

THE FBAC OBSERVER

APRIL, 2003 VOL 17, NO. 4

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

WHAT'S HAPPENING IN APRIL

Tuesday, April 1—New Moon at 1:19 p.m., CST. 40 Minutes after sunset, look for Mercury low in the W, Saturn high in the WSW, and Jupiter high in the SE. These 3 planets span a distance of 105°. On this day, I have discovered a new Comet, called LP #1. It is busy streaking across the evening sky heading for the planet Jupiter and is expected to impact with the force of 1 pound of TNT. The planet will break up into many smaller planets, thereby increasing the number of planets in our solar system. **LIRPA LOOF.**

Wednesday, April 2—Again 40 minutes after sunset, look for a very young Moon in the west. Mercury is located just to the WNW of the Moon.

Thursday, April 3—Look high in the south 1½ hours after sunset. Jupiter, ending retrograde, pauses 1.1° NNW (upper right) of 4th magnitude Delta Cancer and just SE of the Beehive cluster.

Friday, April 4—40 minutes after sunset, look for the Pleiades about 12° above the Moon.

Saturday, April 5—The Pleiades cluster is about 4° to the right of the Moon. Look as the sky darkens—a beautiful sight for your binoculars.

SUNDAY, APRIL 5—DAYLIGHT SAVINGS TIME BEGINS. SET YOUR CLOCKS AHEAD ONE HOUR.

Wednesday, April 9—Moon is in First Quarter and high in the SW. Mercury, Saturn, and Jupiter span just over 90°.

Thursday, April 10—In the predawn skies, just after Mars rises in the SE, Jupiter is about to set in the WNW. They are about 165° apart. Jupiter and the Pleiades are less than 2° apart.

Friday, April 11—One hour after sunset, three planets, Jupiter, Saturn, and Mercury are equally spaced at 44° intervals.

FBAC MEETING THIS DATE AT THE ELDRIDGE CENTER. PLEASE NOTE THAT THIS IS THE 2ND FRIDAY OF THE MONTH.

Wednesday, April 16—Full Moon at 2:36 p.m. CDT known as 'Grass Moon' or 'Egg Moon'.

Monday, April 21—Mercury at mag. +1.2 stays 10° for the rest of its visit, but is fading fast.

Tuesday, April 22—Lyrid meteor shower may be the best in the predawn darkness, especially in the hour before moonrise which is about 5 hours before sunrise.

Thursday, April 24—One hour after sunset, Mercury-Saturn-Jupiter span 78°, but Mercury has now faded to 2nd magnitude.

Friday, April 25—AOW star party, 8 p.m. CDT. Check FBAC web site for details.

Sunday, April 27—Leave for TSP 2003.

Monday, April 28—Mars, rising in the ESE and Jupiter setting in the WNW are 175° apart. Look early before sunrise.

Wednesday, April 30—New Moon which is the second New Moon of the month, known as a "Blue Moon".

Digitizing the Sky

by Wes Whiddon

One clear evening not long ago, I had the urge to do some observing. This urge usually involves loading my van with four medium-size aluminum cases, two tables, one ladder, two telescope cases, a tripod with German equatorial mount, assorted counterweights, one laptop, two sealed lead-acid batteries, a portable recliner, ice chest complete with drinks and food, four different kind of star charts, five gallons of Deep Woods Off, and a partridge in a pear tree. I then drive into the wilds of Ft. Bend County, stopping at a place known cryptically as "Late Arrival".

Upon arriving at "Late Arrival", all the aforementioned stuff is offloaded and, if I'm lucky, assembled into what passes for an astronomical observing platform. When assembly is complete, I stand back to admire my handiwork and promptly collapse from exhaustion. After a period of R&R, and upon acquiring darkness, I boot the computer, launch Megastar and some other less memorable programs, polar align the telescope, turn on the Gemini system, initialize the Go-To on the first star I can find, align on a half dozen other stars, and then sit down for some more R&R.

Darkness, of course, has it's own set of difficulties not the least of which is the variety of nocturnal insects that spring forth from the air and waters of East Texas even in the cold days of winter. And I won't mention the sounds that are emitted from the wooded area that abuts "Late Arrival". I sometimes expect to see Jason charge out of the underbrush slicing and dicing the air and anything else that gets in his way with his K-Bar fingernails. But I digress. Back to the story.

I finally got in some observing and a pleasurable thing it was. But in the deep recesses of my feeble mind, there was something gnawing away at me. I kept on observing but as the hour grew late, the something gnawed harder. Finally I realized what that something was. The reverse process had to happen. I had to take all this stuff apart. It's got to be loaded back in the van. I looked around at all those cables and wires and charts and computers and empty Coke cans and thought to myself: Holy Holstein on a Vespa, Batman. Where did all this stuff come from?

But this time--on this evening of astronomical urges--I did something different. Instead of making the long haul to "Late Arrival", I drug all the stuff from my garage to the back patio. Setup was simple (at least as simple as setting up a German Equatorial mount can be) and I was ready to observe before dark. As a side note, I did learn one important thing. Flip-flops are no match for the weight of a Losmandy tripod. My right big toe will attest to that fact.

I have, many times in the past, observed from my back patio. Observing from the city is, as in the case of "Late Arrival", fraught with danger. Insects are still a threat but to a lesser degree. Sounds emitting from the underbrush are of a different variety consisting mainly of my neighbor's dog snorfling around the edge of the fence and a few Grackles flapping in the banana trees. But the biggest danger of all is the omnipresent and infuriating unshielded luminosities de portico along with the ever present and dangerous Cobra Head; monstrosities designed and built by madmen bent on blinding every inhabitant of the planet Earth and destroying every vestige of the night sky.

But I have, with practice, managed to overcome these beasts. It's amazing what a well-placed patio umbrella will do to cut down on their effects. This night was no different so with

patio umbrella in place, I reached into one of my aluminum cases and removed the device that would assist me in my observing journey for that evening. It was a simple thing, somewhat cubicle in shape and about three inches in length. At first glance it could have been mistaken for a kind of fancy eyepiece but second glance showed that it had a computer connector on it's rear end. I attached the device to the visual back of my telescope and attached some cables between my laptop and the device. After searching through the light pollution, I found Regulus in the eastern sky. I slewed the telescope to that Leonian star and centered it in the finder scope. Then I centered Regulus in the screen on my laptop and star aligned the Gemini Go-To. By now you may be asking what kind of device is he talking about and upon what screen is he gazing? The device is nothing more than a video camera. But it's a very special video camera. Many of you have heard of it and in fact may have one. The camera I'm referring to is an Astrovid Stellacam EX. I won't go into details of operation but will say that it has many methods of adjustment and can be used for deep sky observing. Astro imaging is also possible using software and a video frame grabber such as the one I had installed in my laptop.

So, after centering and aligning with Regulus, I was ready to observe. Since I was already in Leo, I slewed the scope down to M65. The scope moved, slowed, and settled on the galaxy. I watched, in real time, as the camera began to integrate images and stars gradually sprinkled the laptop screen. Then I watched, in absolute amazement, as M65 rose out of the noise and light pollution square in the middle of the image. The core was very bright and I could see vestiges of the body on the screen. Using star patterns from Megastar, I confirmed that it was M65. But some of you may be thinking "So what. M65 is big and bright. There should be no problem seeing it through a ten inch telescope." And this is indeed true. The only problem is, the sky at my suburban home is magnitude 3 at best. In fact I have trouble finding Polaris, a magnitude 2.2 star, most of the time. I have only been able to find M31 a few times in the five years I have lived here.

Now I was primed for action. I slewed the scope to M66, then M95, 96, 105. Every galaxy was plainly visible on the screen. And I'm even more excited because the Virgo cluster is above the garage so I slewed into that mass of galaxies. I felt like a kid in a candy shop. So many objects and so little time. I went from one galaxy to another observing magnitude 11.5 objects with ease. Then I noted that Vesta is in Virgo where I'm playing around. I fed the coordinates into the hand controller and the Go-To easily found the asteroid. It's at magnitude 5.9 and brighter than anything else in the field. For the next two hours I sat hunched over the computer, control paddles in hand playing with the universe.

But in the deep recesses of my feeble mind, something is again gnawing. This time though it's not fear of having to dismantle two tons of stuff in the middle of the night. This time it's a more subtle thing, a philosophical thing that's doing the gnawing. I began to question myself. Is this really doing astronomy? Am I a cheater? After all, I just observed thirty galaxies and various other objects and I never looked up at the sky except to align my telescope. All I did was stroke some keys and push some buttons. For me this was a new way of observing, a way of enhancing my vision, almost like having X-ray eyes that could cut through the light pollution and see things that are otherwise impossible.

CCD cameras are marvelous devices. Married to the right software and computer they can perform miracles. But there was something missing that night. And I think I know what it was. Instead of being directly impressed on my retina, the light from all those galaxies was digitized and homogenized before I saw it. When we go outside at night and look up we are in direct contact with the universe. As observers we're hard wired to the stars. We feel the primal urge to see the unseen with our very own eyes. Observing

with video camera and laptop is like putting a shield between us and the sky. On the bottom line, the act of bending to the eyepiece is our connection to the stars.

Having said all that am I going to relegate the Stellacam to the junk heap? Absolutely not. I loved it. It's a new way of observing that is a major benefit to light distressed areas. I can't wait to get it to the dark skies of west Texas. But I will remember to look up when I get there

**FBAC MEETING FRIDAY
APRIL 11th
AT THE ELDRIDGE ROAD
COMMUNITY CENTER.
PLEASE NOTE THIS IS THE 2nd
FRIDAY.**

**EAST DOME REPORT
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.

APRIL SATURDAY NIGHT SCHEDULE

APR 5	DILLON / WELLS / OPEN
APR 12	HISERODT / OPEN / OPEN
APR 19	OPEN / OPEN / OPEN
APR 26	MACKAY / J. Mc CUTCHEON / C. Mc CUTCHEON

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

DARK MOON OBSERVING SCHEDULE *

Asteroid team:	APR 2, 3, *
Supernova:	Not scheduled
Terry Hiserodt:	APR 1
Don Jarvis	Not yet scheduled
Jim Ellis	Not yet scheduled
Open dates:	APR 6, 7, *

***Late April observing schedule will be updated on the "calendar" web site by mid-month**

For online information and updates go to <http://users3.ev1.net/~keithrivich/astronomy/eastdome/calender.html>

These observing teams are open for all Club members. Participation is strongly encouraged!

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

TSP PACKING LIST

TELESCOPE:

Personal Items
Scope
Rocker box and/or tripod
Wedge
Eyepieces
Filters
Collimating tools
Red flashlight(s)
Folding table and chairs
Log sheets
Pencils and drawing paper
Charts
Dew Zapper-Hair Dryer
Extra batteries

Camera(s) including accessories
Film

IF YOU ARE CAMPING:

Tent
c
Foam pad
Ground cloth
80 d nails (available at Academy)
A big hammer (there are rocks at the ranch)
Extra rope (DUST DEVILS ABOUND)
Water Bottle

CLOTHING:

Rain gear
Wind breaker
Warm clothing for the nights
Moon Boots
Hiking shoes
Knock about shoes
Warm socks
Stocking cap
Gloves
Shorts for daytime wear
Hat
Sun Glasses/Sun Block
Prescription glasses

MISCELLANIES:

Binoculars
Soap
Towels
Shampoo
Prescription Medication
Coffee and Coffee Maker
Hot Chocolate Mix
Pastic trash bags
Paper towels
Soft drinks

Note: Ice will be available at the snack bar
Sheets, blankets and pillow cases.

**NOTE: Please remember that you are about
6000 ft. up in the mountains.**

It gets hot during the
day, and cold at night.
Drink plenty of fluids during the
daytime.

Also remember we are in a desert. Scorpions
can hurt you, Tarantulas only look scary

Bring your bird books and rock books.

You will see species of birds not
seen in our area. Bring a compass
just in case.

**ANYTHING ELSE YOU THINK YOU
MIGHT NEED**

THERE IS A WAL-MART IN FORT STOCKTON

CLUB MEETINGS AND FBAC OFFICERS

FORT BEND ASTRONOMY CLUB

The next meeting will be Friday, April 11 at Eldridge Road Park Community Center, 2511 Eldridge road. 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: John Harrison	835-0577
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>

REMEMBER:

FBAC MEETING FRIDAY, APRIL 11 AT THE ELDRIDGE ROAD COMMUNITY CENTER. THIS MEETING IS THE SECOND FRIDAY OF THE MONTH.

SEE YOU THERE