

Houston Astronomical Society

# GuideStar



October, 2004

*At the October 1 meeting...*

## New Developments in the field of Asteroid Occultations.

**Richard Nugent**

Asteroids can often 'eclipse' a star from our view. This happens when the asteroid moves between us and the star. Other than the novelty of seeing a star wink out and then come back, asteroid occultations can tell us a lot about the asteroid itself.

We can learn the asteroid size and shape from observations of occultations and get a better understanding of the orbit of the asteroid. The geometry of these occultations is generally well known, but has a bit of uncertainty associated with it.

Richard is an expert in this area, having done many observations of occultations in the past. In this talk, he'll show us what's new in the field and invite you to participate in this interesting area of observational astronomy.

### Highlights:

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HAS Web Page:

<http://www.AstronomyHouston.org>

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

### 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.

Site orientation meeting: ..... 7:00 p.m.  
Classroom 121

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

See last page for a map and more information.

## 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: Steve Sartor .....	H:281-370-3544
Vice Pres: Bill Leach .....	H: 281-893-4057
Secretary: Brian Cudnik .....	H: 832- 912-1244
Treasurer: Bill Flanagan .....	H:713-699-8819
Past President: Kirk Kendrick .....	H: 281-633-8819

### Additional Board Members

Steve Goldberg .....	713-721-5077	Liaison responsibility
Don Pearce .....	713-432-0734	
Jay Levy .....	281-557-4920	.. Field Trip and Observing, Program
Tessie Nolan .....	936-321-5422	

### Committee Chairpersons

Audit .....	Don Selle .....	281-391-5470
Education .....	Richard Nugent .....	713-524-1993
Field Tr./Obsg. ....	Kenneth Miller .....	936-931-2724
Novice .....	George Stradley .....	281-376-5787
Observatory .....	Michael Dye .....	281-498-1703
Program .....	John Blubaugh .....	713-921-4275
Publicity .....	Joe Khalaf .....	713- 660-8219
Telescope .....	Clayton Jeter .....	281-573-1337
Welcoming .....	Susan Kennedy .....	281-376-3262
	Hannah Lange .....	832-715-7833

### Ad-Hoc Committee Chairpersons

Historian .....	Leland Dolan .....	713-688-0981
Librarian .....	Peggy Gilchrist .....	281-443-8773
Logo Mds Sales .....	Judy Dye .....	281-498-1703
Long Range Plan .....	Bill Leach .....	281-893-4057
Parliamentarian .....	Kirk Kendrick .....	281-633-8819
Publ. Star Party .....	Richard Nugent .....	713-524-1993
Rice U. Coord. ....	Matt Delevoryas .....	713-666-9428
Schedule Obs'v't'y .....	Steve Goldberg .....	713-721-5077
Texas Star Pty .....	Steve Goldberg .....	713-721-5077

### Special Interest Groups & Help Committees

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

### Advisors

Dr. Reginald DuFour, Rice Univ.  
 Dr. Lawrence Pinsky, U. of H.  
 Dr. Lawrence Armendarez, U. of St. Thomas

### Dues and Membership Information

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

All members have the right to participate in Society functions and to use the Observatory Site. Regular and Student Members receive a subscription to *The Reflector*. Regular, Student, and Honorary Members receive *The GuideStar*. Associate Members, immediate family members of a Regular Member, have all membership rights, but do not receive publications. Sustaining members have the same rights as regular members with the additional dues treated as a donation to the Society. *Sky & Telescope* mag \$32.95/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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## 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 Leach .....	281-893-4057
Comets .....	Don Pearce .....	713-432-0734
Lunar & Planetary .....	John Blubaugh .....	713-921-4275
Occultations & Grazes .....	Wayne Hutchison .....	713-827-0828
Advanced .....	Bill Leach .....	281-893-4057

## 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://www.fbac.org>

**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](mailto:bill.leach@nhmccd.edu). Web site: [www.astronomyclub.org](http://www.astronomyclub.org)

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# President's Corner

September 2004

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by Steve Sartor

The September general membership meeting, birthday party and raffle went very well. As you all know, George Stradley donated a Lumicon 12 x 80 finder scope to the HAS which we raffled off to raise money. We were able to sell 80 tickets at \$5.00 each and raised an even \$400.00, a very successful endeavor. For those of you that were there, you will remember that the first ticket drawn was not claimed, and as Paul Harvey would say, "Now the rest of the story." The first ticket drawn was held by. .... you guessed it..... George Stradley.

The second ticket holder and winner of the finder scope was Dana Lambert, who will mount his new possession to the secondary cage of his 20" Obsession. Congratulations Dana. Although this is not something we plan on doing on a regular basis, it was fun, and if any other items of value should come our way, maybe we could do it again sometime.

Another new addition to the HAS web page and/or *GuideStar* (we haven't decided exactly where it will be placed yet) is a "For Sale" page. A place to post those treasures you no longer use. A place to find that item you've been looking for. Our own little Astro-Mart. So, as the details get worked out, we'll let you know where to place those want ads.

*Steve Sartor*

**Editor's note:** Your 'want ads' are welcome for the *GuideStar*. Please email them to me, and I'll put them in, subject to space limitations. Thanks.

-- *Bill Pellerin, GuideStar Editor*, billp10566@aol.com

## **Membership Renewals...**

**Please check the mailing label on your copy of the *GuideStar*, or check your email if you get an electronic 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 page 2.

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!**

# Houston Astronomical Society

## General Membership Meeting

Friday, September 10, 2004  
University of Houston

### *Minutes*

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The Meeting was called to order at 8:14pm.

There were 1 new member and 2 guests present.

President Steve Sartor made the following announcements:

- *GuideStar*—Debbie Moran will take over mailing tasks
- A Raffle is being held—George Stradley donated a Lumicon 12x80 finderscope; raffle tickets are \$5.00 .
- Tom Fox is having medical problems and is in the hospital
- The problems with students occupying the meeting room cannot be avoided. If they are in the room at 8pm, we will go down the hall...in lieu of the alternative (meeting elsewhere instead of the U of H)
- Most members voted in favor of having a “For Sale” section in the *GuideStar* and on the web site.

Other announcements as follows:

- Jay Levy announced that we are accepting nominations for next year’s officers.
- George Stradley mentioned that Astronomy Day information will be distributed to participating clubs very soon.
- Michael Dye announced the annual H.A.S. picnic, to be held at the Site on Saturday, 18 September. The picnic will start between 3 and 4pm, with dinner between 5:30 and 6:00pm. Since last month’s meeting, an additional \$304.06 has been raised for the Observatory.
- Judy Dye, logo sales, stated that the *Observer’s Handbook*, at \$25.00 each, should be available for the next meeting. Also, there is a Rice Space Institute lecture on Tuesday, September 14 at 4pm. Dr. Geoff Marcy will be speaking. A link to additional information is posted on the Web site.
- One of the members raised the question whether there will be two meetings next month. The answer is yes: the H.A.S. will meet at the regular date/time in addition to the all clubs meeting at the University of St. Thomas. The website, [www.astronomyday.org](http://www.astronomyday.org) or [www.astronomyday.com](http://www.astronomyday.com), has more information.
- Don Pearce gave the comet report for the month:
  - C/2004 Q2 Machholz, discovered on August 27 by Don Machholz, with a 6-inch f/8 reflector. The comet is in Eridanus, moving southeastward toward Colomba, but will begin moving north by November 1 and be in Taurus by January 1, possibly at magnitude 3 or 4. Perihelion is in late January.
  - C/2004 R2 ASAS (All Sky Automated Survey), discovered September 3 and is a morning comet in Puppis at magnitude 9.8. It rises in the Houston area at 4:58am. It will brighten in September, reaching 8th magnitude before being lost in the solar glare by late month.
  - C/2004 Q1 Tucker, discovered August 23 by Roy Tucker at magnitude 14.6. Now it is at magnitude 12.4 and is moving north thru Cetus into Aries. It is approaching the Earth and Sun, and is due to pass closest to Earth on October 23, perihelion on December 8. The comet will peak in brightness at magnitude 10 or 11 by November 1. This is a rare comet, with two magnitude peaks, the first near perigee, and the second near perihelion.
  - C/2003 K4 LINEAR is in Virgo, magnitude 6.5 and is moving southward into Corvus, setting at 9:15pm in the Houston area. After

mid-month, it is gone for us, being then a southern hemisphere object.

- C/2004 H6 SWAN is at magnitude 17.
- There was a birthday cake (courtesy of Darlene) to celebrate H.A.S.’s 49th birthday after the speaker.

Brian Cudnik introduced the evening’s speaker, Peter Gural, who gave a talk entitled “Chasing the Leonid Meteor Storms”

The talk was followed by the raffle, which raised \$400.

The meeting adjourned at 9:32pm.

*Continued on page 8...*

# October/November Calendar:



Photo by Scott Mitchell

**Date Time Event**

## October 2004

1	7:00 p.m.	Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H. Richard Nugent presents: "New Developments in the Field of Asteroid Occultations"
6	5:12 a.m.	Last Quarter Moon
9		Members Observatory Night - Columbus
13	9:48 p.m.	New Moon
16		Prime Night-Columbus
20	4:59 p.m.	First Quarter Moon
22	7:30 p.m.	All Clubs Astronomy Meeting at location to be announced.
23	3:00 p.m.	Astronomy Day—George Observatory
28	8:14 p.m.	Lunar eclipse partial phase begins
	9:23 p.m.	Totality begins
	10:04 p.m.	Full Moon, greatest point of eclipse
	10:45 p.m.	Totality ends
	11:54 p.m.	lunar eclipse partial phase ends
30	3:00 a.m.	Daylight Saving Time ends and Standard Time begins. Set clocks back 1 hour.

## November 2004

4	11:53 p.m.	Last Quarter Moon
5	7:00 p.m.	Novice Presentation - U. of H.
	8:00 p.m.	General membership meeting - U. of H. Dr. Larry Pinsky "The Accelerating Universe"
12	8:27 a.m.	New Moon
18	11:50 p.m.	First Quarter Moon
26	2:07p.m.	Full Moon

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

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**GuideStar deadline  
for the November  
issue  
is October 15**

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Check the web site:  
[www.astronomyhouston.org](http://www.astronomyhouston.org)  
Webmaster: **Bob Rogers**  
[siteworker@juno.com](mailto:siteworker@juno.com)

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

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 [siteworker@juno.com](mailto:siteworker@juno.com).

## New HAS Shirt

We have a new shirt for Logo Sales. It is a short sleeve with a collar, and comes in several different colors. It comes in men's sizes and ladie's sizes. The logo was digitized and will be embroidered on each one, not silk-screened. You will be seeing them (I hope) by the next meeting.

For those of you who want to order a shirt, or for those of you who want to order another one, they have to be prepaid. The price of the shirt will be \$24.00. If you want to order, please call me at **281-498-1703**, or you can e-mail me at [judyadye@aol.com](mailto:judyadye@aol.com). All checks are to be made out to HAS and mailed or given to me.

Thank you to the ones who have already ordered a shirt.

*Judy Ann Dye*

**At the HAS meeting, please remember to park across from Entrance 14 because of the construction in the parking lot of the Science and Research bldg.**

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## Observations... of the editor



by Bill Pellerin, GuideStar Editor

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It's not (entirely) about the telescope...

Many times I've had conversations with friends who have similar interests to mine. Often these conversations are directed to the kind of equipment used in the pursuit of that interest. Astronomy is a very equipment-intensive hobby. To be honest, though, I'm more interested in what experiences others have had while observing than what equipment they used for the process. What did you see? What did it look like? What's interesting about it?

Last month, I described an observation I made from the Texas Star Party of 18 Sco, a sun-like star that's 46 light years from us. To me, this was an interesting observation because I had some information about the star that made it interesting. The fact is, the more you know about what you're observing the more you'll enjoy the observation. A 'faint-fuzzy' object can be interesting or not depending on your knowledge of the object.

Our fellow club member Larry Mitchell compiles a 'challenge' list for the Texas Star Party and gives a presentation telling us what's interesting about each object. This is what makes his list appealing.

The next time you're planning an observing trip, try something different. Research a few objects that you want to observe and understand what's interesting about them. This will peak your enthusiasm for the observation and make the observation a lot more fun.

### Geoff Marcy at Rice University

I went to Rice University last Tuesday to see Geoff Marcy give a talk. Geoff and his co-workers are leaders in the effort to find extra-solar planets (planets revolving around other stars). Their work continues with over 90 planetary systems discovered, and with some new categories of systems discovered.

Geoff reviewed his work at the presentation, talked about how these planets are discovered and discussed the future of this effort.

The meeting was at 4:00 p.m. on a work day, but I managed to get to Rice for the presentation, and it was excellent. Dr. Pat Reiff coordinated the presentation. Several HAS members were there, and the presentation was followed by a nice reception. An excellent crowd was on hand for the talk.

Check the Rice University web site for more presentations ([rice.edu](http://rice.edu)). There's a 'President's Series' of lectures, and I've attended some of these in the past (including David Levy and Dava Sobel).

### Pedaling to Pluto

I just got a newspaper clipping from the Chicago Tribune from our friend Carol Iwata, who lives in the windy city.

It seems that in Peoria, Ill a 'model' of the solar system has been set up, to scale. Here's what it looks like.. with a 36 foot sun, earth is 4 inches in diameter and .75 miles away from the sun. Pluto, by comparison, is .75 inch in diameter and 40 miles away from the sun. There's a bicycle ride from the sun to Pluto covering 125 road miles. The article, with pictures is on the [www.chicagotribune.com](http://www.chicagotribune.com) web site, and it's worth a look.

*Until next time...*

*clear skies and new moons!*

*..Bill*

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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.

<b>Subject</b>	<b>Name</b>	<b>Phone</b>
Asteroids .....	Barbara Wilson .....	281-933-1289
Astrometry .....	Richard Nugent .....	713-910-5945
Astrophotography .....	Steve Goldberg .....	713-721-5077
Beginning in Astronomy .....	Peggy Gilchrist .....	281-443-8773
.....	Amelia Goldberg .....	713-721-5077
CCDs & Astrophotography .....	Randy Brewer .....	
Comets .....	Kenneth Drake .....	936-890-3735
.....	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	
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 .....	281-573-1337
Variable Stars .....	Barbara Wilson .....	281-933-1289
.....	Tom Williams .....	713-526-2868
Video .....	Larry Mitchell .....	281-448-8700

## NASA's Space Place may be no more

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By Bill Pellerin, *GuideStar* editor

The NASA Space Place articles that have been included in the *GuideStar* for some time may no longer be coming. I got information that NASA wants to cut this program as part of their restructuring for new lunar and Mars missions. While the Space Place program represents a vanishingly small portion of the NASA budget, I have been told that the funding is being eliminated. So, unless things change, we shouldn't expect to see any more Space Place articles in *GuideStar*.



Too bad.

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## 2005 Observer's Handbook

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Orders for 2005 *Observer's Handbook* now being taken. This essential guide to astronomical events in the year 2005 can be ordered through Judy Dye at the Logo Sales desk at the monthly meeting. Or, call Judy at 281-498-1703

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# Observatory Duty Roster

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by Michael B. Dye, Observatory Chairman

This is the duty list for October, November and December. 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 ..... Logan Rimes ..... 713-681-5397**  
Scott Poteet ..... Members Observatory Night 10-16-04  
Leonard Raif ..... Site  
Henry Schneider ..... Site  
Linda Sternbach ..... Members Observatory Night 10-16-04  
Larry Wadle ..... Site  
Mark Watson ..... Members Observatory Night 10-16-04

**November Supervisor ..... Logan Rimes ..... 713-681-5397**  
Tom Williams ..... Site  
Barbara Wilson ..... Members Observatory Night 11-06-04  
Buster Wilson ..... Members Observatory Night 11-06-04  
Warren Wundt ..... Site  
John Blubaugh ..... Site  
Ken Carey ..... Members Observatory Night 11-06-04

**December Supervisor ..... Preston Engebretson ..... 713-270-9574**  
Kelly Biggs ..... Site  
John Chauvin ..... Members Observatory Night 12-04-04  
Art Ciampi ..... Members Observatory Night 12-04-04  
Brian Cudnik ..... Members Observatory Night 12-04-04  
Gary Delzer ..... Site  
Kay Sandor ..... 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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## Want Ads

**For Sale: Parks 8" F-7 Newtonian** reflector This high resolution planetary telescope has superior optics. Scope includes: fiberglass tube assembly, eyepiece, 1 1/4"-2" rack and pinion focuser, "Parks" finder scope, and German equatorial mount on portable pier. Interested in the planets, their moons and ours.... view them in detail with this beautiful scope. Price: \$500.00 Call Clayton at: HM. 281-573-1337 Cell 713-569-7529 WK 713-945-5637

**For Sale: Takahashi FS-102** refractor and would prefer a local sale. Please contact me at (rlocke1@houston.rr.com) if you're interested. You can see the scope, and what it can do, here: <http://www.dl-digital.com/astrophoto/astro-featured.htm>  
Dick Locke

**For Sale: LX200 Classic** -- 8" LX200 with all original accessories, 1.25" diagonal, eyepiece, finder, tripod. Extras include carry bag for telescope, case for accessories. Excellent condition. \$900 Call Bill Pellerin 713-880-8061 or [billpellerin@sbcglobal.net](mailto:billpellerin@sbcglobal.net).

**For Sale: Eyepieces.** TeleVue 1.25" 20mm Plossl \$50, TeleVue 1.25" 11mm Plossl \$45 Call Bill Pellerin 713-880-8061 or [billpellerin@sbcglobal.net](mailto:billpellerin@sbcglobal.net).

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# October's Total Eclipse of the Moon

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by Leland A. Dolan

Although this autumn's total lunar eclipse occurs on October 27th, we will still be on Central Daylight Time (CDT). In fact, Daylight Time does not end for another four days (Oct. 31<sup>st</sup>) and that date just happens to be Halloween. While the eclipse occurs on a Wednesday evening, it starts early enough so that even school children should be able to stay up and see the Moon totally eclipsed (beginning at 9:23PM) when the Moon begins to turn a coppery-orange color. Totality lasts an hour and twenty-two minutes, and ends at 10:45 pm. The remainder of the eclipse goes through the same phases, only in reverse order.



*The moon in eclipse*

The following table gives times of the events that make up this eclipse. Please note that the times when the penumbra first becomes visible, as well as when it finally disappears, (as seen by the human eye) are subjective. People with fine vision can detect the first appearance of the penumbra, some minutes before this geezer's "old" eyes can see it. Also note that the dates given for these events are for Wednesday, Oct. 27<sup>th</sup>, but the last moments of the penumbral phase actually occur after Midnight on the morning of Thursday, Oct. 28<sup>th</sup>.

## **Total Lunar Eclipse, Evening of October 27, 2004**

<b>Event</b>	<b>Time (CDT)</b>	<b>Alt.</b>	<b>Azimuth</b>
Moonrise .....	6:31 pm .....	00° .....	76° (ENE)
First Sighting/Penumbra .....	7:48 pm .....	15° .....	84° (E)
Moon Enters Umbra .....	8:14 pm .....	21° .....	87° (E)
Totality Begins.....	9:23 pm .....	36° .....	95° (E)
Totality Ends.....	10:45 pm .....	53° .....	109° (ESE)
Moon Exits Umbra.....	11:54 pm .....	66° .....	129° (SE)
Last Sighting/Penumbra .....	12:23 am .....	71° .....	143° (SE)

It will be several years before the next total lunar eclipse visible from the Houston area, so be sure and observe, and enjoy this one, if weather permits.

# Upcoming HAS Meetings

## General Meetings

**October 1**—Richard Nugent “New Developments in the field of Asteroid Occultation’s”

**November 5**—Dr. Larry Pinsky “The Accelerating Universe” (originally scheduled for April, but postponed until November)

**December 3**—Kelly Taylor. "Industrial Light Pollution" Kelly Taylor, working for the power generating plant at Premcor Refinery in Port Arthur, noticed the wasted light that his refinery was putting into the sky. And this wasted light cost money to produced and harmed the environment in several different ways. Kelly set about adjusting the position of some lights, replacing many with lower wattage bulbs, and turning other off. These changes reduced glare, made the working environment more friendly, and helped comply with OSHA standards.

## Novice Presentations

**September 10:** Coordinate Systems: Ed Preston. Don't miss this one if you are a beginner — it's your key to finding things in the sky.

# New H.A.S. Dues Schedule

*By Bill Flanagan, treasurer*

Last June, the membership voted to change the way we pay our H.A.S. annual dues. To make it easier for us to remember when it is time to renew, we decided to make everyone's yearly membership run from January 1<sup>st</sup> through December 31<sup>st</sup>. This way everyone pays H.A.S. dues at the beginning of each year, making it a lot easier for all of us to keep track of when to renew. In addition to changing how we pay dues, we also voted for a small increase in the yearly amount to offset some of the increased cost of running the society. The new yearly membership dues that go into effect on January 1<sup>st</sup>, 2005 are

Regular Member .....	\$36.00/year
Associate Member .....	\$6.00/year
Student Member .....	\$12.00/year
Sustaining Member .....	\$50.00/year.

The sustaining membership remained at \$50.00/year of which \$14.00 is considered a donation to the society.

Although it will be easier after this changeover, things may be a little confusing during 2005. After much discussion, the H.A.S. Board of Directors has decided on the following plan for making the transition to the new system.

- All members who renewed or joined during 2004 will have valid memberships for one complete year under the old system. For example, if your membership expiration date was the end of August 2004 and you renewed it, your membership is good until the end of August 2005.
- To transition everyone to the new system during 2005, renewing members will pay prorated dues to take them to the end of 2005. Using the example above, if your regular membership was good until the end of August 2005, you would pay for four months at the prorated rate of \$3.00 per month or \$12.00.
- New members who join during the year 2005 and later will also pay prorated dues based on the month they join H.A.S. For example, if someone joins as a regular member during May 2005 they will pay for 8 months at \$3.00 per month or \$24.00.

We encourage our existing members to renew their H.A.S. membership for 2005 before the end of January 2005. This will get all of us used to the idea of renewing our membership at the beginning of the year. To make it easier, I have prepared a list of current members that shows the amount each member will owe in 2005 to renew their H.A.S. membership. This list will be available at our monthly H.A.S. meetings on the table at the front of the meeting room for those who want to check to see what their prorated dues will be for 2005.

If anyone has any questions please feel free to ask. I should be available at the monthly meetings or you can contact me by phone at 713-699-8819 or by email at [wdfnanagan@houston.rr.com](mailto:wdfnanagan@houston.rr.com).

# Observatory Corner

By Michael B. Dye Observatory Chairman



I am writing this article on the day after the Annual Picnic (which is pushing it for the *GuideStar* closing date). The picnic was more or less a success. The weather was hot and humid with partly cloudy skies all day. We had forty people attend, which was pretty good since I only advertised this activity for the preceding nine months. I played cook this year because I was not able to find a volunteer to do the job for me. I believe Ken Miller has a picture of me

holding the necessary cooking utensils slaving over a hot (500 degrees F) Bar-B-Q grill. We should have some pictures showing up on either Ken's web page or the HAS web page as Ken was wandering around taking pictures of all kinds of things. Ken Miller showed up early Saturday morning with his tractor and bush hog to mow the grass fields. Ed Szczepanski and Bob Rogers had been keeping the pad and picnic areas mowed during the preceding weeks. I would like to thank all three gentlemen for their fine work because grounds looked great. Mary Lockwood had her Piñata hung over an Oak Tree branch and we had at least four children taking turns working it (the Piñata) over with a stick trying to break it to get the candy and games out of it. I was not able to pay much attention to that activity as I finally ran out of meat to cook and was doing some eating myself. I would like to thank all the members who brought the extra stuff this year that made the picnic work.

Believe it or not, even though it was cloudy all day and even sprinkled (lightly) about 6 o'clock, the sky cleared up about 8 o'clock and some observing activities were performed. I declared a light window at 11 o'clock and I and about 6 other cars left about that time. I have no idea how things went after that as I went home and crashed.

One of the subjects of discussion at the picnic was the fact that the local Electric Company had come through and cut back all the trees that were getting close to their power lines. The areas look a little bare inside the fence line but at least the North fence line looks good. We can expect this sort of thing to continue to happen. I believe the power companies are going to be very sensitive about tree branches because of the power outage in the northeast a year or so ago. As I remember this outage was caused by tree branch(s) getting messed up in some power lines and causing said blackout. The involved power company was fined for causing the problem so other companies are going to be very vigilant about checking for trees and shrubs grounding out power lines.

The next fun activity at the Observatory Site turned out to be the Observatory Roof. Bob Rogers calls me on a Friday evening and told me that the roof would not open any more. Some discussion was had about checking the various items that could cause this problem. Bob called back on Saturday to tell me that none of the items we had discussed worked to resolve the problem. So I ended up going out the next day (Sunday) to attempt to fix it. Bob was still out at the Observatory Site when I arrived and we (I) started looking around for the probable cause. I opened the control cabinet door and started looking around inside. One of the items I noticed was a loud buzzing sound. I started carefully (so

as to not get zapped) touching relays to see which one was generating the interesting sound. I eventually discovered an adjustable timer that was the culprit. Interestingly enough this timer was labeled as the OPEN DELAY TIMER. Spare relays and timers were conveniently stored in the control cabinet on the bottom. I pulled a timer and adjusted it the same as the 'bad' one and replaced the 'bad' timer with a 'new' timer. We waited a few minutes for everything to settle out and lo and behold the Roof opened and closed correctly. Another Observatory disaster averted. I wish all my troubleshooting activities were that easy.

The last item turns out to be a small warranty repair on the new lawn mower. On Sunday evening, August the 29<sup>th</sup>, Ed Szczepanski called me to tell me that the Lawn Mower deck was having problems. The blade bearings were going bad. Ed had brought the deck back to town with him and I arranged to have him deliver the broken item to Brookside Equipment Sales in Jersey Village on Monday. Tuesday afternoon I was called by Brookside Equipment and informed that the problem was resolved. All three deck bearings were replaced under warranty at no charge. I called Ed, and he went back to Brookside Equipment and retrieved the deck and took it back to the Observatory Site on the following Friday. Thanks Ed for your assistance in this activity.

The Society continues to benefit from members who shop at Randalls and now Kroger's. For this we (the Society) thanks you. Please link your Randalls card to the Houston Astronomical Society so that the society can benefit from the Randalls program. Our number is #6618. This is very easy to do, just go to the Courtesy Booth and tell the person there what you what to do. If you shop at Kroger, we now have a card available (at the General Meeting) that you present at the cash register when you check out. We can thank Joe Khalaf for his efforts in getting the cards.

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.

### 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. Parking is NOW across from Entrance 14, by the stadium.

### Board of Directors Meeting

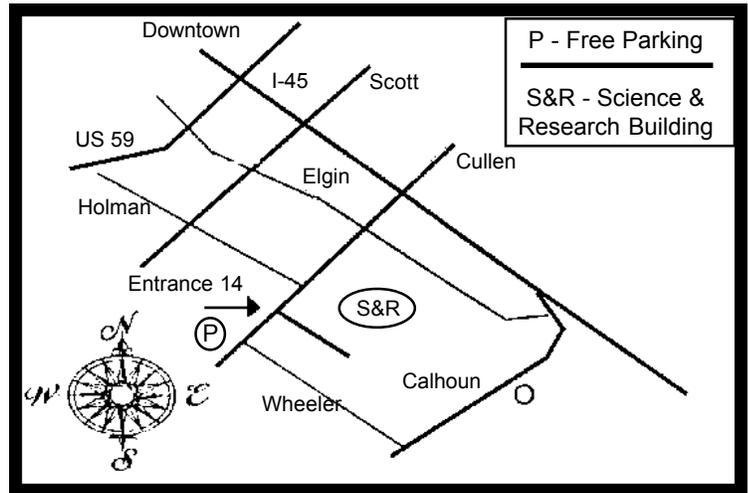
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

### 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 text, MS-Word format via email BillP10566@aol.com. 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**

### **Meeting**

**September 10, 2004**

**7:00 Novice & Site Orientation**

**8:00 General Meeting**

**University of Houston**



## **Houston Astronomical Society**

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