

THE FBAC OBSERVER JULY, 2003 VOL 17, NO. 7

Fort Bend Astronomy Club, P.O. Box 942, Stafford, TX 77497-0942

WHAT'S HAPPENING IN JULY

Wednesday, July 2—An hour or so after sunset, look for a sliver of a New Moon $2\frac{1}{2}^{\circ}$ NW of rapidly fading Jupiter.

Friday, July 4—**HAPPY BIRTHDAY AMERICA....**Also, Earth is at aphelion, farthest from the Sun; distance = 152 million km, or 94.5 million miles.

Saturday, July 5—Mercury is at superior conjunction. This month's meteor shower, known as the S Delta Aquarids, peaks on July 29, the date of the New Moon. This peak is very broad so look in the predawn for several days around that date.

Sunday, July 6—First Quarter Moon.

Tuesday, July 8—Waxing gibbous Moon occults double star Alpha in Libra. Look $1\frac{1}{2}$ hours after sunset. For more info: <http://www.lunar-occultations.com/iota> Also 40 minutes after sunset use your binoculars and try to spot Saturn, 0.8° lower right of Venus.

Thursday, July 10— $1\frac{1}{2}$ hours after sunset, Jupiter and Regulus are 10° apart and closing.

Saturday, July 12—**TELESCOPES FOR TELETHON AT TINSSELTOWN THEATER, BELTWAY 8 AT WESTPARK. 5 P.M.-11 P.M.**

Sunday, July 13—Full Moon known as 'Thunder Moon' or 'Hay Moon' rises at 2:21 p.m. CDT.

Tuesday, July 15—2 hours before sunrise, Mars is going east at 0.2° per day and passes 0.5° north of 4th magnitude star Tau Aquarli. One hour before sunrise, look very low for Saturn 25° to 30° N of E.

FRIDAY, JULY 18—**FBAC MEETING. WE ARE BACK AT OUR REGULAR MEETING PLACE 3232 AUSTIN PARKWAY.**

Monday, July 21—40 minutes after sunset, Mercury and Jupiter are 6° apart.

Thursday, July 24—40 minutes after sunset, Mercury and Jupiter are now 1.6° apart.

FBAC MEETING FRIDAY JULY 18 FIRST COLONY CONF. CTR



EAST DOME SCHEDULING KEITH RIVICH

The FBAC owns and operates an 18", fork mounted newtonian telescope which is housed at the George Observatory in Brazos Bend State Park. As part of our agreement with the Observatory we are responsible for supplying volunteers during nights of public use, which includes all Saturday nights and some Fridays. In return we are allowed full access to the scope for personal use. Included with the scope are a full set of Televue eyepieces and filters, several sets of star-charts and reference books, a computer with charting programs and a CCD camera. To have access to this equipment you MUST go through a short training program AND volunteer at least once each quarter. The training can take place on the same night that you volunteer.

During the dark-moon period, which runs from several days prior to third-quarter moon to several days past new-moon, use of the scope is scheduled due to demand. At all other times the scope is available on a first come basis. If you volunteer for a public night, even during the dark-moon period, then the scope is yours for the remainder of the night. To schedule a dark moon night I must be contacted no later than the full-moon prior to the next observing runs. Each month I will publish the current East-dome volunteer schedule, observing schedule, and research team schedule.

JULY SATURDAY NIGHT SCHEDULE

JULY 5	DILLON / ELLIS / WILLIAMSON
JULY 12	MILLER / MACKAY / OPEN
JULY 19	OPEN / OPEN / OPEN
JULY 26	OPEN / OPEN / OPEN

See <http://users3.ev1.net/~keithrivich/astronomy/eastdome/calender.html> for updates

DARK MOON OBSERVING SCHEDULE

This part of the schedule will be continually updated and posted at <http://users3.ev1.net/~keithrivich/astronomy/eastdome/calender.html> For more information on how to schedule dark-moon nights call me at any of the numbers posted below.

Also available are the clubs 8" dobsonian reflector and the Solaris scope (for viewing sun w/ H Alpha filter).

The clubs Meade 8" and 10" LX-200 loaner scopes are available for use. For an update on availability please call me or go to

<http://users3.ev1.net/~keithrivich/astronomy/eastdome/page3.html>

For more information or to sign up as a volunteer please contact me at: HM 281-468-8491 or WK 713-771-6944 or e-mail at icgalaxies@cs.com

An Ode To Tuesday Evenings

Some might call it a meeting place,
While others say it's just a waste
Of time
That occupies our feeble mind
With tales of yore and things sublime.

A place of conversations where
We talk of things up in the air,
And of the earth and wind and where
We can only go a little piece
Toward our goal but cannot cease
Our quest for things ethereal
And even things imperial.

This place! This place! Of majesty
Where great minds meet and talk is free.
This place of jargon scientific-wise,
A place where we sometimes fantasize,
About great machines that bend men's minds,
And can even take us back in time,
To show us places beyond our prime.

The things said here have gravity,
They come not from mouths of pomposity.
Things of truth and goodwill are foremost said
And never go to a speaker's head.

The things we speak are of great import,
And the world awaits our final sort
Of priorities and things to do
But first things first: Let's eat!

Because
This place! This place! Of majesty
This place where great minds meet and talk is free.
This place of jargon and fantasy
Of clusters, planets, and galaxies
Can only be called by the name it takes:
The International House Of Pancakes.

By Wes Whiddon (with apologies to poets worldwide)

Getting ready for Mars!

Of all the celestial sights available in 2003, Mars will be the one to go after. On August 26-27, the Red Planet makes an extraordinarily close approach to Earth ... so close it will outshine (at -2.9 mag!) everything in the night sky except the moon. At its closest, it will be 34,646,418 miles from Earth. According to Aldo Vitagliano (an expert in computational celestial mechanics at the University of Naples, Italy), the last time Mars came so close was in 57,617 B.C. An even closer approach occurs in the year 2287, but unless you are currently well under the age of 5, you had better not miss this year's opportunity!

If you are already observing Mars, you may have seen the whitish spot, which is the south polar cap. This is due to the fact that the southern hemisphere of Mars is tipped toward Earth. Being the planet's southern hemisphere "spring", it was quite large and prominent during May and June. Observations during July and August will show that cap diminishing as Mars moves into summer.

The June 2003 issue of *Sky & Telescope* has a great article starting on page 93 with techniques for observing Mars this year. Also mentioned in this issue are a number of websites (listed below). *Sky & Tel* promises that upcoming issues will feature more observing tips and the latest analyses of spacecraft data. If you aren't familiar with their website, go to www.SkyandTelescope.com where you will find a lot of current information on Mars.

- www.uapress.arizona.edu/online.bks/mars/contents.htm ... Read in its entirety the book "The Planet Mars: A History of Observation and Discovery" by Sheehan.
- www.MarsDaily.com ... Keep track of space missions and scientific results.
- www.astrodigital.org/mars ... The Explore Mars site for everything Martian.
- <http://cmex.arc.nasa.gov> ... This site is NASA's Center for Mars Exploration at Ames Research Center and offers a Mars calendar, excellent Mars images, and 3-D views of prime landing sites.
- <http://humbabe.arc.nasa.gov> ... View a daily-updated six-part screen showing the current relative orbital positions of Earth and Mars, how large Mars looks from Earth (and vice versa), and the Red Planet's current weather.
- www.sci.esa.int/marsexpress ... Information on ESA's new Mars Express spacecraft and Beagle 2 lander.
- <http://mars.jpl.nasa.gov> ... view the latest on NASA's Mars Global Surveyor and 2001 Mars Odyssey already in orbit around Mars.
- www.isas.ac.jp/e/enterp/missions/nozomi/cont.html ... read about Japan's Nozomi spacecraft and two yet-to-be-named rovers as part of the Mars Exploration Rover Mission.

Book Review ... Mars: The Mystery Unfolds ... by Peter Cattermole

This new book follows a previous publication by the author called Mars: The Story of the Red Planet, published in 1992. Since then there has been much new research on the old Mariner 9 and Viking images, new programs of Earth-based spectroscopic and infrared measurements, and most recently, observations from the Hubble Space telescope that have rapidly changed our perception of Mars' climate and daily weather patterns. And this all preceded the very successful Mars Pathfinder and Mars Global Surveyor missions, which provided us with first-hand knowledge of Martian materials and Mars' weak magnetic field.

Peter Cattermole's new book offers amazing pictures of surface features such as fluvial, cratering, volcanic and tectonic development, as well as insight into the nature of the climate and weather, the rock chemistry and the planet's interior. Most of the pictures of surface features are black and white, but there is a section in the middle of the book containing true color pictures of the surface taken by the Rover team at the Mars Pathfinder landing site in 1997.

If you have an interest in the Red Planet, you should not pass up this book!

"This is an outstanding book, written by one of the world's leading experts. It provides detailed information about what we have learned about Mars, and it incorporates all the latest developments. It must become a standard work on the subject." -Sir Patrick Moore

Oxford University Press, 2001—<http://www.oup-usa.org>—ISBN 0-19-521726-8

Minutes from our June 13 FBAC meeting.

Steve Goldberg gave both the novice and the main programs. The novice program was on the TSP pin program available for novices. The main program was on "what happens at TSP". Among other things, we learned surprising details about the hazards of attempting to get the liquid inside glow sticks out of its sealed container and inside a helium balloon.

Steve also noted that the telescopes for telethon will take place on July 12 and August 9 at the Tinseltown on WestChase. He promised to post more details to the club e-mail list.

In business, our president Wes Whiddon noted that we have not been honoring our club's constitution, which states that dues renewals should take place in September of every year, not one year from the date of last renewal, which is what we've been doing. Our vice-president Derek Newton proposed that we go back to the Sept-Sept scheme as stated in our constitution. Jack McKae seconded. The vote passed almost unanimously; there was one opposition. Obviously new members may join in any month. New members and renewals of old members happening outside September will pay appropriate pro-rated fees for the partial year.

The door combination on the East-Dome will be changed in July. If you are not sure whether you are on the list of people to be informed of the new combination, contact Terry Hiserodt.

Leonard Patillo has a largish collection of historical Sky and Telescope magazines and is trying to find a good home for them. If anyone has any suggestions, please contact him.

The east-dome committee reports that they are getting new computers from a donation. These will not be owned by the museum. The plan is to return the computers currently in the dome, which are owned by the museum, to the museum. Jim Ellis announced that he has assembled a computer CD with all the various manuals, etc, for all the East-dome equipment. Contact Jim for details about how you can get a copy!

The asteroid team reported success in being the last people on earth to observe the probable Apollo 12 third-stage rocket ("J002E3") as it disappeared into the morning twilight and ended its current year-long apparition. This object is now slowly drifting away from the vicinity of the earth, and is not expected to be observed again from earth-based telescopes for many years, possibly decades. The asteroid team is planning on trying again in October, however, because it wasn't expected to be observable nearly as late as they successfully observed it in May, either!

The asteroid team also reported that 11 of their asteroid discoveries were numbered in the last month, and are thus newly eligible for naming. This unprecedented burst of newly numbered asteroids was mostly due to the much-appreciated efforts of a Canadian astronomer, Andrew Lowe. He is an expert at finding historical observations of asteroids on archival sky-survey plates. After learning of our club's existence, he did us the favor of back-extrapolating our asteroid's orbits, finding them on archival survey plates, and obtaining historical measurements of their positions (some of them as far back as 1951)!

If you have any suggestions for suitable names for some of our club's newly namable discoveries, please suggest them to Bill Dillon.

The variable team reported that they successfully measured the brightness of the the variable star "UZ Boo" at 20+ magnitude, using the 36" telescope with appropriate calibrated photometric filters, and shot with automated

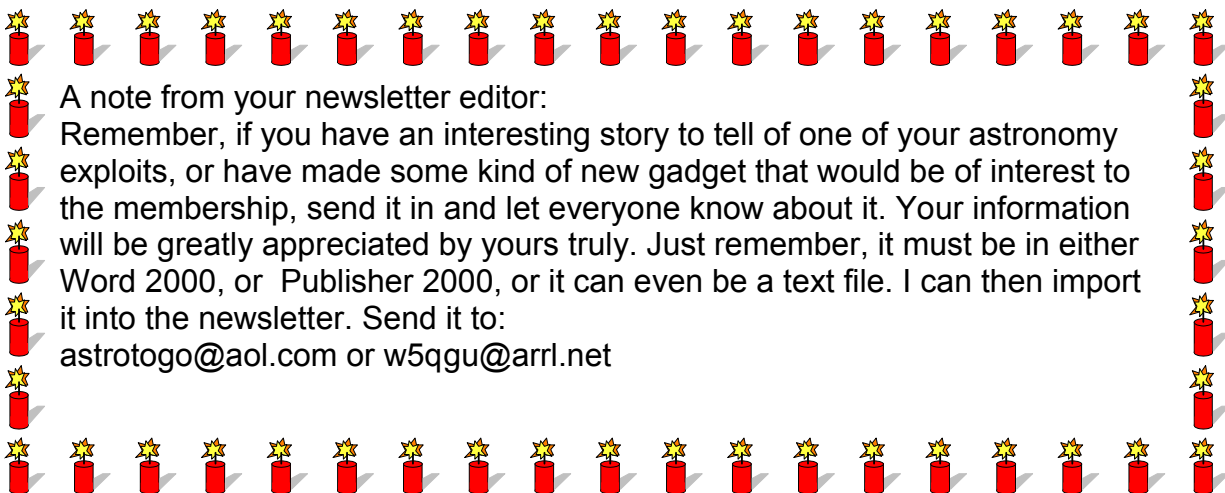
guiding of the telescope. (Both of these were made possible by the Zhilka grant.) This means that we are now proven to be capable of providing uniquely valuable data to the AAVSO (the American Association of Variable Star Observers, of which Bill Dillon is a vice president). Very few amateurs have the capability to go that dim. The professionals, who do have the scopes to go that dim, can't afford to use their telescope time for such "routine" measurements. As a result, astronomers have very little idea what stars like UZ Boo are up to most of the time. This is data that we are now in a position to obtain. If you are interested in becoming a variable star observer, talk to Bill Dillon. Being able to use the 36" is not required! You can contribute quite valuable data to the AAVSO with nothing more than binoculars.

Keith Rivich explained that he is in charge of scheduling the East Dome and the club's loaner telescopes. If you are interested in doing public duty in the East dome, or want to use one of the club's fine loaner telescopes, talk to Keith (aka "K2"). Remember that if you use the east dome for observing, you are expected to volunteer to help run the telescope on a Saturday night at least once a quarter or so.

Leonard Patillo suggested that Astronomy On Wheels should attempt to go to areas of Houston most in need of learning about science: "inner city observing". He received strong encouragement from the club membership and will be looking into the possibilities.

Our treasurer Terry Hiserodt reports that the club treasury contains \$750 in checking, and approximately \$150 in petty cash. About half of that money is already committed, however. In particular, he has ordered multiple copies of some astronomical-league publications, which he will be offering to the membership at a future meeting.

Remember that we will be switching back to our old meeting place on Austin parkway, starting with our next meeting (July 18), and that club officer elections will be coming up soon. Time to start thinking about whether you might want to run!

A decorative border consisting of a horizontal row of 18 yellow stars on red candles at the top, a horizontal row of 18 yellow stars on red candles at the bottom, and vertical columns of 6 yellow stars on red candles on the left and right sides.

A note from your newsletter editor:
Remember, if you have an interesting story to tell of one of your astronomy exploits, or have made some kind of new gadget that would be of interest to the membership, send it in and let everyone know about it. Your information will be greatly appreciated by yours truly. Just remember, it must be in either Word 2000, or Publisher 2000, or it can even be a text file. I can then import it into the newsletter. Send it to:
astrotoago@aol.com or w5qgu@arrl.net

CLUB OFFICERS & CLUB MEETINGS

FORT BEND ASTRONOMY CLUB

The next meeting will be Friday, July 18 at our regular meeting place, 3232 Austin Parkway. The time is 7:15 p.m. Dues are \$30/ year for the first member of a household, \$5 for each additional member at the same address, \$15 for students.

HOUSTON ASTRONOMICAL SOCIETY

The HAS meets the first Friday of the month in room 117 of the University Of Houston Research building. The Novice program begins at 7:00 and the main meeting at 8:00.

JOHNSON SPACE CENTER ASTRONOMICAL SOCIETY

Refer to the JSCAS web site for meeting sites. There is a link on the FBAC web site.

NORTH HOUSTON ASTRONOMY CLUB

The North Houston Astronomy Club meets on the 4th Friday of the month at Kingwood College. The meeting starts at 6:45 p.m. and the main meeting begins at 7:30 p.m.

FBAC OFFICERS AND PHONE NUMBERS

President: Wes Whiddon	265-7614	Newsletter Editor: Leonard Pattillo	980-1175
Vice-President Derek Newton	313-1765	Librarian: Alec Cruz	713-702-9069
Treasurer: Terry Hiserodt	495-4012	George Observatory	242-3055
Secretary: Joe Dellinger	531-5417	Membership Chairman:	
Alcor: Tracy Knauss	(409)-798-7917	Refreshments: Jack McKaye, Jayne Lambert	
East Dome Cord. Keith Rivich (K2)	468-8491	FBAC loaner scopes: Keith Rivich	468-8491

All phone numbers A/C 281 unless otherwise indicated.

FBAC HOME PAGE: <http://www.fbac.org>

THE SECRETARIES REPORT APPEARS ELSEWHERE