with his huge club, making the sounds of thunder and the flashes of lightning. (P. 115, 117 The New Patterns in the Sky)
4. (EGYPT:) Long ago, earth was created when the sun arose in Leo's tail, near the star Denebola. Lions were important to the Egyptians. Every year, when the Nile River flooded its banks, thirsty lions would come down from the mountains to the Nile Valley. These events always took place at the time of the year when the sun was in the constellation Leo.

The Egyptians worshipped lion gods, and made many carvings of lions and lion heads throughout the land. Some people believe that even the Sphinx was made to represent the constellation Leo. (P. 163 The Constellations, how they came to be, etc.)

5. (INDIA:) The dry season in India, like Egypt, ended in flood season, which arrived when the sun, Indra, was in the constellation Leo. (P. 364 The Glorious Constellations)
6. (CHINESE:) The head and mane of Leo was sometimes seen as part of flowing water carried by a conveyor to irrigate crops, and sometimes as part of the Raindragon. (The other stars are outside Leo.) In China, the Raindragon represented the fruit bearing power of water. In the dry summer season, the people held ceremonies, carrying a large, clay dragon up and down the streets while they prayed for rain. When the rains began, the people were happy and called it joyous rain. When the Raindragon stars appeared in the sky, the Chinese knew it was time to begin the ceremonies. (P. 37 Stars of Jade, P. 117 119 The New Patterns in the Sky)

## BOOTES

1. (GREEK:) Long ago, people called the Big Dipper the Big Plough, and said that Boötes used it to plough up the sky. Others said Boötes was the Bear driver, who drove the great and little bears (Ursa Major and Ursa Minor) around and around the sky. The hand of Boötes almost reaches Ursa Major's tail, and the two can easily be found together.
2. (ROMAN:) Boötes was the herdsman who drove seven oxen around the sky. The seven oxen were the seven bright stars in the Big Dipper. Boötes does his ploughing in the springtime, when these constellations are highest. (P. 261 The Glorious Constellations)
3. (ANCIENT:) Boötes may have been the mythological titan Atlas, the giant who held up the world on his shoulders. His daughters guarded the legendary golden apples of the Garden of Hesperides in

the Atlas Mountains. Hercules was sent to steal these apples as one of his twelve labors. (P. 263 The Glorious Constellations)

4. (HAWAIIAN:) Arcturus is Hokulea (Hokoo LAY ah), or Star of Gladness. In Hawaii, Arcturus crosses directly overhead, and is important to navigators.
5. (BRAZIL:) The Kabeua Natives of Brazil pictured a large Piranha. (P. 155 The New Patterns in the Sky)
6. (GREEK:) Boötes was Icarus, a friendly man who grew grapes. One day, Bacchus, the god of wine, went to visit Icarus vineyard. Impressed with what he saw, Bacchus taught to make wine from grapes. Icarus brewed the wine and liked it. He then went out to the countryside with his daughter and his dog, to introduce others to his new drink. At length, they came upon several shepherds and talked to them about the heavenly new drink. Icarus gave them a container of strong wine, warning them to dilute it with water before drinking it. He then departed.

The shepherds did not bother to dilute the wine before they drank it. None of them had ever tasted alcohol before, either. They split the wine, and found it so delicious they drank until they were drunk. When they woke up the next morning, all of them felt ill and concluded that Icarus had tried to poison them. So, full of anger, the shepherds went after Icarus and killed him. The murderers were later punished, and Icarus was given an honored place among the stars as Boötes. (P. 152-153 The New Patterns in the Sky)

#### CORONA BOREALIS

1. (GREEK:) Corona Borealis is the Northern Crown. Once upon a time there was a beautiful princess, Ariadne, daughter of King Minos of Crete. She had a brother, Androgeos, but in a battle against Athens, he was killed. Upset over the loss of his son, King Minos demanded that every year the Athenians must give up seven young men and women who were given as food to the Minotaur monster. The Minotaur was locked up inside a giant maze, called the labyrinth. After two years of such sacrifices, the young prince of Athens, Theseus, decided to try to kill the Minotaur and volunteered to go as one of the 14 yearly victims. The

14 young men and women were put on a boat with a black sail and taken to the island of Crete, where the monster awaited them.

By chance, Theseus met Ariadne before he was taken to the Minotaur. Impressed with him, Ariadne gave Theseus a ball of yarn to unwind it as he walked through the labyrinth and use to find his way out. Gratefully, he accepted her gift. When Theseus entered the labyrinth, he carefully unwound the yarn as he found his way to the Minotaur monster. He finally met the awful beast, which was startled to meet a human who did not show fear. Theseus bravely battled the Minotaur and killed it. The people of Athens rejoiced. At last they were freed from the terrible sacrifice they were forced to pay every year. All of Athens celebrated, with dancing. Ariadne and Theseus fell in love and set sail for Athens to marry.

On the way, they stopped overnight on the island of Naxos, owned by Bacchus, the god of wine. Bacchus was struck by Ariadne's beauty and ordered Theseus to leave the island while Ariadne was asleep. Theseus dared not argue with a god, so he sadly left. When Ariadne awoke, she was dismayed to find herself all alone. Then Bacchus came and tried to reassure her. Bacchus told Ariadne that she shouldn't cry for Theseus because he left her. Bacchus said that he loved her and wanted to marry her. But Ariadne was distrustful now of men and didn't believe that Bacchus was actually a god. She said that if he could prove his godhood, she might marry him. Delighted with such an easy request, Bacchus took off his golden crown and promised that this crown would be her wedding tiara. Then he hurled it up into the stars, where it glitters today as the seven stars of Corona Borealis. Satisfied that Bacchus was a god, Ariadne married him, and her crown still sparkles in the night sky. (P. 208-210 The New Patterns in the Sky)

2. (CHINESE:) Corona Borealis was a money string, called Koan so. The coins had holes in their centers, and were threaded onto a string for safekeeping. Before the Chinese used coins for money, they used seashells and pearls, which they kept on strings in the same way. (P. 210-211 The New Patterns in the Sky)

3. (AUSTRALIA:) The Aborigines saw a woomera, what we call a boomerang. (P. 313 The Glorious Constellations)
4. (SHAWNEE:) Once upon a time, a hunter named White came across a prairie with a big circle traced out in the grass. But he could see no trail leading up to the circle, nor any tracks. Suddenly, he saw a silver basket coming down from the sky. Inside the basket stood twelve lovely maidens who began glowing when the basket reached the earth. The maidens were sisters, and they danced in a circle, beating rhythms on a silver ball. Overcome with their beauty, White Falcon wanted to capture the fairest maiden to be his wife. But as he started to approach, the sisters jumped into the silver basket and it flew them up into the sky.

The next night, White Falcon disguised himself as a rabbit and waited for them to return. At first this plan seemed to work, but when he chased them, the maidens outran him and got away. The third night, White Falcon camouflaged himself as a mouse, and this time was successful. He captured the loveliest maiden, and took her as his wife.

But as time passed, the young maiden grew homesick. Night after night she would gaze up at her sisters, who shone in the stars of Corona Borealis. At last she could bear the separation no longer. She waited until White Falcon was out hunting one day, and she wove a silver basket. She stepped inside it, singing a magic song that made the basket rise up into the heavens. Unfortunately, she did not start out from the circle in the grass on the prairie, so she did not land among her sisters but in the constellation Boötes, becoming the bright, orange star Arcturus. (P. 75 78 Star Tales Mayo, P. 313 The Glorious Constellations)

5. (SKIDI PAWNEE:) Corona Borealis is the Circle of Chiefs, holding council among the stars. They say that the tiny star in the middle is preparing food for the chiefs. (P. 313 The Glorious Constellations)
6. (CAROLINE ISLANDS:) Fishing Net (P. 210 The New Patterns in the Sky)
7. (MIDDLE EAST:) Beggar's Dish (P. 210 The New Patterns in the Sky)
8. (CHUKCHEE OF SIBERIA:) The Polar Bear's Paw (P. 210 The New Patterns in

the Sky)

## VIRGO

1. (GREEK:) Virgo, the Virgin or the Maiden, was sometimes known as Ceres, goddess of fields and growing crops. Virgo is high overhead in the spring time, the time when planting begins. Virgo was also known as Proserpina, the beautiful daughter of Ceres. Proserpina was so lovely that Pluto, the god of the underworld, fell in love with her. Pluto spotted Proserpina outside one sunny day playing among the flowers. He captured her, taking her in his black chariot as his four black horses galloped swiftly down to the realm of the dead.

Ceres, her mother, was very upset. She refused to help anything grow until Proserpina was returned. As a result, winter gripped the land and springtime did not come anywhere on earth. People could not grow food to eat. Jupiter, the king of the gods, saw what was happening and took action. He ordered Pluto to let Proserpina spend half of each year in the upperworld with her mother, and then she could go back to Pluto's underworld for the rest of the year. So during the six months when Proserpina is in the upperworld, we have the warm weather of spring and summer, but when she goes back to Hades we have the cold months of autumn and winter.

In another Greek legend, Virgo is Astrea, goddess of justice. She holds a sword in one hand and scales in the other. Once upon a time, Astrea lived on earth with men and women. This was the golden race of humankind, when everyone lived in peace, sharing with each other in happiness. Astrea handed down justice in law. Over time, the golden race gave way to the silver race of humans, who were not as good. Astrea rarely visited the humans now, and then only to point out their evil deeds. But the silver race eventually gave way to the Bronze race, who made swords and other weapons to fight each other. Wars broke out on the earth, and Astrea could bear it no longer. She fled up to the heavens, where she can still be seen today. (P. 157 158 The New Patterns in the Sky)

2. (EGYPTIAN:) Virgo was the goddess Isis. One day, the monster Typhon scared her, and she ran away. In her haste, Isis dropped grain, which scattered along behind her, leaving a trail that the



Chinese call the Yellow Road. (P. 158 The New Patterns in the Sky)

3. (CHALDEANS:) These long ago peoples saw Virgo as the Ishtar, the goddess associated with agriculture. Tammuz, her husband, was one day captured by King Winter and imprisoned down in the underworld. Unhappy, Ishtar ignored the plants on earth. Winter then blanketed the earth with snow and ice so that no plants or crops could grow.

Anxious to find her husband, Ishtar went down to the underworld to look for him. She found him, but then she, too, was taken prisoner. But when the celestial gods saw what had happened to the earth, they ordered the release of Ishtar and Tammuz, so the world could have springtime again. (P. 158-159 The New Patterns in the Sky)

Global Mythology, Part 2  
continued

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## IPS Report

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IPS 98, scheduled for London, has established a late June - early July timeframe. More details will be available following the Council Meeting at the 96 Conference in Osaka, Japan.

The March 96 issue of *The Planetarian* included a conference meeting time survey. IPS wants input regarding month(s) most convenient for conferences. A major problem with the survey is that it's polling IPS members only. Many planetarians may have chosen not to join IPS due to the timing of conferences, and thus their input will not be considered in the existing survey. I have already brought this situation to the attention of IPS with the hope of somehow including the input of non-IPS members in this important consideration.

IPS has been working with the Space Telescope Science Institute in Baltimore to establish methods of obtaining copies

of their slides and press releases. The Institute does not have the capacity to distribute materials to each and every IPS member. IPS is proposing that each affiliate establish a contact person and clearing house for the materials. I have brought this to the attention of the SEPA Council, and will hopefully have some conclusions to report at our meeting in Nashville.

Don't forget choosing a meeting site for IPS 2000. Details were published in the Winter 1996 issue of *Southern Skies*.

By the time you read this, if you are going to IPS 96 in Osaka, you will already have made your plans. I have cashed in a ton of frequent flier miles to secure my ticket, and will be representing the interests of SEPA at the Council meeting on July 10. Please be sure to discuss your concerns with me at SEPA 96 or by phone, fax, or e-mail before July 8.

John Hare  
ASH Enterprises  
Bradenton, FL

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## Red Moon II: The Next Phase

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If you live too far west or the weather was cloudy, the total lunar eclipse of April 3 was a disappointment. Don't despair; you have another chance! On September 26 another total lunar eclipse will begin at approximately 8:12 P.M. Central Time. The eclipse will be full after moonrise, with the Moon about 20-25° above the horizon. The Moon will once again assume a red-dish hue, and this time the Moon will be located just 2° away from Saturn.

The Moon will enter totality at about 9:19 P.M. and will leave the umbra at

about 10:29 P.M., giving you plenty of time to observe the eclipsed Moon. The red hue will vary in color depending on atmospheric conditions.

You can view lunar eclipses safely. Only solar eclipses are dangerous to view. Sunlight is merely reflected from the lunar surface, so the Moon doesn't emit any dangerous ultraviolet rays. As a result, the Moon's light won't give you a Moonburn, so it can't hurt your eyes either. So take advantage of this risk-free, beautiful phenomenon. It will be worth the effort!

Stephanie Lim  
Senior Intern  
Craigmont Planetarium  
Memphis, TN



# Book Review: City Astronomy

Patrick McQuillan  
Book Review Editor  
Alexander Brest Planetarium  
Jacksonville, FL

Sky and Telescope  
Observer's Guides:  
City Astronomy

by Robin Scagell

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etarium  
Museum of Science  
and History

Hello fellow SEPAites! I've been so busy the last month explaining every possible fact and correcting every possible un-fact about Comet Hyakutake that I haven't had time to read anything other than comet updates. But that is the beauty of having a staff. With the journal deadline looming during best comet viewing, I picked up



a book I had been meaning to read and asked my assistant to read and review it.

I didn't just say "Hey, Mike, read this and write a review. That would seem like work. So I threw the book at Mike and said

"Hey, Mike, this book is supposed to be about viewing the sky from cities. Could you read through it and see if there is any useful information that might help us in viewing the comet from the planetarium (downtown Jacksonville)? While he was busy reading the book, I poked my head outside the planetarium one night and looked to see if I could find the comet. It was faintly visible to the naked eye and, through an eight inch telescope, even sported a bit of a tail.

The next day Mike said, "This book doesn't have much to say about comets, just that you will have a very hard time at best finding comets in light polluted skies unless they are spectacular. I thanked Mike for the useful info and asked him "So what was that book really about? Did you like it? Did it have any useful information in it? Any errors? Would you write a review

of it for Southern Skies?"

Mike handed me the review the evening of one of our public telescope viewing sessions for Comet Hyakutake. Looking at the totally overcast skies and feeling drops of rain beginning to fall, I asked Mike what the book said about the main enemy of city astronomers: Weather! I then proceeded to turn my 45 minute "how to find Comet Hyakutake" talk into a 2 hour "how to find Comet Hyakutake" hope you aren't upset you couldn't see it for real it can be seen from your backyard you know talk.

City Astronomy, one of Sky and Telescope's Observer's Guides, is a book about survival as an astronomer under a light polluted sky. Robin Scagell gives us some tips about how one can cope with light pollution and still find the sky just as interesting as out in the country. The sky is a very busy place and lots can be found with just a little patience and the right equipment. Scagell reminds us often about how poor the skies are around big cities throughout the book. He then goes on to explain what causes it. Pollutants and water vapor are the main culprits, but Scagell seemed to have a personal vendetta against the common streetlamp. The act of seeing is actually ruined by these street lamps as they emit colors of green and blue light that ruin night vision. He recommends low pressure sodium lamps as an alternative to fight light pollution. After reading the book, you too may feel you need to do something to combat light pollution. As a planetarium instructor, I could appreciate this information as I often compare the light polluted sky to the sky seen from the tops of mountains or the middle of the ocean. It is an awe inspiring sight to begin a program with the city lights, then fade away to the perfect sky to show visitors what they are missing. Scagell tells us how we can reclaim the sky.

City Astronomy points out what objects one is likely to encounter in a light polluted sky. Definitions are given to lengthy words

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# Astro-Video Review

As the budget year nears its end here at Bays Mountain, no more money has been available to purchase new resource materials... such as the videotapes I normally review! But have no fear, there are still a few items to tell you about. So let's get right to it.

I'm sure that I am not much different from other planetarians, spending a portion of my TV time watching the excellent television programs on Public Broadcasting and the increasing number of cable channels that offer educational programming. Like me, you've probably noticed that after more and more of these special interest programs, information about purchasing a videotape copy is provided. Of course, before I can grab a pencil and paper, the number and address have vanished from the screen.

Luckily for me... and for you, these stations all host home pages on the Internet. If you're looking for a copy of that Space Telescope show you saw last Tuesday night, this may be the place you'll find it.

As an example, you might want to try the Science and Technology listing at PBS Home Video. The address for this site is <http://www.pbs.org/store/video>. Their latest listing includes a videotape entitled, *Living and Working in Space*.

It's a 60 minute tape produced in 1994 by the Foundation for Advancements in Science and Education. The show features humorous vignettes by well known celebrities and addresses day to day activities that will need rethinking in a space environment. A copy is \$29.95 and the order code is LIWO 000 WWWV. If you can't access the Internet, call 1 800 344 3337 to place an order.

Another good source of programs is The Discovery Channel. They have an Internet product catalog at the URL <http://catalog.discovery.com/>. You can order 24 hours a day, seven days a week by calling 1 800 889 9950.

In looking over their listing, two titles caught my eye. One *Giant Leap*, obviously on the moon landings, and a brand new title, *The Space Shuttle*. Each of these is a bargain at \$19.95. In case you need to know, the order numbers for the tapes

are W90401 and W90402 respectively.

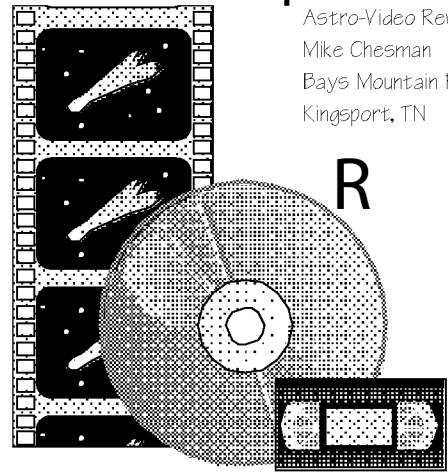
While I was browsing this Discovery Channel site, I stumbled onto Assignment Discovery and Discovery Classroom. These are excellent sites for curriculum materials and classroom activities.

I also found information about an upcoming broadcast, *On Jupiter*. The page provided suggested vocabulary, study questions, and further reading. Check it out by starting from <http://school.discovery.com/>.

I saved the best for last, A&E (Arts and Entertainment) and The History Channel are both owned by the same parent organization. I found a number of interesting titles at their sites. They do have separate home pages, but some of the material is repetitive at both sites.

I especially have enjoyed some of their Biography programs. A listing is found at <http://www.aetv.com/biography>. The History Channel page is found at <http://www.historychannel.com/index.html>. Jump off into the region called History Channel Collector, and you will find a compilation of around 600 videotapes. I noticed a Biography show *Men In Space: From Goddard To Armstrong* #AAE 10429, an Investigative Reports program *Can We Still Trust NASA?* #AAE 10053, and a Time Machine segment *Soviet Space: The Secret Designer* #AAE20044. I've seen that last show, and it has some remarkable and rare footage documenting the Soviet space effort. Any of these tapes is \$19.95 and would be a nice resource for any facility.

Well, that's about all for this time. If any of you have found other interesting video material please drop me a line. Also, the < and > symbols around each Internet address is for clarity; don't type them in when entering an address. Most of you know that, but there might be one or two



Astro-Video Review Editor  
Mike Chesman  
Bays Mountain Planetarium  
Kingsport, TN

# Tech Talk:

## A Realistic Aurora Effect

Richard McColman  
Past-President  
Morehead Planetarium  
Chapel Hill, NC

Auroras are perhaps the most beautiful and entrancing of atmospheric phenomena. Planetarians have long tried to recreate this wondrous natural light show on their domes to varying degrees of success. The typical aurora effect employs an actual slide of an aurora projected through a rotating ripple wheel. While marginally effective, this approach lacks some of the undulating, dynamic character of the real thing. What follows is an easy alternative that will

produce an image strikingly similar to the actual event. Even though it is a slight modification of a recycled special effect design, it bears repeating because of the realism of its imagery.

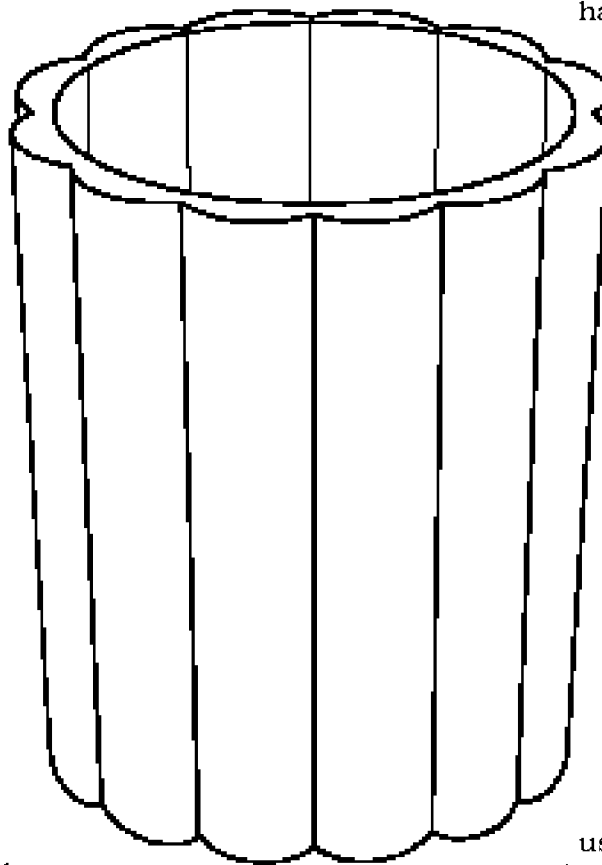
For those old enough to remember, old glass Pepsi bottles had long convex patterns in a spiral configuration. This makes the light streaming out through clear lines of the slide create an almost three dimensional waving curtain aurora on the dome when projecting through the Pepsi bottle.

Back in the 80s, when I made my first iteration of this effect, Pepsi had stopped bottling their product in these containers (or else the glass bottles were just very hard to find). For this reason, I decided to use a glass Coke bottle. But the long convex patterns in a Coke bottle which are vertical instead of the spirals found in a Pepsi bottle coupled with the slide's vertical lines, made for a rather artificial appearance to the projected curtains. In this case, the moving lines on the dome looked more like a couple of monochromatic emission spectra passing one another, rather than the undulating patterns in an aurora. However, I quickly overcame this problem by tilting the vertical lines of the slide just a bit.

Nowadays it seems nearly impossible to acquire glass soda bottles of any variety. But recently I ran across a neat alternative in a Lechters house wares store a transparent plastic bathroom cup, or tumbler (Figure 1), possessing the same vertical convex patterns as an old Coke bottle. Additionally, the low weight and small size of this cup are much more suitable for use in a planetarium effect, allowing it to be mounted easily on a small motor's shaft without the necessity of a secondary support at the other end (as is required with the long, relatively heavy Coke bottle).

Once you have located one of these bathroom cups, round up an unused single slide projector and a 1 RPM or a 1/2 RPM AC Synchron motor. (By the way, one added plus resulting from the design of this effect is that the single slide projector doesn't need a projection lens, so pull that out and you can use the lens for another effect projector later.)

Figure 1  
The Bathroom Cup



The original IPS Special Effects Source book (November 1982) includes a design for an aurora projector which incorporates an old style glass Pepsi bottle rotating on a motor in front of a single shot slide projector. In the gate of the projector is a Kodalith slide with three clear, vertical lines of irregular length (on the obligatory

Then create a Kodalith slide with tilted lines by drawing and shooting black felt tip marker lines on a white piece of paper (Figure 2).

Through some very simple fabrication, the motor can be mounted on the projector below the lens opening (shaft up) and the cup epoxied to a disc, which is, in turn, fastened to the motor shaft. You can experiment with coloration of the aurora by attaching small pieces of colored acetate inside the cup. In addition, two or three strips of black construction paper attached inside the cup will tend to randomize the patterns that you get on the dome.

Once you've done that, paint some  $\frac{1}{2}$  to  $\frac{3}{4}$  inch black bands on the top and the bottom of the cup, and tape a cardboard disk onto the top of the cup. These additions will prevent stray light patterns from splaying out of the cup and onto the dome.

Finally, build a simple wooden box open at the front and rear, just wide enough to accommodate projector and cup, and slightly longer than the entire assembly and paint it flat black inside and out. With the effect projector contained inside, the sides of the box's front end will act as blinders and control the horizontal spread of the aurora across the

dome (and the box will minimize other light leaks, too). The box with projector, cup, and motor inside can then be tilted up with wooden blocks to suitably position the aurora onto the dome.

Tech Talk:  
A Realistic Aurora Effect  
continued

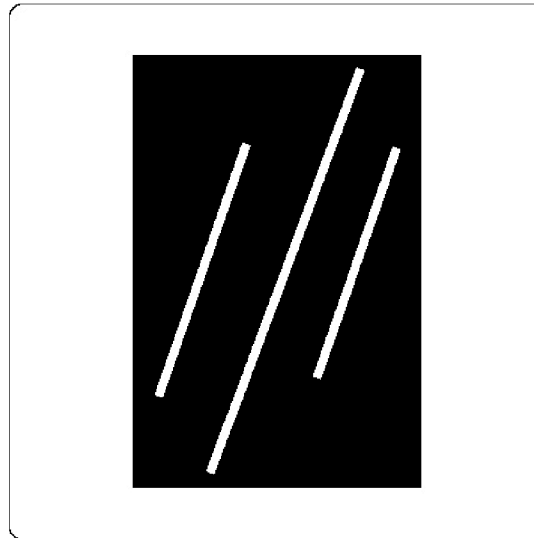


Figure 2  
The Kodalith Slide

I think you'll be amazed at the authentic looking nature of this simply constructed aurora effect. A friend of mine who lives in Fairbanks, Alaska and sees the aurora borealis on a regular basis viewed this effect and was amazed at how it looks

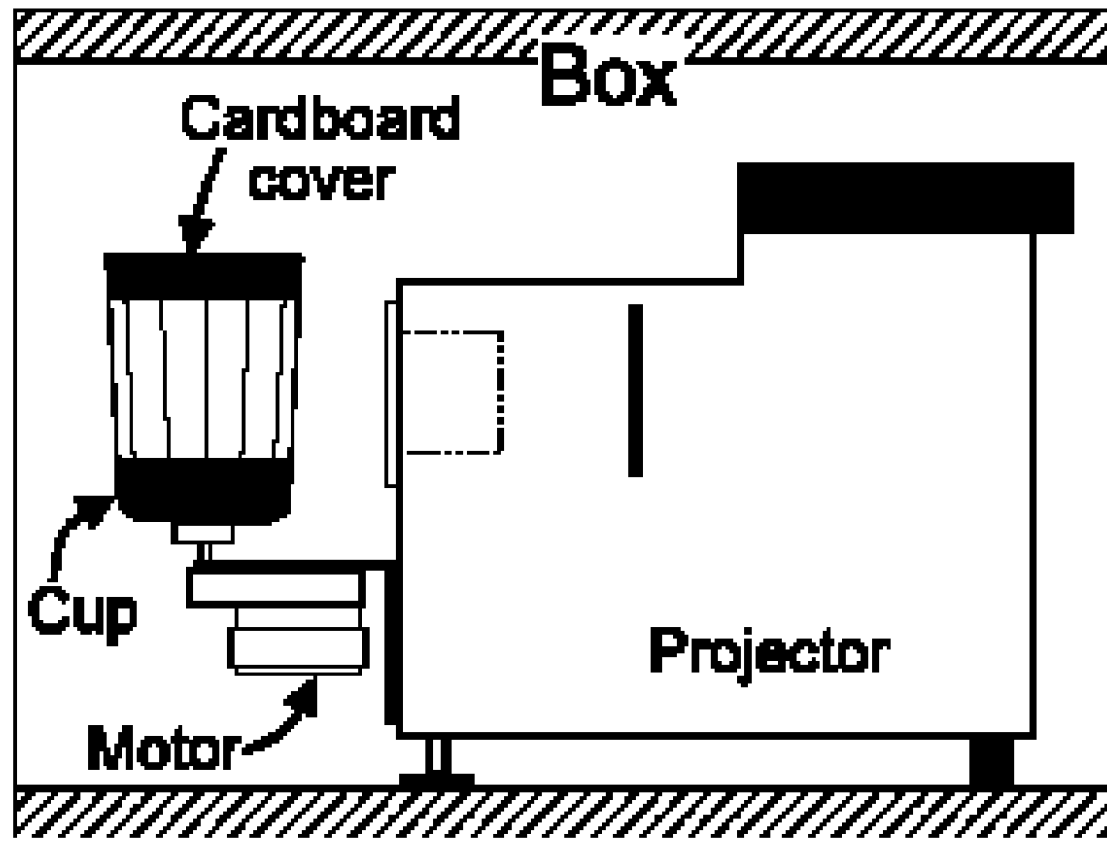


Figure 3  
The Assembled Projector

# Allende Carbonaceous Chondrite Meteorites

Dennis Joseph Cowles  
Louisiana Nature Center  
New Orleans, LA

One of the most interesting types of meteorite is the Allende carbonaceous chondrite. Allende provides a textbook example of a large meteorite fall (large in the sense of numerous), highlights the importance of rapid meteorite recovery and underscores the tremendous value of meteorite studies. A discussion of these meteorites seems appropriate for this journal.

Allende fell in Mexico on February 18, 1969, at about 1 a.m. It broke up in flight and separated into numerous smaller pieces that were still burning as they fell. (This was inferred by eyewitness accounts.) The meteorites landed near the town of Pueblito de Allende, Chihuahua, Mexico.

A large meteorite fall one with a large number of meteorites has a characteristic distribution of meteorites along the ground. The fall area itself is elliptical in shape, and it is known as the distribution ellipse. The longer axis of the distribution ellipse is oriented along the direction of travel of the meteorites. The area within the distribution ellipse is known as the strewn field. The larger, more massive meteorites are always found at the far end of the strewn field, opposite the direction of the fall. Since the more massive meteorites have more momentum, they travel farther than the smaller pieces. For example, if a meteorite that is travelling due north breaks up and lands, the longer axis of the

distribution ellipse will be oriented along a north-south line; the largest pieces, at the northern end of the strewn field.

The Allende distribution ellipse is roughly 50 kilometers in length in the longer axis and the strewn field has an area of about 300 square kilometers! To date, this is the largest known strewn field. The meteorites approached from the south-southwest, so the largest pieces are found in the north-northeast. Over two tons of meteoritic material was recovered from this fall. The Allende meteorites turned out to be rare carbonaceous chondrites, type CV3. This was (and remains) one of the most important falls in history. As O. Richard Norton says in his book *Rocks from Space*, More type CV3 material was recovered from this fall than was known in all the world before 1969.

The timing of the Allende fall could not have been better. In 1969 there were several laboratories preparing to analyze the Apollo lunar samples. The Allende meteorites arrived at the right moment to serve as a test for the laboratories. This meant that the Allende carbonaceous chondrites could serve as a trial run for the moon rocks and that a lot of information about the meteorite would be obtained in a very short period of time. The Smithsonian Institution organized the fall investigation and recovery of the specimens. Thousands of

Allende meteorites were recovered, and more are still being found.

Carbonaceous chondrites are stony meteorites named for both the spherical inclusions found in them (called chondrules, found only in meteorites) and their carbon content (up to 5% in some cases). They usually have hydrated minerals in them, meaning water was present in them at some point.



Artwork by  
Dr. William K. Hartmann

Allende is classified as a type CV3 carbonaceous chondrite. The C indicates a carbonaceous chondrite; the V indicates that the meteorites most closely resemble the meteorite that fell in Vigarano, Italy in 1910; the 3 is the petrologic number which indicates the amount of metamorphic (thermal) change that the meteorite has undergone since it first formed. A meteorite with a petrologic number of 3 is relatively unaltered. Actually, a meteorite with a petrologic number of 1 or 2 shows a lot of alteration through the presence of water, and a meteorite with a number higher than 3 shows increasing thermal change. Eventually a point is reached where the chondrules are completely lacking due to a high degree of metamorphism, i.e., a high petrologic number means that the chondrules melted. A CV3 like Allende is not very altered from its original form; it shows neither excessive melting nor excessive chemical change from water.

There are three surprising bits of information about the Allende carbonaceous chondrites. The first is their tremendous age. Meteoriticists determine the age of a meteorite (when it first formed) by measuring the radioactive parent elements and daughter

The Allende meteorites are approximately 4.56 billion years old. They are older than our planet and are the oldest known rocks in the solar system. It is believed that Allende represents some of the very first material to condense out of the solar nebula.

elements and comparing them; the ratio of the two tells approximately when the meteorite formed. The Allende meteorites are approximately 4.56 billion years old. They are older than our planet and are the oldest known rocks in the solar system. It is believed that Allende represents some of the very first material to condense out of the solar nebula.

The second surprising piece of information relates to the chondrules found in Allende. Chemical elements can have slightly different masses due to the number of neutrons found in the nucleus of an atom. Since neutrons are electrically neutral they do not affect the chemical properties of an atom they only contribute mass. Differing forms of an element, chemically identical but with different masses, are known as isotopes. Some isotopes are more common than others, and the approximate ratios of isotopes in the solar

system is fairly well known. The Allende meteorite chondrules possess odd isotope ratios. The isotopes that Allende has are unusual in that they are believed only to form in supernova explosions. Further, it is believed that specific isotopes can only form during the supernova phase of stars with specific masses. Some meteoriticists have speculated, based on the isotopes of silicon carbide (SiC) found in the chondrules, that there must have been at least four supernovae that contributed material to the solar nebula. They are even estimating the masses of those stars.

The final surprise about the Allende carbonaceous chondrites relates to some of the inclusions found in them. These inclusions are called calcium aluminum inclusions (CAIs), and they are composed mostly of calcium, aluminum, and titanium. The isotopes in CAIs are also unusual. Many researchers suggest that the CAIs formed directly from interstellar dust

grains. They show very high levels of one particular isotope of oxygen that forms only in supernova explosions the other isotopes of oxygen would not survive the explosion. The unusual level of oxygen in the CAIs are found only in the Allende meteorites. Other

material in the meteorite shows the same ratios of oxygen isotopes found in the rest of the solar system. Some researchers suggest the oxygen came from a supernova that occurred in the immediate neighborhood of the solar nebula.

There are other isotope anomalies with the Allende meteorite, mostly in heavy elements like barium, strontium, neodymium, and samarium. Another theory that has been proposed to explain the isotope data is that the Sun might have been more energetic during the period immediately after it formed and that a high flux of particles could have caused the unusual isotopes. There is some evidence to suggest that many, if not all, newly born stars undergo a T Tauri soon after formation. It is also possible that the unusual isotopes were not formed anywhere near the solar

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# News from SEPA States

George Fleenor  
Bishop Planetarium  
Bradenton, FL

## Bishop Planetarium, Bradenton

The Bishop Planetarium has been very busy. As you may recall from the last Southern Skies, John Hare left and works full time with Ash Enterprises. Former Staff Astronomer/Educator, and 12 year (Hare) veteran, George Fleenor is now serving as Director. Things at the Bishop have been business as usual. However, a few changes in programming have been made.

Two children's star shows are presented each morning, based on scheduling. Teachers choose from 36 different presentations, 28 of which are fully automated and/or interactive. Children's star shows are presented every Saturday morning at 10:30 a.m. followed by hands on museum activities. The public star show features in house production Starlite Nites at 1:00 p.m. and 4:00 p.m. The Summer star show will feature Quick As A Flash, a program produced jointly with Bays Mountain Park.

A matinee laser show is presented daily at 2:30 p.m. The laser show Big Band Boogie ran from January April. Cool Oldies 50s & 60s was presented in May. The Summer matinee will feature Surfs Up, a collage of Beach Boys, Jimmy Buffet, etc.

Skies Over South Florida is presented every Friday and Saturday evening at 7:30 p.m. The program features observational astronomy and includes a live tour of the evening sky. The program also includes admission to the Tonite Show. The Tonite Show, which begins at 8:30 p.m., (weather permitting) features the Bishop Telescope and Observatory. The observatory is also open every Saturday morning from 11:30 a.m. 1:00 p.m. for solar observing.

A new admission policy has also been instated. Museum patrons are admitted to all Planetarium presentations, Manatee presentations, and museum for one low admission for daytime programs only! Evening admission is still sold separately.

Laser shows continue to run every Friday and Saturday evening at 9:00 p.m. and 10:30 p.m. Two different shows are featured each week. The technical department is currently working on an offline laser projection system which can be

used for production. The facility is striving towards the goal of compatibility. Every thing is shifting towards an ILDA format which will eventually allow shows to be exchanged etc. Currently all star shows and laser shows are run on ADAT.

Museum staff members are also preparing for summer camps. Last year the South Florida Museum, Bishop Planetarium, and Parker Manatee Aquarium (that's the official name) offered summer camps for the first time. The camps were well received and are once again scheduled. Each week a different camp is hosted on themes such as Dinosaurs, Indians, Space, etc.

Comet Hyakutake also kept life interesting. Only two special free observing nights were scheduled for the comet, both of which were rained out. However, attendance to all the evening star shows rose in addition to the Tonite Show in the observatory. A lot of front page press didn't hurt either! Astronomy Day activities were also well attended.

## Miami Space Transit Planetarium, Miami

Jack Horkheimer & Co. are currently presenting Through The Eyes Of Hubble as well as The Stars of the Season twice daily. A 2:00 p.m. matinee laser show features Best of Floyd. Patrons purchase one ticket and are permitted to all three presentations. A live Star Show is presented every Saturday evening at 7:30 p.m. followed by free telescopic viewing in the observatory. Two additional shows are presented In the Giant Screen Space Theater, Gate to the Mind's Eye and The Planets. Visions of the Universe, an original space art exhibit by Joe Tucciarone is presented In the Planetarium Galleries. In conjunction with Hyakutake, a half dozen live comet shows all sold out! A couple of thousand people were run through the observatory. A live lunar eclipse show was also well attended. Laser light shows are presented every Friday and Saturday evening at 8:30 p.m., 9:30 p.m., 10:45 p.m., and midnight. The Best of Pink Floyd, Laser Jimi Hendrix, and Led Zeppelin VIII are currently featured.

The Museum of Arts and Sciences, Daytona Beach



Roger Hoefler, Curator of Astronomy, reports Volusia District Schools adopted the Macmillan/McGraw Hill Science series as the district wide elementary science program during the 1994-95 school year. Five new planetarium programs targeting grades 1-5 have been written by a teachers committee and produced by the planetarium staff of one, and incorporated in a Planetarium Program Curriculum Guide. Since this is a hands on program of science units, Roger has tried to actively involve students in each grade level with eye on, and fingers on activities during each program. The increase in student involvement seems to heighten student interest and, hopefully, increase the effectiveness of each program.

Daytona was also invaded by Comet Hyakutake! On March 25, the Museum of Arts and Sciences Planetarium, Don Trombino, Jeffery Pettit, and Erni Sangraw from the Davis Memorial Solar Observatory, and the Daytona Beach branch of the Central Florida Astronomical Society hosted NIGHT OF THE COMET programs on the museum grounds attended by an estimated five hundred folks of all ages. Five telescopes operated by CFAS observers tried valiantly to show the comet through broken cloud cover while Don Trombino and his group conducted a Comet Photography seminar. In the planetarium, Roger's hastily produced, old fashioned style, Comets and Comet Hyakutake show was a complete sell out with 303 attending the three programs! Roger reports, It seemed sort of refreshing to walk into the chamber and step up to the microphone with rudiments of a program outline, a set of visuals, the latest color photographs of Hyakutake, the beautiful Minolta star field, and do an extemporaneous program. That's the way we used to do it before the days of canned shows and automation control systems. Comments from the audience about how enjoyable the show was were almost embarrassing... and I didn't even use background music (noise?)

Alexander Brest Planetarium, Jacksonville

Patrick McQuillen reports the Alexander Brest Planetarium is currently showing the Maryland Science Center/Davis Planetarium program Worlds of Wonder through June 21. Snooty's Great Space Adventure opens June 22 and runs through September 2. Snooty is running in conjunction

with the opening of our new permanent exhibit Atlantic Tails. This exhibit is all about marine mammals (i.e., right whales, dolphins, manatees).

All that and the standard live night sky tour show on Saturday mornings until June 10 and then 7 days a week at 11 a.m. until September 2.

We will be hip deep in Cosmic Concerts (laser shows) all summer. We are working with JHE to provide a variety of laser programming. Programs include: Laser Kids, Family Favorites, Led Zeppelin's Greatest Hits, and the classic Pink Floyd: Dark Side of the Moon.

We're doing a series of Saturday Morning summer workshops for grades 1-4. The series is titled Saturday Astronomers and includes topics like constellations, telescopes, and the solar system.

Finally we've been contracted by the Duval County School System to staff and manage their new Challenger Center. The Grand Opening is scheduled May 29-30. Astronaut Norm Thagard is the guest speaker. This Challenger Center is located at a science and math magnet school about 10 minutes from the Museum. It looks to be an exciting venture for the school system and the museum.

Orlando Science Center, Orlando

Construction continues on the new Orlando Science Center. The bridge from the parking garage to the main building is in place. The observatory dome was hoisted to the top of the building at the end of February. In the current facility we are currently running New York's UFO show and preparing for the great move at the end of the year. Everything is still set for a March 1997 opening.

Indian River Community College,  
Indian River

According to the Institutional Advancement Office of Indian River Community College, Jon Bell, Director of Indian River Community College Hallstrom Planetarium, was recently honored with the 1996 IRCC Instructional Innovation Award.

The award recognizes College programs which merit distinction due to their unique nature, application of new technologies, or special responsiveness to the needs of the community.

Bell received the award for his creativity and vision in developing and implementing the educational programs of IRCC's Hall

George Fleenor  
Bishop Planetarium  
Bradenton, FL

strom Planetarium. Since its opening in 1993, the planetarium has been visited by 52,000 people of all ages. As Planetarium Director, Bell develops and presents college classes in astronomy, public school presentations, and the Starlight Series of public programs.

George Fleenor  
Bishop Planetarium  
Bradenton, FL

Bell was commended by the IRCC Board of Trustees for integrating astronomy into instruction in other science disciplines, incorporating cultural and historical information into Planetarium programs, and serving as a community resource on astronomical matters.

Bell joined IRCC in 1993 and received the IRCC Ambassador Award in 1995 for his extensive community involvement. The Fort Pierce resident earned a Bachelor's in Earth Science Education at State University of New York and a Master's in Science Education from Columbia University. He served an internship at the Hayden Planetarium in New York City and previously

served as the Astronomy Director at Virginia Living Museum in Newport News, B.C.C. Planetarium, Cocoa

Ian Griffin reports a new show *Amazing Universe* premiered on March 1. Mixing Digistar effects, Minolta stars, and digital video, this roller coaster ride across the cosmos has been playing to pretty good audiences since it opened. We set a new attendance record on the opening weekend. We also opened a new Iwerks show *In Search of the Great Sharks* which has also been drawing in good crowds. We have produced a new color brochure detailing our facilities, and are presently dispatching it to all who might be interested in visiting our humble institution. *Hyakutake* also proved to be a good draw for us. Work has started on a new gift shop, and we are deep in production for a new Pink Floyd laser show (due to debut in July) and a new star show *The UFO Show* (also due to debut in July). See you all at SEPA! Oh

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Savannah Science Museum, Savannah

Some of the best things happening to the Savannah Science Museum Planetarium have happened outside the planetarium. In January our new 6 gravity well display was installed to demonstrate orbital dynamics by dropping coins in the slot (and simultaneously encouraging visitors to make a donation). At the end of February, our video wall was switched on, nine screens showing space related films while visitors wait for a show or the planetarium is closed. In April we'll be modifying our Foucault pendulum display to bring people closer to the action and clarifying the signage.

Erich Landstrom  
Savannah Science Center  
Savannah, GA

Interest in Comet Hyakutake has prompted us to resurrect portions of old Halley's Comet shows for a Hyakutake/

lunar eclipse/ 15th anniversary of the first Shuttle launch skytalk (kudos to Kris). We are dusting off Hansen's *The Universe of Dr. Einstein* for the 80th anniversary of General Theory of Relativity (May 10, 1916). We received *Inner Space* from the Gallaxo Institute, and will be presenting it this summer, along with *A Light in the Dark Ages*, an archaeoastronomy program about the Middle Ages. During the 100 days of the Olympic Games we will be adding *Stellar Performances* about the lives of stars and the formation of heavy metals (gold, silver, and bronze) in supernova explosions, and general sky talks in foreign languages (German, Spanish, and French).

And need I mention summer space camp on aeronautics and astronomy? See you all

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Freeport McMoRan Planetarium and Observatory, Kenner

Current projects continue to keep us busy in Kenner, namely planning of the new planetarium. By the time you read this article, final plans for the building should be finished. Currently it is hoped that Phase I of the Kenner RiverStar Theater should be completed by early 1997. No decisions have yet been made concerning a projector or other specifics which are part of the Phase II program. Restoration of the Martin Marietta Space Station mock up

also continues. Planned opening of this space station exhibit is scheduled for later this year.

Currently we are showing a few in house presentations along with JHE's *Bear Tales and Other Grizzly Stories* and HPS's *Where On Earth is Christopher Columbus?* We are continuing to give educational programs in conjunction with the University of New Orleans Astronomy Department. We are also expanding the capability of our current planetarium by adding new and updated video equipment.

Michael Sandras  
Freeport-McMoRan  
Daily Living Science Center  
Kenner, LA

Our observatory and planetarium have been kept very busy by the spectacular appearance of Comet Hyakutake. I m sure this has been true for all public astronomical facilities.

Louisiana Nature and Science Center,  
New Orleans

Mark Trotter and Dennis Cowles are experiencing the usual heavy load of shows that comes at the end of the school year. They report good attendance for their Saturday and Sunday public shows; The Sky Tonight, Planet Patrol: A Solar System Stake Out, and Family Laser Show. Currently running laser shows are Aerosmith, Rush 2112, Metallica, Pink Floyd s The Wall, Led Zeppelin, Pink Floyd s Dark Side of the Moon, The Best of Pink Floyd, and The Alternative Show.

Mark just finished cleaning the planetarium from top to bottom. The only problem is that figuring out where everything was placed. The only project going on is the astronomy workshops for teachers which are still being tinkered with.

St. Charles Parish Library, Luling

This past February in conjunction with the library s activities concerning Black History Month, Follow The Drinking Gourd

was presented. This program from New Jersey fit in well since it tied in the slaves escape to the north with the identification of the Big Dipper.

Currently running is Magellan: Report Venus produced by Loch Ness. This program is expected to run through April.

Lafayette Natural History Museum,  
Lafayette

After re opening the planetarium last November, Our Home in the Milky Way was shown. It had been since 1992 that the last commercially available planetarium program had been shown.

After a few months of delays due to the installation of a new roof, Russians In Space will start showing in early April. This program was originally to be shown in February as part of a city wide celebration of Russian arts and culture. Lafayette was visited by a cosmonaut and two high ranking Russian space officials. These Russian visitors did public presentations and presentations in the middle and high schools.

In the next month the schedule for the entire year will be set, work will begin on the Hale Bopp program, and Astronomy Day will be celebrated with day and evening telescope observing at the local

News from SEPA States  
continued

Michael Sandras  
Freeport-McMoRan  
Daily Living Science Center  
Kenner, LA

Davis Planetarium, Jackson

Have you had enough Comet Fever yet? As spectacular as Comet Hyakutake has been to the eye, too many telephone calls ( Where do I look? ) have made it a real pain in the ear! : )

For spring the Russell C. Davis Planetarium in Jackson is once more transporting visitors To Worlds Beyond and sending them to the moon with Larry Cat in Space. Plans for summer programming include Hubble Vision and The Secret of the Cardboard Rocket.

Fundraising and film selection continue for an 8/70 film system with premiere showings now scheduled to begin next spring. In March the Planetarium opened A Part of HIStory, its second original laser program, featuring selected hits from Michael Jackson s recent album.

Sky awareness activities have included media support for the passage of Comet Hyakutake and a rooftop observing session for the total lunar eclipse in April (complete with Moon Pies).

Mission 96 A of Student Space Sta

tion™ will begin July 7th and end July 20th.

Happy Easter, y all!

Rainwater Observatory and Planetarium,  
French Camp

The Rainwater Observatory and Planetarium in French Camp finally received its 6 refractor and is now enjoying spectacular lunar and planetary views. (Unfortunately the 12 Meade had to go in for repair after someone left the drive running. Too bad telescopes don t have slip rings!)

Hundreds of people attended weekend viewing sessions for Comet Hyakutake s passage. Clear, dark skies revealed a 30 tail while the 20 Dobsonian showed two spikes attached to the nucleus like minute hands.

The Mid South Regional Star Gaze took place April 17 20. Activities included presentations by Gerrit Verschuur ( Magnetic Fields in Space ) and Bruce Panuska ( Volcanism in the Solar System ) with Jim Hill conducting a Project SPICA Teacher

Gary M. Lazich  
Russell C. Davis Planetarium

### Dupont Planetarium, Aiken

Jim Mullaney reports attendance continues to be brisk in the new theater. Since opening last October, more than 10,000 visitors have come through the doors. During all this, he still managed to find time for an eclipse watch that drew over 700 people and a Hyakutake viewing that included a visit by John Dobson.

Todd Slisher  
Gibbes Planetarium  
Columbia, SC

Jim also reports he's developing some new shows. The Search for Extraterrestrial Life will be featured for school and public audiences. He's also working on a Christmas program and formatting Through the Eyes of Hubble to fit his theater.

### Settlemyre Planetarium, Rock Hill

Glen Dantzler and crew have been developing new specialty programming which focuses on particular groups. Sky Lights and Mozart is a new live program which excites and stimulates mentally challenged groups. Follow the Drinking Gourd will be offered during the school year and ties directly into material covered by area schools during the black history section of the curriculum. For talented and gifted students a new offering will be Fire and Ice. This in depth program will compare and contrast the features of Venus, Earth, and Mars.

There were some spring special events. Gathering at the Equinox featured John Dobson and others. Southern Star included a fascinating lecture, The Moon and Transient Lunar Phenomena. Lunar Eclipse watch had weather problems, but several Hyakutake watches drew over 400.

### Gibbes Planetarium, Columbia

Here at Gibbes we finished up a sensational run of Through the Eyes of Hubble that set records for attendance. Next in the weekend feature slot is The Great Dinosaur Caper: a children's program in which detective Tyrone Rex and his sidekick Sara Topps investigate the death of the dinosaurs. Work also proceeds on a new

home brewed program tentatively entitled Discoveries featuring new information from Magellan, Galileo, Hubble, and the discoveries of new planets.

We've also been busy with special events. The Night of the Red Moon Rising, a combined Lunar Eclipse/ Comet Watch, was enjoyed by over 800. Our girl scout camps and the usual rush of spring school groups keep us hopping. For more info on what's happening at Gibbes (or if you're just curious) check out our web page at <http://scsn.net/users/planet>.

### Hooper Planetarium, Greenville

Doug Gegen, Rex Smith, and Jim Flood have also been busy with comet mania. Over 1,000 attended their comet watch. They were assisted by the Roper Mountain Astronomers who brought binoculars, telescopes, and Godzilla, a trailer mounted 17.5 scope. Out of the Darkness, a comet program, was well attended during Hyakutake's apparition.

In addition to school offerings, Friday night public shows include; The Cowboy Astronomer, More than Meets the Eye, and an entertaining Digistar demo of effects set to music. This summer they'll be involved in teacher seminars, helping area teachers learn astronomy teaching techniques. In addition they provide teachers with loads of materials to use in the classroom.

### Stanback Planetarium, Orangeburg

Jim Brown reports all is well in Orangeburg. One of his latest projects can be seen on the world wide web at <http://www.conterra.com/starman/sbp.html>. Their web page is quite nice, so surf on over and take a look. Jim plans to undergo a major electronics overhaul of his Viewlex and replace and upgrade components on the control cards.

Public programs this spring include The Voyager Encounters and Fred and Martha vs. the Skies of Spring. Jim is also busy with school shows. Offerings this spring include: The Magic Sky, The Little Star that

### Sudekum Planetarium, Nashville

Well, let's see, Kris. What's going on in Tennessee this spring? The state is celebrating its bicentennial this year. Oh, yes, the SEPA Conference will be in Nashville.

Lisa F. DuFur  
Craigmont Planetarium  
Memphis, TN

### Bays Mountain Planetarium, Kingsport

Mike Chesman and his committee have

been working on the SEPA membership recommendations. See them elsewhere in this issue.

### Craigmont Planetarium, Memphis

Craigmont will bring a star show produced by four high school student interns, Hubble: From Here to Eternity.

### Hopkins Planetarium, Roanoke

Britt Rossie and Gary Close of the Hopkins Planetarium report that they have had a great time with Comet Watch programs during Hyakutake's perigee. Attendance topped 1,500 people over several nights. They are currently running WSKY: Radio Station of the Stars and Visions of a Spring Night through the end of May. He also reports (with a touch of sarcasm) that they are in their third year of renovations. They have a mini version of the traveling exhibit called Bats: Masters of the Night coming out this fall, and would like information on any planetarium shows that include bats, or as he put it batty starshows. A possibility for the future may be the installation of Laser Light Shows. They hope to see us all at SEPA and/or MAPS this year.

### Ethyl Universe Planetarium, Richmond

Eric Mellenbrink tells me they are nearing completion of the outside renovation construction which includes an all new parking lot. Paving was going on as we spoke. Big news was that a private non profit Children's Museum had just decided to relocate near to the Ethyl Universe Planetarium which may give some opportunities for cooperation and cross promotion. They needed a bigger building, so, in a complicated land swap, the Medical College will get the old site. The move is expected to be complete in a couple of years.

In the theater is showing The Back Yard Universe through June 9th to be followed by Hubble Harvest for the summer and fall. The Imax Dome offerings are Africa: The Serengeti and Antarctica through July 26; then Storm Chasers.

### Arlington Public Schools Planetarium, Arlington

We haven't heard from Steve Smith in a while, so I gave him a call. He says that there are many new and exciting things happening there, including a total redesign of the curriculum. As he says not a nice thing to do to a Planetarium Director who has only 3 years to retirement. Aside from that, it looks like they have been very busy. April 12 was proclaimed Young Astronaut Day, and 800 students from 15 elementary schools came to the planetarium for a blow out program. Space suits and other space related paraphernalia were provided by Amanda Young of the Air and Space Museum. There was a visit by Dr.

Planet who mixed up a comet. Awards for T shirt design were given. The next day there were model rocket launches, demonstrations, and competitions. Steve says that a particular highlight was the unveiling of a new CD Rom by Teramedia. This interactive program is part of the Time Blazers series and will soon be available in stores. It features a nearly seamless online interface that connects via modem to a private service that gives much more possibilities for exploration.

They are currently running Strassenburg's new program called Space Elves to record breaking attendance. He's not sure whether the attendance is due to the Elves with an attitude or the recent discoveries in astronomy. Either way it bodes well for the rest of us that attendance is up not only for school programming but public as well. He made a special note to remind people that he will be retiring soon and anyone who would like to operate the greatest little planetarium in Virginia should keep an eye on us.

### Virginia Living Museum, Newport News

This has been a busy spring. School show performances have been brisk. Our public show offering Through the Eyes of Hubble gave way to Worlds Beyond narrated by another Star Trek TNG alumnus Patrick Stewart. Production is under way to adapt WSKY: Radio Station of the Stars for presentation in the Hampton Schools Planetarium, which we operate for part of each year.

Like Britt Rossie we too did a couple of comet watch nights. Unfortunately, it was cloudy both nights. Even so, about 320 people showed up to learn about the comet through our live demonstrations in the planetarium theater. It just goes to show you (to paraphrase a line from Field of Dreams) if you open, they will come. We had already made plans for a Lunar Eclipse party a week later long before we heard about Hyakutake. I've been told that we had 442 visitors that night. We had telescopes and binoculars outside, planetarium shows, games, moon rocks, tektites, meteors, and refreshments inside that included Moon Pies and green cheese. As soon as the sky darkened, we took advantage of the dark sky due to the eclipsed moon to view the comet. It was still a naked eye object from the city of Newport News! Venus added to the show, shining brightly near the Pleiades. The sky was clear, and at

Membership Committee  
Report  
continued

Dave Maness  
Peninsula Planetarium  
Newport News, VA

Dave Maness  
Peninsula Planetarium  
Newport News, VA

about 7:10 p.m. we saw an eerie peach colored moon rise above our treetops. I have seen several lunar eclipses, but this was the most dramatic one in a long time. If you didn't get to see, it was beautiful. Due to the steep angle of the ecliptic, the moon came out of the shadow from the bottom up as though a thin pinkish curtain were being raised from in front. This served as our Astronomy Day, and it could not have been better. To top off the evening, when the eclipse was over we performed a sold out performance of the AVI Laser show

(What could be more appropriate?) Dark Side of the Moon.

City Public Schools Planetarium, Virginia Beach

Along with a full slate of school programming, Herb Teuscher offers free shows to the public. The current public program, Islands in the Sky is given Tuesday nights at 7:30. Reservations are required.

Elizabeth Wasiluk  
Berkeley County Planetarium

I know of no one else who has so much difficulty submitting text for her Small Talk column and for West Virginia planetarium news as Elizabeth Wasiluk. She has a ludicrously small budget, even for supplies like computer diskettes and disk mailers. There is no Internet access in her community. She has access only to a single antique IBM compatible computer with only 5¼ inch disk drives. We have to copy her text files from her disk to a 3½ inch diskette and finally translate her

DOS text files into Macintosh format to be able to read her submissions. Despite all these hurdles, guess who is the only person who regularly meets the Southern Skies deadlines. That's right, Elizabeth

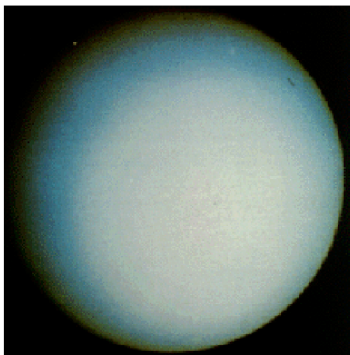
Planetarium assistant Frank Aliveto of Berkeley County Planetarium in Hedgesville, West Virginia received the prestigious Kennedy Award for football and also signed with West Virginia University where he hopes to play football.

## You Say Potato, I Say...

Nicole Hassold  
Sophomore Intern  
Craigmont Planetarium  
Memphis, TN

Okay, picture this. You and some of your best friends are sitting out by the pool, soaking up the Moon rays, and looking up at the stars. You, being the astronomy whiz kid that you are, point out to the group the constellation Cassiopeia, the queen sitting upside down in her throne in the sky. But, to your dismay, before you can speak the name, one loud mouth friend shouts out: Cas si óp ee ah, not Cáss i a peé ah. Sound funny and false to you? Well, it's not as false as you may think, and Cassiopeia is not the only celestial object that these mispronunciations happen to.

For example, take the seventh planet in our solar system Uranus. Many people think that it



is supposed to be pronounced like: U rá nus, right? Wrong! It really sounds like Úr a nus, sort of like Europe, the continent where Uranus was discovered.

Here's another one that confuses people. Halley's Comet passed by the Earth in 1985-86, and many people thought it was pronounced Haley, like the former singing group Bill Haley and the Comets. The name of the real comet should be said like valley except with an H!

All right, I have one more for you. If you're like me, you love going to the zoo to look at your favorite animal the Polar bear. Looking at the bear always seems to remind me of the North Star, Polé a ris, in the constellation Ursa Minor, the Little (Polar) Bear. If pronouncing Po lár is that way helps you remember it's the pole star, then go right ahead.

What is the correct way to pronounce the name of the seventh planet?



nebula; they may have travelled here from elsewhere in the galaxy. Perhaps all these mechanisms occurred; perhaps none. We must continue searching for the answer.

Who would have dreamed that we would learn so much from one particular meteorite? We have learned several different stars contributed material to the solar nebula, the solar system may have formed as a direct result of a supernova explosion, material in the solar system was condensing at least 4.56 billion years ago, and the Sun may have undergone a T Tauri stage soon after formation. All this information from one particular meteorite!

How much more can we learn from other meteorites? A great deal we could investigate properties of the solar nebula (temperature gradient across the nebula or the distribution of chemical elements within it); we can learn more about the stars that contributed material to the solar system; we might get clues to the origins of life on Earth. (Some meteorites contain amino acids and other organic molecules.) Knowing more about the solar nebula can give us a better idea of which newly born stars may eventually have planetary systems.

The study of meteorites is important to astronomy, and as planetarians we should be more aware of its tremendous impact. Meteorites are a direct connection to the early solar system, and they provide

samples of various places within the solar system samples that would cost billions of dollars to obtain. I am not opposed to manned exploration of the solar system, but meteorites can tide us over until we visit those places in person.

Meteorites (and their parent asteroids) reveal our origins, and they have altered the history of life on Earth. Practically everyone knows about the impact at Chicxulub that almost certainly led to the demise of the dinosaurs and opened the way for animals like us to evolve into dominance. But not many know that paleontologists know of at least five major episodes of mass extinction in the fossil record. The extinction that marks the end of the Permian period (about 225 million years ago) was the biggest. The Chicxulub impact at the end of the Cretaceous that killed off the dinosaurs 65 million years ago is third or fourth. There are five really big extinctions known from the fossil record; there may have been more. Some, perhaps all, were caused by impacts. Go out and take a look at the battered surface of the Moon. The Earth has experienced many more impacts than the Moon has we're a bigger target.

Meteorites are intrinsically interesting. They're unlike rocks we find on Earth. They challenge notions of the universe around us; they can make or break theories of our origins. They make a really neat display,

Allende Carbonaceous  
Chondrite Meteorites  
(continued from page 15)

that might seem difficult to the amateur. Safety tips in observing the Sun are given and the proper way one can protect a telescope from glare. I enjoyed *Choose your Weapons* and *Choose your Ammunition*. Scagell brings up the point that binoculars are like cars. It's not what you got, but what you do with it. The three basic telescopes are defined, and the author explains his preference. The section on photography was a bit over my head; I am not proficient with astrophotography, but it will prove invaluable if I ever have time to try some photography. Filters and CCDs are mentioned in great detail.

In *Sights to See*, Scagell refers to the Canary Islands as a popular observing location. I enjoyed the show pieces section of the northern, mid northern, and southern hemispheres. A top ten list of popular objects are listed by designation, location, constellation, and personal comments.

City Astronomy is geared for the semi to

serious astronomer. It's a great wealth of information for anyone interested in astronomy and anyone who wants to advance current knowledge. A few blurbs came to my attention with two photographs that puzzled me. One was a before and after picture of a star that supposedly brightened (a variable star), but pictures of the same area must have been photographed with two different films or exposures. One picture had many more stars than the other. I couldn't tell which star was being focused on and which star was brighter than before. Another set of photographs compared views of Orion (one with a deep sky filter; one without). The first photo had Orion in the correct orientation. The second photo had Orion standing on his head (i.e., upside down). This can be confusing to a novice. Other than these two minor problems, I found the book enlightening. I recommend it for any astronomer's library as a research aid. As a planetarian, it could

Book Review  
City Astronomy  
(continued from page 10)

# Read Me: Meet Your Candidates for SEPA Offices

George Fleenor  
Bishop Planetarium  
Bradenton, FL  
Candidate for  
President-Elect

Through junior high and high school I was constantly involved with science and astronomy clubs. It was during this time I became an avid amateur astronomer.

I can remember my first visit to a planetarium as if it were yesterday. The whole room was basked in blue light, and a strange, futuristic machine stood in the middle. An individual who seemed to be bouncing off the walls with enthusiasm greeted us. When the lights lowered, revealing the starry sky, I was overwhelmed. The sky was so real, and the tour that followed so exciting (even for a middle schooler), I began to fall deeper in love with astronomy. No real special effects were used, only the dynamics supplied by our host Phil Groce at Bays Mountain Park.

Through high school and college, I maintained a high interest in astronomy. I served three terms as President of the Bristol Astronomy Club, which met at King College in Bristol, Tennessee. Dr. Ed Burke was the local professional astronomer who sponsored the club and contributed to my desire to know more.

This is also where I met Mike Chesman. Mike was Director at Bays Mountain Park Planetarium in the neighboring city of Kingsport. I spent a lot of time watching shows at the planetarium and volunteering when needed. While I was in college, a position opened at Bays Mountain. I felt compelled to apply. Many programs I was presenting in local clubs were strongly multi media oriented, so I felt a planetarium might be a good home for me. Mike agreed!

I began my professional planetarium career in 1980. Serving as planetarium assistant, I was subjected to vast exposure in darkroom technology, chained to the console for countless hours of school shows, and performed painstaking surgery with opaquing fluid! I was first exposed to SEPA in 1982, when Mike Chesman, Charles Ferguson, and I hosted a conference. The conference fueled my desire to remain in the field. Through networking, I met Joe Hopkins, John Hare, Jim Hooks, Jon Bell, Bob Tate and others! Two years later I joined the staff of the Bishop Planetarium in Bradenton, Florida.

I began my Florida planetarium career, by helping host another SEPA conference! I served as Staff Astronomer/ Educator from February 1984 January 1996. Over the years I have tried to contribute to SEPA through the journal, as well as presenting papers and conducting workshops at conferences. I even helped host a third SEPA conference in 1994. Since February 1, 1996 I have served as Director of the Bishop Planetarium.

Over the last 25 years I have designed and built many observatories. I have equipped them with some of the best technology available. I have participated in the refurbishing of several planetariums, tinkered with its gadgetry, run laser shows till I couldn't stand up, and observed many of the universe's greatest showpieces. I have witnessed the smiles on children's faces when they got the big picture and observed the frowns on adults trying to comprehend the creation of the universe.

Through all I have experienced I have come to appreciate the planetarium's greatest asset its people! I have a strong conviction for Planetarium Science. We are a group of highly skilled, highly motivated people who make a major difference in the world of astronomy education. The world's greatest technology cannot replace the enthusiasm and creativity of the Planetarian. A Planetarian, with a pointer and a star filled sky can awaken curiosity and understanding in the human soul!

Sure, we need modern technology. We need ways of making money; it's all part of the game. We are in competition with all the luxuries of modern civilization! But as Hyakutake just showed us and Hale Bopp is about to reinforce society is still hungry for knowledge. If elected President, I would do my best to further our Society's commitment to education and its Statement of Purpose. I would look for ways to involve all members of the organization through joint projects and networking. After all, the members make us strong. Working together, we can travel into the 21st Century creating new standards and reaching higher goals. I am honored to be nominated for this position and would be honored to work for you as President.



Few planetariums can compare with a 40 dome located in Young Harris, Georgia. The Spitz planetarium star projector provides a beautiful night sky for the teaching of astronomy. Then you can step immediately outside the entrance and see a dark, country sky. Located in the North Georgia mountains, this facility is where I first volunteered in a planetarium theater. After two years of behind the dome flash cube strobes, water pistol rain showers, and miles of kodalith, I knew that planetarium life was for me.

Jimmy Westlake, my first astronomy mentor, introduced me to SEPA six years later. I was working at the Mark Smith Planetarium in Macon, when Phil Groce graciously allowed me to take his place at the IPS conference in Richmond. Jimmy and I traveled to Richmond where he showed me around. The conference was enormous and demonstrated to me how important these gatherings were to collaborate with colleagues and share ideas.

Phil's renovation in Macon gave me the opportunity to gut and rebuild a theater. New carpet, seats, electrical wiring, and star projector were all installed. This gave new life to an old theater, and invaluable experience to a young planetarium curator.

Presently I reside at the Gibbes Planetarium in Columbia, South Carolina. This planetarium is smaller in size, but not in activity. A wonderful array of audiovisual equipment fills the dome, while its compact size allows for live demonstrations. A great staff works hard producing original productions, performing Starlab outreach, planning special sky events, and giving

numerous school programs. All of this combines for an incredibly active environment.

Last year, I was appointed SEPA Education Liaison for South Carolina. My efforts to introduce the educational goals to the state administration have been moving at a slow, steady pace. I now serve on the Regional Systemic Initiative Science Committee, and this spring I was appointed to the State Instructional Materials Review Panel. The SEPA educational goals are valuable tools in working with each of these panels. Astronomy education directly affects the future of planetariums. More collaboration between colleagues on the progress in each state would be beneficial.

I would like to see more regional or state meetings take place between yearly conferences. This would allow colleagues to share ideas and resources with those who can't make the annual spring or summer conference.

SEPA has been an avenue of information and guidance for many years. The ideas attained from conferences and journals are all incorporated into the operations here at Gibbes. I look forward to continuing my service in SEPA, and appreciate this nomination. If given the chance, I would enjoy serving SEPA in a greater capacity.

I am happily married with three lovely children. I enjoy cosmology, caving, cycling, computers, and science.

I have been Director of the Hopkins Planetarium at the Science Museum of Western Virginia in Roanoke for the past five years, prior to the position of Planetarium Educator. Before my arrival, I worked in the public school system as an earth science teacher.

I hold a Bachelor of Science degree in Geology from James Madison University. I have been active in numerous societies, clubs, and professional organizations, including the Roanoke Valley Astronomical Society, which I currently serve as club president. I have most recently worked

with an appointed committee to resolve the issue of SEPA Membership Status.

I believe it is a honor to be asked to run for this position, and, if I were to be elected, it would be my privilege to serve my colleagues in the SEPA region.

THE DEADLINE FOR THE NEXT ISSUE OF SOUTHERN SKIES IS JULY 1. SEND YOUR SUBMISSIONS ON A 3.5 DISKETTE OR VIA EMAIL ATTACHED FILE TO [STARMAINTNG@AOL.COM](mailto:STARMAINTNG@AOL.COM)

Meet Your Candidates  
for SEPA Offices  
continued

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Britt Rossie  
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Roanoke, VA  
Candidate for  
President-Elect

Meet Your Candidates  
for SEPA Offices  
continued

John Hare  
ASH Enterprises  
Bradenton, FL  
Candidate for  
IPS Representative

My planetarium career began in 1963 when I secured a job with Spitz Space Systems. I moved on to Abrams Planetarium at Michigan State University where I served first as Technical Director, and later as Program Director.

In 1979 I assumed the position of Executive Director of the South Florida Museum and Bishop Planetarium in Bradenton, Florida. A restructuring of the South Florida Museum, and some serious philosophical disagreements, led me to resign my position earlier this year.

I am now pursuing, on a full time basis, technical service and various other services and consulting to planetariums through a partnership in Ash Enterprises.

I have always been a strong proponent of planetarium organizations, believing that the collective efforts resulting from such have been important in advancing our profession over the past 30 years.

While at Abrams Planetarium I saw the birth of the Great Lakes Planetarium Association in 1965, and was on the organizing committee for CAPE in 1970, the

conference from which the International Planetarium Society was founded. I have been a SEPA member since 1979 before moving to the region and an IPS member since its founding. I have been fortunate enough to attend every IPS conference, and have served as IPS Historian since 1989.

Even though I am not (for the first time in over 31 years) on staff at a planetarium, I still consider myself a planetarian. My new status actually will allow me to be come even more active in planetarium organizations and conferences.

I feel that I am in a position to offer strong representation to IPS on behalf of SEPA, as well as experience and perspective to the SEPA Council. With your support I would like to continue as IPS Council Representative.

Duncan Teague  
Craigmont Planetarium  
Memphis, TN  
Candidate for  
Secretary-Treasurer

Duncan Teague has been married for nearly 28 years to the former Judy Bousson, a speech language pathologist. They have two daughters: Katherine, a software engineer, and Christine, a singer/actress.

Duncan is a graduate of the Massachusetts Institute of Technology, where he earned a Bachelor of Science degree in Chemical Engineering and Humanities in 1968. He earned a Master's degree in Education from the University of Memphis in 1970.

After teaching physical science and physics for four years for the Memphis City Schools, Duncan became Director of the Craigmont Planetarium in 1974. He has been a member of SEPA since 1975, serving as President Elect from 1981-82, President from 1983-84, Past President from 1985-1986, and Secretary Treasurer and Southern Skies Editor since 1995. In 1981 Duncan received a SEPA Special Achievement Award for co-hosting the SEPA Conference in Memphis.

NASA's Ames Research Center in California awarded the Craigmont Planetarium three grants to produce and distribute star shows to select nationwide planetariums. Duncan developed On the Shoulders of Giants, the story of the Pioneer Venus

spacecraft mission to Venus, in 1978 and Saturn: Gateway to the Stars, the story of the journey of the Pioneer 11 spacecraft, in 1979. In 1983 he wrote and distributed The Age of Space, a star show which celebrated the 100th anniversary of the birth of Robert Goddard.

Duncan has been involved with three PBS elementary science series. He wrote scripts for and appeared in one episode of The Scientific Bureau of Investigation and four episodes of The Science Corner. In 1981 he served as writer and host for the internationally distributed six program PBS series Vantage Point.

In 1987 Craigmont Planetarium's student planetarium intern produced newsletter Skylights was recognized in Gregg Keizer's book Using Newsroom at Home, School, and Work. In this book about a desktop publishing program for Apple IIe computers, an entire chapter was devoted to the planetarium's newsletter. Skylights was recognized as the outstanding business publication produced with Newsroom.

In 1993 Duncan started an electronic publishing business. D T Publishing specializes in newsletters for planetariums and other educational organizations and has subsequently become involved with

# *Southern Skies*

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SPRING 1996

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