



# October, 1998

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*At the October 2 meeting...*

**Dr. Brent Archinal.**

**“Where in the Universe -  
The New Celestial Reference  
Frame”**

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*Houston Astronomical Society*

**GuideStar**

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Starline - 281-568-9340

Houston Astronomical Society presents *Starline* -- a recorded message of Society events and astronomical happenings. This service is updated regularly, so call often to keep up-to-date on Society functions, new comets and more.

H.A.S. Web Page: <http://spacsun.rice.edu/~has>

Schedule Changes & Up-To-Date Information

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

Observatory Site Telephone: 409-732-8967

★★★★★ **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 and past president** ★★★★★★

President: Don Pearce H: 713-432-0734	Treasurer: Bill Flanagan H: (713) 699-8819
Vice Pres: Kirk Kendrick H: 281-391-3834	Past-President: Allen Gilchrist H: 281-558-1190
Secretary: Matt Delevoryas H: 713-795-0808	

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

John Blubaugh ..... 713-921-4275	Liaison responsibility
Jay Levy ..... 281-992-2708	Publicity, telescope
Warren Wundt ..... 713-697-2960	Program, Field Trip/Observing
Tom Fox ..... 281-358-5419	Audit, Program, Field Trip/Observing
	Education, Welcoming

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

Audit ..... Mike Gumler ..... 409-938-4793	Program ..... John Chauvin ..... 713-981-8281
Education ..... James Benthall ..... 713-669-0838	Publicity ..... Marg Nunez ..... 713-529-2549
Field Tr./Obsg. .... Kenneth Drake ..... 281-367-1592	Telescope ..... Clayton Jeter ..... 281-383-1337
Novice ..... Mitchell/Goldberg ..... 713-461-3020	Welcoming ..... Susan Spore ..... 281-493-2614
Observatory ..... Michael Dye ..... 281-498-1703	

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

Historian ..... Leland Dolan ..... 713-529-0403	Publ. Star Party ..... Marg Nunez ..... 713-529-2549
Librarian ..... Peggy Gilchrist ..... 281-558-1190	Rice U. Coord. .... Matt Delevoryas ..... 713-795-0808
Logo Mds Sales ..... Judy Dye ..... 281-498-1703	Schedule Obs'v'ty ..... Steve Goldberg ..... 713-721-5077
Long Range Plan ..... Don Pearce ..... 713-432-0734	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 \$27/year, *Astronomy* mag \$24/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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***Call the Starline, 281-568-9340 for updates and changes***

## **Welcome to New Members!**

The Houston Astronomical Society encourages you to join our group of active amateur astronomers and take advantage of the benefits of membership. As a member you'll have access to the club observing site near Columbus, Texas. (You're required to participate in a site orientation meeting before you get the gate lock combination.) The site has concrete pads for setting up your telescope, restroom and bunkhouse facilities, and areas set aside for camping. No new members this month.

## **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 .....	Kenneth Drake .....	281-367-1592
Lunar & Planetary .....	John Blubaugh .....	713-921-4275
Occultations & Grazes ...	Wayne Hutchison .....	713-827-0828

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## *The President's Message*



This month I want to focus on some upcoming events. By the time you receive this we will already have had Astronomy Day at the George Observatory (Sept. 26th).

On October 10th we will have the annual HAS picnic at the site (details in Sept. *GuideStar* -page 10). Then on October 18th through 25th is the Okie-Tex Star Party, this year to be held at the Prude Ranch near Ft. Davis. This coincides with the Orionid meteor shower on Oct. 21st. The Orionid's progenitor is perhaps the most famous comet of all, Halley. On the 19th there is a fine 22-hour old (old as in before new) morning Moon, and on the 20th there is an extremely young 14-hour new Moon in the evening sky. Some people have asked me what is the "big deal" about observing very thin crescent moons. For myself, one of the most thrilling experiences in astronomy is the anticipation and then the successful acquisition of a thin crescent moon. My adrenaline really flows when I first "spot" a very thin crescent. Try it sometime.

In November we have the Leonid meteor shower. Approximately every 33 years there is a potential "meteor storm" with this group, (there was one in 1966) whose progenitor is Comet Tempel-Tuttle. In fact, NASA has convened a conference to deal with the potential damage to satellites with this year's shower. Unfortunately, the peak should occur about 19:00 hours U.T. on the 17th, good for China, but not necessarily so good for the Western Hemisphere. Let us hope for a good shower, nevertheless.

Clear skies and le croissant lunaire

*Don Pearce*

*Houston Astronomical Society*

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*Meeting Notice  
For Friday, October 2, 1998*

***Dr. Brent Archinal.***

*“Where in the Universe -  
The New Celestial Reference Frame”*

*Dr. Archinal is an astronomer in the  
Earth Orientation Department of the  
U.S. Naval Observatory in Washington,  
D.C. His work there centers on  
performing research into methods for  
more accurately determining the  
orientation of the Earth in space.*

*The programs for the remainder of the year are now set.  
See the H.A.S. WEBSITE for details.*

**Schedule of meeting activities:**

**Novice meeting: ..... 7:00 p.m.**

**Site orientation meeting: ..... 7:00 p.m.**

**General meeting: ..... 8:00 p.m.**

**See the inside back cover for more information.**

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# October Calendar:

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<i>Date</i>	<i>Time</i>	<i>Event</i>
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2		<b>HAS Club Meeting</b>
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting - U of H
5	3:12 p.m.	Full Moon-Harvest Moon
10		HAS Picnic at Columbus
		Members Observatory Night-Columbus
12	6:12 a.m.	Third Quarter Moon
13	7:00 p.m.	Advanced SIG Mtg.-Rice Univ., contact Bill Flanagan, 713-699-8819
17		Prime Night-Columbus
20	5:10 a.m.	New Moon
21		Orionid Meteor Shower Peaks
23		Saturn at Opposition
25	2:00 a.m.	Daylight Saving Time ends-set clocks back 1 hour
28	5:47 a.m.	First Quarter Moon

## November

3	11:19 p.m.	Full Moon, and closest perigee of 1998 expect very high tides
6		<b>HAS Club Meeting</b>
	7:00 p.m.	Novice Presentation - U of H
	8:00 p.m.	General Membership Meeting - U of H
11	6:29 p.m.	Third Quarter Moon
14		Members Observatory Night-Columbus
17	1:00 p.m.	Leonid Meteor Shower Peaks
19	10:27 p.m.	New Moon
21		Prime Night-Columbus

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

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# ***Election Notice***

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On August 27th, the Board of Directors accepted a resignation from the office of Chairman of the Welcoming Committee, and the position officially became vacant. This shall serve as notice that the Society shall hold an election for Chairman of the Welcoming Committee at the November 6<sup>th</sup> meeting. The winner of the election shall serve from November 6th until December 31st. (Note that this special election is different from the annual election held on this same day to fill this position for 1999. If the vacancy for the last two months of the year is filled by election, there is no requirement that the person elected be the same as, or different from, the person elected to serve for 1999.)

Any member with no lapse in membership since November 6th, 1997, is eligible to run for Chairman. For any further information, contact any Officer of the Society. (See the inside cover for telephone numbers.) In the unfortunate event that a quorum of the Society does not attend the July meeting, this shall serve as notice for an election at the August 7<sup>th</sup> meeting.

The Chairman of the Welcoming Committee appoints members to the Committee. The Bylaws describe the duties of the Welcoming Committee as "shall be responsible for welcoming and orienting members new to the Society, and any activities to welcome members to regular meetings." In practice, this has included being responsible for member name tags, arranging refreshments, and arranging a Society birthday celebration at the September anniversary meeting.

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

**Brazosport Astronomy Society** meets at 7:00 p.m. on the 2nd Thursday of each month in the Planetarium of the fine Arts Center at Brazosport College. Call Steve Lamb for program details (409) 297-3984

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

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

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# *HAS Annual Picnic*

## *October 10, 1998*

### *HAS Observatory Site*

#### *Columbus, Texas*

Serving time: 5:00 p.m.

Price: \$4.50 / person

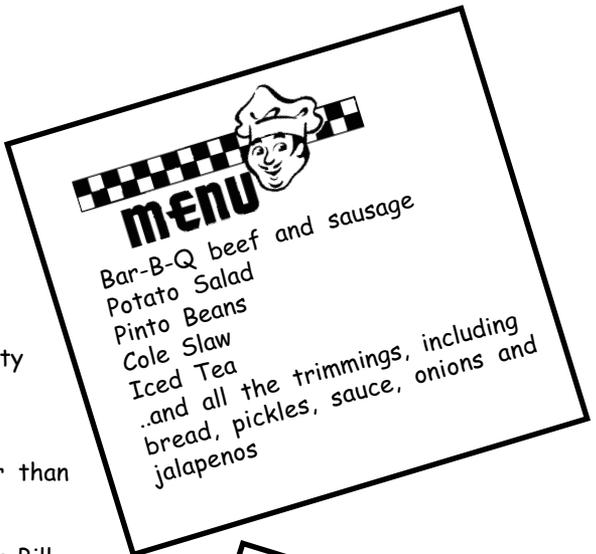
To register: Fill out the form below, write a check for the number of meals you want to purchase, and mail the check and the form to:

Bill Flanagan, Treasurer  
Houston Astronomical Society  
P.O. Box 20332  
Houston, TX 77225-0332

Check must arrive no later than  
Monday, October 5, 1998

Payment may also be made to Bill  
Flanagan or Larry Wadle at the  
October 2 HAS meeting.

Larry Wadle, Chairman  
Picnic Committee  
Rt. 1, Box 96  
Weimar, TX 78962-9525  
(409) 562-2109



I have enclosed \$ \_\_\_\_\_ for \_\_\_\_ persons

Name(s): \_\_\_\_\_

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# *Nominations for H.A.S. Offices*

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*By Scott Mitchell, Nominations Chairman*

Every year, we elect officers, directors and committee chairpersons to carry out the various jobs that makes the Houston Astronomical Society run as it should. To kick-start that process, the Board of Directors appoints a Nominations Committee to gather nominations in an organized way. How should we go about this? In the past, the nominations committee has gone down the list of the membership and called each one. That seems like a lot of work for what should be a voluntary matter. A better way would be if you see a committee you would like to help, you contact me or the other members of the Nominations Committee listed below.

The offices open for nomination are:

**President, Vice-President, Secretary, Treasurer, Five at-large directors**

**The Committees chairmanships are:**

- |                    |   |
|--------------------|---|
| <b>Audit</b>       | Once a year looks over the financial records and reports if things look okay.   |
| <b>Education</b>   | We get requests from time to time to speak at schools and other functions; this committee contacts HAS members in the area who can do that. |
| <b>Field Trips</b> | Organizes occasional expeditions to the site and other locations for observing.   |
| <b>Novice</b>      | Arranges for presentations in our monthly novice meetings, helps people get started in astronomy.   |
| <b>Observatory</b> | Looks after the maintenance of our Columbus observing site; organizes roster of "on-duty" members.  |
| <b>Program</b>     | Arranges presentations and speakers for our monthly meeting   |
| <b>Publicity</b>   | Gets the word out to the public on various H.A.S. functions and activities  |

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## *Nominations... from previous page*

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- Telescope** Organizes the H.A.S. loaner scope program, keeping track of the scopes out.
- Welcoming** Makes newcomers and visitors feel at home at H.A.S. functions.

Each member ought to review this list and consider what he or she can do to help out. We all have demands on our time. We all hesitate to try things for the first time. But I can promise two things to anybody who offers to place their name in nomination for those offices:

- 1.They will have lots of help and suggestions from others who have done it before them.
- 2.You will have fun. (If anybody wonders about this, you need to stop by and see the fun Amelia Goldberg and I have, looking after the Novices!)

That reminds me. The Board sanctioned the notion of co-chairman running together. If you are not sure you have the time or the inclination to undertake a job on your own, consider getting a friend to split the duties as a co-chair arrangement. Also, if you want to participate as a just a member of a committee, we would be glad to be a clearinghouse for that, as well.

How do you get in touch with the Nominations Committee? That's easy. Just contact us by phone or e-mail.

Scott Mitchell	Phone (713) 461-3020. Email : STARSCM@aol.com
Mary Lockwood	(281) 495-7548
Bill Pellerin	(713) 880-8061 Email: BILLP10566@aol.com
Warren Wundt	(713) 697-2960
Ricardo Palmeira	(713) 669-1409

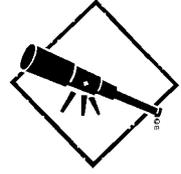
If you would just like further information, don't hesitate to call. We would like to hear from you at least a week before the next meeting.

“Ask not what your Astronomical Society can do for you. Ask instead what you can do for your Astronomical Society.” —alleged to be Galileo's closing remark to the Inquisition, which reportedly did not go over very well.

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# Observatory Corner

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By Michael B. Dye Observatory Chairman



This month I wish to thank a new member who just donated a Meade Starfinder 12.5 inch Dobsonian Telescope to the Observatory Site. This telescope was donated by Robert Cline who, at the time, was not a member. Hopefully by the time this article is distributed, he will have been able to attend the October General Meeting and join. I would like to thank Robert for his donation. We will use it. His donated telescope along with the previously donated telescope will be

kept in the new storage building starting October 10th. Access to the new telescopes will be by calling the Observatory Telescope scheduler (Steve Goldberg) who after verifying that the requested telescope is not already scheduled, will supply the caller with the combination of the day. Use requirements will be defined (as simple as I can get them) and posted on the door of the (new) storage building.

We got our first Randalls statement this last month (like August) covering the months of April, May and June. Members spent a grand total of \$280.01. The bad news is that this is not enough to qualify the H. A. S. for a donation check. The good news is even though the total purchases were less than \$2,500.00, the total purchases will automatically carry over to the next quarter. Randalls also changed the payment schedule to one percent on all purchases over \$2,500.00.

If you have a Randalls Card, please have same coded with #6618 which is the H. A. S. code. The more we buy at Randalls, the more it will help the Houston Astronomical Society.

And now a few words about the grass (the growing and cutting kind). While our riding lawn mower is OK for mowing around the telescope observing pads and picnic area, we have reached the point where the Observatory Site needs a real tractor with a bushhog. We need a

*Continued...*

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

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medium size tractor and bushhog to cut the grass around the rest of the cleared area. We are looking for about a 45 horsepower tractor with said bushhog as either an attachment or that we can get separately. If any member knows where we can find the above described equipment, please call me at home (281-498-1703) or work (281-240-5521) and talk to me about it.

The second weekend of October (Saturday the 10th) is the weekend of the Annual Picnic. Please come and enjoy an afternoon with other H. A. S. members, spouses and guests. There will be some games and activities during the afternoon, self prepared or catered food for dinner and hopefully (if the sky's are even close to clear) an evening of viewing. The main festivities of the day will be the official roll out of the New Dob telescopes, the opening of the new building and the (and I have no idea how to say it) cooking of the new Bar-B-Q grills. I am looking for any members who will help me get the site ready for all the fun activities. I will be at staying at the Observatory Site Wednesday, Thursday and Friday. If you would like to help, please call me at home (281-498-1703) or work (281-240-5521).

From time to time I notice the various items left behind at the Observatory Site. The latest item of interest is what looks like a fairly new Nissan Hubcap (now at least three months older). I mentioned this fact in the July *GuideStar* hoping that the owner would come and pickup the Hubcap. Said Hubcap is propped up against the right hand EXIT sign by the bathroom sidewalk. Would the owner please collect same and take it home.

*Please fill out the appropriate log form when you use the site.*

Prime Night for October is the 17th.

Members Observatory Night for October is the 10th.

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# *Welcome to Astronomy Day*

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If you are reading a copy of this month's *GuideStar* because you received it at Astronomy Day, we hope you'll take the next step -- come to the October H.A.S. meeting (details in this *GuideStar*). Attendance is free and is open to all. There'll be a Novice meeting at 7:00 (Scott Mitchell and Amelia Goldberg do a GREAT job with this), and a general meeting at 8:00 with announcements and a program of interest. Then, how about becoming a HAS member?

HAS membership is the best astronomy deal in town! You get a subscription to *GuideStar*, the ability to use our observatory site (Mike Dye, observatory chairperson) and equipment (after training), and access to the loaner telescope program (free use of a telescope!) (Clayton Jeter, chairperson). There's a yearly banquet and a yearly picnic (details in this issue). We'll keep you up-to-date on astronomical happenings in the area with StarLine (see front cover), and via our Web Page (Steve Goldberg, webmaster)

There are plenty of special interests in astronomy, and whatever your interests are, you'll find someone to share them with in the society. Some of our members get excited about comets, some like the challenge of finding the young moon. Some like dim galaxies, and some observe variable stars. To get you started, Amelia Goldberg and Barbara Wilson have developed the "Universe Sampler" (A Journey Through the Universe for the Beginner). This outstanding program is a complete introduction to astronomy by two of the most experienced observers in our club. When you complete this program, you're rewarded with a pin in recognition of your achievement.

We look forward to seeing you at our next meeting and having you join with us in the study of our universe. See you on October 2!

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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://spacsun.rice.edu/~has>

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

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# Observatory Duty Roster

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by Michael B. Dye, Observatory Chairman

This is the duty list for October, November and December. 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.

**For October supervisor ..... Matt Delevoryas ..... 713 795-0808**

David Granadino ..... Site  
Michael Gumler ..... Members Observatory Night 10-10-98  
Chai S. Heng ..... Site  
David L. Herlinger ..... Site  
Gary Hlivko ..... Site  
John Huff ..... Members Observatory Night 10-10-98  
Wayne Hutchinson ..... Site  
Clayton L. Jeter ..... Members Observatory Night 10-10-98

**For November supervisor ..... Charles Foyt ..... 254-773-5068**

Stanley Jones ..... Site  
Arnie Kaestner ..... Site  
David Kaestner ..... Site  
Bill Krell ..... Site  
Howard Leverenz ..... Members Observatory Night 11-14-98  
Mary Lockwood ..... Members Observatory Night 11-14-98  
Robert Menius ..... Site  
Larry Mitchell ..... Members Observatory Night 11-14-98

**For December supervisor ..... Kirk Kendrick ..... 281 391-3834**

John Mitscherling ..... Members Observatory Night 12-12-98  
Jeff Moore ..... Site  
Debbie Moran ..... Site  
Ben Negy Jr. .... Members Observatory Night 12-12-98  
Johnny Norris ..... Site  
Richard Nugent ..... Members Observatory Night 12-12-98  
Ralph Overturf Jr. .... Site  
Don C. Pearce ..... Site

Please remember that Site work can be done anytime and does not have to be done just before Members Observatory Night. Contact your Site Supervisor for details. Names are selected for Site Duty using the current Alphabetical listing for Observatory Key Holders. If any member knows of a conflict please call me before your name is listed.

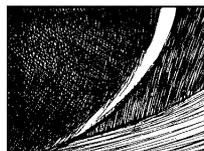
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# Comet 52P/Harrington-Abell

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By Matt Delevoryas

Following is an ephemeris for Comet 52P/Harrington-Abell, brought to you by the folks at Starline, with information provided by the IAU Circulars Committee. Do not believe the magnitudes listed. The comet has spent many weeks nearly ten magnitudes brighter than these predictions, which are based on its normal behavior. Check Starline (281-568-9340) for information about its current magnitude. During the ephemeris, it is a high northerly morning object in Auriga. The elements are from MPC 27081, and the magnitude is from the 1990 Comet Handbook (which is also the magnitude still used in MPC 31882). For elements, contact the Committee. For additional ephemerides, please contact Kenneth Drake, the Chairman of the HAS Comet SIG. The columns C-E and C-S give the comet-Earth and comet-Sun distances in a.u., and each line is for 0<sup>h</sup> UTC.



Date	Julian	J2000.0				B1950.0				Mag	C-E	C-S
		RA	Dec		RA	Dec						
mmm dd	Date	h	m	deg mi	h	m	deg mi					
Sep 24	2451080.5	5	43.6	+35 20	5	40.2	+35 19	19.6	1.78	2.11		
Sep 29	2451085.5	5	53.3	+35 48	5	50.0	+35 47	19.4	1.71	2.08		
Oct 4	2451090.5	6	02.9	+36 15	5	59.6	+36 15	19.3	1.64	2.06		
Oct 9	2451095.5	6	12.4	+36 41	6	09.0	+36 42	19.1	1.57	2.04		
Oct 14	2451100.5	6	21.5	+37 06	6	18.1	+37 08	19.0	1.50	2.02		
Oct 19	2451105.5	6	30.4	+37 31	6	27.0	+37 33	18.8	1.44	1.99		
Oct 24	2451110.5	6	38.9	+37 54	6	35.5	+37 57	18.6	1.38	1.97		
Oct 29	2451115.5	6	46.9	+38 17	6	43.5	+38 21	18.5	1.31	1.95		
Nov 3	2451120.5	6	54.4	+38 40	6	51.0	+38 44	18.3	1.26	1.93		

# Comet C/1997 J2 Meunier-Dupouy

By Matt Delevoryas

Following is an ephemeris for Comet C/1997 J2 Meunier-Dupouy, brought to you by the folks at Starline, with information provided by the IAU Circulars Committee. During the ephemeris, it is high early night southern object in Aquarius. On the evening of November 2nd, it passes within a third of a degree of M 73, with closest approach around 11 PM CST. The elements are from MPC 31482, and the magnitude follows MPC 31028. For elements, contact the Committee. For additional ephemerides, please contact Kenneth Drake, the Chairman of the HAS Comet SIG. The columns C-E and C-S give the comet-Earth and comet-Sun distances in a.u., and each line is for 0<sup>h</sup> UTC.

Date mmm dd	Julian Date	J2000.0				B1950.0				Mag	C-E	C-S
		RA h m	Dec deg mi	RA h m	Dec deg mi							
Sep 24	2451080.5	21 04.2	-01 41	21 01.6	-01 53	11.3	2.82	3.60				
Sep 29	2451085.5	21 01.9	-03 25	20 59.2	-03 37	11.4	2.90	3.63				
Oct 4	2451090.5	21 00.1	-05 03	20 57.5	-05 15	11.5	2.99	3.65				
Oct 9	2451095.5	20 58.9	-06 34	20 56.2	-06 46	11.6	3.09	3.68				
Oct 14	2451100.5	20 58.2	-07 58	20 55.5	-08 09	11.7	3.19	3.71				
Oct 19	2451105.5	20 58.0	-09 15	20 55.3	-09 27	11.8	3.29	3.73				
Oct 24	2451110.5	20 58.3	-10 26	20 55.6	-10 37	11.9	3.40	3.76				
Oct 29	2451115.5	20 59.0	-11 30	20 56.3	-11 42	12.0	3.51	3.79				
Nov 3	2451120.5	21 00.1	-12 29	20 57.4	-12 41	12.1	3.62	3.82				



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# Comet C/1998 M5 LINEAR

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By Matt Delevoryas

Following is an ephemeris for Comet C/1997 M5 LINEAR, brought to you by the folks at Starline, with information provided by the IAU Circulars Committee. During the ephemeris, it is a high northerly evening object in Cygnus, entering Lyra on October 6th. The elements are from MPC 32169, and the magnitude follows MPC 32356. For elements, contact the Committee. For additional ephemerides, please contact Kenneth Drake, the Chairman of the HAS Comet SIG. The columns C-E and C-S give the comet-Earth and comet-Sun distances in a.u., and each line is for 0<sup>h</sup> UTC.

Date	Julian	J2000.0				B1950.0				Mag	C-E	C-S
		RA	Dec		RA	Dec						
mmm dd	Date	h m	deg mi	deg mi	h m	deg mi	deg mi					
Sep 24	2451080.5	19 58.6	+40 18	19 56.8	+40 10	10.9	1.77	2.33				
Sep 26	2451082.5	19 53.1	+40 11	19 51.3	+40 03	10.9	1.77	2.32				
Sep 28	2451084.5	19 47.8	+40 03	19 46.1	+39 55	10.9	1.78	2.30				
Sep 30	2451086.5	19 42.8	+39 54	19 41.1	+39 46	10.8	1.79	2.29				
Oct 2	2451088.5	19 38.0	+39 43	19 36.3	+39 36	10.8	1.80	2.27				
Oct 4	2451090.5	19 33.5	+39 32	19 31.8	+39 25	10.8	1.80	2.25				
Oct 6	2451092.5	19 29.2	+39 20	19 27.5	+39 14	10.8	1.81	2.24				
Oct 8	2451094.5	19 25.1	+39 07	19 23.4	+39 01	10.8	1.82	2.22				
Oct 10	2451096.5	19 21.3	+38 55	19 19.6	+38 49	10.8	1.84	2.21				
Oct 12	2451098.5	19 17.7	+38 42	19 16.0	+38 36	10.7	1.85	2.19				
Oct 14	2451100.5	19 14.4	+38 28	19 12.6	+38 23	10.7	1.86	2.18				
Oct 16	2451102.5	19 11.2	+38 15	19 09.5	+38 10	10.7	1.87	2.16				
Oct 18	2451104.5	19 08.3	+38 02	19 06.6	+37 57	10.7	1.88	2.15				
Oct 20	2451106.5	19 05.6	+37 49	19 03.9	+37 45	10.7	1.89	2.14				
Oct 22	2451108.5	19 03.2	+37 37	19 01.4	+37 33	10.7	1.90	2.12				
Oct 24	2451110.5	19 00.9	+37 25	18 59.1	+37 21	10.6	1.91	2.11				
Oct 26	2451112.5	18 58.8	+37 14	18 57.0	+37 10	10.6	1.92	2.09				
Oct 28	2451114.5	18 56.9	+37 03	18 55.1	+36 59	10.6	1.93	2.08				
Oct 30	2451116.5	18 55.1	+36 53	18 53.4	+36 49	10.6	1.94	2.07				
Nov 1	2451118.5	18 53.5	+36 44	18 51.8	+36 40	10.6	1.95	2.05				
Nov 3	2451120.5	18 52.1	+36 36	18 50.4	+36 32	10.6	1.96	2.04				

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# *Dark Texas Skies*

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Dear Friends in Astronomy,

Please look over this note and petition I received today from Ruthie Premack who is trying to spearhead the effort to get the Light Pollution Bill reintroduced next January in Austin. I also talked today with John Gregory in Dripping Springs who feels that there may be a pretty good chance to overcome the objections of the TexDot people this year.

Sign this petition and then forward it to others, send a copy back to the originator at [ida.premack.com](mailto:ida.premack.com)

*Barbara Wilson*

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Dear Barbara Wilson –

- 1) Thank you for taking the time to speak with me on the phone earlier this afternoon.
- 2) Below is the e-mail petition we spoke of. It will be interesting to see how -or if -it works.
- 3) To read about our efforts in Texas, the bill itself, and to print a hard copy of the petition please go to the website referenced at the bottom of this email.
- 4) Thank you also for finding out if it was acceptable for you to speak to this issue to the media.
- 4a) I will look forward to hearing if you can be a contact person
- 5) I just spoke with Ted Hollingsworth. He is finding out if he can be a contact person with the media. Thanks for his name and number.
- 6) Thanks for the fax copy of your article... I look forward to having the time to read it.
- 7) Good luck and please don't hesitate to be in touch as needed.

*Sincerely, Ruthie S. Premack*

***Petition is printed on next page. Send this as an Email, or visit the designated web site to get a printable copy. - Ed.***

*Continued...*

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**Dark Texas Skies... from previous page**

DEAR 76TH TEXAS LEGISLATURE LEGISLATORS & GOVERNOR BUSH:

During the 75th Legislature you passed a pilot program to use energy efficient, money saving, fully shielded, security lighting at the Texas Department of Criminal Justice (TDCJ) facility in the Fort Stockton Area. We would like you to take this initiative statewide.

For most of the industrialized world, the awe-inspiring view of our stars has disappeared, lost in the glare of streetlights, security lights, billboards, and sports facilities.

The problem isn't outside lighting. It's OUTDATED & INEFFICIENT outside lighting.

I AM SIGNING MY NAME BELOW TO SHOW MY SUPPORT IN REQUESTING THAT THE STATE OF TEXAS PASS DURING THIS SESSION REPRESENTATIVE PETE GALLEGOS BILL FOR IMPROVING THE FUTURE OF RESPONSIBLE NIGHTTIME OUTDOOR LIGHTING IN OUR STATE.

The increasing opaque glow of Light Pollution in our night sky is unnecessary. It is evidence of energy and money wasted needlessly.

Technology exists which can retain our security, reduce our expenses, Save on energy consumption and

LET US SEE THE STARS IN OUR NIGHT SKY AGAIN...  
NO MATTER WHERE IN TEXAS WE LIVE!

Name \_\_\_\_\_ City, Texas  
optional: phone # or e-mail address

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

(please continue to add numbers and names below)

- Please "sign" your name and forward this e-mail petition to other people

*Continued...*

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## ***Dark Texas Skies... from previous page***

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you know in Texas.

- So we can keep track of signatures.... Please send a copy of your “signed” petition back to the originator at e-mail address [ida.premack.com](mailto:ida.premack.com) as you forward it to other Texans.
- If you do not agree with the petition - please do not kill it. Just send it back to [ida.premack.com](mailto:ida.premack.com)
- Updated grassroots information, a complete wording of the bill, and additional copies of the petition - for printing and hard copy distribution can be found on the World Wide Web at [www.limber.org/ida/lp.html](http://www.limber.org/ida/lp.html) and click on the topic “San Antonio Section of the IDA is sponsoring a statewide petition drive”

Thanks for caring and taking the time to make a difference.

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## ***A Bedtime Story...***

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Sherlock Holmes and Matthew Watson were on a camping and hiking trip. They had gone to bed and were lying there looking up at the sky. Holmes said, “Watson, look up. What do you see?”

“I see thousands of stars,” Watson replied.

“And what does that mean to you?”

“Well, I guess it means we will have another nice day tomorrow. What does it mean to you, Holmes?”

Holmes replied, “To me, it means someone has stolen our tent.”

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## *Email Received --*

Re:Importance of Astronomy/Space development for Mankind as a whole

Dear H.A.S,

I am sure that your society and its members will appreciate how important it is that the public at large understand the importance of astronomy and space science / technology in the affairs of this planet. To quote three examples:-

1/ the issue of global warming is being used as an argument for restricting economic growth, and even, by more extreme environmentalists, as an argument for the rejection of Science and technology in general, in favour of a simpler, more pastoral life. Nothing could be more disastrous, especially in view of the clear need for a population of 6 billions and rising to have the resources of human ingenuity and foresight at its disposal. Without science, and astronomy, our culture could revert to a sort of barbarism in which the whole idea of improving human conditions is rendered taboo! The fact that recent research now points to the Solar cycle as an important factor in our climatic changes, rather than simply wicked humanity, should prove the old saying of Sun Tzu "The man without intelligence resembles a blindfolded man locked into a room with a tiger!" To understand our world, we need more science and cosmic perspective, not less.

2/ The now increasing public awareness of the threat from asteroid/comet impacts shows that a civilization without access to space is doomed to extinction, however Politically Correct or Green it might be. We simply cannot build a sustainable civilization as long as we remain confined to one small fragile planet!

3/ Since our civilization demonstrably depends more and more on science and technology, it is important that our children be encouraged to study these areas at school - they will be more important to us than gender/ethnic/media studies and the like, although more intellectually rigorous! Space and astronomy projects are proven motivators, but demand expanding and interactive programmes in these areas with employment opportunities at the end of their studies. We should push for these without hesitation wherever possible. Astronomy and Space development are the seedcorn of our culture as well as a new potential area for economic activity.

The above being so, we should, as astronomers be ready to tell the public that astronomy/space science is no mere hobby, or rarified irrelevance, but a matter of life and death for our children. Financial and moral support for astronomy and space development is therefore a vital part of our world culture, and should be promoted by our community with full vigour. Those of you who wish to agree, might like to visit/ join one of the following sites

Space Age Associates <http://www.astronist.demon.co.uk/index.html>

Spaceguard-UK <http://dspace.dial.pipex.com/town/terrace/fr77>

Greater Earth Manifesto <http://ww.canavese.it/autino/ge-manif.htm>

Yours sincerely,

Dr Michael Martin-Smith, President of Space Age Associates

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# *Alive And Well....*

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by Clayton Jeter, Loaner Telescope Program Chairperson

Hello gang... the night sky has been pretty good lately, other than those terrible rain clouds that we gotta keep dodging. I'm really glad that this Hurricane season is almost over. Hope we all stayed high and dry.

The loaner telescope business is alive and well. If you need a scope, put your name on the list and I will hold one for you.... Promise! To give all of you an idea of how busy I am ... in the last year and a half, I have signed out a total of 38 loaner telescopes ... both our 8" Coulter Dobs are the most popular followed by the society's C-11 coming in a close second.

As I write, There are two scopes available for you. Just ask me for one at our general meeting, E-Mail me at:stonebloke@aol.com, or call me at (281) 383-1337.

See ya soon.....

*cloudless nights.. always, Clayton*

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## *...from your Editor*

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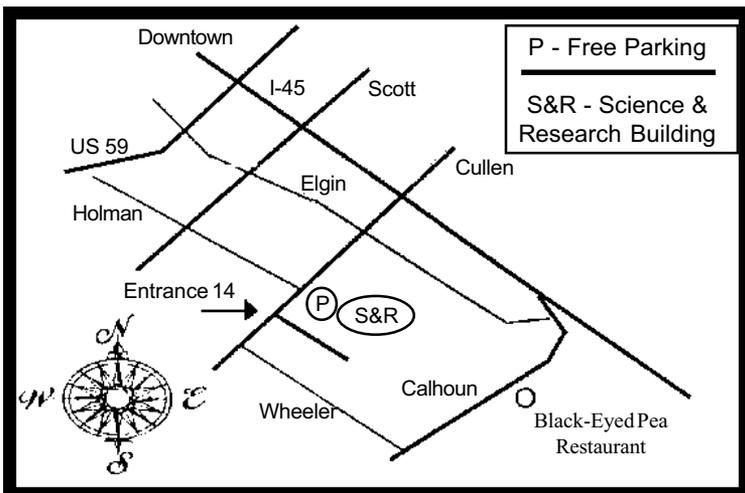
by Bill Pellerin, Editor

I am finishing the *GuideStar* from the Star Hill Inn in New Mexico. The first two nights of our five-night stay have been completed. The skies have been astounding! The Milky Way is so bright it almost puts your eyes out, and Jupiter looks like a searchlight! From here, I have been pursuing variable and double star observations (working on the AL double star list), and Mark Williams has been working on imaging Arp galaxies with his NGT18 (he has bagged 20 in the first two nights). I hope you're enjoying this new moon cycle, wherever you are!

The technology available to us allows me to finish the *GuideStar* far from home, and transmit a printable file to Mike and Judy Dye. They can then take it to a print shop and print copies for mailing. Another PDF goes to our Web master (Steve Goldberg) who makes it available for reading on the HAS Web site.

Neat! -- Clear skies everyone!

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### General Membership Meeting

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

### Board of Directors Meeting

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

### GuideStar Information

The H.A.S. *GuideStar* 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 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 second Friday 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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AOL: BILLP10566; Internet: BILLP10566@AOL.COM

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## **Houston Astronomical Society**

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