



September, 2000

At the September 8 meeting...

Note: 2nd Friday to avoid conflict with Labor Day Holiday

Dr. Jane MacGibbon

on

**Recent Discoveries
in Cosmology**

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

Vice Pres: Barbara Wilson

H: 281-933-1289

Secretary: Bill Leach

H: 713-863-8459

Treasurer: Gene Horr

H: 713-468-2157

★★★★★ Additional Board Members ★★★★★★

Liaison responsibility

Bill Flanagan 713-699-8819

Howard Leverenz 713-957-8667

Jay Levy 281-557-4920 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

Education Richard Nugent 713-910-5945

Field Tr./Obsg. Kenneth Drake 281-367-1592

Novice Kirk Kendrick 281-391-3834

Observatory Michael Dye 281-498-1703

Program Margaret Nunez 713-529-2549

Publicity Mark Egan 281-265-1497

Telescope Darin Palmer 713-223-3123

Welcoming Bill Leach 713-863-8459

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

Historian Leland Dolan 713-529-0403

Librarian Peggy Gilchrist 281-558-1190

Logo Mds Sales Judy Dye 281-498-1703

Long Range Plan Barbara Wilson 281-933-1289

Parliamentarian Kirk Kendrick 281-391-3834

Publ. Star Party Marg Nunez 713-529-2549

Rice U. Coord. Matt Delevoryas 713-795-0808

Schedule Obs'v'ty Steve Goldberg 713-721-5077

Texas Star Pty Steve Goldberg 713-721-5077

★★★★★ 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.

★★★★★ Dues and Membership Information ★★★★★★

Annual Dues: Regular \$33.00

Associate \$5.00

Sustaining . \$50.00

Student \$5.00

Honorary None

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

I missed the August meeting, and I normally hate it when that happens. But, I had the opportunity to have dinner with a friend that I've known since the 8th grade. We even graduated from college together, but then went our separate ways. I credit this guy with getting me into 'technology', which, at the time, was ham radio. Once a techno-geek, always a techno-geek, and now, of course, I've added astronomy to my geek list.

It's difficult to avoid being the target of derision when you have an interest in something like astronomy. Sometimes I'll be accused of being interested in astrology... no.. that's astronomy. Be that as it may, having some knowledge of astronomy gives me (and you) the opportunity to explain some things about the sky to friends and co-workers who are not otherwise interested in astronomy. "What are the two bright objects in the morning sky?" "Jupiter and Saturn," we can say. And so on.

I did have one observing session this month, but it was spent mostly messing around with equipment. While my techno-geek role encourages equipment tinkering, I'd really rather be looking at the sky. Anyway, having used alt-az telescopes for some time, I'm trying to figure out how to do a critical polar alignment of a German equatorial mount. The 'drift method' is not at all intuitive, but is considered to be one of the best ways to go (for critical alignment). I'd really like to be able to measure separation and position angle of double stars at some time in the near future. A couple of recent articles in *Sky & Telescope* discuss methods of making those measurements, and I'm eager to try this out.

In the end, though, I find that the sky and my ability to observe and understand it (in some small way) quite astounding. It is the fact that I can observe it and make some sense of it that makes me think that those who haven't taken this interest or who haven't made the effort to study the sky are the ones who are missing out. How can you not be interested in something such as this. This is the study of *everything*. It is the study of how the earth was formed, how stars shine, and how likely it is that there are other (populated?) planets nearby. It is the study of our place in the universe and the study of the place of other objects in the universe.

Continued on Page 7...

Houston Astronomical Society

Meeting Notice

For Friday, September 8, 2000

Note: SECOND Friday of September

Dr. Jane MacGibbon

got her Ph.D. at Cambridge while working with Stephen Hawking's group there. She will speak on recent discoveries in cosmology.

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

Kirk Kendrick has planned an exciting year for the Novice Group. Show up for the novice meeting and be a part of it.

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.**

September/October Calendar:



| <i>Date</i> | <i>Time</i> | <i>Event</i> |
|-------------|-------------|--------------|
|-------------|-------------|--------------|

September

| | | |
|----|------------|--|
| 5 | 11:27 a.m. | First Quarter Moon |
| 8 | | HAS Club Meeting- <i>Second</i> Friday of the month |
| | 7:00 p.m. | Novice Presentation - U of H |
| | 8:00 p.m. | General Membership Meeting U of H |
| 12 | 7:30 p.m. | Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808 |
| 13 | 2:38 p.m. | Full Moon |
| 20 | 8:29 p.m. | Last Quarter Moon |
| 22 | 12:27 p.m. | Autumnal equinox-Fall begins as sun enters southern celestial hemisphere |
| 23 | | Members Observatory Night-Columbus |
| 27 | 2:53 p.m. | New Moon |
| 30 | | Prime Night-Columbus |

October

| | | |
|----|-----------|--|
| 5 | 5:59 a.m. | First Quarter Moon |
| 6 | | HAS Club Meeting |
| | 7:00 p.m. | Novice Presentation - U of H |
| | 8:00 p.m. | General Membership Meeting U of H |
| 7 | 3-10 p.m. | Astronomy Day at George Observatory, contact Bill Leach to volunteer |
| 12 | 7:30 p.m. | Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808 |
| 13 | 3:54 a.m. | Full Moon |
| 20 | 3:00 a.m. | Last Quarter Moon |
| 21 | | H.A.S. Annual Picnic at the Obs. Site |
| | | Members Observatory Night-Columbus |
| 27 | 2:58 a.m. | New Moon |
| 28 | | Prime Night-Columbus |
| 29 | 2:00 a.m. | Set clocks back 1 hour from Daylight Time to Standard Time. |

**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

If you haven't checked out www.heavens-above.com, you need to do so. Among other information that you'll find on this site, you can find predictions for Iridium Satellite flares. The first time I heard of a satellite 'flare' I had to admit that I didn't know what it was about. Motorola launched a set of satellites intending to provide direct-to-satellite telephone communications. Anyway, as a business, it was a flop. The satellites are still in orbit, but will be de-orbited in the near future, so if you want to see a flare, do it soon. A flare is simply a reflection of sunlight off the panels of the satellite. I saw one from my front yard near downtown Houston, and saw a really bright one from TSP this year. Check it out.

Get your telescope out, even if it's in your own back (or front) yard, and take a look. Show your neighbors and friends. Show kids at a school star party and spark a lifetime interest in the sky. Most of all... have fun.

Clear skies!

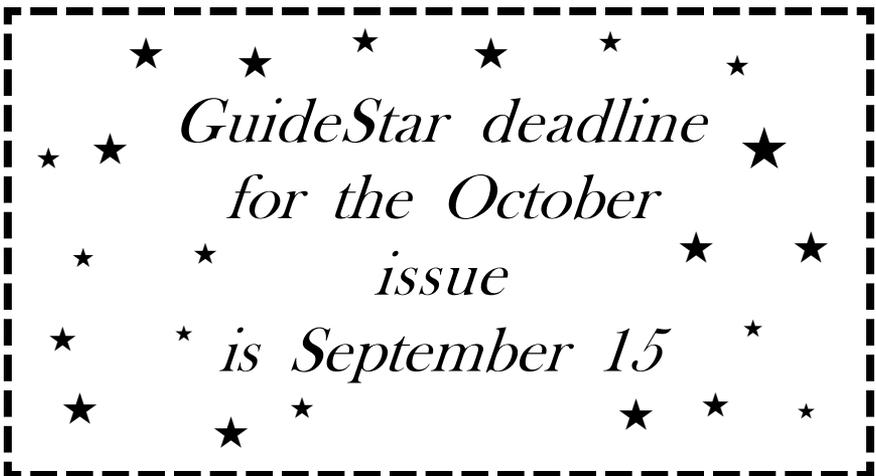
..Bill

Membership Renewals...

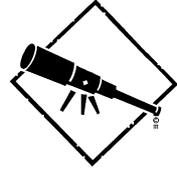
Please check the mailing label on your copy of the *GuideStar*. It'll tell you when your membership expires. If it expires soon, please send your renewal to the address on the outside cover of *GuideStar*. The dues information is on the inside front cover.

Membership in the Houston Astronomical Society is one of the great bargains in Astronomy. For a regular membership of \$33 you get the opportunity to support an active and growing organization, you get the monthly *GuideStar* newsletter, and you get access to the outstanding H.A.S. observing site near Columbus, Texas. (You must attend an orientation, given monthly, to use the site.) And, after two months of membership you can borrow, at no charge, one of the Society's loaner telescopes. It's the best deal in town, we think. Please renew your membership when it expires.

Thanks!



Observatory Corner



By Michael B. Dye Observatory Chairman

This year Astronomy Day is October 7th. In the interest of keeping things easy and hopefully uncomplicated we are going to have the Annual Picnic at the Observatory Site on October 21st. Last year I appointed myself Picnic Chairman and that worked out well, so I am repeating the process and re-appointing myself as 2000 Picnic Chairman. Last year's picnic was successful as a pot lock picnic, and using the tried and true process of not messing with a process that works, I am going to try and do it again. The Observatory Committee will again supply the meat (hamburgers and hot dogs), buns (also hamburger and hot dog), Ice Tea and maybe some soda (Coke, Pepsi, etc.). I am asking the membership to attend the picnic and bring a covered dish of some sort (Salad, vegetable, or desert) large enough to feed at least 8 to 10 people. I will repeat the experiment with not charging any money to offset the cost of the meat, buns or drinks. Donations of course, will not be refused. About the only thing I am asking is that I be contacted by members who will be attending to let us know. Please call or E-mail me. My phone is in the front cover of the *GuideStar* and my E-mail address is 'mbdye@aol.com'.



For some reason, the Observatory phone isn't working. I am in the process of trying to figure out why. I will write an article update when I find out why.

Good news about our Randalls card, we got the April 1 through June 30 report. In the second quarter we had spent \$12,060.81, which is an increase of \$1,263.69 over last quarters total of \$10,797.12. The Society will receive a check for \$120.60 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 July 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.

Continued...

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Observatory Corner... from previous page

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 actuating 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.

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.

Tough Duty, But Someone Has To Do It...

By Mark Williams

For reasons wholly obscure, Frank Bush, Director of the McDonald Observatory, recently invited me to join the Observatory's Board of Visitors. The Board supports the work of the Observatory and the University of Texas Department of Astronomy and helps the Observatory in its outreach programs. It is not strenuous duty, as the Board meets only twice per year, once in July at the Observatory near Fort Davis, Texas and once in December in Austin.

The invitation to the July meeting in West Texas lay on my desk for weeks; it was a long way to travel for two days of receptions and meetings, and my previous experience on boards suggested I would probably only miss a sore butt and a chance to practice sleeping while feigning rapt attention. But a business trip to Midland two days before the Board meeting presented a good excuse to head that way, and I figured it would be a shabby start of my Board tenure to snub the first invitation. Besides, they had thoughtfully scheduled the meeting over a new moon weekend so I calculated fair odds that I might get some observing in, if not through a scope, at least with a fair pair of eyes.

So with low expectations I rolled into the Friday evening reception and barbecue in the familiar dust bowl of the Prude ranch, in full summer swing as a kid's dude ranch. Now, all the veterans of TSP will recognize just how unpromising a prospect this was: Prude food outdoors on a hot July night with John Prude announcing a kid's rodeo over the camp PA as background accompaniment to cocktails and hors d'oeuvres.

Actually, it was a wonderful event held in a shady grove well away from the main Prude circus. Either the food was catered or old John Prude had splurged and provided road kill less than a week old. But the real treat were the attendees: many of the Observatory staff, graduate students and post-docs from UT Austin, faculty and administrators, some local West Texas

Continued...

Tough Duty.... from previous page

dignitaries, and the other Board members—Bill Hobby, the legendary former Lt. Governor, a few amateur astronomers like me (a lapsed physicist), but mostly just private individuals with a deep interest in promoting science education and research. I had a great time cornering the grad students and learning about their research and digging into some of the engineering aspects of the Hobby Eberly telescope (HET) with its technicians and designers.

The Saturday plenary session of the Board was held on Mount Locke in the dome of the Harlan J. Smith 107-inch telescope. It was really cool to sit with the big scope looming overhead and hear about the work of the Observatory. Larry Faulkner, President of UT Austin, discussed the direction of the University. Mary Ann Rankin, Dean of Natural Sciences, covered state of graduate science education at the UT. Frank Bash, Director of the Observatory provided a report on the status of the Observatory, and Chris Sneden, Chairman of the Department of Astronomy, updated the Board on the research activities of the UT Department of Astronomy. We heard from a grad student and post doc about their work in star and planet formation.

For me, however, the most interesting and moving discussion was from Khotso Mokhele, President of the National Research Foundation, South Africa. South Africa is building the Southern African Large Telescope (SALT), a 10-meter class telescope that is a near twin to the HET, in Sutherland, Northern Cape Province. McDonald Observatory and town of Fort Davis have partnered respectively with SALT and the town of Sutherland to share experiences. Delegates from both the SALT and Sutherland attended the Board meeting to learn how McDonald and Fort Davis have approached issues of light pollution and town/gown relationships over the years.

Although Khotso Mokhele discussed the SALT's progress, for me the most impressive part of his presentation was his answer to the question: how does a country as poor as South Africa, riddled with AIDs and scarred by generations of apartheid justify the enormous expense of a 10-meter telescope? His answer was simple. "Without scientific ambition we will forever be poor. We need projects like SALT to lift our gaze to the stars."

Continued...

Tough Duty.... from previous page

I have reflected on this since the meeting, and I believe Dr Mokhele is on to something. Forty years ago, John Kennedy pledged to land a man on the moon. While at that time we were nowhere near the current wretched conditions in Africa, the United States was struggling with our own form of apartheid, hunger and malnutrition were significant problems, and parts of Appalachia seemed forever doomed to poverty and despair. Kennedy's pledge was met with howls of outrage, "How can we possibly spend billions on space exploration, when we cannot even feed our own people!" But I believe the intervening forty years has revealed the wisdom in the choice to pursue both societal improvement and scientific exploration as simultaneous government goals. The spirit of exploration and discovery have motivated humans for about as long as we have historical evidence; and the quest for scientific understanding has probably done more to raise the human spirit and improve the human condition than any other activity on the planet. Good luck and Godspeed to South Africa!

The afternoon following the Board meeting saw the groundbreaking for a major renovation of the visitor's center at McDonald. The heart of the expansion will be a spectacular circular amphitheater, arranged much like an indoor planetarium except that overhead will be some of the darkest and most transparent night skies on the planet. And note the expansion will also have observing pads for visiting amateur astronomers! Nearly five hundred people attended the groundbreaking, including many ranchers and people from nearby communities in West Texas. The evening barbecue recognized State Representative Pete Gallego, who sponsored the recently passed light pollution control legislation in Texas. He is a huge friend to both the McDonald Observatory and the amateur astronomy community in Texas.

After a few beers and some barbecue, I made my way up to the top of the Mt Locke to see the sunset and savor some ancient photons once the full darkness had descended. The sunset was indeed spectacular, but in the growing darkness a huge thunderhead covered the sky and for miles around the West Texas landscape was revealed by the blasts of lightening. It rained not a drop, nor was a single star visible, just the rolling thunder, flashing lightning, and the dead silence between explosions. I gave up about midnight and made my way back down the mountain, grateful that the meeting next July was again thoughtfully scheduled for a new moon weekend.

Astronomy Day 2000!

This annual H.A.S. sponsored event is scheduled for Saturday, **October 7, 2000** from 3:00 – 10:00 PM at the George Observatory at Brazos Bend State Park. Organizational efforts have been engaged to publicize the event and to offer a quality program. Other sponsors include the Houston Museum of Natural Science, the Astronomical Society of Southeast Texas, the Fort Bend Astronomy Club, the Johnson Space Center Astronomical Society and the North Houston Astronomy Club.

This “family” oriented event will feature space shuttle simulations, solar observations, views with the George’s 36-inch telescope, numerous types of telescopes on the deck, information booths of local astronomy groups, astronomy specialty displays, younger astronomer’s activities, solar system display, door prizes and seven interactive presentations by speakers scheduled on the hour.

The event requires the efforts of many volunteers and H.A.S. usually provides most of these. If you usually help with this event or if you would like to help then please contact Bill Leach at 281-312-1650 or astrobil@flash.net. Even if you can’t bring a telescope your efforts are needed in promoting the Society and in coordination.



Astronomy Day 2000!

**Saturday,
October 7, 2000**

3:00 – 10:00 PM

**George Observatory
Brazos Bend
State Park**

Southwest of Houston

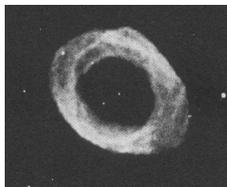
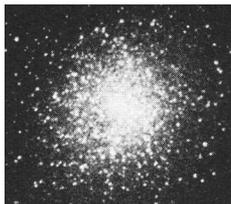
Activities:

**Space Shuttle Simulations
Daytime Solar Observations
36-inch Telescope Views
Deck Telescope Observing
Houston Astronomy Organizations
Astronomy Specialty Displays
Interactive Presentations
Younger Astronomer's Activities
Solar System Display
Door Prizes**

Objects to Observe:

**First Quarter Moon
Mercury
Venus
Jupiter
Saturn
Neptune
Uranus**

**Ring Nebula in Lyra
Globular Cluster in Hercules
Andromeda Galaxy
Northern Cross Double Star
Milky Way Galactic Center
Satellites and Meteors
Open Clusters in Sagittarius**



Sponsored By:

**Houston Museum of Natural Science (HMNS)
Astronomical Society of Southeast Texas (ASSET)
Fort Bend Astronomy Club (FBAC)
Johnson Space Center Astronomical Society (JSCAS)
Houston Astronomical Society (HAS)
North Houston Astronomy Club (NHAC)**

Observatory Duty Roster

by Michael B. Dye, Observatory Chairman

This is the duty list for September, October and November. 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.

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

October Supervisor Allen Gilchrist 281-558-1190
Jean-Marc Follini Site
Fred Garcia Members Observatory Night 10-21-00
John Garza III Site
Clifton Goldman Members Observatory Night 10-21-00
David Granadino Members Observatory Night 10-21-00
Chai S. Heng Site
Terry J. Hiserodt Site
Gary Hlivko Site

November Supervisor Matt Delevoryas 713-795-0808
Clayton Jeter Site
Stanley Jones Members Observatory Night 11-18-00
Keith Jurgens Site
Arnie Kaestner Members Observatory Night 11-18-00
David Kahlich Members Observatory Night 11-18-00
Howard Leverenz Site
Jay Levy Site
Mary Lockwood 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.

Special "Help" Volunteers

Any member who wants specific information on a subject listed below may call the individual listed. If you have a moderate knowledge of a special subject and would be happy to have others ask you about that subject, let the editor know and your subject, name and phone will be listed in *GuideStar* in the future. Note that we have listed a few possible areas where you might volunteer, but, of course, you are not limited to these. You can also have a specialty which is a sub-group of another. Note that the number of names for any subject is not limited to only one person. Also see the "Ad Hoc Committee Chairpersons" on the inside front cover and the "Special Interest Groups Listing article.

| <u>Subject</u> | <u>Name</u> | <u>Phone</u> |
|-----------------------------------|---|--------------|
| Asteroids | Barbara Wilson | 281-933-1289 |
| Astrometry | Richard Nugent | 713-910-5945 |
| Astrophotography | Steve Goldberg | 713-721-5077 |
| Beginning in Astronomy | Peggy Gilchrist | 281-558-1190 |
| | Amelia Goldberg | 713-721-5077 |
| Comets | Kenneth Drake | 281-367-1592 |
| | Don Pearce | 713-432-0734 |
| Computers | Matt Delevoryas | 713-795-0808 |
| | Leland Dolan | 713-529-0403 |
| | Ricardo Palmeira | 713-669-1409 |
| Cosmology | Ricardo Palmeira | 713-669-1409 |
| Deep Sky | Larry Mitchell | 281-448-8700 |
| | Barbara Wilson | 281-933-1289 |
| Double Stars | John Blubaugh | 713-921-4275 |
| Drawing (Sketching) | Scott Mitchell | 713-461-3020 |
| Herschel Objects | Larry Mitchell | 281-448-8700 |
| History, Astro'y - General | Leland Dolan | 713-529-0403 |
| | Ricardo Palmeira | 713-669-1409 |
| History, Astro'y - Amateurs | Tom Williams | 713-526-2868 |
| Mathematics, Astronomical | Richard Nugent | 713-910-5945 |
| Messier Objects | Novice Committee (see inside front cover) | |
| Photometry | Open | |
| Radio Telescopes | John Hiatt | 713-464-4010 |
| Satellites, Artificial | <open> | |
| Solar Observing | Larry Mitchell | 281-448-8700 |
| Spectroscopy | Open | |
| Thin Crescent Moons | Don Pearce | 713-432-0734 |
| Variable Stars | Barbara Wilson | 281-933-1289 |
| | Tom Williams | 713-526-2868 |
| Video | Larry Mitchell | 281-448-8700 |

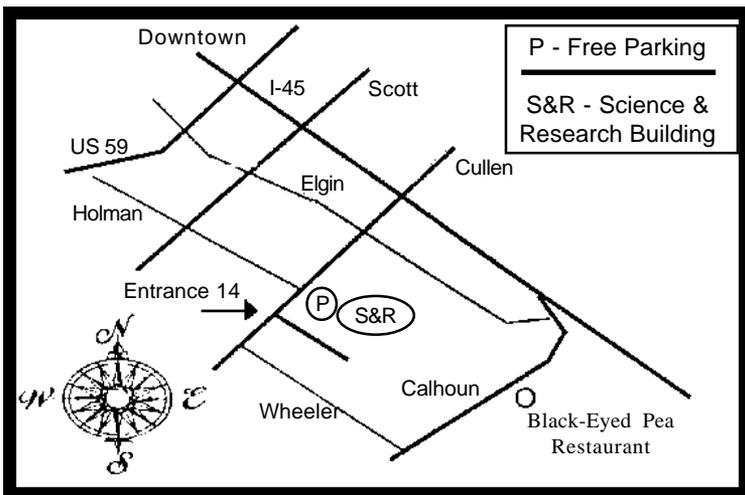
M-51 Image from Texas Star Party

Mark Williams just sent me (your editor) a copy of his image of M51 taken at the Texas Star Party 2000. I checked his web site, and it's not posted there yet, but I'm going to send him an email asking him to share it with you. It's an outstanding image. Mark's site is at:

<http://freeweb.pdq.net/williams/index.htm>

..and there's a link to it from the Houston Astronomical Society Web Page.

Notes...



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.

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