



October, 2000

At the October 6 meeting...

**Hubble Space Telescope
Calvin Seaman**

*...will show pictures and tell stories from the
beginning of the project to the present*

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 ★★★★★★

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

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Liaison responsibility

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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

Observations... of the editor

by Bill Pellerin, GuideStar Editor

I was finally able to get out under the stars last Saturday (9/16), with an hour or so of darkness before the moon came up. It was a nice night, the air temperature had cooled to the point of reasonable comfort and the skies were clear. My primary objective was to make sure that all the equipment worked and that I knew how to operate it I'm going on an observing trip next week and I want to make sure I'm ready.

I was thinking about the various telescopes and equipment that I've used over the years and thought some comments might be in order. So... in roughly chronological order, are some quick equipment reviews.

Celestron C-4.5, 4.5" reflector on German Equatorial mount. — This was a fine telescope giving very crisp and sharp images of the stars and planets. The mount worked very well too.

Meade 2045, 4" Schmitt Cassegrain. Optics not as good as the Celestron, but adequate for most purposes. Equatorial drive had quite a bit of 'slop' in it. Very portable, though. Good travel telescope.

Coulter, 10" Dobsonian reflector. Excellent value for the money. Nice size gives good views of relatively dim objects. I was obliged to add a counterweight to balance the telescope. Upgraded the focuser and added a Telrad. Easy to set up and use. Lots of similar telescopes now available.

7x50 binoculars, these are the Adlerblicks, previously sold by Orion Telescope. (They may be the same binocs that are sold now, but with a different name.) You'd be amazed what you can see with a good pair of binoculars. If you don't have a good set, get one. 7x50's or 10x50's are a good choice.

Starsplitter, 14.5" Dobsonian. Outstanding workmanship. Superb optics. Primary mirror box is a bit larger (and heavier) than it needs to be. Beautiful views of deep sky objects.

Meade LX200, 8" SCT. A lot of bang for the buck. Computerized go-to capability makes observing a breeze. Good optics (SCTs are, by design, a compromise). Easy set-up. Easy hook-up to a computer with a sky chart makes this a lot of fun to use. Select an object on the screen and command the 'scope to "go there", and it does!

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Houston Astronomical Society

***Meeting Notice
For Friday, October 6, 2000***

Calvin Seaman

***from NASA, will discuss the
Hubble Space Telescope***

***His presentation will be on the design and
construction of the telescope, the completed and
future repair missions, and the images produced
by the telescope.***

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:

October -- Astronomy from your backyard
November -- Filters, Dew, and viewing
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.**

October/November Calendar:



<i>Date</i>	<i>Time</i>	<i>Event</i>
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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 help with this event
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		Members Observatory Night-Columbus HAS Annual Picnic at the Observatory Site
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.

November

3		HAS Club Meeting
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting U of H
4	1:26 a.m.	First Quarter Moon
11	3:16 p.m.	Full Moon
14	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Matt Delevoryas, 713-795-0808
18	9:26 a.m.	Last Quarter Moon Members Observatory Night-Columbus
19		Saturn is at opposition and is on the meridian at midnight.
25	5:12 p.m.	New Moon Prime Night-Columbus
27		Jupiter is at opposition and is on the meridian at midnight.

**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

Tele Vue Pronto, 2.7" Refractor. Superb optics and beautiful construction. Views with 55 mm eyepiece (5 degrees of sky) are outstanding. Observed the Lagoon Nebula with it and a UHC filter last weekend. Alt-az mount good for more casual (wide field) observing, but not usable at high power.

Losmandy GM-8, German Equatorial mount. This is a beautiful piece of equipment, solid as a rock. It's not cheap (but who wants cheap, anyway). Motor drive works well (in visual mode, haven't tried photography). No go-to function available (although digital setting circles are available).

I realize that telescopes are like cars... there are your Ford people and your Chevy people, and never the twain shall meet. The key requirement is that you use whatever you have to enjoy views of the sky. Focus the telescope, but don't focus on the telescope. It's the means to the end, but not the end itself.

Have a good month, with clear, cool, steady skies.

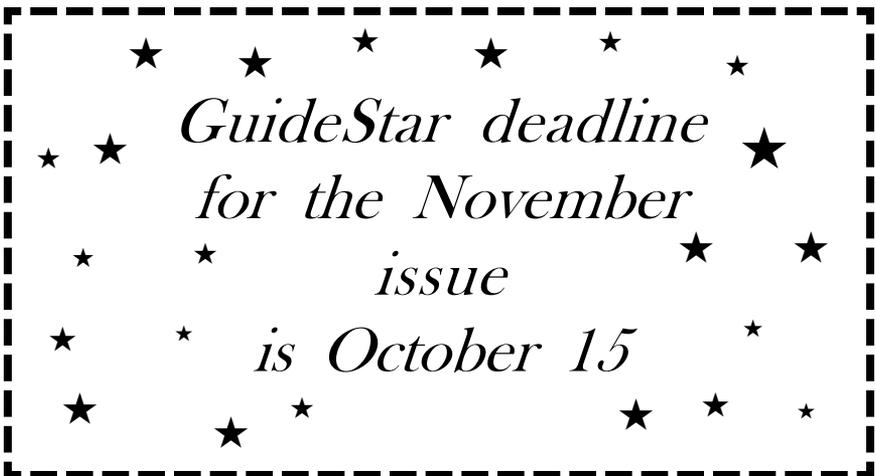
..Bill

Membership Renewals...

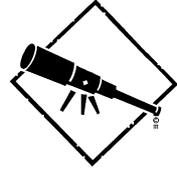
Please check the mailing label on your copy of the *GuideStar*. It'll tell you when your membership expires. If it expires soon, please send your renewal to the address on the outside cover of *GuideStar*. The dues information is on the inside front cover.

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

Last month I stated that Astronomy Day would be on October 7th. Well it still is. We need the support of the individual members of all the involved clubs and the Houston Museum of Natural Science, which provides the location, to make this event happen each year. This year, as in the last few years, the activity will take place at the George Observatory in Brazos Bend State Park. A large turnout by both members of the Houston Astronomical Society (along with other clubs) and of the public at large will help make Astronomy Day a success. If you can help, contact Bill Leach (who is the HAS member of the Astronomy Day Committee) to indicate your willingness to assist or attend the event on October 7th at the George Observatory. His number is on the inside front cover.



While on the subject of the George Observatory, let me send out a plea for volunteers to help at the Observatory. The Building Managers run the Observatory on Saturday night and need volunteers to help run the 36 in telescope, the deck scopes, the West Dome and to provide crowd control. The Fort Bend Astronomy Club usually turns out a group of members to run the East Dome. Volunteers supply the majority of the help at the George. Please show up and help. If you can, call the George Observatory at 281-242-3055 and talk to Barbara Wilson, Betty Glass or Tracy Knass and see what you can do. There is a positive benefit to this altruism, as the Museum sponsors special activities (dinners, I-Max shows etc) for the Museum Volunteers, (which includes the George Volunteers).

From Astronomy Day to the Annual Picnic. In the interest of keeping things easy and 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 years picnic was successful as a pot lock picnic, and using the tried and true process of not messing with a process that works (they do this in TV all the time), I am

Continued...

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Observatory Corner... from previous page

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 have not yet found a cook for this activity (the fact that I haven't looked yet may influence the results), but I am looking for a volunteer for this position also. 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. I am also looking for volunteers to co-ordinate games and other activities. This picnic is taking place on Members Observatory Night (as by established tradition) so the Observatory will be open for public (HAS member and guests) viewing. 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 have not been very successful if finding out why but I am still trying. I will write an article update when I find out why.

We have found a local resident of the Oak Ridge Ranch Estates who cutting the grass in a timely manner and does not charge excessively for the job. I look forward to using him to cut the grass for years to come. This has relieved us of the problem of buying a tractor of our own to do this job.

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.

Radio Astronomy

by *Bill Pellerin, GuideStar Editor*

I don't know of any radio astronomers in the Houston Astronomical Society, but I know of a few radio amateurs (Hams) that are members, and, of course, there's the Ham radio station at the Texas Star Party every year.

Well, it turns out that amateur radio and radio astronomy converged on the event of the completion of the new Green Bank radio telescope in August. Here's some background. One of the pioneer radio astronomers was a guy named Grote Reber who built a parabolic dish antenna for radio astronomy in his back yard in 1937. Using this antenna, Reber was able to produce a crude map of radio emissions from the Milky Way and opened up the field of radio astronomy. He's alive today, and living in Tasmania. Grote Reber was a Ham radio operator with the call W9GFZ.

When the new telescope was ready for dedication, a 'special event' Ham station was set up using Reber's old call, W9GFZ. I was lucky enough to talk to the station on the morning of 8/26/2000 (20 meter SSB) and receive confirmation of the contact (Hams call these confirmations QSL cards). The card has a nice picture of the Green Bank telescope in West Virginia. The 16 million pound telescope has an area of over 2 acres, and is the world's largest fully steerable antenna. The antenna will be used to detect radio emissions from astronomical objects at frequencies up to 100 GHz.

As is usual with these 'special event' stations, we didn't chat for long, but I was able to let Gary (the operator at the station) know that I am a member of the Houston Astronomical Society and involved in amateur astronomy. There were many other stations on the air trying to get Gary's attention on this morning, so I let Gary get on with his operations.

Nice contact, though!

As they say in the radio biz'.... 73's (best regards)

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

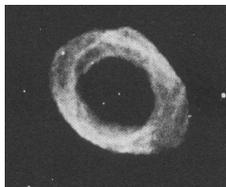
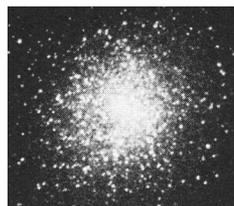
Activities:

**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

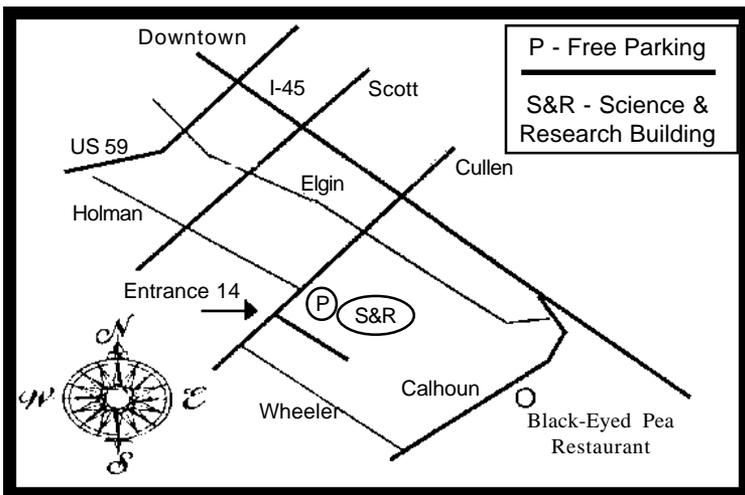
This is the duty list for October, November and December. Some names were moved from one month to another to accommodate some conflicts. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change 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.

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

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

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



General Membership Meeting

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

Board of Directors Meeting

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

GuideStar Information

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

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

AOL: BILLP10566; Internet: BILLP10566@AOL.COM

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Houston Astronomical Society

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