Houston Astronomical Society

GuideStar

December, 2007

Highlights:

Chris Peat - Heavens-Above.com creator . 5
HIP56948 - A Star Like Ours 7
Minutes of the November Meeting 10
Space Place - Going My Way? 11
Observatory Corner 12

At the December 7 meeting...

Cleaning Your Telescope Optics...

Another View

Clayton Jeter

Are you afraid of damaging your optics in your attempts to clean them? Fear no more! Clayton Jeter, who has been repairing and cleaning telescopes for years will provide us with the benefit of his experience.

The presentation includes 30 slides and cover the topic completely -- much more than just cleaning a mirror.

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.

Happy Holidays

..from the Houston Astronomical Society

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.
Richard Nugent
Introduction to Total and Grazing Occultations

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: Bill Leach ..... H: 281-893-4057
Vice Pres: Ken Miller ..... H: 936-931-2724
Secretary: Doug McCormick ..... H: 281-996-0177
Treasurer: Bill Flanagan H:713-699-8819
Past President: Steve Sartor .....

Additional Board Members

	Liaison responsibility
Steve Goldberg 713-721-5077	
Brian Cudnik	
Allen Gilchrist	
Don Pearce 713-432-0734	
Bram Weisman	
John Missavage	

Committee Chairpersons

Audit	Tom Blocker	
Education	Richard Nugent	
Field Tr./Obsg	George Stradley	281-376-5787
Novice	Justin McCollum	
Observatory	Bob Rogers	281-460-1573
Program	Don Pearce	
Publicity	John Missavage	
Telescope	Bram Weisman	
	Paul & Kay McCallum	
Welcoming	Lee Lankford	

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't'y	Steve Goldberg	713-721-5077
Texas Star Pty	Steve Goldberg	713-721-5077

Special Interest Groups & Help Committees

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

Advisors

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

Dues and Membership Information

Annual Dues:Regular	$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, imm ediate 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* and *Astronomy* magazines are available to members at a discount.

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

3 ..... December/January Calendar
..... Web site
4 ..... Observations of the Editor
..... Mark Your Calendar
5 ..... Just Looking
..... Chris Peat - Heavens-Above.com creator
7 ..... Shallow Sky Object of the Month
..... HIP56948 - A Star Like Ours
8 ..... Astronomical League
..... Membership Renewals
9 ..... Logo Sales
10 ..... Minutes of the November Meeting
..... Want Ads
11 ..... Space Place
..... Going My Way?
12 ..... Observatory Corner
13 ..... Observatory Duty Roster

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

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-mailbill.leach@nhmccd.edu. Web site: www.astronomyclub.org

December/January Calendar:

Photo by Scott Mitchell

Date	Time	Event
December		
1	6:44 a.m.	Moon at Last Quarter
		Observing Field Trip, Columbus Observing Site
7	7:00 p.m.	HAS Novice Meeting, U of H
	8:00 p.m.	HAS General Meeting, U of H
8		Prime Night, Columbus Observing Site
9	11:40 a.m.	New Moon
13	7:30 p.m.	HAS Board Meeting, Houston Chronicle Building
14		Geminids Peak
17	4:17 a.m.	Moon at First Quarter
22	12:10 a.m.	Winter Solstice
24	2:00 p.m.	Mars at Opposition
	7:15 p.m.	Full Moon
31	1:50 a.m.	Moon at Last Quarter
January 2008		
4		Quadrantid Meteors Peak (a.m.)
	7:00 p.m.	HAS Novice Meeting, U of H
	8:00 p.m.	HAS General Meeting, U of H
5		Prime Night, Columbus Observing Site
8	5:37 a.m.	New Moon
15	1:46 p.m.	Moon at First Quarter
22	7:35 a.m.	Full Moon
26		Novice Star Party, Columbus Observing Site
29	11:03 p.m.	Moon at Last Quarter
31	7:30 p.m.	HAS Board Meeting, Houston Chronicle Building

Send calendar events to Doug McCormick - skygazer10@sbcglobal.net

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

Check the web site:

www.astronomyhouston.org

Webmaster: Kay McCallum

KayMcCallum@MccLibrary.net

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 KayMcCallum@MccLibrary.net.

Publicity Suggestion Box

I welcome any suggestions that *any* member has to offer. It doesn't matter how trivial you think your idea may be. All input will be reviewed and welcomed.

Let's grow.

Please drop me a note at the following address.

itjdm0@yahoo.com

John Missavage- HAS Publicity Chair

Observations... of the editor

by Bill Pellerin, GuideStar Editor

Darn! I missed the November meeting

I missed the November meeting of the HAS. The traffic got me. There was a soccer game at the stadium and I could tell that I wasn't going to make it to the meeting on time, so I turned around and went home.

I hope to see you all at the December meeting!

It's dues time!!!

All of us must remember to pay our HAS dues for 2008. Consider what you get for your money -- supporting the organization, access to the observing site, the telescope loaner program, discounts on *Astronomy* and *Sky and Telescope* magazines, the *GuideStar*, and a great group of other amateur astronomers. What a deal!

Holiday gifts for astronomers

If you're looking for an astronomy related gift to give (or receive) check out the January, 2008 edition of *Sky & Telescope* magazine. On page 38 is their annual 'Hot Products' list. The list is led by the TeleVue Ethos (13 mm) eyepiece. At $620, it's expensive, but I looked through a prototype at the 2007 Texas Star Party; it is quite an eyepiece.

Not in the 'Hot' list, but also mentioned in the January issue is the book *Secrets of Stargazing: Skywatching Tips and Tricks* by fellow Texan Becky Ramotowski.

Happy New Year

As 2007 ends and 2008 begins, let's all resolve to do a bit more to engage the public in astronomy. Participate in a public star party or help the HAS in some way this year.

Enjoy your holiday season. Best wishes for a Happy New Year.

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

..Bill

billpellerin@sbcglobal.net

Mark Your Calendars!!!

There is one more field trips to our Columbus observing site in 2007:

December 01

This date is a Saturday.

We will be inviting members of all the area clubs to each event as we did in previous months (the turnout was great!).

There will be a laser tour of the constellations to begin the evening, and the observatory will be staffed for telescopic tours as the sky darkens. We will have "light windows" for those who bring families and would like to leave a little early.

Please mark your calendars, pack your gear and observing list, and come on out. Our website www.astronomyhouston.org will keep you up to date on details as they are developed.

See ya' there,

George Stradley, **Field Trip / Observing Coordinator**
stradley@sbcglobal.net

Just Looking

A *GuideStar* Interview by Clayton L. Jeter

Chris Peat - 'Heavens-Above.com' creator

Most every evening, I go outside and look up at our beautiful star-studded skies and hunt for deep sky objects with my SCT or RFT telescopes. But…I also observe artificial satellites and iridium flares with the help of www.heavens-above.com This is a very informative site where you plug in your local coordinates and then search within the program to see what will be buzzing over that night…or day! If you haven't seen a bright flare in daylight hours, then you're missing a treat. Chris Peat who we are interviewing this month is the "brain-child" of this program. I have always wanted to contact him to learn about his website and to learn about how he conceived this great idea.

Here's Chris…

Chris Peat was born in 1959 in Leicester, England. After attending Lutterworth Grammar School he studied at Oxford University, graduating in physics in 1980. Since then his entire career has been in the space industry, beginning with 5 years at British Aerospace plc in Bristol, England. During this time he worked on the mission analysis of space missions proposed for the European Space agency and the attitude and orbit control system on the Hipparcos satellite. In 1985 he moved to Germany to work as a contractor at the German Space Operations Centre (GSOC) in Oberpfaffenhofen, near Munich, where he is based today. His work here has concentrated on software development for spacecraft operations, particularly for mission planning and the display of satellite telemetry data. In 1999, Chris started his own company called Heavens-Above GmbH, which currently employs four people and develops software mostly for GSOC.

The Heavens-Above.com web site started out more as a hobby and the original satellite prediction service was hosted on the GSOC web site, starting in December 1997. After the founding of the company Heavens-Above, the service was then transferred to the companies own web server, but it is still hosted in the GSOC computer center. The income from advertising now contributes to the running costs, and the site also acts as an advertisement for the company and its software development services.

Chris is married to his wife, Margot, and lives in Munich. They have 3 children between them – Gareth (20), Hanna (13) and Franziska (2). His interests include mountaineering, sailing, and model aircraft.

The Chris Peat interview:

Clayton: The first satellite I observed was the Echo 1-A communication satellite in 1960. What was yours?

Chris: My first was Skylab back in the 1970's. I was just a kid then with no special equipment and it was easy to see and our local newspaper carried regular sighting predictions.

Clayton: Several months ago, my wife and I were living in Schweinfurt Germany in a cozy apartment. Although I observed regularly there, I found it difficult to find German astronomy clubs that wanted to observe on a regular basis. Are there local star parties over there? Are you in a German club?

Chris: I'm not in any club, and to be honest, I'm not even a regular satellite observer. My interest is more in the development of the web site and the prediction software it uses. But if something spectacular is happening, such as an ISS/STS formation flyover or an Iridium flare, I do make a point of trying to see it. Living in a large town like Munich makes it difficult to see most satellites.

Clayton: I developed a spreadsheet to log my satellite observations on while in Germany that I still use today. Do you log your observations? Photos too?

Chris: I have only logged observations to test out the observation reporting pages on the

Continued ...

Just Looking... from previous page

Heavens-Above web site. I haven't tried photography yet, but I receive many photos from Heavens-Above users who have used the site's predictions to obtain them.

Clayton: Tell us about some of your most interesting satellite observations?

Chris: Iridium flares always go down well at parties because they are invisible before and after the flare, and easily outshine Venus at their brightest. People are quite skeptical at first, but afterwards everyone suddenly wants to talk to you! I had an e-mail once from a guy in Italy who had used a predicted Iridium flare to impress his girlfriend before proposing marriage to her – she accepted.

Clayton: Where is most of your satellite observing performed? Do you have dark skies at your home in the Munich area?

Chris: We don't have dark skies at home in the Munich suburbs unfortunately, but when we visit my wife's family in the Bavarian forest, they have very good skies, and that's where I've done most observing of the dimmer satellites.

Clayton: Is Margot or are your children interested in your hobby? Do they observe satellites too?

Chris: Margot is interested, but the children are not or at least not yet. My father is very interested and he often calls me from England to let me know when he's seen something interesting.

Clayton: Any new ideas/features up your sleeve that's pending for Heavens-Above?

Chris: Yes, plenty. Many people have asked for predictions of Sun or Moon transits of satellites. I've seen several spectacular photographs on the Internet of the ISS transiting the Sun or Moon. We are also considering setting up an e-mail alert service, which would send users who opt in a summary of each evenings viewing by e-mail. We want to extend the page which shows the spacecraft leaving the solar system and add pages for most interplanetary satellites which would show their current position and other data. I would also like to expand the astronomy section of the site and add things such as eclipse predictions, minor planets, Galilean moons etc. I just wish I had more time to implement all the ideas.

Clayton: Do you observe with an astronomical telescope and if so, what design? Any deep-sky viewing?

Chris: No, I only have a pair of 11x70 binoculars.

Clayton: Do you have an amateur observing mentor?

Chris: I get all the tips on observing from the people on the"SeeSat" mailing list. The list also keeps me informed of new events and interesting satellites to keep an eye out for.

Clayton: How do envision amateur astronomy in the next 25 years?

Chris: I can't say much about amateur astronomy, but I hope satellite observing will still be going strong. There should certainly be more satellites to observe by then. Perhaps we will even have observers on the Moon by then who will be able to post reports on lunar orbiting spacecraft. I hope Heavens-Above is still going then and I see it as an ongoing project for my retirement.

Clayton: Do you have any helpful advice to pass on to observers just starting out in astronomy?

Chris: To those who want to start watching satellites, the best place to visit first is the Visual Satellite Observer's home page, which can be found at http://www.satobs.org/satintro.html

Clayton: Thanks Chris 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 on this side of the "Big Pond". Clear skies und auf wiedersehen…

Remember --

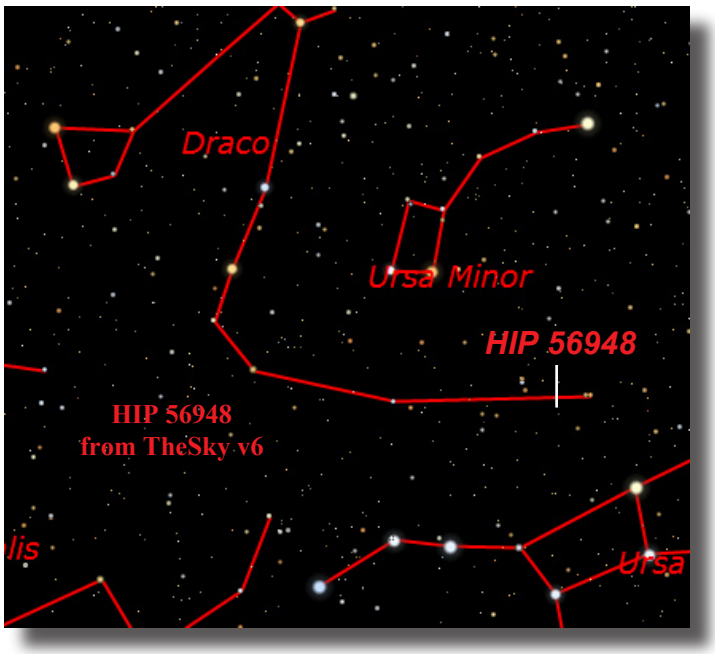
All HAS memberships are due for renewal in January. Pay your 2008 dues now!! Our membership year now corresponds to the calendar year.

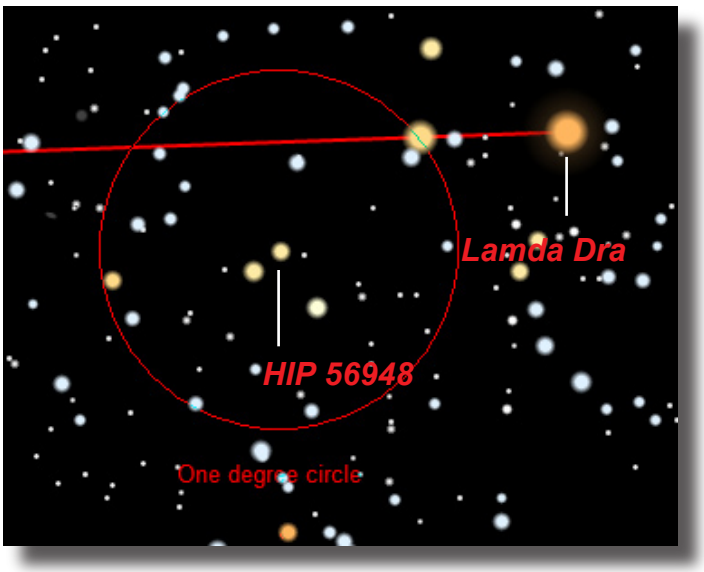
Mail your dues to the address on the last page of this *GuideStar* or bring your payment to the meeting.

Shallow Sky Object of the Month

HIP56948 - A Star Like Ours

Object: HIP56948 (SAO15590)
Class: Star
Magnitude: 8.7
R.A.: 11 h, 40 m, 28 s
Dec: **+69** degrees, 00 minutes, 31 seconds
Distance: 200 ly
Constellation: Draco
Optics needed: A small telescope





Why this object is interesting.

HIP56948 is a star very, very similar to our Sun, but 200 light-years away. If you were on a planet around this star, looking back at our Sun, the view would be the same. The designation is from the Hipparcos Catalog of stars. This catalog was developed as a result of a space telescope with the mission of accurately measuring the stellar parallax, which gives the distance to the star. (The SAO catalog is from the Smithsonian Astronomical Observatory.)

The similarity of this star to our Sun was determined by Ivan Ramirez of the University of Texas at Austin and by Jorge Melendez of the Australian National University. The discovery was made with the Harlan J. Smith 2.7 meter (106") telescope at the McDonald Observatory in west Texas.

While HIP56948 is about a billion years older than the Sun, its chemical composition is similar. The Sun is deficient in lithium, and for a long time astronomers considered this feature unique to the Sun. Now, we know that the lithium deficiency isn't unique.

Why is this important? Some believe that it is the unusual chemical composition of the Sun that enabled life to exist on the third planet of our solar system -- that'd be our planet, the Earth. There's some evidence to support the idea that low-lithium stars have fewer outbursts - - the kind of outbursts that could be harmful to life on its accompanying planets.

The study of HIP56948 so far has not developed any information about planets around HIP56948, but small earth-like planets wouldn't show up using current planet detection methods. (Research continues on planet detection, however, and we will someday be able to detect small planets -- stay tuned.)

If you want to see HIP56948 yourself, you'll have to look low to the horizon unless you're willing to wait a few months or stay up very late. While this star is circumpolar (that is, it's above the horizon all the time), at our latitude it'll be grazing the horizon some times of the year/night.

How can I learn more about the Astronomical League?

Amateur astronomers from across the country benefit from perusing the many pages of the Astronomical League's website, 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.

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.

There is even something to help your club function better. Try www.astroleague.org/al/socaids/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 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 2006, your payment for 2007 was due as of January 1, 2007. If you want to get a jump start on your 2008 dues, you can pay them now!!

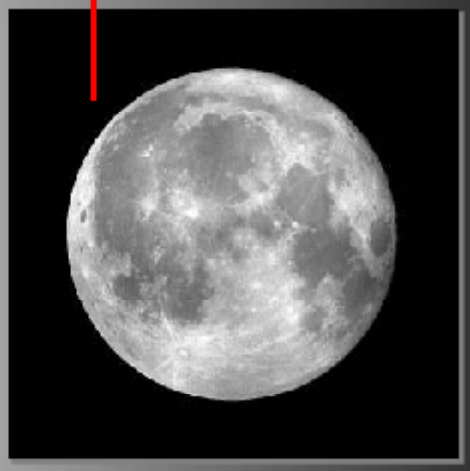
Magazine subscriptions can be renewed at any time and the renewal does not need to be synchronized with your HAS dues.

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!

ADVANTAGE Telescope Repair



- We have moved to the country !
- We pick up and deliver locally
- Precise "Last Word" collimation
- Hi-Performance telescope tune-up's
- Offer repair throughout the U.S.

PO Box 2238
Brenham, TX 77834 (New Address)
Call: 713-569-7529
Email: advantagetelescoperepair@gmail.com

Logo Sales

In addition to all the other cool stuff that Judy Dye has available in Logo Sales, the 2008 "Observer's Guide" is (or will soon be) available. This book is a must-have for planning your observing in 2008, so if you don't have your copy come to the meeting, see Judy and buy one.

All checks should be made out to HAS for the correct amount, and mailed to Judy Dye, 12352 Newbrook, Houston TX 77072-3910. If there are any questions, please call. Our phone number is 281-498-1703.

Judy Ann Dye

Minutes
of the November, 2007 Meeting of the
Houston Astronomical Society

The November, 2007 meeting of the Houston Astronomical Society was called to order on November 2nd at 8:15 p.m. by HAS Secretary, Doug McCormick.

Announcements:

- Doug McCormick introduced himself and welcomed everyone, including two new members to the meeting.
- HAS Observing/Field Committee Chair, George Stradley, reminded everyone that our last Star Party of this year is scheduled for December 1st at the Columbus observing site. Other area clubs have been invited, and George has arranged for a pot of chili large enough to serve all in attendance. Those planning to attend should RSVP to George at the email address listed for him on the HAS website, www.astronomyhouston.org.
- HAS Awards Chair, Amelia Goldberg, presented Larry Wadle with the Astronomical League's Lunar Club Certificate #757 and pin, presented for observing the 100 lunar features on the AL's Lunar Club list.
- Amelia presented Gordon Houston with the Astronomical League's Herschel Club Certificate #371 and pin, presented for observing and logging all 400 objects on the AL's Herschel Club list.
- Don Pearce gave an extended Comet Report highlighting the recent outburst of Comet 17/P Holmes. In addition to describing the history and theories surrounding the comet's recent spectacular apparition, Don showed several pictures of the Comet Holmes, some taken by HAS members. More information on Comet Holmes and other comets of interest is available in Don's Comet Corner on the HAS website.

Program:

Don Pearce introduced the featured speaker for the evening, HAS member James Wooten of the Houston Museum of Natural Science's Burke Baker Planetarium. James delivered his presentation, "The Great Cosmic Year," in which he presented the history of the universe, as it would look compressed into one of our Earth years. At the conclusion of his presentation, James answered questions, and Don presented him with a gift of appreciation from the society.

Closing Announcements:

- Doug McCormick announced that the election of club officers and committee chairs for 2008, scheduled to take place at the meeting, was postponed to the next general meeting on December 7th because the full slate of nominees was not available.
- Doug pronounced the meeting adjourned at 9:45 p.m

Want Ads

For Sale: Celestron NexStar 8 GPS - flawless

For sale in the Houston area. The optics are primo!!! I own and operate ADVANTAGE Telescope Repair and this is my personal scope. I bought it new in 2003. It operates perfectly, unbeliveable goto accuracy, no scratches...all flawless. The "Last Word" collimation process has been performed and produces perfect pinpoint star images. Asking $1,200. Includes all standard equiptment.
Call Clayton Jeter at 713-569-7529 for more details

For Sale: Celestron Starhopper, 8" Dobsonian Telescope

$250.00, Kerry Warner, 713 784 7673

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-

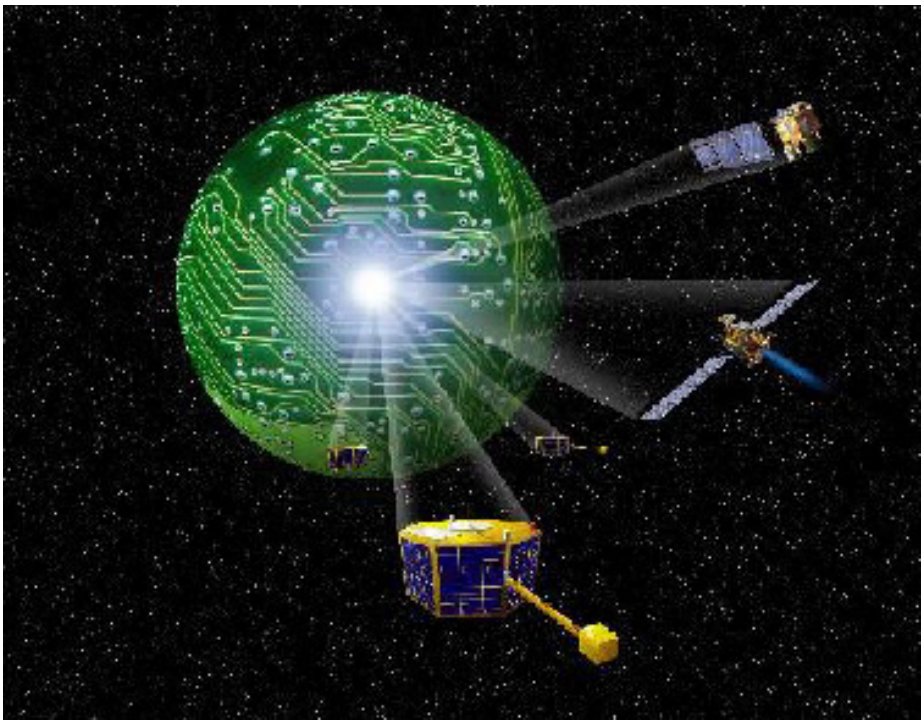
Continued on page 12...

Going My Way?

NASA's Space Place

By Diane K. Fisher

Not many endeavors require that you plan the mode of transportation before you even know what it is you are transporting. But weighing the physics and economics of getting any sort of cargo to space is a major part of designing a space mission. It's one of the first issues that NASA's New Millennium Program (NMP) considers when planning a new mission. NMP has the forward-looking job to identify promising new technologies for space exploration. It then helps to mature the technology so it will be available to space missions of the future. If the technology cannot be tested adequately on Earth, the last part of this process is to actually send the technology into space. With carefully documented test results, future mission planners can confidently incorporate the new technology into their designs.



NASA's New Millennium Program selects breakthrough technologies that will be of the greatest use to future space and Earth science missions and that are perceived to be risky to the first user.

But where to begin? On call from the start, Linda Herrell is the New Millennium Program Architect. Given a list of proposed technologies, she has the job of figuring out the feasibility of wrapping a mission around them.

"We might be considering six or more technologies, anything from solar panels to imagers to masts for solar sails to more intelligent software. Of those, we may choose four. My job is to answer the question—can the selected technology be transported to and operated in space within the constraints of a low-cost technology validation project?" Along with the list of possible mission payloads (the technologies), Linda also has a list Of spacecraft to put them on, as well as a list of launch vehicle parameters. Allshe has to do is try them out in every possible combination(of which there are thousands) and see what might work.

"Fortunately, we have a software tool to help with this analysis," says Linda. When it comes down to it, her job is primarily to figure out how to get the technologies into space.

"Sometimes, it's like figuring out how to get across town when you don't have your own car. You have to get creative."

She keeps a database of all possible options, including riding piggyback on another spacecraft, hitching a ride on a launch vehicle as a secondary payload, or sharing a launch vehicle with other NASA, Department of Defense, or even commercial payloads. Her assessment is but one of a gazillion factors to be considered in planning a mission, but it is indeed one of the very first "details" that forms the foundation for the rest of the mission.

Find out some of the technologies that NMP has already validated or is considering at nmp.nasa.gov/TECHNOLOGY/innovative-tech.html. Kids will enjoy watching Linda's cartoon alter-ego talk about her job at spaceplace.nasa.gov/en/kids/live.

This article was written by Diane K. Fisher and provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Observatory Corner

By Bob Rogers, Observatory Chairman

Hello everyone.

With the Holidays upon us, I hope that everyone has a safe and Happy Holiday season. The combination to the HAS Observatory Site will be changed on March 1st, 2008. In order to get the new combination you must have attended the Site Orientation Class and have your 2008 membership dues paid for the year. I will be passing out the new combination at the January and February meetings.

I hope to see everyone at the December 1st all club's star party at the Observatory Site. The Star Party is being put on by George Stradley, so if you plan to attend, please contact him at stradley@sbcglobal.net. We will be serving Chili with all the fixin's.

I would like to let everyone know that we are having a North Fence/Gate Replacement work weekend at the site on the weekend of January 19-20. I'm asking for volunteers to come out and help with this venture. If you can help, you will get fed lunch and dinner by Boy Scout Troop 404 from Pearland. Breakfast is included if you stay overnight to help finish the project on Sunday. If you can help, please email me at siteworkerbob@hotmail.com.

A friendly reminder to all the Key Holders of the Observatory, when you took your training in the Observatory, you learned that part of the responsibility of having the key is that you will need to volunteer some time at the site for site duty. In the last couple of years, I have seen the same small group of people come out to the site to work. There are a lot of key holders that are not coming out and putting in their time. We have a couple of projects in the works for January and February and I would like to see more key holders coming out to help with them. The more key holders that volunteer, the faster the work gets done and the less that everyone else gets burned out from doing all the work. So, please come out and put in your time. Of course, any member can volunteer to help at the site. I won't turn down anybody who wants to help.

Some dates of interest here for everyone. George Stradley, our Field Trip and Observing Chairman, has set the following 2007 Field Trip Schedule –

- December 1st for an All Clubs Field Trip.
- January 26th (2008) for a Novice Party
- March 29th for an All Clubs Field Trip,
- May 24th for a Novice Party
- June 28th for an All Clubs Field Trip
- August 23rd for a Novice Party
- September 27th for the HAS Picnic
- October 18th for a Novice Party.

Keep an eye out on the Web site and here at the Observatory Corner for future updates for these Field Trips.

If you have any suggestions or thoughts for the site, let me know.

Thanks,
Bob Rogers
Observatory Chairman

Want Ads... from page 10

wave surface by Sky Optrical 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: Celestron Nexstar 8
Like New Condition...Celestron Nexstar 8, Used only 2 times in back yard. Some extras include Solar 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

Email your ads to Kay McCallum, our Webmaster, at KayMcCallum@MccLibrary.net

Observatory Duty Roster

by Bob Rogers, Observatory Chairman

The site is in great shape thanks to the many, many volunteers who help maintain the site. Ed Fraini, Ken Miller, Dale Morningstar, and the site teams did a great job.

December Supervisor – Ed Fraini – 979-236-5008

Volunteers:
David Kahlich
Daniel E Lambert
Howard Leverenz
Jay E. Levy
Doug McCormick
Robert C. Menius
Debbie Moran
Richard Nugent

January Supervisor – Bob Rogers – 281-460-1573

Volunteers:
Ralph Overturf Jr
Don C Pearce
Sim Picheloup
Leonard W. Raif
Linda Sternbach
Larry C Wadle

Projects for January
North Fence/Gate Replacement

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

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 next year?

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

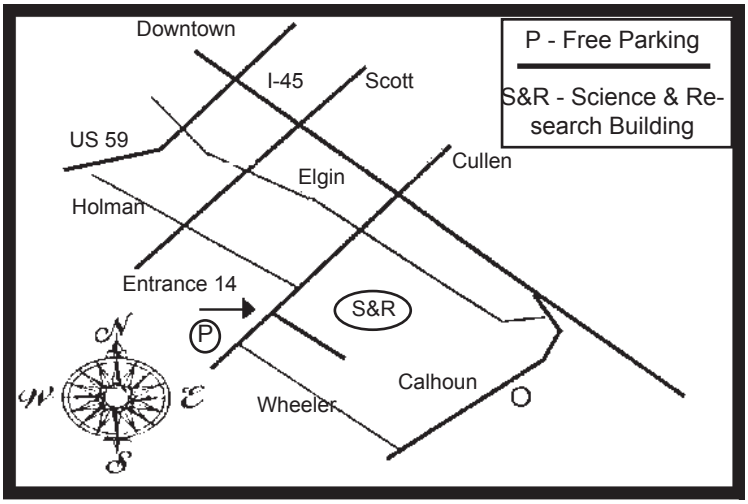
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

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 iinterested 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. 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

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



Houston Astronomical Society Meeting

Meeting on December 7, 2007

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.