



# GuideStar

**October, 2006**

*At the October 6 meeting...*

## **The Ejection Hypothesis Vs. The Expansion Hypothesis**

**Bill Leach, HAS Vice President**

*Dr. Halton Arp and his colleagues have developed a controversial hypothesis concerning the nature of the universe. Their idea will be compared to the presently accepted hypothesis, the standard cosmological model or "Big Bang" theory. The theoretical basis of the two ideas will be examined along with some of the extensive observational evidence. Don't miss this meeting.*

*Bill Leach is the vice-president of the H.A.S. He was born in Laredo, Texas and did graduate work at the University of Houston in prebiotic physics and chaos theory. He has been a Professor of Physics, Kingwood College, for 30 years and founded chemistry, physics and astronomy programs*  
**Accomplishments:**

- Leonid Meteor shower in 1966
- Climbed 20,000 ft Cotapaxi volcano in Ecuador
- Eagle Scout, employed by Philmont Scout Ranch in the mountains of New Mexico for 12 summers - this is where I learned astronomy.

### **Highlights:**

**Interview with Dave Clark ..... 5**  
**Moon crosses Pleiades ..... 9**  
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**Minutes of the August Meeting ..... 15**

**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.  
John Blubaugh -- "Observing the Planets"
- 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: Doug McCormick.....H: 281-996-0177  
 Treasurer: Bill Flanagan .....H:713-699-8819

### Additional Board Members

	Liaison responsibility
Steve Goldberg.....713-721-5077	
Don Pearce.....713-432-0734	
Bob Rogers.....281-460-1573	
Kenneth Miller.....936-931-2724	
Allen Gilchrist.....	

### Committee Chairpersons

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Education.....	Susan Kennedy.....	281-376-3262
Field Tr./Obsg.....	Clayton Jeter.....	281-573-1337
Novice.....	George Stradley.....	281-376-5787
Observatory.....	Kirk Kendrick .....	281-633-8819
Program.....	Don Pearce .....	
Publicity.....	John Missavage.....	
Telescope.....	Mike Hamlin .....	281-489-2926
Welcoming.....	Susan Kennedy.....	281-376-3262
	Darlene Sartor.....	281-370-3544

### 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'ty .....	Steve Goldberg.....	713-721-5077
Texas Star Pty.....	Steve Goldberg.....	713-721-5077

### Special Interest Groups & Help Committees

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

### Advisors

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

### Dues and Membership Information

Annual Dues:Regular .....	\$36.00
Associate .....	\$6.00
Sustaining .....	\$50.00
Student .....	\$12.00
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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## 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.ghg.net/cbr/jscas/>

**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)

# October/November Calendar:



Photo by Scott Mitchell

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

Date	Time	Event
<b>October</b>		
6	7:00 p.m.	Novice Presentation - UH "Observing the Planets" -- John Blubaugh
	8:00 p.m.	General membership meeting - UH
	10:13 p.m.	Full Moon
9	10:30 p.m.	Moon occults Pleiades Begin watching at 10:30 p.m.!!
13	7:26 p.m.	Last Quarter Moon
20		Orionid meteor shower peak
22	12:14 a.m.	New Moon
29	3:25 p.m.	First Quarter Moon
<b>November</b>		
3	7:00 p.m.	Novice Presentation - UH "Steps to a Successful Observing Session" -- Bill Pellerin
	8:00 p.m.	General membership meeting - UH -- Sam Waldman
5	6:58 a.m.	Full Moon
8	1:13 p.m.	Transit of Mercury on Sun* -- Second Contact
12	11:45 a.m.	Last Quarter Moon
20	4:18 p.m.	New Moon

Send calendar events to [billpellerin@sbcglobal.net](mailto:billpellerin@sbcglobal.net)

## **\*Mercury Transit on Sun** **Begins 1:12 p.m. (local time) on November 8**

First contact will occur about 1:12 p.m. local time, followed by second contact at 1:14 p.m. First contact means that the edge of Mercury just touches the edge of the solar disk as Mercury enters the transit. Second contact means that the trailing limb of Mercury enters the solar disk. Since Mercury is so small, these events occur slightly less than 2 minutes apart.

**Be sure you know how to SAFELY observe the sun. Never, never, look directly at the sun through an optical instrument or with your naked eye without proper filters. Consult reference materials for information on how to safely observe the sun.**

The sun will be 40 degrees above the horizon at the beginning of the eclipse, so it'll be easy to see.

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**GuideStar deadline**

**for the November**

**issue**

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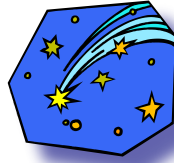
**★ is October 15**

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## Observations... of the editor

by Bill Pellerin, GuideStar Editor



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### How many light years...

Yesterday (9/10), I participated in a charity bicycle ride and I rode my bike about 50 miles. At my speed, it takes a while to complete 50 miles, so I had plenty of time to think about stuff. It occurred to me that I could calculate the fraction of a light-year that I had traveled. I was able to calculate (while riding) that I was traveling a distance of about .00025 light-second. When I got home, though, I did a more accurate calculation. Here it is:

Ok... if we say that light moves at 186,000 miles/second I figure that I went  $2.69 \times 10^{-4}$  light seconds or  $8.52 \times 10^{-12}$  light-years. This is .0000000000852 light years. Another way to look at it... I took me almost 4 hours to complete 50 miles on my bicycle, but light would cover that distance in .000269 seconds. You'd have to go around the earth 250 million times to go the distance that light covers in one year.

### The Houston Astronomical Society needs you

As our elections come up, it's time again for all of us to think about what we can do to help the organization.

Run for an office -- many of the current office holders have been involved in the management of the organization for some time. We appreciate their contribution, but it's time to involve others, such as YOU. Let the prez or the nominating committee know that you would like to be considered for a leadership position within the organization. Volunteer for one of the many opportunities within the organization. Think of something new that the organization can do, and get busy!

Another, simple thing you can do for the organization is to invite others to attend the meetings and to become members of the organization. You'll be doing a favor to both your friend and to the H.A.S. -- your friend will realize the benefits of membership in the H.A.S. and the organization will benefit from the energy and interest of new members.

### "Eye to the Telescope"

KT Tunstall is a singer-songwriter from Scotland. This would not normally be of interest to amateur astronomers, but the name of her first album is "Eye to the Telescope". The name comes from the fact that her father taught physics and would often take her and her siblings to the school observatory. The album doesn't

have an astronomical theme, but I like it anyway. I bought it on I-Tunes and have the album on my Ipod. You can sample the album at I-Tunes or at [kttunstall.com](http://kttunstall.com).

### Winter Projects

Already, I have more winter projects than I have winter.

- Clean out the attic - Add attic decking - reorganize stuff
- Clean out the garage (major!)
- Wash and wax fiberglass on observatory
- Clean out storage room

It doesn't look like a long list, but each of these items has been neglected for long enough that it'll be a quite a bit of work. You think my boss will let me take days off work to do these projects? Me neither.

*Until next time...*

*clear skies and new moons!*

*..Bill*

[billpellerin@sbcglobal.net](mailto:billpellerin@sbcglobal.net)

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## *Just Looking*

A GuideStar Interview by Clayton L. Jeter

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# **An Interview with Texas Star Party Organizer Dave Clark**

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*If you have ever been to the annual Texas Star Party, you just might have run into one of the party's founding members, Dave Clark. This amateur is a dedicated observer, party coordinator, and has been a friendly face to every Texas Star Party. This guy is "Mr. Busy" making sure the party runs smooth...quite a task. I think you'll find this month's interview here in the "Guide Star" quite interesting as I did. Enjoy!*

### **Bio:**

Dave Clark has lived most of his life since age 10 in Texas. After graduating high school in Dallas, he attended Stephen F Austin College in



Nacogdoches, worked for several years as a cable TV tech in Nashua NH, and then returned to Texas to finish his education at North Texas University in Denton, graduating cum laude with a BBA in Accounting.

Dave worked for the first commercial microcomputer company, MITS/Altair and started writing bookkeeping/billing programs in 1977

for use in offices of various local businesses. After working for several Dallas-area software companies, in 1987 he started working as a programmer for IBM. While in Dallas he worked mostly on developing email server and client programs, until IBM bought Lotus and started using their software. Transferring to Austin in 1995, he works with software developers/ISVs to help them with programming applications that use IBM software. He also has written numerous software patents and technical articles.

Dave has two sons, Steven and Scott, and lives in Cedar Park with his wife Valerie.

Dave's first Texas Star Party (TSP) was in 1980, its second year. It was hosted by Debbie Byrd at the Davis Mountains State Park, one mile from the current site at Prude Ranch. He has the distinction of having attend-

ed every TSP (over 25 years) since that time.

Dave presently enjoys annual trips and hikes in various parts of Canada, including Vancouver Island, Jasper in the Canadian Rockies, and Nova Scotia at the Bay of Fundy (highest tides in the world). He is also skilled at family history research and genealogy, helping friends and family discover their family roots.

### **The Dave Clark Interview:**

**Clayton:** Thank you Dave for taking time out of your busy schedule to answer a few questions for our society. It is always fun and interesting to learn how other observers became involved in amateur astronomy as a hobby.

It's a real pleasure and honor to interview one of the original founding organizers of the Texas Star Party. Here are a few questions for you that our society members will surely enjoy to hear your comments on...

What first sparked your interest in astronomy and when?

**Dave:** My very first awareness of the sky was during one wintry night outside our home in Simsbury CT, in 1957. My dad held me on his shoulders and pointed out Sputnik as it passed overhead. While I grew up with toy rockets and jet planes, it wasn't until a few years later that it really became a personal thing.

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## *Just Looking... from previous page*

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A neighbor had one of those Edmund 4.25" telescopes gathering dust in his garage, and loaned it to me in 1965. Alone, I set it up and eventually figured out how to use it and looked at various bright stars. Imagine my surprise when instead of seeing a speck of white light, in pops Saturn in all of its glory and rings, sharp crisp and clear. I am sure everyone in the neighborhood heard me yelling and calling to come see my discovery. I can assure you that I checked out all the other bright stars as well! By this time I was already one of those "space cadets", marveling at the astronauts of the Mercury and Gemini space programs and was always glued to the TV screen the next year when the Star Trek series started.

**Clayton:** What do you think is important to amateur astronomers?

**Dave:** I think it is very important to encourage folks to become interested in science and specifically amateur astronomy. For most folks, this means a decent (relatively dark) observing site, a friendly astronomy club where there you can meet others with similar interest and you can discuss equipment and the numerous "how to's".

Since many folks don't have access to a large astronomy club and its resources, a national star party made just for amateur astronomers might turn out to be very valuable to the community. We didn't know how TSP would turn out, but knew it was worth the investment to sustain and nurture a place for serious amateurs to go. You have to be pretty serious into astronomy, to drive hundreds/thousands of miles and stay in the mountain desert for a week, right?

For my own experience, I had access to one of the largest clubs in the US. Within a few years after graduating from college I located the astronomy club (TAS) in Dallas and started attending their meetings in 1978. I eventually purchased one of those orange-tube Celestron 8" SCTs, and used their observing site SE of Dallas near Kaufman. I assisted the TAS with locating and developing a replacement observing site near Atoka OK. We put in roads, electricity, and concrete pads. We also set up an unusual program for site leases, where members could build their own private observing space adjacent to the regular observing area. We found that when members are personally-invested in an observing site, the use and maintenance of the site is easier to sustain (surely this is a nagging problem for all astronomy clubs)

**Clayton:** What scope design do you generally use and what kind of observing do you prefer (visual, astrophotography, sketching, etc)?

**Dave:** I have an 8" Celestron Schmidt Cassegrain (old orange tube design) that has suited me since I started. It's portable and has very good optics. While I spent years doing astrophotography with gas-hypered and other film, I have primarily enjoyed vi-

sually observing planetary nebula. Someday I hope to do some of the neat web cam-based astrophotography that seems to be yielding such high (and easy) results for folks.

**Clayton:** In the mid 1980's, I observed and logged most of the Messier objects from the southern shores of Lake Buchanan in the Texas Hill Country. I understand the Austin club has its "Eagle Eye" observatory on the north-east side of that lake. How are the skies darkness, transparency, and overall seeing from your clubs site there?

**Dave:** Considering that the Canyon of the Eagles Park is only an hour's drive for me, the skies (and protected environment) are fairly good. While not "dark" like TSP or ESP, the overhead viewing is fairly good. It is wonderful for a club to have a facility like this for its members to share. Another hour's drive westward brings you to the dry-side of the Texas climate, with much darker and less light-polluted skies.

**Clayton:** Are any of your family members interested in your hobby? Do they observe too?

**Dave:** I met my wife through TSP. Valerie is a science teacher for physics, math, chemistry, and astronomy. Having a spouse hooked on astronomy is interesting. Similar book collections: Whose copy of Burnham's do we keep? Whose telescope do we use tonight? And I really like it when I don't have to explain to "my spouse" about the purchase of an expensive astronomy gadget!

Since we met, we almost always observe together and swap observations and notes. And it is especially nice when she takes on her teaching role at ESP or LBJ Ranch star party, to give astronomy presentations to students or the public.

**Clayton:** What best serves your observing needs in the field while observing.... a star atlas in a booklet form, or an electronic version? Why?

**Dave:** For a field star map, I enjoy my (old) copy of Vehrenburg's "Handbook of the Constellations". While out-of-print, it has a durable outer cover, and it is indexed by constellation. It has detailed black charts with white objects, and each constellation has

*Continued...*

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## Just Looking... from previous page

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a page that lists objects by type. I don't have a problem with the 1950 coordinates, as I can still find things fairly easily by referencing my scope's setting circles to the 1950 coordinates of a bright star.

I have come into the 21st century, by using my laptop computer in the field for serious observing runs. I use SkyTools software to record my observations, organize observing lists, and of course get detailed star maps for hunting the objects. And when there is "internet" capability in the observing field, I like the ability to quickly download the image of an object to verify what I am seeing.

**Clayton:** Where is the farthest you have observed from your home?

**Dave:** Cheticamp at Cape Breton, on the eastern shore of Nova Scotia where I shared informal viewing with friends and neighbors several times with my 14x100 binoculars. This is also a great place for photographing sunsets!

**Clayton:** I'm sure you get many suggestions from TSP attendees concerning new possible TSP locations. How did you rate TSP-97 when it was held in Leakey, Texas? Did you and others enjoy that event (I attended also)?

**Dave:** The Alto Frio site at Leakey is a wonderful facility for a star party in many ways. But 1997 happened to be a year where all of Texas was clouded out for that entire week, except for a few dew-y hours on Saturday night. But the last night of TSP-97 was extremely important to me: I met my soul mate Valerie and we married 5 months later.

Four years ago, TSP established the Eldorado Star Party located 100 miles NW of Alto Frio. Each autumn, over 100 people enjoy the dark and dry skies of this great location which we jointly developed with X-Bar Ranch.

The most frequent comment I have heard from folks about both of these locations, is that they didn't have to drive so far from home.

**Clayton:** How do you envision the Texas Star Party in the next 25 years?

**Dave:** We can always hope for stability, but things rarely stay the same.

TSP will likely change, as the needs of our attendees change. For example, we have recently invested heavily in providing reliable wireless Internet in all of the TSP observing fields on the Ranch. We have some really smart engineers who attend TSP every year, who volunteered their time to help us with our

technology needs.

While few of our attendees had this need just 5 years ago, it was clear from trends in astronomy products that folks would be needing internet connectivity to make the most of their intensive week out in the remote desert mountains.

TSP is heavily influenced by the astronomy equipment that our attendees buy and bring with them. 15 years ago, we saw a reduction in AC power needs, as more telescopes ran on batteries or were Dobsonian. But now AC power needs have come back up, as folks bring their computers and gadgets that they prefer to plug in.

A key issue we will have to struggle with is the "graying" (ie aging) of amateur astronomers involved in the hobby. This comes as a result of fewer younger people doing amateur astronomy as their hobby. This might be reflected in future years, with fewer attendees at TSP and other star parties. It will also likely reduce the number of able-bodied volunteers; 30+ volunteers are vital to sustain the operation of TSP. If they aren't replaced, then various features of TSP will need to be eliminated.

We need to find effective and creative ways to induce young people to take on amateur astronomy as their hobby. Perhaps TSP should sponsor young people to attend TSP, or assist Texas clubs with programs to encourage membership of young people, or fund activists to help promote science education in Texas schools.

Another important issue that will influence TSP over the next 25 years is the overhead sky conditions, which affect our ability to see the night sky. TSP is known for its dark skies and this is a major reason why folks are willing to spend money and travel hundreds/thousands of miles to TSP. We have witnessed a slight degradation in transparency at TSP, due to dust/smoke/pollution from Mexico. I do not know if this trend will continue. TSP has invested over \$25,000 in light-shielding and education in nearby communities and this helps to keep light pollution at bay. While reduced lights help to

*Continued...*

***James B. Cotter***

*July 2, 1923 - September 13, 2006*

H.A.S. member James B. (Jack) Cotter passed away on September 13, 2006. Jack was a great friend to the Houston Astronomical Society and to everyone who knew him. Jack enjoyed being at the Texas Star Party with his friend George Stradley.

*Jack Cotter at  
the Texas Star  
Party*



minimize the effects of reflected light on particles in the air, the natural sky glow remains as a source of illumination to pollutants.

As part of our efforts to assure a dark-sky location for TSP, we have invested in an alternate site, the Eldorado Star Party (ESP) near Sonora, Texas. This smaller star party today enjoys the Autumn skies, and helps to insure a venue that may become increasingly important as a backup location for TSP if we ever need it.

The Houston-area clubs have contributed heavily to the success and longevity of TSP, especially through the efforts of numerous volunteers from these clubs. I particularly want to single out and express my thanks to Steve and Amelia Goldberg for their high dedication and hours spent in many areas of TSP operations. Most importantly, the Goldberg's personal commitment (and sweat) assures that TSP attendees are fairly-treated for reservations of the limited accommodations at Prude Ranch.

**Clayton:** Thanks Dave for taking the time to share your interest and thoughts with us for our monthly HAS newsletter, *The GuideStar*. We wish you luck with all of your astronomy interests. Please come visit our society when in the Houston area, we'd love to see you. Thanks also for a wonderful job of coordinating the Texas Star Party for so many years.



# Moon Crosses Pleiades

by Bill Pellerin, GuideStar Editor

**Object:** Moon

**Class:** Solar System Object

**Magnitude:** Bright

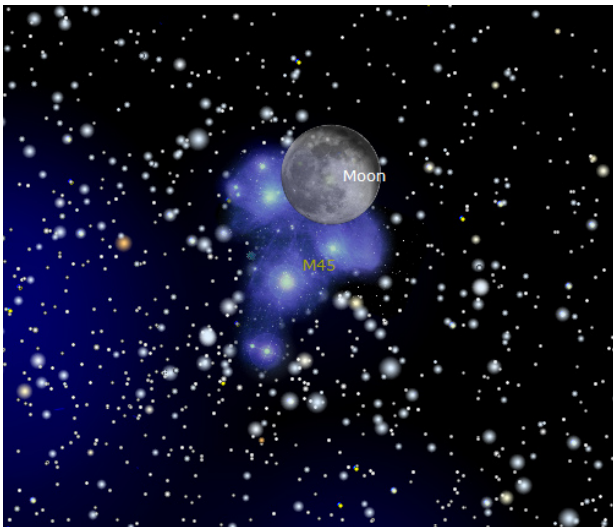
**R.A.:** 3h 43m 32s (year 2000 coordinates) (10:30 p.m. local time, October 9)

**Dec** +23 58' 43"

**Constellation:** Taurus

## Why this object is interesting:

This time, we're going to look at an event. This will be something that occurs rarely, but will occur on October 9, 2006, at a time that's convenient for you to see it. October 9 is a Monday, so you're likely to be home and have a good opportunity to see the event.



*Moon at 10:30 p.m. on October 9  
Image from TheSky by Software Bisque*

On that night, the moon will pass through the Pleiades (M45), the beautiful and bright star cluster in Taurus. At 11:00 p.m. in Houston, the moon will be just north of due east, and 25 degrees above the eastern horizon. A good view to the east is required if you want to see the moon enter the Pleiades, but by midnight the moon will be 39 degrees above the horizon, and easier to see. It'll still be in the Pleiades, though and worth a look.

Any time the moon occults a star it's remarkable how it simply winks out. That is, there's no dimming of the star before it disappears behind the moon. This is because the star is so far away that it appears to us to be simply a pinpoint of light; there's essentially no angular size to it.

The picture (above) was generated with *TheSky* software from Software Bisque. It shows nebulosity around the main stars of the Pleiades. It's true that this nebulosity exists, but you won't see it with the moon shining in your eye.

The last time this happened was April 1, 2006. No foolin'.

This event will be easily visible naked eye, with binoculars, or with a telescope. You'll be able to see the stars wink out easier with optical aid, but since the lit side of the moon is entering the cluster, the starlight will have to compete with the lunar light for your attention.

There have been 8 other 'occultations' of the Pleiades by the moon this year, but not all of these have been visible from here.

Astronomers used to time the disappearance and reappearance of stars as the moon moved through the sky. This was done to develop information on the size of the moon. While this may be an interesting exercise these days, the size of the moon is so well known that there's not much scientific value from making these measurements.

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# Time Capsule - 2030

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By Steve Goldberg

This is a list of contents for the 2006 Time Capsule. This is a list of all the new items added to the contents of the 1st time capsule

## Member related:

- Steve Sartor – Letter from the President.
- Thomas Blocker - Personal book belonging to Thomas Blocker, given to him by Mrs. Margaret Wallits. She authored the book called "Orlin and the Big Bright Stars". Also, a personal letter to Tom from Mrs. Willits and hand drawn star chart.
- Amelia Goldberg – Copy of "Universe Sampler" book that she wrote that is used for an observing program for the Astronomical League. Also, a copy of the certificate and a pin that is received at the completion of program.
- Comet (Ed) Szczepanski information, IAU circular, discovery photo, magazine articles.
- Larry Mitchell - IAU circular and information on Supernova 1994S in NGC4495 discovered by Larry Mitchell.
- Larry Mitchell – 3 Texas Star Party "Advanced" observing program pins that are awarded at the completion of the program. Included are the Arp and Globular Observing lists.
- Glen T Penfield - Write-up about Glen T Penfield, HAS member. He discovered the circular structure in the Gulf of Mexico just north of the Yucatan Peninsular. This structure, now named Chicxulub Crater, was later to be determined the cause of the dinosaur extinction. A roster of the club is attached.
- Tom Williams – past President 1979, web page information.
- Takao Doi – Astronaut. NASA biographical data and Shuttle patch for STS-87 on Columbia. HAS member
- Copies of articles from the HAS web page involving members
- Roster dated August 21, 2006
- Pamphlet from McDonald Observatory describing the facilities. 1953. from Tom Blocker
- DVD – from Channel 13 KTRK, 3 HAS members talking about Comet Halley, August, 1985
- Photo – Comet NEAT, taken at Texas Star Party 2003 by Steve Grimsley
- Photo – Comet Hale-Bopp, taken by Barbara and Buster Wilson. April 2-3, 1997, near McDonald Observatory
- Photos – by Leland Dolan. Comet Bennett 1970. Moon. Sun with large sunspot. Milky Way from near downtown Houston 1960. Echo I satellite trail near Polaris. M31. Partial Solar Eclipse, Jun 10, 2002
- Photos – 3 photos of Comet Hale-Bopp taken by Loyd Overcash. One photo with the North American nebula, one with the Pleiades, one with M34.
- Photo – M51 by Randy Brewer. May 4, 2005 from Ft. Davis, TX
- Photo – Houston at night. By Don Pettit while on the International Space Station, Expedition 6 crew.
- Photo – Comet Hyakutake over the George Observatory in Brazos Bend State Park, south of Houston.
- Brochure of George Observatory

## Astronomy related:

- Houston Chronicle "Special Edition"
- HAS koozie and 2 cloth patch logos.
- T-Shirt, size Medium, from Astronomy Day, 2001, with Mars as the subject
- Wooden puzzle from the US Post Office of one of the Hubble stamps
- Manual on how to "Use and Enjoy Your Scanglobe" globe of the Earth.
- Solar System poster from the National Geographic Society 1981.
- Article he co-authored on "The Clustering Properties of Active Regions During the First Part of Solar Cycle 23"
- NASA news article about Brian seeing a Leonid meteor impacting the moon
- Article on "Observations of the inner coma of C/1995O1 (Hale-Bopp) – gas and dust production"

*Continued...*

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## **Time Capsule... from previous page**

- 2005 Moon calendar
- "Time" magazine May 12, 2003. Articles about amateur astronomy. Featured pictures of Larry Mitchell with his telescope, and group picture on page 58 with: Ben Jones, Jayne Lambert, George Stradley, Steve Sartor, Dana Lambert, Russell Croman.
- Texas Star Party history including speakers and award winners from the HAS.
- "Astronomy" magazine September 2006 with pictures in the Gallery by Amelia Goldberg and Randy Brewer.
- CD of images from the Mars 2005 Apparition by Bill Flanagan
- Advertising brochure from Orion Telescopes and Binoculars
- 35MM slide set called "A Spacecraft Tour of the Solar System"
- Picture of the "Earth at Night" showing light pollution, with explanation article.
- Sheet of stamps from the US Post Office commemorating the Hubble telescope
- 2006 Observer's Handbook published by the Royal Astronomical Society of Canada
- 2006 Banquet gifts of key chains from Steve and Darlene Sartor
- Joke: Man on scale that has a sign "Speak Your Weight". Caption: "You have been awarded planetary status".
- A Thank You card from an attendee at one of the local star parties at the Bellaire Nature Center.

### **Non-astronomy related:**

- Empty boxes of Kodak Tech Pan for 35mm film and 120 size film.
- Toy of NASA Shuttle
- Computer generated art by member August Pieres using "projective geometry"
- Computer punch cards with article description
- Texas US quarter
- Roll of US Pennies – Rumors that the US Mint will stop making pennies.
- Justin McCollum - Drinking glass from the movie Star Trek III – The Search for Spock. The "FAL-TOR-PAN" scene is depicted on the glass.
- A package of Strawberries "Freeze-Dried Ready to Eat Space Food" from NASA

### **About previous time capsule:**

- Print pictures of the digging up and opening of first time capsule
- DVD video of digging up the time capsule in 2006.
- DVD with pictures of the digging up of the time capsule in 2006

## **Remember --**

All HAS memberships are due for renewal in January. Pay your 2007 dues early!! Our membership year now corresponds to the calendar year.

Mail your dues to the address on the back page of this *GuideStar* or bring your payment to the meeting.

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## How can I learn more about the Astronomical League?

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Amateur astronomers from across the country benefit from perusing the many pages of the Astronomical League's website, [www.astroleague.org](http://www.astroleague.org). Naturally, this is the place to go if you're looking for information about upcoming events and League news. But there is so much more...

Want to learn all about one of the great League observing programs? Go to [www.astroleague.org/observing.html](http://www.astroleague.org/observing.html).

Do you know of a worthy candidate for one of the many League awards? Look at <http://www.astroleague.org/al/awards/awards.html>.

Are you interested in buying a particular book about our fascinating hobby? Then go to [www.astroleague.org/al/bookserv/bookserv.html](http://www.astroleague.org/al/bookserv/bookserv.html).

There is even something to help your club function better. Try [www.astroleague.org/al/socaid/socaidid.html](http://www.astroleague.org/al/socaid/socaidid.html)

Make the most of your Astronomical League membership! **To find out more about what the Astronomical League offers you, why not log on to [www.astroleague.org](http://www.astroleague.org) today?**

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

**Your membership is renewable on January 1 of each year.**

Total yearly dues are \$36.

If you paid your dues any time in 2005, your payment for 2006 is due as of January 1, 2006. New members joining in 2006 will pay only for the months remaining in the calendar year.

Magazine subscriptions can be renewed at any time and the renewal does not need to be synchronized with your HAS dues.

Membership in the Houston Astronomical Society is one of the great bargains in Astronomy. For a regular membership of \$36 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.

Encourage other astronomy enthusiasts to join the organization as well. It's a great group.

***Thanks!***

## Want Ads

### For Sale: Orion Short Tube 80

Orion ShortTube 80mm telescope - Optical tube with astronomical diagonal, carry bag, red-dot finder, magnifying finder, upgraded focusing knobs, two eyepieces. All for \$150. Bill Pellerin [billpellerin@sbcglobal.net](mailto:billpellerin@sbcglobal.net)

### For Sale: 17.5" Newtonian

Perfect for imaging or visual star parties. 17.5" f4.5 Newtonian telescope with highly accurate microprocessor-controlled, stepper-based alt-az drive system with focal plane rotator. Designed and built by Andy Saulietis and the owner. Accepts ST4-compatible inputs for autoguiding. Mechanical and calibration work done by the owner to optimize system accuracy for autoguided CCD imaging. Original 1981 Coulter mirror refigured to smooth 1/8th-wave surface by Sky Optical in late 80's. Primary and secondary recoated with enhanced coatings group by PAP in early 90's. Optics in excellent condition. 80mm f5 finder. Breaks down to numerous major pieces for transport. With modest effort, can be a traveling scope, but better as a semi-permanent observatory. See my website for many images made with this system over the last decade.

Price negotiable. For pickup/delivery, maybe can meet you halfway.

Call 281-482-5190 or E-mail Al Kelly.

### For Sale: SCT Denkmeier II x PowerSwitch binoviewer and Eyepices

Excellent condition, original aluminum case, along with a pair of TeleVue Nagler 6 7mm eyepieces and a pair of TeleVue Panoptic 24mm eyepieces, all four eyepieces in their original TeleVue boxes.

New the set retails for \$2500. Will sell the set for \$1500. All pieces are in excellent condition and little used. I will also toss in my 3 year old LX90, also in excellent shape, for an additional \$750, for a great binoviewer set up. The LX90 still has its original packing carton, as well as a Telrad finder and an 8x50 finder attached. I will toss in for free a Meade electronic focuser and an eyepiece tray that attaches to the LX90 base.

I can be contacted by telephone at 713 851 2861 or email ([james.morse@exxonmobil.com](mailto:james.morse@exxonmobil.com)). I live and work in Houston and would prefer a hand delivery, but am willing to send by post. - Jim Morse

### For Sale: Celestron Nexstar 8

Like New Condition...Celestron Nexstar 8, Used only 2 times in back yard. Some extras include Solor filter, 1 1/4" star diagonal, 40 mm multi-coated nexstar plossel, 8-24 mm Z00 eyepiece, variable polarizing filter, 2X multicoated Barlow. \$ 850.00 Jack DeNina, Willis, Texas 936-856-0704, [jjack9485@cs.com](mailto:jjack9485@cs.com)

### For Sale: 20" Obsession

I can no longer handle the weight, or trips up the ladder, and must sell the 20" Obsession. I would prefer this to be a Texas or Oklahoma deal in which both parties could drive a reasonable distance for the exchange.

Included with the basic telescope are:

1. The JMI NGC Max digital circles (never used, but the light comes on).
2. A Protostar diagonal holder with heating wiring attached (also never needed),
3. A 6-foot customized ladder with grab bar and intermediate steps up to 3 feet.
4. A battery "shelf" that bolts into the handlebar bushings.
5. An Astro Systems Scope Coat.
6. TelRad finder.
7. Lots of stainless replacements on the hardware.
8. Obsession light shroud.
9. JMI focuser upgraded to compression ring version drawtube.

The mirror is Galaxy, recoated by Galaxy with 96% coatings in 1998 and coatings remain in excellent condition. My 71-year old eyes saw one galaxy rated at 16.3 mag by Megastar at TSP and lots in the 15.7 mag. range.

The truss tubes have been equalized as best as possible so that when assembled in the field, collimation is never far off. There are about 18 pounds of fitted counterbalance weights, needed to accommodate an 80 mm finder. This finder is not a part of the sale, however. The UTA round box has a custom lid that can substitute as a table top in the field.

There are a few battle scars as this is a 1993 model,.

Overall, this is an excellent telescope, in great condition, and has been a joy to use.

I would like to get \$5,100 for everything listed above, based on Midland pickup, or \$5,250 for pickup at some intermediate point. The new replacement values for the above is in excess of \$7,000. Contact Don Judd at [dkjudd@nts-online.net](mailto:dkjudd@nts-online.net)

### For Sale:

Celestron Sky Master 11 X 80 Astronomical Binocular with original carrying case. Celestron Photographic Tripod (crank up) in original box. Both items purchased new and gently used a few times. \$250 or best offer. George Sellnau 713-978-7774, [gsellnau@aol.com](mailto:gsellnau@aol.com)

### For Sale: Meade ETX 90EC Telescope,

and Meade tripod Used once. Includes Autostar controller. Paid \$850 new 6 months ago – no time for a new hobby. Includes all original boxes and manuals, and carrying case for scope and tripod. Before I put it on eBay, I'd like someone local to enjoy this scope. I'll take \$500 or any reasonable offer. Contact Bill at [beley8@houston.rr.com](mailto:beley8@houston.rr.com).

*Email your ads to Bob Rogers, our Webmaster, at [siteworkerbob@hotmail.com](mailto:siteworkerbob@hotmail.com)*

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## **Minutes**

### **the September, 2006 Meeting of the**

# **Houston Astronomical Society**

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The September, 2006 meeting of the Houston Astronomical Society was called to order at 8:14 p.m. by HAS President, Steve Sartor.

#### **General Announcements:**

- Steve Sartor welcomed everyone to the meeting.
- Steve recognized and welcomed the new member, Charles Cooper, and his son, Justin, present at the meeting.

#### **Announcements:**

- Steve Sartor related that we are celebrating the 51st anniversary of HAS, and he also mentioned that our oldest member, Bill Molinare will be celebrating 50 years of membership in November.
- HAS Picnic Chair, Amelia Goldberg, announced that the HAS Annual Picnic is scheduled for September 23rd on new moon weekend. Other regional clubs have been invited, and the gates are scheduled to open at noon. Amelia solicited volunteers to man the gate. Burial of the time capsule is scheduled from 2p.m. to 3p.m. and dinner is scheduled for 5p.m. Amelia requested members RSVP to her if they are planning to attend.
- Steve Sartor announced that elections are coming up at the November meeting, and we need volunteers who feel led to give back to the society by serving in one of the elected positions.
- Larry Mitchell presented Amelia Goldberg with the Astronomical League's Arp Peculiar Galaxy observing certificate and pin, presented for observing 100 of the 338 galaxies in the Arp Catalogue of Peculiar Galaxies. Amelia sketched each of these objects in addition to observing and logging them.
- Steve Sartor presented Amelia Goldberg with the Astronomical League's Master Observer Award certificate and pin, presented for completing ten of the Astronomical League's observing programs. Amelia is only the second member of HAS to receive this award.
- Judy Dye announced that, in addition to other items, she has two new books available from the HAS Logo Sales table: Planetary Nebulae and Globular Clusters, each selling for \$13.
- Steve Sartor related that HAS Member, Jack Cotter, has recently undergone a double-bypass and is recovering. Steve circulated a get-well card for the membership to sign.
- Tony Settles gave a report on the progress of the Mars Reconnaissance Orbiter mission.

- Ed Szczepanski reported that the restroom doors at the Columbus site have been refitted with door locks that lock from the inside utilizing simple locking mechanisms on the doorknobs. Instructions for operating the locks and lights inside the restrooms will be posted on the walls.
- Steve Sartor distributed 3x5 index cards to attendees so they could record their thoughts about the future for inclusion in the HAS time capsule.
- Don Pearce gave the Comet Report highlighting 177P/ Barnard, C/2006 M4 SWAN, P/2006 HR\_30 SIDING SPRING, and 4P/Faye. For information on these and other comets of interest, see Don's Comet Corner on the HAS website at <http://www.astronomyhouston.org>.

#### **Program**

Steve Goldberg introduced Bill Dillon, PHD in Geophysics from Texas A&M University and former President of the AAVSO, who delivered his presentation, Overview of the 3rd High Energy Astrophysics Workshop, Spring 2005, Las Cruces, NM. Upon completion of his presentation, Bill answered questions and was presented with a gift of appreciation from the society.

As a second part of our evening program, Steve Goldberg presented the items to be included in the HAS time capsule, scheduled for replanting at the society's observing site in Columbus at our annual picnic on September 23rd. After its internment at the picnic, the next time the capsule will be opened is in 2030 on the society's 75th anniversary.

#### **Closing Announcements**

Bram Weismann, Chairman of the Telescope Committee, addressed the society concerning the scopes available for loan.

Steve Sartor pronounced the meeting adjourned at 9:48 p.m.

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## **Minutes**

### **the August, 2006 Meeting of the**

# **Houston Astronomical Society**

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The August, 2006 meeting of the Houston Astronomical Society was called to order at 8:10 p.m. by HAS President, Steve Sartor.

### **General Announcements:**

Steve Sartor welcomed everyone to the meeting.

Steve recognized and welcomed the new member and guest present at the meeting.

### **Announcements:**

- Steve Sartor distributed 3x5 index cards to attendees so they could record their thoughts about the future for inclusion in the HAS time capsule.
- HAS Picnic Chair, Amelia Goldberg, announced that the HAS Annual Picnic is scheduled for September 23rd on new moon weekend. HAS will supply the food for the picnic.
- Amelia presented member, Gordon Houston, with the Astronomical League's Lunar Club Certificate #514 and Pin in recognition of his having observed and logged the 100 lunar features on the Lunar Club list.
- Amelia presented member, Brian Cudnik, with the Astronomical League's Herschel 400 Club Certificate #349 and Pin in recognition of his having observed and logged the deep sky objects on the Herschel 400 list.
- Steve Sartor introduced Bram Weismann who has volunteered to serve as Chairman of the Telescope Committee. In addition, Paul and Kay McCallum have volunteered to serve on this committee and provide storage space for the telescopes. Bram addressed the society concerning the scopes available for loan.
- Ken Miller announced the next HAS Star Party will be held in the November - December time frame.
- Steve Sartor introduced the Nominating Committee for this year: Steve Sartor - Chair, George Stradley, Ken Miller, Don Pearce, and Kirk Kendrick. Steve solicited volunteers to give back to HAS by serving as an Officer or Committee Chair in 2007.
- Judy Dye announced that she has two new books available from the HAS Logo Sales table: Planetary Nebulae and Globular Clusters, each selling for \$14.
- Susan Nesterovich announced that there would be a public star party held Friday, August 11, 2006, at the Nature Discovery Center in Bellaire, and she solicited volunteers to bring their telescopes.
- Steve Sartor read a letter of thanks to the HAS for the public star party held June 2, 2006.
- Steve Sartor announced that the September General Meeting would be the last opportunity for members to make contributions to HAS time capsule, scheduled for replanting at the society's observing site in Columbus at our annual picnic. Steve reiterated we would like to see a few "things" included this time around such as eyepieces, observing aids/tools, or other items that will fit in the 6" diameter PVC tube.
- Brian Cudnik announced that over Labor Day weekend, the European Space Agency's Smart 1 spacecraft will be guided to a controlled impact on the moon to study high velocity impact structure. While the impact is not likely to be visible in amateur telescopes, amateurs may be able to view or image the plume generated by this impact. Brian will be coordinating amateur observations of this event, and he will be posting more information on the HAS website and the List-Server.
- Tony Settles reported that astronomers have detected a planet orbiting the star, 55 Cancri, which may lie the right distance from the star to be within the system's habitable zone.
- Don Pearce gave the Comet Report highlighting 177P/ Barnard, C/2006 M4 SWAN, and P/2006 HR\_30 SIDING SPRING. For information on these and other comets of interest, see Don's Comet Corner on the HAS website at <http://www.astronomy-houston.org>.

*Continued...*

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# Observatory Duty Roster

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by Kirk Kendrick, Observatory Chairman

**The site continues to be in GREAT shape thanks to the unending efforts from our chief grounds keeper – Ed Szczepanski – as well as Bob Rogers and a few other volunteers that keep tackling key jobs.**

Major Projects for 2006 & 2007:

- Continued Site cleanup
- Annual Picnic – plant the new time capsule!
- Additional Camping sites with water and electricity
- Workshop & Tractor Storage building

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October Supervisor      Michael Edstrom      281-347-7267

John Huff  
Clayton Jeter  
Stanley Jones  
Keith Jurgens  
Arnie Kaestner  
David Kahlich  
Volunteer  
Volunteer

FOCUS THIS MONTH  
Weed eat, trim trees,  
Poison ants

Additionally:

Month	Prime Night	Members Night	Observatory
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October..... 21 .....14

- Please volunteer to help us keep the site in great shape! Contact Kirk Kendrick with your desires and let him know of any special skills you have that the club could leverage. Thanks!

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## August Minutes... from previous page

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### Program

Brian Cudnik introduced the featured speaker for the evening, Richard W. Schumde, professor at Gordon College in Barnesville, Georgia and Coordinator of the Jupiter Section of the Association of Lunar and Planetary Observers. Richard delivered his presentation entitled, The Remote Planets 1991 - 2006. Upon completion of his presentation, Richard answered questions and was presented with a gift of appreciation from the society.

### Closing Announcements

teve Sartor collected the time capsule index cards from the membership. He announced that, for those needing more time, the cards could be turned in at next month's meeting.

Bram Weisman reminded members that there are a 9 ½" and two 12" telescopes at the observing site for members' use.

Steve Sartor reminded the membership that the Nominating Committee is looking for volunteers to run for the 2007 HAS offices and committee chair positions.

Steve Sartor pronounced the meeting adjourned at 9:50 p.m.

## Want new information in the GuideStar? Write it!

You, too, can be published here.

- What are you doing that's new and exciting?
- What have you read recently (book report!)?
- What new and interesting software are you using?
- Did you have an observation that was especially interesting?
- Any 'lessons learned' from observing attempts?
- What are you looking forward to at the Texas Star Party this year?

Send your materials to Bill Pellerin, the GuideStar editor at:

[BillPellerin@sbcglobal.net](mailto:BillPellerin@sbcglobal.net)



### 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

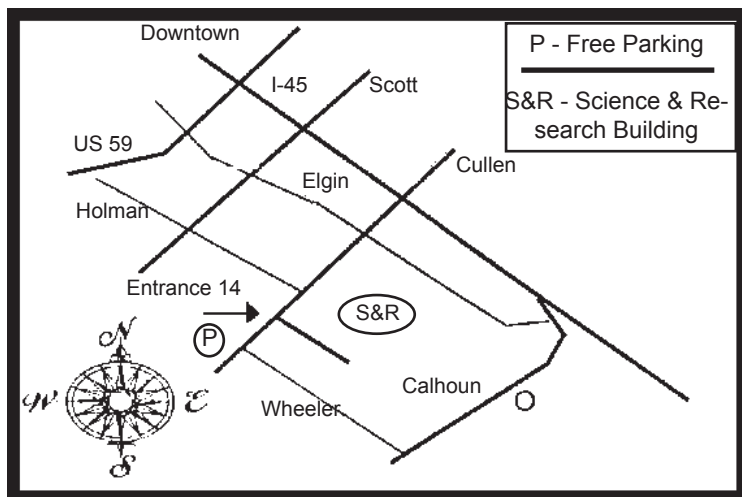
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

### 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 available on the HAS web site to all members of H.A.S., and to persons interested in the organization's activities. Contributions to *GuideStar* by members are encouraged. Electronic submission is helpful. Submit the article in text, MS-Word format via email [BillPellerin@sbcglobal.net](mailto:BillPellerin@sbcglobal.net). Copy must be received by the 15th of the month for inclusion in the issue to be available 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;  
Email: [BillPellerin@sbcglobal.net](mailto:BillPellerin@sbcglobal.net)

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## Houston Astronomical Society Meeting

October 6, 2006

7:00 Novice & Site Orientation

8:00 General Meeting

University of Houston

### Houston Astronomical Society

P.O. Box 20332 • Houston, TX 77225-0332



The Houston Astronomical Society welcomes you to our organization. The HAS is a group of dedicated amateur astronomers, most of whom are observers, but some are armchair astronomers. The benefits of membership are:

- Access to our 18 acre observing site west of Houston -- a great place to observe the universe!
- A telescope loaner program -- borrow a HAS telescope and try observing for yourself!
- A monthly novice meeting, site orientation meeting, and general meeting with speakers of interest.
- Opportunities to participate in programs that promote astronomy to the general public (such as Star Parties at schools)
- A yearly banquet with a special guest
- A yearly all-clubs meeting for Houston area organizations
- Meet other amateurs and share experiences, learn techniques, and swap stories

***You're invited to attend our next meeting.  
You'll have a great time.***