



***June, 2003***

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At the **June 6** meeting...

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***Science Fair Winners***

*(Three contest winners)*

**&**

***Texas Star Party Review***

*(It's all about the pin count)*

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*Houston Astronomical Society*

***GuideStar***

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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.

# ★★★★★ **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: 281-633-8819      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** ★★★★★★★★★

Bill Flanagan ..... 713-699-8819 ..... Telescope Loaner Program  
Don Pearce ..... 713-432-0734 .....  
JayLevy ..... 281-557-4920 ..... Field Trip and Observing, Program  
Christopher Mendell ..... 281-488-8906 .....  
Steve Sartor ..... 281-370-3544 .....  
Liaison responsibility

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

Audit ..... Matt Delevoryas ..... 713-666-9428      Program ..... John Blubaugh .....  
Education ..... Richard Nugent ..... 713-524-1993      Publicity ..... Joe Khalaf ..... 713-660-8219  
Field Tr./Obsg. .... Kenneth Miller .....      Telescope ..... Clayton Jeter .....  
Novice ..... George Stradley ..... 281-376-5787      Welcoming ..... Marg Nunez ..... 713-529-2549  
Observatory ..... Michael Dye ..... 281-498-1703      ..... Hannah Lange ..... 832-715-7833

## ★★★★★★★★★ **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 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 \$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.

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**Check the web site:**

**<http://www.astronomyhouston.org>**

## Welcome to New Members!

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

## Special Interest Group Listing

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

|                           |                       |              |
|---------------------------|-----------------------|--------------|
| Advanced .....            | Bill Leach .....      | 281-893-4057 |
| Comets .....              | Don Pearce .....      | 713-432-0734 |
| Lunar & Planetary .....   | John Blubaugh .....   | 713-921-4275 |
| Occultations & Grazes ... | Wayne Hutchison ..... | 713-827-0828 |
| Advanced .....            | Bill Leach .....      | 281-893-4057 |

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# *Observations... of the editor*

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**by Bill Pellerin, GuideStar Editor**

Wow!!! The 2003 Texas Star Party was an outstanding event. We had clear skies on at least 5 of the 7 nights of the event, and the other two were partly cloudy. During the clear-sky nights the sky was very dark.

I told you last month that I didn't expect to see the 12th magnitude galaxy on John Wagoner's TSP observing list in my 4" refractor. Well, I saw it (NGC 4485), and without much difficulty either. John put together a very nice list with some very interesting objects. You just can't beat the dark TSP skies for showing you what your telescope can do.



John Wagoner

John's program was called "The Great Celestial A.R.C." and was composed of (Asterisms, Radio Sources, and Clusters). If you want the list it's still on the Texas Star Party web site ([www.TexasStarParty.org](http://www.TexasStarParty.org)). Some of the asterisms were interesting as well, but not all of us could agree on which stars constituted the asterism. Check these out; you should be able to see them under relatively poor conditions. John's list helps make the TSP a lot of fun.

Larry Mitchell had his "Advanced Observing Program" this year as well. Matt Delevoryas completed it in his 8", and quite a few more TSP'ers completed the list in their larger telescopes.

After completing the TSP list, I worked on some AAVSO variable stars, and some double stars. There are two articles in the June *Sky and Telescope* listing colorful double stars to look at. Gamma Leo, two close, orange colored stars, was a favorite of mine. I also did some of my "100 Greatest Stars" list, and observed the asteroid Vesta over a few nights to watch it move through the sky.

Nearby, Scott Mitchell was working on his Herschel list, and Bill Flanagan and Bob Aaker were working on Larry Mitchell's Advanced list.

You probably know about this by now... but the May 12th issue of *Time* magazine carried an article featuring the TSP. The writer and photographer were on site Monday and Tuesday of the TSP, and the article was in the magazine a week later. Larry Mitchell, Jayne and Dana Lambert, George Stradley, and others

*Continued on page 14...*

# Houston Astronomical Society

*Meeting Notice  
For Friday, June 6, 2003*

## **Texas Star Party Review & Science Fair Winners**

This month, we'll see a presentation on the goings on at this year's Texas Star Party and a presentation of the astronomy and space projects from this year's Houston Science Fair.

Beth Turner, "The Orbital Trajectories of Jupiter's Galilean Satellites"

Mark Connell, "Determining the Distance Between Earth and the Pulsating Variable Star Delta Cephei"

Elisa Dolson, "Is the Earth Truly Round?"

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### **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.  
Jay Levy "Solar Observations"

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

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

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

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# June/July Calendar:

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Photo by Scott Mitchell

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

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## June 2003

|    |           |   |
|----|-----------|---|
| 6  | 7:00 p.m. | Novice Presentation - U of H.   |
|    | 8:00 p.m. | General membership meeting U of H.<br>TSP Wrap-Up, Science Fair Winners |
| 7  | 3:28 p.m. | First Quarter Moon  |
| 14 | 6:16 a.m. | Full Moon   |
| 17 | 7:30 p.m. | Advanced SIG meeting, contact Bill Flanagan,<br>713-699-8819            |
| 21 | 9:45 a.m. | Last Quarter Moon   |
|    | 2:10 p.m. | Summer solstice. Summer begins in northern hemisphere.                  |
| 29 | 1:39 p.m. | New Moon  |

## July 2003

|    |           |   |
|----|-----------|---|
| 3  | morning   | Mercury at greatest western elongation  |
| 4  |           | A holiday for most of us. Meeting rescheduled for NEXT<br>week. Moon sets just after midnight |
| 7  | 3:28 p.m. | First Quarter Moon  |
| 11 | 7:00 p.m. | Novice Presentation - U of H.   |
|    | 8:00 p.m. | General membership meeting U of H. (see special<br>notice in this issue)                      |
| 14 | 6:16 a.m. | Full Moon   |
| 21 | 9:45 a.m. | Last Quarter Moon   |
| 22 |           | Uranus 3 degrees north of Mars  |
| 29 | 1:39 p.m. | New Moon  |

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

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# **Minutes of the H.A.S. General Membership Meeting 09 May 2003**

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The Meeting was called to order at 8:08pm, with Don Pearce presiding in the absence of President Kirk Kendrick.

Don Pearce welcomed everyone to the H.A.S.

The Announcements follow:

- ⇒ Marg discussed star parties and name tags:
  - The Katy Prairie Conservatory has rescheduled its star party for Saturday, May 31. Don Mayhall has more information.
  - Star party on May 20 (or May 21 as cloudy-night alternate) at Stovall School. Philip Kuna has requested a star party at his school.
  - The *GuideStar* has listed a number of additional star parties to be held this summer, with one correction mentioned for an event to take place on June 21, rather than what was mentioned in *GuideStar*.
  - The Name tags have been narrowed down to those who regularly show up at meetings. If you come regularly to the general meetings, and your name tag is not available but you want it to be, print your name legibly on a piece of paper and give it to Marg.
- ⇒ Don Pearce awarded Amelia Goldberg, who has successfully observed all 400 Herschel 400 objects, an observing certificate.
- ⇒ Leland Dolan brought to the membership's attention, the article in Time magazine, May 12, 2003 issue, concerning the article "Stars in their Eyes", which contained material about the Texas

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## ***Minutes... from previous page***

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Star Party. Steve Goldberg explained more about the article and comments about the article from the membership were heard.

- ⇒ Don Pearce introduced himself and gave the monthly Comet Report:
- C2002Y1—Juels Holvercem continues to shine at 7<sup>th</sup> magnitude. After crossing the ecliptic on May 8, the comet is finally beginning to move away from the Sun, but only for Southern Hemisphere observers. The comet is a morning object, some 2 degrees from Venus, and it makes its closest approach to Earth on June 24. Having passed perihelion on April 13, C2002Y1 is now moving toward Cetus and Fornax.
  - C2001RX14 is at 12<sup>th</sup> magnitude in Leo, moving Southeastward and fading as it recedes from both Earth and Sun.
  - Comet 116P, Wild 4, is currently at 12<sup>th</sup> magnitude in the constellation Libra. The comet made its closest approach to Earth on May 5, resulting in its brightness, but is slowly fading as it receded from both Earth and Sun.
- ⇒ Steve Goldberg discussed about the list server and suggested starting a forum, which Robert Kuna already has done. It is a server on Yahoo called “HAS members”. This server is not e-mail based but is more like a newsgroup. Discussion by the membership followed. The conclusion is to pursue this issue more offline.

There were 2 new members at the meeting, and 3 visitors.

Don Pearce introduced the evening’s speaker, Professor Matthew Baring who gave a talk entitled “The Microwave Background: Cosmic Glitter for the Ages”.

Marg awarded door prizes after a ten-minute break. The Meeting was adjourned at 9:58p.m.



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# ***Pictures from the 2003 Texas Star Party***

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*by Bill Pellerin, GuideStar Editor*



The north observing field was chock-full of telescopes of all size and description during the 2003 TSP.

HAS member, Scott Mitchell on the north observing field with his dobsonian telescope. In addition to doing the TSP list, Scott was working on his Herschel objects in Leo. Over several nights, Scott observed the movement of the bright asteroid Vesta.



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# *Eggs in the Air*

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By Patrick L. Barry

The sky will be filled with flying eggs on May 10, 2003, when a thousand students converge on The Plains, Virginia, for the first-ever national high school rocketry competition.



Called the Team America Rocketry Challenge (<http://www.rocketcontest.org>), the competition sets the goal of flying a custom-built, two-stage rocket carrying two raw eggs to a height of exactly 1,500 feet, and then returning the eggs to the ground unbroken. The team that comes closest to 1,500 feet without breaking their eggs will win the national title.



*A Boeing Delta II (7326) rocket launched the New Millennium Program Deep Space 1 spacecraft on October 24, 1998.*

The competition is being organized by the Aerospace Industries Association and the National Association of Rocketry (NAR). NASA administrator Sean O'Keefe will attend the final event.

"The idea is to get kids interested in the world of aerospace," says Trip Barber, director of the competition and vice-president of the NAR. "And they will learn some important lessons about the power of math and science-and cooperation and teamwork-along the way."

To develop their designs, the students first used computer simulator software provided by NAR. Then they had to apply old-fashioned ingenuity and craftsmanship to bring the design to life and flight testing to refine it.

*Continued...*

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## ***Space Place... from previous page***

Students constructed rocket bodies using a combination of hobby-store rocket kit parts and custom materials. A typical rocket might consist of cardboard tubes from paper-towel or wrapping-paper rolls, a pre-made nose cone, rocket-kit body segments cut to size, and light-weight, balsa wood fins. But the greatest challenge for many was designing the compartment for the eggs.

Some used plastic Easter eggs as casings, padding the inside with bubble wrap, foam peanuts, or even gelatin. Others decided not to “reinvent the wheel,” making a cradle from the egg-crate material used for shipping eggs. Some chose to make larger, more powerful rockets big enough to carry the eggs inside, while others made smaller, more efficient rockets that have a bulging egg compartment mounted on top.

A hundred unique designs will be put to the test in Virginia. Only one will win. But for the students, the real prize has already been won: Learning an approach to problem-solving that works, whether you’re launching eggs over a field or sending astronauts to Mars.

In the end, it’s all about the future: Future technologies and the kids who will grow up to create them. Many advanced technologies are being developed now by NASA’s New Millenium Program (<http://nmp.nasa.gov>). Who will do that work in the future? Perhaps some kids who spent their weekends launching eggs in the air.

Are you a kid? Would you like to build your own rocket? Visit NASA’s Space Place and learn how to make a bubble-powered rocket! (<http://spaceplace.jpl.nasa.gov/rocket.htm>.) It won’t take you to Mars, but it’s a good way to get started.

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

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# *Observatory Corner*

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*By Michael B. Dye Observatory Chairman*



I really need to start checking my calendar better when I schedule activities at the Observatory Site. I really didn't know that the weekend of the 19<sup>th</sup> (of April) was Easter when I scheduled the Fence Repair Project back in March. I didn't tumble to this fact until the weekend before (17<sup>th</sup> of April) when Judy mumbled something about that weekend being Palm Sunday and about that time I realized that the following weekend was Easter. Oops. Anyway I was stuck with the 19<sup>th</sup> as the Fence

## Repair Day.

All things considered (as explained above) the Fence Repair Project came off very well. We got the West Fence line repaired and I had enough helpers left over to clear the North Fence line of most of the green stuff that seems to clutter fence lines. The Activity started about 9 AM (I know, some people didn't even realize that the Observatory Site existed at 9 AM) when Ken Miller showed up with his truck, trailer, tractor and son. Judy and I had spent the night, so I was already on site. Other volunteers started showing up and we got started. Work continued on the west fence until about noon or so when we broke for lunch. About that time the second string started showing up and I put them to work clearing the North Fence line. After lunch the rest of the original group went back to work on the West fence line tightening up the barbed wire and adding more fence poles as required.

After lunch, Ken pulled out his tractor and started mowing the Observatory Site grass. Ken has volunteered to mow the grass at the Observatory Site this year and I am not going to discourage him. I sent some pictures of this stuff to Steve and he said he would post some of them if space were available on the web site.

The participants of the West Fence Mending group were as follows; Ken Miller (group leader), Kevin Miller (Ken's son), Steve Sartor, George Stradley, Susan Kennedy, and Dan Kennedy. Keith Jurgens and Chris

*Continued...*

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## ***Observatory Corner... from previous page***

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Mendell worked on cleaning up a very overgrown section of the West fence line.

The North Fence Line clean up group were; Marge Nunez, George Nunez (Marge's Father), Keith Jurgens and I think someone else who I forgot to get the name or a picture of.

I want to thank all the volunteers who showed up early (morning and afternoon) to help with the Fence Mending project. Without volunteer members who come out to the Observatory Site to help with our projects, we would not have an Observatory Site to use. Again, my thanks.

Bob Rogers was on Site to work on the Observatory Site Lawn Mower (yes it still works, because of Bob). In this case, he was changing the blades and sharpening the old ones for the spring lawn-mowing season. Later that day, Bob also did upgrade training for Jay Levy and Judy Dye on the C-14. Please remember in order to use the new and improved C-14, a retraining class is required. Arrangements for training classes can be made through Steve Goldberg.

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. A new person has volunteered to spearhead this effort so we may have Kroger card yet.

***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.

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# July Speaker and Meeting Announcement

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As a reminder to members and visitors, our July meeting will be held on the second Friday (the 11th), since the first Friday falls on the 4th.

For July, we are pleased to be welcoming Ed Ting. Ed Ting has been involved with astronomy for about twenty years, and he is a frequent guest speaker at the planetarium in Concord, New Hampshire, and at local schools. He has written for *Sky and Telescope*, and *Amateur Astronomy* magazines, and is scheduled to have a review published in an upcoming issue of *Sky and Telescope* magazine. However, he is probably best known for his web site, [www.scopereviews.com](http://www.scopereviews.com), which is read thousands of times each day by astronomers all over the world.

His talk will be called "The Best and the Worst." It will be a serious (and not-so-serious) look at important astronomical equipment available today. The Program Committee urges members and visitors to attend.

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## ***Observations... from page 4***

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were photographed for the article. If you haven't seen this, look for it (it'll be a 'back' issue by the time you read this). .

Not one, but TWO LX90 (8" computerized SCT) telescopes were given away as door prizes. A 6" dobsonian telescope was given away to a child (age 9 - 14). Many more minor prizes were given away as well. These included collimation tools for SCTs, books, planispheres, and more.

Stephen O'Meara, from *Sky and Telescope* was on site, and gave two presentations during the TSP. Pam Gay, from *Astronomy* magazine was there as well, and presented on RR Lyrae variable stars.

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

***..Bill***

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## *More Texas Star Party Pictures*



Bill Flanagan and Bob Aaker on the north field. These guys were using the C-14 on the G-11 Losmandy mount to observe Larry Mitchell's list and other deep sky objects. Bob won a 13mm Nagler eyepiece as a door prize!



Jay McNeil (former Houston resident), Amelia Goldberg, Larry Mitchell, and Steve Goldberg at the Texas Star Party

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## *More Texas Star Party Pictures*



Dana Lambert, Jayne Lambert, and Steve Sartor at the TSP. The Lamberts used the 6" refractor in this picture for Star Party observing.

Jayne coordinated the vendors for the TSP.

TWO LX-90 telescopes were given away this year as door prizes.



George Stradley won the craftsmanship award for this telescope in the ATM (amateur telescope building) contest at the TSP. His newly constructed equatorial platform got a test run at this year's event.



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# ***Marg's Star Parties***

## ***...Need Folks and Scopes***

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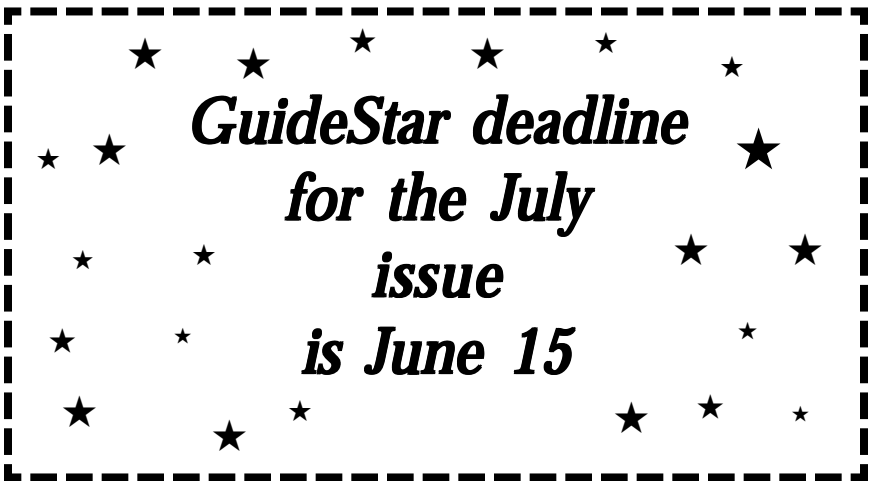
Here's your chance to share your enthusiasm for astronomy with some kids. Marg Nunez has planned events for the near future. Bring your telescope, or just come by... Either way, you'll have a great time. Mark your calendars! So far we have 3 star parties scheduled for the summer month's

**Friday, June 21st** at dusk, Conroe, Camp Deerfoot, Lennon Camp for Boys

**Saturday, July 19th** at dusk in Conroe, Camp Deerfoot, a camp for boys.

Call or Email Marg for more details. 713-529-2549 **Marg10@flash.net**

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

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# *Observatory Duty Roster*

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by Michael B. Dye, Observatory Chairman

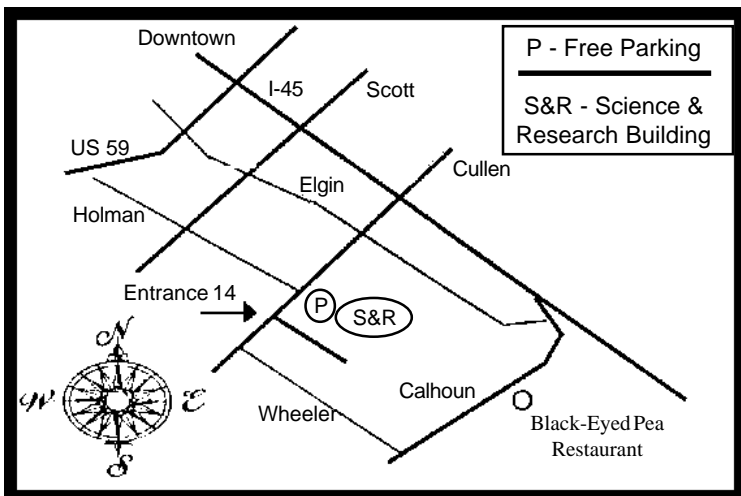
This is the duty list for June, July and August. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change from site duty to open house or from open house to site duty by pre-arrangement with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

**June Supervisor ..... Matt Delevoryas ..... 713-662-2939**  
Leonard Raif ..... Site  
Henry Schneider ..... Site  
Marge Nunez ..... Site  
Steve Simpson ..... Site  
Larry Wadle ..... Site  
Mark Watson ..... Members Observatory Night 06-21-03  
Tom Williams ..... Site  
Barbara Wilson ..... Members Observatory Night 06-21-03  
Buster Wilson ..... Members Observatory Night 06-21-03

**July Supervisor ..... Kirk Kendrick ..... 281-633-8819**  
Warren Wundt ..... Site  
John Blubaugh ..... Site  
Ken Carey ..... Site  
John Chauvin ..... Site  
Art Ciampi ..... Members Observatory Night 07-19-03  
Gary Delzer ..... Site  
Kay Sandor ..... Site  
George Dolson ..... Members Observatory Night 07-19-03  
Kenneth Drake ..... Members Observatory Night 07-19-03

**August Supervisor ..... Matt Delevoryas ..... 713-662-2939**  
Brian Cudnik ..... Site  
Victor Flores ..... Site  
Jean-Marc Follini ..... Site  
David Herlinger ..... Site  
Fred Garcia ..... Members Observatory Night 08-16-03  
Bob Menius ..... Site  
Clayton Jeter ..... Site  
Stanley Jones ..... Members Observatory Night 08-16-03  
Keith Jurgens ..... Members Observatory Night 08-16-03

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.



### 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. *GuideStaris* 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. *GuideStaris* 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.

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Reproduction and Mailing: Anne Hallman & Hannah Lange

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## **Houston Astronomical Society**

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