FORT BEND ASTRONOMY CLUB
P.O. BOX 942
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The FBAC Observer

VOLUME 18, ISSUE 3

MARCH, 2004

Stepping Up To The Plate

By Wes Whiddon

A lighting ordinance for Ft. Bend County is within our reach. If it doesn't happen, it won't be for lack of trying by George Observatory employees and Ft. Bend Astronomy Club members. For two years, Phil Inderwiesen and Barbara Wilson have been the driving force in this effort and maybe, just maybe, it will come to fruition.

Last week, FBAC members were out in full force to file comments at a hearing. If my count was right, there were 26 members present and 22 of them commented. They commented well and confidently even though the county judge threw everyone a curve by cutting the comment time down from three to two minutes. As Barbara Wilson put it, each person who stood at the podium spoke with eloquence and passion. It looked like a done deal when we outnumbered the opposition by about a 10 to 1 margin. But with politics, nothing is ever certain.

In a move that looks suspiciously like a delaying tactic, the commissioners voted to hold another public meeting on March 16. One has to wonder if the March elections could possibly have anything to do with that decision. By the 16th most, if not all, of the commissioners will be back comfortably ensconced in their chairs, wearing their dark suits, and presiding over another meeting. But their position will be secure for another term and, since voters have a short memory, whether or not the ordinance passes will be a moot point.

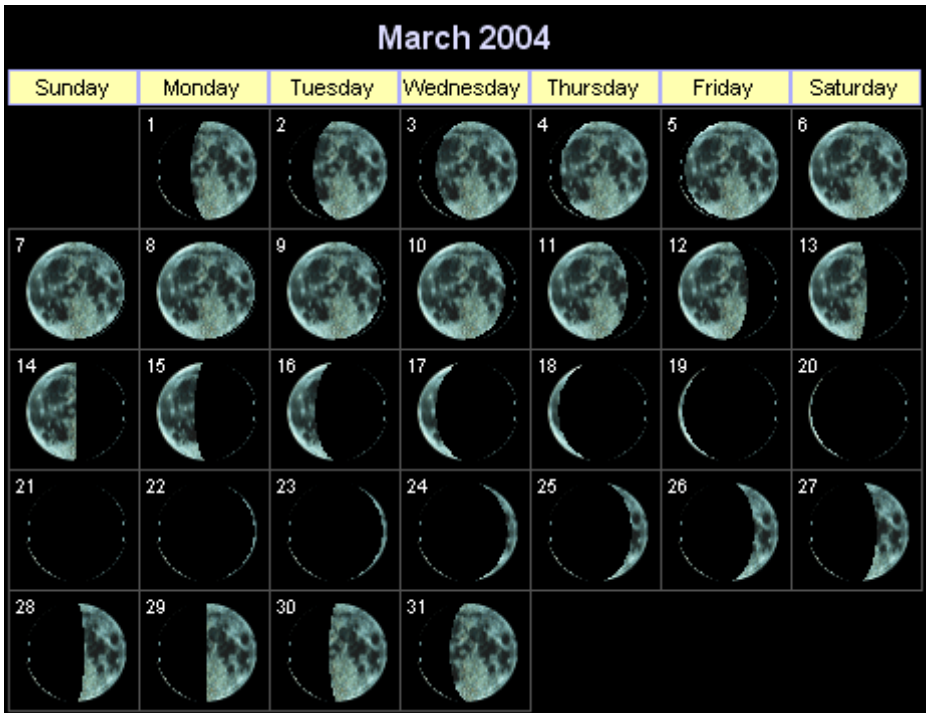
Laying politics aside though, there are more dangers to be faced. The entire project is being portrayed by one of the opposition as a conspiracy. Nowadays, this seems to be the route to take. Conspirators come in many forms but the granddaddy of them all is the government. And since there's always a conspiracy to be fought somewhere, what better way to raise support than invent one right in your own backyard. Of course, there's always the attendant petition which has also reared its ugly head.

But there is a clear and present danger we have to face: complacency. If we believe we have done all we can do. If we believe the outcome is preordained. If we believe our presence at the next hearing won't make a difference. If we stop swimming and drown when we're only a few feet from shore, then it'll all be wasted. On February 24th we stepped up to the plate and hit a fly ball to left field. An unlucky gust of wind bumped it into the glove of the opposition. But the game is not over. On March 16, 2004 we need to grab the bat and step up again. This time it's got to be a home run.

INSIDE THIS ISSUE:

What's Happening This Month

March 1—The waxing moon sits near the twins in Gemini while Saturn rests about a fist-width to the upper right.
March 2—Pollux and Castor hang vertically a few degrees above Luna. By tomorrow, the Moon slides 15 degrees lower into the constellation Cancer, the Crab.
March 3—Mercury is in "superior conjunction" on the far side of the sun. Jupiter reaches "opposition" exactly opposite the sun as seen from Earth.
March 4—Jupiter is closest and brightest to us at magnitude –2.5. The Gallilean moons will line up on the left side of the planet around 2 hours after sunset. A double shadow event occurs from 1:22 a.m. until 1:59 a.m. CST.
March 5—Spring begins today for the northern hemisphere—of Mars. Because of Mars' tilted axis relative to the sun, it, like the Earth, has seasons. But it's orbit is highly elongated, causing further climatic variations.
March 6—Full moon at 5:14 p.m. CST.
March 7—For the next few nights, we experience a reverse Harvest Moon effect as Luna rises more than an hour later each night. It rises less than 30 minutes later around the autumn equinox.
March 8—Spica, the brightest star in Virgo, rises about 3 hours after sunset.
March 9—Four of the five planets we can see with the unaided eye are visible in the evening skies in a 128 degree span. Venus in the west and Jupiter in the east bookend Saturn and Mars.



March 10—Venus at magnitude –4.2, blazes in the west and will be above the horizon for almost 4 hours.
March 12—Look for the zodiacal light in the west. Or not since it's almost impossible to see in our light polluted skies. This phenomenon is created by dust particles in the plane of our solar system scattering sunlight.
March 14—During coming days, sky watchers can see all five of the naked eye planets. But don't wait too long because Mercury fades quickly later in the month.
March 17—Last easy to see Moon before it turns new. Thirty minutes before sunrise the thin crescent can be spotted just above the horizon.
March 18—Orion is past the meridian as it emerges at dusk.
March 19—FBAC CLUB MEETING, 7:30 P.M. AT THE FIRST COLONY CONFERENCE CENTER, 3232 AUSTIN PARKWAY, SUGAR LAND, TX. And after the meeting, you can stand around and wait for the new moon which occurs at 4:41 a.m. tomorrow morning.
March 20—Spring begins in our hemisphere at 12:49 a.m. CST. At that moment in time, the sun stands directly over the equator. Travel to a spot in the Indian Ocean due south of the Indian peninsula to see it happen.
March 21—First young moon after New. Catch it 30 minutes after sunset.
March 24—Check out the Moon and Venus tonight. These two bright objects are only 2 degrees apart. You can also locate Venus in the daytime using the moon as a pointer. Look to the upper right of Luna.
March 28—Moon reaches first quarter at 5:48 p.m. CST. Britain and Europe begin Daylight Saving time by advancing their clocks ahead 1 hour. The U.S. continues with Daylight Wasting time until next month.
March 30—Comets NEAT and LINEAR will be reaching naked eye visibility by May...maybe. Comets are notoriously fickle so keep your eyes on the sky for the next couple of months.
March 31—Venus reaches 50% illumination. Half phase should correspond with the planet's greatest elongation from the sun but because the orbits of both Earth and Venus are elliptical, elongation was reached two days ago.

Beyond The Oort Cloud

Going Deep

By
Paul Downing and Keith Rivich

I have always liked aperture. Although it is possible to see quite a lot in smaller instruments, if people ask me which telescope to buy I always recommend they go for the largest aperture they are prepared to carry and set up. For me the 14 inch Celestron has proved to be a superb work horse through the years, giving crisp, sharp images of the planets, yet having enough aperture to allow reasonably comfortable viewing of the fainter nebulae and galaxies. We bought the 4 inch Takahashi because of the legendary sharpness and color which can be obtained in these apochromatic telescopes, but apart from the brighter planets and double stars, the C-14 beats it hands down for visual work. We now use the Tak exclusively for imaging and have bought a 16 inch Dob to extend our visual observing tools. Another thing people don't always realize is that it is much, much harder to image with long focal length, larger aperture scopes, and you can get superb results much more easily in smaller instruments. Use the bigger scopes for your eyeballs!

—Paul Downing

My introduction into this hobby came about 15 years ago. After reading about the "gigantic" telescope out at the George Observatory I decided to take a ride out to the Park and see what was up. Much to my dismay the Observatory was closed due to "technical difficulties". Bummer, it was such a long ride. The very nice lady at the headquarters said "there's a bunch of people over there (pointing to late arrival), I'm sure they would not mind you looking through their telescopes". After a wonderful evening looking at many wonderful objects I decided this was what I really want to do. My first real scope was an 8" Schmidt-Cass which saw many hours under the night sky. I used this scope for nearly 5 years before lucking into a 12.5" Dob and then, finally, a 25" Dob.

—Keith Rivich

During this series of Deep Sky articles we will be talking about the many factors which affect the observing of deep sky objects, such as:

- The use of filters
- The different types of telescopes
- The effect of aperture
- Using averted vision – what is it and how does it work?
- Magnification – how much should you use?
- Age, and the deterioration of your eyesight as the get older
- Sky conditions and dark adaptation

We will also be talking about how to prepare for your observing session and will discuss some of the tools available to help you plan.

Along the way we will be introducing you to many fascinating deep sky objects, some of which can be seen from the Houston area with moderate aperture and some that will challenge even the larger scopes and darkest skies so sit back and enjoy the ride, as we are "Going Deep"!

For The Beginner

Beginner's Corner

by Jim Ellis

When starting Astronomy there are just a few essentials. Albeit some will argue the merits of them, I see these as essentials—curiosity, a star map or good book about the sky, and a red flashlight to read the chart/book by.

The most important part is curiosity as that is what motivates you to go out night after night and look at the sky. I'll get to what there is to look at in future columns, but simply looking up at the sky and thinking something along the lines of "Wow, this is really neat." Even if it is the moon, or the few stars you can see from the backyard or even a constellation or two there is something to look at. You'd be surprised what you can see from a backyard in Sugar Land. If you are in Houston, well good luck!

OK, so I'm looking up and going "Ooh cool!" Now, what am I looking at? This is where a star map or good book about the sky will help. The simplest star map is a planisphere and one of the best I've seen is by David Levy. These can be found at Barnes and Nobles, Borders, and I think Land, Sea and Sky (I'm not sure on the last, I've seen them at the first two.) Keep in mind that these planispheres are specific to where you are in the country and the world. Thus a planisphere bought in Chicago won't necessarily show you all you can see in Texas. The same thing goes for south of the equator; there are stars and objects down there that you can't see from Texas. Follow the directions on the planisphere, look up and you are on your way. As for books, there are two that I highly recommend. The first is ***Nightwatch*** by Terence Dickinson. This book is a great starter. It tells you some of the basics in a very readable format and includes star charts for sections of the sky that make it easy to learn the sky. The other book I found very helpful is ***365 Starry Nights*** by Chet Raymo. This book is a tour of the sky throughout the year. You can sit in the backyard in a lawn chair sipping your favorite beverage, open the book to whatever day of the year it is and it will guide you through the prime area of the sky for that date and tell you a lot about what you are seeing. That's it for your basic library. I would avoid the fancy star atlases for a while. We'll get to that in later columns.

You may be saying, "Wait a minute. I'm sitting in the backyard, sipping my favorite beverage, looking up and you're telling me to read a book? Hello, it's dark out here!" That's where the red flashlight comes in. First we'll go over some of your options and then "Why Red?" Your first option is the easiest. Find any old SMALL flashlight. You don't want the big fluorescent lanterns or huge maglight you want a little flashlight that will put out just enough light without lighting up the neighborhood. Then get the darkest, reddest and cheapest nail polish you can find at the store and thickly coat the clear plastic at the business end of the flashlight with the red nail polish. Let it dry and when you turn on the flashlight, the light is now red. Your other option is the variety of red LED (light emitting diode) flashlights at academy or Land, Sea and Sky. These work just as well as your cheap red nail polish flashlight at much more cost. Now on to the "why red?" part, when in the dark we are mostly blind until about 20 –30 minutes of adaptation in darkness. This is why when you turn out the light and try to get in bed you stub your toe or trip over your kid's toy—you are blind, you cannot see clearly. (Get ready for this K2!) When you turn that light off chemical changes begin in your eyes that result in dark adaptation. To put it simply, if you wait twenty to thirty minutes standing around in the dark, you will see that toy rather than trip over it. Shine a white light in your eyes at this point and turn it back off and congratulations, you are blinded for another 20 to 30 minutes. The chemical change in your eyes when exposed to white light is that quick. Now, wait your 20 to 30 minutes and turn on a red light and you'll experience something different. Turn off the red light and you can still see that toy. The red light does not trigger as massive a change as the white light. There is a change, but the red wavelengths of light do not trigger as massive a chemical change in the eye as the higher and more energetic wavelengths. You can still see. The nice thing about dark adaptation and the sky is that after 20 to 30 minutes and see more in the sky.

So, get out that lawn chair, sit in the backyard with or without your favorite beverage, open your map or book, turn on your red flashlight and enjoy the beginning of your new hobby.

Clear skies!

Saturday Evening Star Party at the George Observatory
By Randy Brewer

It has been a while since I took a scope to the deck of the George Observatory for a Saturday evening star party. So last Saturday (2/21/04) Keith Rivich and I made arrangements to meet at late arrival with our campers since the park was full. Keith just got a new 30+ foot monster "Pull Toy" for Michael and Kim. Dolly and I got there about 10:30 in the morning and set up on the back corner of the lot. We left room for the Rivich camper to pull in close to us since there was no power and we would be sharing generators.

Dolly and I enjoyed the morning just hanging around the camper. Paul Downing arrived a little later and joined us under the awning for a nice visit. He was going to spend the night with the Rivichs in their camper. About 12:30 the Rivich toy pulled in. We got them set up and immediately proceeded to cook lunch. Burgers grilled outside were on the menu today. After consuming numerous great hamburgers and the appropriate liquids, we decided to go for a bike ride through the park. Preparations included hooking up young Michael's new bike trailer to Kim's bike. Naturally, once the ride began, Michael promptly went to sleep. We rode from Late Arrival to the observatory where Kim and Michael rested while Dolly and I went on to the trails around Horseshoe Lake. On the back side of the lake, we stopped to admire a 12' long alligator sunning on the bank. He was drawing quite a crowd of observers by the time we went on.

Upon returning to the camper, it was time to stow the bikes and break out the scope for the trip to the deck to get set up for the evening of viewing. After getting all set up, I began to scan where I thought that the very new slice of a Moon would be above the setting sun. I didn't get it until the sun actually set. It was a very thin slice indeed at less than one day old and only 3.3% phase.

Next was Venus which looked like a perfect little half moon at 68% phase. Seeing was holding very nicely on the 6" refractor. Finally, my VIP of the evening, Saturn was the next target which I planned to stay on for most of the evening. It was simply stunning. The crowds made the obligatory Uhhhs and Ahhhs with the occasional WOW!!!! Since I stayed on it most of the evening, I had multiple opportunities to point out features to look for to the excited observers. I had them look at the Cassinni division, the Crepe Ring, the shadow of the planet on the rings, the varying colors on the surface of the planet, and of course the many moons surrounding Saturn.

Later I did swing over to Jupiter once it rose to about 35 degrees above the horizon. But by now the high - thin clouds that we had been dealing with throughout the evening were getting much thicker. Jupiter still looked great through the haze.

Through the evening, many people asked if they could try to take pictures of Saturn through my eyepiece with their digital camera. I obliged their request if there wasn't too much of a line and watched them try to get the "perfect shot". This seems to be requested more and more as people get their new digital cameras out. I must thank the people who came to watch the scope for me so I could take the necessary pit stops as night went by.

I broke the scope down just after 10:30 PM since the crowd was waning and the weather was worsening.

Dolly and I retreated to the camper and broke out the wine to celebrate the successful evening. Shortly, Paul, Keith, and Kim showed up with Michael in tow. By the time we got the popcorn going, Dennis, Tracy, David Jenkins, Jack and Judy showed up to round out the party list. We shared lots of stories (and drinks) well into morning. It was a great evening to top off a super day.

Overall, we had a wonderful weekend at the park. We intend to get out to late arrival more often this year for club observing also.

Hope to see you at the George the next time we are there…

Editors Note: It is believed that Paul Downing made a complete recovery from the stories and drinkies.

Seeing Double

Seeing Double

By Wes Whiddon

I've been working on the Astronomical League double star program since last August . This is something a light polluted observer can do from his or her back yard with a small telescope and these sessions have been quite enjoyable for me. Most of the stars are fairly bright--with a few exceptions--and there's no giant rush to get it done. It's quite rewarding when you split a close double; some of them are very beautiful, especially in a good refracting telescope.

One thing I've found is that you can stop for a while and easily pick it up again. You only have to decide which part of the night you are willing to give up to observing. But the easiest way is to just wait until Earth makes it's way around our star and get outside a few nights a month to pick up the ones that are visible that time of year.

Last Friday's clouds gave way to clear skies late in the day and *she who must be obeyed* was away at a women's conference so I found myself outside with the little refractor even though the moon was waxing in the first quarter. The moon, of course, had to compete with my neighbors porch light but I manage that situation by throwing up a light shield between me and his house.

I was set up and ready to roll by 7:30 and, having only about 15 or so doubles to go on my list, I was determined to knock them out by the time I quit. The first star on the list, Epsilon Canis Majoris, was a no go because its place in the universe sits at -28 degrees, 58 seconds and my house blocks anything below about -10 degrees in declination. That one will have to wait until later.

Number 2 was a no go also. Delta Geminorum is a fairly close double at 6.8 arcseconds apart. The only problem is that Delta Gem is magnitude 3.5 and it's companion is 8.2. One would think that a mag 8.2 star is easily doable in a 4" refractor. But I've found that close doubles like this where one star is several magnitudes dimmer are the hardest to split. I probably would have bagged it if the moon hadn't been around.

The first of the night, 19 Lyncis at mag 5.6 and 6.5 and a 14.8 arcsecond split, was easy enough but the next one was the prize.

Alpha Geminorum is one of the two main stars making up the constellation Gemini. Many constellations are named after heroic figures in Greek mythology and this is no exception. Alpha Gem's common name is Castor. He and Pollux were apparently part of Jason's band of Argonauts and remain fixed in our sky today as the head stars of the twins.

Early in the evening, Castor shines almost directly overhead at magnitude 1.9. It's listed as the 20th brightest star in the sky and is easy to find even in the light pollution. But for a double star observer with a small telescope, Alpha Gem is a challenge. It's companion is split only 2.2 arcseconds away and is 2.5 times dimmer at mag 2.9. But it was easily split. And it's one of the prettiest doubles I've observed. Through my small scope at 133 power, the two components of Castor were almost touching. If I slightly defocused, the diffraction rings would touch. Since all achromatic refractors suffer from a malady known as chromatic aberration, I was also seeing violet fringing around both stars. Some people think this is a distraction; I think it looks kind of neat.

So my observation of that star was complete. The part I could see that is because Castor is actually a system of more than two stars.

Separated by about 100 AU, the two main components of Castor, A and B, revolve around a common center of mass with a period of between four and five hundred years. But that's not all. At 73 arcseconds away, there is a dim third component C. Seventy three arcseconds is a long way, clocking in at a whopping 1200 AU which results in an orbital period around the A and B stars of 10,000 years.

But wait, there's more. The A component is itself a binary. Castor A consists of two almost identical main sequence stars of spectral type A in an eccentric elliptical orbit. The separation between them is only 4 million miles resulting in an orbit period of 9.2 days. Each star in the component is twice the size of the sun and 12 times as bright. The total mass of the pair is 3.2 times that of the sun.

Castor B is also a binary with the two stars whipping around each other in a circular orbit. These type A5 stars have an orbital period of 2.9 days and are about 1.5 times the diameter of the sun. Their luminosity is 6 times the sun and they weigh in at 2.3 solar masses.

The third component, Castor C, consists of two stars revolving in an orbit almost edge-on to our line of sight. Separated by only 1.67 million miles, they make a mad dash around each other in 19.5 hours. Each one is about 2.5 times brighter than the sun and have about 0.6 times the mass.

And so ended my search. I had turned my little scope toward one star and bending to the eyepiece, saw two beautiful, yellow pinpoints like jewels splayed tightly on black velvet. But my eye was deceiving me. In Greek mythology Castor is one of two. But Castor is more than meets the eye. Instead of being a twin, he is an entire family.

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 then 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.

MARCH SATURDAY NIGHT SCHEDULE

MAR 6 **JANSSEN / OPEN / OPEN**
MAR 13 **WELLS / OPEN / OPEN**
MAR 20 **OPEN / OPEN / OPEN**
MAR 27 **OPEN / OPEN / OPEN**

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

DARK MOON (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

OBSOLETE CONSTELLATIONS PART III

THIS article is the third in a series dealing with constellations that are no longer recognized by the astronomical society. These now obsolete asterisms were the product of the human mind and depicted everything from politics to obscure objects, and someone's favorite animal. However, in 1933 the Astronomical Union either removed some of them from atlases, or changed some of them to other names. In any case, we as astronomers were left with 88 constellations that we spend a good part of many nights searching for that dim, fuzzy, elusive celestial object.

GLOBUS AEROSTATICUS
—the balloon—

GLOBUS AEORSTATICUS first appeared on the atlas of Johann Elert Bode in 1801, but it was suggested by Joseph-Jerome de Lalande in honor of the Montgolfier brothers, pioneer balloonists. It lay south of Aquarius and Capricornus. Its dim stars were not recognizable with the naked eye.

HARPA GEORGII
—George's Harp—

MAXIMILIAN HELL, An Austrian Jesuit astronomer, introduced this constellation in 1789 from stars beneath the feet of Taurus. He used the name Psalterium Georgianum to honor King George III of England, patron of William Herschel, the discoverer of Uranus. Both Herschel and King George were of German extraction. Bode changed the name to Harpa Georgii on his atlas of 1801.

HONORES FRIDERICI
—Frederick's Glories—

A CONSTELLATION introduced by Johann Bode in 1787 to commemorate King Frederick the Great of Prussia, who had died the preceding year. Bode originally called it by the German name of Friedrichs Ehre, but Latinized the name on his star atlas of 1801. The constellation was squeezed in next to Lacerta, the Lizard. In fact, this constellation still remains on some star charts. If you have a copy of the seasonal star charts that are put out by Meade or Celestron, the one with the date and time wheel on the front, look just to the left of Lacerta, and just to the right of Andromeda. You will find "Gloria Frederika". Also you will find it on chart 9 of Sky Atlas 2000.

In this same area the Frenchman Augustin Royer had in 1697 placed his own invention, Sceptrum, representing the French sceptre and hand of justice, commemorating Louis XIV.

More next month. Leonard Pattillo, FBAC

Fort Bend Astronomy Club
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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

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 March 19, 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.

E Pluribus Unum

Somewhere back in the early history of our country, one of the founding fathers is reported to have said, "United we stand, divided we fall." At least that's what I think one of them said. Maybe it was another famous figure from the past. My history is a little rusty right now.

Whatever the case, and no matter who uttered that pithy phrase, there's no better time than the present to demonstrate that very thing. And I think FBAC is up to the task.

In an unusual move, we recently elected two new officers to step into spots left by resignations. As far as I know, this is a first for our club. Someone might correct me if I'm wrong. Point is, this is the time for unity and cohesion. As club members, we should place our full support behind David Jenkins and Dennis Borgman as president and vice-president. I know what it's like to be in those shoes and I know what it's like to need help from other people. There may be times when you don't like what's happening in our club. People don't always agree on everything. It's easier on everybody if a club leader is told in a friendly way about a problem. It's easier on everybody if we become part of the solution rather than part of the problem.

And that leads me to another situation we face. I wrote in the beginning of this newsletter about the lighting ordinance. If it goes down to defeat, the bad buys have won. We can't let that happen. I saw what happens when we all pull together. It was heartwarming and encouraging to see so many people take time away from their work and homes to support an important issue. We will have to do it again but I believe FBACers will come through.

I also want to thank the people who responded to my request for newsletter articles. The deep sky and beginner columns are up and running. I have not gotten a writer for the solar system column but I'm sure someone will come through.

As for the title of this blurb, some people actually think it means "United we stand, divided we fall". And it's not certain that a founding father actually uttered that phrase. What it really means is, "Out Of Many, One". And this is what we represent. We may diverge in our likes and dislikes but when the chips are down, FBAC is one body, acting in the common interest of all.

—Wes Whiddon

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A NON-PROFIT ORGANIZATION DEDICATED TO ASTRONOMY BY TEACHING, SHARING, AND OBSERVING

Minutes of The February, 2004 Meeting
By Joe Dellinger

Jennifer Lopez of the Legacy Land Trust, talked about the efforts of her organization to protect ecologically significant land from development. A land trust allows a landowner to retain ownership of land while getting a tax break, at the cost of giving up the right to do certain things with the land. Protecting the land ecologically also requires protecting it from light pollution, as light at night upsets animal's diurnal rhythms.

Barbara and Phil made a plea for folks to turn out on Tuesday at the Fort Bend County Commissioner's court meeting.

ALL OUR HARD WORK OVER THE LAST SEVERAL YEARS COMES DOWN TO THIS, FOLKS!!!.

If we sit on our duffs and the pro-light-pollution folks turn up in greater numbers than we do, the George is history as the sky brightens and brightens. The meeting is next Tuesday at 1PM. Regret is such a bitter thing, and it takes so little to avoid it.

Here's the details:

http://people.txucom.net/tovinder/light_ord.htm

Remember you get exactly 3 minutes, no more.

Someone bring a 3-minute timer!

Terry spoke on the member roster. If you don't know your membership status, talk to Terry. We have $1235 in the club checking account.

"Triple Nickel" spoke on how the shuttle training aircraft is used to train astronauts to land the shuttle. Bizarre way to fly a plane... with full thrust reversers on, landing gear down, and all sorts of extra drag-enhancing modifications. Basically, they make a perfectly good plane "fly like a piano". One interesting tidbit... all shuttle landings except one have been done manually! Another interesting tidbit: the COMMANDER of the shuttle mission lands the shuttle, not the pilot. The pilot is actually the co-pilot, and the commander is the pilot, got it?

James of the museum planetarium needs volunteers for Sun/Earth day on March 20 to show people the sun through telescopes at the HMNS. If you can help out, contact him.

The recent work day at the George was a success, although many were sore afterwards.

Leonard will start organizing a spring star party road trip. Contact him if you're interested or have suggestions.

Steve Goldberg gave the TSP report. If you are registered and haven't received your packets, you should very soon.

We elected a new Prez and vice-Prez, they are David Jenkins and Dennis Borgman, respectively.

Joe Dellinger, secretary, nominated both and Leonard Patillo 2nd'd David and Bill Dillon 2nd'd Dennis. Both were approved by voice vote with no nays.

Dennis read the memorandum of understanding that governs how often FBAC is expected to man the East dome for the public. You can now find it on the FBAC web page.