GLPA Newsletter

1987

4 issues — 82 pages
Editor's Notes

From different sources I keep hearing "everything is going well, the planetarium is busy, but not so busy as in the year of THE Comet." Well, I think such news is good news. It says we don't need Comet Halley (or another sensational sky event) to go about our business of exciting and teaching people about the universe. The beauty of a star-filled evening sky is there wherever clouds have dispersed and street and house lights can be avoided. The night sky, much easier to see than 1986 Comet Halley, can always be a source of material for planetarium programs. It is nice, though to have a supernova, black hole, a brown dwarf, or something else of recent discovery or current interest (even a comet) to discuss and relate to our earth-based view. I would like to print ideas of different GLPA members on "the ideal (public) planetarium program"....the program that contains both what the planetarium astronomer thinks the audience should see and hear and what the audience thinks it should see and hear. Is there such a program or set of programs? Is the method of presentation more important than the content? Please let me hear your ideas. I will incorporate them in a "panel discussion" of the GLPA Newsletter.
It is important to get your items for the Summer Solstice issue of the Newsletter to me by May 10. Nancy Franklin, who types the material for publication, must complete her work at the Elgin Planetarium and Observatory by early June. Remember that numerous items in good taste are welcome fillers to be placed with the news section. Can you send an original cartoon or an anecdote about what happened in your planetarium or at a planetarium regional meeting? Thanks to all who help make the Newsletter an interesting and informational medium of communication for GLPA.

Jeanne Bishop

Secretary-Treasurer's report—David E. Parker

There are 190 paid members of GLPA, 41 paying at or since the fall conference. Only 5 new members this year are renewals, the rest being really new to GLPA.

Since October 1, GLPA has had about $3290 in receipts and $937 in expenses. Currently the checking account has about $1200 and the savings account holds $3970.

Gary Tomlinson recommends the following items: Astronomical Tables of the Sun, Moon, and Planets by Jean Meeus, with a forward by GLPA member Bob Victor. Published by Willmann-Bell, Inc., P. O. Box 3125, Richmond, Va. 23235...

COMETS Workshop Leader's Manual (a misleading title, as it is about various areas of science and technology for grades 5-9); has very nice sketches for overhead transparencies. Free from the following with a self-addressed mailing label: Walter E. Smith, Director, COMETS, 205 Bailey Hall, University of Kansas, Lawrence KS 66045...the catalog of Light Impressions Archival Supplies, which sells slide storage materials of high quality: 439 Monroe Ave., P.O. Box 940, Rochester, NY 14603.

There are a large number of audio-visual publications that are free to many people for the asking. (Give your position and use official stationary.)

Audio-Visual Communications
Media Horizons, Inc.
50 West 23rd St.
New York, NY 10010-5205.

Industrial Photography
Media Horizons, Inc.
50 West 23rd St.
New York, NY 10010-5205.

Technical Photography
PTN Publishing Corp.
101 Crossways Park West
Woodbury, NY 11797

Functional Photography
PTN Publishing Corp.
101 Crossways Park West
Woodbury, NY 11797

AV Video
Montage Publishing
25550 Hawthorne Blvd.
Suite 314
Torrance, CA 90505

Gary also recommends the following old article from A-V Video, Vol. 7, No. 10, October 1985: "Da Whatsit Gozinta da Whoozie-Common Connectors" (a special brief photo feature).
Regional News - Please send your state news to the state chairperson.

Illinois - Bart Benjamin

Adler Planetarium - James Sweitzer reports that Adler will soon be acquiring a 20-inch Cassegrain telescope with CCD camera for its observatory. The Planetarium has recently purchased and installed a Sony Video Projector system for its dome theater. Their current public show is "You and the Universe," which utilizes their newest special effects projector -- a large scale fiber-optics model which illustrates the distribution of galaxies within the universe. This summer, Adler will present "Countdown to the Year 2000" and "Intruders from Outer Space."

Cernan Space Center -- Bart Benjamin reports that the Cernan Space Center is currently running "The Dawn of Astronomy" and an updated version of its very popular laser light show "Reflections." In the coming months, the Cernan Center will be hosting a variety of special events for its members and the general public. Two children's workshops are already planned -- "Space Days" in spring and "Dinosaur Days" this summer. This summer, the Space Center will produce a mini-show entitled "Summer Skies" along with the return of the Cinema-360 film "The Magic Egg." Recently the Cernan Space Center received grants for the following projects -- a $1,400 Museum Assessment Program (MAP) grant from the American Association of Museums, and a $5,000 grant from Morton Thiokol for partial funding of the Cernan Space Center's "Space Camp USA", a nationally broadcast teleconference originating from Triton College and the Space Camp and Space Academy in Huntsville, Alabama which is planned for early 1988. Details about this teleconference will be given in an upcoming issue.

Crown Space Center -- Steve Bishop reports that 500,000 people saw "The Dream is Alive" in the seven months that it was shown at the Henry Crown Space Center. On January 30th, "The Grand Canyon" premiered to the public. Playing with "The Grand Canyon" is a short multi-media program entitled "Grand Canyon of the Midwest," which celebrates Chicago-area architecture.

ISU Planetarium -- Carl Wenning reports that he has established a Young Astronauts Program in the Bloomington-Normal area which meets monthly. Currently, the ISU Planetarium is showing "Voyages of Discovery." Its upcoming show will be "Fire and Ice."

Lakeview Planetarium -- Sheldon Schafer reports that Lakeview Planetarium is currently reviewing astronomy books for inclusion in its traveling astronomy library for kindergarten through 6th grade students. Currently, Lakeview is showing "The Dawn of Astronomy" and "Fred and Martha meet the Spring Skies, the Planet Uranus, the rest of the Universe, and more" (world's longest planetarium show title?) Sheldon also reports receiving a $640 grant from the Peoria Area Arts and Sciences Council for the adaptation of the planetarium program "Future Scape," and a $900 grant from the Illinois Humanities Council to become the sole distributor in Illinois of Eileen Starr's planetarium program "Humanities and the Stars." Illinois planetariums wishing to present this program starting this fall are asked to call Sheldon Schafer at (309) 686-7000.

Parkland College Planetarium -- Jim Manning reports that the planetarium building should be completed by the end of March, the Zeiss star projector should arrive in the first half of April, and the grand opening of the Planetarium is scheduled to take place in October, 1987. Jim also reports that he has decided to install a custom-made 35-mm film system manufactured by Standard Theater Supply of Greensboro, North Carolina.

Indiana -- Dan Goins

The planned spring meeting will not be held at Jim Nichols planetarium in Indianapolis, as Jim has experienced some operational difficulties. Contact Dan Goins for further information about changes.
Regional News (cont.)

Michigan -- Garry Beckstrom

Michigan will hold its state meeting on May 2. Garry Beckstrom, Ruthven Planetarium Theatre, Natural Science Museums, University of Michigan, Ann Arbor, is host. For information, contact him. (Phone: 313-764-0478)

Minnesota-Wisconsin -- Dave DeRemer

No Report.

Ohio -- Dale Smith

The 1987 spring meeting of Ohio Planetarians will be held at the Ward Beecher Planetarium in Youngstown on Saturday, April 4. Tim Kuzniar and Warren Young will be the hosts. This facility has just re-opened after an extensive renovation (extensive in time as well as quality -- Tim had hoped the architects and contractors would be done in time for Halley's Comet -- maybe they thought he meant aphelion passage). We will see segments of their own new Joe Hopkins automation system and other planetarium goodies, as well as a flood-proof basement and the place on the dome where the architects almost cut holes a cubit square for quartz lights.

Bill Buckingham has joined the planetarium and museum staff at COSI in Columbus. Among other things, he will be doing programs with COSI's portable Starlab planetarium. Bill is a recent graduate in planetary science from Bowling Green.

Bowling Green is running a home-produced winter show called "It's About Time." It deals with the astronomy and history of timekeeping and calendars and includes original electronic music by BG music senior Patrick Bolek. If you are looking for a talented composer, contact Pat through the BG planetarium.

Two copies of the Humanities and the Stars series of programs will reside in Ohio. The Martha Holden Jennings Foundation has approved a grant proposal submitted by Jeanne Bishop for the Cleveland Association of Planetariums to purchase a copy of the mythology tape-and-slide programs produced by the University of Washington and the National Endowment for the Humanities. The set, actually purchased through the Ohio Council for the Humanities, will be on permanent loan to northeastern Ohio planetariums. The grant pays for a set of materials ($500) and provides money for postage in the first year of operation ($200). Dick Speir will handle mailings from the Supplementary Education Center in Sandusky, although it is expected that materials will sometimes be transported by car within the Cleveland area. Jeanne will write a report for the Foundation in June, 1987, describing how the programs have been utilized. The other copy of the programs already resides in Columbus, at COSI with Rikk Harris and is intended for use outside the CRAP area. The $500 purchase price of this copy is being shared by the planetariums which intend to use it. Current subscribers include Ohio State, Bowling Green, Peters Planetarium, and COSI: contact Rikk if you want to be added to the list.

The Cleveland Regional Association of Planetarians met on February 24 at Lakewood High School Planetarium, Jim Comienski, host. Rod Thompson and Jon Marshall covered some final details related to the fall GLPA conference. Joe DeRocher reported on the overwhelming response of Cleveland area people to their temporary (Feb.-May) animated dinosaur exhibit and related programs. Some upcoming projects and newy items were discussed. Jon Marshall showed slides of the Barringer Meteorite Crater and other slides of his trip west with his family to the IPS meeting in Tucson. A small group stayed together to have dinner at a local restaurant. Dale Smith gathered opinions on procedures and events for a GLPA meeting at Bowling Green in 1988. CRAP will meet later this spring two times, first at the Museum of Natural History and then at Midpark High in Berea.
General GLPA News

Do you need Lumalines?

Wes Orloff of Euclid Public Schools has been in touch with an engineer/executive at General Electric's Nela Park in Cleveland concerning the blue and yellow Lumaline bulbs which were standard in many coves and around pedestals in old Spitz installations. These bulbs are now out of stock, but Wes's contact says that GE will produce 100,000 (the necessary minimum batch size) if there is a sufficient demand for them. Further, he will make them available to the planetarium community at a 40-60% discount. If you are interested in purchasing blue and yellow Lumaline bulbs, or simply want more information, write or call Wes by the summer solstice. GE does not need a commitment to sell 100,000 now; they simply want to know interest and about how many would be purchased now. Wes is handling this for GE; he initiated the project: Weston Orloff, Euclid Sr. High, 711 E. 222nd St. Euclid, OH 44123.

Could you help?

GLPA is looking for someone to serve as Proceedings Editor for the 1987 Merrillville annual meeting. It would be nice for the person to have access to cheap transcription and typing service. If you can help, please contact Pres. Gary E. Tomlinson, Chaffee Planetarium. (See address on cover.) Phone: 616-456-3985.

New slides in the GLPA Slide Bank

Sheldon Schafer of Peoria's Lakeview Museum has donated a copy of slides describing the electrophoresis operations of McDonnell Douglas with Space Shuttle involvement to the GLPA Slide Bank. Many of these slides were seen in a presentation at Triton College in 1985. Thanks, Sheldon!

Congratulations are in order

Sheldon Schafer and Joy Stoner (she of Monroe Avenue School, Peoria,) have together been awarded $1,000 in the 1987 AGA-NSTA Science Teaching Achievement Recognition Competition. Appropriately, the award is titled a "STAR" Award. Their project was "A Parental Involvement Program in 5th Grade Astronomy." Sheldon presented a paper on this at the IPS meeting last summer in Tucson. (I told Sheldon by phone I was sorry to have missed the talk...and then we found my name as Moderator of his session and I had taken a photograph of him giving the talk!!-How embarrassing.) Sheldon will receive his award at the National Science Teachers Association annual meeting in Washington, D.C. in late March. Super going, Sheldon!

Photographer dies

Remember the fun-loving photographer who carefully lined up members on that sunny fall conference day to get the 1986 group GLPA picture? Well, within a month of the conference, he went to work, propped his feet up on his desk with arms behind his head - and died, peacefully, mysteriously. Our group photo is an inadvertant memorial.
Other News

International Planetarium Society

Early GLPA member and CAPE 1970 host (the organizational meeting for IPS) Von Del Chamberlain took the reins from Alan Friedman January 1, and is now IPS President. Newly elected officers are Terence Murtagh, Armagh Planetarium, Northern Ireland – President-Elect; Gerald Mallon, Methacton School District, Norristown, Pa. Exec.Sec’; and Mark C. Peterson, Loch Ness Productions, Boulder, Colo.– Treasurer. The new Planetarian Editor is John Moseley at Griffith Observatory, Los Angeles, CA. John published an issue of primarily 1986 conference papers in January, with a computer-printed format. John welcomes articles on Macintosh-format computer disk as well as double-space-typed. A special report, 27 Steps Towards the Universe by Lars Broman has been published and should be in your hands soon if you renewed your membership by the Spring Equinox. (The report contains astronomy education ideas and experiments for young people.) Council voted Falun, Sweden as the 1980 Conference site, and Lars will be conference host. A 1987 Directory is being prepared by Mark Petersen, and it will have many updates and new features. Mark is Membership Chairman as well as Treasurer. For IPS membership, send $34 to him: Loch Ness Productions, P. O. Box 3023, Boulder, Colo. 80307.

V.M. Slipher grants

The V.M. Slipher Committee has $4,500 to award for projects that enhance the public’s understanding of astronomy. Preferences will be given to projects requiring seed money for programs to continue beyond the funding period. Grants of $200 to $1,000 are typical. Past grant include support for radio astronomy programs, refurbishment of an historical telescope for use in a public museum, partial support of teacher workshops, and park interpretive workshops. Applications must be postmarked by May 25, 1987. Notification will be made about July 15th. Send objectives and procedures with a budget page in a space no longer than three typewritten pages to: Dennis Schatz, Chairman, V. M. Slipher Committee, Pacific Science Center, 200 Second Ave., N., Seattle, WA 98109.

Mars Curriculum Project

Carolyn Collins Petersen has prepared and sent a questionnaire about educational materials related to human mission to Mars. She plans to write a multi-level Mars Mission curriculum. Send any ideas to her. (Although from Colorado, Carolyn is now an active GLPA member): 2780 Perry St., Denver, Colorado 80212.

Planetarium Position Opens

GLPA member Don Hall of Strasenburgh Planetarium has operated a Positions Corner for some time, and continues this service for IPS. If you know of an opening or are looking for a position, contact Don. I have received the following notice of a position in the GLPA region with request to publish.

The Grosse Pointe Public School System, Grosse Pointe, MI. is looking for a full-time planetarium director, work year of 184 days. A minimum of a B.A. with a strong background in science and astronomy in particular with planetarium training and/or experience is needed. Salary range: $19,000 to 36,000. Send a resume, credentials, transcripts to: Mr. Ronald R. Tonks, Dir. of Personnel, The Grosse Pointe Public School System, 389 St. Clair, Grosse Pointe, MI. 48230. Phone: 313-343-2016.

*******************

Dan Francetic (at Euclid High School, Ohio) had a parent of one of his students tell him there was a relative in the 1986 GLPA conference group.--Small world.
Overseas member news

Gail Bouslog is frequently in touch with overseas GLPA member Uwe Lemmer of the Bochum Planetarium in West Germany. She sent Uwe's letters which tell of happenings both at Bochum and in his life as he works on his doctor's degree in astrophysics...

The Bochum reopened in August, 1986, with the projector thoroughly refurbished by Zeiss and a new dome and automation system. Bochum's chief technician, who built the automation system, is committed to having the Zeiss IV automated, not just slides and special effects projectors, and the technician is currently designing a new control desk for this large project. The result should be the only completely automated Zeiss IV anywhere.

Uwe's hometown is Wuppertal, where he recently became involved with a local astronomy club. In October, the club hired the U. S. Embassy to put a space exhibition, "From Apollo to Space Shuttle" in 400 square meters of the foyer of a large bank. The Max-Planck Institute for Astronomy added mock-ups and models of telescopes of the German-Spanish Observatory at Calar Alto Mountain in Southern Spain. Incidentally, says Uwe, Wuppertal was the first city in the world to have a Zeiss II planetarium with 800 seats under a 25 m dome. It was damaged by British bombs in 1943, plundered in post-war times, and finally demolished in 1955. Now the astronomy club is trying to revitalize the old Wuppertal tradition to get money to build a new, smaller (8-10 m diameter dome) planetarium.

In December Uwe went to the European Southern Observatory on La Silla, a 2400-meter high mountain in the Chilean Andes. (The Cerro Tololo Inter-American Observatory is a few hundred km south of La Silla.) He writes vividly of his experience:

Oh, what a world! A stony desert of brown mountains. And what a sky!!! The southern Milky Way is really beyond the specs! But one of the most fascinating spectacles is a colorful dawn or dusk sequence...My work is rather exhausting. Collecting photometric data of Be stars all night long is not very thrilling...There are 13 telescopes of La Silla. Starting with the gigantic 3.6 m down to a 40 cm Swiss telescope, there are telescopes and astronomers wherever you look...The air up here is pretty thin. Walking up a few dozen meters makes you snap for air. It is dry and sometimes there is a strong wind, but the most severe problem here is a kind of insect called the Vinchca. It is a bug which sucks blood, and some are infected with a dangerous disease. So we all have to take care. Vinchcas look mean, and they are. It's warm here. Summer will begin soon. I have to take care that I don't get a sunburn...My day/night rhythm has changed completely from day work at home in West Germany...I stay until January 16.

**********************

Don and Carol Tuttle before his 1986 Armand Spitz Lecture
Cleveland School's planetarium is falling apart.

Recently the Cleveland paper, The Plain Dealer, ran a commentary article by Brent Larkin about the "big bubble at Lakeside Ave. and E. 14th St." home of the Cleveland Public School System's $2 million-plus planetarium. GLPA conferees did not see it in 1986, although there was an agenda opportunity to see it in 1975, before it opened. Unfortunately, this planetarium has been plagued from problems from the start. Larkin, who researched the situation, writes, "As the school system went into debt, some of the equipment went to pot....A plan was adopted to spend $280,000 to improve the equipment and begin generating revenues by opening the planetarium to the public. Then the roof started to cave in--literally." Larkin reports that cracks began appearing on the outside of the dome over a year ago. A consultant engineer advised that sections of the outer dome could start sliding off following a freeze-thaw cycle. The inside of the dome is also in danger of collapsing on an audience. Now the Cleveland school system has sued four firms responsible for construction of the Planetarium.

Eastern Kentucky Planetarium

A new Space Voyager system from Spitz is to replace equipment (like that in the Cleveland School's space theater) that did not meet specifications at Eastern Kentucky University. Jack Fletcher, Planetarium Director, should finally be able to open the Hummel Planetarium within the next 18 months. There was a negotiated out-of-court settlement of a 1983 lawsuit filed by the University.

Upcoming Conferences and Other Events

MAPS will hold its 1987 conference Thursday, April 23-Saturday, April 25, in New York City at the Vanderbilt Planetarium. Conference hotel is the Smithtown Sheraton. Mark Levine and Tom Carey and Co-hosts.

SWAP will meet on the same days as MAPS at the University of Little Rock, Arkansas Planetarium. Their theme is "Something Old, Something New." Conference hotel is the Executive Days Inn. Keith Johnson is Conference Coordinator.

SEPA will meet June 8-12, at Brevard Community College, Cocoa, Fla. Mike Hutton is Host.

1987 Summer Institutes in Planetarium Education will again be given by Spitz and West Chester University. Institute I provides instruction in the principles of descriptive astronomy most applicable in the planetarium and is given July 20-24. Institute II provides a variety of theory, examples, and supervised training on topics related to planetarium education for most experienced planetarium operators. Institute II is offered July 27-31. Direct inquiries and applications to: 1987 Summer Institutes, Spitz, Inc., P. O. Box 198, Chadds Ford, PA 19317. Attn: Mona Coldiron. Spitz tuition is $235 per institute. Strasenburgh Planetarium usually holds summer institutes for training both new and experienced planetarium educators. However, no information for this summer was available at the time of preparation of this issue.

The GLPA Executive Committee will meet April 4, 9 - ?, at Merrillville, Indiana, the site of the 1987 conference. Minutes of that meeting will appear in the Summer Solstice Newsletter issue.

***************

The December, 1986, issue of a new magazine, Space Today, reports that O-rings such as those which failed in the Challenger are found in nuclear power plants. They prevent radiation leaks in two places, cooling systems and shock absorbers. This helps to prevent radiation leaks from core overheating and earth quake damage.
Focus on members - Steve Bishop

I interviewed Steve at lunch, at the close of the Cleveland GLPA conference. Behind us at another table, the GLPA Executive Committee was handling some important business. With an ear partly turned in that direction and the commotion of the door prizes, I hope that I got Steve's responses correctly noted. J.B.

Steve is President-Elect of GLPA, and was conference host for the fall, 1985, GLPA meeting at Triton. Steve has moved to a new position since that conference and his election. He is now Director of the Crown Science Center's Cinema-360 in Chicago, which has had high attendance since its recent opening. ("There's been higher attendance in one month than at Cernan in a year.")

Steve began his planetarium career at the University of Minnesota in 1972, where he was a Teaching Assistant for Astronomy with a Spitz NOVA in a 20' dome. He moved to Chicago and worked at Triton College for six months before the first Cernan (he calls Cernan I) opened, transferring to Northwestern University. Steve graduated with a Bachelor's degree in Astronomy. He is now working on a Master's degree in Geology, with special interests in crystallography and lunar samples.

A book by O. Richard Norton was influential in getting Steve turned toward astronomy and planetarium work. This and an astronomy professor made Steve decide on a career field.

At Crown, Steve is spending a great deal of time on management. He feels he was always spreading himself too thin with other duties at Cernan II, with not enough time for proper management. He enjoys working with professionals from many fields to produce quality presentations for Crown. He brings to Crown certain skills and experiences that now seem perfect for the job: experience with the use of film, knowing planetarium work as a business, familiarity with both the Chicago public and out-of-town visitors, work with the Cinema-360 format, and preparing Cernan II for its opening. While at Triton, Steve made panoramas and Cinema-360 films from many places, including Hawaii, the British Isles, Mexico, and Alaska.

Steve and his wife Judy, with daughter Jessica (age 2 in December) recently moved to Clarendon Hills, Illinois. He notes that it is hard to juggle responsibilities of his job, family, and Master's degree work, but he is sure that everything will work out well and there will be some quality time left for doing his job for GLPA.

Goals for his two years as President of GLPA, which will begin at the Spring Equinox, 1988, are for GLPA to be of assistance to closing and threatened planetariums and to strive toward the greatest professionalism possible. Steve would like to see that GLPA continue to publish Proceedings (like the one distributed at the 1985 meeting at Triton, which Steve and his staff had published) and incorporate workshops at conferences.

In his hard-to-come-by spare time, Steve enjoys photography, travel, and reading.

***********************

Teacher Resource Room Booklet

The teacher resource room of the Lewis Research Center Visitor Information Center, 21000 Brookpark Road, Cleveland, OH 44135, has prepared a new booklet of slides (over 4000) and classroom lesson plans and activities. (extensive). There are also some cassette/slide programs and filmstrips. Costs are low for slides, cassettes, and filmstrips, and sets of 25 lesson plans (one of each of 25 different) are free.
New Members:

Jeffrey Bass
McMath Planetarium
Cranbrook Ins. of Science
500 Lone Pine Road
Bloomfield, MI 48013

Mike Baumhauer
Avon Lake Schools
175 Avon-Beldon Road
Avon Lake, OH 44012

Cliff Becher
Dayton Mus. of Nat. Hist.
2620 Ridge Ave
Dayton, OH 45414

William J. Berry
West Allegheny Sc. Dist.
R. D. #2
Imperial, PA 15126

Ronald G. Buday
Montour Sch. Pltn.
Clever Road
McKees Rocks, PA 15136

Charles Crawford
Emmerich Manual H. S.
852 Revere Court
Greenwood, IN 46142

Peter K. Detterline
Boyertown Pltn.
2020 Big Road
Boyertown, PA 19525

Planetary Dir.
Pennsylvania St. Univ.
525 Davey Lab
University Park, PA 16802

Edward G. Eichelberger
Joliet Jr. College
1216 Houbolt Ave.
Joliet, IL 60436-9985

Michel K. Gainer
St. Vincent College
Latrobe, PA. 15650

Robin & David Gill
Wilderness Ctr. Pltn.
Massillon, OH 43337

Joanna Gordon
1801 East 86th St.
Indianapolis, IN 46240

Paul Greinke
Grand Haven Pltn.
1400 S. Griffin St.
Grand Haven, MI 49417

Bernie Hadwin
Hurst Pltn.
Ella Sharp Museum
3225 Fourth St.
Jackson, MI 49203

Russell A. Harding
Roton Middle Sch.
Highland Ave.
Norwalk, CT 06820

M. Rick Harris
Battelle Pltn.
230 East Broad St.
Columbus, OH 43215

David F. Heil
Mankato E. High Sch.
2600 Hoffman Road
Mankato, MN 56001

Morris Mason
Science Ctr. of Iowa
4500 Grand Ave.
Des Moines, IA 50312

David H. Menke
1615 Stanley St.
New Britian, CT. 06050

Kathy Michaels
Maryvale School
1050 Maryvale Dr.
Cheektowga, NY 14226

John F. Milan, III
Mckinley Museum
800 McKinley Mt. Dr.NW
Canton, OH 44708

Merrick Owen
Edinboro Univ. Pltn.
Edinboro Univ. of PA
12141 SkyView Dr.
Edinboro, PA 16412

Richard Panek
Niagara Cty. Com. Col.
3111 Saunders Settlement
Sanborn, NY 14132

George Reed
Spitz Space Systems
P. O. Box 198
Chadds Ford, PA 19317

Daniel F. Rich
Phys. & Ast.
Bowling Green St. Univ.
Bowling Green, OH 43403

Laney Ross
Stephen J. Polinsky Pltn
108 Woodrow Ave.
St. Clairsville, OH 43950

Phil Schipper
Barrington Middle Sch.
215 Eastern Ave.
Barrington, IL 60010

Ted Schultz
Phy. & Ast.
Bowling Green St. Univ.
Bowling Green, OH 43403

Jim Shannon
Warrensville H. S.
4270 Northfield Road
Warrensville Hts. OH 44128

Bridget Shea
Ritter Pltn.
2801 West Bancroft
Toledo, OH 43606

Richard Shea
Rogers High School
5539 Nebraska
Toledo, OH 43615

Clyde Simpson
Mueller Pltn.
Wade Oval, Univ. Circle
Cleveland, OH 44106

Steve Sinkiewicz
Merrillville Com. Pltn
Pierce Jr. H.S.
199 East 70th St.
Merrillville, IN 46410

C. Lee Spivey
2629 Ridge Ave.
Dayton, OH 45414

Eileen M. Starr
The Planetarium
Eastern Wa. Univ.
300 Patterson Hall
Cheney, WA 99004

Floyd J. Zehr
Westminster College
New Wilmington, PA 16172
We had a total of 68 completed survey forms assessing brain-side preferences at the 1986 GLPA meeting. Wes mailed an individual result to each person who gave a name requesting it. The total results, based on two different ways of scoring responses was as Jeanne hypothesized: most planetarians have about equal preference for use of both right and left brain hemispheres. In fact, 53 people (of the 68) showed this result on each of the two ways of scoring the information. Eight people showed a left-brain tendency (one score showed mixed and one showed left). Seven people showed a right-brain tendency (one score showed mixed and one showed right). The left side of the brain is usually responsible for processing verbal and other types of communication. The left side also can be identified with the logical, sequential, and systematic nature of the scientific method. The right side of the brain, in contrast, usually handles spatial images, emotional responses, kinesthetic integration, and musical understanding. Since the total creative process needs strong elements of involvement of both sets of brain capabilities, and since planetarians are typically so creative and enthusiastic about their work, Jeanne predicted that mixed brain dominance would be common among planetarians. This survey project arose from a conversation we had on the way home from the 1985 GLPA conference, after Jeanne gave a paper about using techniques that promote learning with both brain hemispheres.

******************

Other News

South Florida Museum and Bishop Planetarium in Bradenton, Florida, will offer a planetarium production workshop, July 12-16, 1987. There will be sessions for all participants in basic electronics, video production, art, graphics, and darkroom techniques, audio equipment, special effects equipment, and planetarium maintenance. Optional sessions include laser light shows, McIntosh graphics computers, advanced art and darkroom techniques, and sound system engineering. Tuition is $250, which includes all regular and optional sessions, handouts, coffee and donuts, and unlimited museum and planetarium admission for participants and family. For more information: John Hare, Director, Bishop Planetarium, 201 19th street West, Bradenton, FL 33505.

Some Special Publications...

A fine booklet, Teaching Science in a Climate of Controversy, has been published by the American Scientific Affiliation, P. O. Box 661, Ipswich, MA. 01938-9980. Two sections are "Coping with the Creation/Evolution Controversy," and "Teaching about Origins." Single copies are free to educators.

******************

Studies of the hazards posed by asteroids and comet nuclei colliding with the Earth, based on analyzing old craters on the Earth and Moon, have been announced by astronomers performing research for NASA. Although probably catastrophic, the chance of such an event occurring in the next century is remote. A far more probable encounter is one with an object like a large meteoroid. Such an object explodes when it enters the atmosphere. The explosion could be mistaken by some of the world's less technically advanced countries for a nuclear attack. The astronomers involved are Dr. Alan Harris, a JPL scientist, and Dr. Eugene Shoemaker, a US Geological Survey Scientist.

Has something like this ever happened to you?...

Joe DeRocher (at the Cleveland Museum of Natural History) recently had a visitor say that he was told by a planetarium lecturer in Colorado that if he were ever in Cleveland to say "hi" to Joe...No place or name for Colorado.
THE GREAT LAKES PLANETARIUM ASSOCIATION offers membership opportunities to all individuals in any way connected with the operation of planetariums regardless of geographical location. G.L.P.A. is an affiliate of the International Planetarium Society, and the National Science Teachers Association. Membership dues are $13 annually, payable at the time of the Autumnal Equinox. General correspondence and requests for membership should be addressed to: Mr. David E. Parker (address within).

This quarterly "GLPA Newsletter" is received by all members in good standing. Ideas and opinions expressed in this newsletter are not necessarily those of GLPA or its membership. Deadlines for contributions fall on the 15th of February, May, August, and November. Send information to: Jeanne Bishop

Printed and mailed from:
Elgin Observatory and Planetarium
School District U-46
355 E. Chicago St.
Elgin, Ill. 60120

Dale W. Smith
Dept. of Physics & Astronomy
Bowling Green State University
Bowling Green, OH 43403
PRESIDENT'S MESSAGE..... Gary Tomlinson

Your Executive Committee had another marathon meeting in Merrillville, Indiana. Minutes of that meeting are published elsewhere in this Newsletter. Some of the highlights are:

GLPA no longer has the highest dues of any regional. SEPA dues are higher.

We will once again have insurance for the conference.

Bart Benjamin is feverishly working on the 1985 proceedings. They should be ready by the conference. Bart mailed the final drafts in mid-May. A quality publication is expected.

Dave Hoffman has accepted the post of 1986 Proceedings Editor. He has started work on transcription.

April Whitt(address on back cover) is editing a new poetry TIPS booklet. If you have any ideas or suggestions, please write to her. We are hoping to have the booklet finished by the end of the 1987 calendar year.

We are in negotiations with ASCAP to get "blanket" coverage for members of GLPA. The details are still being ironed out, but this proposal should be worked out by the fall conference for a vote of the membership.

Details for corporate membership are being refined. We hope to start soliciting corporations in 1988. So, if you do business with a regional or national company, please jot down their name and address and pass that on to Bob Thomson.

Remember, if you are preparing a will, you might consider leaving something to GLPA.

Barb and Gregg Williams are planning a great conference, including some workshops. The only bus ride is a ten minute trip to and from the planetarium and motel. They are giving us one night to fend for ourselves for dinner. Unfortunately they have provided us with only 200 restaurants to choose from.
If you do not want your name released to companies, please contact Dave Parker to this effect. The Secretary/Treasurer will send the membership names to our corporate members. He will delete names of members not wanting their names included.

Hope to see you in the fall.

*

Editor's Notes......Jeanne Bishop

In the last GLPA Newsletter I noted that Teaching Science in a Climate of Controversy is a "fine booklet". Well, I would like to withdraw my first impression and replace it with an accurate description. The booklet is published by the American Scientific Affiliation, a group which explores the relationship between science and Christian faith. It is, in my considered view, a subtle, misrepresentation. It advertises a form of creationism that is moderate—it rejects young-Earthism and the type of creation "science" to which young-Earthism is central. It is written in such a manner to probably seem credible to many of the 52,000 people who received free copies—perhaps school administrators, school and museum board members. Says William J. Bennett in his analysis, "A Question of Integrity, in the spring, 1987, issue of the California Science Teacher's Journal, "To an unusual extent, the A.S.A. writers have generated an appearance of sophistication, geniality, and responsibility... They have offered 'science' that is phony but will seem plausible to layman...they have offered pedagogic advice that is corruptive but seems sympathetic." There are some correct and balanced parts of this seductive booklet, but I recommend that you read it for its conflicts with both scientific method and mainline scientific thinking. Were I one of the scientists with my picture carefully placed in this booklet (e.g. Lynn Margulis, Stephen J. Gould), I would be hopping mad.

Teaching Science in a Climate of Controversy
A View from the American Scientific Affiliation

Now, after careful reading, I recommend a little brochure I picked up at the American Geological Institute exhibit at the NSTA meeting in Washington in March (I was there partly to present in the same AAE session with Bob Allen and others). The brochure is titled "Why Scientists Believe in Evolution," written by Norman D. Newell of the American Museum of Natural History, New York. Single copies are free; AGI, Dept. ED187, 4220 King St. Alexandria, VA 22302-1507.

As always thanks to the many who sent material for this Newsletter issue. Please note that the material was to me and prepared by May 10, a necessity for Nancy to publish and mail it before her vacation. Any news item from May 10 forward will be received for the next issue. Please have your items to me by August 15. Have a great summer!

For anyone who wants to call information to me, note that my work phone number is 216-835-6325. Over the summer, use my home no: 216-871-5293.
The 23rd annual Great Lakes Planetarium Association Conference is being held in Merrillville, IN. October 28 to 31, 1987. Each year, we look forward to meeting with and learning from our colleagues in the planetarium field. This year we'll also be able to relax. No session starts before 9:00 a.m. There will be an evening you can spend on your own -- by the indoor pool...shopping...or visiting with friends! Also, good food, a four-star hotel, a fine banquet, and a well-paced schedule.

The 1987 conference will feature a panel discussion on religion and astronomy and a variety of hands-on workshops in addition to the usual conference activities.

Our Armand N. Spitz lecture will be presented by Jack Spoon, sales representative for IMAX systems. Prior to his work with IMAX Jack was a salesman for Spitz for 23 years.

Location

The 23rd annual GLPA conference will be hosted by the Merrillville Community Planetarium located in Pierce Jr. High School. Merrillville is located in northwest Indiana along I-65 and just south of Interstates 80, 90, and 94. Merrillville is centrally located for all of the Great Lakes States.

Registration for Conference

Conference registration materials will be mailed to GLPA members during the week of August 24th. If you have not received your registration material by Tuesday, September 1st, contact the conference host.

There will be no registration at the door. Regular registration (mailed by September 24th) is $38 per person ($18 for students). Late registration (accepted up to October 20th) is $50 ($30 for students).

Lodging

The Holiday Star Plaza of Merrillville is the host hotel to the 1987 GLPA conference. The Holiday Star Plaza is a combination resort, conference center, and theatre. The resort is a Mobil 4-star award winner with 354 guest rooms, 6 restaurants and lounges, and Holidome complex including an indoor pool. Adjacent to the resort is the 3,400 seat Holiday Star Theatre, famous throughout the midwest for its top name entertainment.

Guest rooms are available at a conference rate of $61.60/single and $72.60/double per night (tax included). For each additional adult sharing a room there is a charge of $8.00. Reservation cards will be mailed out with the conference registration material in August. The Holiday Star Resort will require one night's deposit by September 28, 1987.

For those desiring lower rates, there are many other nearby motels.
Meals

Four mouth-watering meals will be provided during the conference, including Thursday's lunch of roast loin of pork, Friday's lunch of beef tips and noodles, and Saturday's lunch of chicken fettuccini alfredo. Friday evening's banquet will include family style servings of sirloin of beef, baked ham, and sole florentine. There will also be a reception Wednesday evening. The morning sessions on Thursday and Friday will begin with coffee, milk, juice, and rolls and donuts. Afternoon refreshment breaks on Thursday and Friday will include coffee, tea, soda pop, and cookies. The total cost for meals and refreshments provided during the conference is $40 per person.

In addition to the meals provided during the conference, you'll also have an opportunity to have dinner on your own Wednesday and Thursday evening at any of the more than two hundred restaurants in the Merrillville area.

Transportation

Once you arrive in Merrillville, bus transportation will be provided from the hotel to the meeting site and to all conference-provided meals. There will be no bus ride longer than five minutes!

Dozens of restaurants and two major shopping malls are within a few minutes driving distance of the Holiday Star Resort.

Proposals for Papers and Workshops

If you would like to present a paper or workshop during the conference, please complete the appropriate proposal form included in this newsletter issue and return to the conference host for consideration.

***********************

What Makes a Good Program...Bob Ernst, Mishawaka, IN. Planetarium

Taped programs are nice. They are convenient and many of them extremely well done. When I'm tired, very busy, not feeling too well, or perhaps have a cold or (heaven forbid) a touch of laryngitis, oh what a blessing that taped program might be. In fact, I believe the taped program necessary to keeping one's sanity at times. How many times did you repeat your comet program last year? Did you know it word for word by the end of the year?

However, I think at times we need to interact with an audience. These are rules that I feel are important, speak simply and logically, and as if the subject is very important. Don’t ever talk down or use words the audience cannot understand. Adults love simplicity. I believe one basic reason why adults come to the planetarium with children for the children's presentation is because they know they can understand it. Change your tone, move about, use a model, speak softly, then loud, slow down occasionally and repeat once and a while. When you come to a story conclusion, or the ending of something interesting and exciting, do you whisper? No greater attention will you ever get; even the adults will lean forward.

We need spontaneity. We need stage presence. We need to touch the audience. Give them a piece of yourself, your wit, your charm, your drama, your humor. Let them remember you as an out-going human being that made them feel invited, warm, interested, enchanted, and relaxed.

Some how or other, a tape player, plugged into 110 volts, passing through an amplifier and out across four foot speakers, can do none of these so well.
Each paper presentation should be limited to 15 minutes, including time for questions.

| title: | 
| presented by: | 
| facility: | 
| address: | 
| city/state/zip: | 
| phone: | 
| summary: | 

total length (circle one): 5 minutes 10 minutes 15 minutes

facility needed (circle one): planetarium lecture room either

equipment or materials we are to supply (overhead, slide projectors, etc.):

will you be bringing handouts? (circle one): yes no

Please complete this form by Thursday, September 24, 1987 and mail to:

if you have questions, contact Gregg Williams
(219) 736-4837 school
(219) 887-5978 home

GLPA Paper Proposals
Pierce Junior High School
199 East 70th Avenue
Merrillville, IN 46410
1987 GLPA Conference
October 28-31/Merrillville
Workshop Proposal

Workshops should be "hands-on" or participatory in nature. Otherwise, the proposal should be submitted for a paper session.

**title:**

**presented by:**

**facility:**

**address:**

**city/state/zip:**

**phone:**

(for July/August)

**summary:**

workshop length (circle one): 45 minutes 90 minutes

can you repeat the workshop (circle one): yes no

facilities required (darkroom, lab, planetarium, tables, chalkboards, etc.):

equipment or materials we are to supply (overhead, slide projectors, etc.):

cost per person (for additional materials): ______________________

maximum people per session: ______________________

Please complete this form by Friday, July 17, 1987 and mail to:

if you have questions, contact Gregg Williams
(219) 736-4837 school
(219) 887-5378 home

GLPA Workshop Proposals
Pierce Junior High School
199 East 70th Avenue
Merrillville, IN 46410
GREAT LAKES PLANETARIUM ASSOCIATION

EXECUTIVE COMMITTEE MEETING
April 4, 1987 ——— PIERCE JUNIOR HIGH SCHOOL
MERRILLVILLE, INDIANA


CALL TO ORDER — The meeting was called to order at 9:22 A.M., CST., by President Gary Tomlinson in the library of the school, following coffee and a variety of donuts provided by the hosts.

COMMITTEE REPORTS AND OLD BUSINESS

SECRETARY'S REPORT — The minutes of the last meeting, October, 1986, as printed in the NEWSLETTER and mailed to the committee were approved.

TREASURER'S REPORT — David Parker distributed copies of the current financial status of the association to the committee as follows:

CHECKING:
Account Balance 10-1-86 44.27

Receipts:
- GLPA dues 2431.00
- Annual Conference 834.00
- Donation 100.00
- Publications 4.77
- Checking Account Interest 22.64
Total Receipts 3392.41

Total Working Capital 3436.68

Disbursements:
- Script bank shipping 46.72
- Newsletter postage 254.02
- Newsletter phone 4.95
- Other postage 110.88
- Newsletter printing 263.38
- 1985 Proceedings 120.00
- 1986 Conference 37.21
- GLPA Supplies 190.41
- Brochure typesetting 60.00
- Transfer to savings 1200.00
Total Disbursements 2287.57

Checking Account Balance 4-3-87 1149.11

SAVINGS:
Credit Union Balance 10-1-86 2671.15
Transfer from checking 1200.00 3871.15
Interest received 97.78 3968.93
Rod Thompson distributed a listing of the 1986 conference financial statement. After discussion, the treasurer's report was approved.

COMMENDATION -- President Gary congratulated Sheldon Schafer for receiving the STAR award from the National Science Teachers Association. The Science Teaching Achievement Recognition was presented to him at the recent NSTA conference in Washington, D.C.

MEMBERSHIP -- Chairman Bob Thomson encouraged state workshop chairmen to submit any nominations for the FELLOW award or Honorary Life Membership to him. Gary mentioned receiving letters from recipients of the FELLOW award, including the director of the first public school planetarium in the world, John Rosemergy, who retired this year as director of the Argus Planetarium in Ann Arbor.

For future recipients of the FELLOW award, the membership chairman will send individual press releases to designated newspapers, school boards, principals, and administrators.

Gary noted that the $5.00 membership dues paid the first year of GLPA would calculated to over $15.00 in 1982. He did not have figures for years after that. Our $13.00 dues are, therefore, below the Consumer Price Index increases.

CORPORATE MEMBERSHIP -- The president asked for discussion concerning the implementation of the category of corporate membership to provide a more secure financial base for the publication of the PROCEEDINGS and other GLPA projects. Various levels of membership were proposed, with renewals each year. Ways of recognizing corporate members and promoting them before the membership were suggested. Bob Thomson suggested asking corporations for financial support for specific projects rather than for corporate membership fees. The membership route would be easier to maintain on a regular schedule. Bob Gardner would like to see the PROCEEDINGS published on a more regular basis before we ask for corporate memberships. Steve would like to be sure that our tax-exempt status would not be altered if we would allow corporate members to vote. He will investigate whether we should extend voting rights for-for-profit corporate members. Jerry suggested adding institutional memberships for non-profit institutions, allowing individuals and non-profit institutional representatives to vote. Steve will bring back to the committee a revised corporate membership proposal.

Bob Thomson requested that the conference registration material include a copy of the FELLOW and Honorary Life Membership forms. He will supply these forms to the conference host.

PUBLICATION -- Jeanne Bishop's written report said that bulk mailing will not be pursued at this point because of complications of changing our legal status from a "business league" to a "non-profit educational organization".

Jeanne expressed concern about the teachings in the book Teaching Science in a Climate of Controversy. It's anti-science and she will discuss it in the NEWSLETTER.

She suggested special ribbons for presenters at the conferences; something to signify that the person has gone the extra mile to share with GLPA members. She presented a book of photographs from the 1986 conference from the Cleveland Regional Association of Planetariums to the GLPA historian.

The 1985 PROCEEDINGS articles should be back from the presenters and about ready to go to the printer. The 1986 PROCEEDINGS is still in tape form (approximately 15 hours) and needs to be transcribed and printed. Currently there is no extra source of funding for the project.

Various sources indicated that the cost of having people at the meetings to transcribe the talks and later type the transcription would not less than transcribing the audio tapes. Gary asked Gregg to check local sources and compare prices for having someone take the talks shorthand and type the notes as opposed to transcribing the tapes. Steve suggested that a discount ($10-20) in the conference registration be given to presenters that included a prepared, printed text.
Various methods of preparing the rough drafts and final copies were discussed. Current desktop publishing software would allow us to produce all of our publications, text and graphics, for printing. Bob Gardner will help look into the concept of desktop publishing and the practicality of using it.

Bob Gardner made a motion to accept the offer of David Hoffman's wife to transcribe the first draft of the tapes of the 1986 conference. She will also send the drafts to the presenters for corrections. Motion seconded by Rod. Motion carried. Gary will deliver the tapes to Mrs. Hoffman.

The 1985 PROCEEDINGS will be paid for out of current GLPA funds; corporate support will be sought for the 1986 and 1987 editions.

**INSTRUCTIONAL MATERIALS** -- Gary gave Jerry a release form to be filled out by all individuals who submit materials to GLPA.

Alan Davenport, a GLPA member from Maine, has been investigating the possibility of putting planetarium program scripts on computer disks for distribution to GLPA members in the IBM and Apple formats, and possibly several others. He proposes to initiate the bank at his expense, providing indexes and copies at $6.00 per disk. Jerry will contact Mr. Davenport and get some more information about specifics.

Jerry has been borrowing a slide duplicator to copy the slides for GLPA members. He asked about the possibility of purchasing a slide copier. He will check into costs.

Jerry asked for guidelines in operating the computer disk bank. The committee decided that anything that does not have a release or is not public domain should be protected against copying. Some copyrighted programs have been given to GLPA for demonstration and review purposes and are not to be copied.

**EDUCATION** -- Rod and Don Tuttle are working on astronomical pronunciations, and associated mythological background and place of origin. April Whitt, Adler Planetarium, is working on the poetry supplement, which may possibly be published by the fall conference.

**INTERNATIONAL PLANETARIUM SOCIETY** -- Sheldon reported that the Council is meeting in Cocoa Beach, Florida, June 7. Terence P. Murtagh, Armagh, Northern Ireland, was elected President; Mark C. Petersen, Boulder, CO, Treasurer; and Dr. Gerald Mallon, Norristown, PA, Secretary.

**INSURANCE** -- Sheldon has been investigating avenues for liability insurance for GLPA. He found "Headquarters Chapter" insurance, from Wohler's, the carrier of our previous policy. This new policy may fit our needs better than the previous one, which jumped from $275 to $4265. The cost of this new policy would be $500 per year. The committee discussed the various coverages of this type of policy. It would cover conventions and meeting sponsored by GLPA, as well as many other things.

Bob Thomson moved that Sheldon continue a search for a carrier that would provide equivalent coverage at a reduced price, report to Gary, and authorize Gary to enter an agreement with them up to $500. Steve seconded. Motion carried. Some of the expense of the insurance can be covered by the conference since most of the insurance costs are due to the conference activities.

**NOMINATIONS** -- Steve Bishop and the nominations committee will be formulating the ballot for the election at the fall conference for the offices of President-Elect, Secretary/Treasurer, and I.P.S. Representative. Absentee ballots will be available to those who request them and cannot attend the conference. Any committee chairman who has served for two consecutive terms, and is asked by the President to continue, must be approved by the membership at the conference. Information about nominees will appear in the fall newsletter.

**CONFERENCE PLANNING** -- The 1988 conference will be held at Bowling Green State University, Ohio, October 19-22. Dale Smith has reported good progress in several areas of conference planning. Parkland College, Champaign, Illinois.
will be hosting the 1989 conference, which will be the 25th anniversary of GLPA. A committee will be formed to plan special activities for the event.

A review of the conference planning materials was conducted.

ASCAP -- Gary has made two proposals to the American Society of Composers, Authors and Publishers to work out an arrangement whereby GLPA members can pay a lesser amount through GLPA than ASCAP regularly requires for licensing use of its music. Most colleges and universities are already covered by agreement with ASCAP. ASCAP wants to charge a fee based on the number of days the planetarium is open to the public. Gary will continue to work with ASCAP to see if further clarifications and equitable arrangements can be made. He will report on progress at the fall meeting.

OFFICERS HANDBOOK -- Gary distributed the new handbooks to each of the officers and committee chairmen. The President-Elect is responsible for the upkeep and maintenance of the the accuracy of the handbook.

NEW BUSINESS

1987 CONFERENCE -- Barbara and Gregg Williams distributed a tentative conference schedule. The conference activities will begin Wednesday evening, Oct. 28, at Pierce Junior High School, Merrillville, Indiana. Thursday, Friday, and Saturday sessions will be at the school and at the conference hotel, the Holiday Star, so no long bus trips will be involved. The Thursday afternoon session on Religion and Astronomy will involve four invited panel members who will present papers and involve themselves in discussions among themselves and with the audience. Three main areas being considered are the origin of the universe, the origin of life, and the Star of Bethlehem. Friday will feature several participatory and hands-on workshops for people to build things and learn new techniques. Some small expenses may be required for particular workshops. Three paper sessions will be available during the conference. The annual business meeting and the state meetings will be Saturday morning at the Holiday Star.

Costs and other information about the conference will be in the summer NEWSLETTER. Registration materials should be mailed out about August 20-25.

Rod Thompson made a motion to adjourn the meeting at 6:02 EST.

Respectfully submitted:  

David E. Parker  
GLPA Secretary/Treasurer

**********************

Dr. Jill Tarter of NASA-AMES spoke to the Cleveland Astronomical Society on May 8, 1987. She eloquently described some of the 48 SETI projects now in operation and the R and D for a proposal for a big NASA-sponsored SETI. The $62 million price tag would mean a few pennies/day for each U.S. citizen. Both frequency coverage and sensitivity would be greatly expanded by the project. Dr. Tarter noted that if signals from intelligent life elsewhere are received, and she believes they will be, the group is committed to announcing the discovery immediately to all. She and her colleagues would not tolerate a national security ban on sharing this information.
Regional News

Illinois - Bart Benjamin

The Illinois State Meeting of GLPA was held at the Henry Crown Center in Chicago's Museum of Science and Industry on Saturday, April 25th. A brief description can be found in the Crown Space Center report.

Adler Planetarium -- James Sweitzer reports that Adler is beginning a new two-show format this summer. The first of these two shows, "Countdown to the Year 2000" will play in the Universe Theater. Audiences will then be ushered into Adler's Sky Theater for the second planetarium program, "Intruders from Outer Space."

Cernan Space Center -- Bart Benjamin reports that the Cernan Space Center is currently running its all-new program, "Summer Skies," which takes the audience on an exciting tour of the spectacular summer sky. Also included in the show is "The Magic Egg," a stunning 15-minute Cinema-360 film that combines state of the art computer graphics and animation with an electronic music score composed by Michael Boddicker, a world leader in the field.

John Boesche, who has served as the Laser Light Show Manager for the past seven years, has departed the Cernan Center staff to pursue a free-lance career in theater and multi-media production. Mark Webb has been appointed to fill the responsibilities of laser and planetarium show production.

Space Days, a childrens workshop that highlights space exploration and astronomy, was very successful. Their next children's workshop "Dinosaur Days" is scheduled to take place in early August.

Henry Crown Space Center -- Steve Bishop reports that "The Grand Canyon" is doing so well that he has extended its public run into early October.

On April 25th, the Illinois state meeting of GLPA was held at the Crown Space Center. Twenty-eight planetarians attended -- the most ever for an Illinois State meeting! They were treated to two exciting Omnimax films and papers presented by Jim Manning (about the progress being made on the Parkland College planetarium) and Gregg Williams (on the plans that are underway for this fall's GLPA meeting in Merrillville, Indiana).

ISU Planetarium -- Carl Wenning reports that he is hosting a two-day summer institute for the Young Astronauts in his area on July 30th and 31st. Their current planetarium program is entitled "North Star to Southern Cross." Carl is also working with the Central Illinois Space Group to promote the national distribution of SpaceNet over the Teleconnect cable system. Also planned this October is an Astronomy Rendezvous and Conference. More details on this will be forthcoming.

Joliet Jr. High School Planetarium -- the Joliet planetarium re-opened in March with the return of Director Douglas Graham. The planetarium will be closed for the summer recess, but will re-open the first week of October.

Lakeview Planetarium -- Sheldon Schafer reports that Lakeview Museum and Planetarium will pursue an overall theme of Hawaii during the 1987-88 school year. Special Hawaii Skywatches, travelogues, Hula dance demonstrations, and a Museum-sponsored trip to Hawaii are all being planned. In July, Lakeview will premiere "Futurescapes," a trilogy of science fiction thrillers. Sheldon also reports that the funding for Project Starwalk has been extended for an additional two years.

Olivet Planetarium -- Al Fleming reports that he is currently showing "Death of the Dinosaurs," an expansion of the 15-minute program from the Strasenburgh Planetarium. Almost all of the program was produced by students at Olivet Nazarene University. Original background music was composed and synthesized by a music student, and an ONU artist painted many of the dinosaur pictorials. Response so far has been very good. Al also plans to teach an astronomy institute for gifted 4th through 6th grade students this summer.
Parkland College Planetarium -- Jim Manning reports that the staff at the Parkland College planetarium are now installing their new Zeiss M1015 star projector, a task that they hope will be completed by the end of May. Installation of their automation system (an R.A. Gray MC-10), 35mm wide-angle projection system, sound system, and numerous other projectors will take place this summer.

The Parkland College Planetarium (50-foot diameter, 145-seats) is expected to open in October.

Indiana - Dan Goins

Dan forwards a letter from Dayle Brown, which appears at the close of Regional News. Dan notes, "I think Dayle's thoughtful remarks illustrate how well GLPA members work together."

Michigan - Garry Beckstrom

Michigan Planetarians met in Ann Arbor on Saturday, May 2. Garry Beckstrom of the Ruthven Planetarium Theatre and Steve Schaffer of Argus Planetarium were hosts.

The morning session was held at Argus Planetarium in Ann Arbor's Pioneer High School. Argus Planetarium was the first school planetarium ever installed. Steve Schaffer described the facility, demonstrated his new carousel control system, and talked about his future plans for programs and equipment. Because of the planetarium's historical significance, the original star projector (a Spitz A-1), dome and seating will be maintained. Dr. John Rosemergy who directed the planetarium from the beginning until he retired last summer (30 years) was in attendance and added some interesting comments about its history.

Recently retired GLPA member.

John Rosemergy gave the Armond Spitz Lecture in 1978 at Cranbrook, Bloomfield Hills. He told us, "Very few events of my lifetime shook this nation as violently as the blast which launched Sputnik." (Joe Chamberlain and Robert Elliott join him.)

Jeff Bass from the McMath Planetarium at the Cranbrook Institute of Science did a presentation on a three-screen Cleark Light control system he has built for his planetarium.

After lunch the group visited The University of Michigan School of Music's Electronic Music Studio where Jeff Bass (who is also on the faculty at U-M) did a fascinating presentation concerning electronic music composition using an analog recording studio and a digital studio.
From there it was on to The University of Michigan Natural Science Museums where the Ruthven Planetarium Theatre is located. Garry Beckstrom introduced everyone to the facility and described its on-going modernization program.

The group was treated to The Universe Game, the current public feature show.

Mark Perkins from the Chaffee Planetarium at the Grand Rapids Public Museum introduced the computer automation system he designed and is installing in the Ruthven Planetarium Theatre.

Near the end of the afternoon there was time for those who were interested to browse through the exhibit areas of the museum.

A few people stayed into the evening to take an optional trip to the U-M's Peach Mountain Observatory to see the large radio telescope and the 24-inch optical telescope operated by the local amateur group.

The meeting was well attended and some very interesting and informative discussion resulted.

The program series Humanities and the Stars produced by Eastern Washington University is now available to planetaria in the state of Michigan. Programs from the set can be obtained by writing to the Hans Baalduf Planetarium, Kalamazoo Public Museum, 315 South Rose Street, Kalamazoo, MI 49007. For program availability information, call Eric Schreur at (616) 345-7092.

There will be a small fee to cover cost of shipping and handling.

Minnesota-Wisconsin - Dave DeRemer

Bob Allen and Gary Sampson attended the NSTA annual conference in Washington, D.C., in late March, giving presentations. Bob presented information on the AAE (Association of Astronomy Educators) and discussed activities within an AAE session with other AAE presenters. Gary explained the format of his very successful high school astronomy course.

Three area planetariums have plans for remodeling. Gary Sampson at Wauwatosa West High School plans to revise theater projector wiring, wiring, and shelves. John Harman at University of West Milwaukee Planetarium has already revised his sound system, has replaced several seats, and has plans for other improvements. Dave DeRemer at Waukesha Schools Planetarium will be building new projector booths, adding cove lighting, and modifying the wiring.

No spring meeting was planned for the area this year.

Bob Allen is due to be married on May 30. As you receive this Newsletter, he and Suzanna will be husband and wife. We of GLPA wish him the very best.

Ohio - Dale Smith

Several Ohio planetariums ran home-produced shows this spring. The Missing Planet was found in Cincinnati telling the story of planetary discovery past, present, and maybe future. Dave Duszynski reports that the Bishop Planetarium in Bradenton, Florida purchased a copy of this program and is now running it. Pilots of the Purple Twilight flew through the Ward Beecher Planetarium (Youngstown) to recreate the saga of the Soviet and American human exploration of space. Missing stars and daring dinosaurs roamed the Copernicus Planetarium (Lourdes College, Sylvania) in The Nemesis Factor. Tony Pisano produced this program in a cooperative venture with the Toledo Zoo. Sound and Light filled the Ritter Planetarium and included poetry, prose, and music of several University of Toledo students.

Live music and effects echoed through the Bowling Green Planetarium in two April concerts, one with a brass quintet and the other with a pair of
bell choirs from local churches. The university president also gave a
lecture on celestial navigation and a Honolulu to Seattle sailing voyage
he made.

Bad luck fell on the April 4 state meeting at Youngstown in the form of
a near-record April blizzard (what a special effect!!!). Among Ohioans,
only the foolish contingent from B.G., who didn't know about the storm
until they slid into it half-way across the state, made it. Good conversa-
tion ensued amidst plenty of food and beverage and a nice planetarium show.
The weather provided a unique opportunity to study the cratering character-
stics of humongous snowballs (would you believe a yard across?) slamming
into the slush beneath the sixty-story roof. Thanks to Warren Young, Tim
Kuzniar, Rick Pirko, Tom Willmitch, and Mike Dimuzio for a good meeting.

The Cleveland Regional Association of Planetariums (C.R.A.P.) met on
April 28, at the Cleveland Museum of Natural History. After seeing the
array of seven half-scale dinosaurs move, breathe, and bellow, director Joe
DeRocher introduced the new museum director, Dr. Mary Taylor. Dr. Taylor is
the first women director of a major museum of science in the United States.
Joe then showed us a dinosaur program that he and his colleague Clyde Simpson
have presented almost 200 times in the last three months. Crowds at the
museum to see the animated dinosaurs have been overwhelming. (Joe and Clyde
had two days off as soon as the dinosaurs left, May 3.)

Joe discussed an upcoming program to celebrate the Centennial of the
Michelson-Morley Experiment done in Cleveland. The theme is "Light, Space,
and Time," and there will be six days of events in Cleveland. A major kick-
off event will be the same week-end as the 1987 GLPA conference in Merrillville.

The Cleveland Regional Association of Planetariums now has its set of
Humanities and the Stars mythology programs, purchased with a grant from the
Martha Holden Jennings Foundation. Jeanne Bishop is chairing this grant, and
Dick Spier is sending programs on a reservation basis to northeastern Ohio
planetariums during 1987-88. The programs are geared to secondary and college
levels.

At the same meeting, it was noted that long-time GLPA member Bill Kobel
is now semi-retired, having left his position as Planetarium director at
Fairview Schools Planetarium and taken the part-time position at the Lake
Erie Nature Center Planetarium. Then someone mentioned that Bob Andress,
also present, was fully retired...some chimed in "just tired" (!) Bob and
his wife Lois do a lot of traveling now during winter months. They had al-
ready left at the time of the fall Cleveland GLPA meeting.

***************

Dayle Brown
Hudson Lake Elem.
RR 3
New Carlisle, IN
46552

Dear Dan,

I have news. I am finally almost a full-fledged planetarian!
The Hudson Lake Planetarium, with its spanking new 10' dome and
slightly used Spitz A2 projector, will open its doors formally
some time soon...as soon as I get it built.

My dream is coming true at last. But none of it could have happened
if I hadn't had the help and support of the planetarium community.
I'd like to credit a few of the many helpful people as an illus-
tration of the generosity and unselfishness of this group.
Art Klinger (Mish., IN) started me on this path in 1984. I signed up for a night class in astronomy (my first) and was completely captivated by his planetarium. Art suggested that I talk to my school administrators about completing an unused facility. I hesitated. Me? A sixth-grade teacher? A planetarian?! But when I brought my students to their first planetarium program and realized that they shared my wonder, I began to appreciate all the possibilities. I was sold. I talked to my superiors and received encouragement. I took another class in astronomy with Art and he continued to encourage me.

I attended the 1984 Spitz Summer Institute where I received my introduction to planetarium education from George Reed and his excellent lineup of guest lecturers. George's example of good humor in the planetarium, and out, was invaluable. Here I also met Patt Olmstead (New Castle, DE). She introduced us to PROJECT STARWALK, which she later helped me implement in my school district. Patt's thoroughness and determination were impressive.

At my first GLPA Conference (1984, Milwaukee) I was overwhelmed by the number of people who went out of their way to help me. I had the good fortune to meet a kind and sincere woman who was looking for a roommate. Jeanne Bishop (Westlake, OH) listened to my stories of hope and frustration and quietly made me feel that I wasn't chasing rainbows. Gail Bouslog (Russiaville, IN) could match any hard-luck planetarian story I could muster...and filled me with renewed determination with her spirit and energy. When it became known that I was a planetarian without a planetarium, Carl Wenning (Normal, IL) put his head together with Garry Beckstrom (Ann Arbor, MI) and Walt Mitchell (Columbus, OH) and solved the problem for me! It was arranged that my school would be "loaned" an unused Spitz A2 projector from Ohio State University. A miracle!

Equipped with an instrument, a program, and unbounded enthusiasm, I returned to my administrators who still found financial reasons why there would be no planetarium facility, yet, in New Prairie.

Back to another Spitz Institute ('85) and more timely instruction from George Reed—this time on Grant Writing. However, my superiors decided that they didn't want grant money. I wasn't allowed to submit one.

In '85-'86 I was permitted to pilot the STARWALK program...but where? Dan Smith (South Bend, IN) stepped forward to help out. He allowed me to use his facility for our STARWALK lessons. Dan spent countless hours patiently explaining the workings of his Spitz A4 and allowing me to practice...and practice...and teach!

The STARWALK results were better than I hoped for. But upon my return from the IFS Conf. in Tucson I learned that there still would be no planetarium, and not even another year for STARWALK.

Defeated? Almost. Art Klinger came to my rescue. He produced plans for a 10' cardboard dome that my sixth grade students and I can build ourselves. We're building it now, in the basement of my elementary building.

The icing on the cake came last month. I received a $4000 award from Lilly Endowment, Inc. for their Teacher Creativity Fellowship Program for this summer. I'll use the fellowship to attend workshops at Bishop Planetarium, Bradenton, FL and the Spitz Summer Institute in Chadds Ford, PA. I'll put together a K-6 curriculum in planetarium education to implement next year at Hudson Lake Elem.

There you have it. Jiminy was right. When you wish upon a star, your dreams do come true!

I submit this letter with heartfelt gratitude to these and so many others who have made me proud to be counted (finally!) among the ranks of planetarians.

Sincerely yours,

Dayle Brown
Good News! The GLPA script bank is now back in business. Copying cost is still 10¢ per page, and approximately 300 titles are available for copying by GLPA members. If you do not have your script file index cards, a printed index is now available for $2.00, postage paid. All inquiries about the script bank should be directed to:

Gary Sampson  
Wauwatosa West H. S. Planetarium  
11400 West Center St.  
Wauwatosa, WI 53222

Since our fall conference, two new scripts have been donated by Dale Smith of Bowling Green State University. They are "Halley: A Comet's Tale" (25 pp), and "Planet Quest" (19pp.) We really are in need of new scripts; please consider donating. Remember that you need to include a written statement indicating that your donated script is your own work, and that you give the rights for duplication of your script by GLPA members.

NOTE: Gary hopes to put the index on a data base sometime in the future. Direct suggestions to him.

Other News:

IPS Council met on Sunday, June 7, at the site of the June 7-14 SEPA meeting at Cocoa, Florida...Institutional membership for IPS is now being handled by Mark Petersen, also Treasurer and Membership Chairman of IPS. Tom Hocking was the person who started this work, but he has passed the job on to Mark because for institutional membership must be passed by Mark anyway; there was a duplication of effort. Institutional Membership for IPS is a little like the new institutional membership for GLPA. Contact Mark for information: Loch Ness Productions, P. O. Box 3023, Boulder, CO. 80307. Phone: 303-455-0611, MT...You should have the 36-page publication, 27 Steps to the Universe by Lars Broman of Borlange, Sweden if you are an IPS member. The most recent Planetarian has an expanded format of 70 pages.
Judy Budd of Educational Services at NASA Lewis in Cleveland asks us to share information about the upcoming two conferences: The 16th Annual Aerospace Education Workshop, "The Sky As Your Classroom," will be held on Center from June 15 to June 26, 1987. This workshop is targeted for elementary and secondary teachers. Three hours of graduate credit are offered and tuition is charged. Registration for the workshop is through Baldwin-Wallace College (216-826-2168) or Kent State University (216-672-2202). The Lewis Educational Services Office is planning to host a three-day conference in Orlando, Florida, the last week in October. Targeted for school administrators and other supervisory personnel, the theme of the conference will be "Futures in Education." GLPA members who were on the mailing list for last fall's conference at NASA Lewis will automatically receive further conference information. Remember the bus "Shuttles" described by Lynn Bondurant, Chief of Lewis Educational Services? Well, the effort was duplicated by nine Cleveland area elementary and secondary schools in April. Many dignitaries sent their regards, and students had a time of their life. Lynn Bondurant reports that a booklet and a video program on how to conduct a simulated Shuttle Mission should be produced at Lewis this summer.

"I hope when I grow up to become the greatest astronaut that ever went into space to explore," wrote 4th grader Tim Holt, a member of the astronaut crew from Daniel Morgan Elem. School (shown left). Their Shuttle was equipped with a space trike for extravehicular missions.

Elementary school astronauts look to a bright future in space at the April 8, rendezvous of 9 "Space Shuttle" bases at NASA Lewis, Cleveland in the 1987 Greater Cleveland Area Simulated Shuttle Missions Program.

Lonny Baker, 1986 IPS Conference hostess at Tucson, has changed positions. She is now with the Morrison Planetarium in San Francisco, and she was just elected Secretary-Treasurer of PPA (Pacific Planetarium Ass'n.). Larry Dunlap, a host of the IPS conference still at Flandrau, was recently honored with an asteroid named after him. At a ceremony last fall Larry was officially awarded with a plaque noting Asteroid 3291, "named in honor of Larry Dunlap...who has published light curves of asteroids and is now teaching high school and other students the beauty of astronomy at the Flandrau Planetarium." (From the PPA Newsletter, Vernal Equinox, 1987)

The Astronomical Society of the Pacific Teachers' Newsletter now has a circulation of about 15,000. It is free to teachers who write on school stationary and request it. Titled The Universe in the Classroom, the newsletter is co-sponsored by the AAS and the Canadian Astronomical Society. It is intended for those who have not had strong background in astronomy. The ASP has begun a second newsletter for members, separate from the journal MERCURY. In the first (spring, 1987) issue, it is noted that the ASP has
members from every U. S. state and 74 other countries. The ASP will offer a teachers' workshop July 11 and 12, 1987, during its 99th annual meeting at Pomona College in southern California. The Pomona meeting will feature a scientific symposium on "Cool State and Galactic Structure" and "Universe '87", a meeting of almost all the national amateur astronomy organizations in the U. S. For a detailed informational brochure, contact the ASP. Address: ASP, 1290 24th Ave., San Francisco, CA 94122.

There will be a joint conference of the PPA and the RPA October 15-17, 1987 at Fleischmann Planetarium, University of Nevada, Reno. Director Art Johnson will host.

********************

The scientific and educational community had a loss early this year when science cartoonist Sidney Harris died. S. Harris is known for cartoons that appeared in American Scientist, Punch, The New Yorker, Playboy and Wall Street Journal. He made those who understand science laugh. Six books of cartoons were published. Some captions on cartoons dealing with astronomy were: "From all indications, ours is one of the biggest universes there is."...(one space walker to another) "To think our field trip in Physics I was to a boiler factory."...("EAT" flashing off and on above an observatory) "I don't care what it looks like--they're pulsars." (On five rocks outside a spacecraft) "Space is Big...Space is Dark...It's Hard to Find...A Place to Park...BURMA SHAVE." S. Harris wrote an article about his work, "Then a Miracle Occurs" for the September-October, 1986 issue of American Scientist.

********************

From the banquet centerpieces at the 1975 Cleveland GLPA meeting:

Professor Planeti (George Reed's "professor" character) defines:

Conjunction: A clash of two planets or one with the sun or the moon. No sound is heard because there is no air in space.

Celestian horizon: Where the sky stops and the earth starts. Earthquakes occur here.

George Reed with Gary Tomlinson at the 1986 GLPA Conference. George gave the Armand Spitz lecture in Milwaukee.

********************

Dr. Nick Sanduleak of the Warner-Swasey Observatory in Cleveland just became famous with a star he had catalogued becoming the supernova of the Large Magellanic Cloud 1987A. Said one of my students, seeing the name in a news article..."San-du-le-ak...What's that?" J.B.
Reading about the sad state of the Cleveland School System's planetarium in the last Newsletter, reminded me of a far more positive experience I had at its predecessor, an old-but-working planetarium in the Cleveland Supplementary Education Center. It was October, 1967; the event, the third annual meeting of the G.L.P.A., and the first of three to be held in this now dynamic city.

One of the things we did in those early conventions was put local planetarians on the spot. Because the profession was so young, and because we were so interested in our colleagues' instructional techniques, we encouraged them to include live shows, with real audiences, on the agenda. Afterward came the fun part --- the critique.

Over the years, we were exposed to some outstanding sessions --- Jim Pike in Mount Clemens in 1971 comes to mind, but none stands out more clearly than one in Cleveland in 1967. A young planetarian named Dewey Saunders held a group of impressionable youngsters literally spellbound in the palm of his hand. He related to that particular audience so beautifully, as I am sure he did to many others. Some of us were so impressed that we still talk about that occasion.

I wish that we could continue to have sessions of that type at our meetings. This would seem so appropriate when we consider what a large percentage of our membership is composed of school planetarium sorts, who can benefit so greatly from watching effective colleagues in action. I realize there are logistics problems with our larger membership, and it takes a little courage to do something like this in front of one's peers. However, the fact that I clearly remember my impression of Dewey's presentation twenty years later says something.

Other things also stand out from that first Cleveland meeting. It was chaired by a personable fellow named Paul Kirby, the first G.L.P.A. Secretary/Treasurer, and director of the planetarium at the Supplementary Education Center. I believe he was one of the charter members, present at that snowy preliminary meeting in Lansing (another story) in 1964, and at the organizational meeting in Grand Rapids a year later. He quit participating in our meeting shortly after his term expired, and I have since wondered whatever became of Paul. I suspect that his job situation may have changed as the City of Cleveland and its educational system entered the turbulent crisis period of the 70's.

The "Wizard" was there in full flower. Many of you have come to this organization too recently to remember him personally, but certainly somewhere you have heard the name Ralph Ewers. He was the second president of GLPA, following Von Del Chamberlain, and certainly one of the most creative geniuses that I have ever met. He was a pioneer of the special effect, developing the pinpoint light source to a fine art, and introducing us for the first time to such present staples as ortho film and colored gels. Ralph was for many years the director of the planetarium at the Cincinnati Museum of Natural History, until he too dropped out of sight. We should track him down sometime and invite him back to a convention. Even if he is no longer one of us, I am sure he would still have some words of wisdom. (Ralph now directs a planetarium in Florida, I understand-Ed.)
While we’re reminiscing, let’s not forget Jeanne Bishop, who has few equals in overall dedication to this profession. Jeanne learned the planetarium business at her father’s knee in his "garage planetarium," a homemade affair (See Sky & Telescope, March, 1956, page 214) back in Canton, Ohio. As a very young professional, she was already making waves as a progressive school-oriented planetarian at that first Cleveland meeting. Newly married, she was already dragging Allen to conventions as well. (!-Ed.)

Dan Snow, who for many years was "Mr. Astronomy" in Cleveland, and who was also on the steering committee that guided G.L.P.A. during the time of its inception, was active at that convention. As director of the Ralph Mueller Observatory and Planetarium at the Cleveland Museum of Natural History, Dan hosted the annual banquet in one of the beautiful exhibit halls at the Museum. While I can still vividly remember the King Cobra peering over my shoulder (I have always had trouble with snakes at Cleveland meetings, but that, too, is another story), the main memory of that significant evening is something far more profound.

It was the occasion of the first annual Armand Spitz lecture. This initial lecture set the tone for what has become a very significant highlight of each of our subsequent annual conventions. It was a nostalgic occasion for all those who had ever met this very special man --- or who had been influenced by what he had done. For those who knew him as a warm personal friend, it was an especially emotional experience. It was our intention to have Armand Spitz himself deliver the first lecture, but a series of strokes had incapacitated him. Instead, his charming wife Grace made a moving presentation in which she admonished us not to lose sight of the vision which Armand held and which motivated him to such high levels of achievement. He loved the stars with a burning enthusiasm. This in turn translated into a desire to share that enthusiasm with as many others as he could possibly reach.

Yes indeed, it was quite a meeting!
Focus on Members... Dennis Brinkman, Como Planetarium, St. Paul, MN.

Dennis (better known to close friends as Denny) began his involvement with planetariums in 1978. Dennis was not one of those planetarium directors who love astronomy from age 3. He came to the business on a round-about path. He graduated from Mankato State College (that's in Minnesota) with a degree in chemistry education. He had his first teaching jobs in such well-known communities as Sheffield, Iowa, and Plainview, Minnesota. And before coming to St. Paul, he spent a year teaching science in Sydney, Australia.

While Dennis was teaching junior high science in St. Paul, he taught himself astronomy with an old set of Modern Earth Science textbooks tucked among meager classroom resources. He scrambled to learn enough each night to teach his students the next day. Shortly after this, the Como Planetarium was built. Dennis took charge three years later.

Como Planetarium is a 30-foot theater with 60 unidirectional seats. It was constructed in 1975. It is equipped with a Spitz automated 512 instrument. The planetarium is located in an elementary school for handicapped children.

Dennis claims that his experiences in the planetarium have included both successes and failures. He says that his failures will remain in the dark of the planetarium, but he is glad to point out a couple of successes. In 1982, Dennis and a friend, Gene Breault, produced an extensive astronomy curriculum for elementary grades. He is pleased to see that many school districts in the United States have adopted parts of it in their curriculum. A couple of years later, Dennis collaborated with Gene again to design an astronomy program for the Apple computer, "Skylab". The program was produced by the Minnesota Educational Computing Corporation (MECC), and a copy of it is now in the GLPA materials bank. (Both Gail Bouslog and Jeanne Bishop reviewed this excellent resource for MECC.)

After nine years under the planetarium stars, Dennis still finds a lot of satisfaction and challenge in his work. "What I enjoy most in this business is the diversity of required job skills." The need to learn new skills keeps his interest level high. When he begin planetarium work, Dennis spent a lot of time (mostly at home) building special effects projectors. Then his specialty became inventing electronic controls. Says Dennis, "Throw in the arts of producing slides, writing, producing, and presenting lessons, and that makes a never-ending set of avenues over which to apply creativity in planetarium work."

Life outside the dome centers on his family. Dennis with wife Margie and three children (Joe, 8; Ellen, 5; and Adam, 2) live in North St. Paul in a house he built before becoming a planetarian. His present major distractions are a graduate program at the University of Minnesota in Curriculum and Instructional Systems, a new Apple computer, and an occasional set of tennis.

Attending GLPA and IPS conferences is special to Dennis. (He missed the Cleveland one for financial reasons, but he is looking forward to others.) The thing about GLPA that impresses him most is the positive attitude and openness that is shared. "No other group of professionals continually presents this pervasive positive attitude. I find every conference a refreshing experience."

Dennis enjoys sharing ideas at conferences. At the next conference he attends, he would like to present a paper "that has never before been done"-how to give a planetarium lesson on constellations (!).

A recent fan letter...

Dear Mrs. Bishop, I like you, you are different. It is fun to see what Other People think about. The stars. I really like the dome. It's net. Like you.

Sincerely,
Chris L.
Wes Orloff has been receiving letters and calls about the Lumaline bulbs (described in the last newsletter). A group of yellow and blue Lumalines probably will be produced for General Electric's Nela Park in Cleveland for the planetarium community. The necessary minimum batch size of 100,000 is not all spoken for. Wes says that a white Lumaline lists now at $17; the discount price of each yellow and blue Lumaline in this project will be about $4.50. Wes would like to hear from more planetarians about commitments for bulbs. Contact him at: Euclid Sr. High, 711 E. 222nd St., Euclid, OH 44123.

A booklet just prepared by Darrel Hoff, now working with Phillip Sadler on Project STAR at the Harvard-Smithsonian Center for Astrophysics in Cambridge Mass., is The Universe in Your Desk: A Resource Guide for the Beginning Teacher of High School Astronomy. To receive a copy and get on the Project STAR mailing list, write: Project STAR, Center for Astrophysics, 60 Garden St., Cambridge MA 02138. (I have just used information in this booklet about textbooks to update my astronomy class for next year. The descriptions are very detailed. - Ed.)

Aimed at junior high level, a 22-part series of public TV programs is soon to be released. It is called "The Expanded Universe and I," updated from an earlier series "The Universe and I". A unique feature of the series, which covers many science topics, is that it tries to instill constructive attitudes concerning the methods and major concepts of earth/space science. Of interest to planetarians may be "Electromagnetic Mischief (#5, about the Science Police, a trio of zanies who track down the evil Spectrum Man), "LGM: The Work of an Astronomer" (#6, the story of the discovery of Pulsars), and "Star Salesman" (#7, about a man and woman who visit the Star Mart in search of their dream star...As they browse, they discover that stars differ in size, color, composition, and life cycle). The series is produced by KET, (Kentucky Network): 600 Cooper Drive, Lexington, KY. 40502. Broadcast is scheduled to begin Fall, 1987. Schools will be granted unlimited off-air recording and re-use rights for a three-year period.

The February, 1987 (no. 49) issue of the ESA Bulletin (available free from ESA as described in an earlier issue of the GLPA Newsletter), is an excellent resource for information and photographs about Comet Halley. I like the photo of delegates to a symposium in Heidelberg posing with a model of the Halley nucleus. This, with the June, 1987 issue of Astronomy, forms a fine package featuring new data from Halley, in the year we worked so hard to show and publicize its nature. (The Astronomy article is "Search for the Primitive," by Steve Berry. He notes that the Halley nucleus is often described as a vegetable. Vega workers say it's like an avocado; Giotto experts call it a peanut.)

The Native American Science Education Association has published a booklet, Star Stories, by Linda Skinner (Choctaw), illustrated by Ramona Mason (Creek). It is a brief publication of 12 pages, but it contains very interesting information that should be useful in planetarium programs. It is available for $2.00 from the NAESEA, 1228 M Street, NW, Washington, D. C. 20005.

Should anyone be interested in the astronomy/mythology of the Maori of New Zealand, I have several extra copies of The Astronomical Knowledge of the Maori by Elsdon Best, 80 pages. Contact me for information - Ed.

If you are prepared to spend big bucks for a publication, investigate the Mapping of the Stars program of Archival Facsimilies Limited. For only $800 per annual collection of this series, you will receive four published classical books on this topic. Authors of the 1987 collection are Galileo, Bayer, Digges, and Bevis. Archival Facsimilies, 230 East Ontario, Chicago, IL 60611.
Reported in the Plains Planetaria, Mark Hartman of J.M. McDonald Planetarium recommends using pens to opaque slides. They are special ones, which contain opaquiing fluid. They come in different sizes and are available in red or black. Ask for "FilmOpaquers", manufactured by Mark-Tex Corp., P. O. Box 681, Englewood, N.J. 07631.

The Fels Planetarium soon will be offering its preschool show "What's Up?", containing original songs and a fuzzy projected dog named Sunny. The program is about 30 minutes in length and is taped except for a short live section. It uses 155 color slides and 15 special effects. The cost of the program will be between $350 and $400, depending on what items of the entire show are requested. Contact Joyce Town, Fels Pltm., Franklin Institute, 20th and The Parkway, Philadelphia, PA 19103-1194: 215-448-1200.


You can organize a visit to Kennedy Space Center (and Walt Disney World/Epcot) with students under a program called "Earth Shuttle." For details contact: Earth Shuttle, 11 Beacon St., Boston, MA 02108: 617-723-3060.

Fisher-Price sells a "Starscope Set,"..."The first real telescope designed specifically for children." It comes with prepared slides "that let children see the stars and moon up close." The telescope contains a wide-angle, low-power eyepiece. Contact your local toy store or Fisher-Price Fun Starters, Golin/Harris Communications, 500 North Michigan Ave., Chicago, Ill. 60611.

Also for children, the ASP (within its "Summer Vacation" products list) offers two books by Franklyn Branley for ages 3-9: The Sky is Full of Stars and The Planets and the Solar System. The set of two books are $10.50. ASP Summer Sales, 1290 24th Ave., San Francisco, CA 94122.

The hats we had made with the GLPA logo for last year's Cleveland conference were made by a company that has now changed name. Now they are: Markline Promotional Wear, Box 12098, Kansas City, KS 66112. They have good prices on Hats, T-shirts, and jackets. Perhaps your planetarium, astronomy club, museum, or school would be interested in ordering a catalog. I found their prices and service excellent. They do the logo free-Ed.
THE GREAT LAKES PLANETARIUM ASSOCIATION offers membership opportunities to all individuals in any way connected with the operation of planetariums regardless of geographical location. G.L.P.A. is an affiliate of the International Planetarium Society, and the National Science Teachers Association. Membership dues are $13 annually, payable at the time of the Autumnal Equinox. General correspondence and requests for membership should be addressed to: Mr. David E. Parker, (address below).

This quarterly "GLPA Newsletter" is received by all members in good standing. Ideas and opinions expressed in this Newsletter are not necessarily those of GLPA, its membership or the Editor. Deadlines for contribution fall of the 15th of February, May, August, and November. Send information to: Jeanne Bishop.

Printed and mailed from:
Elgin Observatory and Planetarium
School District U-46
355 E. Chicago St.
Elgin, Ill. 60120

Dale W. Smith
Dept. of Physics & Astronomy
Bowling Green State University
Bowling Green, OH 43403
President's Message...Gary Tomlinson

As the GLPA expands service, it is no longer possible for the ten members of the Executive Committee to do all of the work. In the past few years, wonderful people have been volunteering to assist us. This year I have encouraged committee members and state chairpersons to attend the Executive Committee meeting, to be held Wednesday, October 28, 1987, at 2:00 PM Merrillville time (Central Standard Time) at the Holiday Star Resort. Actually, any GLPA member is welcome to attend any meeting of the Executive Committee.

The annual membership business meeting will be held on Saturday, October 31, 1987, at 9:00 a.m. This is an important occasion, so be sure to be there if you're at the Merrillville conference.

During the summer, the Executive Committee has been negotiating with the American Society of Composers, Authors and Publishers (ASCAP), to establish some type of blanket agreement for GLPA members. ASCAP had been very cooperative. By the Annual Meeting we should have a final proposal worked out for a vote of the membership. Some highlights for proposal are:

1. We will be given a discount on all types of license.
2. We pay annually for the proceeding year.
3. Programs for classroom groups are exempt. Only programs for the public are chargeable.
4. We pay only for the days we play ASCAP music.
5. Seating and lobby music are chargeable.
6. Universities and colleges are already covered by their host institution and would not need to pay again.

As of April 1, 1987, GLPA had 197 members. Of these, two were in foreign countries and could not participate.

35 are in college planetariums and are already covered.
63 are school planetariums.
34 are museum planetariums.

The remainder were either not at a planetarium, at the same planetarium as someone else, or used their home address and their type of institution was not readily apparent.

1987 Conference, Merrillville Community Planetarium, Merrillville, IN.
October 28 - 31
So, ASCAP is interested in about half to two thirds of our membership. Right about now some of you may be asking "Why should I take what little budget I get now and pay ASCAP? So far, they don't even know that I exist!"

It is true that ASCAP may never know you exist, but it's not likely. ASCAP has become aware of planetariums and it is only a matter of time before they find you. If ASCAP goes to all the trouble to "track you down" they would not be very willing to give you a discount. They will want the full license fee. Besides, it is the fair thing to do. Eighty percent of this license fee goes back to the artist, composer, etc., that created the music. It is only fair that we pay for the privilege of using their talents. After all, you wouldn't want someone running a show you wrote without you getting some type of compensation, would you?

The GLPA code of ethics, passed by the membership a couple of years ago, states that GLPA members "respect the rights of other artisans and professionals to collect just compensation for the fruits of their labors."

I know in this time of stringent budgets, it is extremely difficult to justify additional spending, but look at it this way, we were very fortunate to be able to use the music "free" of charge up to now.

Some of the questions I have already been asked and their answers, as I understand them are:

Q. Do we have to pay if our host institution already pay for an ASCAP license?
A. No.

Q. Do we have to pay if we don't use ASCAP music?
A. No.

Q. Do we have to pay if we only use ASCAP music for seating during our public shows and not in the program itself?
A. Yes.

Q. Does the license cover the use of mechanical music behind narration?
A. Yes.

Q. If I only do programs for scheduled school groups, do I have to pay?
A. Not if you don't allow any public into your school programs.

Proposal to ASCAP:

GLPA members would calculate the number of days that they perform chargeable shows during the proceeding year and annually, in January, send to GLPA the fee chargeable per day. This rate will be less than the standard $2.00 per day museum/planetarium rate and shall apply to ALL United States GLPA members, regardless of the type of institution. It will cover any and all uses of ASCAP mechanical (recorded) music.

This percentage discount (i.e., 33%) will apply to all forms of ASCAP licensing. Light shows (standard rate $5.00 day) and live performance (also $5.00 per day) rates will also be reduced by the same percentage. If an institution has both mechanical music and a live performance on the same day, only the higher rate would apply (i.e. not $5.00 + $2.00, only $5.00 per day).

A chargeable show is any performance where the general public hears ASCAP music. This includes lobby music, entrance music, seating music, or music used behind narration. If you do not use ASCAP music behind your narration and you don't use lobby music, then you would not be required to pay. If you only have shows 4 days per week, then you only pay for those 4 days (unless you use lobby music on the other 3 days in your institution). NOTE: Programs for educational use with school classes are exempt. These are not chargeable uses. This applies even to museums who do programs for visiting school districts. If however, along with the school class, you admit the public (the classroom teacher and chaperones do not count as public) – even
just one person, then that is chargeable use and payment would be required.

Programs produced using ASCAP music by a participating institution may be sold to another participating institution without further charge.

GLPA members' institutions who participate in this proposal will be guaranteed that it will be renewed and that ASCAP will not attempt to terminate this agreement unless both parties (ASCAP and GLPA) agree. Any member not willing to participate in this proposal will be expected to pay the full amount. This agreement would cover the calendar year starting in 1987. GLPA will then issue one check for the amount paid by its members to ASCAP in January, 1988.

GLPA will furnish the names of the Planetariums/Museums participating. Planetariums/Museums already located by ASCAP (prior to 1988), will be granted amnesty and allowed to participate at the cheaper rate.

If you have strong feelings or suggestions for refinement of this proposal, please send it to me right away. The final proposal (including these suggestions) will be voted on at our annual meeting next month.

***************

Editor's Notes......Jeanne Bishop

I'm looking forward to seeing many of you at the upcoming GLPA meeting in Merrillville. Although a Newsletter does the job of keeping us in touch between conferences, the annual conference is the best vehicle for communication within our organization. Hearing papers, viewing programs, discussing problems and strategies, and laughing with our colleagues brings stronger sense of purpose, new ideas, and change of pace to our professional lives. I need it! Don't you? If you haven't yet responded to Gregg and Barbara Williams' conference packet--registration, room, paper proposal--now is the time.

The Winter Solstice issue of the Newsletter will be my last (as Editor). A new Editor should be announced at the fall conference, with material to be sent to that person beginning January 1. For this last issue under my jurisdiction, I would like to publish topics seen by different members to be timely and appropriate during the next year or two. I will be gathering ideas at the fall conference. If you can't be there or have a later idea, send it to me by mid-November. Elaborations (why appropriate, what to include) are welcome.

I received a number of items for this issue at a wrong home address. As printed in the spring issue, my home address is now 3180 Oakwood Lane, Westlake, OH 44145. Due to slow mechanisms of the postal service, not members' mailing dates, I received some information quite late. I hope no letter was still held up at this time. I'm forwarding the issue to Nancy Franklin. Actually, it's best, even in the summer, to use my work address printed on the cover of this issue. Thanks.

***************

Jim Cogsville......Kingman Museum of Natural History

WANTED: Replacement parts for Viewlex Model Apollo planetarium projector. We need everything from spare bulbs to entire machine. Send list, condition, and fair price to me at the Kingman Museum of Natural History, 175 Limit Street, Battle Creek, MI 49017.
1987 Conference

In late August, the 1987 conference materials were mailed by Gregg and Barbara Williams from Merrillville. Gregg has asked that a few items from the packet be mentioned, things not in the summer solstice newsletter discussion. Special talks will be given by Dr. Kerry Mark Joels (keynote speaker, "The Planetarium and Space Science--Past, Present, and Future", Dr. Peter R. Backus "The Search for Extraterrestrial Intelligence", and Jack Spoehr (Armand Spitz Lecture).

Five panelists will present their views on aspects of religion and astronomy in the planetarium, with discussion among panelists and audience following. The panelists are Dr. Richard Busse (Dept. of Theology, Valparaiso U.), Jon Costas (law student, Valparaiso U), Dr. Sherman Kanagy (Assistant Prof. of Physics, Purdue U.), Dr. Rosalie Levinson (Prof. of Law, Valparaiso U.) and Dr. Jim Sweitzer (Assistant Director, Adler Planetarium).

Workshops will be held on Friday, October 30, when the GLPA slide and script banks will be available. A Sky-Skan product exhibit will also be present.

Workshops include "Active or Passive Participation", 45 minutes, Gary Kutina; "Building a Moving Cloud Projector, 45 minutes, Carl Wenning ($10 materials fee); "Classroom Activities in Astronomy" 45 minutes, Carl Wenning; "Electronics - Solid State Controls," 45 minutes, Don Tuttle; "Fixing that Noisy Ecktagraphic," 45 minutes, Carl Wenning; "Modeling the Sky," 45 minutes, Bob Riddle and Sheldon Schafer; "Physics Demonstrations for Astronomy," 45 minutes, Robert Kasting and Jim Vermillion; "Previews of 'Planetaria' and 'First Light'," 45 minutes, Gregg Williams; "Project STAR," 90 minutes, Dan Francetic, Larry Sabbath, and Gary Sampson; "Slide Masking with LPD4 Film," 45 minutes, Mitch Luman; "Starlab," 90 minutes, Jim McDowell and Georgia Neff.

Hotel reservations should be made directly with the hotel, the Holiday Star Resort. Deadline for group rates is September 28: single, $56.00 and double, $66.00. Phone is 219-769-6311. Less expensive Knights Inn ($30.25 and $37.40) has no group rate or deadline. Phone is 219-736-5100.

Registration is $38 before September 28 and $50 after (students, $18 and $30). Meals, including a reception on Wednesday, lunch on Thursday, Friday, and Saturday, banquet on Friday evening, and coffee and rolls each morning are $40. Banquet fee is only $16. GLPA dues, payable by the conference, are $13. (student, $6.50)

********************

LIGHT DELAY

There is a short delay between the arrival of light at the retina of the eye and the generation of its nerve message. The length of time involved depends on the light intensity. A tenfold increase in light energy at moderate illumination will reduce the delay by ten milliseconds.

This can be tested in the following way. Observe a pendulum that is swinging in a vertical plane. Cover one eye (say, the left) with a dark glass. The nerve message from this eye will suffer a greater delay than that from the uncovered eye. Thus the unobstructed right eye sees "where the pendulum is", the left eye where it was short interval before. The pendulum, to the observer, appears to execute an elliptical orbit. From the eccentricity of the orbit an estimate of the time delay as a function of the reduction in intensity can be obtained.
FOCUS ON MEMBERS: ....Gregg Williams

In Gregg’s own words, our 1987 Conference host tells how he came to be at Merrillville enthusiastically pursuing many projects. His wife, his best assistant adds her comments!

Gregg: I became director of the Merrillville Community Planetarium in July of 1982, when I was 22 years old and had just graduated from college. Merrillville is located in northwest Indiana, not far from Chicago. The Merrillville schools is composed of 5 elementary, 2 junior high, and 1 senior high school. The planetarium is located in Pierce Junior High. Originally, the position was full time as planetarium director; however, in recent years, I have been teaching - at my request - a high school course in astronomy. My students are bused to the planetarium in the junior high each day. As planetarium director, I am responsible for developing astronomy and space science curricular for our school system, producing and giving programs, and administration (scheduling, budget, etc.) of the planetarium facility.

Looking back at my life, I suppose it was inevitable that I would become a planetarium educator. I can remember being interested in astronomy and space exploration as early as first grade (1966). In the summer of 1969 just after the flight of Apollo 11 - a friend and I performed a re-creation of the first landing of the Moon. For 9 days and 8 nights we stayed in his family's breezeway following the same timeline as the real astronauts. I remember sleeping on lawn chairs and having our meals brought to us. We even simulated our own moonwalk wearing winter coats and long underwear for spacesuits and card board boxes for backpacks.

As the years went on, I began to share my interest in space with others. In fifth grade, my teacher let me teach a month-long unit on space exploration, since our textbooks were not keeping pace with the rapid progress of the space age. By the time I was a teenager, I had decided that I wanted to teach about space when I started a career. I figured that I would probably work for NASA, traveling to schools, and speaking to groups.

Gradually, that idea changed. While in high school in Muncie, IN., I began to attend public programs at the Ball State University Planetarium. The director was Newton Sprague. Later, when I entered BSU to pursue a secondary science teaching degree, I became an assistant at the planetarium, then (and now) under the directorship of Roger L. Scott. I eventually decided that having my own planetarium was far superior to the uncertainty and probable travel associated with working for NASA.

Later, my student teaching assignment included working in the Muncie Community Schools Planetarium with Frank H. Arthur. It was while working with Mr. Arthur that I learned about GLPA and became a member. I was even given the opportunity to attend an Indiana State Meeting in the South Bend area during April of 1982. During this meeting I learned of a possible job opening for a planetarium director in Merrillville.

In May, 1982, I graduated from Ball State with a B.S. in science education (physical science and Earth-space science) and a minor in astronomy. That summer I was interviewed and hired by the Merrillville schools as planetarium director.

The Merrillville Community Planetarium opened in the fall of 1974; I am the planetarium’s third permanent director. During the first years I have been director, my most important project has been the creation of an elementary planetarium curriculum. The project is nearly complete and includes 20 programs that I have written for K to 6th grade. I am now in the process of writing teacher guides for each program. I have also worked on the planetarium's physical facilities, including an automated slide projection system and video projection system.

Another project includes the introduction of an astronomy course to our high school curriculum. For the last three years, the course has been just one semester in length, but for the 1987-88 school year, the course will
be year-long. I have also worked hard to involve students as assistants running the planetarium. Each year, I have trained and supervised a group of 15 to 20 junior and senior high school student assistants. GLPA members will probably remember me bringing groups of students to the last several GLPA conferences.

Lately, I have been computerizing many of my administrative duties. All scripts, guides, schedules, and memos are word-processed. The planetarium's budget, inventory, and mailing list (with over 700 entries) are on the computer. During 1986-87, I placed the planetarium's reservation system and attendance statistics in computer memory. Now I am using my computer experience to help with 1987 GLPA conference.

In June, 1986, I married Barbara. We have no children (unless one counts all our planetarium assistants!)

When I'm not in the planetarium, my interests include Star Trek, science fiction, and BASIC programming. I also enjoy spending time with Barbara and working on our Merrillville home. Over the last several summers, I have worked on my M.A. degree in Earth Science at Ball State and in August, 1987, I finished. -- Just in time to devote more energy to the GLPA conference. See you in Merrillville in October!

.........Barbara Williams

Barbara: I graduated in 1983 from Valparaiso University with a major in accounting and a minor in information systems (computers for business). After graduation I started working for the Indiana State Board of Accounts, an auditing department for the state. I audit governmental units in the state of Indiana. I met Gregg when I audited the extra-curricular accounts at Pierce Jr. High School where Gregg's planetarium is located. The secretaries at the central office told the secretaries at Pierce to introduce Gregg to me, especially since we both knew a lot about computers. The next month I attended a public show Gregg was giving. The following month Gregg invited me to a public show, our first date. That is how I became interested in astronomy.

I have passed the certified public accountants' exam and now I am a CPA. My hobbies include singing, playing the piano, and mysteries. I will be starting my third year in GLPA this October. I have attended the past two conferences and an Illinois state meeting. I also chaperone students with Gregg on field trips and help record planetarium shows.

******************

Famous thoughts:

Can you identify the authors of these quotations of the sixteenth and seventeenth centuries?

1. "I thought that...by laying down that the Earth has some movement, demonstrations less shaky than those of my predecessors could be found for the revolutions of the celestial spheres."

2. "But it is absolutely certain and exact that the ratio which exists between the periodic times of any two planets is precisely the ratio of the 3/2/th power of the mean distances...."

3. "...one may conceive Light to spread successively, by spherical waves, and...that this spreading is accomplished with as great a velocity as that which experiments and celestial observations demand."

Answers:

1. Nicolaus Copernicus, De revolutionibus orbium coelestium. (1543)
2. Johann Kepler, Harmonice mundi (1619)
3. Christiaan Huygens, Traite de la lumiere (1678)
Illinois - Bart Benjamin

Adler Planetarium -- James Sweitzer reports that Adler premiered its newest planetarium program "Secrets of the Hidden Universe" on September 1st. Adler staff members are also revising a portion of its annual Christmas offering "Star of Wonder" for its upcoming winter showing.

Cernan Space Center -- Bart Benjamin reports that the Cernan Space Center will be showing "Australia: Land of the Southern Cross" beginning in mid-September. In October, the Cernan Center will be hosting a film series that highlights four classic science fiction films. Also planned for the fall is the installation of a video projector system and video recorder. As well as providing the Center with a host of new video capabilities, this equipment will allow the Cernan Center to serve as a teleconference receive site when used in conjunction with Triton College's television studio. In July, Phil Thistlethwaite, the Cernan Space Center's technician, was promoted to a full-time Space Center Assistant. This brings the number of staff members at the Cernan Center to 5 full-time and 8 part-time employees.

Crown Space Center -- Steve Bishop reports that over 1 million people have attended programs at the Henry Crown Space Center since it opened to the public. In August, the millionth visitor received a "One in a Million" weekend prize to Chicago's finest attractions. Its current Omnimax film, "Grand Canyon" will play through October 8th. Premiering on October 9th will be the Omnimax aerial extravaganza "Flyers."

Lakeview Planetarium -- The Lakeview Museum planetarium reports that its current program "Futurescapes" will play through November. On Friday, November 13th, Lakeview Museum will be sponsoring an evening of mystery in the museum. Beginning with the program "Futurescapes" in the Lakeview planetarium, "Murder in the Museum" will give mystery lovers an opportunity to "live" a mystery rather than just read about it. Currently in progress is the development of an in-house program entitled "Hawaii: Island Paradise" along with a museum-sponsored vacation to Hawaii as well.

Parkland College Planetarium -- Jim Manning reports that his staff is currently in the process of installing their Zeiss star projector and 35mm motion picture projector. A fall opening of the planetarium is still planned.

Indiana - Dan Goins

The Indiana group have offered to help the Williams' with work at the Merrillville meeting. Dave Parker, Jerry Mansfield, Dan Smith, Bob Ernst and Art Klinger met early in the summer at Merrillville and planned to return Sunday, September 20, to see what else they could do.

Dan Goins has a new home address, as of June: 60 Bailliere, Martinsville, IN 46151 (same phone).

The Indiana Astronomical Society is planning an Astrofest, similar to the Apollo Rendezvous in Ohio. Dan, who is the President of the Society, is a firm believer in planetarians being active in astronomical societies.

Michigan - Garry Beckstrom

At Cranbrook, Jeff Bass had a very busy summer giving "Death of the Dinosaurs." The planetarium presentation was coordinated with the presence of the Dynamation exhibit of dinosaurs, like the one that was at the Cleveland Museum of Natural History last spring. As in Cleveland, "They were swamped!"
Minnesota-Wisconsin - Dave DeRemer

Gary Sampson, Larry Mascotti, and Dave DeRemer were invited to Harvard University for a two-week seminar for high school astronomy teachers, given August 3-14. The program was excellent, and Indiana members with other GLPA members who attended will have a lot to say about it at the Merrillville conference.

Ohio - Dale Smith

The Cleveland Museum of Natural History has a new Foucault Pendulum, located where GLPA had its pre-dinner reception, near the outside court and stairs. Joe DeRocher and Clyde Simpson will hold an official dedication ceremony on September 22.

The sixty-story height for snowball rolling at the Ohio Youngstown meeting in the spring should be corrected to six stories!

The Cleveland Regional Association of Planetarians will meet September 24 at the Lake Erie Nature and Science Center, Bay Village, OH. hosted by Bill Kobel, Director.

At Bowling Green, a course using the Humanities and the Stars programs will be jointly taught by Dale Smith and a humanities instructor. The interdisciplinary class will offer 2 credits. Bowling Green installed a patch bay for its Omni-Q slide system this summer so no programs were given.

GLPA News from other members

Mitch Luman - Evansville Museum of Arts and Science, Indiana

I would like very much to become active in GLPA again after a five-year hiatus. I gave up my position as editor of The Plains Planetaria earlier in the year. I made quite a bunch of friends in GPPA and they always will be very special to me. But now I'm ready to renew participation in GLPA activities.

It's wonderful that Indianapolis will be receiving a large planetarium soon, long overdue in my opinion. With the support of the Children's Museum, a Digistar should be a boon to the public and to the schools that utilize the facility.

Bob Gardner - 1249 Vey St. Maumee OH 43537

We folks in Toledo have a problem that GLPA members might solve.

The Observatory at Rogers High School has been broken into and vandalized several times the last couple of years. The 8-inch Criterion has had the primary mirror, finder scope and four eyepieces taken and the tube smashed with a hammer. The 4-inch tracking scope had the objective smashed and the finder scope and eyepiece taken. The 16-inch, Group 128 had the finder scope, four eyepieces, two Bodine motors and the electronics board with its guide paddle taken. Also missing is a 4x5 plate camera for the 16-inch.

Group 128 provided a user's manual with each telescope. The manual also contained an itemized parts list with the manufacturer. The Manual at Rogers High School cannot be located.

Rick Shea, a new GLPA member last year, has been newly appointed to take over the Rogers planetarium and observatory program. He needs our help.

Do any of our members know the location of another Group 128 telescope where we might get a copy of the parts list for Richard? Thanks for your help.

Wes Orloff - Euclid Public Schools, Ohio

I have some disappointing news. Companies that were to manufacture and coat Lumaline bulbs, described in the last two issues of the GLPA Newsletter, went...
out of business over the summer (both plants in Ohio). Now it is uncertain if and how the lamps that GE thought they could make for us in a large batch could be produced. I received letters from people across the country. It is good to know that Spitz can still offer needed lamps at a reasonable price (see below).

George Reed - Spitz Space Systems, PA.

There has been a lot of discussion lately about the lumiline lamps used in Spitz coves. It should be known that Spitz is not in the lamp business. Lumiline lamps are carried and sold as a service to Spitz installations, at well below the standard mark-up.

Spitz, Ins. provides lumiline lamps at a cost of $7.72 each, in case lots of 24. The cost of color sheaths is $3.00 each, with a discount for quantity orders.

Anyone contemplating the acquisition of large numbers of lamps with the intention of long period storage should be aware that lumiline lamps have a limited shelf life.

****************

I.P.S. Report.......Sheldon Schafer, IPS Representative

The IPS council met June 7, 1987 in Cocoa, Florida. Membership is currently at 320 individuals and 35 institutions. Since this is an off year, membership is down. To encourage membership in off years, a two-year membership rate of $62.00 (USD) was passed. The one year fee of $34.00 was retained. Three additional persons were approved as "Fellows of IPS": H. Richard Calvird, David Hoffman, and Donald E. Tuttle. Nomination forms for "Fellow of IPS", plus a list of all recipients will be published in a future issue of The Planetarian.

IPS Publications for the year will consist of The Planetarian, 27 Steps to the Universe, and The IPS Directory (soon to be released). The IPS council also passed a motion to participate in the sponsorship of the ASP/AAS/CAS Teachers' Newsletter, "The Universe in the Classroom", provided that all IPS members receive the newsletter, that IPS information be published once a year, and that the contribution encourage wider international distribution. Part of the Armand Spitz Fund will be used for this project.

Jordan Marche' was appointed Chair of the Public Program/Script Contest Committee, the contest to be funded by the Eugenides Foundation of Greece. Details will be forthcoming in a future issue of the Planetarian.

The 1988 meeting in Richmond will be held June 29 - July 4. The Marriott will be the Conference Hotel ($67.00/night, 1-4 persons). A limited number of nonair-conditioned college dorm rooms will be available.

Plans are progressing well for the 1990 conference in Borlange, Sweden, July 15-19, with an optional four day luxury ferry trip to Helsinki to view the July 22 total solar eclipse. Borlange is approximately 200 km northwest of Stockholm, where we will be hosted by the Dalarnas Museum & Kosmorama Space Center. Much of the planning was described in the April issue of The Planetarian. Anyone interested who didn't receive the issue should contact me for a copy of the article.

Invitations for the 1992 conference have been received from Salt Lake City and Edmonton. I will have informational packets from the host cities at the Merrillville meeting; if you are not planning to be there but would like more information or want to express your preference for a meeting site, contact me before the Richmond meeting.
ELECTION OF OFFICERS

The Nominating Committee respectfully submits to the membership the following candidates for office......Steve Bishop, Chairman

PRESIDENT ELECT: Robert Gardner
Dan Goins

SECRETARY/TREASURER David De Remer
David Parker

IPS. REPRESENTATIVE: Sheldon Schafer
April Whitt

CANDIDATE BACKGROUND INFORMATION:

Robert Gardner.....1249 Key St.; Maumee, OH 43537

Bob received his B.A. from Miami University in zoology, his M.S. in educational administration from Bowling Green State, and has had additional graduate courses at Michigan State, San Diego State, and Ohio State.

He has been a GLPA member for 22 years and has attended 20 conferences. He has served GLPA as conference planning chairperson for 8 years. His memberships include the Astronomical Society of the Pacific, Ohio Retired Teachers Association, American Astronomical Association, and the Ohio Academy of Sciences, which presented him with its outstanding science teacher award in 1966. Bob spent 36 years teaching high school biology and astronomy, and was Director of the Hedrick Planetarium at Rogers High School, Toledo, for 12 years. He also served as science department chairman for 4 years. Bob says,"GLPA is one of the few organizations where members are willing to surrender the precious gifts of their talents that others might be more successful. I would work hard to maintain the spirit and objectives the founding members created the organization to accomplish."

Dan Goins......Director, Martinsville High School Planetarium, 1360 E. Gray St., Martinsville, IN. 46151

Dan has been a GLPA member for 10 years. He received his B.S. and M.A. from Ball State University, Muncie, IN. He served on the GLPA nominating committee several years ago. He is a member of I.P.S., National Education Association, Indiana State Teachers Association, and the Indiana Astronomical Society, an organization with about 200 members of which Dan is President. Dan has taught middle school science for 11 years and has been Planetarium Director for 8 years. He has twice been named science teacher of the year at Martinsville High School. Dan says, "It is an honor to be asked to run for GLPA President. This is a very good group of people doing a very good job in astronomy education. I look forward to working with the leadership. I will do my best to live and work up to the high standards of GLPA."

David DeRemer....Director, Horwitz Planetarium, Waukesha Public Schools, 222 Maple Avenue, Waukesha, WI 53186.

Dave has been a GLPA member for 10 years. He received his B.S. degree in science/secondary education and biology from the Univ. of Wisconsin, Lacrosse, and he is currently working on an M.A. at the U.W., Milwaukee. He was co-host for the 1984 GLPA conference and is currently GLPA Regional Chairperson for Wisconsin and Minnesota. He is a member of I.P.S., The Planetary Society, Weir Astronomical Society, and the Milwaukee Astronomical Society. Dave is a GLPA Fellow and he was selected as Employee of the Month, Waukesha Schools, in December, 1986. Dave also holds the distinction of being Wisconsin State Frisbee Freestyle Champion for 1980, 1982, 1983, and 1985. Dave says, "Over the years I have greatly enjoyed sharing astronomy education techniques and friendship with the members of GLPA. I would be honored to continue to serve as GLPA Secretary/Treasurer."
David E. Parker......Director, Tipton Planetarium: 817 South Main St.
Tipton, IN 46072

Dave has been a GLPA member for 15 years. He has a B.S. and M.S. in earth science with additional graduate work in geoscience. Dave has served GLPA as instructional materials co-chairman for three years, secretary/treasurer for seven years, and co-edited TIPS booklets #8, #9, and #10. He is a member of IPS. He says, "I believe that timely and accurate correspondence with individual members is important. The secretary/treasurer should also strive to keep the membership well-informed."

Sheldon Schafer..... Director, Lakeview Museum Planetarium; 1125 W. Lake;
Peoria, Ill. 61614.

Sheldon has been a GLPA member for 11 years. He earned his B.S. in astronomy at Ohio State University and his M.S. in science/planetarium education at Wagner College. He has served GLPA as president in 1984-85 and as IPS representative 1986-87. Sheldon is a member of IPS, Association of Astronomy Educators, Planetary Society, and National Science Teacher's Association, an organization which awarded him their "Star" award in 1987. He says, "Communication is a key word in our profession, both to our audiences and amongst ourselves. My commitment as IPS representative is to assure that IPS continues to be an effective international communications medium through its conferences and publications, serving the planetarium professional to the fullest potential."

April S. Whitt....The Adler Planetarium, 1300 S. Lake Shore Drive, Chicago,
Ill. 60615.

April has been a GLPA member for 2 years. She earned her B.Ed. in elementary education at SUNY-Fredonia, and her M.Ed. in planetarium administration and education at the University of North Carolina at Chapel Hill through a Morehead Fellowship. April has presented papers at annual conferences, and is currently editing another IPS booklet. She is a member of MAPS, IPS, NSTA, and AAE. In 1983 April edited Advances in Astronautical Sciences, Vol. 53 (space manufacturing). She says, "I'd be honored and delighted to serve the GLPA membership as IPS representative!"

RIDDLES:

Tell me how fast light travels.
Answer: The same speed slow light travels.

What's different between the moon and the sun?
Answer: They're as different as night and day.

If the sun were famous, where would it be celebrated?
Answer: In the Hall of Flame.

What's another name for an astronaut?
Answer: A night watchman.

Which is heavier, a quarter or a full moon?
Answer: Quarter...a full is lighter.

What did the planetarium lecturer say when asked about unidentified flying objects?
Answer: No comet.

Why will we never see a full moon again?
Answer: Apollo astronauts brought some of it back to Earth.

See the book Astronauts: Space Jokes and Riddles, Compiled by Charles Keller, 1985, Prentice-Hall, for many such items. I'm sure GLPA members could compile a new collection!
Panel Discussion - What are the Characteristics of a Good Planetarium Program?

Last month this panel discussion opened with comments from Bob Ernst of Michawaka, IN. This month we continue with statements from five other planetarians. We begin with Mitch Luman, whose ideas on school program ideas agree well with those of Bob Ernst.

Mitch Luman...Koch Science Center and Planetarium, Evansville, IN 47713

I think that the way people view the qualities of a good planetarium show depends largely on the type of environment (museum-vs-school) in which they practice their trade. I have found widely differing views among planetarians, some have been personal, but most are a clear indication to me of their environment. In any event, all planetarium educators must eventually come to grips with their philosophy on the subject, whether consciously or not.

School shows should fit the curriculum of the particular school whenever possible. While not practical in every case, most planetarians know what is being taught in the schools and what is not. When in doubt, I always ask the teacher before a visit or at least before the start of the program. Most of my teachers (who work without any approved astronomy curriculum at the primary level) leave my program content up to my discretion.

Taped shows are fine for older students, but nothing beats a good live show. When you can tailor a live show to the needs of the day and the moment, ideas can be exchanged, new copies can be explored and situations can be taken advantage of immediately. These things are logistically not possible with a taped program. School shows should serve to excite and inspire children to want to learn more, not attempt to explain everything under the sun. Rapport should not be ignored when presenting programs. Every attempt should be made to establish good rapport with the students. I am a firm believer in inspiring children first and teaching them second. With knowledge and enthusiasm, I hope to create meaningful experiences for my school audiences.

Often when trying to balance content, educational value, and entertainment in a public show, it suffers from the monster of length. Nothing is worse than a show where the audience wants nothing more than to have the show end. In nearly every case, I've found purchased and distributed programs to be excessive in length. My biggest problem with Hansen Planetarium shows is that they tend to be too long. I cut all my Hansen shows for that reason. A good planetarium show should be no longer than 35 minutes. My public audiences feel that they get "their money's worth" in shows as short as 25 minutes.

The best public shows are those that you produce yourself. Given adequate production facilities and the availability of time, you can't argue with a well written, home-made public show. Do what your planetarium does best. Incorporate your special effects. Use your star projector (all planetarium's have one!) and don't try to sell me your show unless it's less than 35 minutes long!

Richard J. Speir...Sandusky Area Supplementary Educational Center, Sandusky, OH 44870

Live shows or taped? Every planetarian has an opinion on this matter. Twenty years ago I attended a show at the Abrams Planetarium at Michigan State where a witty and entertaining lecturer charmed his audience with an all-live presentation. Today, however, with our major planetariums stepped in high tech, I think I would feel cheated if I traveled some distance, as I once did, to the Strasenburgh in Rochester, only to hear a live lecturer.

I guess I like both delivery systems, and in my small half-time operation, I try to have a program that provides the variety that a taped program can offer - music, sound effects, a story line, some humor and surprises -
along with the personal touch that only a live presenter can give.

The Hansen Planetarium has gained a high reputation producing shows which in my opinion are not only superbly written but have equally high quality art work and sound tracks plus the fact that they are within the budget of the small planetarium and can be presented with modest auxiliary equipment.

I don't like my programs to run over an hour and so if I use a Hansen-type show, I edit it down to 30 to 40 minutes so that I have at least 15 minutes to talk to the audience and give them the "latest" in the night sky. No matter how good a canned show is, my audience doesn't think they've had "their money's worth" if I don't show them the Big Dipper again and where the planets are, and where they're going. And so they always get "their money's worth" - since my shows are free!

(Ed. Note: Dick says he is "off to Soviet Land Sept. 16 - Oct. 1. Da Swidahniya (good-bye)." He should have some interesting stories to relate at the Merrillville conference.)

Carl J. Wenning.....Illinois State University, Normal, IL 61761

I feel that it's impossible to present a really exciting and informative planetarium lesson without first knowing something about the audience. A knowledge of grade level, abilities, and interests is paramount to presenting the proper program to the audience. The persons visiting the planetarium have come for a certain reason. Without knowing and responding to that reason one's program can be less than useful. With the general public, determining their wants and needs in advance can be difficult.

The classroom audience can be managed with pre-visit unit activities which both serve to ascertain and establish certain needs. Whether working in a "live" or "taped" medium, the instructional value of a lesson can be enhanced to properly determining, establishing, and managing class needs. A teacher's guide can come to the rescue by providing activities that relate directly to what will be happening in the planetarium presentation.

All of our planetarium lessons are thematic. We either deal with the sky tonight, solar system, the galaxy, the dinosaurs, etc......However, every one of these programs includes at least a short introduction to the starry night sky. A planetarium visit that does not take advantage of the magnificent capacity of the instrument to exhibit the beauty of the night sky is incomplete.

One would be doing a disservice not to explain the geography of the heavens and not mention the fact that everyone is being robbed of one of the most beautiful sights in nature by way of light pollution. A view of a pristine night sky seems to lift one upward to a higher plane of thought and appreciation. Some of the greatest minds in the history of science have commented that their thoughts were elevated by sights of the night. How unfortunate that only a handful of kids can recognize the Milky Way. How many minds are destined to a moribund intellectual existence for lack of inspiration.

With adult and/or public show audiences I frequently discuss the question of the form of earth, the motion of the earth, etc. I ask audience members how they know that the earth is "round" or that it spins daily and orbits yearly. What proof do they have? For most I find that it boils down to (and they often say it themselves) faith--Faith in a book, faith in a teacher. But that's not how science works. Scientists do not rely on anyone's authority for facts. If we want to know about nature, we question nature. I often take the opportunity to allow the audience arrive at some sort of scientific conclusion. I usually put them on the spot...and in a few minutes we usually come up with one or another valid proof.

Interaction is the key word in any planetarium presentation. Planetarium visitors should not sit passively...this is how the live presentation has the advantage over the taped program. I rarely tell the visitors the directions.
We discuss how, from the audience's experience, the sun appears to move across the sky by day. We then watch the motion of the sun, and from that we determine the directions.

By night (and before I fill the visitors' minds with the traditional images of the constellations) I allow each of them to find their own constellations. I stress the fact that one can enjoy sky watching without knowing the constellations. To help younger children (concrete reasoners) visualize the heavens I share stuffed animals and project shadows of these on the heavens with a flashlight. Adults (who are more formal reasoners) don't need to see patterns in the sky but are always informed that the constellations don't necessarily reflect the image of the character so formed but, rather, serve as a reminder. For instance, the George Washington monument in Washington, D.C. looks nothing like a man. However, upon seeing it we are reminded of the man and his great deeds. This analogy can be transferred to the stars. Every time we see the jumbled stars of Lyra, we can be reminded of the story of Orpheus and Euridice from Greek Mythology.

During any live portion of my planetarium lesson there is a constant lively chatter between the lecturer and the audience. By making a planetarium lesson a meaningful two-way flow of information, the audience learns from the lecturer and the lecturer from the audience. It is very important for the lecturer to determine whether or not he or she is making progress in satisfying those needs that were established while planning for the visit. This is the role that interaction can accomplish admirably in the course of a planetarium lesson.

Dayle Brown...Hudson Lake Planetarium, South Bend, IN 46637

The purpose of a planetarium program is twofold: to educate and to instill a sense of wonder. To accomplish both goals there are four crucial ingredients to consider. If any are omitted or slighted the program will have failed. The important ingredients of a good planetarium program are the audience, the instructor, the content, and the magic.

The audience for a program determines the amount and balance of content with magic. Programs designed for school groups should weigh heavier on the side of content. Participatory or laboratory types of programs insure better rates of learning. However, the program which allows a student to leave the planetarium without a gasp or an awestruck exclamation hasn't served its purpose. Public shows can lean more into the magical realm. They can and should dazzle the audience with the grandeur of the universe and its workings. Content can't be ignored here either. Audiences come to a planetarium to learn something: otherwise they'd go to the movies.

In a school setting, it's the instructor who determined the success or failure of a program. The instructor selects the method for presenting the content and adding the magic. The method of presentation--be it live ("live shows" have a different meaning in Norway!), taped, or a mixture of the two--doesn't matter as much as the instructor's enthusiasm and ability to communicate his/her enthusiasm to the students. The "instructor" in a public show is still the key figure. Sometimes, however, this person is behind the scenes or is made up of a team of individuals who pool their talents and abilities to procure a miraculous combination of sights and sounds. The person at the console becomes the "instructor" for the audience. He/she regarded as the expert and should exhibit all the enthusiasm needed in any good learning environment.

The content areas for a planetarium program are too varied and numerous to get into here. "Everything relates to astronomy," I heard somewhere. It's true!

And finally, magic. It has to be there...but it doesn't have to be fancy. I've been dazzled by some pretty spectacular stuff (and want to build some of my own!), and yet a pure and twinkling starfield, all by itself, still manages to turn me on. I've heard folks draw in a deep breath, hold it, and
then exhale with a small sound of pure pleasure when the lights go down. Yep, magic.

This year I begin. For now I speak with all the authority of a student. I've listened to the best planetarians from all over the country, heard the debates, and formed my conclusions. Next year maybe I'll really know what I'm talking about.

(Ed. Note: Dayle expresses her view after attending two summer institutes at Spitz and a workshop at the Bishop Planetarium... as well as attending GLPA meetings and other institutes. This year she will open a new school planetarium organized with lots of her hard work and determination, and assistance from GLPA members. See her enthusiastic letter in the last issue of the GLPA Newsletter.)

Don Tuttle... Past Director of the Elgin Planetarium/Observatory, (1986 Armand Spitz Lecturer) Elgin, Ill. 60120

(Ed. Note: At my request, Don went back over his Spitz address to glean the following philosophy on what makes a good program.)

If our objective is to inform as well as entertain, we should always narrate what the viewer is watching. Just offering music to supplement the planetarium sky may be entertaining, but it may also represent negative learning.

Let the planetarium, and what it can best help present, be front stage center for at least 25% of each presentation. Using the planetarium sky as nothing more than background gives the impression that it is being used because it is there but really isn't necessary.

Everything we do and say should be as academically accurate as is known to current scientific knowledge and theory. For example, never run daily motion backward unless the reason is explained to the audience.

Use the most accepted pronunciations of astronomical names and terms.

Are there different views? Strong agreements? Disagreements? Share your ideas in future GLPA issues, at conferences, in the Planetarian. Thanks to Bob, Mitch, Dick, Carl, Dayle, and Don for sharing theirs.

************************

Carl Sagan spoke to a crowd of about 10,000 at the March, 1987, Meeting in Washington, D.C. He noted that science and technology are changing this planet in time scales of decades. Politicians start projects with results not felt within their terms of office, so accountability for poor stewardship is minimal. Science educators have the opportunity to influence people who will be in control in a very big way. Sagan thinks that people should learn issues and decision-making; they should learn the interrelationship of nations and the oneness of humanity.

************************

From: The Light Stuff-Space Humor from Sputnik to Shuttle. by Bob Ward....

A used car dealer in New Orleans wrote NASA after the first lunar rover was used and left on the moon that he would like to buy the vehicle. The dealer contacted a "worldwide mover" for an estimate of cost, when NASA said he could have it if only he would handle the small matter of delivery. The moving company responded, "We are currently preparing an estimate for return shipment. However, we beg to inform you we have encountered a slight delay. Our computers have encountered a mild lunar occultation, complicated by moon-dust and moonbeams." Needless to say, everyone is still waiting on those computers.
Meetings, Etc.

A joint PPA/RMPA meeting will be held in Reno, Nevada, October 15-17, 1987. For information contact Art Johnson in Reno at 702-784-4812.

The PPA Newsletter notes that Tom Tsung (UTI, 7460 Girard Ave., #16, La Jolla, CA 92037) is coordinating a trip to China during mid or late June, 1989. Among the points of interest are the Great Wall, Terra Cotta Excavations, and the Jiling meteorite in the Northeast. If interested, contact Tom.

Ted Pedas is coordinator of Mayan Astronomy Cruises in 1988: "Mayan Temples and Monuments", January 16-30; "Mayan Equinox", March 16-26; and "Mayan Discovery (Easter), March 26-April 5. Ted has expertly organized many cruises with astronomical emphasis, and these promise to be excellent as well. Contact: Sun Line Cruises, One Rockefeller Plaza, New York, NY. 10020 (800-872-6400).

Dale Etheridge has invited colleagues to a Cinema-360 User meeting October 12-14, 1987. The meeting will precede the Reno conference and is open to all users and potential users. Contact Dale at Clark County Community College, 3200 E. Cheyenne Ave., North Las Vegas, NV. 89030. Registration fee: $30 until October 3, then $40.

A Conference sponsored by NASA-Lewis Educational Services (Lynn Bondurant, Chief) "Challenges for Tomorrow's Schools: A Perspective from Space" will be given at Kennedy Space Center and the Walt Disney World/Epcot Saturday, October 24-Wednesday, October 28, 1987, overlapping slightly with the annual GLPA conference. Registration excluding air fare is $295, which includes a double room, local transportation, tours, and some meals. Contact Judith Budd, Educational Services Office, Mail Stop 7-4, NASA Lewis Research Center, 21000 Brookpark Road, Cleveland, OH 44135 (216-433-5580).

The National Science Teachers Association will hold 1987 Area Conventions in Pittsburgh (November 5-7), San Antonio, TX (November 19-21) and Miami Beach (October 15-17). Contact NSTA, 1742 Connecticut Ave., NW., Washington, D.C. 20009.

Job Openings

A reminder...Don Hall at Strasenburgh is the best person to contact with and for planetarium positions. Don has performed this service for IPS for many years.

I have received requests to place notice of the following positions in this issue....(ed.)

The J.M. McDonald Planetarium, Hastings Museum is searching for a planetarium director, request letter dates August 19. The planetarium contains a Minolta MS-8 Star Projector, panorama system, and many other special effects. There is seating for 55 under a 24-foot dome. The theater attaches to a new office with show production area and darkroom facilities. Daily programs are given to the public and schools. The director is responsible for all facets of operation, as well as supervision of part-time staff and some volunteers. The salary will start at $1,420/month with a plan for a raise after six months. The candidate must have a degree in astronomy, education, or a related field and at least a year of planetarium experience. Excellent speaking and writing skills are required as well. Send a letter of application, resume, and three professional references to: Ed Bisaillon, Director, Hastings Museum, 1330 N. Burlington Avenue, Hastings, NE 68901 (402-461-2399).

The Davis Planetarium, Maryland Science Center, is searching for an assistant producer. Jim Leary informed me of this in early September, as this newsletter was going to press. The planetarium and IMAX theater (under planetarium administration) are part of the three-floor multi-exhibit facility visited by IPS members attending the Washington, D.C. conference in 1978,
now on the busy Inner Harbor across from the National Aquarium. The assis­tant producer takes part in all aspects of planetarium production and presenta­tion—research, writing, and general audio-visual responsibilities. This person also presents, in rotation with other staff members, live astronomy pro­grams to visiting school groups. The candidate must have a working knowledge of astronomy, some planetarium experience, and a bachelor's degree. Send a letter of application and resume immediately to: Personnel, Maryland Science Center, 601 Light Street, Baltimore, MD 21230.

The (new) Taylor Planetarium, Museum of the Rockies, is searching for a "highly motivated and experienced individual to shape and direct the new Taylor planetarium and its entire set of programs." This 100-seat facility will have a 40-foot dome and a Digistar. The planetarium is under the directorship of the Museum of the Rockies, which is a university-community regional museum with a private board of trustees. Bozeman is a community of 30,000 in a scenic mountain valley served by a major airport and I-90. The candidate should have a master's degree in astronomy or a related field and 3 years of experience in planetarium work, 1 of which must have been in a supervisory capacity. Preferred qualifications: excellent verbal and written communication skills with budget and grant-writing experience. For application information and a packet of relevant information write: Michael W. Hager, Museum of the Rockies, Montana State University, Bozeman, MT 59717 (406-994-2251).

***************

New Resources

School curriculum materials for eight of the twelve Humanities and the Stars planetarium programs are now available from Eileen Starr, Project Director, Eastern Washington University, 300 Patterson Hall, Cheney, WA. 99004 (509-359-6391) The total cost for Teacher and Student packets is $96, $12/set. No slides or tapes are included. Shipping is $8.00.

Pacific Drum has produced a way to "blow up the world...peacefully." They now carry the Whole-Earth ball, an inflatable 16" world with artist's rendition of the Earth as seen from space. A single model is $8.95; a dozen for $54.00 + $2.70 shipping.

***************

Patrick So........Adler Planetarium, Chicago

At noon on June 13th, the Adler Planetarium was proud to present prizes for winners of its Sky-Eye coloring contest. Sky-Eye was a children's sky show presented at 10 a.m. Saturdays through July 25. It was recommended for children six and younger.

As interns of the Adler Planetarium, my co-worker Larry Berz and myself were assigned the writing of the show under the guidance of Assistant Astronomer April Whitt. Writing a children's show to explain galaxies and nebulae was not as simple as we thought it would be. The show writing and production gave us a chance to learn procedures involved.

In the program the children learned how to tell directions by observing the sun's movement. As day turns into night, some of the important Chicago summer constellations were pointed out. Appearing suddenly in the dark sky is the star of the show, a friendly space creature called "Sky Eye". He invites the children to fly back to his planet. On the way, the children used pretend telescopes to see images of star clusters, nebulae, galaxies, and view of the Earth from outer space. On Sky-Eye's planet, called Schrillich 7 he points out some of his constellations and shows that the essentials for life there are the same as on Earth. Finally Sky-Eye takes the children back to Chicago just in time for them to see the sunrise.

What do you think? This was the first time I ever wrote a children's show. I hope it won't be the last. My internship finished on June 30. If there are any planetarium directors out there who are hiring staff, please get in touch with me at Adler.
THE GREAT LAKES PLANETARIUM ASSOCIATION offers membership opportunities to all individuals in any way connected with the operation of planetariums regardless of geographical location. G.L.P.A. is an affiliate of the International Planetarium Society, and the National Science Teachers Association. Membership dues are $13 annually, payable at the time of the Autumnal Equinox. General correspondence and requests for membership should be addressed to: Mr. David E. Parker (address below).

This quarterly "GLPA Newsletter" is received by all members in good standing. Ideas and opinions expressed in this newsletter are not necessarily those of GLPA, its membership, or the Editor. Deadlines for contributions fall on the 15th of February, May, August, and November. Send information to: Jeanne Bishop, for the Winter Solstice issue only. A new editor will be announced in the Winter issue.
Bob Ernst and Dave Parker discuss the progress of a rotating cloud projector with workshop chairman, Carl Wennig.

Joe DeKocher and Bill Kobel look over slides in the GLPA bank.

Jayne Brown describes how she and her sixth grade students constructed their own dome.

Next Annual Conference:
October 19-22, 1988
Bowling Green Univ.
Bowling Green, Ohio

Sheldon Jaffee stands beside the compact traveling library of elementary astronomy books after his paper discussing the project.
President's Message......Gary Tomlinson

Well, the 23rd Great Lakes Planetarium Association conference is history (see the convention report elsewhere in this newsletter). Gregg and Barbara Williams did a splendid job and are even still talking to each other!

As all the convention delegates know, the ASCAP negotiations fell through. One of the primary reasons for this was that ASCAP does not have the rights to grant a license for synchronization (i.e. using music behind narration). I will write a letter to ASCAP suggesting to them that they devise some method to allow us to pay an annual fee for synchronization rights. In the mean time, Robert C. Elliott is chairing a committee, to get from our membership, a list of most desired music to use behind narration. This committee will then approach the individual right holders for their music to work out some type of easy permission process, either as a group or individual. Look for an announcement in the Newsletter of how and when you can help.

On the plus side, GLPA was given permission to use the "Just Say No" symbols in our domes. I hope that everyone will take advantage of this opportunity.

Gregg and Barbara Williams will be taking over as chairpersons of the conference planning committee next spring. Bart Benjamin will become Newsletter Editor. We owe Bob Gardner and Jeanne Bishop an extreme amount of gratitude for their management of these positions. We owe the same to Editors of two new GLPA publications--Bart Benjamin for the 1985 Proceedings and April Whitte for the Poetry Tips Booklet, #13 in the "Tips" series. If you do not have copies of these new publications, let Dave Parker know.

My term of office is winding down. I want to thank members of GLPA for having the confidence in me to allow me to serve as President. The tenure has been one of the top three highlights of my life. Thank you all. In case you think that now I have nothing to do, I am revising the GLPA Handbook--again! I want to get it right before I leave office. See you at Bowling Green.

[Image of President-elect Steve Bishop with President Gary Tomlinson.]

[Image of Gregg and Barb Williams standing against the mural in the hall near the Merrillville Planetarium.]

Conference Co-Chairpersons
Editor's Notes

It was great to see so many members in Merrillville. The papers and workshops were exceptional. We were inspired to explore new horizons and make the most of the special opportunities we have as planetarium educators.

Although there are many new things I wish to attempt, there is one project I am completing...the Editor position of the GLPA Newsletter. I am extremely pleased that President-Elect Steve Bishop, with President Gary Tomlinson's approval, has appointed Bart Benjamin to be the new Newsletter Editor. Bart's first issue will be sent at the Spring Equinox, as Steve becomes President. Please send news and ideas to Bart Benjamin at Triton College (address on issue back). I hope that you will support Bart in producing a newsletter that reflects the many activities, opinions, and creativity of our large membership. I thank the many people who have sent me news and ideas during the last two years. Without them, our newsletter would have amounted to little.

I particularly want to acknowledge the work and support of Nancy Franklin and Gary Kutina at Elgin Planetarium and Observatory. Nancy takes my sheaf of pages and re-types them; she takes my photographs and reduces them. Then she integrates all sections to make the most of paper, helping GLPA save money. Finally, she stampa and mail the issues, all first-class; and she does everything within a couple of weeks of receiving information from me. Nancy began publishing the Newsletter many years ago and many Editors ago, when Don Tuttle was Director at Elgin. At some point in the near future, GLPA may enter the desktop publishing scene. However, the type of work Nancy has done and still does has made our Newsletter a reality for most years of GLPA's existence. Thank you, Nancy. And thank you, Gary--current director at Elgin, and Don, and the Elgin School District.

I also want to share appreciation of what I have seen Gary Tomlinson do the GLPA during his tenure as President. With some requested help from the Executive Board, especially Secretary-Treasurer Dave Parker, Gary has done the yeoman's share of work in bringing into existence an Executive Committee Handbook. Ask a board member to see a copy of this some-100-page accomplishment at the next GLPA meeting. Gary has pushed it through not just one stage, but at least two, and in some areas, three, in a very brief time. The thought, detail, and examples that fill this book will be a strength to GLPA for many years to come. No other regional planetarium organization (to my knowledge) and not even IPS has such a complete list of spelled-out duties, guidelines, and gathered experience. It defines our organization, and yet, Gary is quick to point out, "It is a working document, and changes are not difficult to make." For this--and your other contributions--thank you, Gary, from all of us.

And now, I'd like to adopt some words of that famous author, "Anonymous," as I pass on the Newsletter editorship to Bart Benjamin:

My wish to each and every one of you...
May the future glow like dawn before you,
May the past be a source of understanding;
And may you always live in the present moment,
aware and awake to its possibilities.
And my thanks...
Your life has touched mine -- I have grown.

Happy Holidays!

Jeanne Bishop
CALL TO ORDER -- President Gary E. Tomlinson called the meeting to order at 9:36 A.M.

MINUTES -- David Debruyn moved that the minutes as published in the NEWSLETTER be accepted as printed. The motion was seconded by Carl Wenning. Motion carried.

TREASURER'S REPORT --

BEGINNING BALANCE OCTOBER 1, 1986 2715.42

Receipts:
GLPA dues 2587.00
1986 annual conference 1800.51
Conf. advance repayment 834.00
Savings interest 229.39
Donation 100.00
Publications 4.77
Checking Account Interest 52.66
Total Receipts 5608.33 --> +5608.33

Total Working Capital 8323.75

Disbursements:
Postage 401.60
Publications 180.00
Liability insurance 350.00
Phone calls 18.84
Newsletter 722.46
1987 & 1986 conferences 537.21
GLPA supplies 335.60
Executive Committee travel 251.82
Treasurer bond 50.00
Non-profit filing fee 10.00
Total Disbursements 2857.53 --> -2857.53

ENDING BALANCE SEPTEMBER 30, 1987 5466.22

Dan Goins made a motion to accept the treasurer's report. Seconded by Gloria Rall. Motion carried.
ELECTION OF OFFICERS -- The nominating committee had announced the following nominees in the NEWSLETTER:

FOR PRESIDENT-ELECT:
Robert Gardner and Dan Goins

FOR SECRETARY/TREASURER:
David DeRemer and David Parker

FOR INTERNATIONAL PLANETARIIUM SOCIETY REPRESENTATIVE:
Sheldon Schafer and April Whitt

Steve Bishop, Chairperson of the nominating committee, announced that Bob Gardner has decided to withdraw his name from nomination as President-Elect. Bob, addressing the group, said that he felt badly about having to withdraw from the election. He mentioned that some physical problems may interfere with the performance of his duties. He felt that in two more years he may not have the drive and the purpose that the leader of this organization should have.

The ballots were distributed and nominations from the floor were entertained. Jon Marshall made a motion which was seconded that Dan Goins be selected unanimously as President-Elect. Motion carried.

Robert Elliott corrected the spelling of Sheldon Schafer's name on the ballot. There being no nominations, Bob Thomson moved that the nominations be closed. Motion carried.

The ballots were marked. The nominations committee compiled the ballots and the absentee ballots.

PRESIDENT'S REPORT -- Gary reported that in light of the numbers of students that visit our facilities every year and the positive impact that we can have on them, GLPA has applied for and received permission from the Just Say No Foundation to use their symbol in our planetariums. The symbol will be published in the NEWSLETTER and may be copied as we desire.

GLPA has been negotiating with ASCAP for several months in an attempt to get a license for music use by voluntarily participating members. Two points of information published in the NEWSLETTER needed to be corrected. (1) Gary had been told several times that synchronization rights (music behind narration) would be included in the license. The ASCAP representative finally told Gary that they cannot grant synchronization rights. (2) The fee for live performances in the chamber are not $5 per day but a minimum of $15 per day based on admission price and seating capacity. The standard fee charged for museum and planetariums to use seating, exit lobby, and show music (without narration) is $2 per day that the facility is open to the public. They do not charge for using music for school or classroom setting programs in which the public is not involved.

ASCAP was willing for GLPA to all the work of determining music use, number of days open to the public for each institution, collecting fees from participating members, and paying ASCAP, but they were not willing to give any discount to those participating members. Therefore, the negotiations did not produce an agreement.

Gary related incidents of a wide variety of charges being levied by various ASCAP representatives and warned people dealing with ASCAP to be sure that they were not being charged too much.

Mitch Luman asked how the money paid ASCAP is divided among the various performers. Gary said, as he understands it, ASCAP doesn’t
care what music you play, they just divide the money according to which performers get the most air time on the radio; 80% of the money going to ASCAP goes to the performers.

Steve Mitch asked if music can legally be played behind slides. Gary said yes, as long as there is no narration. ASCAP does not handle licensing of music behind narration. Jeff Bass said that a lot of the music we use is not even ASCAP music, but BMI. Sheldon Schafer noted that synchronization of music makes the music less prominent; therefore less valuable. The fees should then be less and maybe not worth trying to collect. Steve Bishop countered with the thought that using the music as an enhancement makes it more valuable and they don't want it tied to the same fee scale. Jeff Bass related that performers often want their music performed as a complete work, not excerpts or as background.

Greg Rawlings said that the ASCAP brochure mentions that licensing is not required for face-to-face teaching situations. Mitch Luman asked if the $2 per day charge applied throughout the museum and if you had to pay in advance or at the end of the year. Gary said yes, $2 per day, and ASCAP required advance payment with recalculation at the end of the year.

Bill Kobel said some music is public domain but still the rights to a particular recording may be held by different performers. Jon Marshall mentioned that many of us work for employers that have adopted official policy that all employees will comply with copyright laws. He asked if it is practical for us to comply literally with the laws in an everyday situation of presenting shows for the public. Sheldon noted that many of the shows we use for the public already have music that goes with the show. There are a couple of records through IPS that we have rights to use. There is Mark Petersen's music which can be purchased for use in the planetarium. Steve Mitch asked if IPS has done any work on this problem. Sheldon answered that IPS has found the same things that Gary has mentioned - that neither ASCAP nor BMI have the rights to grant that we require.

Jon Marshall asked if ASCAP will be pursuing individual planetariums for licensing. Gary said that ASCAP was aware of planetariums, but only the major institutions have been approached. Most colleges and universities have blanket licenses for music use. Gene Jenneman asked how radio and TV station deal with synchronization during commercials. Sheldon replied that they don't care about short cuts of minuscule value.

Bob Thomson mentioned that since some planetariums had been approached by ASCAP, GLPA members at the 1986 annual meeting asked a committee to look into the problem. He also said that it is our responsibility to respect and comply with all copyright laws.

Bob Elliott asked if someone could negotiate with a particular composer for a particular record that most of us use and see if we could get the rights to use the music. Sheldon said that we would be quite limited in the amount of music we would be able to use. He would rather see ASCAP develop a system for granting the rights for the kind of applications that we have. Jeff Bass mentioned that Davis Planetarium uses library music. Gene Jenneman encouraged planetarians to submit the kind of music that we ordinarily use, and from that evolve a music library for planetariums and then negotiate to get those titles as a library for planetarium use.

Dan Goins moved that we get a committee to work on getting the rights to the music that we normally use and like to use. Seconded by Joe DeRocher. Motion carried. The committee will be Bob Elliott,
chairperson, Gary Tomlinson, Jerry Mansfield, and Jeff Bass. The committee asked that lists of well-liked records be sent to Bob Elliott, L.E. Phillips Planetarium, University of Wisconsin - Eau Claire, Eau Claire, WI 54701.

Bart Benjamin asked that a list of music libraries be made available to the membership. Gary will have a list published in the NEWSLETTER. Mark Perkins asked if the committee would look into the possibility of negotiating directly with artists and producers. Steve Bishop mentioned that his institution has not been able to reach a satisfactory agreement with ASCAP but the museum sells record albums of the music they use. David DeBruyn noted that use of music is an important issue, but asked that, in view of the time, we move on to other topics.

ELECTION RESULTS -- Steve Bishop reported on the count of the ballots for the election of officers. The officers elected will take office on the Vernal Equinox, 1988. They are Dan Goins, President-Elect; David E. Parker, Secretary/Treasurer; and Sheldon Schafer, I.P.S. Representative.

Steve noted that Bob Thomson, chairperson of the Membership Committee; Rod Thompson, chairperson of the Education Committee; and Jerry Mansfield, chairperson of the Instructional Materials Committee, according to the by-laws, need to be confirmed by the members present at the conference to continue in their respective positions. David Hoffman moved that they be confirmed. Seconded by Gene Jenneman. Motion carried. Steve thanked them for their willingness to continue to serve GLPA.

CONFERENCE PLANNING -- Bob Gardner distributed conference evaluations forms for everyone to fill out. He announced that the 1988 conference would be October 19-22 at Bowling Green, Ohio, and the 1989 conference will be at Parkland Community College, Champaign, Illinois. There were 106 registrations for this conference. Bob said that he had received nothing but praise for this conference and he expressed his thanks to Barbara and Gregg Williams for their tremendous job with this conference.

STATE WORKSHOPS -- Gary asked that all state workshops dates, times, places, and other details be sent to Jeanne Bishop for publication in the NEWSLETTER.

MEMBERSHIP COMMITTEE -- Bob Thomson reported that for the year just ended we had 206 members. He asked that Honorary Life Member and Fellow of GLPA nominations be made to him directly or through the state chairpersons.

PUBLICATIONS COMMITTEE -- Jeanne thanked everyone who sent information to be published in the NEWSLETTER. She asked that everyone send or give her some information that is not well known about themselves. For example, an unusual hobby or a former job, which may be shared with colleagues in the NEWSLETTER. She also asked for ideas for lessons for specific age levels or planetariums programs.

There are two Proceedings in the works. Gary asked that all rough drafts transcribed from conference tapes be returned to David Hoffman as soon as possible.
INSTRUCTIONAL MATERIALS -- Jerry Mansfield reported that there are about 3100 slides in the slides bank. People that wish to order slides were asked to send their orders to Jerry at his planetarium. Jerry has a student that has videotaped the slides of the slide bank - about 4 seconds each - with slide numbers on the audio track. Jerry can send a copy of the tape to anyone who inquires. Jerry asked recipients of the NASA bibliography of "Software for Aerospace Education to please return the evaluation card. Jerry will be sending a release form to all who donated items to the instructional materials banks. Audio tapes that go along with program scripts and slides are kept with the slide bank. There is one video tape from IPS - the Evans and Sutherland demo of motions in space. Gary Sampson has the scripts and all other printed instructional materials. Gary asked the membership for new scripts donations to the GLPA script bank, as many of the ones that he has are somewhat dated. New scripts will be added to the bank and published in the NEWSLETTER. They should be sent to Gary Sampson, Planetarium Director, Wauwatosa West High School, 11400 West Center Street, Wauwatosa, WI 53222.

EDUCATION COMMITTEE -- Rod Thompson was not able to be at the conference. Gary reported that April Whitt has finished TIPS BOOKLET 13 - ASTRONOMICAL POEMS, which was distributed at the conference and will be mailed to members in good standing. Don Tuttle is working on a pronunciation guide.

INTERNATIONAL PLANETARIUM SOCIETY -- Sheldon Schafer's report of the last Council meeting was published in the NEWSLETTER. IPS is considering joining with the Astronomical Society of the Pacific for masthead status on the newsletter, "The Universe in the Classroom," which will put planetariums in a very visible place for tens of thousands of teachers around the U.S. The upcoming IPS conference will be Wed., June 29 to Mon., July 4, 1988, at The Universe in The Science Museum of Virginia in Richmond. In 1990 the conference will be in Borlange, Sweden, July 15-20, with an optional tour to Helsinki for the total solar eclipse which is scheduled to appear on July 22, 1990. Two locations which have invited the IPS conference for 1992 are Salt Lake City and Edmonton. Edmonton is supported by a world class museum and science center; Salt Lake City intends to have the conference up in the mountains at a ski resort during the summer. Sheldon took a straw poll of the GLPA members which indicated that most would prefer Edmonton. Jeanne noted that several people may have toured the Utah area during the recent conference in Tucson. Sheldon gave some 'ballpark' figures for expenses in Sweden. Hotel - 5 nights, 5 breakfasts, 5 dinners, single room for $200 per person (1986 U.S. dollars). Budget accomodations - 4 to 6 persons in apartment or rental condominiums within a few miles of the convention site for $73 per person for the four days. To Helsinki - outside 'A' level cabins for $235 per person, single; inside 'C' level cabins for $162 per person, single; 4 persons in inside 'C' level cabins for $97 per person. In Helsinki - $70 for hotel. Current airfare to Stockholm is much higher than to the mainland. Jeri Panek suggested Eurail passes as a good way to get around in Europe.

NEW BUSINESS -- Carl Wenning mentioned that over the years that he has been in the planetarium field he has seen a lot of bad things happen - programs cut, planetariums closed, etc. More recently he has been inspired by a success story within the ranks of GLPA. He said
that Dayle Brown, with her class-made dome and borrowed planetarium projector in the corner basement room of her school, has been a tremendous inspiration to him. He made a motion that the Executive Committee or its appointees write a letter of commendation to Dayle’s Superintendent with our congratulations and our good wishes for the future. Motion carried.

An announcement was made that Everett Q. Carr passed away this summer. The IPS PLANETARIAN will contain more information for those who are interested.

This being Gary’s last annual business meeting as President, he thanked the Executive Committee and the membership for their patience with him.

Gene Jenneman recognized Gary for his service to the organization and led everyone in a hearty round of applause in appreciation to him.

Mark Perkins moved that the meeting be adjourned. Seconded by David DeBruyn. Motion carried.

Respectfully submitted:

[Signature]

David E. Parker
GLPA Secretary/Treasurer

Bob Gardner, retiring from many years as GLPA Conference Planning Chairman, shows a big smile at the end of the end of the Merrillville Conference
Summary of the Minutes of the Executive Committee Meeting (Oct. 28-29, 1987) at Merrillville. Dave Parker prepared a wonderful set of minutes, as usual; but since there is much duplication with the general meeting minutes, I have selected only some items to include here. - Ed.

1. It was noted by President Gary Tomlinson that if a conference has excess funds or losses, that the GLPA treasury absorbs these.

2. A planetarium program being produced by 3-2-1 Contact will be made available to planetariums in general. Bill Gutch of Hayden reported this while saying that the "Wonderful Sky" program will not be available.

3. The Officers Handbook was updated and the revisions were adopted.

4. Bob Thomson, Membership Committee Chair, will be sending or coordinating the sending of letters of invitation to join GLPA to planetarians that are not currently members. State chairpersons will be updating lists of potential members in their regions.

5. Steve Bishop has made a study of problems that may be encountered if we accept corporate memberships and allow those members voting privileges. The IRS said that as long as the function and purpose of GLPA doesn't change, there should be no problem in admittance and permitting voting privileges. The Executive Committee will continue to explore price structure and benefit ideas and will discuss this issue again at the spring meeting.

6. Jeanné Bishop and Gary Tomlinson noted that the Publications Chairperson and the Newsletter Editor do not need to be and should not be the same person, as the Newsletter job has grown.

7. Dale Smith, Conference Host for the 1988 conference, distributed copies of a tentative schedule. The conference will be October 19-22, at Bowling Green, OH. The Holiday Inn is reserved for $44 per night for 1 to 4 persons. Since it saves transcription fees, there will be a discount of approximately $10 to conference registrants who prepare a printed copy of their talk for the proceedings.

8. If GLPA members supply their own film, copy price is 10¢ per slide; if Instructional Materials Chairman, Jerry Mansfield supplies the film, the price is 32¢ per slide, plus postage. Jerry is interested in obtaining a slide copier.

9. The Executive committee meeting was set for 10:00 on April 16, 1988, at Bowling Green.
The 23rd annual GLPA family reunion occurred in Merrillville, IN. from October 28-31, 1987. The conference was hosted by Gregg and Barbara Williams of the Merrillville Community Planetarium. Their efforts in planning and organizing the activities were obvious from start to finish.

The conference featured an expanded format for "hands-on" and "make and take" workshops. Each registrant was able to select up to four workshops from a menu of 11 delicious topics prepared by GLPA renouned master chefs and several highly skilled guest chefs. Persons who chose to visit with vendors or browse in the GLPA media library of 35mm slides, computer software, and lecture scripts were provided ample time to do so. Workshop participants built homemade cloud projectors and solid state control devices, repaired Ektographic projectors, and created slide masks using LPD4 photographic film. Other workshops permitted the participants to review the latest and greatest in curricula, materials and teaching techniques for astronomy education.

Nineteen papers of interest and value to planetarium professionals were presented. Of special interest was a panel discussion entitled "Religion and Astronomy in the Planetarium". The panel was moderated by Ms. Gale Carmona, Law Student and the panelists included Dr. Richard Busse, Theologian; Mr. Jon Costas, Attorney; Mr. Donald Hall, Planetarium Director; and Dr. Sherman Kanagy, Physics Professor. The discussion focused its attention on the "Star of Bethlehem" planetarium show as an example of a topic with the potential for overstepping the First Amendment guarantee of separation of church and state. Unfortunately the panelists, with the exception of Mr. Hall and Dr. Kanagy, had not attended a planetarium show on the topic and therefore had to glean its content from comments being made during the discussion. It was sometimes difficult for me to judge whether Dr. Kanagy was reporting facts or his opinions on the subject. Dr. Kanagy did administer a survey to GLPA members which may help him to assess a more factual reference basis on the state of current practice in the planetarium profession.

It became clear to anyone who listened to the discussion that a potential does exist for violating the First Amendment guarantee in this and numerous other topics presented in planetariums and public school classrooms. The extent to which planetariums are violating the First Amendment, as Dr. Kanagy suggested, they are, was not made clear during his presentation or the discussion and question sessions which followed. In conclusion the input from each of the panelists was appropriate and valuable to planetarium and science educators - we benefitted from the dialogue generated by a diversity of professional opinions.

Invited guest speakers and their topics included: Dr. Kerry Joels "The Planetarium and Space Science - Past, Present, and Future" and Dr. Peter R. Backus "The Search for Extraterrestrial Intelligence". Both persons had supurb and relevant presentations; we appreciated their contributions to our professional growth. Gregg Williams presented his public and school planetarium show, "Mercury: America's First Men in Space" which was an exceptionally good documentary on the American and Soviet space programs.*

The highlight of each GLPA family reunion is the annual Armand Spitz lecture, and this year's conference exemplified that tradition. We were privileged to be reunited with a family member who has not been with us for several years. Jack Spoehr is a planetarian of the first magnitude yet he has never directed or taught in his own planetarium. He has understood us individually and collectively - perhaps even better than we understand ourselves. Jack has been influential in the growth of our profession and the directions it has taken over these many years. Had it not been for Jack's talents and effort as a businessman with Spitz Space Systems, Inc. many of us would never have enjoyed the joys and rewards we have experienced as planetarium professionals. In this sense Jack has indirectly touched the hearts and souls and minds of many more children and adults than you and I.
The Armand Spitz lecture, "Some Reflections on Our Real Purposes", that Jack delivered was soft spoken, articulate and inspirational. He provided us with a sense of human values and purpose. It would be an injustice to attempt a summary of his address - you had to be there to experience and appreciate the moment. It will live forever in my mind. Thank you, Jack, and thanks again, Barbara and Gregg - the 1987 conference was exceptional.

Bob Thomson extends his point of view on the conference panel discussion beyond his conference highlights.

THE STAR OF BETHLEHEM Vs. THE U. S. CONSTITUTION

ARTICLE I

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

The "Star of Bethlehem" shows with which I am familiar are quite different in content than the images brought forth by their titles. The planetarium show is nothing other than a historical presentation of information about the culture and civilization at the time of the birth of Jesus. The show is a history lesson which teaches relevant astronomy concepts while demonstrating the thought processes required in formulating conclusions based on evidence. The traditional versions of the show conclude that there isn't enough evidence to make a scientific conclusion on the subject.

If a scientific conclusion were possible there would be no need to do the show in the first place! Planetarium educators then, in their desire to teach scientific literacy, have turned to a seasonal subject related to the history of a major religion to demonstrate scientific objectivity and end up in the middle of a controversy fed by innuendo and opinion.

The controversy occurs when critics who have never seen the show begin to "judge the book by its cover" and then jump to conclusions about the text without having read the book. This practice is the antithesis of the scientific literacy which responsible planetarium educators have been working so hard to establish for so many years.

On the other hand I acknowledge that the show could be produced or delivered in a manner which would clearly violate the first amendment guarantee of separation of church and state. A digression from a live lecture script might result in a lecturer's inadvertent statement of a personal opinion on a subject of faith. Such practices are correctly prohibited by the first amendment and they have no place in public instruction. I am not aware of any planetarium professionals who would or have crossed the line established by the first amendment intentionally, but, unintentional transgressions of the first amendment must be guarded against as well.

In my view, a digression from the program script which resulted in a lecturer's suggestion that one of the show's many hypotheses might be more reasonable than others would constitute a violation of scientific objectivity more than it would the first amendment. This, too, is important.
Heard at the Conference - Match Who with What was said. (Answers below)

1. George Reed.
2. Dave Hoffman
3. Jack Spoehr
4. Dan Goins
5. Dale Smith
6. Peter Backus (guest speaker)
7. Kerry Joels (guest speaker)
8. Don Hall
9. Gary Tomlinson
10. Don Tuttle
11. Bart Benjamin
12. Bob Elliott
13. Jim Severs
14. Armand Spitz (quoted by George Reed)
15. Kathy Michaels

a. "Twenty percent of the students surveyed before the college course thought both the U. S. and U.S.S.R. had send men to Mars.

b. "In a way we're like magicians...we build illusions, such as being suspended in space."

c. "Ninety-five percent of the pronunciations in my list are undisputed. Now consider yourself a member of a committee to fill in correct pronunciations of the other star names."

d. "For me, it's very impressive that one can go about anywhere in the country and see a good planetarium show."

e. "Yes, you can see galaxies, planets, and the moon as they are at the moment while seated in the planetarium chamber."

f. "It's amazing that important and credible companies can't get the Earth right side up in a photograph."

g. "The planetarium is the greatest single teaching instrument ever invented."

h. "One can put a slide in 8 different ways; 7 are wrong."

i. "Board, this sheet replaces the old updated version in your handbook."

j. "Poor writing most often is the result of the writer not knowing his objective."

k. "There is only one other place in the universe where we know that life has existed--for a short time...the moon."

l. "Love and respect should permeate our presentations. These are the most important aspects of our jobs."

m. "Even when things go good, they go bad."

n. "In writing 'Horoscopes to Telescopes' no one on our staff knew diddlyswat about astrology; we got an astrologer to help us."

o. "When your protégés get to be old cronies, you're in bad shape."

Membership Chairman Bob Thomson, who wrote the conference summary in this issue.
Illinois

The Illinois State Meeting of GLPA will be held at Parkland College Planetarium in Champaign, Illinois on Saturday, April 30th, 1988.

Adler Planetarium -- During the month of December, Adler Planetarium will be presenting "Star of Wonder" and "Secrets of the Hidden Universe." Premiering in January will be "A Star is Born," a program about stellar evolution. A new "Space Transporter" exhibit will be opened early in 1988, which will allow visitors to "beam down" to the surface of each planet to weigh themselves and see the local landscape. Classes in astronomy resume in late January.

Cernan Space Center -- Through December, the Cernan Earth & Space Center of Triton College will be presenting "The Christmas Star" and "Australia: Land of the Southern Cross." In January, the Cernan Center will bring back its very popular program "Dinosaurs!" as well as premiering a new laser light show entitled "Electric Flight."

In late-September, a museum consultant visited the Cernan Earth & Space Center to evaluate its current programs and future projects, through a grant received from the Museum Assessment Program (MAP) of the American Association of Museums. In early 1988, the Cernan Center is embarking on several new projects, including a corporate membership program, developing an improved marketing plan, and hosting more special events, beginning with "An Evening with Astronaut Alan Bean" in February.

Henry Crown Space Center -- The Museum of Science and Industry's Omnimax theater is currently showing the aerial extravaganza "Flyers." On Friday, November 27th, the theater experienced its best day ever -- 4,686 people attending 15 shows, which represents 98% of theater capacity. Preceding this program is a 3 1/2 minute "Dome Tour," which demonstrates the theater's automation system, a series of floodlights above and in front of the screen, and the theater's sound system.

ISU Planetarium -- In December, the planetarium is running its "Star of Bethlehem" program. Beginning in January, "Adventures Along the Spectrum" will become the planetarium's public program. Director Carl Wenning will begin teaching a planetarium science course in January.

Joliet Junior High School Planetarium -- the Joliet planetarium is pleased to report that it recently received a sizable gift from a local individual and that the theater will be renamed the Herbert Trackman Planetarium in his honor. The planetarium is now planning a major upgrade of its audio-video capabilities to be installed by the fall of 1988. In December, the planetarium will present "The Christmas Star." In January, their series of Friday evening public lectures will resume.

Lakeview Planetarium -- the planetarium has recently received a grant from the Illinois Humanities Council to produce a new planetarium show, entitled "From Chaco Canyon to Cahokia: A Journey in Space and Time." In October, the Lakeview Museum and planetarium cooperated in a very successful "Murder in the Museum" event. In December, the planetarium is running "Islands in the Sky" and "Star of Bethlehem." In January, the planetarium will present "Adventures Along the Spectrum." With respect to the museum as a whole, William Landwehr was recently appointed as Lakeview Museum's new Executive Director.

Parkland College Planetarium -- The Grand Opening of the Parkland College Planetarium was held on October 22 and 23rd, 1987. Director Jim Manning reports enthusiastic crowds in the first few weeks of public programs. Currently, Parkland is showing the film "To Fly" with its custom built 35-mm projection system. School and group showings have now begun with three additional offerings -- "Odyssey," a multi-media program produced in-house, "Prairie Skies," a guided tour of the current night sky, and a children's program entitled "Magic Sky."

Currently, the Parkland College Planetarium has a staff that consists of 3 full-time employees, 2 part-time employees, and approximately 10 student assistants.

On April 30, 1988, Jim Manning and his staff will host the state GLPA meeting.
Indiana - The annual spring workshop will be held April 22/23 at Koch Science Center and Planetarium, Evansville Museum, Evansville, IN. Mitch Luman will be the host.

Sharon Parker is the newly appointed planetarium director at the new planetarium at the Indianapolis Children's Museum—Regional Coordinator, Dan Goins.

Michigan - Michigan planetarians will meet at the Hans Baldauf Planetarium in Kalamazoo on Saturday, April 9. Eric Schreur is hosting the meeting.—Regional Coordinator, Garry Beckstrom.

Ohio - The spring state meeting will be held at Youngstown on Saturday, April 9. Tentative plans include a showing of Youngstown's home-produced spring show "Traveler," demonstration of effects from Halloween and spring light shows, inspection of a Joe Hopkins automation system, and a paper session. Tim Kuzniar and Warren Young assure me that these plans to not include a repeat of last year's blizzard. Youngstown's current show is "Stars and Stone: The Forgotten Americans," a program on the Mayans and Aztecs.

Dave Duszynski reports that the Cincinnati Planetarium has been running its original program "Cosmic Questions" dealing with mysteries such as the moon illusion, water on Mars, and the center of the Galaxy. A dinosaur program will open in February as dinamation exhibits arrive at the Natural History Museum.

The Batelle Planetarium at COSI has been running "Fantastic Fall Sky," a constellation/mythology program centered on the Perseus-Andromeda part of the sky. Sandy Hallock plans to open "First Light" in January.

Art Goss at the Dayton Planetarium has been showing "The Next Giant Leap," which deals with the space program. In February the museum will open a NASA-based exhibit "Spirit of Apollo." Their January program will be "Crystal Winter Night," a live program on the winter sky.

Two northwest Ohio planetarians got together recently when Bob Gardner brought his class to see "First Light" at Bowling Green.

I am happy to report that the Smith Middle School Planetarium, for many years in the capable hands of Ken Perkins, is alive and well despite rumors to the contrary. The new director is Ms. Adams.

The Cleveland Regional Association of Planetarians met several times this fall to discuss plans for writing two educational booklets for the National Air and Space Museum. Bill Kobel at the Bay Village Nature and Science Center Planetarium and Joe DeRocher and Clyde Simpson at the Cleveland Museum of Natural History hosted meetings prior to the GLPA conference in Merrillville. On November 17, a meeting was held with Lynn Bondurant, director of the project, at NASA Lewis, and on December 8, a working meeting was held at Warrensville Heights High Planetarium Jim Shannon hosting. The group will be working on this project through next summer. -- Regional Coordinator, Dale Smith.

Wisconsin, Minnesota - A spring meeting is tentatively planned for March 25/26, hosted by Robert Elliott at the University of Wisconsin - Eau Claire...

Gary Sampson, who heads the scrip file for GLPA, would like members to submit more scripts. He would like to bring the collection up to date with some current new programs...Bob Allen at the University of Wisconsin - La Crosse Planetarium will host the GLPA meeting next year, probably the week before the GLPA conference...Regional Coordinator, Dave DeRemer.
News Notes

Jack Spoehr asked that we share the address of Grace Spitz: 3314 Barkley Drive, Mantua, Fairfax, VA 22030. She would appreciate a note from any member of the GLPA group, whether or not you know her personally or heard her deliver the first Armand Spitz annual lecture.

Robert Allen distributed detailed lists of "Publications Reporting Space Program News" and "Free Periodicals about Space" for a paper he gave at the Merrillville conference. Contact Bob for copies.

Astronomy Day for 1988, will be April 23. GLPA President Gary Tomlinson is national Astronomy Day Coordinator.

The deadline for amateur astronomers to submit proposals for observing time of the Hubble Space Telescope has been extended from June, 1987, to June, 1988. Send inquiries to: American Association of Variable Star Observers, 25 Birch St., Cambridge, MA. 02138.

A three-minute film, "Monitoring History", part of the NASA Space Report, demonstrates how the imaging technology developed to photograph planets is used to help protect old valuable documents--the U. S. Constitution, The Declaration of Independence, and the Bill of Rights. NASA has the Space Report for copy.--Send a blank video to the Teacher Resource Center, NASA Lewis, Cleveland.

Dr. Peter R. Backus, who gave a very interesting talk on NASA SETI work and plans at the Merrillville conference, offered to make his time available to any planetarian needing information, advice, ideas. Contact his office at the SETI Institute, Mail Stop 229-8, NASA Ames Research Center, Moffett Field, CA. 94035, (415-694-6025).

Don Tuttle presented the GLPA Executive Committee and conference attendees with a handout of constellation and star pronunciations that he has been collecting during the past year. He made a point that the work is not yet finished, and he welcomes well-documented recommendations. Contact Don for a copy of his work.

Gary Tomlinson gave a paper on the use of a new transparency color system in Merrillville, (He gets no money for promotion) "Color Plus." He had a limited number of brochures at the meeting. To learn more, write American Coated Products, Inc., Mount Prospect, IL. 60056, or call 1-800-323-8890. (In IL. 1-800-942-8782).

John Hare, Director of the Bishop Planetarium at South Florida Museum, 201 10th St., West, Bradenton, FL 34205, announces a search for qualified applicants for a position involving electronics, optics, mechanics, and show production/presentation. The position will be available beginning January 1, 1988. Starting salary is $12,000-$15,000 with a generous benefits package.
Some Little-Known Information about GLPA Colleagues

I wish that all GLPA members would share an interesting skill, hobby, award, past job, travel experience, retirement plan, etc. with us. I received the following set after asking for them in Merrillville at the annual business meeting....Ed.

Gene Jenneman is a gourmet cook...Dayle Brown can write mirror-fashion quickly (She told me of this and another skill, rock climbing, in a mirror-image note.)...Greg Rawlings is an avid wargamer, former skydiver, and hockey goalie...Marquita Manley loves playing her flute under the planetarium dome at Turkey Run State Park; she shares that skies there are so dark that she had to search half an hour for her car one night following an evening program...Steve Bishop enjoys flying gliders...Dave De Remer is a national frisbee champion...Sheldon Schafer served two years in the Peace Corps in India; his hobbies are restoring a '69 VW bus and playing power volleyball...Georgia Neff is a belly dancer and a member of the Society for Creative Anachronism--A group dedicated to re-creating the middle ages as they should have been, says Georgia,"We add air mattresses and plumbing and subtract bubonic plague, lice, and death by being drawn and quartered"...Bob Riddle carves boomerangs; two recently were solicited by the National Museum of Woodcarving...Don Hall collects depression glass...Dave Hoffman's things-always-go-wrong image is all an act; Dave and his wife are training to become non-commissioned officers in the Salvation Army, pastoring a church...Dave DeBruyn is now a full-fledged firefighter for Cascade Township in the Grand Rapids area; he both rides the fire trucks and fights fires...Bob Elliott has a belt autographed by Van Allen...Don Tuttle is a serious organ player...Randy Olson shared an office with Pluto-discoverer Clyde Tombaugh and found him an excellent pun-maker...Nancy Franklin leads an exercise class...Gary Tomlinson enjoys square dancing, Star Trek, and John Wayne, although does not agree with all Wayne's ideas; Gary collects cobalt blue glassware.

Program Ideas to Share

Also at the business meeting I asked for program ideas for the upcoming year. I got requests for information that perhaps can be published later. Send Bart Benjamin, the new editor beginning with the 1988 spring equinox, ideas you may have for use with children ages 3 and 4 and ideas for an elementary "drop-in group" program. Here are a few 1988 show ideas.

1. A program featuring or incorporating supernovae, utilizing information and interpretations from the Feb. 1987, supernova.

2. Programs related to Mars, since a good opposition will occur in Fall, 1988. Gary Tomlinson gives these two specific suggestions: a) a Mr. and Ms. Earth contest—all the planets try to imitate Earth and win the Planet Most Like Earth Award. Mars, of course, wins. b) An idea given in the ASP Universe in the Classroom bulletin.—Prepare a travel package to show prospective clients for a travel special to Mars.

Other ideas for featuring Mars are Mars science fiction (including the historical War of the Worlds experience and the two moons of Mars noted in Gulliver's Travels), planet orbit ideas (since Kepler deduced his laws with Mars data from Tycho Brahe), and considerations of trajectories of spacecraft going to Mars and elsewhere in the solar system. The strong Mars futures movement could also be emphasized.

3. The solar system, generally seems to be a good topic for public programs. Thirty years ago next October 1, NASA was inaugurated. Ten years ago the Pioneer Venus mission occurred and Pluto's moon Charon was discovered. Since many people still have the notion that the solar system is fairly static, a program on the origin and evolution of the solar system could be enlightening.

4. There will be a full moons in May, 1988, so a program featuring the moon, explaining the "blue moon" could be timely.
Focus on Members - Gloria Rall, Erie Planetarium, Erie, PA.
Interviewed following the 1987 Conference Banquet.

Gloria Rall came to her present position as Director of the Erie Planetarium by reading the want ads. She arrived in 1980, one year before Gene Jenneman became Director of the Erie Museum. Both Gloria and Gene found the planetarium in poor condition, "a disgrace," and they had a museum priority to upgrade everything relating to the planetarium. Gloria has been very busy working toward that goal.

But to tell of her planetarium projects seems to get ahead in her story. Gloria had a truly unusual professional life prior to becoming a planetarium educator.

Growing up in Texas, Gloria attended college with an undeclared major until an interesting science course motivated her to emphasize botany. After receiving a master's degree from the University of Wyoming, she taught first there and then at the Michigan Technological University. At the University of Missouri she was appointed research associate in their school of Veterinary medicine, where she explored infectious diseases of the GI tract. Strangely, this was her introduction to astronomy.

This was a time when NASA said it was interested in knowing how space flight would affect the "normal microbiological component." In these years, 1967-69, NASA was gearing up for the Apollo missions. Gloria does not feel that NASA really took seriously the need to know what illness could occur in space, but the research project was funded. Funding stopped with the third manned mission, and the project wound down.

1971, Gloria entered the arena of nuclear energy. She became the Chief Scientist for the plaintiffs in an involved case tried in the Federal District Court in Washington, D.C. The plaintiffs were the State of Illinois, The Izzak Walton League, and the United Auto Workers of America. Her team reviewed all documents to determine needs for pre-environmental monitoring before nuclear power plants could operate. Gloria, who was appointed due to her experience in exotic environment biology, summarized team findings in approximately 1000 pages of legal proceedings. While Gloria was in Chicago on business, she fit in many trips to the Adler Planetarium, since she enjoyed Astronomy so much.

There followed a time of much publicity, which Gloria did not care for. She was appointed as one of four scientists, the only woman, to the Illinois Atomic Energy Commission. Her T.V. exposure brought her to the attention of a Moline, Illinois, television station, who invited her to produce a regular program on science and technology. She was free to choose the topics meant for the general public. She estimates that 1 in 4 topics dealt with astronomy in the programs given between 1973 and 1976.

Gloria moved to Erie and stopped working for four years for family reasons. When her daughter reached high school age in 1980, Gloria accidentally saw that Erie Planetarium was looking for a Director. She already knew a lot of astronomy, but she took additional courses at Edinboro Univ.

When Gene Jenneman arrived at Erie, he found Gloria's five-page summary of problems and recommendations related to the planetarium on his desk. Gene implemented many of the recommendations. To improve efficiency and attendance, ticketing procedures were revamped. School programming, previously very unmatched to needs, was changed "to give the teacher what he or she wants. There is no certain live or multi-media program for a particular grade or type of class." There are children and adult classes and teacher in-service days in Gloria's schedule.

For the past three years, Gloria has been working on a project of developing planetarium materials for deaf children. She travels on a grant from the Serotoma Club, a national group with local chapters. Another current project is the Erie Planetarium sponsorship of a Space Biology for Teachers symposium, working with Lynn Bondurant at NASA Lewis, for summer, 1988.
When I asked her philosophy and view of her planetarium responsibility, Gloria responded: "A public planetarium's job is to be an educational facility in astronomy for all ages of the public. Astronomy has become multi-disciplinary. Many who work in space or on space programs will come from non-astronomy backgrounds, as I did. Projects in a pluralistic society should go the way citizens direct; I am confident they will decide well. We can help decisions by the quality of job we do in planetariums. We need to teach critical thinking skills, and I think the planetarium is a more opportune place to do it than the regular classroom." Echoing Armand Spitz, Gloria remarked, "The planetarium is the world's most versatile classroom." "People need to learn to look and think a lot about what is there and what they have seen. These skills are the essence of science."

Gloria feels there is a need for more minorities in planetarium teaching, as well as teaching in general—more blacks, more Hispanics, more of Asiatic origin, and more women and handicapped. "The kids and general public need to see skilled people with these backgrounds so there are role models for those like themselves and more respect for them. Minorities seem to drop science, blocking pathways to careers in science."

Gloria comes from Erie on a regular basis to join us of the Cleveland Regional Association of Planetarians in projects, sharing, and fun. We are so glad she is now a planetarian.

(Interviewed by J. Bishop)

***************

ASCAP INFORMATION.....Gary Tomlinson

As indicated in my President's message, the ASCAP negotiations died, but here is some updated information if you wish to contact ASCAP.

The rate schedule now in effect for museums and planetariums is as follows:

1. Mechanical music only - $2.00 per day.
2. Mechanical music with a slide and/or laser show, $5.00 per day.
3. Live music rate based on capacity and highest admission. The lowest seating capacity is 750 and below. For that seating capacity the rates are:

<table>
<thead>
<tr>
<th>Ticket Price</th>
<th>ASCAP fee per performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $3.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>$3.00 - $6.00</td>
<td>$22.00</td>
</tr>
<tr>
<td>$6.00 - $9.00</td>
<td>$31.00</td>
</tr>
<tr>
<td>$9.00 - $12.00</td>
<td>$44.00</td>
</tr>
</tbody>
</table>

Discounts are available for 25 or more concerts.

For more information, contact the Central Division Office of ASCAP: Robert W. Wieland; Central Division Manager; ASCAP; 999 E. Touhy Ave., Des Plaines, Ill. 60018; 312-827-6810.

Several music libraries exist, including the ones listed below. There may be more.

Music Libraries

- Aircraft Music Library, 77 North Washington Street; Boston MA 02114; 800-543-2514.
- American Image Productions; 1708 Grand Avenue; Nashville, TN 37203; 615-527-4521
- Association Production Music; 6225 Sunset Boulevard; Hollywood, CA 90028; 213-461-3211
- Capitol Production Music; 1750 North Vine; Hollywood, CA 90028; 213-461-2701.
- DeWolfe Music Library, Inc.; 25 West 45th Street, New York, NY 10036; 212-382-0220.
- First Com, 13747 Montfort, Dallas, TX; 75240; 214-934-2222.
- Made to Order Music Library; 6255 Sunset Blvd.; Los Angeles, CA 90028; 213-460-6525.
- Musicians; Box 1301; Doylestown, PA 18901; 215-345-TUNE.
- MusicCues; 1156 Avenue of the Americas; New York, NY 10036; 212-757-3641.
- Network Production Music, Inc; 11021 Via Frontera, San Diego, CA 92127; 800-854-2075.
- NFL Films Music Library; 350 Fellowship Road; Mt. Laurel, NJ 08054; 609-778-1600.

(continued on Page 20)
SAY YES TO JUST SAY NO
Gary Tomlinson

The Just Say No Foundation has granted GLPA permission to use its logo for the purposes of encouraging students to "Just Say No." The logo could be used with seating music as students are entering your planetarium. This would be one more area of exposure for students. The more exposure and support they receive, the easier it will be to make this a drug-free society.

As President of GLPA, I encourage you all to Kodalith the logo below (including the trademark symbol - TM) and use it in all shows where children are members of the audience, both public and school shows. The color of the logo must be green (ink color PMS 347).

The Just Say No Foundation has agreed to send out, upon request, small numbers of brochures on "Just Say No Clubs." These could be given to teachers in your district. If you wanted to provide brochures to all your students, the Foundation will send you a master brochure for you to duplicate upon request as well.

For more information on the Just Say No Foundation, write to them at:
1777 North California Boulevard; Suite 200; Walnut Creek, CA 94596; 1-800-258-2766.

Music Libraries (cont.)

Omnimusic; 52 Main Street; Port Wasington, NY 11050; 516-883-0121.
Philadelphia Music Works; Box 947, Bryn Mawr, PA 19010; 215-825-5656.
Servisound Inc.; 35 West 45th Street; New York, NY 10036; 212-921-0555.
Signature Music Library; Box 268554, Chicago, IL 60626; 312-943-7751.
Soper Sound Music Library; Box 498; Palo Alto, CA 94301; 800-227-9980.
Southern Library; 6777 Hollywood Boulevard; Hollywood CA 90028; 213-469-9910.
Themes/AM Squared; 903 Edgewood Lane; Box C-30; Cinnaminson, NJ 08077; 609-786-0612.
TRF Production Music Libraries; 40 East 49th Street; New York, NY 10017; 212-753-3234.
Valentino, Inc. 151 WEST 46th Street; New York, NY 10036; 800-225-6278.
Voyage Music Library; 686 S. Arronyo Parkway #106; Pasadena, CA 91106; 818-795-6723.
AND THE MOST IMPORTANT OF ALL: Loch Ness Productions; P.O. Box 5023; Boulder, CO 80307; 303-445-0611.
We're experiencing an unusually early snowfall in Michigan today, complete with strong winds and bitter cold. It reminds me of another unseasonal snowstorm that occurred almost exactly 23 years ago, on Nov. 21, 1964.

Earlier that year, VonDel Chamberlain, then staff astronomer at the Longway Planetarium in Flint, met with rookie Planetarians Dennis Sunal and myself to explore the possibility of the three of us promoting the development of a regional organization of planetarium professionals. The number of small planetariums in schools, museums and colleges was mushrooming in this era following the first manned space missions, and VonDel felt the time was right for us folks to start getting together again.

While the idea of a regional organization was new, that of planetarium sorts meeting to exchange ideas was not. The directors of the "Majors" had been convening periodically for years. Earlier, symposiums appealing primarily to those thrust into the operation of the growing plethora of smaller Spitz type installations had been held at Bloomfield Hills, Michigan and also in Cleveland, Ohio. These had been well attended by enthusiastic planetarium directors from throughout the country, and there had been a worthwhile dialogue.

What we were trying to do here was a little different. Instead of an informal symposium, with contributed papers and resource people, we were talking about the establishment of a professional organization, duly sanctioned and recognized as a medium for exchange of ideas between the growing number of planetarians in the midwest.

VonDel suggested that we call a preliminary meeting in East Lansing (where he would soon be relocating) for the fall, sometime around Thanksgiving. That would give those involved in school operations time to settle into their fall schedule before running off to a meeting, and would most surely come before the midwestern winter got cranked up.

We deeded up the assignments to get things going and west our separate ways, Dennis back to the University of Michigan Planetarium, where he was holding forth part time while finishing up at the University of Michigan, VonDel back to Flint for a time, and me back to my fledgling operation in Grand Rapids. We promised to keep in touch.

Dennis was to work with VonDel in getting the word out about the meeting, while I was to collaborate with him on arranging the printing a program. We had agreed that a one-day Saturday meeting would be most appropriate for this first effort, and that as part of the proceedings, we would ask the group whether or not they were in favor of establishing a formal organization.

We were fortunate in obtaining as keynote speaker the late James Stokley, a well-known planetarium professional who had been director of both the Fels Planetarium in Philadelphia and the Buhl Planetarium in Pittsburgh, as well as an author of popular-level astronomy books. Dr. Stokley was semi-retired at the time, but he was keeping academically active through an emeritus appointment at Michigan State University.

The call for papers was most gratifying, considering that this was a first effort. Some things are always the same. The pioneers were just as eager to share their ingenious trade secrets with their peers as their counterparts are today. Among the submitted titles were "Solar Projection and the Inverse Square Law," presented by Alan Yarian, of Lakewood High School, Lakewood, Ohio; "Special Effects in the Planetarium," by William Schultz of Cranbrook Institute, Bloomfield Hills, Michigan; "The Central Point of View," by Ralph Ewers of Cincinnati, who was already making a name for himself as an innovator, and "Activities at the Hoover-Price Planetarium" of Canton, Ohio, presented by a young lady named Jeanne Emmons, who would later go on to prominence in this profession.
She learned at her father's knee. Richard Emmons of Canton, who attended the meeting with his son and daughter, was a pioneer in the truest sense. Unbeknown to him at the time, he inspired "me" to pursue this vocation that I love so much. It was an article about his homemade "garage" planetarium that appeared in Sky and Telescope in the mid 50's that prompted a wide-eyed teenager from Michigan to try something similar in his parent's basement. It was a pleasure to meet him, and to see the amount of enthusiasm about the heavens and the planetarium medium that he had so obviously imparted to his kids and many others. His daughter later became Mrs. Jeane Bishop, who we all know as an enthusiastic and innovative planetarium educator and leader in both the Great Lakes Planetarium Association and the International Planetarium Society. It is my understanding that his son Tom is also involved in the medium somewhere in Ohio. Once it gets in the blood, there is no escape.

It started to snow and blow the night before the scheduled meeting, and in Grand Rapids, cars were slipping and sliding all over the place, as they traditionally do during the season's first significant snowfall. Radio and television were full of announcements telling how widespread the blizzard was, and warning people not to travel. I was miserable. Six months of planning and preparation down the tubes because of the weather. I knew that many of the registrants were coming by car from distant points in Indiana and Ohio. Surely they would never make it!

My friend, Jim Marron, one of our early assistants at the Planetarium, and I arrived late because of difficulties with the weather, and we only had to travel 70 miles! You can imagine my surprise when I discovered that over two-thirds of the registrants had made it and that we were among the last to arrive!

How many people do you recognize in the accompanying photograph? Over 30 attended that first meeting, a truly remarkable turnout when one considers what conditions were like.

It was a warm, exciting, and fun-filled day despite what was going on outside. The spirit of comraderie and stimulating exchange of ideas and experiences was a prelude of what would ensue on a much grander scale in the years to come. Needless to say, there was an overwhelming consensus that an organization should be formed. A steering committee consisting of VonDel, Dennis and myself, along with a number of others whose identities escape my memory, were charged with coming up with an organizational structure and proposed constitution.

A little less than a year later, in October of 1965 (We decided to have our subsequent meetings a little earlier in the year), the Great Lakes Planetarium Association was born and its initial conference held in Grand Rapids. It was the first of a number of regional groups that emerged in the next few years, which in turn would evolve into what would eventually become the International Planetarium Society. That group was also the brainchild of VonDel Chamberlain, who promoted the first large-scale meeting of planetarium professionals from all over the United States and Canada in East Lansing in 1970. I will have some observations and stories about these early events in subsequent issues.

It's snowing a little harder outside now, and the wind is picking up. Glancing at the calendar, I see that the date is November 19th. In two days, it will have been 23 years, but it seems like yesterday. I wonder what ever happened to "Wizzard" Ralph Ewers, to Dan Snow, John Soroka, Paul Kirby, to Dennis and so many of the others that I have lost track of. Today's "Wiz Kids" are a superbly talented and innovative lot, but they could never quite replace in my esteem those special friends from an earlier time.

Addendum-Ed...My father Richard Emmons is Emeritus Professor of Physics, Kent State Univ. (retiring in 1981). Satellite tracking occupies much of his free time, an avocation since the Sputnik period. He still has a small self-made planetarium in his garage he uses for tutoring. My brother Tom Emmons has build and sold about a dozen small planetariums in the U.S. and England, along with electronic devices. This is a side business, as he teaches astronomy, physics and computer science at Kent State Univ. He operates the Kent State Planetarium and has written a course text, Seven Ideas That Shook the Universe. This year he received one of the two Distinguished Teaching Awards presented annually at Kent. State...Jeanne Bishop
GREAT LAKES MEETING OF PLANETARIUM PERSONNEL
Saturday, November 21, 1964
Michigan State University
East Lansing, Michigan

PRELIMINARY MEETING, LANSING, 1964
The MOVING CLOUDS PROJECTOR is a simple and effective special effect that can be built from a 6-inch plexiglass Petrie dish. The lower portion of the Petrie dish is painted black with spray paint. The lid of the dish is painted by brush to create cloud patterns. A very cloudy sky can be created by painting very little of the top; a partly cloudy sky can be created by painting almost the entire surface. In no cases should your "clouds" be more than about 1/4 inch across. Remember, your projector will exhibit only a very small portion of the top at once. Consider a region the size of a silver dollar as representative of what your sky will look like at any one time. The lid is moved with a 110 volt, 1-1/3 r.p.m. motor. The slow motion gives you a serene sky. For an "angry" sky, you might want to substitute a 4 r.p.m. motor. The light source is a common PR-12 bulb (6 volts) which can be wired and glued lightly into place. The projector should be mounted near the center of the dome and two projectors working simultaneously give the best results. (Drawings taken from I.P.S. Projector Sourcebook.)

Construction:

1) Using spray paint, paint the bottom portion (inside and out) of the Petrie dish. Set aside to dry.

2) Using a brush, paint the cloud pattern on the top of the Petrie dish. Completely paint the overlapping edge of the lid.

3) Wire up and solder the PR-12 lamp with wire provided.

4) Attach the motor and mounting bracket to the bottom part of the Petrie dish. Slide lamp's electrical wires through hole provided. There is no need to glue this into place.

5) Install adapter on motor shaft and top off with dish cover.
At Merrillville Greg Rawlings and I had a conversation about our uses of the Humanities and the Stars programs during a bus ride. We decided it would be useful to share among a wider user group. I asked Greg to prepare this description for the Newsletter–Ed.

A few months ago, the Sunrise Children’s Museum purchased the "Humanities and the Stars" series of program from Eastern Washington University. This series, prepared by Eileen Starr, looks at the history and sky legends of twelve different cultures scattered through time and around the world. At the same time, our museum was in the process of putting together an exhibition called "Sky Stories", which looked at sky phenomena such as thunder and lightning, the Big Dipper, and rainbows. Like "Humanities and the Stars", the exhibition looks at these phenomena through the eyes of several cultures, the Norse, Chinese, Greek, and North American Indians. "Humanities and the Stars" was intended to complement "Sky Stories" in the planetarium. However, our largest school attendance is from pre-school through sixth grade, and the "Humanities and the Stars" programs are geared toward an older audience.

To make use of the series for our younger children as well as tie in more closely with "Sky Stories", I used the "Humanities and the Stars" scripts as source material for the four cultures and put together a program that combined the best of the programs and the exhibit. The program, which I simply refer to as the "H+S combo", deals with constellations as we see them during the current season, and how those same stars were seen by the four cultures in "Sky Stories". The Big Dipper serves as a good guide to current skies, and is also the leaping-off point to talk about the constellations of other cultures. I also deal with the mythology of how seasons change, the Sun, and how the sky changes its appearance as you look at it from different points on the earth. This last point becomes quite easy for children to see as we move up to 60 degrees north to see the Norse sky.

The program is easily adjusted to various age levels; most commonly it is requested by high school groups, a level that normally is not seen by the Children’s Museum. I prefer to use most of my own slides in the show, as the ones provided with the show kits are not very useful beyond their specifically intended use. Should anyone be interested in using their "Humanities and the Stars" programs in this manner, I'll be glad to provide an outline of the "H+S combo".

******************************

Some Recent Published Materials Useful to Planetarium/Astronomy Educators

The American Astronomical Society has a new edition of its "Career in Astronomy" booklet. Available for 35¢ copy, the 22-page publication contains information about job opportunities, necessary preparation, and schools with astronomy graduate programs. Write the AAS Education Office, Box 3818, University Station, Charlottesville, VA 22903.

Abrams Planetarium’s widely-disseminated excellent Sky Calendar received an award for excellence in educational journalism from the Educational Press Association and a Special Commendation from the Astronomical Society of the Pacific. Philip Morrison, reviewing it in Scientific American, says it is "a bargain entry into direct observation of the changing order visible in the heavens." Subscription rate is $6.00: Sky Calendar, Abrams Planetarium, Michigan State Univ., East Lansing, MI 48824.

A new book (copyright 1988, John Wiley and Sons), The Space-Age Solar System by Joseph F. Baugher, is an up-to-date summary of present knowledge of our area of space. It contains good black-and-white sketches and photographs, detailed appendices, and a long bibliography. Theories of the origin of the earth’s atmosphere and features of other planets and their moons based on spacecraft data are accurately and succinctly presented. (The author is a research engineer at the Illinois Institute of Technology and a teacher of basic and advanced undergraduate physics courses.)

The September, 1987, issue of Physics Today contains a very high-power but comprehensive summary of "The Birth of Neutron Stars and Black Holes" by Adam Burrows, Associate Professor of Physics & Astronomy, Univ. of Arizona. The same issue also has a comprehensive article on "Particle Physics and Inflationary Cosmology" by Andrei Linde, Professor of Physics at the Lebedev Physical Institute in Moscow.

The September-October, 1987, issue of American Scientist has an authoritative presentation of "The Origin of the Moon" by Stuary Ross Taylor. The conclusion: "Collision of a Mars-sized body with the Earth about 4.4 billion years ago is the most likely explanation for the formation of the moon."

The Amateur Astronomers section of the September, 1987, Sky & Telescope, contains the article "To Catch a Child's Imagination," by James Nicholson. It is about a project meant to fly on the Shuttle in a "Get Away Special" Cannister to photograph Halley. The creative solution was six flights on the Kuiper Airborne Observatory, a situation that rescued involvement of thousands of children in the Charleston County Public School System. The story is worth reading.

An interesting description of the beginning of the space age, "22 hours 28 minutes 4 seconds Moscow Time, Birth of the Space Age" by Peter Pesavento appeared in the October, 1987 issue of Griffith Observer. And the October 10, 1987, issue of Science News (p. 231) carried a brief but worthwhile reflection, "Sputnik 1 Plus 30 years: The Long and the Short of It".

The November 28, 1987 Science News (p. 343) describes work on the asteroid Vesta that revealed surface details and a rotation period of 5 hours and 20.5 minutes.

The November Ohio Motorist Magazine contained an editorial, "Twinkle, twinkle, little Navstar...how I wonder where I are!" The word is that in a year or two, launch of 21 navigation satellites will begin that, with proper receiving equipment, tell drivers exactly where they are within about 100 yards. The Mercedes Benz plans to have the equipment in some car models by 1991. Seven test Navstars are currently in orbit. In a competition with receiver sets built by different companies, the winner was exactly on location target, the runner-up was off by one millimeter, and third place missed by just seven millimeters.

Be Careful, 'Cause...

A planetarian whose spelling's unique Announced a show on the sky of the "Grique." He discussed "Haira" and "Zoose" And feats of "Persooce"-- Now a new show director they sique......Adapted-J.B.
John Harnon holds the world in his hands. Sandy Balneck just blew it up—peacefully.

Almost half of the audience become participants as "gravity" and "radiation" forces and gas particles in the dynamic human model of an evolving giant star.

Instructor Materials Chairman Jerry Mansfield

Robert Hastings prepares a juice can rocket for blast-off during the Physics Demonstrations workshop.
THE GREAT LAKES PLANETARIUM ASSOCIATION offers membership opportunities to all individuals in any way connected with the operation of planetariums regardless of geographical location. G.L.P.A. is an affiliate of the International Planetarium Society, and the National Science Teachers Association. Membership dues are $13 annually, payable at the time of the Autumnal Equinox. General correspondence and requests for membership should be addressed to: Mr. David E. Parker (address below).

This quarterly "GLPA Newsletter" is received by all members in good standing. Ideas and opinions expressed in this newsletter are not necessarily those of GLPA or its membership. Deadlines for contributions fall on the 15th of February, May, August, and November. Send information to: Bart Benjamin

Printed and mailed from:
Elgin Observatory & Planetarium
School District U-46
355 E. Chicago St.
Elgin, Ill. 60120