



July, 2002

At the **July 5** meeting...

***Science Fair Winners
and
Texas Star Party Review***

***Houston Astronomical Society
GuideStar***

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.

Observatory Site Telephone: 979-732-8861

★★★★★ **The Houston Astronomical Society** ★★★★★★

The Houston Astronomical Society is a non-profit corporation organized under section 501 (C) 3 of the Internal Revenue Code. The Society was formed for education and scientific purposes. All contributions and gifts are deductible for federal income tax purposes. General membership meetings are open to the public and attendance is encouraged.

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

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

★★★★★★★★★ **Additional Board Members** ★★★★★★★★★★

Liaison responsibility
Bill Flanagan 713-699-8819
Howard Leverenz 713-957-8667
Jay Levy 281-557-4920 Field Trip and Observing, Program
Christopher Mendell
Steve Sartor

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

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

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

Historian Leland Dolan 713-688-0981 Publ. Star Party Marg Nunez 713-529-2549
Librarian Peggy Gilchrist 281-443-8773 Rice U. Coord. Matt Delevoryas 713-666-9428
Logo Mds Sales Judy Dye 281-498-1703 Schedule Obs'v'ty Steve Goldberg 713-721-5077
Long Range Plan Bill Leach 281-893-4057 Texas Star Pty Steve Goldberg 713-721-5077
Parliamentarian Kirk Kendrick 281-391-3834

★★★★★★ **Special Interest Groups & Help Committees** ★★★★★★★

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

★★★★★★★★★ **Advisors** ★★★★★★★★★★

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

★★★★★★★★★ **Dues and Membership Information** ★★★★★★★★★★

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

All members have the right to participate in Society functions and to use the Observatory Site. Regular and Student Members receive a subscription to *The Reflector*. Regular, Student, and Honorary Members receive *The Houston Star*. Associate Members, immediate family members of a Regular Member, have all membership rights, but do not receive publications. Sustaining members have the same rights as regular members with the additional dues treated as a donation to the Society. *Sky & Telescope* mag \$29.95/year, *Astronomy* mag \$29/year -- see club treasurer.

Membership Application: Send funds to address shown on outside cover of *Guidestar*. Attention - Treasurer, along with the following information: Name, Address, Phone Number, Special Interests in Astronomy, Do you own a Telescope? (If so, what kind?), and where you first heard of H.A.S.

Table of Contents

4	Observations of the Editor	19	Minutes of the June Meeting
5	Meeting notice	20	Membership Renewals
6	July/August Calendar	23	HAS Web Page
7	Star Party Etiquette	24	Observatory Duty Roster
14	Observatory Corner	25	Job Opportunity
	Other Meetings	26	Logo Sales
17	Visual Limiting Magnitude		
18	Science Fiction Becomes Fact		

Call the Starline, 281-568-9340 for updates and changes

Welcome to New Members!

The Houston Astronomical Society encourages you to join our group of active amateur astronomers and take advantage of the benefits of membership. As a member you'll have access to the club observing site near Columbus, Texas. (You're required to participate in a site orientation meeting before you get the gate lock combination.) The site has concrete pads for setting up your telescope, restroom and bunkhouse facilities, and areas set aside for camping. You'll get monthly issues of the *GuideStar* newsletter, you'll get to vote and to serve the organization as an officer, and you will be supporting the local amateur astronomy community.

Special Interest Group Listing

Any member who wants specific information on a SIG listed below may call the listed individual. Also, see the "Ad Hoc Committee Chairpersons" on the inside front cover and the "Special Help Volunteers" listing (not in every issue).

Advanced	Bill Flanagan	713-699-8819
Comets	Don Pearce	713-432-0734
Lunar & Planetary	John Blubaugh	713-921-4275
Occultations & Grazes ...	Wayne Hutchison	713-827-0828
Advanced	Bill Leach	713-863-8459

Observations... of the editor

by Bill Pellerin, GuideStar Editor

Last Saturday night (6/15/02), from the country, I stepped outside to see the Space Shuttle and the ISS (International Space Station) go by. They went overhead separated by a minute or so and more-or-less on the same path. The Shuttle came by first, and it was very bright, followed by the ISS, which was also quite bright.

Tonight (6/19), there's going to be an Iridium flare in the northeast. If the sky is clear, I may get to see it. In addition, there's another Iridium flare in the morning at 5:33; another opportunity to see something of interest. The Iridium flares reach magnitudes of -8 or thereabouts, so they're quite bright. If observing satellites seems interesting to you, check out:

www.heavens-above.com

Here, you enter your location and you can find out what's going to be visible tonight and in the morning. It's a neat site, and it's free.

6/20/02 -- I **was** able to see the Iridium satellites last night and this morning. Very bright objects, but not as bright as they were in the 'country' skies.

I'll probably miss this month's meeting, falling as it does on a holiday weekend. It looks like it's going to be a good one. I was at the Texas Star Party this year, so the review of that event would, in fact, be a review for me. The Science Fair winners are always interesting, and fun, so I'm sorry I'll miss that presentation.

We've got some good information in this issue. Beginning on page 7 is an article by Tom Clark on *Star Party Etiquette*. Most of what is said here applies to the observing site as well. I was asked, at the June meeting, if I could put the graph from Brad Schaefer's TSP talk in the *GuideStar*. You'll find it on page 17.

Continued on page 16...

Houston Astronomical Society

***Meeting Notice
For Friday, July 5, 2002***

Science Fair Winners

and

Texas Star Party Review

***See the exhibits that won awards at this year's
science fair followed by a review of the Texas
Star Party at the Prude Ranch near
Fort Davis, Texas.***

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

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

**See the inside back cover for a map
and more information.**

July/August Calendar:



Photo by Scott Mitchell

<i>Date</i>	<i>Time</i>	<i>Event</i>
-------------	-------------	--------------

July 2002

2	12:19 p.m.	Last Quarter Moon
3	8:20 a.m.	Mars less than 1 degree from Jupiter
5	7:00 p.m.	Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H. TSP 2002 Wrap-Up and Science Fair Winners
5		Earth at apogee (farthest in its orbit from the sun)
6		Prime Night-Columbus
10	5:26 a.m.	New Moon
16	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Bill Flanagan, 713-699-8819
	11:47 p.m.	First Quarter Moon
24	4:07 a.m.	Full Moon
25	7:30 p.m.	HAS Board meeting
27		Members Observatory Night- Columbus

August 2002

1	5:22 a.m.	Last Quarter Moon Neptune at opposition
2	7:00 p.m.	Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H. Joe Dolan will be our guest speaker.
3		Members Observatory Night- Columbus
8	2:15 p.m.	New Moon
10		Prime Night-Columbus
12-13		until sunrise Perseid meteor shower peaks.
13	7:30 p.m.	Advanced SIG Mtg. Rice Univ., contact Bill Flanagan, 713-699-8819
15	5:12 a.m.	First Quarter Moon
19		Uranus at opposition
22		Venus at greatest eastern elongation in western sky
22	5:29 p.m.	Full Moon
30	9:31 p.m.	Last Quarter Moon

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

Star Party Etiquette

by Tom Clark

Most amateur astronomers live in increasingly light-polluted environments and don't have the opportunity to observe from pristine dark sky locations nearly as much as they would like. Perhaps that is one of the reasons why attending dark-sky events has become so popular in recent years. Where else can you disregard your normal routine, stay up all night, poke your eyes into the far reaches of the Universe, and then sleep till noon, day after day? This is just a small part the magic star parties hold.

New star parties are popping up all over the country, while the long established events have grown to gigantic proportions. This is good! Having a few days or a week to enjoy our favorite hobby, while sharing the daytime hours with kindred souls is an experience that is hard to match.

At any star party you will meet all types of people. Many have been mainly armchair observers who are taking their first trip into dark skies. In order to fit in.... and to keep from seeming to be completely unenlightened to the more experienced astronomers, there are a few simple things that you need to learn. Etiquette is not something that we are born knowing - it is something that has to be learned. Here are a few tips that will help you make many new friends at your next Star Party, and to keep everyone from pointing at you and saying, "My God! Who is that Geek?"

Come prepared!

No matter what temperature you hear it will be, prepare for weather that is at least 20 degrees colder. Make and use a check list to see that you don't leave home without something you need, such as your eyepiece case, or red flashlight. If you bring a telescope, set up a small tool box containing extra batteries, lights, etc. If you want to make

Continued...

Star Party Etiquette... from previous page

friends, avoid having to always borrow things. Bring a cooler or thermos, and something for a late night snack. Even better, bring along some goodies to share with your friends around you. If you are not familiar with the observing site, arrive early enough so that you don't have to drive in, not knowing where you are going, and disrupt everyone with your headlights.

Lights

No white lights after sundown if there are other observers in the area. Allow yourself to become dark-adapted and see all that you can see. If you are on dangerous terrain and need a bright red light, for heavens sake, keep it pointed straight down! Don't walk around waving it in everyone's face, because if you shine it in the eyes of the wrong person, they may tell you where to stick it. If you have to open your car door or trunk after sundown, be kind enough to remove the fuse beforehand. It only takes a second. If you want to become unpopular quickly, just be the one who is always ruining his companions dark adaption by opening his car doors or trunk every few minutes and splashing bright light all over everyone. If you have to leave the party early in an auto, park where your lights will not bother those who are still observing, and so that you will not have to use your headlights or backup lights when you leave. They are so bright and are painful to those who are fully dark adapted. You can move the shift lever to neutral before starting your engine, and the backup lights won't come on. If a bright light can't be avoided, just yell "LIGHTS IN THREE SECONDS" first, to give everyone time to turn the other way. You will be somewhat appreciated for your thoughtfulness! If you have one of the new cars that have "daytime running lights" that come on as soon as you turn the key on, there IS a way that is easy to turn them off temporarily. Simply lift the emergency brake one click, and now you can turn the key without the lights coming on. After you drive a couple of hundred yards away from the observing group, remember to turn the emergency brake off, so you don't cause undo damage to the brake system.

Continued...

Star Party Etiquette... from previous page

Rules?

Read the star party information that is handed out to you when you register. There will be a simple list of rules. FOLLOW THEM!! If they say “No moving of cars after sunset”, then don’t move your car after sunset. If you are registered in a local motel instead of camping on the grounds, then you must make arrangements before hand to be able leave when you wish. At most star parties this means parking outside the gates, or far enough away so you will be able to leave when you wish, without shining bright lights all over those who are still observing and ruining their night vision. Almost all the problems that pop up come from people who never read the star party literature, or those who believe that the rules only pertain to others. If you would rather not follow the rules... then go observing on your own, where your method of operation will not bother anyone else.

Star Parties are the perfect place to learn more about observing, more about telescopes, and more about all the other accessories that go with the hobby. If you are considering purchasing a particular model, or building your own telescope, there is no better place to learn all the latest news, or to see the latest designs, and to get first hand advice from other amateurs who have experience with the item you are thinking about. Walking around the observing field during the day will show you almost everything imaginable. With the owners permission, you may be able to try that new item you have been considering, or to see if that new telescope design is as good as it looks on paper. However, remember to be considerate! Don’t move in on someone without an invitation. Everyone loves to show off their equipment once in awhile, but they also have their own little group of friends that they are observing with. Unless you are lucky enough to be asked to join them for the entire evening, don’t impose. Use common sense and keep your visit to a reasonable length of time.

Continued....

Star Party Etiquette... from previous page

Bring your telescope!

Some amateurs have the idea that they can look through their own telescope any time they wish at home, so when they go to a star party they don't even take their telescope with them, thinking, "I'll spend my time looking through everyone else's telescope." What if everyone on the observing field thought the same thing. Not fair! Unless you are flying to the star party, there is no excuse for not bringing your own telescope - if you have one. Even if you only have a small telescope, it is only fair to every one else to bring it with you, and not just go to look through the largest telescopes. You may have a model that someone else would like to see. Don't expect everyone else to do all the work, so you can be entertained. You should do your share of entertaining too!

Dobsonians

Learn how to operate a Dobsonian before you have to embarrass yourself by yelling down from the top of a ladder, "It's moving out of the field!" It's not polite to loose the object being viewed with 25 people standing in line behind you. These large telescopes are so easy to use that you can learn how with just a couple of minutes preparation ahead of time, so don't waste everyone's time by waiting until you are at the eyepiece and then ask what to do. Take the time to learn earlier in the day, as a courtesy to everyone else.

Big Scopes

The largest telescopes on the field are not necessarily public property. It is probable that their owners have their own observing programs to carry out. If you would like to look through one, and everyone does, ask first. If possible, ask ahead of time if the scope will be open for public observing during the star party. Find out when, and go during the proper time.

Piggy

Don't become an eyepiece hog on someone else's telescope. Of course you

Continued...

Star Party Etiquette... from previous page

should never simply take a two second look at an interesting object, and when you are at your own telescope you should learn to study each object - to train your eye to see all that it can see. But when you are at someone else's telescope, don't get carried away and spending hours hogging their observing time. Keep your visit short, and then move on to the next scope on the field.

Smokers

Smokers need to be especially considerate of non-smokers. Since you are outside on the observing field, the smoke itself is not usually a problem. The problem is lighting up. The normally insignificant glow of a lighter or match is a killer to the dark-adapted eyes of your friends. Be careful to turn away, and cup your hands around the flash, so the flare of your match won't ruin anyone's eyes but your own. Also keep in mind that eventually someone will have to pick up every cigarette and cigar butt you throw on the ground, so please use an ashtray, or collect your butts before you leave.

Music

Music is a great relaxation to many. To some, it just isn't possible to observe without the proper mood setting musical accompaniment. Many love to scope out the heavens while listening to heavy metal rock at 110 decibels. Others may enjoy an eight hour Elvis session. Great! Enjoy yourself! Turn it up! Play it as loud as you like it.... just wear earphones. The battle of the bands does not belong on the observing field. Many appreciate the new "space music" at a low volume, to set the mood. But if anyone complains...back to the earphones.

Be Helpful Share Your knowledge.

A star party is a place for learning, and a place for teaching. If you see a novice struggling to locate an object in his telescope, ask if you can be of assistance. Chances are he will appreciate it. Every once in a while

Continued...

Star Party Etiquette... from previous page

take a break and walk around the observing field. You will see both some amazing and some comical sights. Enjoy yourself, and help others to enjoy themselves!

Quiet Mornings

Loud talking or other noise before noon is out of place, and rude to those observers who don't retire till dawn. On the other hand, loud talking on the observing field at 4 AM is rude to early risers who may be leaving on a day trip at dawn. Perhaps families with small children, and other early risers, could place their camp in an area where they won't be disturbed by astronomers talking all night, or disturb astronomers who are trying to sleep late the next morning.

Trash

Trash belongs in the trash can, not around your site. You would be amazed at how many people think nothing of leaving it lay till "tomorrow", but by morning it has blown over to someone else's space. If you finish a drink while visiting someone else's area, don't leave your trash for them to clean up after you.

Be Nice

As the end of a week-long star party nears, you will notice that most of the die-hard observers are becoming a little brain-dead. Observing till dawn night after night, followed by too few hours of sleep, has the tendency of sharpening ones tongue a little. Be careful what you say while in this condition. Nothing worse than looking into someone's 48" Mega Monster telescope, and declaring the view to be much worse than it was in your Super Duper 6" last night. That's not how to win friends. Be considerate. Just because you paid a few dollars registration fee does not entitle you to boss everyone around. The people who run the star parties are just volunteers, not paid servants! Volunteer your services if they need help. Running a star party is a lot of work. When you see

Continued....

Star Party Etiquette... from previous page

a crew setting up chairs to convert the mess hall into the lecture hall, jump in and lend a hand ...it will be appreciated. Never touch or move someone's telescope without first asking permission. A telescope that looks unattended may be in the middle of a difficult star hop to some illusive target, and you may have one angry person on your hands if you act before thinking. Star Parties are for fun. Go in a good mood, and stay in one. Things will go wrong, especially with the complicated equipment amateurs use. You will forget something, or you may not be able to set up exactly how you would like to, or park where you would like. Make the best of it; don't get in a sour mood and spoil it for everyone. As always, the age-old advice "Do Unto Others..." is the best advice, and hard to beat.

Convention or Star Party?

There are two major types of conventions that fall under the heading of star parties. The first is an astronomy convention, but observing is not the highest priority, as other activities come first. If you are one of the organizers, be honest in telling the people what to expect. Don't advertise a dark sky, when in reality your site is close to town and has a light dome reaching to the zenith. Honesty is always the best policy. At Dark Sky star parties observing is the major attraction, with other activities built around the observing. Before you decide to attend a star party, check it out to make sure that the party you select will fit your needs. An astrophotographer will not be very happy trying to take astrophotos at a convention where people are walking around with white lights, and an armchair astronomer may not be at his best at dark sky star parties where only dim red lights are allowed.

A shortened version of this article by Tom Clark appeared in *Sky and Telescope* a few years ago, and in *Amateur Astronomy Magazine* (#18 pg. 34.). This version is from *Amateur Astronomy Magazine*.

Observatory Corner

By Michael B. Dye Observatory Chairman



Again this article was actually started to run in the May *GuideStar*. Unfortunately it got so large that I had to split the article to run in the June and July issues. Even then the June article was three pages long. I have added some other stuff to cover things that have come up since the original article was written.

First I want to clear up a small misconception that seemed to arise from the article I wrote last month about the upgrade of the C-14. The cost Andy gave us was about \$800.00 to \$1,000.00 for his labor and materials. I figured that it would cost us another \$1,000.00 to complete any changes we would need to make to the Observatory and Chart room that the upgrade would require (i.e., computers, wiring and other unforeseen problems). That is where I came up with the \$2,000.00 cost. If any members would like to contribute to this worthy cause, please make your check payable to the Houston Astronomical Society and in the memo line indicate that the donation is for the Observatory Committee. All contributions to the Houston Astronomical Society are tax deductible and we will send a receipt at the end of the year. Please send any contributions to the H. A. S. to the P. O. Box address on the *Guidestar*.

The next item I need to cover is the HAS Annual Picnic. I took considerable flack last year because I did not adequately advertise this activity. Unfortunately this flack was justified. This year the H. A. S. Annual picnic is scheduled to be held at the Observatory Site on September 28th (that is the fourth Saturday in September). In keeping with the practices of the past, this is also the same night as the Members Observatory Night. For the last three years, I have appointed myself Picnic Chairman and (except for the weather) this has worked out well. Because of this, I am repeating the process and reappointing myself as 2002 Picnic Chairman. I am going to use a variation of the same formula

Continued....

Observatory Corner... from previous page

we have used for the past few years with a small variation. Instead of the Observatory Committee again supplying the meat (hamburgers and hot dogs), buns (also hamburger and hot dog), Ice Tea and maybe some soda (Coke, Pepsi, etc.) and other good stuff for free, we are going to ask for a small donation on a per person basis. The exact amount we will be asking for has not been established. I am asking the membership to attend the picnic and bring a covered dish of some sort (Salad, vegetable, or desert) large enough to feed a few extra people. I will try and remind everyone about the picnic in the August and September issues of the Guidestar in order to find out how many people will be attending.

The problem with the West Bathroom Urinal has been resolved. Ed Szczepanski repaired the problem a while back and then E-mailed on June 3rd that the urinal is now working fine. I would like to again thank Ed for all the work he does at the Observatory Site in maintaining the bathrooms and the grass around the pads. Speaking of the grass around the pads. Ed is currently involved in a project to replace the existing grass with Bermuda, specifically a strain called "Sahara" that is supposed to be very drought tolerant and will take a lot of traffic. He indicates that the grass is growing around the pads and is beginning to take hold. He says, "It will likely take two months or more for it to become established. In the end, we should have a better looking lawn that is much easier to mow". Ed is doing all this on his own nickel, that is paying for the grass seed, fertilizer and hoses for watering. I am also accepting donations to repay Ed for his generosity.

The last item I want to address is that this year we will paint the Observatory. This will involve sand blasting the building brick and metal structures and repainting same. We will attempt to accomplish this activity during a full moon time frame but I would like to remind all members that during this activity the Observatory will be shut down and should not be used. After some discussion with other members of the Observatory Committee, we have decided to do the work ourselves. We are going to rent a compressor on a trailer and a sand pot. This activity will take place sometime during the late summer or early fall. I think that I may try for the week before the annual picnic. We will

Continued...

Observatory Corner... from previous page

need about nine volunteers to help with this activity. Please contact me if you want to help. More on this subject when I work out more details.

The Society continues to benefit from members who shop at Randalls. 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. We are also in the process of getting a Kroger number that does the same thing for Kroger but this activity does not seem to be moving along very fast. I think I need to talk to someone.

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.

Observations... from page 4

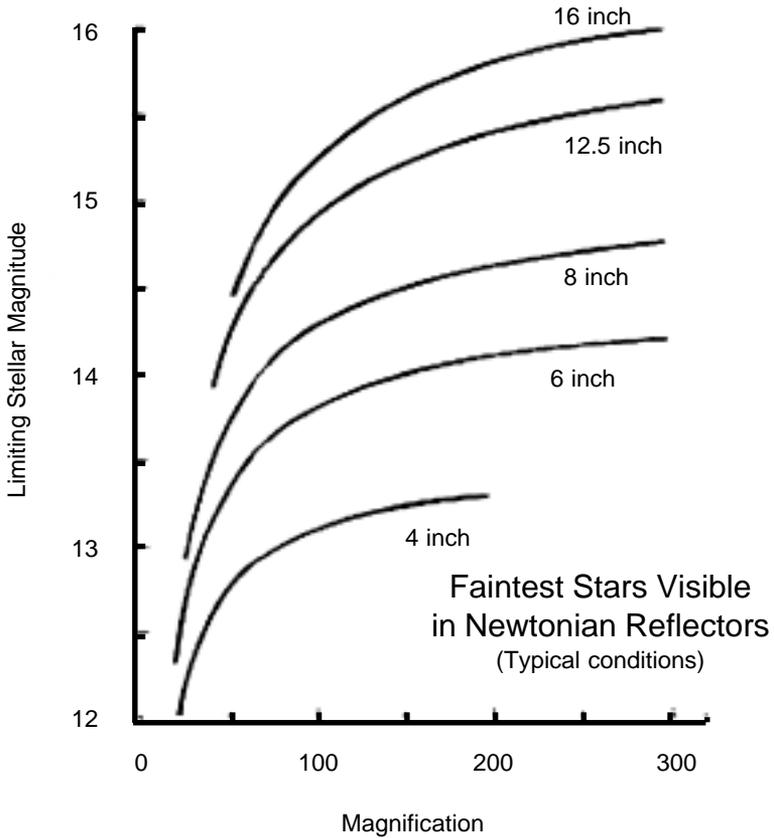
The calculation of this data is based on an algorithm that Brad developed. Some of his work can be found in *basic* programs on the *Sky & Telescope* website (www.skyandtelescope.com). There's a program called *limmag.bas* that calculates the limiting magnitude for various circumstances. There's also information on where to find (on Microsoft's web site) a basic interpreter.

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

..Bill

Visual Limiting Magnitude with Telescopes

(assumed average observer, zenith limiting magnitude of 6)



Graph above from the talk ***How Far Can You See?***
by Bradley Schaefer, University of Texas, Austin,
schaefer@astro.as.utexas.edu.

Talk presented at
2002 Texas Star Party.

Science Fiction Becomes Science Fact



For more than 40 years, science fiction writers have imagined ways for spacecraft to fly more quickly around the solar system. One idea they came up with was an “ion” engine, powered by a gas called xenon. This allows a spaceship to fly almost 10 times faster than a regular spaceship using the same amount of fuel.

Spaceships powered by this fictional technology have appeared in several science fiction movies. Ion propulsion was mentioned in a “Star Trek” episode in 1968. And in the “Star Wars” movies, the TIE (Twin Ion Engine) fighters that raced around the galaxy used ion propulsion.

But now, the fantasy of science fiction has become a reality. In 1998, NASA launched its Deep Space 1 mission with an ion engine onboard to test. The engine performed exactly as mission operators thought it would. By the time the spacecraft retired in December, 2001, the ion propulsion system had accumulated 677 days of operation and had expended well over 90% of the xenon it carried at launch. The ion engine powered the spacecraft past Comet Borrelly and allowed Deep Space 1 to return the best-ever images from a comet.

This means that we can now reach destinations in our solar system that we only dreamed about before. Planning is now underway for NASA’s new Dawn mission which will use ion propulsion to travel to two asteroids. Other missions are also considering using this now-proven technology. What was once science fiction has now truly become a reality.

***Minutes of the
Houston Astronomical Society
General Membership Meeting
07 June 2002***

Kirk Kendrick called the meeting to order at 8:00pm.

President Kirk thanks Bill Leach for leading last week's Board Meeting

Kirk announces that June is the beginning of the Summer Observing Season, and then moves into a discussion of the Club Observatory, located 60 miles west of Downtown Houston. He provides information about the observatory and encourages the membership to use it.

The Board Meeting Discussion was about the Observatory—the board decided to sanction a standard light window centered at 12:15am.

A call for visitors reveals about five persons.

New Members are asked to stand in front of the assembly, then are asked to reveal how they have heard about HAS, and what they like about HAS. (Please note that last name spellings are only approximate)

Philip Kuna
Robert Kuna
Joe Kaliff
T.J.Butler
Julie F.

Announcements are made: Joe Hahn of the Planetary Science Team at the Lunar and Planetary Laboratory are looking for Kuiper Belt Objects through stellar occultations.

Amelia Goldberg presents the Novice pin to Loyce Turner.

Continued...

Minutes... from previous page

Leland Doland reminds the membership about Monday's (June 10) partial solar eclipse, which begins at 7:29p.m. local time. The safest way to observe the event is by projection.

Bill Pellerin discusses the double star survey, found in the center of this month's *GuideStar* and also provided up front. He encourages the membership to do the survey.

Don Pearce gives his monthly comet report:

- Comet Ikeya-Zhang is in Serpens, receding from the Earth and Sun and fading, magnitude is 6.8.
- Comet Snyder-Murakami, magnitude 12.5, has a 2' diameter coma and appears extremely faint. It is circumpolar as it moves across Ursa Minor, receding and fading.
- Comet Utsonymia is moving southeastward into Monocerotis, receding and fading.
- Comet C2001 OG108 (LONEOS) was an asteroid that was reclassified. It is moving from Sextans to Hydra, receding and fading.
- Comet C2000 WM1 LINEAR glows at magnitude 12.7.

Don issues a challenging project: on June 17/18, WM1 will pass 15' south of M13. Now glowing at magnitude 12.7, C2000 WM1 is expected to have faded to magnitude 13.1 or 13.2. The challenge is to photograph the two objects in the same field of view.

Continued...

Minutes... from previous page

Tony Settles reports the death of Mr. Hyakutake, the discoverer of the Great Comet of 1996, from an aneurysm, and takes a moment of silence...

Brian Cudnik introduces tonight's speaker, Dr. Erika Gibb, who gives a talk entitled "From Dust, to Comets,...to Life?"

After the talk, there are three more announcements.

Amelia Goldberg presents the Messier Award #1951 to Jane Lambert.

Marg Nunez announces a star party at Camp Deerfoot for underprivileged boys. Volunteers are needed for both the June 22 and the July 20 camps. The meetings begin at dusk, and there's a sign-up sheet for interested participants to sign.

Judy Dye announces Logo Sales, and features the book "Beginner's Sampler", on sale for \$9.00. She also presents door magnets containing the H.A.S. logo.

There is a ten minute break before the awarding of door prizes.

The meeting adjourns at 9:40pm.

~ Want Ads ~

10" f/6 MEADE model 1066 Research Series Newtonian reflecting telescope on a German mount. Bought new in April 1987 for \$2,200. Brian Skiff rated this scope as one of the better scopes that he observed through at a past Texas Star Party. The optics provide razor sharp star images. Includes drive corrector, Telrad, rotating tube assembly, large casters, leveling screws, and 8X50-finder scope. Not a scratch anywhere on this beautiful instrument. Will sell for \$1,200.
Contact: Clayton L. Jeter at 281-383-1337

Membership Renewals...

Please check the mailing label on your copy of the *GuideStar*.

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

Membership in the Houston Astronomical Society is one of the great bargains in Astronomy. For a regular membership of \$33 you get the opportunity to support an active and growing organization, you get the monthly *GuideStar* newsletter, and you get access to the outstanding H.A.S. observing site near Columbus, Texas. (You must attend an orientation, given monthly, to use the site.) And, after two months of membership you can borrow, at no charge, one of the Society's loaner telescopes. It's the best deal in town, we think. Please renew your membership when it expires.

Thanks!

Other Meetings...

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

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

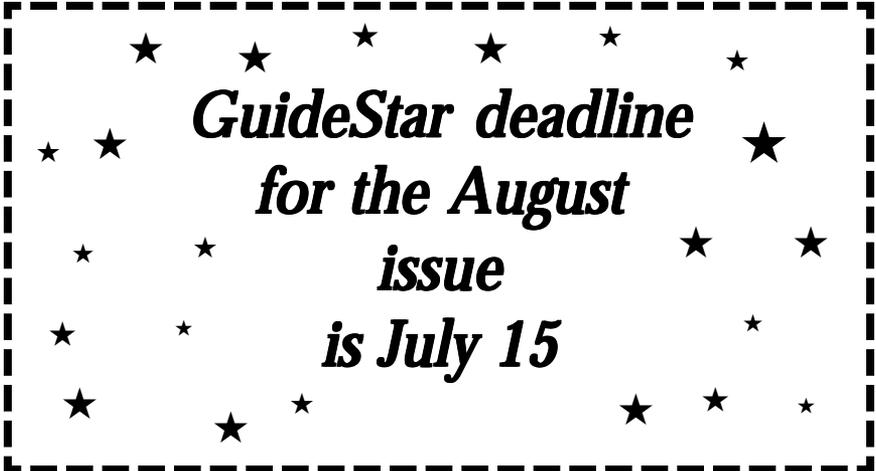
North Houston Astronomy Club meets at 7:30 p.m. on the 4th Friday of each month in the Teaching Theatre of the Student Center at Kingwood College. Call 281-312-1650 or E-mail bill.leach@nhmccd.edu. Web site: www.astronomyclub.org

HAS Web Page

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

The address is: <http://www.astronomyhouston.org>

Want your astronomy work and name on the Internet for the whole world to see? Have some neat equipment? Pictures in film, CCD, hand drawings or video format are all welcome on the page. Do you have an idea to improve the page? I'm listening. Send me Email at goldberg@sccsi.com. (You can click on my name on the HAS home page). Or, you can call Steve Goldberg (WebMaster), at 713-721-5077.



***GuideStar deadline
for the August
issue
is July 15***

Observatory Duty Roster

by Michael B. Dye, Observatory Chairman

This is the duty list for July, August and September. Some names may have been moved from one month to another to accommodate some conflicts. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change from site duty to open house or from open house to site duty by pre-arrangement with the Site Supervisor for that month. Changes between months require Observatory Chairman coordination.

July Supervisor Allen Gilchrist 281-443-8773
Debbie Moran Site
Glenn L. Ray Members Observatory Night07-27-02
Mike Reynolds Site
Henry Schneider Members Observatory Night07-27-02
Steve Simpson Members Observatory Night07-27-02
Larry C. Wadle Site
Mark R. Watson Site
Tom Williams Site
Warren Wundt Site

August Supervisor Logan Rimes 713-681-5397
Barbara Wilson Members Observatory Night08-03-02
Buster Wilson Members Observatory Night08-03-02
John Blubaugh Site
Ken Carey Members Observatory Night08-03-02
John Chauvin Site
Art Ciampi Site
Brian Cudnik Site
George Dolson Site
Ken Drake Site

September Supervisor Dana Lambert 281-304-6400
Mark Egan Members Observatory Night09-28-02
John Fennell Site
Jean-Marc Follini Site
Fred Garcia Members Observatory Night09-28-02
John Garza Site
Clifton Goldman Members Observatory Night09-28-02
David Garnadino Site
Chai Heng Site
David Herlinger 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.

RavenStar Outdoor Education Center Seeking Director of Education

Contract Dates: August 15th - December 15th, 2002 (strong renewal possibility evolving into permanent position).

Job location: RavenStar Outdoor Education Center at Harambe Oaks Ranch in Fischer, Texas (near Canyon Lake, which is central to San Antonio, Austin, San Marcos, New Braunfels and Blanco).

Job Description: Development and implementation of nonprofit educational outreach program using interdisciplinary curricula. Initial focus will include introductory classes in the field, teaching astronomy and biology of environment.

Class participants: Students of all ages, with main focus on 5th through 8th grades.

Required Qualifications:

Degree and / or experience in science education.

Desired Qualifications:

High energy.

Strong interpersonal skills.

Flexibility, creativity and vision.

Passion for sharing love of science.

Knowledge of TEA science accreditation and skills.

Basic knowledge using and maintaining telescopes and small observatory.

Strong organizational skills.

Hours: 40 hours per week, flexible schedule, some travel possible.

Salary: Negotiable.

Please send your information by email or fax to the attention of:

Blair Moore, Executive Director, RavenStar

ravenstartexas@aol.com

Fax: 830-626-3627

Logo Sales

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

Hooded Sweatshirts

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

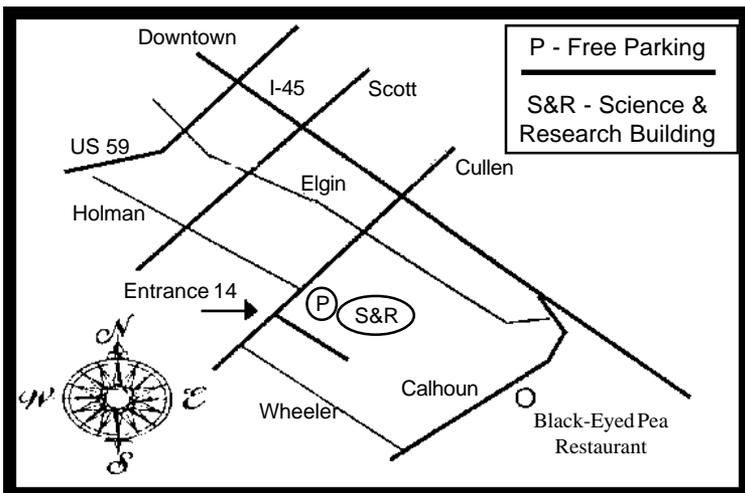


These are the prices for our new hooded sweatshirts. These are made from heavy sweatshirt material and were very popular at the previous meetings. If you want one, come to the meeting -- cash and checks accepted.

Books available:

- Observe the Herschel II Guide \$17.00**
- Observe and Understand the Sun \$14.00**
- Astronomy, The Teachers Handbook \$12.00**
- ALPO's Mars Observer's Handbook \$12.00**
- Observe Variable Stars \$17.00**
- Observe Eclipses \$17.00**

Orders will be taken for the 16 inch Levy Planisphere. It sells for \$24.00.



General Membership Meeting

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

Board of Directors Meeting

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

GuideStar Information

The H.A.S. *GuideStar*s 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*s sent via bulk rate mail to Regular, Student, and Honorary Members of H.A.S., selected individuals and recent visitors to the General Membership Meeting. Contributions to *GuideStar* by members are encouraged. Electronic submission is helpful. Submit the article in ASCII text, MS-Word (preferred), or WordPerfect format on an IBM format floppy or via AOL (BILLP10566). Mail copy to the address shown on the outside cover or to the editor at 256 East 5th Street, Houston, TX 77007. Copy must be received by the 15th of the month for inclusion in the issue to be mailed near the end of the same month. Or, bring copy to the General Membership Meeting and give it to the Editor, or phone to make special arrangements.

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

AOL: BILLP10566; Internet: BILLP10566@AOL.COM

Reproduction and Mailing: Jeff Cooper, jcooper@velaw.com

Advertising: Advertisers may inquire concerning ad rates and availability of space.



Houston Astronomical Society

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

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
STAFFORD, TX
77477
Permit No. 183