



May, 2002

At the **May 3** meeting...

Dr. Reggie DuFour
Rice University
The Chemical
Composition of Nebulae

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

★★★★★ **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 & Past President** ★★★★★★★★★★

President: Kirk Kendrick H: 281-391-3834 Treasurer: Debbie Moran H: 713-666-9428
Vice Pres: Bill Leach H: 281-893-4057 Past President: Don Pearce H: 713-432-0734
Secretary: Brian Cudnik H: 832- 912-1244

★★★★★★★★★ **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
Christopher Mendell
Steve Sartor

★★★★★★★★★ **Committee Chairpersons** ★★★★★★★★★★

Audit Matt Delevoryas 713-666-9428 Program Scott Mitchell 713-461-3020
Education Richard Nugent 713-524-1993 Don Pearce 713-432-0734
Field Tr./Obsg Steve Grubbs 713-455-5701 Publicity Warren Wundt
Novice George Stradley Telescope Darin Palmer 713-223-3123
Observatory Michael Dye 281-498-1703 Welcoming Marg Nunez 713-529-2549
..... Hannah Lange

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

Historian Leland Dolan 713-688-0981 Publ. Star Party Marg Nunez 713-529-2549
Librarian Peggy Gilchrist 281-443-8773 Rice U. Coord. Matt Delevoryas 713-666-9428
Logo Mds Sales Judy Dye 281-498-1703 Schedule Obs'v'ty Steve Goldberg 713-721-5077
Long Range Plan Bill Leach 281-893-4057 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.

★★★★★★★★★ **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. 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	Don Pearce	713-432-0734
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

It's finally here!! May!! The month of the Texas Star Party. Getting ready for this event takes some significant planning. I start with my packing list from the last TSP and modify it to reflect the needs of this trip. I've decided to take my 14.5" Dobsonian this year to take full advantage of the dark skies at the Prude Ranch. This telescope is really nice. It has one of the last Galaxy (primary) mirrors of this size. I suppose they determined that making mirrors this small didn't make the best business sense for them, so they only make larger ones now.

This is a nice size, however. Not so large as to be unmanageable, but large enough to capture a significant amount of light. And... I can keep my feet on the ground for most observing positions. If the telescope is pointed straight up, I have to have a small step stool (one step) to reach the eyepiece.

The area of a mirror, the really important factor, goes as the square of the diameter (or radius), so a 14.5" mirror captures 3.3 times as much light as an 8" mirror, and an 18" inch mirror captures 1.5 times as much light as the 14.5". While this is significant, I figure I'd want to increase my light capture by at least 2x to justify a larger telescope. To capture twice as much light as my 14.5" would require a 20" mirror, and this would be a pretty darn big telescope.

If you're going to the Texas Star Party, or even if you're not, check out the web site at:

<http://www.texasstarparty.org>

You'll want to plan your week around the activities scheduled at the TSP, especially the swap meet on Friday -- lots of goodies. Then... there are the vendors. Get ready.



Bro. Guy Consolmagno
(Photo by Kent Francis)

If you missed last month's meeting, you missed an outstanding one. Brother Guy Consolmagno, the Vatican astronomer, gave us an outstanding insight into the role of the Vatican astronomer, complete with photos of the observatories and facilities. I finished Bro. Consolmagno's book prior to the meeting and was pleased to have him autograph it for me. The book (*Brother Astronomer - Adventures of a Vatican*

Continued on page 13...

Houston Astronomical Society

***Meeting Notice
For Friday, May 3, 2002***

***Dr. Reggie DuFour
Rice University***

***What is the chemical
composition of nebulae, and
what does this tell us about the
universe?***

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.

May: Jay Levy - "Solar Stuff Plus Meteors"

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.**

May/June Calendar:



Photo by Scott Mitchell

<i>Date</i>	<i>Time</i>	<i>Event</i>
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May 2002

3	7:00 p.m.	Novice Presentation - U of H. "Solar Stuff Plus Meteors" presented by Jay Levy.
	8:00 p.m.	General membership meeting U of H. "Those Colorful Nebulae: Cosmochemical Laboratories" Dr. Reggie Dufour-Rice Univ.
4	2:16 a.m.	Members Observatory Night- Columbus Last Quarter Moon
5		Texas Star Party begins in Ft. Davis
10	early eve.	Mars only ¼ deg. from Venus in west
11		Prime Night-Columbus
12	5:41 a.m.	New Moon Texas Star Party ends in Ft. Davis
14	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808
19	2:42 p.m.	First Quarter Moon
26	6:51 a.m.	Full Moon
30	7:30 p.m.	Board meeting SS106 at Rice University entrance 13

June 2002

1		Members Observatory Night- Columbus
2	7:05 p.m.	Last Quarter Moon
7	7:00 p.m.	Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H. Dr. Erika Gibb (Comet Dust)
8		Prime Night-Columbus
10	6:47 p.m.	New Moon
	7:30 p.m.	Approximate start of partial solar eclipse from Houston.
	8:15 p.m.	Partial solar eclipse at sunset. About 50% of sun obscured at sunset.
17	7:29 p.m.	First Quarter Moon
18	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808
21	8:24 p.m.	Summer solstice. Summer begins in northern hemisphere.
24	4:42 p.m.	Full Moon

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

***Minutes of the
General Membership Meeting
of the Houston Astronomical Society,
05 April 2002.***

By Brian Cudnik

The Meeting was called to order at 8:09 p.m. (the delay was due to technical difficulties).

A welcome and introduction from president Kirk Kendrick was given.

The call for visitors revealed approximately 20 visitors. President Kirk then gave a brief mention about who the H.A.S. is and about the H.A.S. observatory.

The announcements were as follows:

- Darrin Lewer, of Land, Sea, & Sky announces a book signing on April 20 at the shop. Dr. John Freeman of Rice University will be signing his book—Storms in Space—and he will be there from 10:30am until 3:30pm. There will also be a 10% discount on all books that day.
- Amelia Goldberg presents the Meteor Club Certificate to Jay Levy. This was Certificate #73 for spending at least 12 hours watching and reporting meteors. She also gave a call for more volunteers to help out with registration at the Texas Star Party.
- James Wooten thanked those who volunteered at the Sun-Earth Day at the Museum of Natural Science on March 23, and he especially thanked the one who brought the Solaris H-alpha scope. On April 24, St. Agnes needs an astronomy speaker, talk to James if interested.

Continued...

Minutes of the April Meeting... from previous page

- Don Pearce gave a comet update:
 - Ikeya-Zhang is currently at magnitude 3.4 after having passed perihelion on March 18th. The comet passes inferior conjunction with the Sun on April 3, but will be far enough north of the Sun to be both a morning and an evening object (which passed very near to M31) for the Houston area. Later this month, the comet will climb higher into the morning sky, and make its closest approach to Earth on April 29, passing within 0.44 au of Earth.
 - Comet Utsunomiya is currently brighter than magnitude 8.5 and brightening. The comet makes its closest pass to the Earth on April 16 and its closest pass to the Sun on April 23, when it is expected to shine at magnitude 5.3. However, the comet is lost in the solar glare until after May, appearing in Pegasus and glowing at around 9th magnitude.
 - C2000 WM1 LINEAR Returns to view, being well placed in Aquila in the Morning Sky but fading. Currently, the comet glows at magnitude 9.2
 - Comet Snyder-Murakami passed perihelion on February 22 and is currently at magnitude 10.7 and fading as it recedes from both the Sun and the Earth.
- The three new members will get to introduce themselves at next month's meeting.
- Marg announced a Star Party tomorrow (Sat. 06 April) evening at the Boy Scout Camp of Karankawa, if clear. The event starts at 6:30pm. Another event will occur on April 30, which is to be announced later.

Continued on page 12....

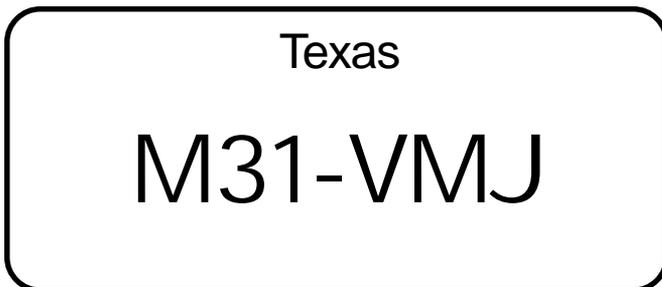
Something I Have Noticed Recently

by Brian Cudnik

I have noticed in recent months while driving on the roads and freeways of the Houston area, a number of license plates whose numbers include the various Messier designations M01 to M99. The vast majority of these people are not likely astronomers, as indicated by a lack of indicative paraphernalia on their automobiles (e.g. bumper stickers, etc.), and probably don't even know they have the names of celestial objects on their bumpers. However, several times a day I notice license plates like (and these are hypothetical examples...any quote of a real license plate number is coincidental and not meant to draw any attention to anyone in particular) M31-VMJ, M22-BGL, M94-SSK, M07-BNJ, M42-RRK, etc.

I try to remember which object each represents: M31, the great Andromeda galaxy; M-22, the large globular in Sagittarius; M-94, the "Blackeye" galaxy; M07, the nice open cluster in Scorpius; and M42, the great Orion Nebula.

While you're out and about in traffic, why not try to quiz yourself whenever you see such license number? Ask yourself what object M33 is, for example, and picture that object in your mind. Also, see how many of the M-object designation you can spot riding, or parked, around town and how long before you see all 99 that can be represented on Texas license plates. This makes for some nice virtual star-gazing and a great way to sharpen your mind on which M-object is which.

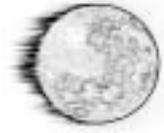


The Elusive History ..of The Term “Blue Moon”

By John Lane

Many of you may remember reading an article that I wrote a couple of months back entitled “what’s a Blue Moon”. In it, I described the blue moon as being the second full moon of the month. Many of us believe this assumption to be true because it has been described that way by countless sources in the media and astronomical community. Well, we were wrong.

The truth finally occurred to me when professor Bill Leach told me the whole tragic story. Apparently, back in the 1940’s, an appalling mistake was made when an article was published in *Sky and Telescope* magazine. In this article the second full moon was mistakenly dubbed a ‘blue moon’.



So, what is actually a ‘blue moon’? All I really know for sure is that the term has been around for over 400. The answer originates somewhere in American folklore. Since I am no expert in any folklore, I will allow your imaginations to run free to draw your own conclusions.

Finally, only piece of the puzzle is missing. What do you call the second full moon of a month? To the best of my knowledge, there is no answer. This phenomenon begs for a more noble title.

Editor's note - This issue has been discussed in several articles that I've read. It seems to me that calling the second full moon in a month a 'blue moon' is harmless enough, especially in light of the fact that no other term for it is available!

What Space-age Inventions Have You Touched Today?

Exploring space is not easy. Space engineers and scientists have invented many new things to make it safe and not too expensive to go into space. Some of the inventions are used to help humans live in space. Showers and toilets that work without gravity are examples of inventions used on the Space Shuttle and International Space Station. Other inventions are used on spacecraft going to Mars and beyond.



Many things invented for space are also very useful right here on Earth. New inventions or new uses for things invented for space are called "spinoffs." For example, special materials were developed for space suits

to protect astronauts from the harsh environment of space. These same materials are used in the special clothing that fire fighters wear to protect them from the harsh environment of a building on fire! Cordless tools were invented for the Apollo astronauts to use on the moon. Cordless drills and vacuum cleaners are examples of spinoffs from these inventions.



This computer game joystick, made by ThrustMaster, uses technology developed for a Space shuttle hand controller. The design for these toy gliders (AeroNerf Gliders), made by Hasbro, Inc., benefited from NASA wind tunnel and aerodynamic research.

Doctors can now take amazing pictures of people's insides to find out exactly what is wrong with them. These pictures are possible because of technology developed to process pictures from space.

And what about the TV satellite dish you may have on your roof? Space program technology helped to make those pictures and sounds crisp and clear.

Continued....

Space Place... from previous page

If it weren't for the space program, some of these wonderful inventions might never have come about! Find out about more space program spinoffs and play the Spinoffs Memory Game at The Space Place, <http://spaceplace.nasa.gov/spinoffs.htm>.

The Space Place is a web site for children with fun and educational activities and facts related to many of NASA's space missions. This article was provided by NASA's Jet Propulsion Laboratory, managed by Caltech in Pasadena.

Minutes of the April Meeting... from page 8

John Blubaugh introduced tonight's speaker, Brother Guy Consolmagno, who answers the question "Why Does the Pope Have an Astronomer?" The talk is followed by a question and answer session.

After a 3-minute break, the doorprize winners are drawn and Marg provides the maps to the star parties announced earlier in the meeting.

The last call for announcements prompts Leland Dolan to remind the membership of the time change on Sunday morning.

The meeting adjourns at 9:52pm.

Dad's Day 5k Run



.....

Benefits Us Too,
...supporting Prostate Cancer Research

June 15, 2002, 8:00 a.m.
Beginning at the Fonde Recreation Center, Memorial at Sabine.
Also, includes a family walk.

Register online at:

<http://www.txustoo.org>, or pick up a registration form at your Randalls store.

Observations... from page 4

Astronomer) is quite good. It should be read as a collection of articles and stories about his experience and activities as Vatican astronomer. There's a lot in the book about the history of the relationship between the Catholic Church and science, including, of course the story of Galileo. There are also stories of his management of the Vatican meteorite collection, and of a meteorite expedition he took.

Thanks to John Blubaugh for arranging his visit to the H.A.S.

This month, a friend of the H.A.S., Dr. Reggie DuFour, of Rice University will preview his Texas Star Party presentation on nebulae and their chemical composition. Dr. DuFour is an excellent presenter and I look forward to his presentation at the meeting.

Our program committee has been doing an outstanding job with the programs this year. They deserve our congratulations for a job well done.

Until next time... clear skies and new moons!

..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!

Other Meetings...

Fort Bend Astronomy Club meets the third Friday of the month at 8:00 p.m. at the First Colony conference Center. Novice meeting begins at 7:00, regular meeting begins at 8:00. Web site: <http://rampages.onramp.net/~binder/>

Johnson Space Center Astronomical Society meets in the the Lunar and Planetary Institute on the 2nd Friday of each month. Web site: <http://www.ghgcorp.com/cbr/jscas.html>

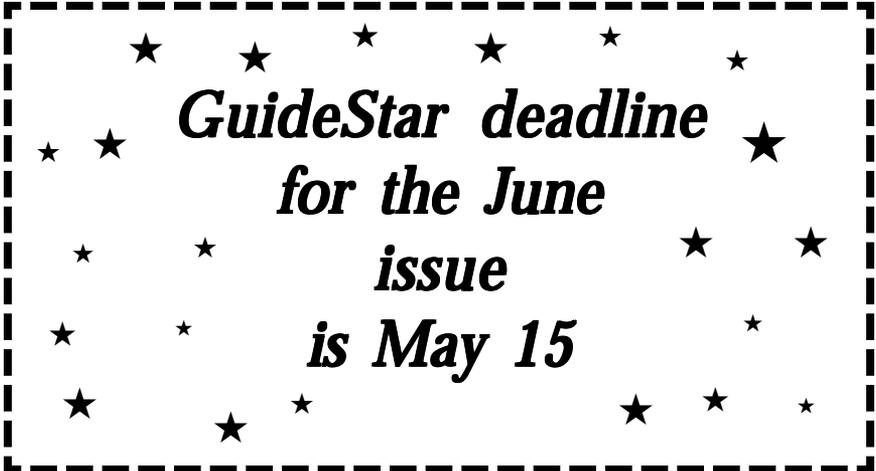
North Houston Astronomy Club meets at 7:30 p.m. on the 4th Friday of each month in the Teaching Theatre of the Student Center at Kingwood College. Call 281-312-1650 or E-mail bill.leach@nhmccd.edu. Web site: www.astronomyclub.org

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.



***GuideStar deadline
for the June
issue
is May 15***

Observatory Duty Roster

by Michael B. Dye, Observatory Chairman

This is the duty list for May, June and July. Some names may have been 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.

May Supervisor Cooper Walls 713-461-9590
Keith A. Jurgens Site
Arnie Kaestner Site
David Kahlich Members Observatory Night 05-04-02
Bill Krell Site
Howard Leverenz Site
Jay E. Levy Members Observatory Night 05-04-02
Mary Lockwood Members Observatory Night 05-04-02
Chris Mendell Site
Robert C. Menius Site

June Supervisor Matt Delevoryas 713-662-2939
Larry Mitchell Members Observatory Night 06-01-02
Jeff Moore Site
Mark Mulrooney Site
Ben Negy, Jr. Members Observatory Night 06-01-02
Johnny Norris Site
Richard Nugent Members Observatory Night 06-01-02
Ralph Overturf, Jr. Site
Don C. Pearce Site
Sim Picheloup Site

July Supervisor Allen Gilchrist 281-443-8773
Debbie Moran Site
Glenn L. Ray Members Observatory Night 07-27-02
Mike Reynolds Site
Henry Schneider Members Observatory Night 07-27-02
Steve Simpson Members Observatory Night 07-27-02
Larry C. Wadle Site
Mark R. Watson Site
Tom Williams Site
Warren Wundt 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.

Subject	Name	Phone
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	713-688-0981
	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	713-688-0981
	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
Telescopes	Clayton Jeter	281-383-1337
Variable Stars	Barbara Wilson	281-933-1289
	Tom Williams	713-526-2868
Video	Larry Mitchell	281-448-8700

Observer's Handbook

Get ready for the 2002 observing season by getting your copy of the Observer's Handbook at the next meeting. This book will be your constant observing companion for the year. All of the important astronomical events for the year are included in this guide.



Don't miss a big event because you weren't prepared. Get your copy from Judy at Logo Sales at the next meeting. They won't last forever, you know!!!

Logo Sales

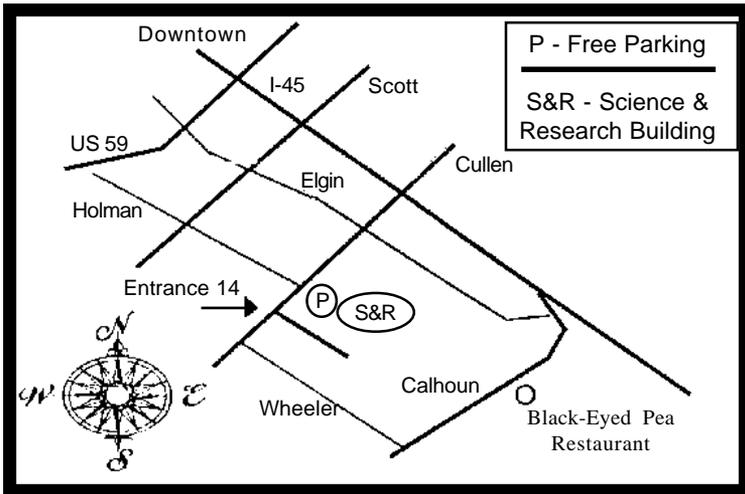
For H.A.S. Logo merchandise, call:
Judy Ann Dye - 281-498-1703

Hooded Sweatshirts

M	\$31.00
L	\$31.00
XL	\$31.00
XXL	\$33.00

These are the prices for our new hooded sweatshirts. These are made from heavy sweatshirt material and were very popular at the previous meetings. If you want one, come to the meeting -- cash and checks accepted.





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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Houston Astronomical Society

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