



REFLECTIONS

of the University Lowbrow Astronomers

June 2001



The University Lowbrow Astronomers is a club of Astronomy enthusiasts which meets on the third Friday of each month in the University of Michigan's Physics and Astronomy building (Dennison Hall, Room 130 or 807). Meetings begin at 7:30 PM and are open to the public. Public star parties are held twice a month at the University's Peach Mountain Observatory on North Territorial Road (1.1 miles west of Dexter-Pinkney Road; further directions at the end of the newsletter) on Saturdays before and after the new Moon. The party may be canceled if it's cloudy or very cold at sunset. For further information call (313) 480-4514.

This month we have reports and pictures from the 2001 Texas Star Party and Lacerta is the featured constellation



I've heard of a bull in a china shop ... But a buffalo in an observing field? (this and all TSP photos provided by John Causland)

This Month: June 15: Lowbrow Meeting at 7:30PM in Rm. 130 of the Dennison Bldg. Video and slide presentation from the 2001 Texas Star Party (John Causland & Mark Deprest)

June 16: Open House at Peach Mt. Lets look at Mars! Begins at sunset

June 23: Open House at Peach Mt. Lets look at Mars again! Begins at sunset ... bring your blood to feed the mosquitoes!

Next Month: July 14: Open House at Peach Mt. The Summer Triangle is nicely placed.

July 20: Lowbrow meeting at 7:30 PM in Rm. 130 of the Dennison Bldg. Speaker TBA

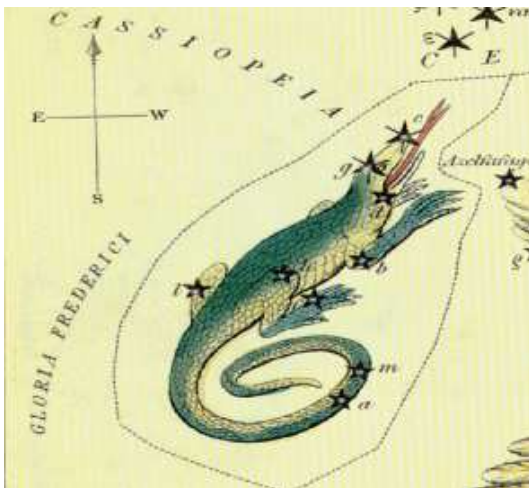
July 21: Open House at Peach Mt. The bugs are hungry come on out and give till it hurts.

Constellation of the Month:
Lacerta: The Lizard

Lacerta, the Lizard was created by the Polish astronomer Johannes Hevelius, from the stars between Cygnus and Andromeda. According to the first renderings the Lizard looked a lot like a weasel with a long curly tail, but later drawings were modified to portray a lizard. This area of sky seems to attract attention, before the Lizard of Hevelius was placed here, Augustin Royer invented a different constellation called, "The Scepter and Hand of Justice," in honor of King Louis XIV of France. Then about a century after Royer, the German astronomer Johann Ellert Bode, altered Royer's asterism a bit and called it, "Gloria Frederica" in honor of his king Frederick the Great of Prussia. Bode's and Royer's creations did not stand the test of time and Hevelius' Lacerta became accepted after its inclusion in John Flamsteed's, Catalog of Stars published posthumously in 1726.

Transit at Midnight of Alpha Lacerta: September 19th

Lacerta sits between Cygnus and Andromeda and is bordered to the north by Cepheus and to the south by Pegasus. It runs through one of the richest areas on the Milky Way and only the Alpha star shines brighter than 4th magnitude at 3.78. Lacerta contains only one other Bayer star, that being Beta Lacertae with a magnitude of 4.43. With the balance of Lacerta being formed by 4.5 to 5th magnitude stars, from a dark site the zigzag pattern is all but lost in the background stars in the area.



Things to Check Out in Lacerta:
Multiple Star Systems

8 Lacertae; STF2922; ADS 16095

RA (J2000): 22h 35m 52.28s Dec.: +39d 38' 03.6"
Included in the Astronomical League's certificate list of 100 double stars. Components display common proper motion.
Component A: magnitude +5.7 spectral type B1V
Component B: magnitude +6.5 spectral type B2V
Component C: magnitude +7.2 spectral type F0V
Separation AB: 22.4 " at position angle 186
Separation AC: 81.8 " at position angle 144

STF2902AB

RA 22h23.6m (J2000) Declination +45 21'
Washington Double Star (WDS) catalog.
Component A: magnitude +7.6
Component B: magnitude +8.5
Angular separation: 6.4" Position angle of: 89

Deep Sky Objects

NGC 7245; open cluster

RA: 22h15m18.0s Dec.: +54d 19' 59"
Magnitude 9.2

NGC 7245: cluster, compressed, 50 stars extremely small in angular size.
Angular diameter: 5.0', Distance: 1900 parsecs, Age 400,000,000 years

NGC 7243; Caldwell 16; open cluster

RA: 22h15m18.0s Dec.: +49 52' 59"
Magnitude 6.4

NGC 7243: cluster, large, poor, little compressed, 40 stars, very large in angular size.
Angular diameter: 21', Distance: 880 parsecs, Brightest star is magnitude 8.0,
Age 100,000,000 years

NGC 7209; open cluster

RA: 22h05m12.0s Dec.: +46 29' 59"
Magnitude 7.7

NGC 7209: cluster, large, considerably rich in stars, pretty compressed, 50 stars 9th to 12th mag. Angular diameter: 24', Distance: 900 parsecs, Brightest star is magnitude 9.0
Age 300,000,000 years

Comet Viewer

Submitted for you viewing pleasure
by Chris Sarnecki

WEMU's The Bone Conduction Music Show airs Sunday evenings from 7:00 to 11:00 PM. The Bone Conduction Music Show is billed as "a white hot mega blast of wig singeing Rock & Roll, hip shakin' Soul music, and industrial strength Rhythm & Blues" by the host Thayrone (self proclaimed most coolest person in these parts). It seems they also dabble in comet viewing. Presented below is their version of how to look at Comet Hale-Boop safely. Do check 'em out at 89.1 FM of the radio bandwidth and remember this is National Public Radio [reprinted with permission].

With Hale-Bopp taking the Heaven's Gate folks for 'a ride' and other comets waiting in the astral wings (it seems the sky is littered with them these days), we at The Bone Conduction Music Show pass on as a public service the benefit of research conducted by Kenn and Mr. Vacation, two of The Official Bartenders of The Bone Conduction Music Show. This research was conducted under laboratory conditions. Attempts to duplicate study results may vary depending on temperature and density. We at The Bone Conduction Music Show accept no responsibility for anything at all, especially Kenn and Mr. Vacation.

To View the Comet Safely

NEVER look directly at the comet. Dangerous alien rays emanating from comet can cause permanent brain damage.

ALWAYS observe comet in the reflection of a beer or by using The Official Mr. Vacation Box-On-Head Unit (see illustration below).

If observing while operating a motor vehicle, ALWAYS have a passenger handy to steer so driver can hold the

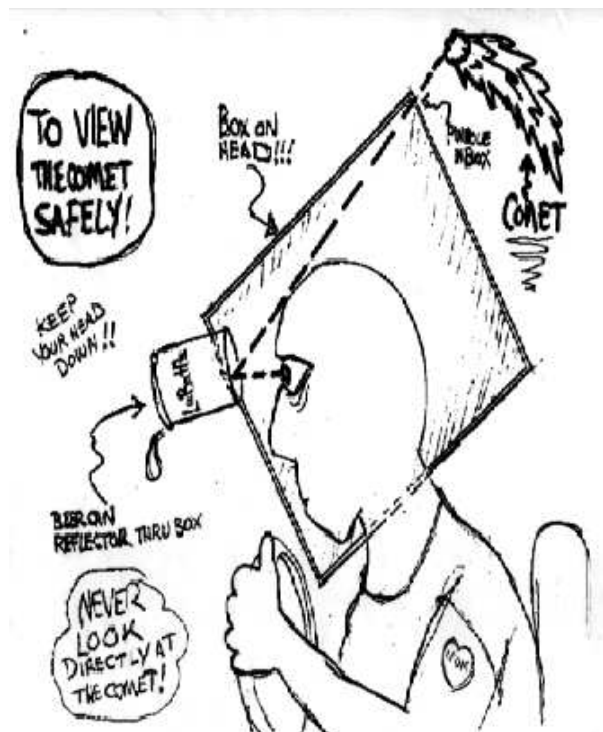
beer in the correct reflective position. Passenger may also assist with proper alignment of The Official Mr. Vacation Box-On-Head Unit to maximize comet viewing.

ALWAYS Duct Tape several beer cans (we recommend at least five cans) to the outside of your head to absorb dangerous alien rays emanating from comet. This is ESSENTIAL when not using the protective Mr. Vacation Box-On-Head Unit.

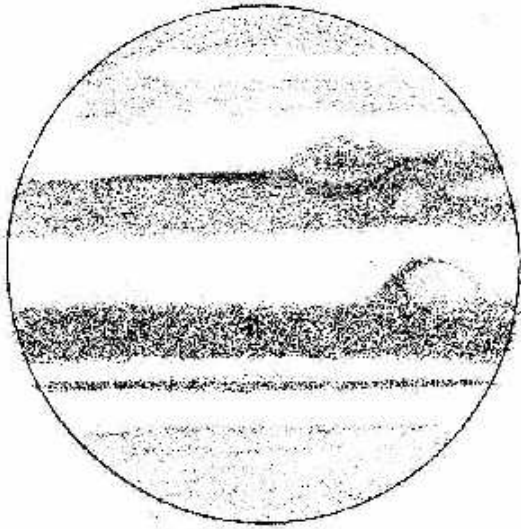
If out of beer and without The Official Mr. Vacation Box-On-Head Unit, use the handy parabolic reflector found on the bottom of every Labatt's beer can and hope for the best.

Good luck and happy viewing, comet lovers.

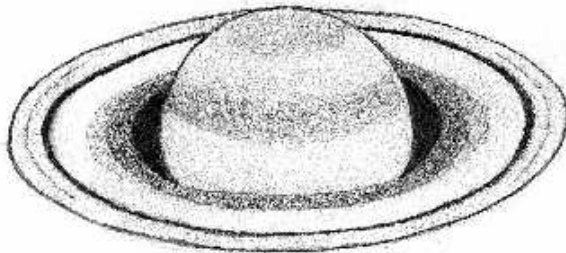
High Tech Illustration courtesy of Mr. Vacation:



Observations of the 2001 Texas Star Party
By Mark S Deprest



Jupiter
00:30 UT March 4, 2001
5.7" Maksutov-Newtonian at 200x



Saturn
November 2000
5.7" Maksutov-Newtonian at 255x

Drawings by Stanley Bies

Stanley has been a Lowbrow since 1995 and has been a serious observer for the last 20 years. Stanley has been sketching since the last time Comet Halley came by (that was some 15 years ago). Stanley says he likes to sketch just the "better-than-average" observations, and tends to concentrate on the brighter objects as he does most of his observing from his backyard in Ann Arbor. Stanley has a good eye for detail and gets the most out of his 5.7" Mak-Newt. (*Keep up the great drawings!*)

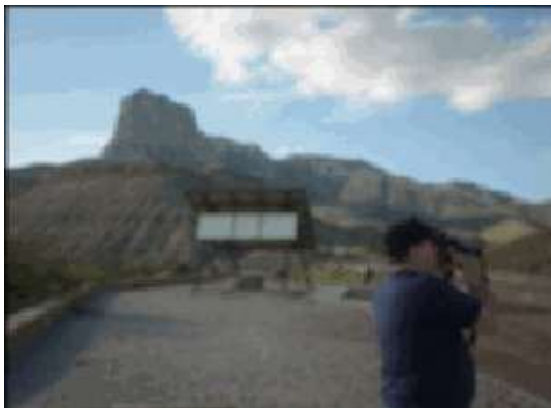
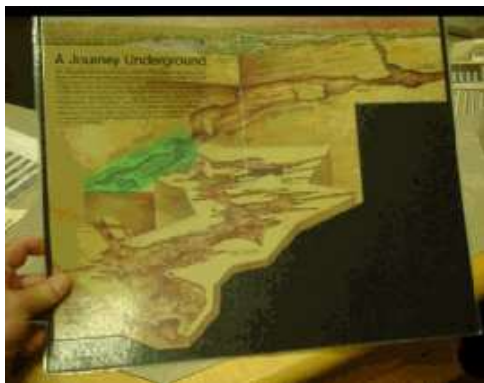
Well the TSP is over and John and I made it back without incident. John Causland and I flew down to El Paso, TX on Saturday, May 12th and rented a car to drive the rest of way. Our equipment went down in Clayton Kessler's van (Thanks again! Clay), and arrived at Prude Ranch just a few hours before we did. Prude Ranch is a working Dude Ranch for most of the year with horses and cattle and other livestock, but for one week each spring the astronomers come and take it over. About 775 astronomers this year and all of them hoping for some of the clearest and darkest skies available in continental US, 150 miles from the nearest town of over 10,000, right in the heart of Texas' Davis Mountains.

John and I arrived in El Paso on the 12th that basically gave us a whole day before we could even show up at the gate for the TSP. So John suggested that we take a drive over to Carlsbad, NM and tour the caverns. It sounded like a good idea to me so we stopped at the nearest Kmart and picked up a few supplies that we had planned to buy anyway and headed off into the Texas desert just east of El Paso. A curious thing about El Paso that John and I noticed was the large number of auto salvage yards that lined the highway. For the first ten to fifteen miles outside the city limits there were junkyard after junkyard, one right next to the other. John and I figured this must be where all cars eventually end up.



The first spot along the way was for lunch in a little town called Cornudas, for a world famous "Cornudas Burger." The total population of Cornudas, TX was 3 the day John and I stopped there, but the week before they were a bustling 5, at least according to the waitress we talked to. She said that an elderly couple went back to their summer home in Washington just last week, so it was just her and the cook and Mayor May left in the town for the summer. Cornudas consisted of a restaurant / gift shop and a couple of mobile homes scattered about a wide spot in the road surrounded by scrub brush and cactus about 45 miles east of El Paso.

John and I continued our little drive to Carlsbad Caverns National Park on a highway that led straight thru the Guadalupe Mts. The drive was a little bit longer than we had anticipated and we arrive at the National Park just in time to catch the last few elevator cars going down into the Caverns. We took what they call an Audio Self-Guided Tour of the Big Room. It was kind of neat; they give you headphones and a transmitter that activates a taped recording of a tour explaining the different formations as you walk along a railed path. It was a wonderful experience and one I highly recommend.



After Carlsbad Caverns John and I decided to drive Van Horn, TX which turned out to be a town of about 3,000 and only 70 miles from Prude Ranch. We found a Best Western to spend the night at and a little restaurant called "Chuy's" that served a Tex-Mex bill of fare. John and I had some Mexican beer with our dinners and headed back to the motel for a bit of sleep.

Sunday morning brought some clear skies and we drove the 70 miles left to Prude Ranch and the TSP. Our drive took us right past the McDonald Observatory and thru a mountain pass that was just under 5,000 ft. The scenery was beautiful and a lot greener than I would have thought, but the locals were saying that they had been getting much more rain than usual (let's hope that stops soon). We got to Prude Ranch just before noon local time and were pleasantly surprised to see Clayton Kessler already there and half set up. He got there about 9:00 am that morning and started unloading his tired van. We started to set up our tents and get our equipment out of Clay's van rather hurriedly as we could see rain approaching from the west. John and I set our tents up just before the afternoon shower, which Clayton said was not unusual. John and I were glad to hear Clayton explain that these kind of showers move thru very quickly and then the sky clears shortly after the sun goes down, which was precisely what happened that night. The sky cleared and we got a glimpse of what truly dark skies are like. John and I were very impressed with the steadiness and clarity, but the thing that blew me away was the intensity of the "Zodiacal Light" which rose well past the zenith from the western horizon, until very late in the evening.



The Texas Star Party is an observer's star party, and although the promoters, who include many dedicated individuals of the South West Region of the Astronomical League (SWRAL), depend on the support of the many vendors for contributions and support, the main reason astronomers come is to observe. John and I enjoyed that first night and when the skies finally submitted to some high clouds and we both crawled back to our sleeping bags, I know that our only thoughts were of what will we look at the next night. My first night of observing was spent working on this year's observing list. Which was compiled by John Wagoner - TSP Observing Chairman, and was entitled, "An Astronomical Odyssey." This observing list was the fourth in the on going TSP Observers Challenge Program, which include last year's Glorious Globulars and previous years' Planetary Nebulae List and The Great Southern Sky Challenge (a.k.a. Grazing in the Grass). In addition to the telescope observing programs they also have a Binocular Objects list and for the past two years they have produced and Advanced Observers List that John can tell you contains some objects that would challenge even the most seasoned observer. I will run off some copies of this year's list as well as the Glorious Globulars List and I believe John Causland might be persuaded to do the same for the Advanced Observer's List and have them at the June meeting, for those of you who are interested.

Unfortunately this year's TSP happened to be in the beginning of the "monsoon season" and the weather was not real cooperative. This is not to say we didn't have any good skies, just that this was an atypical TSP as far as the weather went. We were only completely clouded out one night, but most evenings the skies were not very transparent or we were looking thru "sucker holes." John was persistent and stayed up well into the wee hours of the morning most nights, but by Thursday he had enough of fighting the night sky and decided to go to sleep early. Of course this was one of those nights that looked like a cloud out at the beginning but turned out to be the best of the week. Although it took until 1:30 am to clear, once it did, it was incredible. The stars were visible right down to the horizon, the Summer Milky Way was so bright you'd swear it could cast a shadow. Mars was well above the hills and shone with an intensity and clarity I've never experienced before, but definitely would like to again. I found my

self sitting next to the scopes with my head tilted as far back as I could manage just gazing wide-eyed and mouth opened in total awe of a vista that has inspire both poets and preachers. By 4:30 am even I was getting a little tired and by then I had completed both the observing lists I was working on, which earned me two pins, and I proudly display them on my hat. So, I packed up the equipment for what was to be the night of observing for John and I at the 2001 TSP, because Friday night was the total cloud-out, and Saturday night we had to drive back to El Paso for and early flight out Sunday morning.

Although observing the night sky is the primary purpose of the astronomers who come to the TSP, it's not he only thing going on there. Prude Ranch has horses to ride if that is your pleasure, there is a very nice pool for swimming, and during the afternoon there are many wonderful talks given in the air-conditioned meeting hall. The TSP also provides transportation to the McDonald Observatory for guided tours twice during the week. Near the Upper or Main observing field there is a vendor's building where the vendors display and sell their wares. John and I saw Al Nagler assembling one of his own scopes there. Representatives from both Sky & Telescope and Astronomy magazines were there and the editor of Amateur Astronomy magazine, Tom Clark, was one of the speakers during the week. John attended most of the talks throughout the week and said that all the talks were worth while. Clayton Kessler and I were coming back from the Upper Field and we stopped near the edge of the Central Field where a small group of people were scanning the afternoon skies for a naked-eye daylight look at Venus, after a few minutes we found Venus and were then surprise



to have Stephen J. O'Meara ask us our names and club affiliations for the photo he snapped of us. Stephen O'Meara is a contributing writer and photographer for Sky & Telescope magazine and was one of the featured speakers for the 2001-TSP. We didn't have the best weather but what we did have was one helluva good time. I enjoyed myself thoroughly and will be going back again. I would like to say Thank you to my traveling companion John Causland for his company and good humor. I would also like to give a HUGE Thank you to Clayton Kessler our equipment transporter and guide through our first TSP. I hope that next year we might get a larger group of Lowbrows to go and experience those dark Texas Skies.



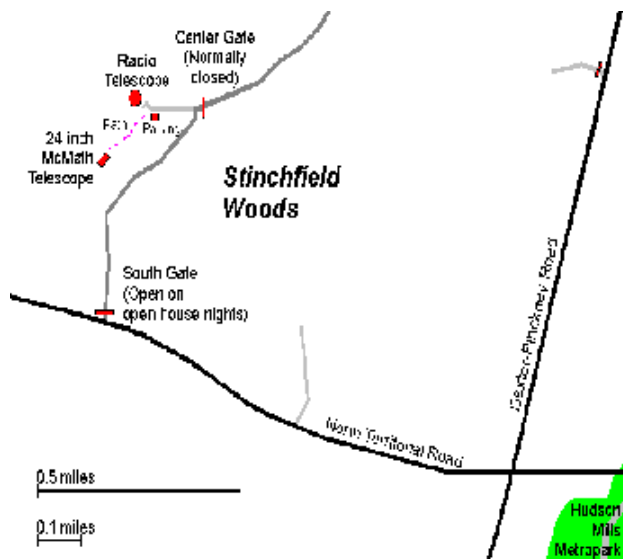
ASTRONOMY/SPACE EVENTS - JUNE/JULY (All times in EDT) compiled by Doug Warshow

- Jun 15 - 2:56 Algol at minimum.
- AM Saturn emerging in ENE., 28? lower left of Venus and 9? below the Pleiades.
Past Events: 1819 - John Couch Adams (one of the predictors of Neptune's location) is born.
1965 - NASA M2-F2 lifting body first rolled out.
1971 - First Titan III-D launch.
- Jun 16 - 9:00 Mercury at inferior conjunction.
Past Events: 1963 - Valentina Tereshkova becomes first woman in space and currently the only woman to fly a solo space mission.
- Jun 17 - 18:00 Venus 1.7? N. of the Moon.
- 23:35 Algol at minimum.
- Venus close to 31 Arietis.
Past Events: 1985 - STS-51G Discovery launched.
Jun 18 Past Events: 1799 - William Lassell (discoverer of Hyperion, Ariel, Umbriel and Triton) is born.
1983 - Sally Ride becomes first American woman in space.
- Jun 19 - 18:00 Saturn 0.9? N. of the Moon.
Past Events: 1999 - QuikSCAT launched (sea wind scatterometer).
- Jun 20 - 4:00 Saturn is 7-8? upper right of Old Moon (ENE.).
- 20:23 Algol at minimum.
Past Events: 1939 - First flight of liquid-fuel rocket plane (Heinkel He-176).
1985 - NASA announces cola wars will take place on Shuttle mission 51-F.
1996 - STS-78 Columbia launched.
- Jun 21 - 3:38 Summer solstice in northern hemisphere.
- 7:58 New Moon.
- 19:00 Mars at closest approach to Earth.
- Jun 22 - PM: Young Moon near Pollux and Castor.
Past Events: 1675 - Royal Greenwich Observatory founded.
1960 - First multiple satellite launch
1978 - James Christy discovers Charon, satellite of Pluto.
2000 - NASA announces evidence of present-day liquid water on Mars.
- Jun 23 - 13:00 Moon at perigee (363,132 km).
- 17:10 Algol at minimum.
- AM: Aldebaran emerging lower right of Saturn.
- Jun 24 - AM: Saturn 20? lower left of Venus.
- PM: Moon near Regulus.
- R Aquilae at maximum.
Past Events: 1999 - FUSE (Far Ultraviolet Spectroscopic Explorer) spacecraft launched.
- Jun 25 Past Events: 1894 - Hermann Oberth (early rocket science pioneer) is born.
1992 - STS-50 Columbia launched.
1997 - Progress spacecraft collides with Mir's Spektr module. Mir coincidence?
1999 - Gemini North telescope is dedicated.
- Jun 26 - 13:59 Algol at minimum.
- AM: Saturn and Aldebaran are 18? and 20?, respectively, lower left of Venus. Epsilon Tauri is 0.9? S. of Saturn.
Past Events: 1730 - Charles Messier (comet hunter and Messier list composer) is born.
1984 - First Space Shuttle launch pad abort (STS-41D).
1994 - Ulysses spacecraft passes over the Sun's south pole.

- Jun 27 - 19:33 Latest sunset of the year at 40° N. latitude.
 - 23:19 First Quarter.
 Past Events: 1962 - X-15 sets velocity record (6,606 kph).
 1982 - STS-4 Columbia launched.
 1995 - STS-71 Atlantis launched.
 1997 - NEAR (Near-Earth Asteroid Rendezvous) probe flies by 253 Mathilde.
- Jun 28 - 3:00 Mercury is stationary.
 - PM: Moon near Spica.
- Jun 29 - 10:48 Algal at minimum.
 Past Events: 1868 - George Ellery Hale (inventor of spectroheliograph, designer of large telescopes) is born.
 1961 - Transit 4A launched, first nuclear power satellite.
 1971 - Crew of Soyuz 11 die.
- Jun 30 - AM: Saturn 15° lower left of Venus.
 - RR Scorpii at maximum.
 Past Events: 1908 - Tunguska impact.
- Jul 1 - AM: Aldebaran 4° lower right of Saturn.
 Past Events: 1917 - 100" mirror arrives at Mt. Wilson for Hooker Telescope.
 1972 - Wernher von Braun (rocket designer) retires from NASA.
 1997 - STS-94 Columbia launched.
- Jul 2 - 7:36 Algal at minimum.
 - PM: Moon is near Mars and Antares.
 Past Events: 1985 - ESA launched Giotto probe (Halley's Comet).
 1996 - NASA awards X-33 (single-stage-to-orbit) contract to Lockheed Martin.
- Jul 3 - 6:00 Mars 6° S. of the Moon.
 - AM: Saturn 12° lower left of Venus. Jupiter 19° lower left of Saturn. Mercury 7° upper right of Jupiter and 13° lower left of Saturn.
 - Mercury at greatest heliocentric southern latitude.
- Jul 4 - 10:00 Earth at aphelion (152,088,000 km).
 - T Cassiopeiae at maximum.
 Past Events: 1054 - Chinese astronomers witness supernova in Taurus. Precursor to Crab Nebula (M1).
- Jul 5 - 4:25 Algal at minimum.
 - 11:04 Full Moon.
 - AM: Venus 7° S. Of the Pleiades.
 Past Events: 1966 - Apollo-Saturn 208 launched. Test of Saturn S-IVB stage in orbit.
- Jul 6 - Venus at greatest heliocentric southern latitude.
 - AM: Saturn 9° lower left of Venus.
 Past Events: Isaac Newton publishes his *Principia*.
- Jul 7 - 10:00 Neptune 3° N. of the Moon.
 - 15:00 1 Ceres at opposition.
 - AM: Mercury 5° right of Jupiter.
 Past Events: 1998 - Israel launches first satellite from submarine (SSN-28).
- Jul 8 - 1:13 Algal at minimum.
 - 18:00 Uranus 3° N. of the Moon.
 - AM: Saturn passes 3.8° N. of Aldebaran.
 - R Canis Minoris at maximum.
 Past Events: 1994 - STS-65 Columbia launched.
- Jul 9 - 0:00 Mars occults TYC 6818 1463.
 - 7:00 Moon at apogee (405,567 km).
 - 13:00 Mercury at greatest western elongation.
 - AM: Venus 6° and 25° upper right of Saturn and Jupiter, respectively.
 Past Events: 1945 - White Sands Missile Range opens.
 1979 - Voyager 2 flies past Jupiter.
- AM: Saturn 5° lower left of Venus. Mercury 3.3° right of Jupiter.
 - ♃ Aquarii occultation.
 Past Events: 1962 - Telstar 1 launched. First transatlantic television relay satellite.
 1992 - Giotto spacecraft flies past Comet Grigg-Skjellerup.
- Jul 11 Past Events: 1979 - Skylab re-enters Earth's atmosphere.
- Jul 12 - 18:00 Mercury 1.9° S. of Jupiter.
 - AM: Mercury 2.1° lower left of Jupiter. Venus, Saturn and Aldebaran form triangle <4° on a side.
 Past Events: 1966 - First glide test of M2-F2 lifting body.
 2000 - Zvezda Service Module launched to International Space Station.
- Jul 13 - 4:00 Saturn 4° N. of Aldebaran.
 - 14:46 Last Quarter.
 - 18:51 Algal at minimum.
 - AM: Mercury passes 1.9° S. of Jupiter. Venus and Saturn are 2° apart. Venus 0.1° N. of Epsilon Tauri.
 - R Canum Venaticorum at maximum.
 Past Events: 1995 - STS-70 Discovery launched.
- Jul 14 - 21:00 Venus 3° N. of Aldebaran.
 - AM: Saturn 1.2° left of Venus. Mercury 2.2° below Jupiter.
 Past Events: 1965 - Mariner 4 completes first successful flyby of Mars. Returns first close-up images.
 1967 - Surveyor 4 lands on the Moon.
- Jul 15 - 1:00 Venus 0.7° S. of Saturn.
 - AM: Mercury 3° lower left of Jupiter.
 Past Events: 1975 - Apollo 18 launched for Apollo-Soyuz Test Project.
- Jul 16 - AM: Saturn 1.3° above Venus. Mercury 4° lower left of Jupiter.
 - R Aquarii at maximum.
 Past Events: 1969 - Apollo 11 launched.
 1994 - First fragment of Comet Shoemaker-Levy 9 impacts Jupiter.
- Jul 17 - 9:00 Saturn 0.6° N. of the Moon.
 - 14:30 Venus disappears behind the Moon.
 - 15:35 Venus reappears from behind the Moon.
 - AM: Moon near Saturn and Aldebaran.
 - R Hydrae at maximum.
 Past Events: 1850 - First stellar photograph (Vega).
 1975 - Apollo 18 and Soyuz 19 dock in orbit.
 1994 - Soyuz T-12 is launched. 100° human space mission.
 1991 - ERS-1 (European Remote Sensing satellite) launched.
- Jul 18 - 20:00 Jupiter 0.2° N. of the Moon.
 - AM: Saturn, Venus, Moon, Jupiter and Mercury all within 37° of each other.
 Past Events: 1966 - Gemini 10 launched. First use of target vehicle (Agena) as propulsion source.
 1980 - India becomes 10° nation to launch its own satellite (Rohini RS-1).
- Jul 19 - 9:00 Mercury 1.0° S. of the Moon.
 - 19:00 Mars is stationary.
 Past Events: 1846 - Edward Fickering (creator of first great photometric catalog) is born.
 1967 - Explorer 35 launched. (Lunar radiation/magnetic field detector.)
 1985 - NASA selects Christa McAuliffe to be 1° private citizen in space.
- Jul 20 - 15:44 New Moon.
 - TT Monocerotis at maximum.
 Past Events: 1969 - Apollo 11 lands on the Moon. Neil Armstrong becomes first human to walk on its surface.
 1976 - Viking 1 lands on Mars. Returns first surface images.
 1999 - Liberty Bell 7 capsule recovered from Atlantic Ocean.

Places and Times:

Dennison Hall, also known as The University of Michigan's Physics and Astronomy building, is the site of the monthly meeting of the University Lowbrow Astronomers. It is found in Ann Arbor on Church Street about one block north of South University Avenue. The meeting is held in room 130. Monthly meetings of the Lowbrows are held on the 3rd Friday of each month at 7:30 PM. During the summer months, and when weather permits, a club observing session at Peach Mountain will follow the meeting.



Peach Mountain Observatory is the home of The University of Michigan's 25 meter radio telescope as well as the University's McMath 24 inch telescope which is maintained by the Lowbrows. The observatory is located northwest of Dexter. The entrance is on North Territorial Road, 1.1 miles west of Dexter-Pickney Road. A small maize-and-blue sign marks the gate. Follow the gravel road one mile to a parking area near the radio telescopes. Walk along the path between the two fenced in areas (about 300 feet) to reach the McMath telescope building.

Public Star Parties:

Public Open House/Star Parties are held on the Saturday before and after each new Moon at the Peach Mountain Observatory. Star Parties are canceled if the sky is cloudy at sunset or the temperature is below 10 degrees F. Call 480-4514 for a recorded message on the afternoon of a scheduled Star Party to check on the status. Many members bring their telescopes and visitors are welcome to do likewise. Peach Mountain is home to millions of hungry mosquitoes - bring insect repellent, and it does get cold at night so dress warmly!

Amateur Telescope Making Group meets monthly, with the location rotating among member's houses. See the calendar on the front cover page for the time and location of next meeting.

Membership:

Membership dues in the University Lowbrow Astronomers are \$20 per year for individuals or families, and \$12 per year for students and seniors (age 55/+). This entitles you to the monthly REFLECTIONS newsletter and the use of the 24" McMath telescope (after some training). Dues can be paid to the club treasurer **Charlie Nielsen** at the monthly meeting or by mail at this address:
6655 Jackson Road #415
Ann Arbor, MI 48103

Magazines:

Members of the University Lowbrow Astronomers can get a discount on these magazine subscriptions:
Sky and Telescope: \$29.95 / year
Astronomy: \$29.00 / year

For more information contact the club Treasurer. Members renewing subscriptions are reminded to send your renewal notice along with your check when applying through the club Treasurer. Make the check payable to "University Lowbrow Astronomers".

Newsletter Contributions:

Members and (non-members) are encouraged to write about any astronomy related topic of interest. Call or E-mail to Newsletter Editors at:

Mark Deprest (734)662-5719 msdpresed@mediaone.net

Bernard Friberg (743)761-1875 bfriberg@aol.com

to discuss length and format. Announcements and articles are due by the first Friday of each month.

Telephone Numbers:

| | | |
|---------------------|-----------------|---------------|
| President: | D.C. Moons | |
| Vice Presidents: | Dave Snyder | (734)747-6537 |
| | Paul Walkowski | (734)662-0145 |
| | Doug Warshow | (734)998-1158 |
| Treasurer: | Charlie Nielsen | (734)747-6585 |
| Observatory Dir.: | Bernard Friberg | (734)761-1875 |
| Newsletter Editors: | Mark Deprest | (734)662-5719 |
| | Bernard Friberg | (734)761-1875 |
| Parking Enforcement | Lorna Simmons | (734)525-5731 |
| Keyholders: | Fred Schebor | (734)426-2363 |
| | Mark Deprest | (734)662-5719 |

Lowbrow's Home Page:

<http://www.astro.lsa.umich.edu/lowbrows.html>

Dave Snyder, webmaster

<http://www.personal.umich.edu/~dgs/lowbrows/>



Part of the Very Long Baseline Array, just outside of the Prude Ranch Property.



"Now, just why weren't you at the 2001 TSP?"
(This is some of the livestock on the Prude Ranch)



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