



***December, 2000***

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*At the December 1 meeting...*

***Bill Leach***

***The New Green Bank Telescope  
and the  
Extended Very Large Array***

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***Houston Astronomical Society***  
***GuideStar***

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**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** ★★★★★★★★★★

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 ..... 281-557-4920	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	Program ..... Margaret Nunez ..... 713-529-2549
Education ..... Richard Nugent ..... 713-910-5945	Publicity ..... Mark Egan ..... 281-265-1497
Field Tr./Obsg. .... Kenneth Drake ..... 936-890-3735	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 .....	936-890-3735
Lunar & Planetary .....	John Blubaugh .....	713-921-4275
Occultations & Grazes ...	Wayne Hutchison .....	713-827-0828
Advanced .....	Bill Leach .....	713-863-8459

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## *Observations... of the editor*

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**by Bill Pellerin, GuideStar Editor**

It's raining... and cold... but, it's the weekend before Thanksgiving, so there's still hope that the observing conditions for the Thanksgiving weekend will be good. We'll see.

With cooler weather coming on it's a good idea to be thinking about what you will wear to keep you warm on chilly (cold) observing nights. I'll admit that I'm not good for much cold weather observing, although I *have* been out when the temperature was 8 degrees F. That's **way** too cold to be out observing. Even when the temperature is in the 30's I find myself getting chilled. Astronomical observing is not a strenuous activity, so there's not much going on to generate warmth. The best advice is dress in layers (several), be sure your head, hands and feet are warm, and be prepared to take breaks to warm up from time to time.

We're about ready to begin a new year for the H.A.S., with new officers and some new committee leaders. Again, you have the opportunity to contribute to the organization by volunteering to help. Think about how you can help, and get with one of the officers or committee leaders at the December meeting.

I talked with our president-elect (Kirk Kendrick) at the November meeting and he agreed to renew the practice of writing a "President's Message" in the monthly *GuideStar*. I look forward to putting these items in this place every month for the year 2001. Right now, I don't know if I'll continue to write my "Observations.." items or not.

A few weeks ago I had the opportunity to go to Rice University and hear a lecture by Dava Sobel, the author of *Galileo's Daughter*. She's a great writer, and the book is outstanding. It has just come out in paperback, so if you didn't read it because the price was too high, you can now get a paperback version at a lower price. The lecture was very good, too. Ms Sobel talked about how she came to write the book and the work that was involved

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# ***Houston Astronomical Society***

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***Meeting Notice  
For Friday, December 1, 2000***

***Bill Leach***

***The New Green Bank Telescope  
and the  
Extended Very Large Array***

**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

Novice Committee -- Looking for observing buddies that can help you get started in astronomy? Join the Novice "Committee" at 7pm on the night of each regular HAS membership meeting. Each month we focus on a "topic of interest" requested by the group, and spend some time just talking about astronomy - from observing Messier objects to aligning your telescope to what's in Houston skies. Upcoming meetings will focus on:

December --      What should I buy? Why???

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.**

# December/January Calendar:



*Date Time Event*

## *December*

1		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting U of H
3	9:55 p.m.	First Quarter Moon
11	3:04 a.m.	Full Moon
12	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808
16		Members Observatory Night-Columbus
17	6:43 p.m.	Last Quarter Moon
21	7:37 a.m.	Winter solstice. Sun farthest south of celestial equator.
23		Prime Night-Columbus
25	11:22 a.m.	New Moon. Partial solar eclipse late Christmas morning.

## *January 2001*

2	4:32 p.m.	First Quarter Moon
4	3:00 a.m.	Quadrantid meteor shower, max ZHR=130
		HAS Club Meeting
5	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting U of H
9	2:24 p.m.	Full Moon
16	6:35 a.m.	Last Quarter Moon
	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808
24	7:07 a.m.	New Moon

***Send calendar events to [JBlubaugh@aol.com](mailto:JBlubaugh@aol.com)  
or call 713-921-4275.***

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# *HAS Logo Sales*

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*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
<b>2001 Observer's Handbooks .....</b>	<b>\$ 12.00</b>

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## *Observations... from page 4*

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in producing the book. I was able to get her to sign my copy after the lecture. The Rice University lecture series continues, and you can get the schedule from the Rice web page ([www.rice.edu](http://www.rice.edu)).

As 2001 approaches let me wish you and yours a happy holiday season. Here's hoping that you get the astronomy goodie that you've been wanting and that the season is fun for you and your family.

It seems that 2000 came and went in a hurry. It feels like only yesterday that folks were worried about Y2K computer problems (which didn't happen). If you're one of those people who believes that the new millenium begins on January 1, 2001, have a fun time celebrating.

*..Bill*

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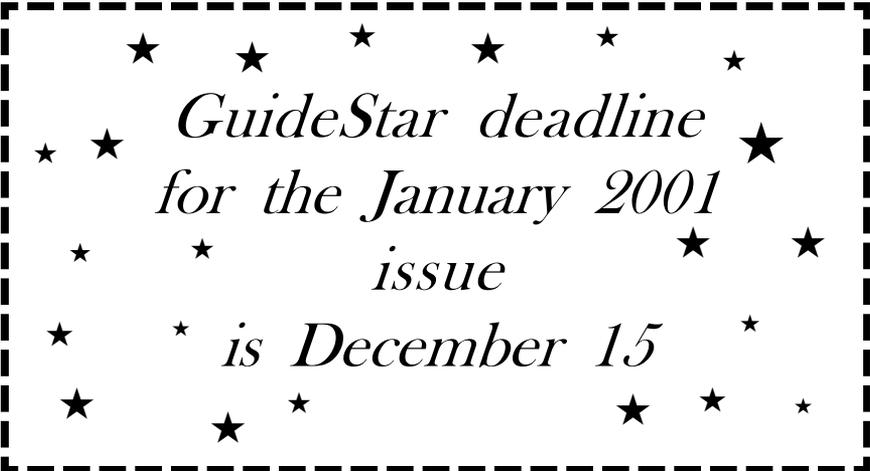
## ***Membership Renewals...***

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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.

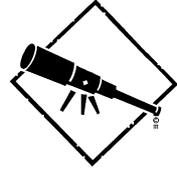
Membership in the Houston Astronomical Society is one of the great bargains in Astronomy. For a regular membership of \$33 you get the opportunity to support an active and growing organization, you get the monthly *GuideStar* newsletter, and you get access to the outstanding H.A.S. observing site near 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!***



*GuideStar* deadline  
for the January 2001  
issue  
is December 15

# ***Observatory Corner***



*By Michael B. Dye Observatory Chairman*

For the last few years, I have compiled the Open House and Prime Night List. Below is the 2001 list generated by much cooperative effort by various members of the Observatory Committee. Included in this list are the New and Full Moon dates. I hope this list helps members choose dates to go the Observatory Site.



<b>Month</b>	<b>Prime Night</b>	<b>Members Night</b>	<b>New Moon</b>	<b>Full Moon</b>
January .....	20 .....	13 .....	24 .....	9
February .....	24 .....	17 .....	23 .....	8
March .....	24 .....	17 .....	25 .....	9
April .....	21 .....	14 .....	23 .....	8
May .....	19 .....	12 .....	23 .....	7
June .....	16 .....	9 .....	21 .....	6
July .....	21 .....	14 .....	20 .....	5
August .....	18 .....	11 .....	19 .....	4
September .....	15 .....	8 .....	17 .....	2
October .....	13 .....	20 .....	16 .....	2
November .....	17 .....	10 .....	15 .....	1 & 30
December .....	15 .....	8 .....	14 .....	30

When I wrote the Observatory Corner article last month I forgot one very important accomplishment. Allen Gilchrist and I (mostly Allen) repaired the Bathroom Toilet in the East Bathroom. This turned out to be more fun than either of us had anticipated. Allen had removed the toilet from the mounting flange before I arrived on Saturday morning. He was going to replace the wax ring and reset the mounting bolts in the flange in the morning so the bathroom would be ready for the picnic. When he removed

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## ***Observatory Corner... from previous page***

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the toilet, he discovered that the flange was broken. This sort of brought the repair activity to a halt. When I arrived, we decided to go to McCoys and get a replacement flange. We came back and spent about an hour scraping and filing to remove the old flange. The new flange was glued in and after some leveling activities the toilet was remounted. So next time you use the East toilet, remember and be grateful for the determined efforts of Allen Gilchrist.

Because of a previous commitment, Judy and I will not be at the December General Meeting. Because of this, Warren Wundt and Molly Hunt have agreed to bring and sell the *Observers Guide* and the 2001 Calendars. I also made a mistake and misquoted the price for the calendar last month; the price is \$12.00 not \$11.00 as I stated in the November *GuideStar*.

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](mailto: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.

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# ***Watching the Activity of the Sun and the Moon***

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*by Brian Cudnik (soon to be Publicity Person for the H.A.S.)*

We literally have a universe of objects to keep us entertained on clear nights here on Earth, but two very familiar objects have me quite busy these days. These are the two brightest objects in the terrestrial skies, the Sun and the Moon. I am currently working on some interesting research projects with both and there are ways that anyone can become involved as well.

My full-time job involves solar observations and research at the Prairie View Solar Observatory on the campus of Prairie View A&M University. My unofficial title (as given by my boss last year) is Senior Observer, but I am “officially” known to PVAMU as a research assistant. Each weekday (that has enough sunlight to work with), we open the observatory for business, watching all the solar active regions and filaments that are visible at the time. We also monitor candidate active regions for flares. Currently we are working with a 35-cm vacuum telescope equipped with a Hydrogen-alpha filter and a Santa Barbara Instrument Group ST-7 CCD camera. The telescope is only able to see a 5'x7' rectangular area of sun, enough to fit a small- to medium sized active region in the field of view. Most of the larger active regions also fit, provided they are not too extended in size (AR 9169 of September was too large to be completely contained in the FOV...). Within the first months of 2001, we expect to have an additional telescope in place to image the full disk of the Sun, as well as a magnet-optical filter to image the magnetic fields on the solar disk.



We have observed over 650 active regions since daily observations began in May 1999. The best images from the larger of these regions are posted on the PVS0 website (go to <http://www.pvamu.edu/cps/solar.html>). We have imaged hundreds of small solar flares, several dozen M-class or greater (Medium-sized flares) flares and five major flares of M6 and bigger. The largest flare we have imaged to date is the X2.3 from last June. In addition to watching flares, active regions, and solar filaments, I count the number

*Continued...*

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## ***Watching the Sun and the Moon... from previous page***

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of sunspots visible on the solar disk each day and report these each month to the AAVSO solar division. This is a rewarding project since one contributes to the official American sunspot number, and it is relatively simple to do.

In addition to the solar duties I perform, I also study lunar meteors on my own time. I am currently the coordinator for the Lunar Meteor Impact search program of the Association of Lunar and Planetary observers. Nearly two dozen observers from several countries and the U.S. keep watch on the moon during favorable meteor shower events in hopes of duplicating the observations made one year ago with the Leonid meteor impacts on the Moon. Most of the observers are equipped with videocameras of one form or another, the rest observe visually. We have had many unconfirmed reports, many with some degree of doubt, but nothing yet scientifically confirmed since the IOTA-coordinated Leonid lunar meteor watch of November 1999.

Currently I am collecting information for a catalogue I plan to write and make available at some point in 2001 or 2002. This will be a catalogue of “probable impact events” or PiP’s, which are a subset of the more familiar Lunar Transient Phenomena. There exist many reports of changes on the moon, including what appear to be impact flashes. However, none of the impact reports have been confirmed before November 1999—and since as of this writing—but many such reports do exist. The Lunar Meteoritic Impact Search program is working to make the study of lunar meteors a viable research discipline as we set out to show that lunar meteors are actually more common than lunar eclipses. More information about the former appears on the lunar meteoritic impact search website at <http://www.lpl.arizona.edu/~rhill/alpo/lunarstuff/lunimpacts.html>

As hinted above with the solar, and will be stated presently with the lunar, anyone may become involved with solar and lunar observing. In the Society, there exists special interest groups where one can get started in solar or lunar observing. The search for lunar meteors also seeks willing, patient observers. Simply drop me an e-mail, at [cudnik@flash.net](mailto:cudnik@flash.net), to inquire about getting started with lunar meteor watching, or sunspot

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# ***Program Committee***

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This is to invite any interested HAS member to join the program committee. If you would like to participate in picking topics, obtaining speakers, or arranging for publicity for programs, e-mail Scott Mitchell at STARSCM@aol.com. We usually have fun putting together the programs for the general meeting, and often enjoy pre-meeting dinners with the speakers. You don't have to have any special speaker contacts to help.

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## ***Watching the Sun and the Moon... from previous page***

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counting. Anyone is welcome to the Prairie View Solar Observatory when it is open, usually 9-6 on Monday thru Friday. To get there, take 290 to Austin, but get off at the Prairie View exit and turn right. There will be a sign stating that PVAMU is at the next right. After exiting and turning right at the light, continue straight until the road bends 90-degrees to the right. Follow this and continue until the road ends and you have to go left or right. Turn right, and the domed building of the observatory should be obvious.

The web sites given above also have more information as well as links to still more information about the Sun and the Moon...

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# ***Minutes of the General Membership Meeting of the Houston Astronomical Society November 3, 2000***

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## ***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 1<sup>st</sup> Friday of the month, except for May and September when the meeting will be on the 2<sup>nd</sup> 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 87 members and 1 guest present. A quorum was determined to be present.
3. Six new members were introduced.
4. 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. These telescopes are housed in a separate building right next to the observatory.
5. Darin Palmer, chairperson of the Telescope Loaner Program, was introduced and he explained the program.
6. The President announced the following membership benefits/concerns:
  - a. The *GuideStar* newsletter editor, Bill Pellerin, was recognized.
  - b. 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.

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- c. The HAS website is also available and Webmaster Steve Goldberg was introduced and thanked. The H.A.S. new domain name is **www.astronomyhouston.org**.
- d. Judy Dye, in charge of logo sales, was introduced and she announced that the Observer's Handbook 2001 were in and available for \$15. Astronomy 2001 calendars are also available.
- e. Discount prices for society members on *Sky & Telescope* (\$29.95) and *Astronomy* (\$29.00) magazines were announced.
- 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. One percent of everything you buy at Randall's will come to H.A.S.

**Announcements:**

- 7. No nominations for the election were received from the floor. Scott Mitchell made a motion to close nominations. It was seconded and passed.
- 8. The following positions were unanimously elected for the year 2001.

President – Kirk Kendrick  
Vice president – Bill Leach  
Secretary – Art Ciampi  
Treasurer – Debbie Moran  
Observatory Director – Mike Dye  
Board member at large – George Dolson  
Board member at large – Bill Flanagan  
Board member at large – Howard Leverenz  
Board member at large – Jay Levy  
Board member at large – Larry Wadle  
Audit committee – Gary Hilvko  
Education committee – Richard Nugent  
Field trips/observing committee – Steve Grubbs

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Novice Committee – Warren Wundt  
Publicity committee – Brian Cudnik  
Telescope committee – Darin Palmer  
Welcoming committee – Marg Nunez

9. Bill Leach made an announcement about the availability of the new member's kit.
10. Don Pearce reported on an observation of a thin crescent moon last weekend.
11. John Blubaugh introduced the guest speaker, Dr. Joe Hahn of the Lunar and Planetary Institute. Dr. Hahn's specialty is planetary formation and the dusty disks associated with it. The presentation lasted for 45 minutes and was followed by 10 minutes of questions and answers. The speaker was presented with a framed certificate.
12. Richard Nugent announced an occultation challenge involving mu Geminorum.
13. Marg Nunez and Bill Leach handed out door prizes.
14. The meeting was adjourned at 9:50 PM.

***HAS Secretary: William W. Leach  
November 3, 2000***

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# ***The Local Group***

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*By Bill Leach*

The Local Group refers to our nearest neighbor galaxies that are gravitationally bound to each other. The term “Local Group” was first used by Edwin Hubble in his book entitled “The Realm of the Nebulae” (1936). Hubble’s list included our galaxy, the Milky Way, and its neighbors the Large Magellanic Cloud (LMC) and the Small Magellanic Cloud (SMC). He included the Great Galaxy in Andromedae (M31) and its companion (M32), the spiral galaxy in Triangulum (M33), and three smaller galaxies (NGC 205, NGC 6822 and IC 1613). These nine galaxies are what he called the Local Group. Presently the population of the local group stands at 35 galaxies increasing at a rate of about four per decade. There may be more members in the zone of avoidance, the part of the sky blocked by the dust in the center of our galaxy. There are also some candidate galaxies whose membership is controversial.

All galaxy types are represented in the Local Group except for the giant ellipticals. It has been suggested that the presence of a giant elliptical in the Local Group could have alter the conditions for life in our galaxy. Our Local Group is typical of the universe, as galaxies seemed to be grouped mostly in medium sized gravitational associations. The Local Group allows us to study supernovae, nebulae and clusters in detail. The local group also allows us to calibrate our methods of distance determination and our methods for determining the effects of interstellar dust on observations.

The local group exhibits considerable substructure. The two main subgroups are the Milky Way galaxy and its companions and the Andromeda galaxy and its companions. Presently the Milky Way subgroup has more members than that of the Andromedae subgroup. The three spiral galaxies in the local group are its brightest members. There are also what seems to be a few “free-floating” galaxies between the subgroups.

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# **Amendment to the Bylaws Houston Astronomical Society**

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The Board of Directors of the Houston Astronomical Society has determined that the following change in the society bylaws is needed to expedite necessary society business.

Article IV Section VI

Present:

Section VI QUORUM AND VOTING

1. Twenty (20) voting members or twenty percent of the voting membership, whichever is greater, present at any meeting shall constitute a quorum and each member shall have one vote. No member shall be entitled to vote by proxy on any question before the membership.

Proposed (change in bold):

Section VI QUORUM AND VOTING

1. Twenty (20) voting members or **fifteen** percent of the voting membership, whichever is greater, present at any meeting shall constitute a quorum and each member shall have one vote. No member shall be entitled to vote by proxy on any question before the membership.

Membership attendance at regular meetings has been vacillating between 75 and 105. Since the society's present membership total is around 400, section VI requires 80 members present in order to engage in society business. This could prevent the society from engaging in necessary business like elections, replacing persons that choose to step down from a position and other society business requiring a quorum. The Board of Directors present at the July board meeting unanimously ratified these changes.

**A vote on this proposed amendment will occur at the December 2000 regular meeting.**

***William W. Leach***  
***HAS Secretary***

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# ***Observatory Duty Roster***

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*by Michael B. Dye, Observatory Chairman*

This is the duty list for December 2000, January and February 2001 information yet. 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.

**December Supervisor ..... Kirk Kendrick ..... 281-391-3834**  
Christopher Mendell ..... Site  
Robert Menius ..... Site  
Larry Mitchell ..... Members Observatory Night 12-16-00  
Jeff Moore ..... Site  
Debbie Moran ..... Site  
Ben Negy ..... Members Observatory Night 12-16-00  
Johnny Norris ..... Members Observatory Night 12-16-00  
Marge Nunez ..... Site

**January Supervisor ..... Robert Rogers ..... 281-997-9682**  
Richard Nugent ..... Site  
Ralph Overturf Jr. .... Site  
Don C. Pearce ..... Members Observatory Night 01-13-01  
Sim Picheloup ..... Members Observatory Night 01-13-01  
Leonard W. Raif ..... Site  
Glenn L. Ray ..... Members Observatory Night 01-13-01  
Henry Schneider ..... Site  
Steve Simpson ..... Site

**February Supervisor ..... Robert Rogers ..... 281-997-9682**  
Larry C. Wadle ..... Site  
Mark R. Watson ..... Members Observatory Night 02-17-01  
Tom Williams ..... Site  
Barbara Wilson ..... Members Observatory Night 02-17-01  
Buster Wilson ..... Members Observatory Night 02-17-01  
Warren Wundt ..... Site  
John Blubaugh ..... Site  
Ken Carey ..... 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.

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# *Special "Help" Volunteers*

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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

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# ***Holiday Gifts for the Astronomer***

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By Bill Pellerin, GuideStar editor

Here's a quick list of goodies you may want to add to your 'wish' list:

***The Night Sky Observer's Guide*** by Kepple and Sanner (about \$70 for both volumes. An outstanding guide for the observer, organized by constellation. This set picks up where the classic *Burnham's Celestial Handbook* leaves off, and is a worthy successor.

***Starlight Nights: The Adventures of a Star-Gazer*** by Leslie Peltier. A classic book about why we love the stars. This book was only recently re-released, and it includes an introduction by David Levy.

**Down Jacket** (about \$70) from Lands' End -- may be just what you need for those chilly observing nights! There's nothing that's quite as warming as down!!

**Tele-Vue eyepiece** -- (price varies) You may need just **one more** eyepiece to complete your collection, and you'll find it difficult to beat ones from Al Nagler.

**A Barlow lens** -- This is an optical device that multiplies the magnification of your eyepieces by 2x, 3x, or 5x depending on the model. These work well and are useful for observing double stars or for nights of outstanding seeing.

**Orion Astronomer's Field Vest** -- (\$42.50 from the Orion catalog). I have a vest similar to this, and it's great. Put your eyepieces, notecards, flashlights, etc in the pockets of the vest for easy availability. I know that it's kind of geeky, but at night, who's going to notice?

**Laser collimator** -- (pick one that meets your needs) There's nothing that will improve the performance of your Newtonian reflector more than proper collimation. Get a collimator and learn to use it.

*Continued...*

## ***Gifts.. from previous page***

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**7x50 or 10x50 binoculars** -- (about \$175 for a good pair). If you go into the field to observe and don't have a pair of binoculars with you, you don't know what a valuable tool these can be. Choose 10x50 will pull out dimmer objects but are more difficult to hand-hold.

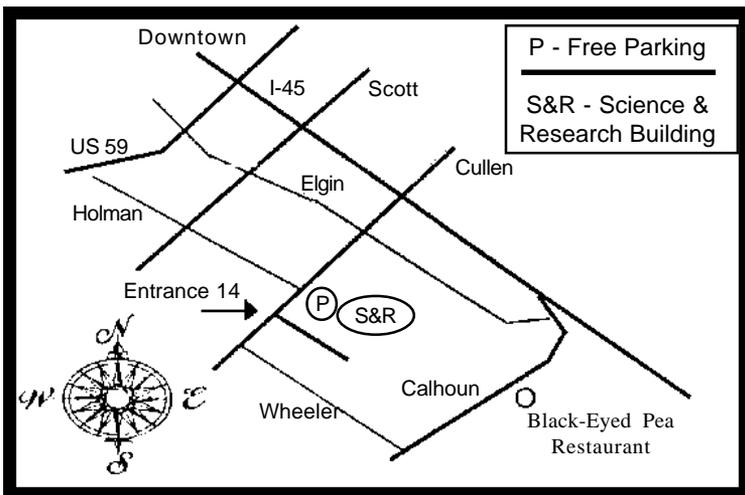
**The *Milky Way* poster**, (\$17.95) offered by *Sky and Telescopemagazine*. This is the poster that shows the full Milky Way as seen from the earth. I have one on my office wall, and everybody who comes in says, "Wow" when they see it.

**Software** -- There's lots of good astronomy software out there. If you want planetarium software take a look at *Megastar* or *The\_Sky*. Both are good programs (and they can control your telescope if your telescope is set up for software control). *Sky Tools* software will help you plan your observing sessions.

**Roll-A-Table...** (About \$40 from the Orion catalog). This clever, card-table sized table rolls up for ease of transport and make just the thing for laying out your charts, observing lists, and laptop computer. It's not so sturdy that you can sit on it, but it's plenty strong enough for its purpose.

**Observing Chair** -- (About \$160, available from the Orion catalog). The Orion catalog calls this the 'Deluxe Adjustable Chair', but whatever it's called, it's great. The seat height adjusts to put your eye at eyepiece height. I have one of these and it's great to be able to stabilize myself at the eyepiece. It makes observing much more comfortable.

***Have a happy and a safe holiday!!!***



### **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**

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