



GuideStar

June, 2007

At the June 1 meeting...

Science Fair Winners

Richard Nugent

Every year the HAS participates in the Houston Science Fair contest by judging astronomy-related entries and providing awards to the best projects. Now, it's your turn to see the winners in action. The winners will present their projects to the Houston Astronomical Society at the June meeting.

Texas Star Party Wrapup

Steve Goldberg

The Texas Star Party wrapped up on May 20, 2007 on the Prude Ranch near Fort Davis, Texas. Hear all about the observing, the new product announcements, and the speakers at this year's meeting. You'll also learn about next year's TSP and how to participate.

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HAS Web Page:

<http://www.AstronomyHouston.org>

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

Schedule of meeting activities:

All meetings are at the University of Houston Science and Research building. See the inside back cover for a map to the location.

Novice meeting: 7:00 p.m.
Don Taylor, "Astro Imaging"

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
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 Past President: Steve Sartor

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 Allen Gilchrist
 Don Pearce 713-432-0734
 Bram Weisman
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 Telescope Bram Weisman
 Welcoming Paul & Kay McCallum
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 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 Obsv'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

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. Web site: www.astronomyclub.org

June/July Calendar:



Photo by Scott Mitchell

Check the web site:
www.astronomyhouston.org
Webmaster: Kay McCallum
KayMcCallum@MccLibrary.net

Date Time Event

June

| | | |
|----|------------|-----------------------------------------------|
| 1 | 8:00 p.m. | HAS General Meeting, U of H |
| | 8:04 p.m. | Full Moon |
| 2 | 5:00 a.m. | Mercury at greatest elongation east |
| 5 | 6:00 p.m. | Jupiter at Opposition |
| 8 | 6:43 a.m. | Moon at last quarter |
| 9 | 10:00 p.m. | Venus at greatest elongation east |
| | | Observing Field Trip, Columbus Observing Site |
| 15 | 10:14 p.m. | New Moon |
| 16 | | Prime Night, Columbus Observing Site |
| 19 | 11:00 p.m. | Pluto at opposition |
| 21 | 1:11 p.m. | Summer solstice |
| 22 | 8:14 a.m. | Moon at first quarter |
| 30 | 8:49 a.m. | Full moon |

July

| | | |
|----|------------|-----------------------------------------------|
| 1 | 3:00 a.m. | Venus 0.66 deg. SSW of Saturn |
| 6 | 8:00 p.m. | HAS General Meeting, U of H |
| 7 | 11:54 a.m. | Moon at last quarter |
| 14 | 7:04 a.m. | New Moon |
| | | Prime Night, Columbus Observing Site |
| 16 | 6:00 p.m. | Moon 0.18 deg. SE of Saturn |
| 20 | 10:00 a.m. | Mercury at greatest elongation west |
| 22 | 1:28 a.m. | Moon at first quarter |
| 26 | 7:30 p.m. | HAS Board Meeting, Houston Chronicle Building |
| 28 | | Southern Delta Aquarid meteors peak |
| 30 | 7:49 p.m. | Full Moon |
| | | Alpha Capricornid meteors peak |

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

Special "Help" Volunteers

Any member who wants specific information on an astronomical topic may call special help volunteer (listed in most issues of the *GuideStar*). If you have a moderate knowledge of a special subject and would be happy to have others ask you about that subject, let the editor know and your subject, name and phone will be listed in *GuideStar* in the future.

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GuideStar deadline

for the July

issue

is June 15

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Observations... of the editor

by Bill Pellerin, GuideStar Editor



Texas Star Party – General Comments

I had a great time at the 2007 Texas Star Party! (I'm writing this from the Texas Star Party site at the Prude Ranch, near Fort Davis, Tx.)

Thursday night -- Alan Dyer, who writes for *Sky and Telescope* and who is the co-author of *The Backyard Astronomer's Guide* did an outstanding presentation on southern sky observing, and got a standing ovation at the end.

Friday night -- Tony Hallas (of the imaging team Tony and Daphne Hallas) talked about *Dynamic Imaging* and the evolution of the imaging process from film to digital. Their work is among the best and garnered plenty of oohs and aahs from the audience.

Saturday night -- Kelly Beatty of *Sky and Telescope* magazine talked about the history of the magazine and some of the more interesting content in past issues (including a news item on a reflector telescope entered in a telescope making contest by none other than Al Nagler!).

Texas Star Party – Product Announcements

Al Nagler, of TeleVue (www.televue.com) is here with his new Ethos 13 mm eyepiece and he did a presentation on Tuesday to talk about the range of TeleVue products. I had an opportunity to look through the 13 mm eyepiece on a NP-127 on Friday night. (There are only a few prototypes in existence and this setup belonged to Al, himself.) The skies were crummy, but the view was outstanding. Larry Mitchell tried one out on his 36" Dob.. no reports from Larry yet.

Dave Kriege of Obsession Telescopes (www.obsessiontelescopes.com) is introducing a new product -- a 18" lightweight and highly portable Dobsonian telescope. The optics are the same as his current products, but the telescope is made to carry in smaller cars or on airplanes. The telescope was first seen in public here, at the Texas Star Party. Later, there will be a 15" version of this design.

Texas Star Party – Observing

Disappointing, since we only got one full night of observing done. It pays not to count on clear skies being available throughout the entire

TSP week. A number of TSP attendees became discouraged and left the site early. As one of our speakers, Andrew Murell (from Australia) said, "I come here to meet the people. If observing is available, it's just icing on the cake."



High portability version of an Obsession 18" Dobsonian telescope. First seen in public at the TSP

Andrew gave us a presentation on the Small



North field at the 2007 TSP

Magellanic Cloud, an object visible from the southern hemisphere and the large catalog of objects it contains. You could easily

spend weeks digging through the objects in the SMC. If you're a northern hemisphere astronomer, you need to go south at least once to see what's there. (On Friday, Andrew won the 'Lone Stargazer' award.)

Continued on page 11...

Just Looking

A GuideStar Interview by Clayton L. Jeter

Tomm Lorenzin and the Lorenzin List

Tomm Lorenzin may not be a household name in Texas, but he is well known in the amateur astronomy community throughout America. He is better known as the author of 1000+ *The Amateur Astronomers' Field Guide to Deep Sky Observing*. His star atlas/database was the book that I used exclusively throughout my journey into the Messier and Herschel lists back in the heyday. His book was published in 1987 and had many well developed features for the amateur:

- Suitable for beginners as well as advanced amateurs
- Epoch 2000.0, Mag. 6.0 (naked-eye) Sky Atlas included
- Catalogue of more than 1200 deep sky objects
- Guide to the selection and use of observing tools
- Large, 11"x15" durable cover format
- Lay-flat design for easy use at the telescope
- Dew-resistant pages

No, this article is not a book review, but rather a view into the man who developed a better mousetrap for the observer. Being that his book is not



Tomm Lorenzin self portrait

Tomm Lorenzin's Bio:

Tomm Lorenzin, a lifelong amateur astronomer and naturalist is the author of 1000+ *The Amateur Astronomers' Field Guide to Deep Sky Observing*.

Tomm graduated from Davidson College. He spent nearly ten years with Microsoft in Charlotte, NC. After several careers, including stints as an on-air personality and administrator with public and commercial radio sta-

tions, he's currently a happily self-employed computer geek who solves computer system problems for local clients.

Visit him on the Internet's World Wide Web at
<http://www.1000plus.com>

The Tomm Lorenzin Interview:

Clayton: How did you become so passionate in amateur astronomy and when?

Tomm: At about age 8 (a half-century ago), I rescued an astronomy textbook from someone's trash. It was Kenneth Heuer's "Men of Other Planets." It included illustrations of fanciful extraterrestrial landscapes and beings (even on the Sun!). Of course, there was much factual information, as well, and I was both captivated and incited to learn more. (Do YOU remember your first dinosaur book? I still have that very-well-worn introduction to the cosmos.) Although I didn't get my first usable telescope until more than a dozen years later, by that time I had immersed myself in the physics of it all with many other textbooks and manuals. Therefore, what I saw thru the 'scope from the very first was ever-so-much more interesting and meaningful to me.

Clayton: What first sparked a desire to put together a star atlas? As amateurs, we already had many versions to choose from. Why another?

Continued ...

Just Looking... from previous page

Tomm: After I had thrilled myself with seeing all of the Messier objects with various aperture ‘scopes and binoculars - keeping succinct notes with a micro-cassette recorder along the way (transcribing later during daylight), I sought other lists to “work.” I wanted ultimately to be able to satisfy myself that I had observed and noted more than a thousand such aerial beasties. Having gone thru spottily the Herschel lists, I began to note objects all over the sky for which I could find no provenance. I found after a dozen years of observing and note-taking, and schlepping literally dozens of atlases and catalogs from which to glean interesting deep-sky targets, that I had digested and compiled a substantial notebook for myself. Several friends and associates with whom I observed regularly suggested that I seek to publish my notes. Well, plenty of others had done that already. Observing-note text alone would not satisfy me, so I convinced myself to undertake the making of the combined field guide, catalog (or database), and Sky Atlas that would be the all-in-one, outdoor, at-the-telescope guide that I wished I had had available to me when I began my observing quest.



1000+ Cover Logo

Clayton: I liked your idea of including a database of astronomical objects with observing comments all neatly arranged into your field guide.

How long did this information take to compile into a useful book?

Tomm: From the time that I decided to enlist my friend Tim Sechler's help in creating 1000+, it was approximately two years before the first copies rolled off the presses. This was 1985-87 – well before digital desktop publishing technology was available to the masses. We are VERY proud that we brooked NO compromises; we made professional digital typesetting systems and software do things for which they were never intended; we resolved hundreds of issues to assure that 1000+ is precisely as we envisioned it.

Clayton: It's a disappointment that 1000+ is now out of print. How could it be published again? Could an electronic version be possible in the future?

Tomm: In the early '90s, two notable astronomy publishers began negotiations with me for an updated version. These plans fell through. The catalog/database has been doubled, including the entire Southern hemisphere making this, the 2000+ version comprehensively international, and is available for anyone with Internet access at:

<http://www.1000plus.com/2000plus/>.

(Please note that the materials on this web site are copyrighted. Please ask before duplicating/distributing.)

The field guide practical information text and the updated 2000+ Sky Atlas (while completed in CADD form) will have to await a brain-cyclone of immense proportions or the emergence of some software system whereby my CADD version of the 2000+ Sky Atlas may be presented on the web.

Clayton: Are any of your family, neighbors, or friends interested in your hobby? Do they observe too?

Tomm: Hobby!?! HOBBY!?! This is a PASSION! This is an OBSESSION! To call amateur astronomy a mere “hobby” is to trivialize it. A true understanding of what we see when we gaze up into the night sky has ramifications FAR beyond the “collecting” a hobbyist might do. There is an entire spirituality in discovering for one's self how closely related we are to such far-away things.

Clayton: Which premier star parties do you regularly attend? Do you have a favorite?

Tomm: The Southern Cross Astronomical Society's Winter Star Party is – by far – my favorite and most frequently attended confab. However, I have had life-changing experiences in California at the Riverside TM Convention, the Texas Star Party in the Davis Mountain foothills, Stellafane in Springfield, VT, and many others.

Clayton: What ‘scope design do you generally use?

Tomm: I use everything from NONE (naked-eye), to refractors (including binoculars of several sizes and magnifications), to catadioptrics of 5-in, f:6, and 8-in f:10 configurations (these last both equatorially mounted). But, by far, my favorite ‘scope

Continued ...

Just Looking... from previous page

is my Coulter Odyssey II – 17.5-in, 78-in. f.l. Dobsonian. And my very favorite finder is the reflex zero-x TelRad that allows one to see precisely where in the constellation(s)-scale portion of the sky the ‘scope is pointed.

Clayton: Tell us about your observing. Are you strictly a visual observer or are you interested in imaging as well? Where is most of your observing performed? Do you have an observatory?

Tomm: I have no “physical plant” observatory. My observatory is wherever I have a clear view to the night sky – with, or without optics. Although I have done some minor imaging work (see <http://www.1000plus.com/Imagic/imagic11.htm>), my real thrill is as a visual, real-time observer. My greatest joy is in “cruising” a random area of the sky with a telescope, stopping when I come upon an interesting object, and “working backward” to decipher and identify what it is I am seeing.

Some of your readers may be interested in this account of a successful Messier Marathon:
<http://www.1000plus.com/marathon.htm>

Clayton: Do you have an amateur observing mentor?

Tomm: No. I have always been self-taught EXCEPT that I learn something new from someone at each observing session where others are present. However, approximately 95% of my observing has been solo... well, I mean just me and the universe.

Clayton: In your opinion, how will amateur astronomy change in the next twenty-five years?

Tomm: Sadly, I see that the proliferation of technology in the automatic aiming and finding of DSOs stunts amateurs’ desire and ability to learn the night sky and how to navigate within it. We can only gain a true appreciation of the panoply of the sky beyond Earth’s surface (I include atmospheric phenomena like meteors) by gaining an understanding of how each thing we can see stands (or moves) in relation to everything else, in TIME, as well as in space.

Clayton: Thanks Tomm for sharing your interest and views with us this month in our newsletter, *Guide Star*. We thank you also for that wonderful field guide you compiled in the 1980’s that many observers still use on a regular basis. We wish you luck with all of your future astronomy interests. Please come visit our society when in the Houston area, we’d love to see you. Clear skies, always.

The Infinite Wisdom of Astronomers

.....

Daytime, sunset, nightfall
A dark sky strewn with stars
I lie in the grass and contemplate
A planet besides ours

Hidden, perhaps, just out of sight
Though never out of mind
Not behind the deep night's curtain
But in the lights of our own kind

Our sound metropolitan infrastructure
Upon which we've so heavily relied
Pollutes our views of galaxies so numerous
One couldn't count them if he tried

But if he started driving
Far away from the city
He would notice the sky
Grow more and more pretty

The occasional speck of a celestial body
Becomes an intricate constellation
An asteroid belt spans the length of the sky
Its components a most perfect aggregation

Let's pause for a moment
In our astronomical story
And consider, if briefly
The human mind in its glory

The mind, it is said, is most thoroughly muddled
When it believes all that it hears
To sort fact from fiction, if this is achieved
Could take weeks, if not months, if not years

But the closer one comes to deriving the truth
The clearer his mentality becomes
The more he distances himself from the useless
white noise
To which masses so meekly succumb

Mary Ellen Knewton

The Coathanger

Object: The Coathanger
Class: Asterism
Magnitude: 1.57
R.A.: 19 h, 26 m, 18 s
Dec: 20 degrees, 07 minutes, 56 seconds
Distance: various light years
Constellation: Vulpecula
Optics needed: Binoculars or a wide-field telescope

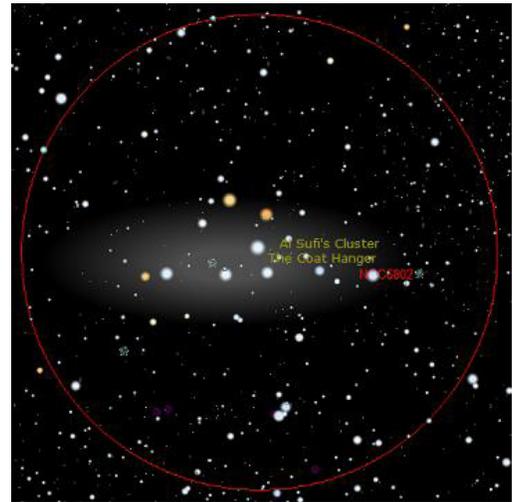
Why this object is interesting.

Many of the constellations that are in the sky look nothing like the object they're supposed to represent. Do you see an archer when you look at Sagittarius? Me neither. What I see is an asterism called the 'Teapot' and the arrangement of stars looks just like a teapot to me. Point out the arrangement of stars to anyone and he or she will recognize a teapot immediately.

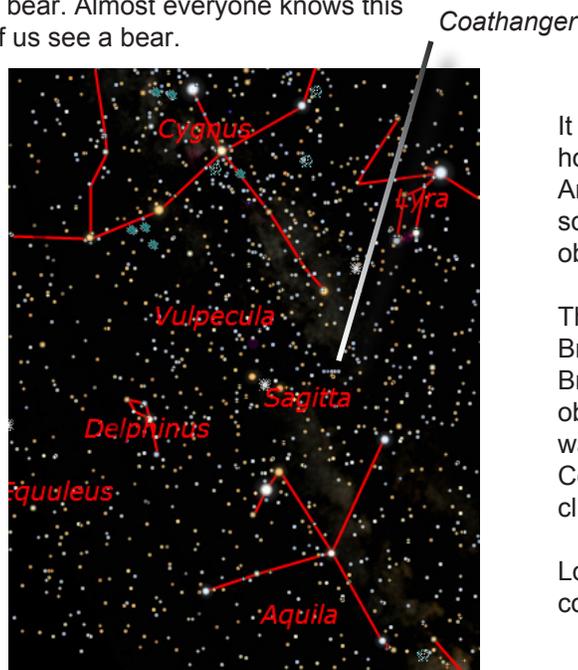
Perhaps the most famous asterism is the 'Big Dipper' in Ursa Major, the big bear. Almost everyone knows this asterism, but few of us see a bear.

This month's object is much smaller, and generally well known as the 'Coathanger'. It looks just like a coathanger and will be recognized immediately by most people. I was showing people this asterism at a public star party and some attendees got it right away, but a few didn't. The stars are bright (5th magnitude, or so) and it's easy to spot. Be aware that the 'Coathanger' may not look right-side-up to you, depending on your telescope.

The 'Coathanger' is in Vulpecula. You know where that is? It's a small constellation between Cygnus and Aquila. If you look about 1/3 of the way from Albireo (a beautiful double star) in Cygnus and Altair in Aquila, you'll find the 'Coathanger'. You can find and see it in binoculars easily.



*The Coathanger in a 3 degree field
North is down in this image
(charts from TheSky V6)*



It rises about 8:00 p.m. in mid June, and a couple of hours later it's over 20 degrees above the horizon. An instrument that provides you with a 3 degree (or so) field of view will give you an excellent look at this object.

The official name for this grouping of stars is either Brocchi's Cluster or Collinder 399. Dalmiro Francis Brocchi, for all I can find out was a variable star observer and a cartographer who lived until 1955. He was given a Merit Award by the AAVSO in 1942. Per Collinder (1890-1974) was a cataloger of 471 open clusters. His objects are named with a 'Cr' designation.

Look for a couple of reddish stars in the hook of the coathanger.

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 web-site, 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/book-serv/bookserv.html.

There is even something to help your club function better. Try www.astroleague.org/al/soc aids/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 is due as of January 1, 2007.

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: 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-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: 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

For Sale: Celestron Sky Master binoculars

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

Email your ads to Kay McCallum, our Webmaster, 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

Remember --

All HAS memberships are due for renewal in January. Pay your 2007 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.

Rocky Mountain State Stare

Rocky Mountain Star Stare (RMSS) is not your typical star party. It's laid back. It's family oriented. It's in the heart of the Rocky Mountains, just 65 miles west of Colorado Springs. You don't camp on top of your neighbor.

You can set up outside of your tent or RV. You have great trout fishing just a short drive away. You have turn of the century towns just a short drive away. There is white water rafting, nature hiking, and horseback riding just a short drive away.

But best of all there's a universe of stars, galaxies, nebulae, and clusters just above the horizon in every direction. Whether you are looking through a 20 inch Dob or a pair of binoculars there's more to see in a night than most people get to see in a month and some see in a lifetime. Introduce your family to the wonders of the Colorado Rockies and the awesome spectacle of dark skies. Who knows, you might make a scientist out of one of your kids yet. And even if you don't it will be an unforgettable family experience.

Join us for our 21st Anniversary celebrating the night sky. This year's event is held from June 14th - 17th and early-registration is currently open. Information on RMSS and online registration can be found at <http://www.rmss.org>.

Observations... *from page 4*

I'm at the Texas Star Party as I write this. It's Friday, and it has been cloudy since Monday. Sunday, the 13th was clear and the night was great. I was able to finish John Wagoner's observing list by staying up until about 4:00 a.m. Many other TSP'ers got their observing done that night, but we haven't done more since. Things are not expected to improve.

I'm Home Now

Things didn't improve, weather-wise so this may be one of the cloudiest TSPs on record. As I said, I had a great time and enjoyed a limited amount of observing. Maybe next year. By the way, the Texas Star Party for 2008 will be held on June 1 through June 8. Start your planning.

The GuideStar is later than I'd like

My apologies to you for getting the *GuideStar* out later than I'd hoped. I got back late (from the Texas Star Party) on May 20 and left town again for the Memorial Day weekend. I'm back from that trip and I'll be home for a while, so I'll have more time to work on the July issue.

For more information regarding RMSS, groups, or other items pertaining to RMSS, please email me directly at chairman@rmss.org <<mailto:chairman@rmss.org>>. I will be more than happy to assist.

Thank you for your time & clear skies,
Al Schlafli
RMSS 2007 Chairman

The Rocky Mountain Star S tare (RMSS) is an annual star party sponsored by the Colorado Springs Astronomical Society <<http://www.csastro.org>>. The RMSS Committee reserves all rights to make sudden and/or last minute changes to this website. RMSS, the Best Star Party in the Nation! <<http://www.rmss.org>>

I'll see you at the meeting on June 1. This is one of my favorites -- seeing the winners of the Science Fair present to the members is a special occasion.

In the meantime, let's hope for some good weather. Our interval between observing sessions is becoming far too long.

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

..Bill

billpellerin@sbcglobal.net

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

The May, 2007 meeting of the Houston Astronomical Society was called to order on May 4th at 8:04 p.m. by HAS Vice President, Ken Miller.

General Announcements:

- Ken Miller introduced himself and welcomed everyone to the meeting.

Announcements:

- Field Trip/Observing Committee Chair, George Stradley, announced the next observing field trip at the Columbus Observing site is scheduled for June 9th. Members from other area clubs will be invited, and HAS is furnishing hamburgers and hotdogs for all in attendance. There will be a green laser tour of the constellations at dusk, and guided observing with the observatory scopes. Bob Rogers will be conducting observing site orientation for members wishing to take this training in order to gain regular access to the site. All planning to attend should RSVP to George Stradley at the email address posted on the HAS website, <http://www.astronomyhouston.org>.
- Telescope Loaner Program Chair, Bram Weisman, showed pictures from the HAS website of the telescopes HAS has available for loan to members. He also introduced two new additions to the program: a Celestron 9 & 1/4 SCT and a Celestron C11 optimized for astrophotography donated by Mike Reynolds.
- Debbie Moran reported on her anti-light pollution work with the City of Houston.
- Banquet Committee Chair, Judy Dye, reported on the recently held HAS Banquet. Everyone enjoyed the speaker, enjoyed a nice meal, and received a good reception by the hotel.
- Steve Goldberg announced that the Texas Star Party was only a week away, beginning May 13th. A wrap-up of TSP will be the topic at the June meeting, and Steve took suggestions from the membership as to what they would like to see in the TSP report.
- Don Pearce gave the Comet Report highlighting 96 P/Machholz, 2 P/Encke, C/2007 E2 Lovejoy, C/2007 E1 Garrad, C/2006 VZ13 LINEAR, C/2006 XA1 LINEAR, and C/2007 F1 LONEOS For information on these comets

and other comets of interest, see Don's Comet Corner on the HAS website.

Program

Brian Cudnik introduced the featured speaker for the evening, Julius Benton, Coordinator of the Saturn section of the Association of Lunar and Planetary Observer, who delivered his presentation, ALPO Saturn Section: Programs and Recent Observations. Upon completion of his presentation, Julius answered questions and was presented with a gift of appreciation from the society.

Closing Announcements

- After a moment of silence in remembrance of astronaut, Wally Schirra, Ken Miller pronounced the meeting adjourned at 9:37 p.m.

Daylight Observations of Venus

by Leland Dolan

In the Feb. 2007 issue of *GuideStar*, I had mentioned about observing the planet Venus during the daytime. However, while preparing the table accompanying this article, I caught one mistake I stated that greatest brilliancy will occur on July 12th, at which time the planet's angular diameter will be 42 arcseconds. That's wrong. The correct angular diameter will be only 37" arcseconds.

The accompanying table lists the date, the time that Venus transits our local meridian (although this will vary with longitude), the altitude of Venus as it crosses our meridian, the angular diameter in arcseconds, and the percentage of Venus's disc that is illuminated with sunlight. You will note that, as the angular diameter increases, the percent of illumination decreases. And that makes

Venus more interesting through your telescope, since the visible "surface" of the planet is its cloud cover. Details in Venus's clouds are not visible to the eye, but can be photographed using ultraviolet filters. Even then, this requires a fairly large telescope, and steady atmospheric "seeing" conditions.

| Date | Merid Trans | Venus Alt. | Angular Diam. | Disc Illum. |
|----------|-------------|------------|---------------|-------------|
| | Time CDT | Degrees | ArcSec. | Percent |
| 05/26/07 | 4:34 PM | 84° | 20" | 57% |
| 05/31/07 | 4:36 PM | 83° | 21" | 54% |
| 06/05/07 | 4:37 PM | 82° | 23" | 52% |
| 06/10/07 | 4:38 PM | 80° | 24" | 49% |
| 06/15/07 | 4:37 PM | 79° | 25" | 46% |
| 06/20/07 | 4:34 PM | 77° | 27" | 43% |
| 06/25/07 | 4:30 PM | 76° | 29" | 39% |
| 06/30/07 | 4:24 PM | 74° | 31" | 36% |
| 07/03/07 | 4:21 PM | 73° | 33" | 34% |
| 07/06/07 | 4:16 PM | 72° | 34" | 31% |
| 07/09/07 | 4:10 PM | 71° | 36" | 29% |
| 07/12/07 | 4:04 PM | 70° | 37" | 26% |

Logo Sales

In addition to all the other cool stuff that Judy Dye has available in Logo Sales, the 2007 "Observer's Guide" is available. This book is a must-have for planning your observing in 2007, 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

The Ions of Dawn

By Patrick L. Barry



This summer, NASA will launch a probe bound for two unexplored worlds in our solar system's asteroid belt—giant asteroids Ceres and Vesta. The probe, called Dawn, will orbit first one body and then the other in a never-before-attempted maneuver. It has never been attempted, in part, because this mission would be virtually impossible with conventional propulsion. “Even if we were just going to go to Vesta, we would need one of the largest rockets that the U.S. has to carry all that propellant,” says Marc Rayman, Project System Engineer for Dawn at JPL. Traveling to both worlds in one mission would require an even bigger rocket.

This is a trip that calls for the unconventional. “We’re using ion propulsion,” says Rayman.

The ion engines for the Dawn spacecraft proved themselves aboard an earlier, experimental mission known as Deep Space 1 (DS1). Because ion propulsion is a relatively new technology that’s very different from conventional rockets, it was a perfect candidate for DS1, a part of NASA’s New Millennium Program, which flight-tests new technologies so that missions such as Dawn can use those technologies reliably.

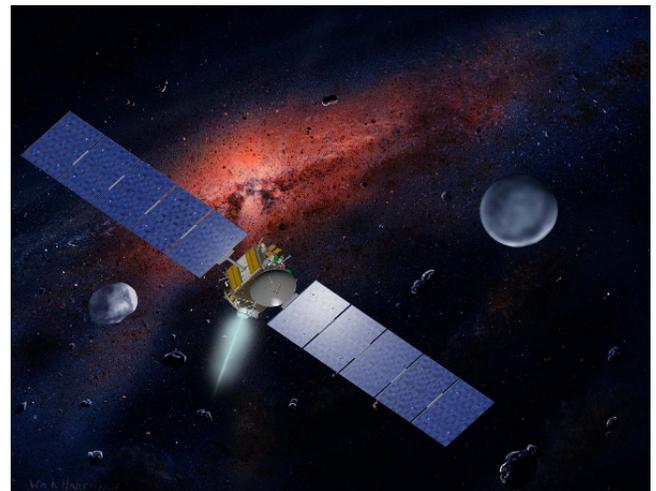
“The fact that those same engines are now making the Dawn mission possible shows that New Millennium accomplished what it set out to,” Rayman says. Ion engines work on a principle different from conventional rockets. A normal rocket engine burns a chemical fuel to produce thrust. An ion engine doesn’t burn anything; a strong electric field in the engine propels charged atoms such as xenon to very high speed. The thrust produced is tiny—roughly equivalent to the weight of a piece of paper—but over time, it can generate as much speed as a conventional rocket while using only about 1/10 as much propellant.

And Dawn will need lots of propulsion. It must first climb into Vesta’s orbit, which is tilted about 7 degrees from the plane of the solar system. After studying Vesta, it will have to escape its gravity and maneuver to insert itself in an orbit around Ceres—the first spacecraft to orbit two distant bodies. Dawn’s up-close views of these worlds will help scientists understand the early solar system. “They’re remnants from the time the planets were being formed,” Rayman says. “They have preserved a record of the

conditions at the dawn of the solar system.”

Find out about other New Millennium Program validated technologies and how they are being used in science missions at <http://nmp/TECHNOLOGY/infusion.html>

While you’re there, you can also download “Professor Starr’s Dream Trip,” a storybook



Artist’s rendering of Dawn spacecraft, with asteroids. Largest are Vesta and Ceres. Credits: Dawn spacecraft—Orbital Sciences Corporation; background art—William K. Hartmann, courtesy UCLA.

for Space Place Astronomy Club article May 2007 grown-ups about how ion propulsion enabled a scientist’s dream of visiting the asteroids come true. A simpler children’s version is available at <http://spaceplace.nasa.gov/en/kids/nmp/starr>

This article was 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. I hope that everyone had a good time at TSP despite the weather. I enjoyed Sunday night, but the rest of the week was a little less desirable weather wise. But despite the weather, it was good to see a lot of HAS members there.

George Stradley has planned another fantastic Star Party at the HAS Observing site for June 9th. The Observatory Committee is going to cook Hamburgers and Hot Dogs for the Star Party. George could use some help with some of the condiments. Please contact George if you can help out. If you are planning to go to this event and want to eat, then you need to RSVP George to get on the food list. The deadline for RSVP is June 7th. You can Email George at - stradley@sbcglobal.net.

I would like to welcome HAS member Ed Fraini to the Observatory Committee. Ed went to the site during TSP and edged all the pads and did a lot of weed eating out there. Thank you very much Ed. I would also like to thank Kirk Kendrick for helping with the mowing on the pads a few weeks ago. Thanks Kirk.

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

Schedule – September 15th (HAS Picnic) and December 1st. 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.

I hope to see everyone at George's Star Party.

*Thanks,
Bob Rogers
Observatory Chairman*

Mark Your Calendars!!!

Here is the schedule for future 2007 field trips to our Columbus observing site:

June 09
September 15
December 01

Each of these dates is a Saturday, and the September 15 outing will coincide with the HAS Annual Picnic.

We will be inviting members of all the area clubs to each event as we did in March (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

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. Bob Rogers, Mike Edstrom and Ken Carey , and the site teams did a great job.

June Supervisor - Kirk Kendrick - 281-633-8819

Volunteers:

Nelson Hagelgans
David L. Herlinger
John Huff
Clayton L Jeter
Stanley G. Jones
Keith A Jurgens
Arnie Kaestner
David Kahlich

Projects for June:

Site Cleanup
Weed Eater Control
Field Maintenance

- 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!

July Supervisor - Ken Carey - 281-488-2765

Volunteers:

Daniel Lambert
Howard Leverenz
Jay Levy
Mary Lockwood
Doug McCormick
Robert Menius
Larry Mitchell
Debbie Moran

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• **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
•

August Supervisor - Dana Lindstrom - 713-862-6044

Volunteers:

Stan Musielewicz
Ben Negy Jr
Johnny Norris
Richard Nugent
Ralph Overturf Jr
Don Pearce
Sim Picheloup
Scott Poteet

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

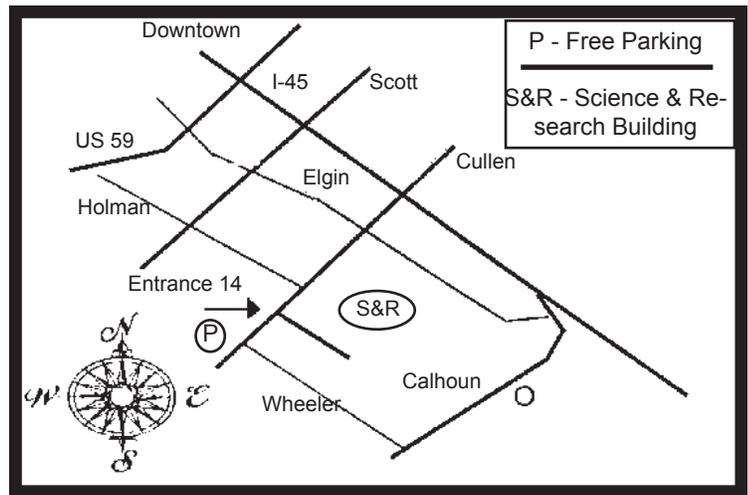
The Board of Directors Meeting is held on dates scheduled by the board at 7:00 p.m. at the University of St. Thomas. Information provided to GuideStar will be published. The meetings are open to all members of the Society in good standing. Attendance is encouraged.

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. 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

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Houston Astronomical Society Meeting

Meeting on June 1, 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.***