

Starscan

Johnson Space Center
Astronomical Society

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**OUR
BI-ANNUAL**

CLUB

TRIP

TO

FORT

MCKAVETT



**OCTOBER
2007**



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Message from the el Presidente

Howdy All,

As usual, October was our busiest month with our Fort McKavett trip, All Clubs meeting and Astronomy Day. We had great success at all three of these events thanks to the efforts of many folks who volunteered their time. The Fort trip was one of our best ever with clear skies and a huge turnout. Not sure when I've eaten so much! The Friday night grill-off was a blast and I want to thank Fred for the seafood gumbo which was exquisite!

The All Clubs meeting gave us an opportunity to join with the other clubs in the area to promote our hobby and educate the public. We were honored to hear Steven O'Meara's presentation on the relationship between witches and comets. Over two hundred folks attended.

Astronomy Day went very smoothly this year due to the detailed planning conducted months ahead of the event. We experienced record attendance. Members of JSCAS were out in force this past weekend and represented us well! I'm anxious to see the pictures once they're posted to the Astronomy Day website. I'm told that the line of cars waiting to get into the park was 45 minutes long at 9:30 p.m.

November brings us a schedule that is a bit slower than the previous month and I hope to see you all at our next regular meeting and star party. Daylight savings time is creeping up on us (Nov 4th) granting another early evening hour of observing so plan accordingly. Also, plan on our bi-annual election in November. For those wanting to occupy a position in the club, please drop me a note off-line.

Letter from the Editor

By Connie Haviland

As you know, the month of October is one of our busiest month. Between Astronomy Day 2007 and our bi-annual trip to Fort McKavett, we stay pretty busy with preparations. So this month I have pulled together as many articles and "allowable" pictures of these event as I can for you to enjoy.

Also, please note that I still do not have a crossword puzzle for this month. I apologized, but with all the events this month, I have not found one that I am satisfied with, without going out and buying one. Any suggestions of a good, reasonably priced crossword puzzle software? Send it my way. Keep in mind that it must give the solutions in a form that I can copy and paste here in the Starscan. I will be looking for another one, so be patient and I will have this feature back ASAP.

Please note the "Note from the JSCAS Librarian" this month. She has some interesting news for you. And I want to thank Ed Malewitz for his wonderful donation to the club. Read on and you will see what that is.

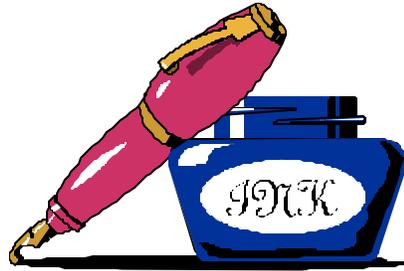
Paul Maley has asked me to set up a calendar that will extend as distant as 2020-something. This calendar will include events that are down the road and will allow others to set aside some time to participate or at least be informed about these events. I will be working on that and will try to have it included either next month (December) or a definite inclusion for the first of the New Year-2008.

Star Party Dates—2007

By John Erickson

November 10, 2007 Haak Winery

Letters to the Editor



Dear Editor:

Here is a visual aid for the teachers on the group. <http://www.rense.com/general72/size.htm> We may be small in size but we are giants when it comes to potential. Check out My Pictures—
www.desertman.smugmug.com

~~ Dale Evans~~
Valentine, Texas

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To all,

Every year, after Astronomy Day, I put together an Astronomy Day photo album to post on the Astronomy Day web site. So, once again I would like to ask that anyone that has pictures from the Regional Meeting and/or Astronomy Day to send copies of them to me at rerogers@ghg.net along with your name for image credit. It doesn't matter as to what size the images are.

On another note, I would like to say Thank You to Bill Leach, Cynthia Gustava and all the Astronomy Day volunteers for all the effort and work to make this event work.

Thanks,

Bob Rogers
Astronomy Day Web Master
www.astronomyday.org

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FROM AROUND THE CLUB

Reflections on the Fort trip of October of 2007

By David Haviland (lame duck VP)

I feel that for me I can sum up this trip in one statement: This was one of the best Fort McKavett trips for me in recent years and for a multiple of reasons.

First among many reasons was that this was one of the highly attended trips to the Fort in recent years. It was a pleasure seeing a number of UN-familiar faces all sharing their passion for the stars. Second, it was good to see some of the club's elders also there, and third, for the most part, these were some of the better skies in recent years. There are other reasons, but being on the admin side of this crazy bunch of folk (and I mean that endearingly) it was just great to see a large group of people.



If you think I am kidding just look at the picture above and see "RV-Row". I have never seen so many packed in behind the ruins!



We did our "usual" thing of arriving late Wednesday night or in reality, very early Thursday morning. Some think we are nuts for doing it this way but I've come to dread being so exhausted come Thursday night that for the past couple of years we've opted to arrive between 1 and 3 am and just "chill" for Thursday. We pulled into one of the slots up top near the bathrooms. For the record we counted perhaps 24 deer coming up the road from I-10, in total contrast to last March where we counted 79. We spent most of Thursday getting things set up, trailer leveled, etc. and I refuse to say how long it took me to get my Dish aligned, or activated! Regardless, we opted to let Thursday go as we had some work to do with Connie's new mount for her Schmidt Newtonian 10" tube (please see a separate piece on that).

We did come down to the grounds where the viewing wasn't the best. It was great socializing by red light and just catching up. The most embarrassing moment was when a few folk gently pointed it out that a seemingly new source of white light on the field was emanating from the Haviland porch light on their trailer. We made sure it was off, never to be turned on for the rest of the trip. The JSCAS group is a great group but don't slip up for one minute as they won't let you live it down!

I'm not sure how the rest of the group spent Friday but John Cavuoti and myself found ourselves in Junction for hardware, food, and Radio Shack. No matter where we go, we always end up having to go search for either a hardware store or a Walmart for some silly thing left behind, forgotten, or for something that was broken in transit. None the less, we needed a few things. Seems we can never get away without having to make "that" trip.



It is always fun when these two are present.

Saturday night brought clear-er skies than Friday night so once the sun went down, scopes were soon tracking the sky and yes, the porch light was off. The only downside to this trip was that the wind was definitely up and blowing. Initial weather predictions were “iffy” and as such I opted to leave my CGE11 at home, only taking my 6” Dob, John took his 6” Dob, and Connie took her SN 10”. I also brought an Orion Wide Field 80 which will become my new spotting scope for the CGE but for this trip I simply mounted it on a photographic tripod and surveyed the sky from a distance. Unfortunately the wind made looking through my Dob a fairly futile exercise since once I got an object aligned and let go of the scope, the wind did whatever it wanted with the scope so I focused more of my efforts through the Wide Field scope and Connie’s SN 10”.

Although this was Saturday afternoon, this was pretty much the situation for Friday and Saturday night. Just take a look at the flag.

The BBQ got off to a very good start as well. Again, it was nice to see so many new faces.



Here, Hernan and Lisa were addressing the “troops” as this was, in fact, our 10th anniversary at the Fort. It was most fitting that Hernan, who is one of those that originally forged the relationship with Buddy at Ft. McKavett was there to say a few words.

Afterward, many opted for naps, quiet time in various places. I wandered about taking pictures as I went and settled down for part of the afternoon with Becky, Shane, and Anne. Becky showed a short DVD program on weather balloons which I found fascinating.

Saturday evening began with the public star party which also seemed to be well attended. Many objects were cued up that night for the public and with Connie’s new mount working well, it performed like a trooper as she went from object to object. We seem to have heard most of the “oohs, and ahhs” when Galaxies (M31) and Nebulas were in the eyepiece. Globular’s were kind of “ho-hum” from what I could tell. The general public left around 10 – ish and we continued until about 11 or so. We opted to head back to the trailer for food, a 30 minute nap, and then we were back out on the field by about 12:20 am. We did another 30-40 minutes of viewing and when we decided to call it quits when we looked around and then at each other -- we had the only two red lights left on the field as we were all alone. We’ve never been the last ones off the field.

As I stated earlier, this was one of the better trips for our crew, the skies, friends, and food couldn’t have been better.

____**

Boy, do I love to go to the Fort!
by Chuck Shaw

Fort McKavett is a magic place I think. Besides the tales of ghosts, the amazing history of the place brings to life what it was like a long, long time ago when life was not as "comfy" as we have it now!! It also helps put me in touch with my west Texas roots when I get to visit with the fine people that come out on Saturday afternoon and evening to the star party!

This trip may have been more fun for me than usual because I had only the night before gotten the latest rebuilding exercise on my poor long suffering 14.5" alt/az operational, and it was sort of a "first light" for it in its latest re-incarnation (of many...). This update also included trying to make it lighter. I ended up drilling 514 holes in it, to try and reduce it from its rather hefty #330 (I now do not have a "Dobsonian", I have a "Swisssonian", catchy, eh??). It is a lot lighter I think... must be down to no more than #295 now... I also had changed the drive system from the roller drive to big 720 tooth gears that Andy had hobbled for me a while back, and then replaced the stepper drive system with a really amazing servo motor system by Dan Gray (Sitech).

I also decided to not bring my CCD cameras this time, and actually LOOK thru the scope!! Wow, what a concept!!!! Thank you Dennis Webb for doing that the last time I was at the fort!!! After I found my eyepiece case (which took a while), I piled everything in the back of the truck and headed west on Friday morning, arriving a bit after 3pm. Using an alt/az mount visually is a LOT simpler to get set up than a GEM and all the CCD "stuf", and I had time left over to visit before and during the Friday evening BBQ.... What fun!! Roast Peaches??? They were GREAT!!

The weather was clear, and a bit windy. That really made me happy that I did not try to image on this trip! It was super to get out under a dark sky with not only my JSCAS friends, but all my friends in the sky I have not been able to see for a long long time (even at TSP due to the rain we had this year!). I was amazed and excited to see how many scopes we had set up on the field! This is what club star parties are all about!!! There's visiting, sharing views through each others scopes and passing on tips and tricks to each other; and, all under a bright Milky Way halo of beauty. Wow, just does not get a lot better than that!

Saturday was just as much fun. A nice slow start to the morning, and more beautiful weather.... The BBQ and silent auction were fun, as was visting with everyone in the afternoon. The siesta in late afternoon was a luxury I usually don't get here in Houston...(gotta do something about that!). Thanks to Shane for showing me how to field strip a Losmandy GEM (I am picking up one to play with). A number of us went into Menard to "OJ's" for Mexican food (Thanks for the tip Becky on the Fajita Quesadilla's!! Glad I was not driving as it took all my energy just to digest on the way back to the fort! The wind stayed up Saturday night, but the sky was clear again (yea!!!). We all had fun showing off fun things in the sky to the visitors than came. I was set up right beside Becky and Shane and they had their wonderful refractor and beautiful AP1200 mount going. Bob Taylor is in the process of updating his magnificent 22" alt/az to the Sitech drive system, so I showed off how it works to him and we ended up giving each other "eyepiece rides" doing GO-TO's (an EP ride is when the observer calls out a target to GOTO, and then keeps observing as the scope slews). I got the biggest kick out of Bob's squealing as the stars would fly by in the FOV, and then stop with the object he called out right there in the EP. You are gonna LOV this system "El Presidente for Life Bob"!!!! Becky and Glenn took turns driving and riding, and by the time we had finished being silly, the mount was so confused as to where it was they ended up "star hopping" with short slews to find Neptune, Uranus and Pluto with it. Pluto was down in the grass, and we were all amazed we could see it at all. It looked great in Becky and Shane's refractor, and everyone could also see it in my VERY dirty not well collimated newt. It was a hoot to explain how to use averted vision to folks using the scope and have them cry out when Pluto would become visible!

Bob, Karen, Randy, Dollie, Triple and Ann were going to swing back by their property in the hill country on Sunday to drop off their RV's on the way home, and asked if I would like to see their setup! I said SURE! Then Bob said they were going to leave "early" on Sunday morning..... ugh (early is defined as before noon in my book!)... So, I struggled back to sort of a functional state Sunday morning, piled my stuff back in the truck, and found that Sonja (bless her heart!!!) had made breakfast and I really enjoyed it!! (miss seeing you guys!!!) It was worth it though. Wow, what beautiful country to retire to!! They have a GREAT setup, with all sorts of "wine trails" that they have cleared, and benches to sit and take it all in, paths that are built, and even places to set up a "wine cache" in case you run dry!! We all had to leave reasonably early to allow them to drop off Ann at the airport in San Antonio (was super to see her again!!). I kept rolling and made it home at a good time with a big smile on my face!!

Like I said, I LOVE going to the Fort!!!! Can't wait for this spring!!!!

See you there!

Chuck



COMMENTS ABOUT OUR 10TH ANNIVERSARY OF GOING OUT TO FORT McKAVETT

My 10th anniversary at the Fort was an emotional, yet fulfilling event. Brenda, Monster and I had a great stay in our Casita at the Fort. Brenda was somewhat apprehensive about how rugged and wild the Fort might be, and was pleasantly surprised to discover how nice it is. She was also a bit nervous about the Casita, but it was comfortable and roomy enough (barely!). Brenda was also encouraged by how kind and welcoming the JSCAS family is, for which I am grateful. The Fort is great, but the membership of JSCAS is what makes the event such a memorable event.

Ed Malewitz

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Just wanted to join in the banter about our recent trip to the Fort. No doubt, one of our best!!! This event drew members from Colorado, New Mexico and Florida!! Special thanks go to Becky for bringing extra copies of her new book for autographing. If you didn't get one.....bummer!! Great work Becky!! Can't wait to see the pictures from this trip in the next Starscan!!!

Bob "the end is near" Taylor

____**

Quite true El Presidente... for me this was one of the better trips I've had to the Fort. I let my dob go for the wind and just viewed out of Ed's, Chris's, and Connie's scopes. I have to say that new Atlas mount for Connie's SN 10" held up very well against the wind. I also did some wide field viewing out of my new Orion Wide Tube 80 that will be the new spotter scope on my CGE11. I had it mounted on a simple photographic tripod for this trip. It was also great spending some time with Becky and talking about the weather ballons. All in all, this was one of the better trips for me.

David "Presidential candidate" Haviland

____**

I am very happy to report that I was able to achieve first light at the Fort, thanks in no small part to the infinite patience of Charlie McLeod who showed me the art of Polar alignment. I was able to capture some 60 second images of Andromeda and the Orion Nebula. I still have yet to get together with resident CCD Guru Al Kelly to learn post processing, but I am looking forward to it as soon as my hectic schedule clears a bit.

Matt 'Mirror-Lab Director/Wine-Maker' Hommel

WHAT DO YOU DO AFTER YOU LEAVE THE FORT??

I asked the club members what they did after they left the Fort and headed for home:

We make it a point to take our time on Sunday, the last day at Fort Mac. Actually, I don't think we want to leave, but we get up and make coffee and start packing things up. We don't eat breakfast since we need to pull our scopes off the field and pack up all the things and ready the trailer for the 6.5 to 7 hour drive home. What we have made as a tradition, after hugging everyone and telling them to have a safe journey home, is stop at the Cracker Barrel. I have fond memories of meeting a couple of members there, like Ed and Eleta, the one time there was a 45 minute wait to get a seat and they shared their table with us. Or the time we met Ken and Lisa there. We would continue our talks and share fond memories to continue those with the ones from the fort. Yes, this has become such a tradition that it seemed strange to pass up the Cracker Barrel that time we returned home after the evacuation with "Rita". Yet with 2 dachshunds and 1 elderly cat (Grandma's at the time) and 4 people, we had to get home.

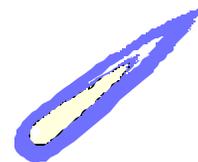
Connie Haviland

____**

I used to drop by to see an old college friend in Austin after a Fort McKavitt trip. This year, however I just drove home, since I had not slept well either Friday or Saturday nights.

Charlie Hudson

ALL-CLUB MEETING AND ASTRONOMY DAY—2007
Steve O'Meara—Astronomy Day 2007 Speaker
Feedback from our members who attended



I have attended about 3 or 4 of the All-club meetings, but this presentation by Steve O'Meara was fantastic. It kept my attention the ENTIRE time. Not to belittle the other speakers from former gatherings, but this was really interesting. It is amazing how Man has looked to the stars and his interpretation be so vastly different from others. Here is where the "times", or ignorance", has caused fatal results. How astronomy and its events have made a huge imprint in American history.

Also, Steve is a pretty amazing person. His personality will capture you from the moment he opens his mouth to speak, until he is finished. He not only captures your attention with knowledge, but his enthusiasm is pretty amazing as well. I am sure that those who did not see him on Friday night at the All-club meeting, but were able to attend his "presentation" at Astronomy Day, enjoyed him equally as much as I did. I want to say I had one of the best times at this year's meeting and I hope to see Steve return.

Connie Haviland



Howdy All,

I want to thank all of the JSCAS volunteers who devoted their Saturday to the event (A-Day 2007). We had a record crowd (numbers are still being tabulated) and the entire day was a success!! The upper deck was packed for the entire day and into the night. The indoor and outdoor presentations were also heavily attended. Astronomy Day is a great opportunity for us to display what our hobby is all about and also to teach about the "evils" of improper outdoor lighting. One lady apologized to me for leaving her flood lights on all night. I asked her why she left them on and all I got for an answer was a blank stare.

Our club was well represented at the All Clubs Meeting downtown and there were two new clubs present; The Galveston Star Gazers and the Huntsville Astronomy Club. There were over two hundred attendees at the All Clubs Meeting, a testimony that amateur astronomy is still alive!!!

With our busiest month behind us, we can throttle back a bit and prepare for our next star party at the Haak Winnery. Thanks again to our volunteers!!

Bob Taylor

.....

Folks:

I'm no official voice of success or failure but from where I sat, it seemed to me that ADAY was better than ever. I detected little problems with the events and coordination of activities. Am very interested in the gate tally since the weather couldn't have been better although with less wind.

David Haviland



I agree with Chris that the Astronomy Day events were well organized, and wish to share my thanks. However, I was disappointed in the All Clubs Meeting main speaker. We flew a guy in from Hawaii to give a talk with only the most peripheral relation to Astronomy. His slides contained lengthy quotations that were too small to read even on the TV monitors designed to enable people to see in the long room where the talk was presented. Bob Taylor has given several better talks. I am not singling Bob out as a horrible example. It is just that he has been the most frequent speaker at our club when another speaker could not be found.

Charles Hudson

Astronomy day was great. I really enjoyed seeing so many excited children run around, hopefully they were excited about astronomy. In my opinion Stephen was great. The topic of his speech was very interesting. I agree that he did not get up and speak about astronomical breakthroughs; however, comets are astronomical objects. It was interesting to understand what ignorance caused many years ago and what it could cause today. I found that with his excellent delivery and enthusiasm I did not have to read the text on the slides. I just wish that I could have attended Stephen's volcano talk on Saturday night. He is a great scientist.

Aldora Louw

Astronomy Day was HUGE!!!!

The majesty of the heavens brought them...they came to see and learn. And while I would agree that our speaker on Friday's topic was maybe only loosely related to astronomy, it was, at least to me, a timely reminder that what we do as a hobby and most of us have come to respect as a science, is still to many people out there, very unknown. We know what people don't understand can easily scare them. Admittedly, I love history and I really enjoyed Steve's talk.

To everyone that volunteered, great job!

David Louw

Official Count for Astronomy Day

Park Visitation: 3,997

Obs. Volunteers: 98

Tina Ibarra

Tina.Ibarra@tpwd.state.tx.us

Enchanted Skies Star Party

A short report from Dennis Webb

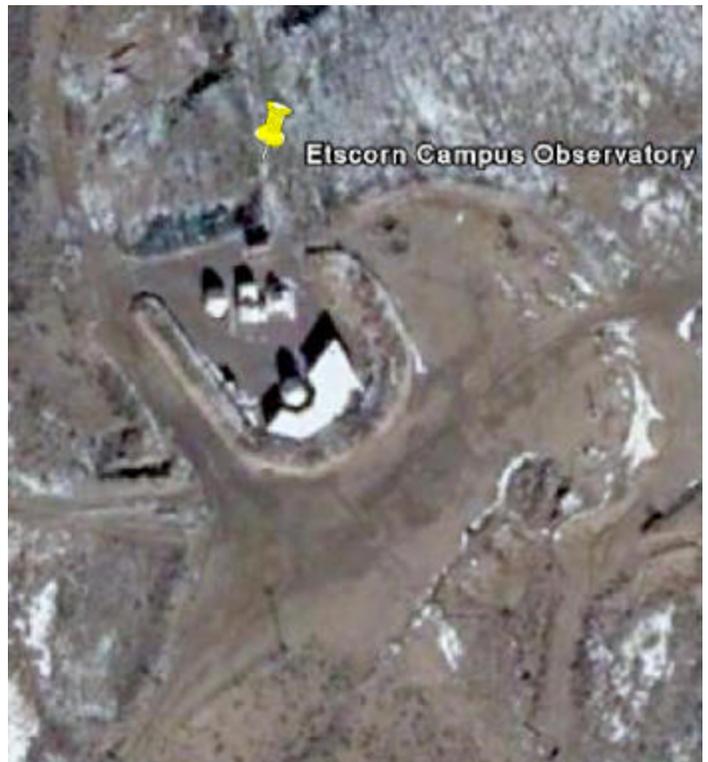
I was invited to speak about the Arp galaxies with coauthor Jeff Kanipe and the Enchanted Skies Star Party (ESSP) in Socorro, New Mexico, the same time as McKavett, Okie-Tex and Eldorado Star parties. It appears that October new moon is a big time for us astronomers. We had a great if brief time and this is a different kind of star party. The Enchanted Skies Star Party is sponsored by the New Mexico Tech Astronomy Club, the Socorro County Chamber of Commerce, the National Radio Astronomy Observatory, the City of Socorro, New Mexico Tech, and the Bureau of Land Management.. The National Radio Astronomy-1 observatory has its offices on the campus and its local observatory, the Very Large Array about half an hour west. We were invited by NRAO public affairs officer and ESSP leader Dave Finley, a professional acquaintance of Jeff's, and the Webb family is always up for a trip to the Land of Enchantment. New Mexico Tech hosts the Energetic Materials Research and Testing Center (EMRTC), "known worldwide for its research and evaluation of explosive materials"; we saw a white cloud drifting off the mountain in the clear blue sky and it appeared to be the result of an explosive test rather than natural phenomena. Astronomy and explosives: fabulous!

Ann and I arrived mid afternoon Friday and made our way to the Etscorn Observatory, the teaching observatory of NM Tech, a facility of the Physics Department. It has two domes and one roll-off roof as well as a nice meeting room. It appears that amateurs have a significant role in the operating the observatory and amateur initiative pairs with tiny funding from the university to get stuff built. It is an interesting location between the university's golf course (greenest thing for miles) and the big mountain west of town. It is situated on a small ridge at the end of a rough road (very rough to a mysterious rent car I had never heard of: Saturn Aura, nice name for astronomy but surely designed for shorter people than me). The observatory proper is surrounded on three sides by a "berm", a pile of dirt with railroad crosstie bulkheads; the berm is to reduce the direct effect of city of Socorro lights on the small observing area – my first thought when I saw it was "why do they need levees in such a dry area and up so high?" Obviously I have too much experience observing from swamps. Pretty neat, a pile of dirt as light control.

This is not the same kind of star party as we are used to, where you set up in a compact area and observe with vigor over several nights. This is apparently a "field trip" star party, with the outings this year including three major outings:

1. Observing for one night on Mount Baldy (10,000 ft) near Socorro
2. Insider tour of the Very Large Array
3. The USAF GEODSS seep space surveillance facility at White Sands

We were not able to go on any of the tours. They also have afternoon talks at the observatory where a two people had set up their telescopes.



After a nice dinner at a microbrewery (every little town in NM has several), Jeff and I talked about the Arps in the big Physics Department lecture hall (ah, takes me back...) before a polite crowd, which included a curious geology student who asked most of the questions. Following our talk we hawked a few books and then returned to the observatory for a public star party. Since they expected more people than the observatory parking lot would hold (was true), we parked in a lot about a quarter mile from the observatory and hiked to the observatory on the rough rocky road lit by luminaries (real paper bags with sand and a candle) (dang, forgot to bring red flashlight – stumble, stumble...). Rounding the berm, we saw a bustling crowd, apparently a large number of Tech students and community guests, the Milky Way visible above, and the remote glow of Albuquerque far to the north. All the domes were packed and observatory hosts showed and explained stuff and we jumped right in. I located one doing CCD imaging where the host was running an ST10 CCD camera on a C14 all under computer control. He had just taken a short image of the Dumbbell Nebula and asked the crowd what he should image next. I held my breath for 8 seconds (letting the crown have a chance) and hollered out “how ‘bout some Arps?” He said “OK tell me where to go.” “What RA is in the meridian?” “About 21.” I flipped through the incredibly well organized “Arps Atlas of Peculiar Galaxies, a Chronicle and Observer’s Guide” and we quickly located and imaged 5 Arps (see photos) – these were all 60 second exposures. We would discuss and explain the image acquisition process, what the galaxies were about. My favorite part was when we did a flat-field and I got to explain to everybody what we were doing. I love talking about flat-fields. In this observatory, they do dome flats. Lots of Q&A with people new to astronomy and it was great to be teaching again in a great facility. We made the long hike back to the cars and headed back to the motel (star party does not have a residential situation, though they apparently allow a few campers.)

Like all star parties, ESSP is a mix of hard-working volunteer efforts, an interesting venue and nice people. The core group of observers would nicely fit into our club as we would fit into theirs. I think we will go back.

About the Observatory:

The Frank T. Etscorn Campus Observatory, dedicated 25 April 1993, is on the campus of New Mexico Tech in Socorro, NM. The observatory is one of the sites of the annual Enchanted Skies Star Party (ESSP). In addition, many public and private star parties are held there throughout the year. In addition to being a NM Tech teaching facility, the observatory hosts several residential programs for high school students, showing them the reality of dragging hard science from occasionally indifferent nature.

The observatory is surrounded by earth berms and is strategically located to avoid as much light pollution as possible from campus and town. Several telescopes are available for use at the observatory, the most noteworthy ones including a 20-inch Dobsonian inside a 15-foot dome, both on loan from club member Ken Mason, and a Celestron 14” on a Paramount GT-1100 mount, on loan from the NMT Physics Department. The building itself is operated and maintained by the NMT Astronomy Club. The Club is in a joint research agreement with the NMT Physics Department. The Minor Planet Center recognizes the Observatory as “719 Etscorn Observaory”, recognizing its record of real observations. The main building, apart from the dome, measures 12 × 24 ft., and consists of two rooms. The front door opens to an office/workshop space, and then a door opens from there to the observing room, which houses the C-14. An unusual feature of the observatory is its automated roll-off roof, which uses a garage-door mechanism to open and close for observing. Behind the main building, there is a raised deck, where a 6-inch Shiefspiegler is kept under a rotating dome.

Who was Frank T. Etscorn? In 1979 Dr. Frank Etscorn, a psychologist studying addictive substances, was experimenting with liquid nicotine when he accidentally spilled some of it on his arm. A little while later he felt the telltale effects of a nicotine buzz.

Nicotine is the most addictive drug in tobacco, but its health risks are far lower than that of the tars and carbon monoxide ingested from smoking. Etscorn's nicotine buzz gave him the idea that people trying to quit smoking could be given, through the skin, gradually decreasing doses of nicotine as they tried to quit smoking.

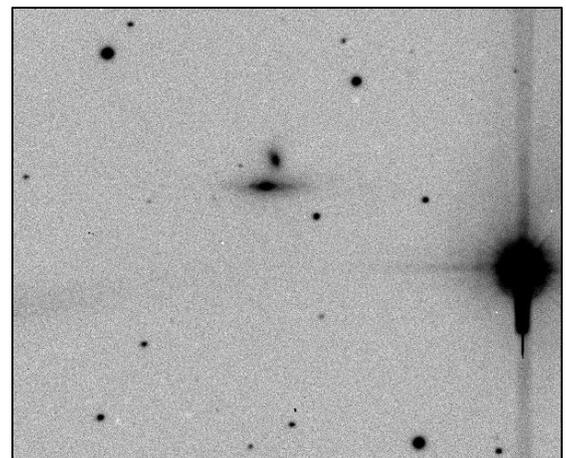
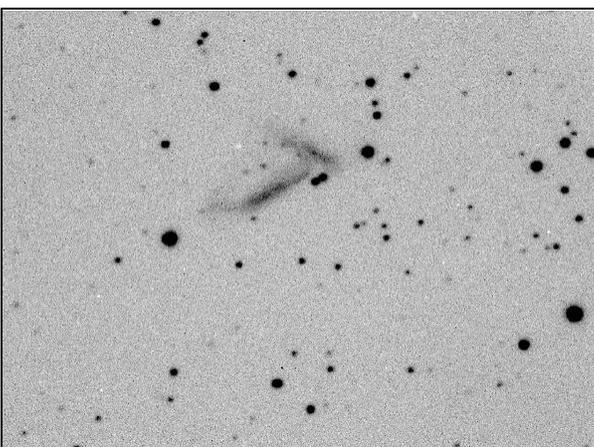
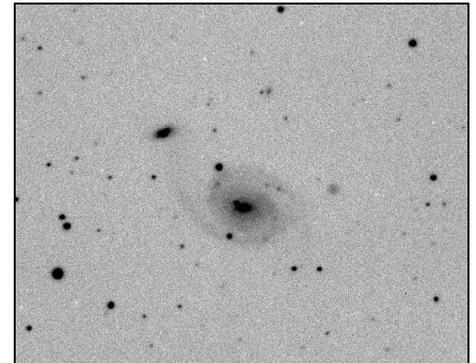
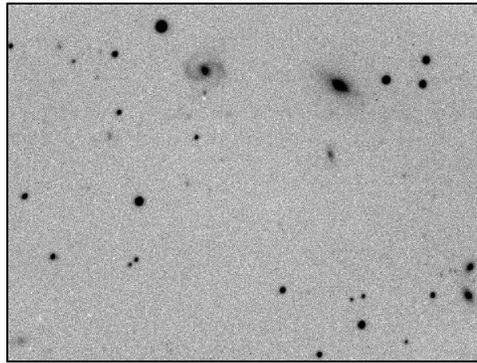
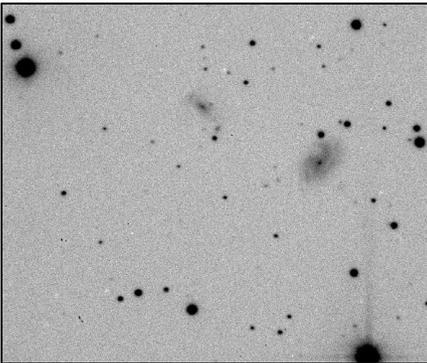
The first nicotine patches hit drugstore shelves in 1992. When the patch was perfected, he patented it and sold it to Ciba-Geigy Pharmaceuticals. The patch earned Etscorn numerous honors and was named one of the best products of 1992. (If you had patented a huge selling product, would you establish an observatory?)

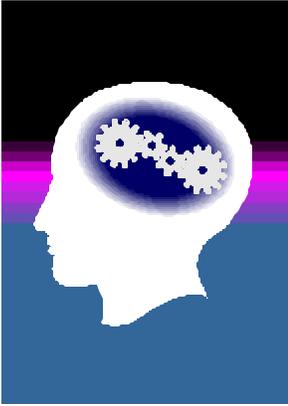


Photos
 Etsorn Observatory – the astronomical berm (obs2.jpg)
 Etsorn Observatory - business end (obs1.jpg)
 Jeff Kanipe and Dennis Webb prepare to autograph books (jeffdennisigning.jpg)
 Dennis speaks (Dennisells.jpg)
 Socorro is proud of their star party (sign in town) (ESSPsign.jpg)
 The Etsorn Observatory from Space (Google Earth in snow) (etsornfromspace.tif) (seen on page 11)



Arp photos (Arp*ESSP.tif – 5 files)





I had seen pictures of high-performance jet airplanes in operation that showed the exhaust containing luminous patches alternating with non-luminous ones. The luminous patches were most likely gasses of higher temperature than the rest. I never understood this, and I was reminded of the problem when I saw it myself at a couple of recent air shows. I had always thought that one could run air and fuel into a jet engine continuously, and there was no reason to operate it in pulsed cycles the way a piston engine has to operate.

I will recall an earlier misconception of mine when I was a little boy for the humor involved. I lived in the Lower Rio Grande Valley of Texas, which is one of the most backward areas in the U. S. On a trip to Dallas a family friend took my brother and me to see the jets take off and land at the airport. I concluded they weren't jets at all, because a jet has fire coming out of the tail, and those planes didn't have that. The reader is entitled to think: "He isn't satisfied even when he does see fire coming out of the tail."

CHARLIE'S CHALLENGE: Could someone either explain this to me or refer me to a publication where it is explained?



RESPONSE TO LAST MONTH'S CHALLENGE

Provided by ??

CHARLIE'S CHALLENGE LAST MONTH: [How is the neutralization of the ions expelled as propellant from the ion engine accomplished?](#) I do not know the answer to this one, either.



By Hernan Contreras

It's About Time

“Time is a maniac scattering dust Life is a fury spewing flames”

In Memoriam

Alfred Lord Tennyson

Perhaps this is the best definition for time and though we may not know the makeup of this mysterious entity; we like to find it, to count it and not waste it. What is really amazing is that even the most sophisticated modern timepieces simply mimic the analog devices of the ancient past.

One of earliest timepieces, the Egyptian clock (Figure 1) was simply two boards set at right angles to each other with markings on the horizontal surface to measure the length of the shadow. With the vertical board oriented north, the simple device could accurately measure time intervals to and from noon. Of course this was strictly local time. No shadow indicated noon at the location of the device. This device never needed winding or batteries, but it didn't work on cloudy days or at night unless you had a bright moon, but then it would be off a little bit, but close enough for pyramid work.

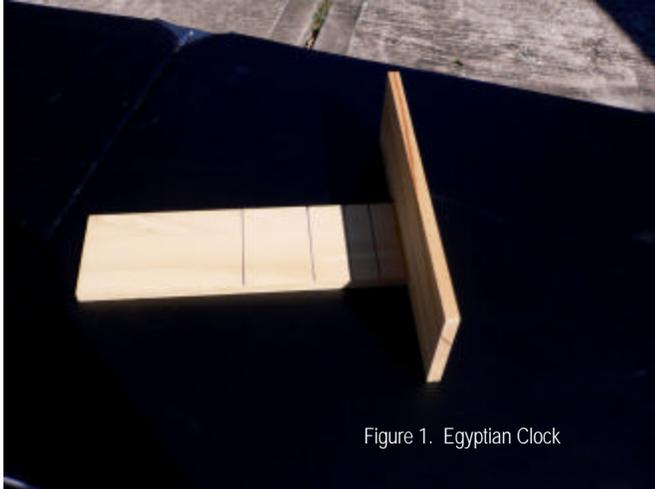


Figure 1. Egyptian Clock

A far more useful yet simple device was the Greek hemispherium sundial (Figure 2) that was simply a bowl with a vertical stick in the middle called a gnomon from the Greek to know. This seemed like a rather strange name for the center pole until I realized that if you want “to know” the time you will have to read its shadow. As the earth revolves west to east, the shadow of the gnomon, like the hour hand of our watch, moves clockwise across the dial. In fact our watch is mimicking the sundial. Even now that we have the technology to display the time digitally most of us still prefer the shadows. What is truly astonishing is that you can tell not just the hour of the day, but also month of the year and even the day of the month by the length of the shadow. This is not all. Aristarchus of Samos deduced from studying this device that the earth revolved around the sun and that the earth tilted 24 degrees to the solar plane over 1700 years before Copernicus.

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Before we had time zones, every town had its own local time. That is, when it was noon in Houston, it was a few minutes before noon in Austin. This system worked fine until we had built railways that crossed the whole country. It was very difficult to set a train schedule if every town had its own time. This was the impetus behind the creation of time zones. In each of the examples I have shown I have mentioned that the time read is local time, but these simple devices can be adjusted to display not just for daylight savings time, but also the time zone. In Figure 3, the hemispherium was oriented about 20 degrees west of north to display Central Daylight Savings Time while the Egyptian clock displayed local time.

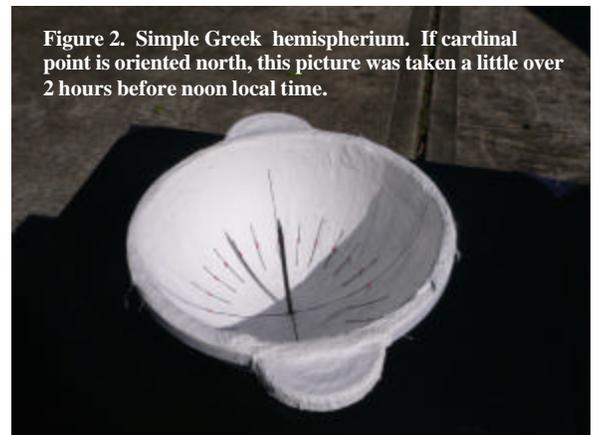


Figure 2. Simple Greek hemispherium. If cardinal point is oriented north, this picture was taken a little over 2 hours before noon local time.

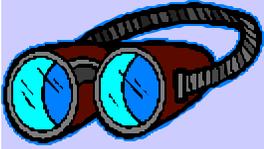
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Though we don't know what it is, we can learn a lot about our world by studying devices that measure it. It's all about time.



Figure 3. Difference in Central Daylight Savings Time and local time





FORT (Forward Observing Recon Team)

By Ken Lester (special operations team)



Once again, Fort McKavett SHS was privileged to host the Johnson Space Center Astronomical Society's Fall star party. Over 50 amateur astronomers traveled from Houston and other Texas locations as well as from Colorado, New Mexico, and Florida.

Fortunately the night skies were fairly good although it was very windy. I believe that all of the astronomers enjoyed their time at the fort.

There was reasonably good turn out of visitors Saturday night. There were even some folks from San Angelo who got confused about the date of the star party and showed up Friday night instead. All the visitors on both nights were treated to some marvelous views of the heavens. I know that everyone who visited my scope was very appreciative of our sharing our scopes and our taking the time to explain what they were seeing.

Of course the evening star party was only a part of the festivities on Saturday. Park superintendent Buddy Garza, his staff and members of the Friends of Fort McKavett group served up a fabulous BBQ lunch. There was a silent auction with many really great items donated by JSCAS members, members of the Friends group and other individuals. The proceeds of the auction and the donations collected for the meal were used to pay for the food for the luncheon with the remaining to be used to purchase food for the Fort's West Texas Heritage Day in March of next year. Once again JSCAS members outdid themselves by winning many of the bids in the auction.

During the afternoon, the Friends group held their annual meeting under the oak tree near the school-house. New officers were elected during the meeting. With great honor Colonel Richard McTaggart was elected President emeritus. John Cobb was elected president. Re-elected were Marilyn Wheless, vice president; Lisa Lester, secretary; Bobby Mae Huss, treasurer. John Schultz, a long time volunteer at the fort and a living historian, was elected to fill the board position vacated by John Cobb.

Saturday was also Town Reunion day with several former citizens of the Fort McKavett returning for a visit. There were many displays and a Power Point presentation of the fort, its citizens and other who have volunteered at the fort.

The next public JSCAS star party at the fort will be the week after West Texas Heritage Day on Saturday, April 5, 2008. Hope to see everyone there.



John Cobb and *Texas Historic Commission*, Commissioner Tom Alexander

Picture Courtesy of Ken Lester



PLANETARIUM MAY BE NAMED FOR DAVID BROWN

By Paul Maley

Astronaut Dave Brown was a member of the JSCAS and perished in the Columbia Shuttle accident almost 5 years ago. Soon that anniversary will be passed and according to Virginia law, it is possible to name a public place for someone after this period of time. A move is afoot to name the Arlington Virginia public schools planetarium after Dave according to his brother Doug. I am touched with Doug and one of his colleagues with regard to this effort. If the measure is initiated and approved I would propose that members of JSCAS who would like to attend this naming ceremony consider to fly up to DC and attend. I plan to do so and have talked this with our esteemed President Bob Taylor who is also interested. JSCAS has had several historical initiatives:

<http://www.eclipsetours.com/historysa1.html>, <http://www.eclipsetours.com/historydc.html>,
<http://www.eclipsetours.com/historysa2.html>

This one should be a welcome addition. More on this as it develops will be presented at a future JSCAS meeting and in STARSCAN.



A SHORT WALK OFF A LONG PIER: OBSERVING IN AFGHANISTAN AND INDIAN-OCCUPIED KASHMIR

By Paul D. Maley

I am always looking for new places to explore and Afghanistan is probably the last place most people would want to visit. However, there were two reasons for me to travel there. The first was the occultation of an 11.2 magnitude star by the 83km diameter asteroid (1241)Dysona on Sept. 29. The path (shown in the next figure) was expected to cross Kabul, the capital of Afghanistan early on a Saturday evening local time. Though troubles have mostly spared the capital, the morning of our arrival a suicide bomber targeted an Afghan military bus killing 30. The explosion was 2km from our Intercontinental Hotel site. This was the first of 3 suicide bombings to take place in the capital in one week. Kabul is not a happy place and there is no astronomy club or any active observers there from what I could learn. Observing conditions, however, can be quite good even in a place with dust and wind. Our visit experienced neither of those conditions.

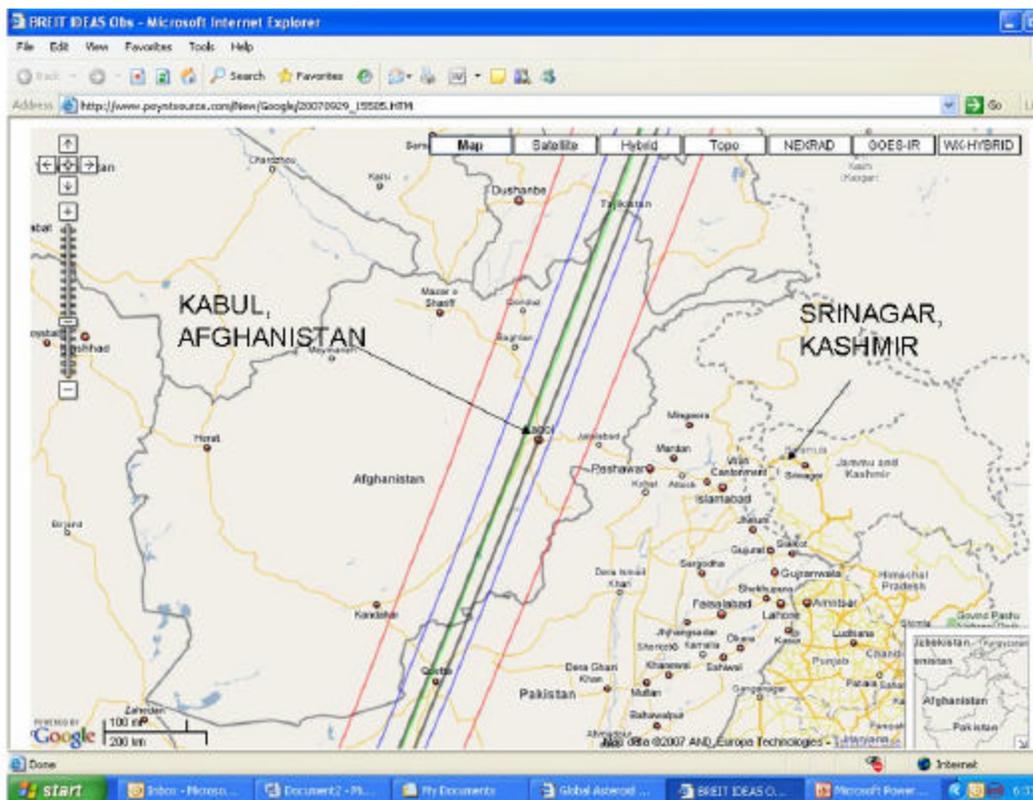


Figure 1. Expected track of Dysona occultation (blue lines) with the centerline shown in green.

Another reason for traveling had to do with a space mission. The European Space Agency had launched an experiment called the Young Engineers Satellite 2 which consisted of a payload that would reel out a 30km long tether. The YES2 flew aboard the Foton-M3 microgravity mission launched on a Soyuz rocket September 14. On Sept. 25 the tether was reeled out and appeared only to go out 8.5km. What happened after this is not well known except to say that the tether is believed to have separated incorrectly from the parent spacecraft and burned up in the atmosphere. It was believed that the tether remained in orbit for a few days. Three objects had been tagged as having been released from the Fotino capsule and it was not sure if any one of them was the tether. Using orbital elements for these unknown objects, I attempted observation in Kabul the evening of Sept. 29 under a clear, moonless sky. I did observe one of the objects which had been seen a couple of nights earlier in Massachusetts and a claim was made that it was the tether. However, the object I saw corresponded to what could have been an ejected battery and was definitely star-like in appearance and not the tether. I could easily see it in 7x35 binoculars at magnitude 6.5-7.0. [By the way, unfortunately, the occultation was not observed since the path had a reasonably large error and missed my site at the Intercontinental Hotel.]

Just to show I was really there, the next image is that proof. On Sept. 30 Lynn and I had a 2 hour driving tour of Kabul. We saw a lot of destroyed places and were caught up in traffic where anything could have happened. As westerners, we stood out like sore thumbs and never saw any other foreigners while on the road. Even at our hotel we did not see any Americans or other western types. We did make a stop at a downtown market to buy t-shirts and moved quickly through the crowd to minimize our exposure; perhaps this was not the best idea but it worked out well. The Afghan military presence is sporadic around the capital to say the least and there were hundreds of people walking freely along the streets. We did see two 2-vehicle Humvee convoys moving very rapidly along the major roads. We were told that the US military likes to swap vehicles with the Afghans making them less of a target. It was obvious our Afghan guide knew how to tell them apart. One of the highlights was an unexpected stop at the Kabul Zoo where we saw the sole surviving lion that was blinded by a grenade explosion during past fighting. It is being completely rebuilt with lots of new animals and if the war does not get progressively worse, the zoo should be a nice place to visit. We only saw workers and perhaps six local visitors. Admission for foreigners is 2 dollars, for locals it is free.

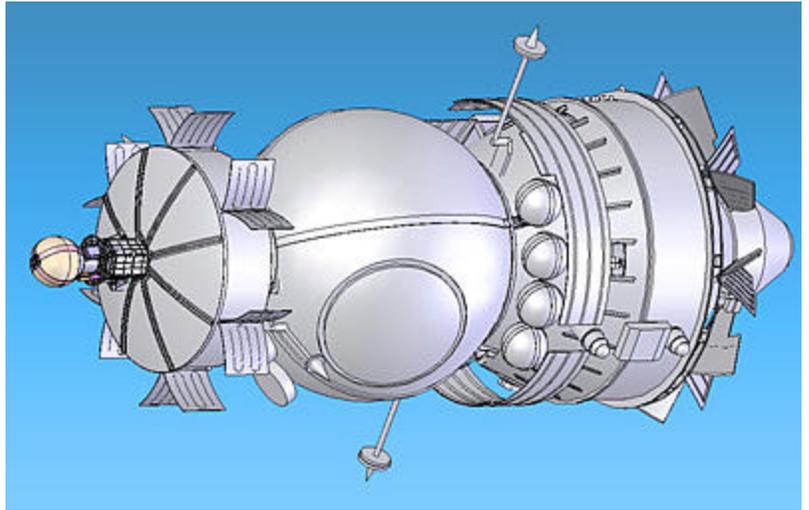


Figure 2. Foton capsule



Figure 3. At the Kabul airport. Note the completely clear sky. If you closed your eyes, you might be in Phoenix. In my backpack is a Meade 2045D SCT.

Following our brief trip to Kabul we traveled to Srinagar, Indian-controlled Kashmir--another garden spot where an insurgency has tied up 600,000 Indian military personnel for years. I observed several satellites on one clear evening and a -4 magnitude Iridium flare from our houseboat on Dal Lake. More on this adventure perhaps at a future JSCAS meeting.

Meeting with Greg Parker

By Dick Miller

While on a trip to Scotland and England in September, I had the good fortune to meet and visit with Greg Parker, an exceptionally skilled imager. He images in Brockenhurst, a village near Southampton in southern England. His work can certainly serve as an inspiration to those who work in less-than-perfect conditions because the weather and light pollution in that area are only a little better than the Houston suburbs. An exceptional night can beat magnitude 5 while a poor, but usable, night runs magnitude 2.

Greg is a professor of photonics at Southampton University. His group designs and builds photonic circuits, in which photons serve the functions served by electrons in ordinary circuits. His interest in astronomy was kindled in New Zealand, where he grew up, but imaging is a recent interest. He started in 2004, long after leaving the dark skies behind. The picture below shows Greg with his observatory. As you can see, it is a tight fit and he spends little or no time in the dome. He operates it remotely from his house about 20 yards away. His main scope, best seen in the smaller picture on the following page, is a C-11. When he originally began imaging, he used a Hyperstar on the C-11 with a StarlightXpress SXV-H9C. Fairly quickly, however, the C-11 (minus the Hyperstar) became his guidescope and his imaging combo now consists of a Sky90 with a StarlightXpress SXVF-M25C. In addition to the one-shot color (colour?) image, he often adds H-alpha and/or OIII filtered exposures. He has found that, except for needing a longer exposure, the color camera with the filters gives images very little different from a monochrome camera, and easily dealt with in image processing.

He is a tireless imager and has accumulated an amazing library of pictures in only three years, in an area where good nights are infrequent. An indication of his commitment is that he can remember each good night that he was not able to image since starting in 2004 and why he couldn't do it. I'm not going to include any of his images in this article, as I could not do them justice. Instead, I'm including the link to his web site and you can browse to your heart's content. <http://www.newforestobservatory.com/>





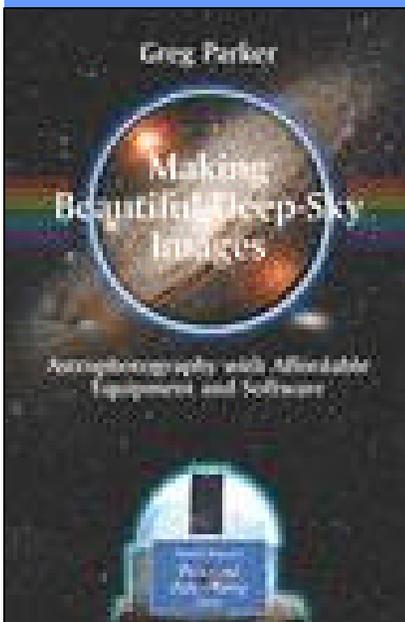
His images are extraordinarily beautiful, and clearly place him within the top group of the world's imagers. He images clusters, nebulae, and galaxies with about equal frequency but his equipment is really optimized for the nebulae, and those are my favorites.

Greg collaborates with Noel Carboni, of Florida. In almost all cases, Greg does the imaging and Noel does the processing. This is one way of increasing productivity but Greg's current project should result in an even more dramatic surge in output. He is building a four telescope array, either four Sky90's or two Sky90's and two FSQ 106's, which will reside on a Paramount mount. There will be two SX M25C cameras, with the fields overlapping to halve the required exposure time, and two SX H36 monochrome cameras aligned with the same field to simultaneously capture Halpha and OIII images. When he doesn't need Halpha or OIII, he can use one or both of the H36 cameras to enhance the luminosity. Obviously, his investment is going way up!

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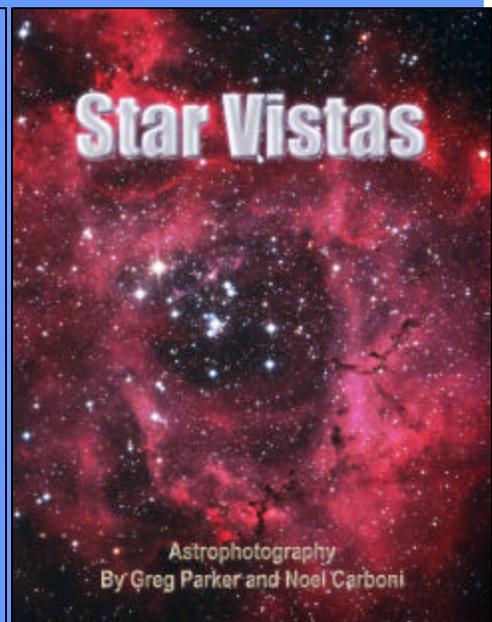
He has written two books, one available now, titled *Making Beautiful Deep Sky Images* and published by Springer, and one coming out in a few months, titled *Star Vistas*. The first is a "how-to" while the second is more of a "coffee table" book; the latter was done in collaboration with Noel Carboni. I first became aware of Greg and his work when a friend sent me an article about him in the London *Daily Mail*. Greg has had several exhibitions of his work, including one last year at Southampton University and a local one that closed just before I arrived. However, I saw all of the work in the comfort of his workroom, with tea and biscuits to accompany the viewing.

The amateur astronomy community in England is a close-knit group, and Greg knows Patrick Moore well. He and his wife Helga certainly made my friend, Chris Robinson, and me feel very welcome. While not an astronomer, Helga almost seems more thrilled by Greg's images than he does. It was a very pleasant and educational several hours and I hope to have continued contact with Greg in the future. I did make a pitch for him to visit Fort McKavett and TSP but would say I left him less than convinced.



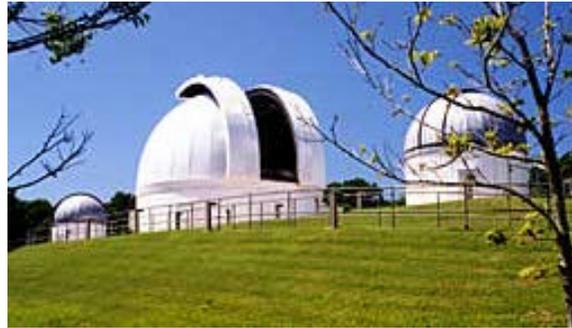
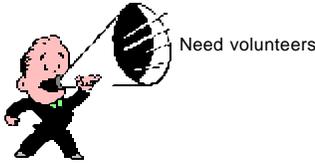
Making Beautiful Deep-Sky Images Astrophotography with Affordable Equipment and Software **Series: Patrick Moore's Practical Astronomy Series** Parker, Greg **2008, XIV, 178 p. 68 illus. in color., Softcover ISBN: 978-0-387-71352-6 Not yet published. Available: Jan 20, 2008**

Star Vistas is a very large format (approximately 15" x 13.5" - 38cm x 34cm) coffee-table book that contains the deep-sky imaging work of Greg Parker (U.K.) and Noel Carboni (U.S.A.). Greg & Noel are currently in discussion with a major publisher on this project and are aiming to launch the book for early in the New Year [2008].



What's Happening at the George!!!

Cynthia Gustava



George Observatory November Events

Friday Night Groups:

Nov. 2 – Two groups totaling 110 school kids (Brazosport Christian School and P.A.C.E. 1st to 8th graders)

Nov. 9 – Girl Scout Sky Search and Overnight (36 girls and leaders)

Nov. 16 – Two groups totaling 95 school kids and parents (La Joya Senior High and Eisenhower High)

Saturday Public Viewing Nights: Nov. 3, 10, 17 and 24

Special events are the Hempstead High Physics class on Thursday, November 29 and our final HMNS Member's Night for 2007 on November 30.

Volunteers are needed for dome positions and deck scopes. Laser pointers are also very much appreciated, especially for the Girl Scout Sky Search.

If you can make it out for any of these events, please write to Cynthia Gustava at cynm31@comcast.net to volunteer. Thanks!

NOVEMBER OBSERVING

★ SSO: (Solar System Objects) Summary for the 15 Nov 07

Object	Const	Mag	% Ill	Rise Time	Transit	Set Time
Sun	Lib	-26.7	100	06:44	12:04	17:24
Moon	Cap	----	31	11:39	16:53	22:07
Mercury	Vir	-0.7	80	05:26	11:01	16:36
Venus	Vir	-4.3	60	03:16	09:14	15:12
Mars	Gem	-1.0	94	20:37	03:38	10:40
Jupiter	Oph	-1.8	100	09:04	14:10	19:20
Saturn	Leo	0.7	100	00:57	07:22	13:47
Uranus	Agr	5.8	100	14:00	19:50	01:36
Neptune	Cap	7.9	100	12:43	18:13	23:38
Pluto	Sgr	14.0	99	09:10	14:31	19:57
Comet Holmes 17P (outburst)	Per	17.1 1.2	97	15:11	00:13	09:10

Highlighted times denote daylight events.

Lunar phases for November 07

Third 	New 	First 	Full 
01st 16:18	09th 17:03	17th 16:33	24th 08:30

Central Standard Time

★ BSO: (Bright Sky Objects)

NGC 224 (M 31) – Galaxy in Andromeda, Magnitude 4.4, Size 190' x 62'

NGC 246 (C 56) – Planetary Nebula in Cetus, Magnitude 8.0, Size 4.1'

NGC 650/651 (M 76) – Planetary Nebula in Perseus, Magnitude 11.5, Size 2.8'

★ DSO: (Dark Sky Objects)

NGC 628 (M 74) – Galaxy in Psc, Magnitude 10.0, Size 10.5' x 9.5'

IC 1613 (C 51) – Galaxy in Cetus, Magnitude 9.9, Size 16' x 14'

IC 5146 (C 19) – Bright Nebula in Cygnus, Magnitude 10, Size 12 x 12

NGC 40 (C 2) – Planetary Nebula in Cepheus, Magnitude 11.6, Size 60" x 40"

★ CDMP: (Chris' Don't Miss Pick)

NGC 457 (C 13, Mel 7, Cr 12) - ET!, Owl Cluster, Phi Cas Cluster in Cassopia, Magnitude 6.4, Size 13.0', #Stars 80

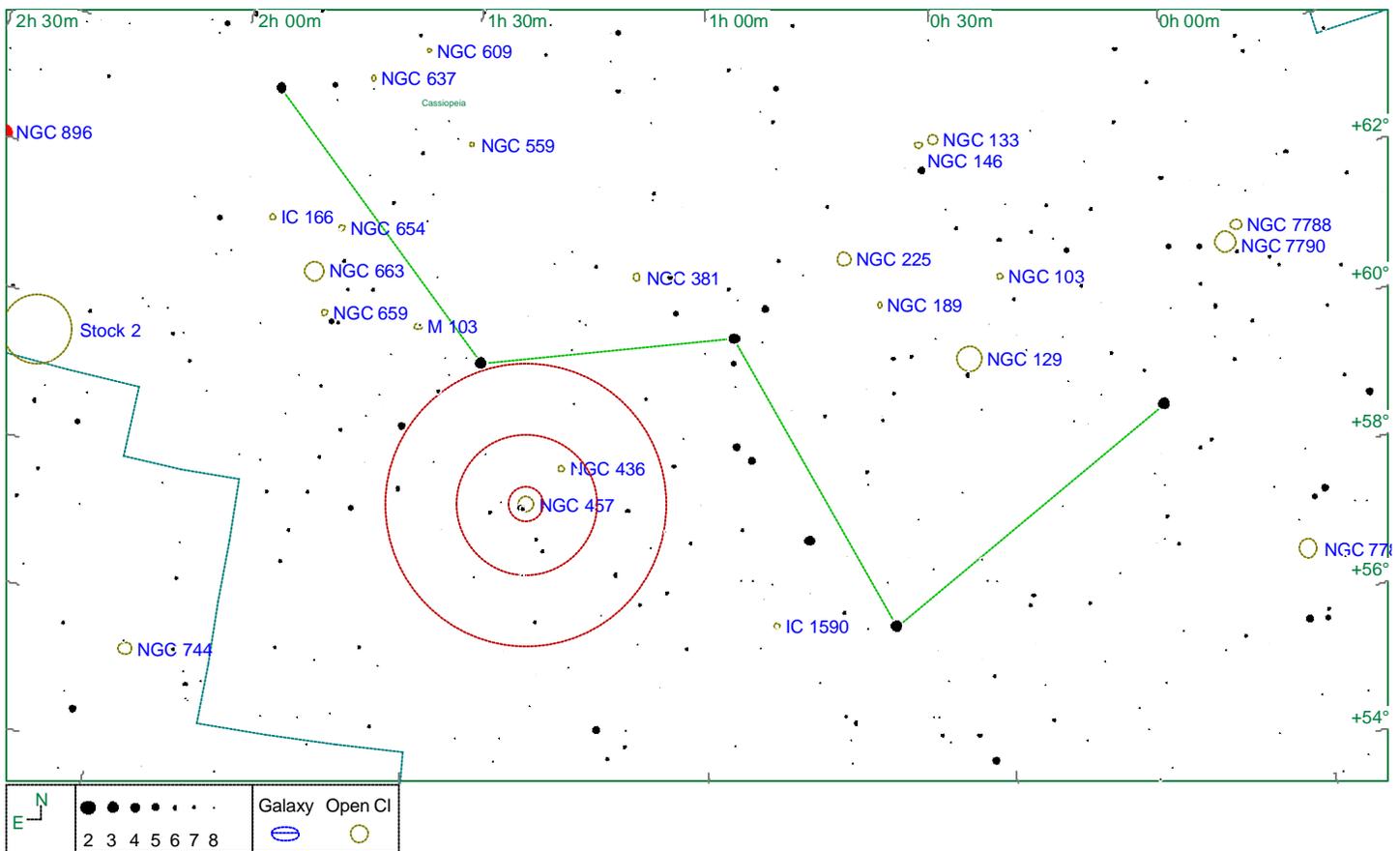
This fine open cluster that was discovered by William Herschel in 1787, is very easy. From delta Cassiopeia go 2 degrees south-southwest. There you will find NGC 457. It a star party favorite with kids

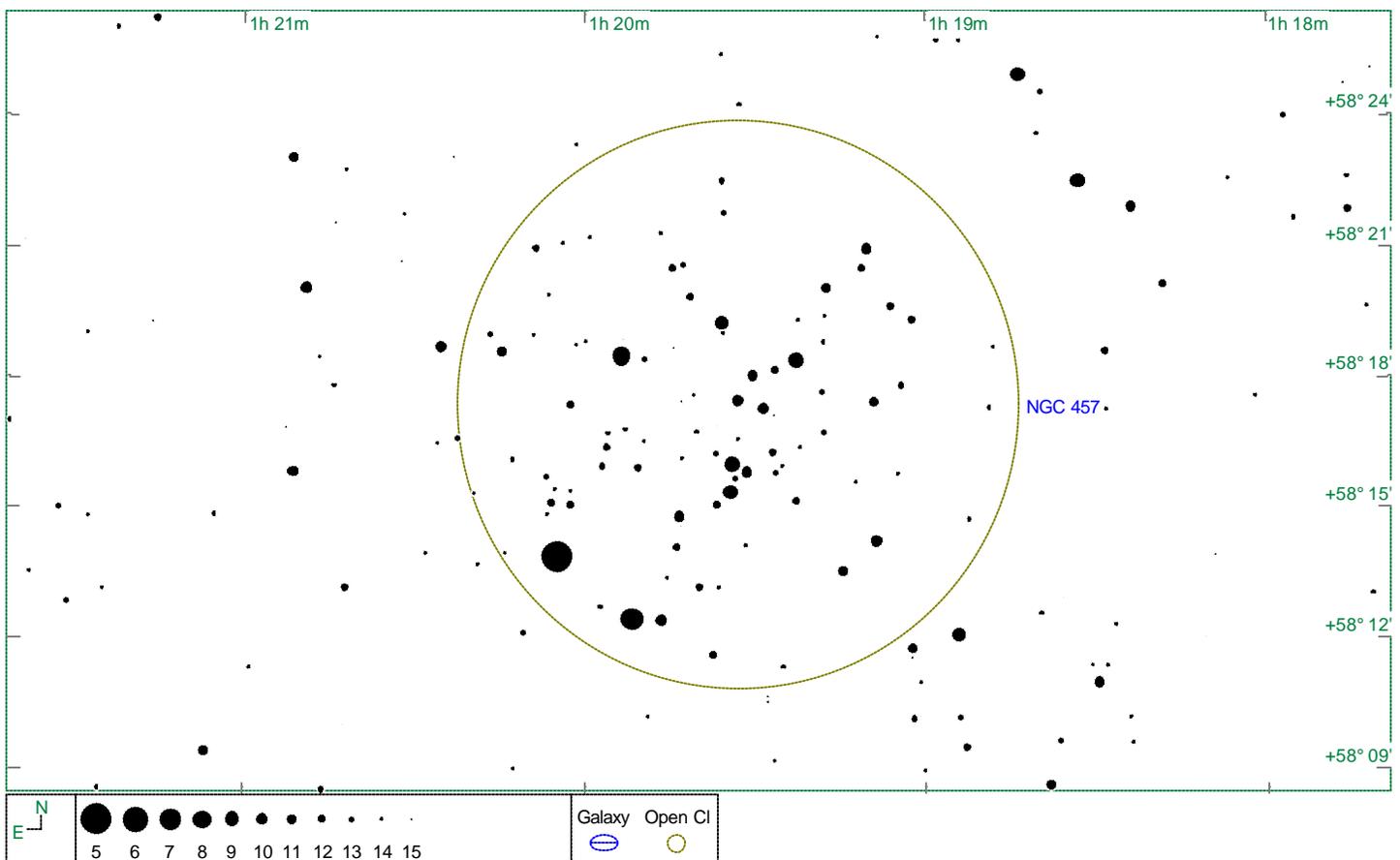
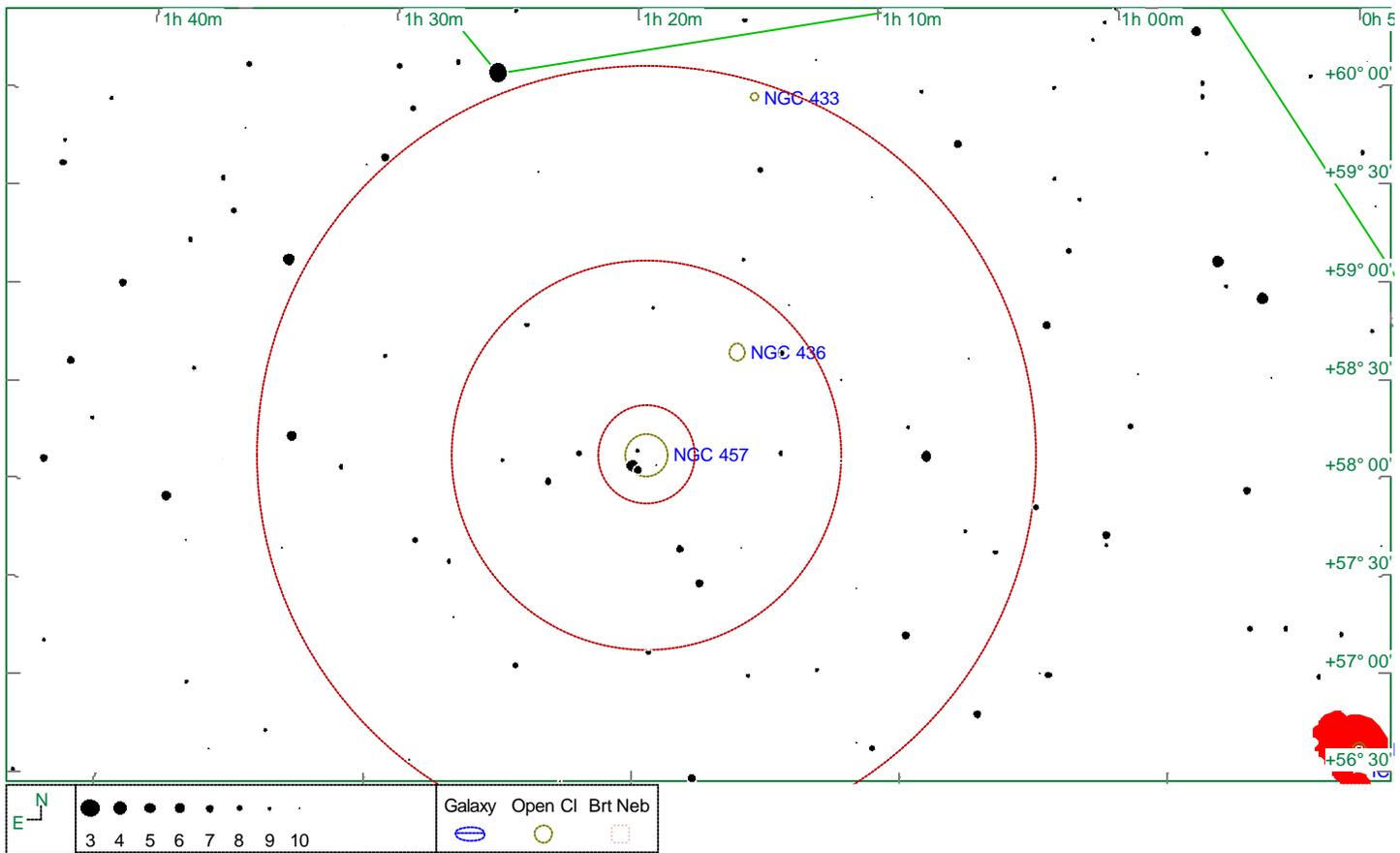
In the eyepiece NGC 457 appears as a scattered group of stellar points some 10' in diameter, consisting of about 100 stars brighter than 13th magnitude. One bright foreground star, Phi Cassiopeia, is in the middle of NGC 457 but is not a member of the cluster. A 2.4-inch telescope resolves about two dozen stars, while a 6-inch reveals almost all the stars of the cluster.

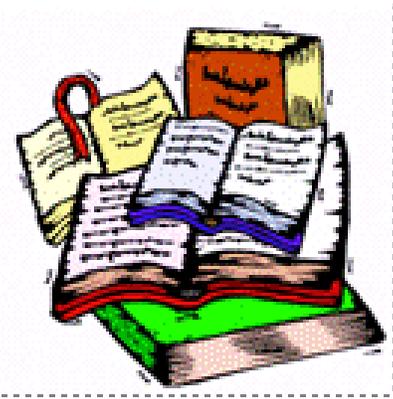
It is sometimes called the Owl Cluster because of its two bright "eyes", but nowadays folks call it the E.T. cluster (as in the "Extraterrestrial"). To find out why, you will have to use your imagination a little. Take a close look at the NGC 457, can you see ET? Two bright stars form ET's eyes, scattered rows of faint stars make up the arms, and the rest of the cluster forms a body.

While there why not look around, there are many Other Clusters in Cassiopeia you can find a large variety. Because you can look over great distances through the Cassiopeia window, you see clusters lying at very different distances from us. Some clusters are "foreground" clusters that lie relatively nearby (Stock 2, NGC 225), some lie scattered across the inter-arm gap between our own Orion arm and the Perseus arm (M52, NGC 7789), while others actually lie in the Perseus arm. NGC 457 is on of them. This open cluster lies in the Perseus arm at a distance of 9,900 light- years away from us.

For this and more information go to http://www.nightskyinfo.com/archive/ngc457_open_cluster/, and <http://www.backyard-astro.com/deepsky/top100/14.html>







JSCAS LIBRARY

Karen Taylor

A Message from the Librarian –

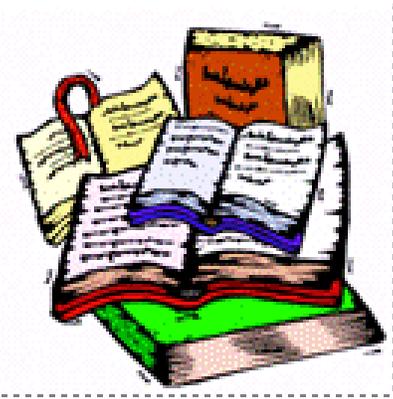
I would like to take a moment to thank Ed Malewitz for his very generous donation to the JSCAS Library. I hope that the members of the club find these additions to the library interesting and that they take advantage of these resources. I have listed here the books that Ed has given us. They will also be added to the list of books available on the JSCAS website.
Thanks again Ed!

Karen Taylor
JSCAS Librarian

HERE IS THE LIST OF NEW BOOKS IN THE LIBRARY

- Voyage to Mars – Laurence Bergreen
- The Sky Is Not The Limit – Neil de Grasse Tyson
- Voyage to Jupiter – David Morrison and Jane Samz
- Total Eclipses – Pierre Guillermier and Serge Koutchmy
- The Weather Companion – Gary Lockhart
- Viking Orbiter Views of Mars – NASA
- A New Sun: The Solar Results from Skylab – John A. Eddy
- Voyager 1 Encounters Saturn – NASA
- Planet Earth – Jonathan Weiner
- Astronaut's Guide to Terrestrial Impact Craters – NASA
- Mars, As Viewed by Mariner 9 – NASA
- Discover the Stars – Richard Berry
- Viking Orbiter Views of Mars – NASA
- Other Worlds, Images of the Cosmos from Earth and Space – James Trefil (forward by David H. Levy)
- The International Halley Watch Atlas of Large- Scale Phenomena – Brandt, Niedner, Rahe
- Venus, The Geological Story – Peter Cattermole
- Stars and Clusters – Cecilia Payne-Gaposchkin
- Mars, The Mystery Unfolds – Peter Cattermole
- Photographic Atlas of the Planets – G.A. Briggs and F.W. Taylor
- Shuttle-Mir – Clay Morgan
- Moon, Mars and Meteorites – Institute of Geological Sciences
- Patrick Moore on Mars
- Mars, The Lure of The Red Planet – William Sheehan & Stephen James O'Meara
- Twister, The Science of Tornadoes and the Making of an Adventure Movie – Keay Davidson
- Johannes Kepler and the New Astronomy – Jaesm R. Voelkel
- Passage to a Ringed World, The Cassini-Huygens Mission to Saturn and Titan – NASA
- Space Shuttle – NASA
- Voyager 1 and 2, Atlas of Six Saturnian Satellites – NASA
- Exploration of the Universe – George O. Abell
- Sky Atlas 2000.0 – W. Tirion
- Phobos: Close Encounter Imaging From the Viking Orbiters – NASA
- Magellan Venus Radar Mapping Results (VHS) – NASA

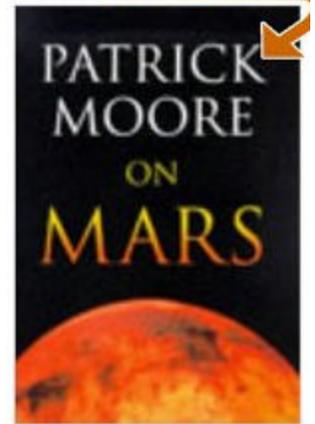




JSCAS LIBRARY BOOK REVIEW

Bob and Karen Taylor

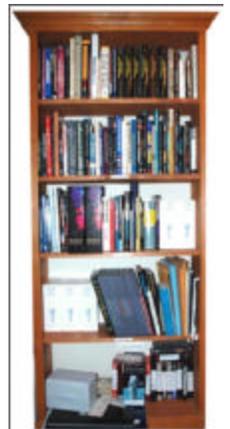
Night falls over the equator and Phobos rises from the west. It takes only 4 ¼ hours for this nearest moon to cross the sky—more than enough time for it to wax from new to full.



This is the enduring charm of Mars: the more you learn about it, the stranger it seems. Moore's sober, common sense tale of discovery cannot help but be as much about the garish Mars of the imagination as it is about the physical planet—and the changes wrought upon that imaginary twin have been truly cataclysmic. Lowell's charming canals lie shattered beneath the gargantuan volcanic sierras of Olympus, Ascræus and Pavonis. The frozen carbon dioxide and thin hoarfrost of Mars's meager poles have vanished beneath huge quantities of water ice, bringing with it the nagging possibility of subterranean oceans and, every few tens of millions of years, an intermittent period of fertility.

Moore is better placed than most to give earlier observations and imaginations their due. When he wrote *Guide to Mars* in 1955, it was commonly believed that the dark areas of the planet's surface were due to vegetations. And, given all the advances in our understanding in the mere 40 years since, it seems perfectly natural for Moore to conclude his account by writing seriously about the likely shape of future colonies there.

At home astronomer's guide, a memoir, a history that ably demonstrates the interplay between scientific data and interpretation—however you read it, *Patrick Moore on Mars* is more poetic and inspiring than it knows. —Simon Ings, amazon.co.uk—This text refers to an out of print or unavailable edition of this title.



Book Review

By Lynn Dippel



This is my first book review so please bear with me. I have just finished Beck's book *Secrets of Stargazing* and it is real informative and easy to read for a beginner like me. There are tips and tricks that I wouldn't have thought of. This is a must for everyone who is starting out or thinking of looking at the stars. Even if you are an amateur astronomer you should get Beck's book.


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FOR SALE: 17-INCH F/4.5 DOB
 made by Andy Saulietis. Good optics but needs work. It has been sitting in my garage, mostly for the last 10 years, unused. I now have another scope and need to make room for it. Best offer.

Paul Maley, 281.2440208
 (daytime) or
 pdmaley@yahoo.com
 email:
 paul.d.maley@nasa.gov (tel.)
 281.244.0208 (fax.)281.244.7622




JSCAS Mirror Lab
 Matt Hommel
 PROGRESS REPORT



In other news the Club Mirror grinding machine which has been in my care for a year or so will be turned over to West on Saturday so I can travel to Iowa to pick up my new mirror grinder.

NEW DEVELOPMENT: I have made arrangements to acquire a mirror coating machine. This machine has the capacity to coat mirrors up to 22 inch diameter. If I can fit it in this trip I will have it next week, if not it will be a month or two before I can make it back that way. It weighs over 1500 lbs so weight is also a concern. The important thing, for those who are interested, is that we will no longer be required to mail our mirrors out to have them coated or recoated, we can do it right here in my garage. I will have to do a few tweaks like running a 100 amp power line to my garage and installing sound proofing for the 15000 RPM water cooled turbine vacuum pump. I will also be coating several practice mirrors over and over to perfect the process and tune the machine.

I am still planning to build an interferometer to round out my mirror lab, but I haven't had time to pursue it lately.



PLEASE NOTENo—these are not pictures from Matt's house

Karen's Easy Hamburger Quiche
Made while at Ft. Mac– Oct. 2007



1 unbaked 9" pastry shell
½ lb. ground beef
½ c. mayonnaise
½ c. milk
2 eggs
1 Tbsp. cornstarch
½ c. green onions, sliced
1 ½ c. cheddar or swiss cheese (or both), grated
Dash pepper

Brown meat in skillet over medium heat. Drain fat and set aside. Blend mayonnaise, milk, eggs and cornstarch until smooth. Stir in meat, cheese, onion and pepper. Turn into pastry shell. Bake for 30 to 40 minutes at 350 degrees or until golden brown on top and knife inserted in center comes out clean.

Thanks Karen Taylor

Brazosport Astronomy Club

Meets the Third Tuesday of the month, 7:45p.m.
At the Planetarium
400 College Drive
Clute, Texas (For more information, contact Judi James at the
Planetarium 979-265-3376)

Fort Bend Astronomy Club <http://www.fbac.org>

Meets the third Friday of the month, 7:00 p.m.
First Colony Conference Center
3232 Austin Pkwy
Sugarland, Texas

Houston Astronomical Society <http://spacibm.rice.edu/~has>

Meets the first Friday of the month, 8:00 p.m.
University of Houston, University Park
Science and Research Building, Room 117

North Houston Astronomy Club <http://www.astronomyclub.org>

Meets the fourth Friday of the month, 7:30 p.m.
In the Teaching Theatre at Kingwood College
20000 Kingwood Drive
Kingwood, Texas

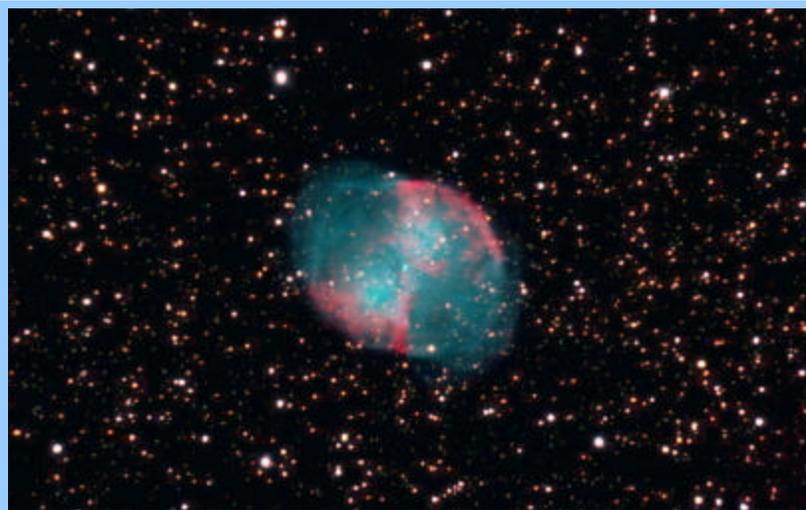
**Houston
Area
Astronomy
Clubs**

Members' Gallery—November 2007



A night-time group shot of just a few of the JSCAS astronomers, friends and family that met at Fort McKavett for the 2007 fall star party. This one was extra special since it was our 10 year anniversary party. It was great!!!

Becky Ramotowski



I was very surprised that this image was even presentable since I shot over 60 subframes in 5-15 mph wind. After all images were evaluated, I was able to salvage 8 images to process & stack. No darks were shot due to short exposures and frankly, I didn't expect to find any images that I could process!

Photographic Details:

Date & Location: October 12th 2007, Fort McKavett, Texas.

Scope: Obsession 20" f/5 on a Tom Osypowski Dual Axis Equatorial Platform, Orion 100mm f/6 Guidescope.

Autoguider: SC1 Mod Celestron Neximage Cam, Shoestring GPUSB

guide port interface adapter, and Guidemaster software.

Camera: Canon 20D DSLR (unmodded), homemade serial control shutter release cable, and DSLR Shutter from Stark Labs.

Filters: None

Conditions: Temp 68F, Humidity 35%, Winds 5-15 mph, Transparency 8/10, Seeing 6/10.

Exposures: 8 x 20sec @ 3200 ISO Sub Frames, NO Darks.

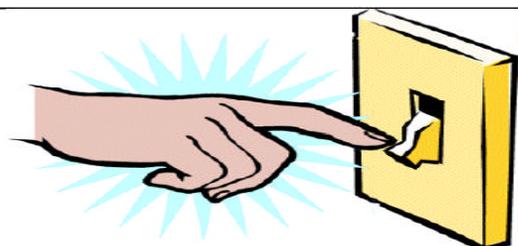
Post-processing: 3504x2336 Raw files converted to Lossless 16-bit FITS, calibrated, aligned, and combined with ImagePlus. Final processing PhotoImpact Pro.

Glenn Schaeffer

Help turn off the lights...

Join the
International Dark-Sky Association (IDA)
<http://www.darksky.org>

"To preserve and protect the nighttime environment and our heritage of dark skies through quality outdoor lighting."



Johnson Space Center Astronomical Society

Club Officers

President – Bob Taylor
Vice President – David Haviland
Secretary – David Haviland
Starscan Editor – Connie Haviland
Star Party Chairperson – John Erickson
Librarian – Bob and Karen Taylor
Historian – Susan De Chellis
Scientific Expeditions – Paul Maley
Web Master Chris Randall

SIGS

Observing Awards – Triple Nickel
Astronomy 101 – Triple Nickel
CCD Imaging – Al Kelly
Binocular Observing – Leslie Eaton
Telescope Making – Bob Taylor
Deep Sky Observing – Chris Randall

Starscan Submission Procedures

Original articles of some relation to astronomy will be accepted up to 6 p. m. (1800 hrs) on the 25th of each month. THE most convenient way to submit articles or a Calendar of Events is by email is preferred but hard copies (CD, disk) are also accepted. All articles must include author's name and phone number. Also include any picture credits. Word, WordPerfect, and text files will be accepted.

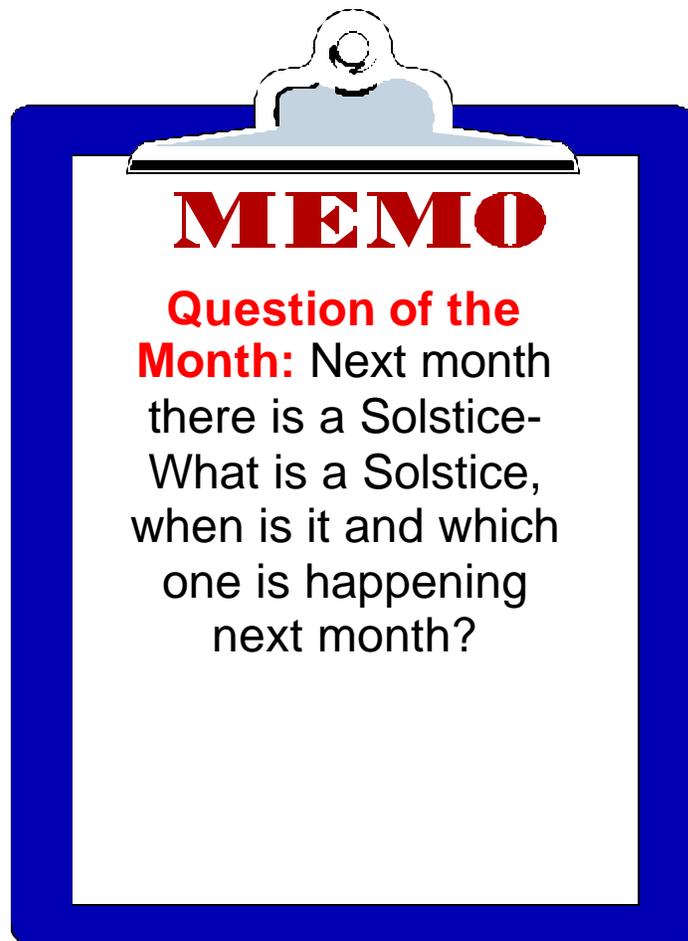
Please send all submissions to:
txcc1234@gmail.com

The author of individual articles bears all responsibility for publishing any e-mail addresses in the article on the World Wide Web



Astronomy and Kids

This is the section strictly for kids (or kids at heart). We will be including information, stories, ideas, puzzles or anything that has to do with astronomy. The only difference here is, it will be directed for children. We don't discourage parents or any other adult to get involved. In fact, we encourage it strongly. So we hope you enjoy this section and if it touches a child's interest in astronomy, our



Here is a visual aid for the teachers on the group. <http://www.rense.com/general72/size.htm> ~~ Dale Evans~~ Valentine, Texas

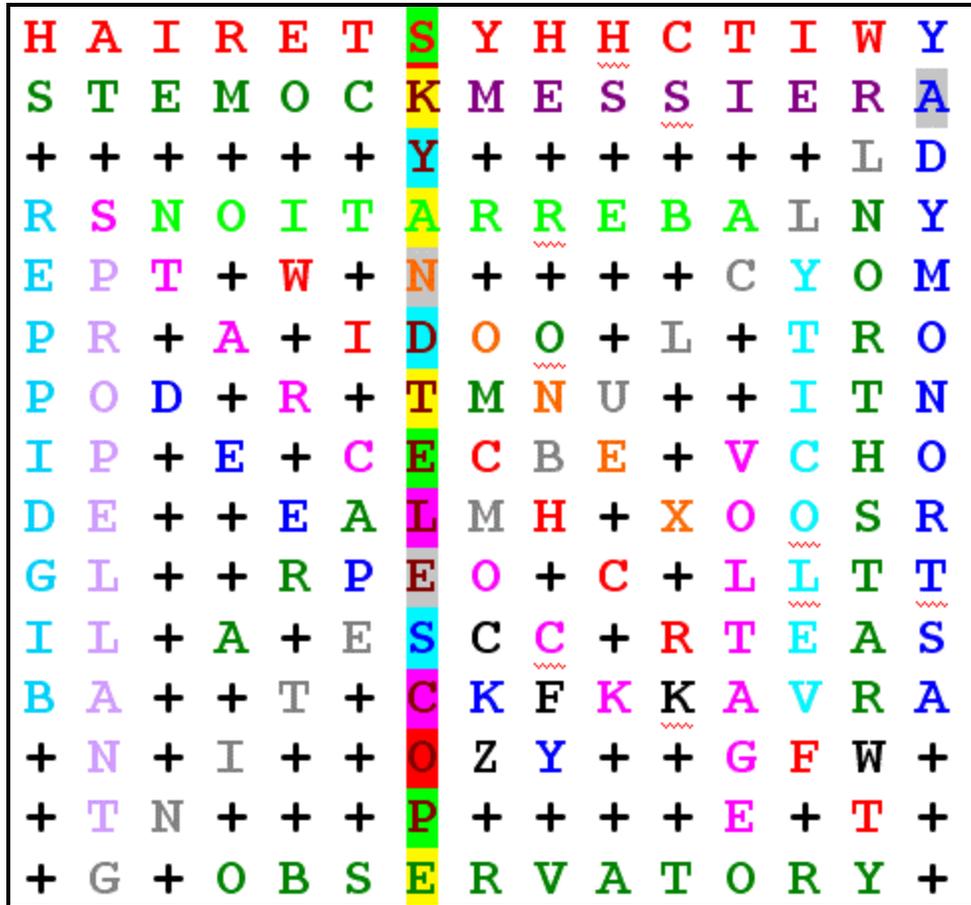
WORD SEARCH

N	A	I	T	P	Y	G	E	X	E	Y	J	H	N	D	B	W	B	A	I
S	W	E	Y	L	D	T	O	O	R	O	E	Y	A	A	R	E	C	Q	E
D	C	V	A	T	A	N	T	A	T	M	B	C	T	Y	M	F	A	I	I
Y	B	H	Z	N	I	I	S	N	I	I	G	L	S	L	J	A	A	Y	M
A	M	M	M	U	D	R	D	S	N	L	W	W	I	I	I	E	S	Y	F
K	J	U	Q	I	E	R	P	N	O	R	V	Y	N	G	B	S	M	A	E
W	D	E	I	V	D	H	O	B	U	A	L	L	A	H	K	N	I	B	Y
V	V	M	I	R	E	T	U	M	F	S	Z	Z	H	T	L	H	V	H	E
I	K	N	T	R	A	L	N	Q	E	U	P	R	G	S	O	G	B	G	F
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U	V	G	K	H	I	E	X	G	D	M	P	H	I	S	S	V	T	U	I
N	O	I	T	A	T	S	E	C	A	P	S	S	U	A	K	E	L	F	O
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C	L	C	O	K	N	L	N	D	P	Z	S	J	K	H	Y	Q	E	M	Y

AFGHANISTAN
 ANDROMEDA
 ANNIVERSARY
 CLOCK
 DAYLIGHTSAVINGS
 DISCOVERY
 DOBSONIAN
 EGYPTIAN
 EQUINOX
 GLOBULAR

HARMONY
 HEMISPHERIUM
 ORION
 PLANETARIUM
 SCHMIDTNEWTONIAN
 SHUTTLE
 SOLTICE
 SPACESTATION
 SUNDIAL
 TIME

October's Word Search Solution



ABERRATION
 ALL CLUB MEETING
 ASTRONOMY DAY
 BIG DIPPER
 COMETS
 DEEP SKY

MESSIER
 NORTH STAR
 OBSERVATORY
 OMEARA
 PROPELLANT
 SKY AND TELESCOPE

STARCLOCK
 VELOCITY
 VOLTAGE
 WITCHCRAFT
 WITCH HYSTERIA
 XENON

SOLUTION TO THE QUESTION OF THE MONTH—OCTOBER

Question of the Month:

Steve O'Meara is known worldwide for his legendary eyesight and observing prowess. Among his many astronomical achievements, what were 2 things he is known to be the 1st person to do?

ANSWER:

Among his many astronomical achievements: he was the first to sight Halley's Comet visually on its 1985 return; he noticed the dark "spokes" in Saturn's B ring before the Voyager 1 spacecraft imaged them; and he was the first person to correctly determine the rotation period of the distant planet Uranus.

CROSSWORD PUZZLE & SOLUTIONS

STILL...



ANSWER TO OCTOBER'S "QUESTION OF THE MONTH"

Question of the Month: Steve O'Meara is known worldwide for his legendary eyesight and observing prowess. Among his many astronomical achievements, what were 2 things he is known to be the 1st person to do?

Answer:

he was the first to sight Halley's Comet visually on its 1985 return and he was the first person to correctly determine the rotation period of the distant planet Uranus.

Make Your Own Star Clock

(credited to: <http://www.lhs.berkeley.edu/StarClock/starclockprintout.html>)

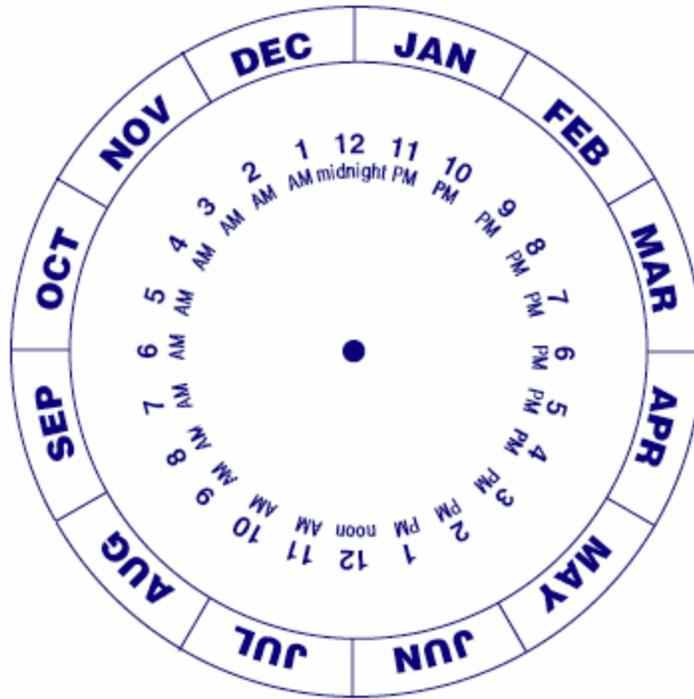
1. Print the next page and cut out the circles. If you don't have a printer, try drawing your own star clock by copying the images on the next page.
2. Cut the notch on the smaller (blue) circle.
3. Place the small circle on top of the large circle. Push a large paper fastener to make a center hole through both circles and spread open the fastener on the back side of the Star Clock or poke a hole through the circles with a pencil then thread a string or thin rubber band through the hole and knot it on both sides.

Using the Star Clock

1. Find the Big Dipper and the North Star, as shown on the face of your Star Clock.
2. Face the North Star, as shown on the front of the clock.
3. Find the current month around the outside circle of the Star Clock. Put your thumb over the current month.
4. Hold your Star Clock so the current month, marked by your thumb is **AT THE TOP**.
5. Holding the large disc firmly with the current month at the top, turn the smaller disc until its stars line up with those in the sky.
6. Read the time in the window.
7. If you are on Daylight Savings Time, add one hour

If you want to see a online star clock go to: <http://www.lhs.berkeley.edu/starclock/>

PRINT THIS PAGE AND CUT OUT



INSTRUCTIONS: Print only 1 single page on your printer. You can make larger by using a photocopier to enlarge. Have fun!