

The FBAC Observer

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JUNE, 2004

FBAC Club Member's Name Enshrined In Space

In a simple ceremony on Friday evening last at the George Observatory, one of the founding fathers of the Fort Bend Astronomy Club was bestowed with a rare honor—having his name attached to an asteroid.

Leonard Pattillo, a member of FBAC since its inception, is described by fellow observers as a major part of the early effort by FBAC to procure and install a large telescope at the George Observatory. But it was Leonard's work with Astronomy On Wheels, a kind of mobile star party, bringing the sky to kids and the public that brought him this tribute.

It is fitting that the asteroid receiving Leonard's name was jointly discovered by long time FBAC members Dennis Borgman, Bill Dillon, John Harrison, and Keith Rivich. A deserving tribute to a fellow Bendonite.

INSIDE THIS ISSUE:

What's Happening	2
Landmark Continued	3
Leonard's Star Chart	3
Obsolete Constellations	4
East Dome Schedule	5
Astro Trivia	6
Club Info	7

HELP ESTABLISH A LANDMARK FOR THE HISTORIC TEXAS TRANSIT OF VENUS SITE IN SAN ANTONIO

By Paul D. Maley

Many of you may not know that in September 1882, an expedition led by Jean-Charles Houzeau (1820-1888) the Director of the Royal Observatory in Brussels, Belgium made its way to San Antonio in order to prepare for the second Transit of Venus of the 19th century that was to occur three months later. After nearly a year of research site investigation, I have recently confirmed the precise locations of where their transit pier and heliometer were situated and would very much like for amateur astronomical societies in our area to commemorate the site by establishing an official State of Texas historic landmark. This is likely the place where the most prominent astronomical event that transpired in the state took place during that century; it is unmarked and essentially unknown except for an obscure article written 14 years ago in the *Southwest Historical Quarterly*.

The cost of establishing such a marker is \$1250 and any donations toward it are tax deductible. Having spent my early years in San Antonio, I am working with the San Antonio Astronomy Association-----a non-profit scientific organization; they are collecting funds and will disburse the check to the state once the application for the marker has been approved. I have already made four trips to San Antonio to locate the site and meet with various people to discuss this effort. I was shocked to find that there are only a few historical landmarks in Texas which are astronomy-related: McDonald Observatory and two older colleges where astronomy was one of the courses taught there; then there are the Odessa and Bedias meteor craters.

In concert with this initiative, I have been able to lobby successfully with Fort Sam Houston (FSH) which has just agreed to authorize the establishment of a museum-related historical marker at that installation to honor the U. S. Naval Observatory team who observed the transit less than 0.1 mile east of the Belgian site. This was an American expedition observing on U.S. government property, unlike the Belgian expedition which was on private property. The commanding general of FSH, Daniel Perugini has acknowledged that the army will develop a marker and place it where we located the site earlier this year using GPS and based on the original field notes by Asaph Hall, the expedition leader (who is the noted discoverer of the two moons of Mars in 1877).

Continued on page 3

What's Happening This Month

June 1—Venus is almost a goner sitting just 5 degrees above the horizon tonight. The sliver of a planet will set 1 hour after sunset.

June 2—Full Moon at 20 minutes past midnight. The moon makes it's closest approach to Earth this year. Watch out for high tides in your bathtub.

June 3—Comet Linear begins making evening appearances in our part of the world. Look in the west-southwest about 1.5 hours after sunset for this faint fuzzy.

June 8—Transit of Venus across the face of the Sun. Transit viewing from our locale not favorable but if you decide to look at the sun just to check and make sure all those astronomical calculations regarding transit times are correct **BE ABSOLUTELY SURE YOU USE A FILTER**. You might need one or two of your eyeballs in the future.

June 9—Last quarter moon at 3:02 p.m. CDT.

June 10—Arcturus crosses the meridian 1 hour after sunset. Arcturus' proper motion is significantly greater than other stars in our neighborhood.

June 11—Elusive Pluto at magnitude 14 is visible all night in the constellation Serpens.

June 12—Comet NEAT is getting fainter but still visible in binocs. It has now moved into Ursa Major and will stay there most of the summer.

June 14—Earliest sunrise of the year but due to the Earth's elliptical orbit, not the latest sunset.

June 15—Venus morphs into a morning star. Find it tomorrow morning shortly before sunrise about 5 degrees below the crescent Moon.

June 16—See if you can find the shape stars in the constellation Libra in our light polluted skies. Good luck.

June 17—New Moon at 3:27 p.m. CDT. Luna reaches the farthest point from Earth.

June 18—Young Moon 3 degrees above the horizon at sunset. **FBAC MEETING, 7:30 P.M., FIRST COLONY CONFERENCE CENTER, 3232 AUSTIN PARKWAY, SUGAR LAND, TX**

June 19—The Moon and the Gemini twins mix it up tonight.

June 20—Summer solstice at 7:57 p.m. CDT. Travel to Wake Island to view the sun directly overhead.

June 21—Vega, Deneb, Altair dominate the eastern sky. This collective is commonly called the Summer Triangle.

June 22—Luna pierces the heart of Leo near Regulus with Jupiter only 13 degrees to the upper left of the Moon.

June 23—Scorpius, the most beautiful summer constellation, appears low in the south-southeast at twilight. The scorpion's tail clears the horizon more than 2 hours later.

June 24—Venus sits a few degrees from Aldebaran, the eye of Taurus tomorrow morning.

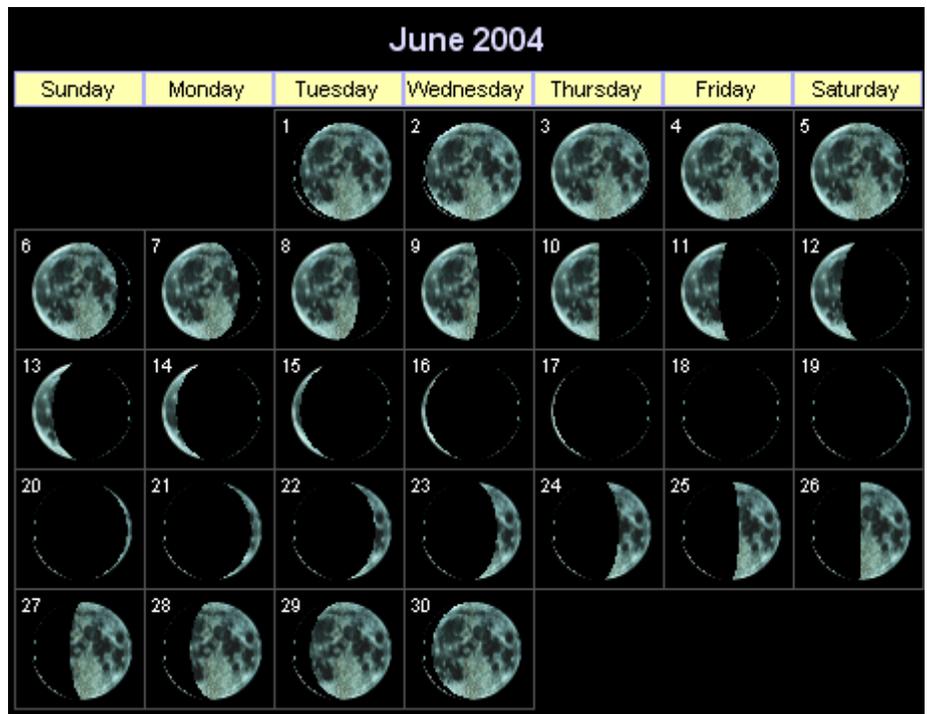
June 25—First quarter moon.

June 26—Hercules crosses the meridian at midnight. Try to find globular clusters M13 and 92 with your binocs.

June 27—Latest sunset (longest day) of the year. If you want a full blown explanation of why, gooogole the web.

June 29—Gibbous Moon passes Antares in the heart of Scorpius during daylight hours tomorrow.

June 30—Mercury appears in the evening sky at magnitude 1.0. Check the west-northwest horizon 45 minutes after sunset with your binocs.



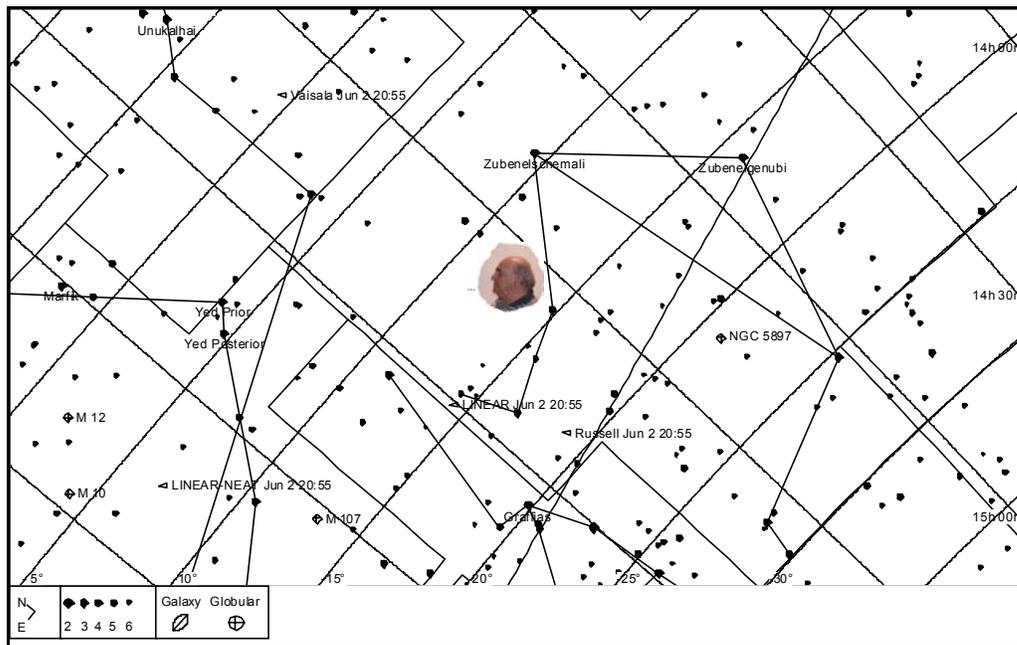
Continued from page 1

However, the Belgian station led by the remarkable astronomer J.-C. Houzeau, is currently unrecognized and unmarked. It is on land owned by the Bullis House Inn, a bed and breakfast on the southeast side of the city. The proprietors of the property on which the 1882 site lies have given their permission for such a marker to be installed provided funds can be raised. I have already begun the paperwork for submission to the Texas Historical Commission justifying the marker.

If your life and experience in Texas has left you with pride as being a Texan and an intense interest in the history of our state, and you have an interest in preserving a part of astronomical culture and contributing to a worthwhile cause, please consider sending a donation to the SAAA. The contact person is Bryan Tobias at 210.4952671. Donations can be made out to the San Antonio Astronomy Association, P.O.Box 701261, San Antonio, TX 78270-1261. They will forward you a receipt which you can use for tax purposes in 2004.

We hope that if this is approved and funded, a ceremony commemorating the exploits of Houzeau will be held on December 6, precisely 120 years after the significant Venus transit observations that he made. It is planned to invite members of all the societies from the Austin, Houston, San Antonio region to represent the astronomy community. If you plan a trip to San Antonio next year, consider staying at the Bullis House Inn, 621 Pierce Street, and you will be able to see the marker for yourself and visit Ft. Sam just across the street. In addition to a military museum, you can see the Quadrangle where the notorious Indian chief Geronimo was held after his capture a few years after the transit. Many of the stone officers housing quarters that were built in the same period are still in use today. And, of course, the U.S. Army marker for the U.S.N.O. expedition site should be ready by winter.

It is noteworthy to comment that Houzeau was an exceptional individual; he was a prominent journalist, surveyor, astronomer, prolific writer, hiker, social activist, and traveler. Those wishing to read more about the life and times of Houzeau should take a look at SKY AND TELESCOPE magazine, October 1990, pp. 372-274.



Location of Asteroid 58535 Pattillo on June 3, 2004 in the constellation Libra
Notice the unusual shape of this newly named object.

OBSOLETE CONSTELLATIONS

PART 4

YOU recall our discussions over the past few months dealing with constellations that have been removed from star atlases, for one reason or another, by the IAU. When I initially started doing research on this subject, I found 24 such asterisms that no longer appear on the charts. Now, further research reveals that more than 100 such constellations existed over a period of time encompassing more than 300 years. I don't even pretend that I can find information on most of those, but I do have information on about 24, and that is what I am passing on to you.

—JORDANUS—

JORDANUS was a constellation representing the river Jordan, and was introduced by the Dutchman Petrus Plancius on his celestial globe in 1613. Jordan had its source near the tail of the Great Bear, Ursa Major, in what is now known as Canes Venatici, and flowed under the Bear's feet and ended near the head of the Bear in Camelopardalis, another Plancius invention. Jordanus was not shown by Bode on his atlas.

—LOCHIUM FUNIS— —the log and line—

AN ADDITION to the constellation Argo and introduced by Bode on his 1801 atlas, representing a nautical log and line used for measuring distance traveled at sea. It was positioned next to Pyxis, the Compass. For what Lochium Funis was placed in the sky for, it was put in the part of the sky that dealt with nautical things.

MACHINA ELECTRICA *the electrical machine*

A CONSTELLATION introduced by Bode on his atlas of 1801. Machina Electrica represents one of the mechanical wonders of the age, an electrostatic generator. It lay in the southern hemisphere, between Fornax and Sculptor.

MONS MAENALUS —mount maenalus—

A mountain of Arcadia in the central Peloponnese, introduced as a constellation by Johannes Hevelius in his star atlas of 1687, where he depicted it as a mountain on which Boötes is standing. It appeared on many later maps, always as part of Boötes, and it never had an independent existence.

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 providing 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.

APRIL SATURDAY NIGHT SCHEDULE

June 5	OPEN / OPEN / OPEN
June 12	MACKAY / OPEN / OPEN
June 19	Open / OPEN / OPEN
June 26	Hiserodt / OPEN / OPEN

Visit www.rivich.com/astronomy/eastdome/calender.html for updates

NON-SATURDAY NIGHT OBSERVING SCHEDULE

This part of the schedule will be continually updated and posted at <http://www.rivich.com/astronomy/eastdome/calender.html> for more information on how to schedule dark-moon nights call me at any of the numbers posted below.

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

The Meade 8" and 10" LX-200 loaner scopes are available for use. For an update on availability please call me or go to: <http://www.rivich.com/astronomy/eastdome/page3.html>

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

Astro Trivia

The Moons Of Mars. Here on Earth?

In 1980 a strange rock fell out of the sky and landed on a Soviet military base in the country of Yemen. Now scientists are saying it could have come from one of Mars' moons. A Russian scientist spent the better part of the last two decades puzzling over the fist sized meteorite and has concluded it must be part of Phobos, the larger of the two Martian satellites.

Commonly called the Kaidun meteorite, the puzzler contains small chunks of minerals never seen before in space debris. Using an electron microscope, X-rays, and vaporized fragments, scientists at JSC checked out its crystalline structure finding, among other things, volcanic rock that only forms in massive bodies with a core, mantle and crust. But they also found carbon-rich material that only occurs in asteroids. It is believed that an asteroid captured into orbit around Mars would have the carbon material and could have received the volcanic material as it was blasted from the surface by meteorite and asteroid hits.

Since Phobos orbits only 6000 km above Mars, it seems the most likely candidate.

The Dynamic Trio: Hubble, Chandra, and Spitzer

In an unprecedented combination of deep space images, astronomers at the National Optical Astronomy Observatory have found super-massive black holes that, until now, were practically invisible to telescopes operating in the visible and x-ray spectrum. Using the Spitzer Space Telescope, seven objects out to redshifts of 6 or higher were observed and may be part of the population of missing super black holes that powered cores of the earliest galaxies.

Hubble observes in visible light, Chandra in the x-ray spectrum, and Spitzer in infrared. Their outputs were combined to make these discoveries.

FBAC Club Meeting, Friday June 18, First Colony Conference Center, Sugar Land, TX

Telescopes For Telethon—July and August, 2004. Be there or be square. Details in next months newsletter.

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Dedicated to the acquisition and dissemination of information pertaining to the science of astronomy

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We're On The Web
[Http://www.fbac.org](http://www.fbac.org)



You are invited to submit your opinions for inclusion on this page. Please be thoughtful and respectful of others in your comments. Rants will not be published. All articles should be 450 words or less and are subject to editing for clarity and length before publication. Please submit in Word format to:
stargazer411@earthlink.net

The Fort Bend Astronomy Club meets on the third Friday of every month except for those months when special meetings are called. The next regular meeting will be at 7:30 PM on June 18, 2004 at the First Colony Conference Center, 3232 Austin Parkway, Sugar Land, TX. Dues are \$30/year for the first member, \$5 per additional household member. Student dues are \$15/year.

The **Houston Astronomical Society** meets the first Friday of the month in room 117 of the University of Houston Research Building. The novice program begins at 7:00 PM and main meeting at 8:00 PM.

For the **Johnson Space Center Club**, refer to the JSCAS web site for meeting times and sites. There is a link on the FBAC web site.

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

Why There Was No May, 2004 Newsletter

Quite frankly, I ran out of time. Personal problems involving my 89 year old mother who spent 12 days in the hospital, taking a week off work to cope with that situation, work demands, and plain old every day things to deal with were more than I could handle. By the time everything straightened out—sort of—it was so late that I felt embarrassed to publish a newsletter. And, I have to admit, I took a week off to attend the Texas Star Party, the best thing that's happened to me this year. It was the greatest and I loved every minute of it, including the rain, lightning, wind, hail, dust, and sharp pointy things you can stumble into in the dark. The scabs on my legs are actually beginning to fall off now.

You may also notice that the June issue is also a little late. And it's not, in my opinion, the greatest piece of literature I've ever produced. It's short on content and long on big type to fill up space. The reason? I'm still dealing with my mother's health problems and the bugaboo of modern man: work.

But don't despair, things will get better—I hope. I'm sure the missing contributors that have so graciously written articles in the past will reappear. So look for bigger and better things next month.

Until then, clear skies.

—Wes Whiddon