



**April, 2003**

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At the **April 4** meeting...

**Dr. Bill Cochran**

**McDonald Observatory**

***Beyond the Solar System.  
The Search for Extrasolar  
Planetary Systems***

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

★★★★★★★★★ **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 Flanagan .....	713-699-8819
Comets .....	Don Pearce .....	713-432-0734
Lunar & Planetary .....	John Blubaugh .....	713-921-4275
Occultations & Grazes ...	Wayne Hutchison .....	713-827-0828
Advanced .....	Bill Leach .....	281-893-4057

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## ***Observations... of the editor***

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***by Bill Pellerin, GuideStar Editor***

Observations? What observations? Has this been a dismal month or what? As spring arrives (7:00 p.m., local time, on Thursday, March 20), maybe conditions will improve. There's almost no where to go but up!

I am starting to get excited about and geared up for the 2003 Texas Star Party. I'm making my equipment list, and checking it twice, and beginning work on my observing list for the event. I'll be taking my 4" refractor and doing some very nice 'shallow sky' observing, I'm sure.

I was at the Stephen Hawking presentation in the Woodlands last Friday night, as were lots of other folks. I figure that this was a once-in-a-lifetime event, so I didn't want to miss it. I enjoyed it very much, and I hope you had a chance to be there. I saw a few H.A.S. members there, but the Cynthia Woods Mitchell Pavillion is quite large, and it'd be easy to miss seeing someone.

I'm please to say that there are some new and interesting submissions for this month's issue. Allen Gilchrist fills us in on the commissioning of the C-14 at the observatory site. Tom Williams is researching some mysterious lights over Houston and is looking for some help to figure out what this was (is?) about. Clayton Jeter has some exciting news about the telescope loaner program in this issue and there's a brief article about the Columbia Space Shuttle incident by Dr. Tony Phillips. Thanks to all of our authors this month, and to our regular writers, Michael Dye (Observatory Corner) and John Blubaugh (Calendar).

It was a challenge to make all the content fit into the 20 pages, but it's all here, and I hope you enjoy it.

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

***..Bill***

# ***Houston Astronomical Society***

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***Meeting Notice  
For Friday, April 4, 2003***

***Dr. Bill Cochran  
University of Texas  
McDonald Observatory***

The talk will present a discussion of the techniques used to detect planets around other stars, a summary of the interesting results obtained, and their implications for our theory of the formation of planets in general.

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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.  
Amelia Goldberg - "Navigating the Virgo Cluster"

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.**

# March/April Calendar:



Photo by Scott Mitchell

<i>Date</i>	<i>Time</i>	<i>Event</i>
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## April 2003

1	1:19 p.m.	New Moon
4	7:00 p.m.	Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H. Dr. William Cochran: "Beyond Our Solar System: The Search for Extrasolar Planetary Systems"
6	2:00 a.m.	Daylight Saving Time begins. Set clocks forward 1 hour.
9	6:40 p.m.	First Quarter Moon
15	7:30 p.m.	Advanced SIG meeting, contact Bill Flanagan, 713-699-8819
16	2:36 p.m.	Full Moon
19		Members Observatory Night- Columbus
23	7:18 a.m.	Last Quarter Moon
26		Prime Night-Columbus
27		Texas Star Party begins in Ft. Davis, and goes until May 4

## May 2003

1	7:15 a.m.	New Moon
9	6:53 a.m.	First Quarter Moon
	7:00 p.m.	(On <b>second</b> Friday of May) Novice Presentation - U of H.
	8:00 p.m.	General membership meeting U of H . Dr. Matthew G. Baring: "The Microwave Background: Cosmic Glitter for the Ages"
13	7:30 p.m.	Advanced SIG meeting, contact Bill Flanagan, 713-699-8819
15	11:36 p.m.	Full Moon
	11:40 p.m.	Total Lunar Eclipse, mid-eclipse time
22	7:31 p.m.	Last Quarter Moon
24		Members Observatory Night- Columbus
29	7:30 p.m.	HAS Board Meeting-Univ. of St. Thomas, Robertson Hall rm. 118
30	11:20 p.m.	New Moon
31		Prime Night-Columbus

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

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# ***C-14 Drive Upgrade Complete***

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*by Allen Gilchrist*

After almost a year of work, the Society's C-14 scope was recently placed back in service after an extensive drive system upgrade. The new system boasts a dual axis computer controlled stepper motor drive system using software by Mel Bartels. All of the old electronics boxes have been replaced with a computer and one small black box. The old tangent arm on the declination axis has been replaced with a large worm and gear assembly. There is now a larger table mounted on the south side of the pier, which holds the control computer monitor and the control electronics box. The changes allow full GOTO capability as well as sophisticated permanent periodic error corrections (PPEC). The system can even be connected to another computer running a planetarium program such as TheSky or Megastar for even more automated control.



Allen Gilchrist  
at the C-14

You might ask, how does all this work? Is a degree in computer science required to use the scope? Not as all, for the casual visual observer, the system is even simpler to use than it was before. After power is supplied to the station, the computer will boot up and ask the user to confirm the date and time before starting the SCOPE program. The program will prompt for the power to be turned on. The switch is on the black electronics box on the table to the east side of the pier. The user should turn on the power only after being prompted by the program. Pressing the "T" key on the control computer turns on tracking. There are slip clutches on both axes, so it is not necessary to unlatch the declination lock before moving the scope by hand. One can manually point the scope at a star or other object using the Telrad or optical finder, and then center the object using the handpad. Observing can proceed this way until it is time to shut down the system. Pressing the "T" key turns off the tracking, and pressing the "Q" key starts the shutdown procedure in the SCOPE program. The only special requirement is that the user must power off the electronics before completing the exit from the program.

Those wanting to take advantage of the GOTO features of the system would start the system up just as outlined above. The SCOPE program has an extensive data

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## *C-14... from previous page*

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base of stars and deep sky objects. After locating a known star or object, pressing the "R" key on the control computer tells the system where the scope is pointed. After this simple initialization, the coordinates of an object can be loaded from the SCOPE program's database and the system can be commanded to slew to that position. The scope will slew to the object and resume tracking. The accuracy of the system is good enough to put most objects in the field of view at low to medium magnifications. Slewing speeds of about 1 degree per second can be achieved, so slews will not take very long. It is even possible to create data files containing lists of objects and move from one to another in sequence with only a touch of a key. For objects that are very far from the scope's current position, the user can manually move the scope to a known star or object in that part of the sky, center it, and press the "R" key to reset the coordinates in the control computer. Then the coordinates of the desired object can be loaded and the system can be commanded to slew to the object. Users can also connect a second computer running a planetarium program to the control computer through the supplied serial-to-serial interface. TheSky, Megastar, or any program capable of interfacing to an LX-200 should work with this system. Control from one of these programs can be a real joy. Click on an object on the display and click to move the scope to the object.

Astrophotographers and CCD imagers will enjoy the stability and accuracy of the mount and the ability to make dual axis drive corrections, either manually or using an autoguider. The autoguider interface does require a special cable, and the only systems currently supported are the SBIG ST-4 or systems using the SBIG Relay Box. Other systems can be supported, but users must have interface arrangements approved by a member of the Observatory Committee. Contact Allen Gilchrist or Mike Dye for approval. Measurements made during recent tests showed residual periodic error with an average amplitude of less than +/- 1.5 arcseconds. Couple this outstanding drive accuracy with the ability of the GOTO feature to put objects on the chip of a CCD camera or in the finder of a film camera, and the power of the system becomes apparent.

The C-14 is back, but use of the system does require special training. Observatory key holders who want to be trained on the system should contact Bob Rogers to schedule one of the special training classes. If you are not already an observatory key holder, contact Bob to schedule full observatory training. If you have already received the special training, call Steve Goldberg to sign up for the scope. This scope has been historically under utilized. That ought to change. This scope is a fine instrument and is a joy to use. Call now to schedule, but save some dark nights for me.

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# ***Help Needed -- Mysterious Night Lights***

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***by Tom Williams***

Last year I wrote four short pieces for *GuideStar* about amateur astronomers in Houston before the formation of the HAS. One of those articles attracted some attention from Antwerp, Belgium, and resulted in an appeal to HAS for help on a related project. The specific historical issue which attracted this appeal was the work of Houston amateur astronomer W. S. Athey in the 1930s and 1940s. He attempted to identify the sources of mysterious lights that appeared from time to time in the night skies around Houston and in other parts of Texas. Athey related these lights to flares at the refineries and oil production fields east of Houston.

Under the leadership of Wim van Utrecht, the Caelestia project was organized in Europe to study such phenomena on a more scientific basis. Members of Caelestia gather anecdotal evidence associated with sightings and then with meteorological data, attempt to identify the possible sources based on the likely altitude of clouds of ice crystals that might have reflected the light to a distant observer. Obviously, then, what they need to reverse this process to identify likely sources is the location of the observer, time and meteorological conditions at the time of the observation.

There are two parts to Mr. Utrecht's appeal for help. One is to prepare a better record of Athey's work. This will be researched in the newspapers of the period. Also, it would be useful to locate the family of William S. Athey and determine whether any of his papers still exist, and if so, whether they contain background on his early investigations of these phenomena. I think that historical project can be handled by one or two of us with related interests. I have already surveyed the Athey entries in the Houston telephone directory and have determined that the answer on this part of the project is likely negative. We will also undertake an examination of newspaper files to see if any additional information about the events that Athey investigated can be produced. The actual dates and local weather conditions and location of observers need to be tabulated.

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# *Telescopes*

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By Clayton Jeter, Telescope Loaner Chairperson

It's been a while since I last chatted to all of you here in the *GuideStar* about the loaner telescope program. This program has really grown in quantity and quality in our inventory of astronomical instruments and accessories.

Non-society members have already donated several telescopes since the beginning of this year. We now even have our first computerized go-to telescope. Thanks to our web page, people are contacting us with scopes that have been sitting in their closet for several years and have decided that our members could better use them.

Although many of our scopes at this time are checked out and are in use, I still have many scopes sitting in my garage with "your name" on them. Please contact me and I'll make sure you get the scope of your choice or reserve this scope for a vacation weekend. Our scopes include all the bells and whistles you'll need for a great evening of stargazing. The spring is right around the corner so make plans to utilize your membership dues and check out one of these fine instruments.

Cloudless nights, always... Clayton -- Hm #281-383-1337  
Email: stonebloke@aol.com

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## *Help Needed... from previous page*

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The second part of Mr. Utrecht's appeal is more general. He notes that the atmospheric conditions and the ground facilities apparently responsible for the Houston sightings in the 1930s and 1940s have not changed all that much, and asks if there is anyone in HAS who would be willing to join in Caelestia's effort by organizing a local campaign to make regular observations in the direction of oil refineries, gas plants and production fields, and record such information as a date, time, weather conditions, and whether unusual light phenomena are visible at that time.

The Caelestia project seems quite reasonable and interesting. I do not have the time to organize such an effort for Houston, but would be pleased to help anyone who is willing to act as an organizer with the materials I already have from Mr. Utrecht. I hope someone will volunteer to get a local chapter of Caelestia organized for this effort. Please contact me at [trw@rice.edu](mailto:trw@rice.edu) or call me at 713-526-2868 if you are interested in helping with this effort.

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# *Seven Strangers?*

*by Dr. Tony Phillips*

At the dawn of the space age some 40 years ago, we always knew who was orbiting Earth or flying to the Moon. Neil Armstrong, Yuri Gagarin, John Glenn. They were household names—everywhere.

Lately it's different. Space flight has become more routine. Another flight of the shuttle. Another visit to the space station. Who's onboard this time? Unless you're a NASA employee or a serious space enthusiast, you might not know.



The crew of  
Columbia

Dave Brown, Rick Husband, Laurel Clark, Kalpana Chawla, Michael Anderson, William McCool, and Ilan Ramon.

Now we know. Those are the names of the seven astronauts who were tragically lost on Saturday, Feb. 1st, when the space shuttle Columbia (STS-107) broke apart over Texas.

Before the accident, perhaps, they were strangers to you. But if that's so, why did you have a knot in your gut when you heard the news? What were those tears all about? Why do you feel so deep-down sad

for seven strangers?

Astronauts have an unaccountable hold on us. They are explorers. Curious, humorous, serious, daring, careful. Where they go, they go in peace. Every kid wants to be one. Astronauts are the essence of humanity.

They are not strangers. They are us.

While still in orbit Dave Brown asked, jokingly, "do we really have to come back?"

No. But we wish you had.

Please see the NASA Home Page (<http://www.nasa.gov>) for more information on the Columbia Investigation.

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# *Observatory Corner*

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*By Michael B. Dye Observatory Chairman*



The first thing I want to talk about in this article is the C-14 Project. It is complete. Allen Gilchrist has declared victory and the scope operational. Please read the article that Allen Gilchrist wrote elsewhere in this issue. I would like to thank Allen for all the work he has put into this project. The completion of this activity indicates that even when you have nothing to start with in the way of resources; impossible projects can be completed. Again, my thanks Allen.

The second thing I need to bring up is that as a result of the C-14 Project coming to completion, we have started a retraining program. If you would like to be retrained on the operation of the C-14 or take the Observatory training course, please contact Steve Goldberg. Bob Rogers and Matt Delevoryas are the main trainers for the Observatory Training. Bob trained two more people last weekend (March 15<sup>th</sup> & 16<sup>th</sup>). I showed up at the Observatory Site and gave them their keys, so they are now ready to use the Observatory.

The third item for this month's list is the size of the Site Duty List. A few months ago I said that the number of key users would be 10 for the summer months. I goofed. I checked last years Duty Lists and determined that I was only using nine names not ten for the summer months. I have corrected the name list retroactively starting this month (April). I hope this will not cause anyone any problems.

The Fence Mending project, originally scheduled for February 22<sup>nd</sup> has been rescheduled for March the 19<sup>th</sup>. The main reason for this change is the number of positive responses that I have received so far. Not counting Ken Miller (who I drafted as project leader) the number of positive responses to date has been (drum roll). Zero. That's right, the number of people in the society who are willing to spend a few hours at the site helping to mend the West fence line is zero. This fence needs to be mended to keep the cows from the property to the west of the site from coming over and feasting on our grass. For those of you who think this could solve the meat problem for the Annual Picnic, it won't. I checked. It is still considered cattle rustling even if the cow is on your property. As for those of you who think that this could be a solution to our continuing grass problem (the stuff grows and has to be cut). Let me point out that unfortunately for cows, what goes in one end as raw grass comes out the other end as processed grass. At two in the morning, when you're crossing the field to get to the bathroom and steps in

*Continued...*

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

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a pile of processed grass, it won't be nice. The first word out of your mouth will most assuredly not be a nice word and may even be a descriptive definition of the item you stepped in. I did have one member point out that this word could possibly be the second word out of one's mouth, the first being "Oh".

We need at least five more members to help Ken Miller and me. If you would like to volunteer, please contact me by any of the following methods:

Home E-mail: [Mbdye@aol.com](mailto:Mbdye@aol.com)

Work E-mail: [Mbdye@rice.edu](mailto:Mbdye@rice.edu)

Home Phone: 281-498-1703

Work Phone: 713-348-6317

Please remember that the Houston Astronomical Society is an amateur organization and survives by the members volunteering to help with projects and on donations of money. If you don't have time to help, at least send money to the P. O. Box and indicate that the money is for the Observatory Site.

The next to the last item on my list is the route to the Observatory Site. We normally take what is called the Short Cut. This used to be a rather slippery path that had a lot of sand traps along the road. This is no longer true. It seems that the county (or I think the county) has improved the road with lots of high quality gravel and a few culverts where the water used to cross the road. I would recommend the short cut now as a primary route to the Site.

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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# *Marg's Star Parties*

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Here's your chance to share your enthusiasm for astronomy with some school 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.

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

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## **Note:**

**The May meeting of the H.A.S. will be on May 9 (not May 2) to avoid a conflict with the Texas Star Party.**

**The July meeting will be on July 11 (not July 4).**

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## ***Other Meetings...***

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**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.ghgcorp.com/cbr/jscas.html>

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

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# **Minutes of the H.A.S. General Membership Meeting 07 March 2003**

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The Meeting was called to order at 8:07pm.

There were three new members and several visitors at this meeting.

The announcements follow:

- ⇒ Kirk Kendrick announced the upgrading of the planetarium at the Houston Museum of Natural Science and announced that they were accepting JPEG images to be used in planetarium shows.
- ⇒ James Wooten announced the 3rd annual Sun-Earth Day at the museum on Saturday, 22 March. They need solar telescopes, and people interested in volunteering were asked to see James.
- ⇒ Amelia Goldberg gave two Messier awards: Stephen Powell was awarded Certificate No. 2000 which was issued on 11/15/02, and Jay Levy was not present to receive his award.
- ⇒ Kirk Kendrick announced that several scopes and equipment were donated to the club: a 6-inch refractor plus CCD plus computer, a 9-1/4-inch Schmidt-Cassegraine with eyepieces, etc., and a 4-1/2-inch GOTO telescope.
- ⇒ Mr. Kendrick also announced that Stephen Hawkins will be speaking on March 14 at the Cynthia Woods Mitchell Pavilion
- ⇒ The Board Meeting will take place at St. Thomas University on March 27.

Steve Goldberg attempted, unsuccessfully, to auction off an old P.A. system.

More announcements:

- ⇒ Marg Nunez announced the following star parties:
  - Katy Prairie star party has been rescheduled for April 5.
  - Conroe Star Party is scheduled for March 22.
  - Rice School (at Braeswood & Kirby) will host a star party on March 26.
- ⇒ Marg also stated that the name tag board is being revamped, and as a result, door prizes will not be awarded this month. They will resume next month.
- ⇒ Clayton Jeter shared about the Loaner Scope Program.

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

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- ⇒ Don Pearce gave his monthly comet report:
- Comet C/2002 V1 (NEAT) is at magnitude 4.4 but is very difficult (not impossible) to see from Houston. It was imaged by SOHO on February 18, but it is not known whether Earth-based scopes were able to image the comet at this time. The comet is lost in the solar glare for Houston until early July, when it will emerge in the morning sky at magnitude 14.
  - C/2002 X5 (Kudo-Fujikawa) is at magnitude 7.7 and is up until setting about 3-1/2 hours after sunset. By the end of the month, the comet will be at magnitude 11.
  - C/2002 Y1 (Juels-Hoverchem) is at magnitude 7 in Lacerta. It rises at 2:40 a.m., and does not set until 8:50 p.m., but it is moving toward the Sun. It reaches perihelion on April 15 and is 2-1/2 magnitudes brighter than predicted.
  - C/2001 Q4 (NEAT) is supposed to be bright in May 2004; currently it is at 14.5 magnitude. It is about 1 magnitude brighter than predicted. Maximum magnitude predicted to be 1.0 on May 6 when it makes its closed approach to Earth at 0.32 A.U.

Scott Mitchell introduced Dr. Allan Treiman, who gave a talk entitled “Gullies on Mars: Geology and Origin”.

Following the talk, Kirk Kendrick mentioned that two meetings this year have been moved from the first to the second Friday of the month: The May 2nd meeting is moved to the 9th, and the July 4th meeting is moved to the 11th.

Don Pearce revealed that the speaker for the April meeting is going to be Dr. Matthew Bering, who helped determine the precise age of the universe (13.7 billion years).

John Blubaugh revealed that the April speaker will be Dr. William Cochran, who will talk about extrasolar planet systems.

The meeting was adjourned at 9:27p.m.

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## *HAS Web Page*

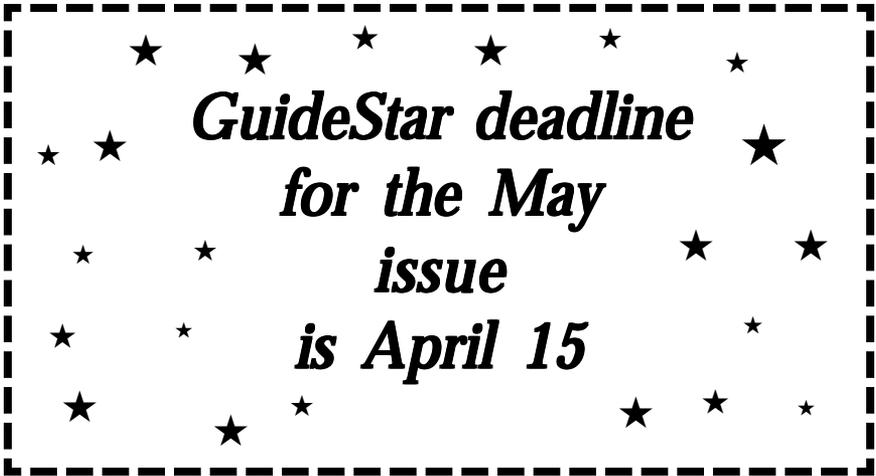
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The Houston Astronomical Society Web page has information on the society, its resources, and meeting information.

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

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

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***GuideStar deadline  
for the May  
issue  
is April 15***

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# ***Observatory Duty Roster***

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*by Michael B. Dye, Observatory Chairman*

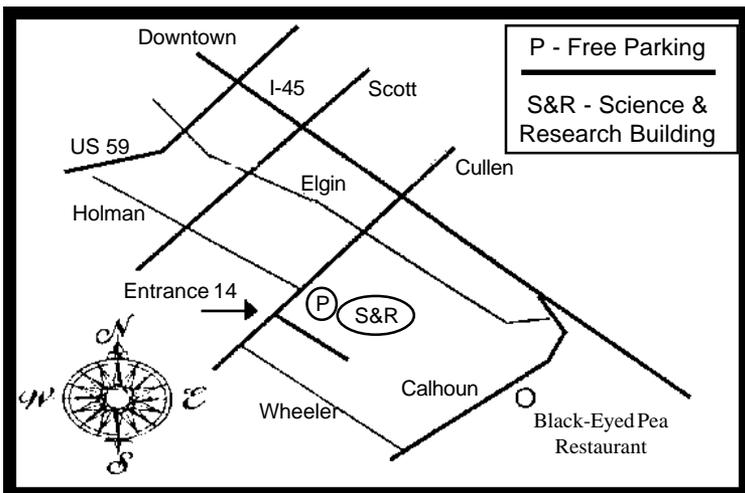
This is the duty list for April, May and June. If you are listed in this roster, please be sure to contact your supervisor for any information that you may need and the date and time to be at the site. You may change from site duty to open house or from open house to site duty by pre-arrangement with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

**April Supervisor ..... Michael B. Dye ..... 281-498-1703**  
Keith Jurgens ..... Site  
Arnie Kaestner ..... Members Observatory Night 04-19-03  
David Kahlich ..... Site  
Larry Karasevich ..... Site  
Howard Leverenz ..... Site  
Jay Levy ..... Members Observatory Night 04-19-03  
Mary Lockwood ..... Members Observatory Night 04-19-03  
Christopher Mendell ..... Site  
Robert Menius ..... Site

**May Supervisor ..... Don Selle ..... 281-391-5470**  
David Herlinger ..... Site  
Kenneth Miller ..... Site  
Debbie Moran ..... Site  
Ben Negy Jr. .... Members Observatory Night 05-24-03  
Johnny Norris ..... Site  
Richard Nugent ..... Site  
Ralph Overturf ..... Site  
Don Pearce ..... Members Observatory Night 05-24-03  
Sim Picheloup ..... Members Observatory Night 05-24-03

**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

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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