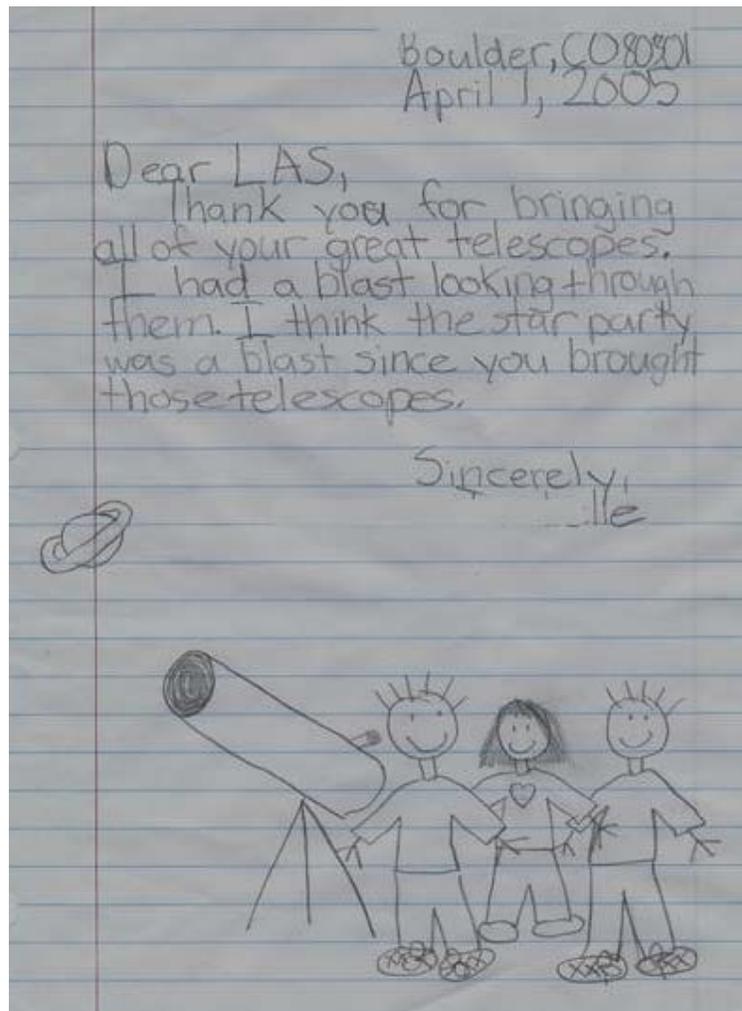


Longmont Astronomical Society

May 2005



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The Home Planet Stellar Views

Hello astronomers,

Again, I first want to thank everybody who helped on Astronomy day, it was the best in years, with lots of help from members.

I would like to see members get more involved at LAS meetings to give short talks or volunteering for Constellation of month or just to give a talk on your past month's observing from urban skies or dark skies. I figure we do not always need a guest speaker and should maybe do more short topic stuff. We have a lot of people with different levels of expertise. Sharing the way we do things, more people getting their scopes out and using them. Dick Mallot and others will start with more short topic items.

Tri town star party is coming up. Michelle Lavers will host star party again this year. It's on Saturday June 25th. Check LAS Web for timing and location place. Star parties coming up are many so check the LAS web page.

Andrew Planck's CalWood above Jamestown is June 3rd and 4th. You must be signed up to go.

CU Mountain research station star party weekend is also coming up. Julie is the contact to pay for the weekend, June 10th, 11th, with rented dorms. You must be signed up and paid for before then, limited numbers of scopes and people. This one is just for Astronomers only thru LAS and BASS clubs. It will be a fun weekend away from chores at home for two nights at 9,600 feet observing site. It's a pretty dark site for so close to home here and the Denver nebula of light pollution. Hope to see you there. I am bringing the 30 scope of course, testing the dark sky site again, my third trip there for observing. Dress warm.

Deep Impact viewing trip from summit of Mt Evans, July 3rd with Dr. Bob Stencil from DU who owns the scope up there. I will have a sign up sheet this month again, to make sure I have a real number of how many people will be showing up for this extreme astronomy adventure to summit. This is a great chance to view from 14,250 feet elevation. I will be bringing my 16 inch for parking lot views also.

The Home Planet Stellar views have not been as good as we would like. I went to Pawnee Friday night for new moon viewing, hoping it would clear. It being my only chance for another month before next new moon, I just could not resist the attempt. Clouds and wind kept me from observing, I am always trying to find the perfect night. I have got a few great nights this past month in Yard here for planets, still some good seeing going on at times. I took many pictures again. Planets and moon are fun and easy to do, then e mail to friends into astronomy.

The weather has kept most from observing this past month, persistent clouds it seemed, but hey it will get better. First I thought it was Bill Travis's new scope or somebody else, dark skies will return. The views will be even better after several failed attempts at dark sky observing, a good night we will appreciate even more now.

Tracking on 30 scope is working pretty well, have been doing more planet shots with drive system. My yard views can be fun is what I figured out. The beat goes on, always looking forward to another dark sky adventure. See you in the Dark? bye, Gary

Calendar

May: New Moon: 7th - Pawnee
 1st qtr: 14th – Flanders Park
 Meeting: 19th – Deep Impact – Jim Crane

Jun: New Moon: 4th – Members’ choice!
 1st qtr: 11th – Flanders Park
 3rd qtr: 25th – Tri-Town Party
 Meeting: 16th – Dick Mallot – Telescopes 101
 Andrew Planck Star Party – 3rd & 4th
 10th – 11th – LAS/BASS/URSA private party at CU Mountain Research Station

Jul: New Moon: 7th – 10th: Rocky Mountain Star Stare
 1st qtr: 9th – Flanders Park
 Meeting: 21st – NOAA – Steve Albers: Science on a Sphere Project
 4th – Deep Impact on Mt. Evans

Aug: New Moon: 4th – 6th: Weekend Under the Stars – Fox Park
 1st qtr: 13th – Flanders Park – Hispanic group BBQ at Flanders shelter – 4 pm to 9 pm
 Meeting: 18th – Solar System Ambassador Update

Sep: New Moon: 3rd
 1st qtr: 10th – Flanders Park
 Meeting: 15th

Oct: New Moon: 1st
 1st qtr: 8th – Flanders Park
 Meeting: 20th

Nov: New Moon: October 29th
 1st qtr: 5th – Flanders Park
 Meeting: 17th – Swap Meet

Dec: New Moon: 3rd
 1st qtr: 10th – Flanders Park
 Meeting: 15th – Ray Warren – Stardust Return

April meeting notes

Meeting called to order by President Gary Garzone.

Visitors:

Mohan and Noorul from India colleagues of Philippe
Chris, sent an email to LAS, have a Meade ETX
Mike, have a scope, lots of questions, saw us in the newspaper.

Jessica, heard about LAS from Jeff Laux "Gran'pa!"

Vice President Report by Dick Mallot: Thanks to Jeff Laux and Jessica, and Mark Propp, for Mead elementary star party. Little Thompson Observatory. Scott Kent directory very helpful. Observed Saturn and Jupiter despite clouds. Jeff gave report, much fun, kids came back for more views every 10 minutes or so.

Secretary report by Mark Propp: web site and email list server running well now. Let us know if your email address changes.

Newsletter editor report by Philippe Bridenne: FRCC report, viewing not good but food very good. Sterling report, Messier marathon report, observing report, good contributions. First month ever having too many articles! Keeping some for next month. Newsletter will be posted to web site.

Publicity, by Ray Warren

Astronomy day sold some stuff, but gave away nearly twice as much worth! Brought prizes to give out. Satchels, Levy book and video. DVD, The Right Stuff. Shining stars glow in the dark, for your ceiling! Another Levy Stargazing book and tape from our banquet.

Stargazer package, and much much more!

New T-shirts, very nice! New observing log, including whole Messier list, some important formulas, Greek alphabet, and more!

Scale model of the solar system!

President report by Gary Garzone, Thanks to Ray for making the club money, now to spend it! We obtained a laser collimator and green laser pointer for the club use.

ALCOR report by Bob Spohn. How's the Messier observing going?

A Tour of the Messier Catalog in Eight Spellbinding and Enlightening Episodes

This being episode Three Globulars and Galaxies, a warm up for the realm

Hydra, M83, M68, M104, then the M's in Leo, M49 M61, then big mess of objects in the Virgo-C? cluster of galaxies.

Hydra largest constellation, touches 1/4 of the sky! 100 headed beast. For every head cut off, 3 more appeared, so they had to cauterize cuts and bury last head under a stone.

Crater, Corvus, M83. This is where we start tonight.

M83 - Spiral Galaxy, Constellation Hydra the Hundred-Headed Beast.

This is a hybrid between barred and spiral type galaxy. The Southern Pinwheel, 1 of the 25 brightest galaxies in the sky, very unusual for its high number of supernovae -- 6 since 1923, the average is 1 per 300 years per galaxy.

M68 - Globular Cluster in Hydra. Very rich cluster, over 100,000 members. Fast: moving towards us at over 100 km/s. Has a diameter of just over 100 light years.

Objects shown here are not like you would see in your telescope. Take your time with details. Globulars are fun, almost 3-d as you focus in.

M104 - The Sombrero Galaxy, in constellation Virgo. Very nice, and easy to find. Hubble has found nearly 2,000 globular clusters associated - 10x as many as in the Milky Way! Noted for its intense equatorial dust lane and large central bulge. Seen 6 degrees from edge-on.

Now to Leo. Start in the belly of the best, middle of Leo and under.

M95 - Barred Spiral Galaxy, in Leo Constellation. Has a ring at the end of the bar. Part of "Leo 1 Group" along with M96 and M106. Nice face on, almost round. Very pretty galaxy.

M96, brighter 9.2 mag, and larger, 6x4 arc min, companion to M95, Sa type spiral: small, bright core. Asymmetrical dust lanes.

M105, Elliptical Galaxy, 3rd Messier galaxy in the Leo 1 group. Nearly circular, E1 on scale of E0 to E7. In the same field with NGC3384 and NGC339 (not in Leo1)

Hindquarters of Leo, famous triangle at the back. The Leo triplet.

M65 - Spiral Galaxy, very pretty. Forms the Leo Triplet with M66 and NGC3628. An incredible view in the eyepiece! M65 and M66 are only 21' apart; M65 is to the west. Long dust lane runs along the east edge. Take your time with observations, let the photons record image on your organic CCD before you turn on red light and start drawing!
Edge-ons are nice to look at to see detail of dust lanes, etc.

M66 - look at that nice Brian Kimball picture, isn't that beautiful!
Spiral Galaxy in Leo. M66 is the brighter and larger of the 2M's in this group. Irregular arms, due to interaction with its neighbors?
Messier missed these when his comet of 1773 passed through the field, due to the comet's brightness. He catalogued them 7 years later. The companion, NGC3628, is over half again as long as 65 and 66.

13 objects in the heart of the realm, the most challenging part of the Messier certificate program. Need a good chart, galaxy hopping instead of star hopping. Multiple galaxies any one time, hard to distinguish and get lost.

M61, Face On spiral galaxy in constellation Virgo. SAB type barred spiral, almost round. Widely spaced arms, 1 of the largest galaxies in the Virgo cluster -- 100,000 LY, similar to the Milky Way.

M49, another Elliptical Galaxy in Virgo. Elliptical class E4. 1 of if not the brightest member of the Virgo cluster. 1st member of Virgo group discovered by Messier. Due to a lack of young blue stars, it is yellower than most galaxies. One of the largest ellipticals known, with a mass 5x that of the Milky Way. Brightness 8.4 mag.

Final 3: M53, M74, M3 in Coma Bernices.

Starhopping from Leo and Spica and Arcturus, to Denebola.

M53 - Globular Cluster in Coma Bernices. With the globular certificate Mike Hotka put together, you have to guesstimate the concentration class of the cluster. This is a class 5, halfway up the density scale, fairly large core compared to entire diameter. Large, rich cluster. How far in can you resolve individual stars? 1 degree SE is NGC5053, it was thought to be a very rich open, but it has now been confirmed as a very loose globular! How does it look to you?

M64 - "Black Eye" galaxy, spiral galaxy in Coma Berenices. The dark dust cloud is easily seen, the black eye, can be seen in small scope.
Thought to be the remnant of an absorbed small companion; there are active star-forming regions along the edge of the dust cloud, otherwise it is a fairly homogenous galaxy. 8.5 mag.

Finally, end up with beautiful globular: M3. Halfway between Arcturus and Cor Caroli (sp?) One of the best globular clusters in the sky, it is 1 of the 3 brightest with M5 and M13. Can be a naked eye object in dark skies - have you seen it? 6th magnitude, need a good dark night and good eyes. Many lines and streams of stars radiating outward. Very resolvable in large scopes, how far in can you resolve individual stars?

Credits and Acknowledgements, including Night Vision from Brian Simpson. Burnhams Celestial Handbook, National Optical Astronomy Observatory, SEDS - University of Arizona, Brian Kimball for the images!

Webmaster report, by Steve Albers. A couple of new links to show on the website. Forecasting seeing conditions, current clouds, and forecast clouds. Seeing calculated on wind speed, $< 20 <$ knots at 500mb pressure. Avoid the "boiling Jupiter" found in the bright yellow blob locations. Talk about models and weather forecasting.

Fiske report, by Julie Carmen. This weekend, Aboriginal Skies, author of book about Southern Hemisphere and Australian aboriginals used skies to survive. Astronomy day, LAS did a good job, Fiske had a great turnout as well. Have 5 or 6 schedules. Thursday June 9, Terry Frazier and Gary doing presentation, 7 p.m. Colorado Skies, wonders etc. at the planetarium.

Observing reports: a lot of observing lately, something every report. Monica did Leo from her back yard! Not very good from back yard, going on week long stargazing vacation with Roy soon! LTO worked out, planets visible despite clouds, seeing good. Same at Lyons elementary.

Crestview Elementary report by Patty. Started with snow in the morning, by noon, still kind of rainy. By two thirty, principal asks if party is cancelled. No way, people coming from all over! Finally cleared up, hole over Boulder, nice evening, from 6 to about 9 pm. 6 from LAS, 4 from BAS, 3 grad students from CU, principal brought his scope. Parents brought scopes, some 16 to 18 telescopes. 150 to 160 people show up! Some "small" star party!

Vern brought computer and tracking 12" Meade schmidt-cassegrain, very nice ending to the evening, see Saturn and the rings. Kids loved it! Wanted to write individual letters to folks that talked to them, dude with the white scope, etc. Drew some pictures. Brian's scope was really cool! Great event for our first star party, want to schedule again for next year!

Lyons star party, nice turnout about 80 kids. Inflatable planetarium from Fiske, Ball aerospace brought mars rovers with web cam. Dr. Ellington very thrilled, turned out great! 8 or 10 scopes.

Flanders worked out ok, kinda hazy. Folks stayed until about 11pm.

Bob Spohn, talked to 65 third graders in Ft. Collins, drove from Sterling and back. Roy helped out. Presented 3 constellations, myths, handed out star charts.

Sterling was a bust due to clouds and wind. Great spot otherwise. Pretty disappointed with the wind. All over eastern Colorado, storm coming.

Treasurer report, after purchase of collimator, green pointer, t-shirts, gave new balance. From telescope fund, gave balance after reimbursing Don Bunker for focusers. Star party 2nd weekend in June at research station, need reservations by May 15th! Talk to me at break.

Calwood event still a go, Andrew Planck not here tonight, June 3, 4, 5? Email forthcoming. Private resort place above Jamestown, lake, cabins, astronomy weekend for about 40 kids. Looking for LAS volunteers to show kids the stars.

Bob is scheduled to go, can't go, if someone else can go.

Introduce George and Carol Hymes? Met Ray up at Fox Park last summer, saw the startracker that George has, and learned of our presentation.

Go to break, we will prepare this recorded program "The Comet Will Return". We use all analog equipment, no digital, Ektachrome 800/1600 processed to 3200? Good results, very long exposures. Regular film cameras piggy-backed to telescope for tracking, usually not through the telescope. We know the challenges of wind and rain and hail, at Pawnee for example. Storm comes through, no time to pack everything up! Covered it up, used a wind break and tie downs, got in our motorhome and thought, "oh boy!" It's too late! Ride it out....

BREAK!

35 mm slides show presentation by George and Carol Hypes. Great pictures! Great humour!

Tri Town Star Party by Michelle Lavers

The next Tri Town Star party is scheduled for Saturday June 25th beginning at dusk. (It will be a late night due to a late sunset). The location will be the same as last October at Milavec Lake in Frederick. This is right across from the Safeway store. Directions from Longmont are to take Hwy 119 or Hwy 66 East to WCR 13 (aka Colorado Blvd) and turn south. The lake is right in the middle of roads 20 and 18 opposite ACE Hardware and Safeway. From Boulder take Hwy 52 East to WCR 13 and go north. There is a map available on the website. I think we will take the access road up a little more this time and maybe the trees will block some more of the parking lot lights.

Despite the bright lights we did have some great views last October including a -8 flare. Looking forward to getting to view some planets and summer Milky Way objects this time around. Since this is near water make sure you spray yourself down well with insect repellent. I will make sure to bring some extra as well. Hope to see another good turn out this time around. If there are any questions feel free to contact me at mimiishaa@hotmail.com.

Pawnee report by Gary Garzone

I was at Pawnee last night but with clouds and wind, no observing got done thru the 30 scope. Mark Wiley, Dan L and his girlfriend were there too. It rained twice thru the night, when winds finally stopped blowing, it was early morning, and I tore down 30 scope, about 6:30 am. Dan helped me load up scope into trailer, then thunder and rain, everything got all wet trying to put away, but no water on mirrors I hope, as they were covered somewhat. I did stay up most of the night trying to find a calm moment with no wind, but if you liked sterling winds you would have loved Pawnee last night. Gusts to 45 or 50 I would guess with steady wind of 20 mph. Weather can be severe on high plains, was worried about hail too.

I did get milky way views without scope and thru very clear skies in the sucker holes at times, M51 was straight overhead would have been spectacular again. I did see the Tea Pot, Altair, Deneb and Vega, Summer Triangle early morning before dawn. I would have stayed for Saturday but weather reports and Mother's Day. I am having huge party here for Mother's day for family. We have been cutting the grass and working all day to get things ready. So all you mother's out there, I wish you all a Happy Mother's Day, bye, Gary

Texas Star Party report by Michael Hotka

This year I decided to attend the Texas Star Party (TSP) again. This was my 5th TSP and the first since 1994. I filled out the registration, sent in my money and on Sunday, May 1st, Barbara and I left Colorado and headed for the Davis Mountains in West Texas.

All the previous week, I had watched the weather reports for this part of the country, and it looked like we would have a week of clear, dark skies. I made several lists of things I wanted to look at under some of the darkest skies on the continental US. The first night, we stopped in Pecos, TX and spent the night at the local Wal-Mart. Looking at the sky, it was clear and stars were everywhere. I was ready to arrive at the Prude Ranch and start my TSP 2005 observing.

I awoke Monday morning to an overcast sky. No problem. It's the night sky I want to be clear, so cloudy in the daytime is alright. What I didn't know, and would soon find out from the weather display setup in the dining room of the TSP lodge, is that a stationary front had parked itself right over this part of Texas. It remained in place all week.

I now know what kind of weather is generated underneath a stationary front.

It was a misty rain from Monday afternoon through Wednesday noon, at which time the sky started to breakup. By sunset on Wednesday, there was a high thin cloud deck everywhere, but that didn't stop me from trying to find objects. Of the lists of objects I wished to observe, I had decided to do some of the special TSP observing programs, for they give neat pins for completing these programs. I was able to capture a few of these objects when the sky complete clouded over about 10 PM. By 11 PM, it was completely clear. We observed for about 45 minutes, at which time the sky completely clouded over in about 30 seconds. By 12:30 AM it cleared up again as fast as it clouded over. We observed till about 1:30 AM, when the sky packed it in for the night. We didn't know the sky had decided this until about 3 AM, when we realized the sky would not open up yet one more time.

The dew Wednesday night was very heavy. My paper was so wet, I couldn't write on it anymore. Holding it in my hand was like holding a wet paper towel.

Thursday night was even stranger. Thursday was clear all day. Not a cloud anywhere. No wind at all. I skipped the 7:30 PM speaker and uncovered my scope, added all the finder scopes and started the mirror cooling. By 8:30 PM, some clouds were seen in the NW, grouping and plotting along the horizon. By 9:15, they had amassed enough friends to cover the sky from the NW to overhead, and by 10 PM, the sky was completely covered. Then these clouds had the nerve to invite their nasty friends. Lightening was seen in the NW, soon replaced by strong wind and rain. We cover the scope and ran into the dining hall to look at the radar loop.

It was clear in Mexico. I didn't want to drive to Mexico to observe tonight, so I decided to set the alarm for every hour, and poke my head out and see what happened. Barbara woke me at 1:30 AM and said the sky was clear. I jumped into my clothes, and setup the scope for observing. The sky was soft, the dew was heavy, but the stars were steady. I observed well into morning twilight.

Friday night started out with a high haze that eventually cleared, but the sky was soft and the stars large blobs. I observed until about 12:30 AM, at which time the sky clouded over for the rest of the night, at least for me anyway. I packed it up and went to bed. I heard it cleared up again after 3:30 AM.

Saturday night, after the speaker and door prizes were handed out, we left west Texas and headed north, under very overcast skies. By the time we reached the New Mexico border, the sky was clear.

So, that's what the weather was like under a stationary front.



Michael, Barbara and the award winning telescope

The non-observing activities of the TSP were awesome. We had a behind the scenes tour of all the big scope at McDonald Observatory. We listened to Halton Arp talk about his observations that support that the Big Bang might not be right, and that the z value, the red shift of a spectral line from its normal position, that correlates to a recessions speed might be wrong. The universe might not be expanding forever. Truly an awesome and thought provoking presentation by the man that believes his theories are correct and has been basically shut out by the astronomical community for these views.

The Thursday night speaker was Brent Archinal and he talked about creating a coordinate mapping system for the Saturn moon Titan. I didn't listen to this person, for I was setting up my scope, hoping for some observing.

The Friday night speaker was Stephanie McLaughin, a NASA public outreach person for Deep Impact. She gave a nice talk about hitting a comet which was followed by a door prize giveaway that no other star party I have attended even comes close to. Incredible prizes.

The Saturday night speaker was David Eicher, the editor of Astronomy magazine. He spent about 10 minutes talking about our own, Karen Mendenhall. I guess he was with her on her last solar eclipse trip in that rocky boat in the South Pacific. He mentioned that she and others on the boat were playing a game, trying to name

star fields and asterisms. She named the area in the tail of Scorpio, “the Gecko” for it looked like such a critter. I was shocked to see her name on one of the slides of this presentation.

I decided to enter my telescope in the Amateur Telescope Making contest. I had never done this before. I was rewarded with a nice presentation about my scope at the Saturday night awards ceremony and a certificate. I even won a John Dobson DVD as a door prize at the Saturday night door prize giveaway. The grand prize was a fully loaded, GPS navigation, computer controlled GOTO, 8 inch Meade telescope.

As many of you might know, I took a friends’ concept (Leroy Guatney) and initial work and created the current Globular Cluster Observing Club for the Astronomical League. In one of the vendor’s display was the observing guide I wrote for this club. The impact of what I had accomplished had never really hit me until I saw my book on sale in this booth.

Colorado was supported at TSP 2005 by Joe Gafford, Sandy Shaw, her friend Laurie from the Denver club, Randy and Judy Cunningham from AstroSystems, Michael Roos from the Northern Colorado club, Gene from Johnstown, who used to be a member of Longmont club, and Barbara and myself.

I met many friends from when I was a member of the Texas Astronomical Society in Dallas, TX. Thank goodness for the name badges. Some I remembered their name, but many others I had to glance at the badge to get their name.

For anyone with aperture fever, there were two 36-inch telescopes to view through. For all the times I have seen M51 through Gary Garzone’s 30-inch telescope and drooled on his eyepiece, I have NEVER seen M51 in an amateur scope so clear, with so many spiral arms as I have through Larry Mitchell’s 36-inch scope. The entire bridge to the neighbor galaxy was easily seen.

Completing the drive home on Sunday May 8th, I realized this was Flat Tire Day for the US. Not only did we suffer a blown out tire, many other poor folks did too. At the gas station in Las Vegas, NM we hobbled to (we drove 30 miles on one tire of dualie tire set at 25 mph), there were 6 other people getting flat tires fixed. Once we were back on the road, we noticed about 10 more cars between there and Denver, on the side of the road, fixing a tire.

All in all, it was a wonderful event to attend. Seeing old astro buddies is a good thing. Making new astro buddies is a good thing. Catching ANY photons you can is a good thing. Sharing the sky with someone you love, priceless.

Glendo State Park Observing Report by Roy and Monica Martens

Clear skies the first week of May appeared as allusive as the jackalope, according to all available forecasts. Monica and I had decided to go wherever the skies were clear within reasonable driving distance. We restricted our range from Central Wyoming to Northern New Mexico and Eastern Utah to Western Kansas. The forecasts finally led us to venture to Glendo, Wyoming for a single night of observing the heavens. According to the “Clear Sky Clock” (<http://cleardarksky.com/csk/>), we should have a good night.

This would be the first dark sky for our new 17mm Nagler eyepiece. Only one word is suitable for the observations using this eyepiece in combination with our 12.5 “ F5 telescope at a very, very dark sight like Glendo Reservoir -- WOW! From the Indian Point campground on the north shore of the reservoir (approx. 15 miles from the park entrance) we had clear sight of the horizon from the Northeast to the Northwest all across the southern sky. Cottonwood trees obstructed the northern horizon but we could observe from about Polaris up so this was not a major inconvenience. The night was stunning. While we suffered through some clouds early, it was perfectly clear and stable by 10pm. Did I mention that it was very dark? The beehive

cluster in constellation Cancer, M44, looked like a small cloud to the naked eye. Nearby M67, also in Cancer, was also an easy naked eye object along with M5 in Serpens Caput just south east of Virgo. Only after coming home and looking at these objects on Starry Night did I realize how dark this sight was. M67 and M5 are listed as magnitudes 7.5 and 7.0, respectively.

Using Nikon 10X50 binoculars, I was working on the Astronomical Leagues' binocular Messier certificate and was able to observe 48 objects on this night. I was able to observe eleven of the sixteen "challenge objects" from Appendix A of the Binocular Messier Club available from the Astronomical League web sight.

Just before 1am on May 5, I decided to have a look at M13 through the telescope. This probably was the highlight of the evening. The setup I was using was our 12.5" Discovery F5 (1587mm focal length) with the 17mm Nagler in combination with a 2x TeleVue Powermate. M13 at 187X magnification, under perfect skies, and with a 2" eyepiece is a photon treat. So many stars and so little time.....

Additional notes from Monica: Best object of the night through the telescope using the 17 Nagler was M108 in Ursa Major, an elongated-looking galaxy that had a lovely hazy dust lane around a bright core. Another highlight: Owl Nebula (M-97) – dark spots in nebula were easily visible through the scope.

Also... the dark sky clock was extremely helpful and very accurate for our star gazing this week. The camping spot was a little sandy and rocky, but we found an additional site nearby in a meadow that we'll try next time - -the only downsides to this other location are (1) it's about a five minute walk to a bathroom and (2) there are cow patties from past grazing. The nature sounds at night are numerous – lots of coyote activity, though none came close to us, lots of frogs and birds also. All of the campsites have bathrooms that don't have locks on them – so they're open year-round. If you go to Glendo, drive all the way around to the backside of the reservoir to get away from the Interstate and campsites with poor viewing due to trees and hills. Also, you can't camp at areas that aren't designated campsites as the park borders a lot of private property. We were near a boat marina and had a sodium solar-powered light nearby, but it hardly bothered us ... the sky was very dark. We think this location might be ideal in May and September but don't plan on using it in June, July or August due to campers. We think we were one of only two camp groups on our side of the reservoir.

Our next trip might be to the Moab area, and we'll report on that also.

Meeting with Burt Rutan by Philippe Bridenne

At the end of April, Mentor Graphics, the company I work for, had a Users Conference in Santa-Clara (CA) with more than 500 users attending.

On the last day of the conference, Mentor Graphics had invited Burt Rutan as the guest and motivational speaker. Burt started this presentation by giving us a short review on the first 16 years of Space flight, then moved on to the Aviation's renaissance, and presented a very interesting chart related to the innovation cycles for high speed travel. The chart started on the left with cars displacing horses and trains in the 1900 and ended in the far right in the years 2030. His key point is that real cycles develop only in the private sector. This was to illustrate his point that Space Travel is currently primitive. Relating to the Aviation's renaissance when this domain only developed when owned by the private sector, he asked the question about the Space Travel Renaissance. Then Burt transitioned to the explanation of the first missions of SpaceShipOne (including a nice video) He briefly explained how SpaceShipOne is immune to accidents caused by entry flight controls. At that point he took us all to the future where he described the development of sub-orbitals Space Line operators that within 5 years would fly 3,000 astronauts, and in 10 years would reach the level of 80,000. He talked about Resort Hotel in orbits. The punch line is that children's dreams will turn into real plans. After a standing ovation for 10 minutes, Burt was kind enough to sign autographs and have pictures taken. A great time for all of us! For more information visit Burt's web site at <http://www.scaled.com/>



Your newsletter editor with the famous Burt Rutan

Classified

To buy:

Wanted: Large dob, say 14-15 inches, in good working order, preferably with digital settings circles. Thanks!
Bill Travis, 303-530-5010, wtravis@colorado.edu

To sell:

I am trying to sell a Celestron Ultima 9.25. If the deal were local I would expect closer to \$1,600 or so and accept credit cards.

<http://www.astromart.com/viewad.asp?cid=233874>

Jared Workman

I got a new (800mHz) computer & wish to sell my 3rd computer. It's a 433mHz, 64meg RAM, 9 Gig HD space, 33.6K modem, SoundBlaster sound card, with a 15" monitor, programmable keyboard & MS mouse, with Windows 98 SE for sale. \$180. No problems with it what-so-ever. Will deliver & setup within 30 miles of Ft. Collins. It would be great for a stand-alone application or a kid's computer.

Contact Tom Teters tomt@starmon.com

If you have astronomy stuff to buy or to sell, send an email to your newsletter editor
philippe_bridenne@yahoo.com

The LAS warehouse

LAS logo T-Shirts:

Crewneck, navy blue, 8" white LAS logon on front

\$10 - S, M, L, XL

\$12 - 2XL

\$13 - 3XL

\$14 - 4XL

\$2 - 5" LAS vinyl sticker, black or white

\$5 - 4" LAS embroidered patch

\$5 - VHS tape, "An Evening With David H. Levy", 3 January 2004

\$1 - LAS Planisphere

2/\$1 - LAS un-bumper sticker



Awaiting darkness at Cactus Flat North by Bill Possel

