



July, 2000

At the July 7 meeting...

Astronomy on the Rocks

or

Darkness at Brunch

Bill Rudersdorf

Houston Astronomical Society

GuideStar

Starline - 281-568-9340

Houston Astronomical Society presents *Starline* -- a recorded message of Society events and astronomical happenings. This service is updated regularly, so call often to keep up-to-date on Society functions, new comets and more.

HAS Web Page: <http://www.astronomyhouston.org>

Schedule Changes & Up-To-Date Information

See the GuideStar's Monthly Calendar of Events to confirm dates and times of all events for the month, and call Starline for any last minute changes.

Observatory Site Telephone: 979-732-8861 (New!)

★★★★★ *The Houston Astronomical Society* ★★★★★★

The Houston Astronomical Society is a non-profit corporation organized under section 501 (C) 3 of the Internal Revenue Code. The Society was formed for education and scientific purposes. All contributions and gifts are deductible for federal income tax purposes. General membership meetings are open to the public and attendance is encouraged.

★★★★★ Officers ★★★★★★

President: Don Pearce H: 713-432-0734	Secretary: Bill Leach H: 713-863-8459
Vice Pres: Barbara Wilson H: 281-933-1289	Treasurer: Gene Horr H: 713-468-2157

★★★★★ Additional Board Members ★★★★★★

Liaison responsibility

Bill Flanagan 713-699-8819	
Howard Leverenz 713-957-8667	
Jay Levy 281-992-2708	Field Trip and Observing, Program
Debbie Moran 713-666-9428	
Warren Wundt 713-697-2960	
Mike Dye 281-498-1703	Observatory Director

★★★★★ Committee Chairpersons ★★★★★★

Audit Gary Hlivko 713-864-2541	Program Margaret Nunez 713-529-2549
Education Richard Nugent 713-910-5945	Publicity Mark Egan 281-265-1497
Field Tr./Obsg. Kenneth Drake 281-367-1592	Telescope Darin Palmer 713-223-3123
Novice Kirk Kendrick 281-391-3834	Welcoming Bill Leach 713-863-8459
Observatory Michael Dye 281-498-1703	

★★★★★ Ad-Hoc Committee Chairpersons ★★★★★★

Historian Leland Dolan 713-529-0403	Publ. Star Party Marg Nunez 713-529-2549
Librarian Peggy Gilchrist 281-558-1190	Rice U. Coord. Matt Delevoryas 713-795-0808
Logo Mds Sales Judy Dye 281-498-1703	Schedule Obs'v'ty Steve Goldberg 713-721-5077
Long Range Plan Barbara Wilson 281-933-1289	Texas Star Pty Steve Goldberg 713-721-5077
Parliamentarian Kirk Kendrick 281-391-3834	

★★★★★ Special Interest Groups & Help Committees ★★★★★★

These are now listed on the inside of GuideStar (not every month). See the Table of Contents

★★★★★ Advisors ★★★★★★

Dr. Reginald DuFour, Rice Univ.	Dr. Lawrence Pinsky, U. of H.
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★★★★★ Dues and Membership Information ★★★★★★

Annual Dues: Regular \$33.00	Student \$5.00
Associate \$5.00	Honorary None
Sustaining . \$50.00	

All members have the right to participate in Society functions and to use the Observatory Site. Regular and Student Members receive a subscription to *The Reflector*. Regular, Student, and Honorary Members receive *The GuideStar*. Associate Members, immediate family members of a Regular Member, have all membership rights, but do not receive publications. Sustaining members have the same rights as regular members with the additional dues treated as a donation to the Society. *Sky & Telescope* mag \$29.95/year, *Astronomy* mag \$29/year -- see club treasurer.

Membership Application: Send funds to address shown on outside cover of *Guidestar*. Attention - Treasurer, along with the following information: Name, Address, Phone Number, Special Interests in Astronomy, Do you own a Telescope? (If so, what kind?), and where you first heard of H.A.S.

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Call the Starline, 281-568-9340 for updates and changes

Welcome to New Members!

The Houston Astronomical Society encourages you to join our group of active amateur astronomers and take advantage of the benefits of membership. As a member you'll have access to the club observing site near Columbus, Texas. (You're required to participate in a site orientation meeting before you get the gate lock combination.) The site has concrete pads for setting up your telescope, restroom and bunkhouse facilities, and areas set aside for camping. No new members this month. You'll get monthly issues of the *GuideStar* newsletter, you'll get to vote and to serve the organization as an officer, and you will be supporting the local amateur astronomy community.

Special Interest Group Listing

Any member who wants specific information on a SIG listed below may call the listed individual. Also, see the "Ad Hoc Committee Chairpersons" on the inside front cover and the "Special Help Volunteers" listing (not in every issue).

Advanced	Bill Flanagan	713-699-8819
Comets	Kenneth Drake	281-367-1592
Lunar & Planetary	John Blubaugh	713-921-4275
Occultations & Grazes ...	Wayne Hutchison	713-827-0828
Advanced	Bill Leach	713-863-8459

Observations... of the editor

by Bill Pellerin, GuideStar Editor

Last month I wrote about the Texas Star Party. This month, I have to tell you that I have been able to do no observing. Leaving town (and work) for a week (to go to TSP) means that I have a lot of catching up to do. The weather hasn't been too cooperative either. It's "full-moon" weekend (June 17th as I write this), so the fact that it's raining isn't too much of a problem. In fact, it means that I can avoid any 'outside' chores that I might otherwise think that I *have* to do.

I went to Kirk Kendrick's novice presentation last month. Kirk was doing a super job setting the stage for a series of talks and activities for the novice group. Kirk was the novice chair a few years ago and it's nice to see him willing to take on this responsibility again. Nice job Kirk!

If you missed the June meeting you missed an excellent presentation by Alan Ma Wong. This was obviously of interest to those attending; there were several good questions during and after the presentation.

Marg Nunez and Bill Leach have done a fine job with refreshments. This is being done on a pay-as-you-go plan since there was no money in the budget for this. With a 'donations' can on the refreshment table the goodies have been fully funded! Our board will consider funding for this during the next budget cycle.

Please pay attention; the Houston Astronomical Society's web page has a new URL (address). URL means Universal Resource Locator (geez!!!), but what's really going on is that there's a new address for the web page. Point your browser to:

<http://www.astronomyhouston.org>

You'll be directed to the proper Web site for the HAS. Note that the domain ends in org meaning 'organization', it is not com which (usually) signifies a commercial (business) operation.

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Houston Astronomical Society

***Meeting Notice
For Friday, July 7, 2000***

***Astronomy on the
Rocks
or
Darkness at Brunch***

Bill Rudersdorf

Schedule of meeting activities:

All meetings are at the University of Houston Science and Research building. See the inside back cover for a map to the location.

Novice meeting: 7:00 p.m.
Across from Room 117

Site orientation meeting: 7:00 p.m.
Classroom

General meeting: 8:00 p.m.
Room 117

**See the inside back cover for a map
and more information.**

July/August Calendar:



Date Time Event

July

1	2:20 p.m.	New Moon Members Observatory Night-Columbus
7		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting U of H
8	7:53 a.m.	First Quarter Moon
16	8:56 a.m.	Full Moon
18	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Bill Leach, 713-863-8459
24	6:03 a.m.	Last Quarter Moon
29		Prime Night-Columbus
30	9:25 p.m.	New Moon

August

4		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting U of H
6	8:02 p.m.	First Quarter Moon
11-12	Until sunrise	Perseid meteor shower peaks; best 3 hours before sunrise.
15	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Bill Leach, 713-863-8459
	12:14 a.m.	Full Moon
19		Members Observatory Night-Columbus
22	1:51 p.m.	Last Quarter Moon
26		Prime Night-Columbus
29	5:20 a.m.	New Moon

*Send calendar events to JBlubaugh@aol.com
or call 713-921-4275.*

HAS Logo Sales

by *Judy Ann Dye*

If you are interested in any of the following items and would like to place an order, please contact me (Judy Dye) at 281-498-1703, or send a check for the items requested to 12352 Newbrook, Houston Texas, 77072-3910. Below is the current list of logo items for sale:

Grey Hooded Sweatshirt (M to XL)	\$25.00
22 Ounce Thermal Cup	\$5.00
Observe Messier	\$4.00
Observe Comets	\$7.00
2000 Observer's Handbooks	\$ 14.00

Observations... from page 4

Thanks to all who contributed to this month's *GuideStar*. Mike Dye (as usual) is letting you know what's going on at the observatory site. Our secretary, Bill Leach, has provided us with minutes of the board meeting and the regular, monthly meeting. Leland Dolan tells us about a total solar eclipse in Texas in 2024 (I'll be 77!!!!). John Blubaugh has provided us with the club calendar. Your contribution is welcome, too. See the inside back cover for details.

I bought a new book on Friday... It's called *Two Moons*, and it's by Thomas Mallon. I haven't read it yet, but it's a novel about "astronomy, politics, and romance". Sounds like fun! A friend gave us a copy of *Natural Prayers* by Chet Raymo (author of *365 Starry Nights*). I haven't started this one yet either, but I've read some of his other work, and liked it.

Wishing you dark, clear skies...

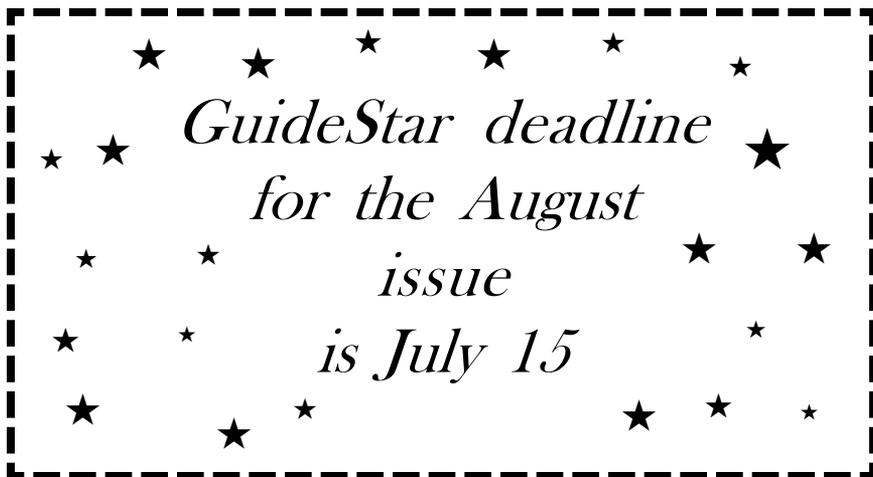
..Bill

Help Wanted: Star Parties for Kids

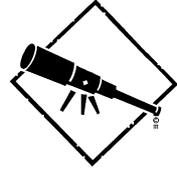
There will be a star party for underprivileged kids near lake Conroe 6/23/00 and 7/22/00 These kids are very well behaved and excited about astronomy. Volunteers are needed to assist at both dates. Please contact Marg Nunez 713-529-2548 or Steve Sartor via the web (Steven O Sartor <ssartor@ix.netcom.com>).

Membership Renewals...

Please check the mailing label on your copy of the *GuideStar*. It'll tell you when your membership expires. If it expires soon, please send your renewal to the address on the outside cover of *GuideStar*. The dues information is on the inside front cover. **Thanks!**



Observatory Corner



By Michael B. Dye Observatory Chairman

On Saturday June 10th nine people again braved the elements to help work on the Observatory Roof. I am happy to announce we were again almost successful. Bob Rogers and I went out to the Observatory Site on Friday night, again. This time we did not beat the rain. It actually rained on us as we were driving in. This was about eight-thirty. We went to our respective sleeping locations and met the next morning about 9 AM. Again it rained most of the night and more or less quit for most of Saturday, there being only one exception, as I will go into later.



Anyway members started drifting in about 9:30 and about 10 o'clock or so we had enough members on site to start work on the caster replacement activity. As more members arrived we were able to also complete the replacement of the East Bathroom Toilet Tank, poison more (fire) ant hills and install new pulleys on the Observatory South Door. We had used the above mentioned pulleys back on June 20th to replace the ones that were outside on the north end of the roof cable assembly. They were replaced because they were substantially damaged from exposure to the elements and they were the wrong size for the stainless steel cable. The members who helped in these collective activities were Matt Delevoryas, Steve Goldberg, Steve Grubbs, John Hiatt, Dana Lambert, Ralph Overturf, Edward Preston, Robert Rogers and Buster Wilson. By about 3 PM we had completed the majority of the activities including replacing the roof castors. We had reached the moment of truth. Roll the roof back and see if the new castors work. Someone yelled at me that they were going to open the roof. At that time I was employed in fixing the drain line for the Observatory dehumidifier. The line had somehow become disconnected from the drain that went through the wall and was leaking water all over the floor. I said OK and then I realized what the pitter-patter I was hearing meant. It was raining outside. The first time for that day, just when we were going to open the roof. We postponed the opening activity until the rain stopped, about two minutes later. For the next hour or so we adjusted the tension on the

Continued...

Observatory Corner... from previous page

cable and adjusted the height of the casters until the roof rolled better than it did before we started. The good news is that the roof now works, the bad news is that we now have a new noise. I believe that we are picking up a vibration someplace that is causing the cable to vibrate.

We were not able to replace the Motorized Variac for the roof control but Matt Delevoryas and I worked out a plan of attack. I hope to implement this plan next month or so. I have decided to release the Observatory back into service, as I don't believe that the vibration represents a safety problem. I am going to have another collective work activity at the Observatory to replace the North Pulleys and the Motorized Variac sometime in late July.

The Observatory Committee is still looking for a Tractor (new or used) with a bush hog to mow the grass at the Observatory Site. If you know where we can get a Tractor as described please contact me by phone or E-mail.

Good news about our Randalls card, we got the January 1 through March 31 report. We had spent \$10,797.12 in the first quarter and received a check for \$107.97 from Randalls. This amount will be split between the Observatory Committee and the General Treasury. Our account will zero out and started over again on April 1st. So please link your Randalls card to the Houston Astronomical Society so that the society can benefit from this Randalls program. Our number is #6618. This is very easy to do, just go to the Courtesy Booth and tell the person there what you what to do. We are also in the process of getting a Kroger number that does the same thing for Kroger.

For the last few months, I have been inserting a paragraph requesting membership feed back concerning installing computers in the Observatory. I have actually got a response. This gives me hope that members are actually reading my articles. This hope was shattered by a long time member who told me he never reads the *GuideStar*. If you have any ideas about the Observatory Site, including providing some sort of computers for controlling the Observatory Telescopes and maybe for CCD processing. Please contact me at mbdye@aol.com or 281-498-1703.

Please fill out the appropriate log form when you use the site. Remember we use these forms as attendance records and to report Observatory Site problems such as broken toilets.

***Minutes of the
General Membership Meeting
of the
Houston Astronomical Society
June 2, 2000***

Secretary's Draft

1. The meeting was called to order by President Don Pearce at 8:10 PM, he welcomed everyone and the following general announcements were made:
 - a. The general meetings of the membership are in this room, room 117, at 8:00 PM on the 1st Friday of the month, except for May and September when the meeting will be on the 2nd Friday of the month.
 - b. The novice meeting is across the hall in room 116 at 7:00 PM preceding the general meeting.
 - c. The site orientation meeting is in room 121. All members must attend this meeting in order to obtain access to the 18-acre observing site in Columbus, Texas. You may visit the site as a guest of a qualified Society member prior to your certification.
2. There were 86 members and 4 guests present.
3. The following new members were introduced:
Stuart Bermack, Bernie Bermack, Dennis Coyne, R. Hudson Hallenbeck, JC Meador, Sherry Slaten
4. Four guests were recognized.
5. The President reviewed the types of telescopes available to the membership at the Society's 18-acre observing site: C-14, 12.5 in. f/5, 12.5 in. f/7, and two 12.5 in. Dobsonians.
6. Darin Palmer, chairperson of the Telescope Loaner Program, was introduced and he explained the program.
7. The President announced the following membership benefits/concerns:
 - a. The *GuideStar* newsletter editor, Bill Pellerin, was recognized.
 - b. Discount prices for society members on *Sky & Telescope* (\$29.95) and *Astronomy* (\$29.00) magazines were announced and those interested were asked to contact the Treasurer, Gene Horr.
 - c. The Starline (281-568-9340), a service offering various recorded astronomy messages, was also announced and Matt Delevoryas was recognized for keeping the messages updated.
 - d. Fred Garcia verified than Society members could request a 5% discount at Land, Sea and Sky on most items.

Continued....

Minutes... from previous page

- e. The HAS website is also available and WebMaster Steve Goldberg was introduced and thanked. Steve announced that the H.A.S. new domain name **www.astronomyhouston.org** will soon be in effect (as of publication date the new domain name is now in effect).
- f. Marg Nunez and Bill Leach of the welcoming committee were introduced.
- g. The program with Randall's grocery stores was announced and members were asked to register for nonprofit organization number 6618.
8. Mike Dye, Observatory Director was recognized and announced that the next Saturday, June 10, 2000 at 10 AM volunteers were needed to help install the new cable in the observatory at the site. Mike asked volunteers to E-mail him.
9. Ken Drake announced a virgin comet, not yet seared by the Sun, is in Triagulum at 10.5 magnitude. Comet Linear 1999S4 may become naked-eye in July with a magnitude of 3. Ken left finder charts for those interested.
10. Kirk Kendrick announced that the novice meeting in July will cover the summer skies.
11. Starline has replaced the answering machine with a computer, which is more versatile.
12. John Blubaugh introduced the evening's speaker, Alan Ma Wong. Alan's presentation was entitled "The Marquez Structure – A Meteor Crater North of Houston". The presentation was an excellent coherent exposure to his research on the crater. The secretary specifically remembers a caution to members not to go traipsing around the site, as the landowners were a little sensitive. John Blubaugh presented Alan with a framed certificate.
13. Mar Nunez and Bill Leach handed out the door prizes.
14. President Don Pearce asked for donations for refreshments and all were invited to stay after the meeting for refreshments. The meeting was adjourned at 9:40 PM.

HAS Secretary: William W. Leach

June 2, 2000

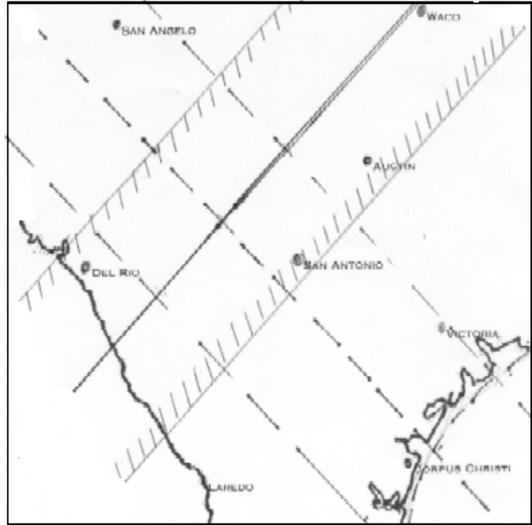
A Total Eclipse in Texas?

Yes, but You'll Have a Long Wait

by Leland A. Dolan

How would you like to observe a total eclipse of the sun, without leaving the Lone Star state? During this past century, not a single total solar eclipse was seen anywhere in Texas. It is true that the tracks of two annular eclipses crossed Texas. My reference is Fred Espenak's Fifty Year Canon of Solar Eclipses: 1986-2035. While the book goes into details about eclipses occurring during those years, it also contains world maps (each covering 20-year periods) showing ground tracks of all total and annular eclipses from years 1901 through 2100, inclusive.

The most widely viewed annular eclipses occurred on April 7, 1940. Its track passed through Del Rio, San Antonio and Houston. Those attending the April HAS meeting may recall that I mentioned that the meeting date occurred on the 60th anniversary of the 1940 annular eclipse, and that I had seen it as a child. The last eclipse of the 20th



*Total Eclipse of April 8, 2024,
lower left to upper right*

Century was actually “related” to the 1940 eclipse. Both solar and lunar eclipses come in families. Eclipses belonging to the same saros

Continued....

A Total Eclipse in Texas? ...from previous page

(lasting 18 years, about 11 days) are repeated under very similar circumstances, except that they are displaced a little more than 120 degrees farther west. Thus, after three saros cycles (54 years) you would expect another eclipse in the same region of Earth as that 54 years previously. As expected, on May 10, 1994 the track of an annular eclipse did cross Texas. However, since it was shifted to the north and west, it passed only over far West Texas, and the Texas Panhandle. Now, let's look at the Twenty-first Century, to see what it offers.

During the first two decades of the new Century, no solar eclipses will cross Texas. And even the partial phases of solar eclipses elsewhere will be disappointing. The one exception will be that of August 21, 2017, in which the track totality will cross the middle latitudes of the US, making a trip to Missouri worthwhile for any eclipse chaser. However, if you can "hang around" another seven years, you'll get to see the paths of two solar eclipses cross Texas: one annular and the other total, and only six months apart.

The first will be the annular eclipse of October 14, 2023, which will cross San Angelo, San Antonio and Corpus Christi. But that will be merely a prelude to the Big Event, which occurs on April 8, 2024. The track of this total eclipse will cross Texas, passing from southwest to northeast. Del Rio, San Antonio and Austin will be near the fringes of totality, but Waco and Fort Worth will be inside the path of totality. For Houstonians, the best and most convenient place to observe this eclipse would be along the centerline in the Texas Hill Country. Hope some of us will still be around to see it.

***Minutes of the Meeting
of the Executive Board
of the
Houston Astronomical Society
May 25, 2000
Secretary's Draft***

1. After determining that a quorum was present, the meeting was called to order by President Don Pearce at 7:37 PM.
2. Board members present were:

Don Pearce, President	Debbie Moran, Director-At-Large
Barbara Wilson, Vice President	Bill Flanagan, Director-At-Large
Bill Leach, Secretary	Warren Wundt, Director-At-Large
Gene Horr, Treasurer	Jay Levy, Director-At-Large
Mike Dye, Observatory Director	

Absent: Howard Levernz, Director-At-Large

Three additional society members were present.
3. There were no additions to the President's agenda.
4. After one correction to the minutes of the March 2000, board meeting, Mike Dye made a **motion** to approve the minutes and it passed unanimously.

Reports:

5. The Secretary indicated that the minutes were being passed on for publication in the Guidestar.
6. The observatory director stated his need for volunteers to help replace the cable in the observatory building. A discussion about changing the type of grass at the observing site followed.

Continued...

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7. The Welcoming committee passed out an accounting of its income/ expenditures indicating that the system of “donations” is working well.
8. The Treasurer passed out a balance sheet as of May 25, 2000.

Total Assets	\$21,182
Total Liabilities and Equity	\$21,182
Total Income	\$6,309
Total Costs	\$4,767
Net Income	\$1,542

The Treasurer was instructed to issue a second check to Dr. Matese and put a stop on the first check.

Trouble opening the roster file was discussed.

The Treasurer indicated that there were presently 310 paid members. Changing the location of the society mailbox was discussed.

9. Astronomy Day committee: Bill Leach reported that he planned to convene the first organizational meeting this summer in order to choose a date and a place and to notify the *Chronicle* of the event. The board had many suggestions for the committee.
10. Columbus Site Pollution Report: It was suggested that the author of an article in the *Reflector* about nuisance towers be contacted. Contacting the Wildlife Refuge Association of Oakridge Ranch and their representative Carol LeBranch was discussed. Mike Dye is to talk to Steve Simpson. The initial number of Hubble light shields to purchase for Oakridge residents was discussed. Warren Wundt suggested that a pilot program be set up to get Oakridge Ranch residents to attend a “star party” on the site. Barbara Wilson stated that the light shields cost about \$23 each. Bill Flannagan encouraged an aggressive posture to protect the site and suggested that the society find some way to suggest a certain light fixture to present

Continued...

Minutes... from previous page

and new residents of Oakridge Ranch. Don Pearce said that he would investigate the number of light shields to be purchased. Barbara Wilson said that she would find out if there are any price breaks for purchasing quantities of shields.

Old Business:

11. Bill Leach was designated to investigate joining the Kroger Foods Stores program (similar to the Randall's program) for an additional source of income for the treasury.

New Business:

12. The possible subdividing of the land around the site of the Texas Star Party was discussed.
13. Mike Dye made a **motion** that the meeting be adjourned, it passed and the President adjourned the meeting at 8:35 PM.

Secretary

Bill Leach 5/25/00

HAS Web Page

The Houston Astronomical Society Web page has information on the society, its resources, and meeting information.

The address is: <http://www.astronomyhouston.org>

Want your astronomy work and name on the Internet for the whole world to see? Have some neat equipment? Pictures in film, CCD, hand drawings or video format are all welcome on the page. Do you have an idea to improve the page? I'm listening. Send me Email at goldberg@sccsi.com. (You can click on my name on the HAS home page). Or, you can call Steve Goldberg (WebMaster), at 713-721-5077.

Observatory Duty Roster

by Michael B. Dye, Observatory Chairman

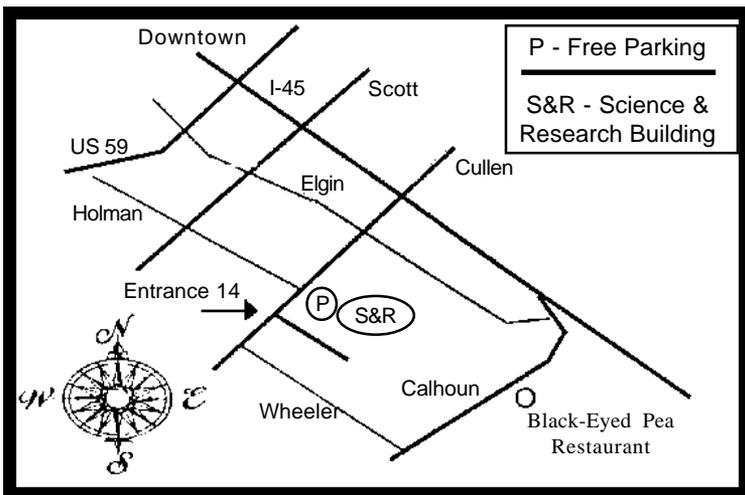
This is the duty list for July, August and September. Some names were moved from one month to another to accommodate some conflicts. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change from site duty to open house or from open house to site duty by pre-arrangement with the Site Supervisor for that month. Changes between months require Observatory Chairman coordination.

July Supervisor Dana Lambert 281-933-4627
Don C. Pearce Members Observatory Night 07-01-00
Michael D. Peters Site
Sim Picheloup Members Observatory Night 07-01-00
Edward H. Preston Site
Leonard W. Raif Members Observatory Night 07-01-00
Glenn L. Ray Site
Henry Schneider Site
Steve Simpson Site

August Supervisor Allen Gilchrist 281-558-1190
Larry Wadle Site
Mark Watson Members Observatory Night 08-19-00
Tom Williams Site
Barbara Wilson Members Observatory Night 08-19-00
Buster Wilson Members Observatory Night 08-19-00
Warren Wundt Site
Richard Nugent Site
Don Bates Site

September Supervisor Matt Delevoryas 713-795-0808
John Blubaugh Site
Ken Carey Members Observatory Night 09-23-00
John Chauvin Site
Art Ciampi Members Observatory Night 09-23-00
Brian Cudnik Members Observatory Night 09-23-00
George M. Dolson Site
Kenneth Drake Site
Mark Egan Site

Please remember that Site work can be done anytime and does not have to be done just before Members Observatory Night. Contact your Site Supervisor for details. Names are selected for Site Duty using the current Alphabetical listing for Observatory Key Holders. If any member knows of a conflict please call me before your name is listed.



General Membership Meeting

The Houston Astronomical Society holds its regular monthly General Membership Meeting on the first Friday of each month, unless rescheduled due to a holiday. Meetings are in Room 117 of the Science and Research Building at the University of Houston. A Novice Presentation begins at 7:00 p.m.. The short business meeting and featured speaker are scheduled at 8:00 p.m. Also typically included are Committee Reports, Special Interest Group Reports, current activity announcements, hardware reviews, an astrophotography slide show by members and other items of interest.

Board of Directors Meeting

The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. in Room 106 of the Space Science Building at Rice University. Call StarLine for Board Meeting information. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

GuideStar Information

The H.A.S. *GuideStar* is published monthly by the Houston Astronomical Society. All opinions expressed herein are those of the contributor and not necessarily of Houston Astronomical Society. The monthly Meeting Notice is included herein. *GuideStar* is sent via bulk rate mail to Regular, Student, and Honorary Members of H.A.S., selected individuals and recent visitors to the General Membership Meeting. Contributions to *GuideStar* by members are encouraged. Electronic submission is helpful. Submit the article in ASCII text, MS-Word (preferred), or WordPerfect format on an IBM format floppy or via AOL (BILLP10566). Mail copy to the address shown on the outside cover or to the editor at 256 East 5th Street, Houston, TX 77007. Copy must be received by the 15th of the month for inclusion in the issue to be mailed near the end of the same month. Or, bring copy to the General Membership Meeting and give it to the Editor, or phone to make special arrangements.

Editing & Production: Bill Pellerin, 713-880-8061; FAX: 713-880-8850;

AOL: BILLP10566; Internet: BILLP10566@AOL.COM

Reproduction: Mike & Judy Dye... Need help!! ... call the president to volunteer!!!

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Houston Astronomical Society

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