

The High Desert Observer

The Bulletin of the Astronomical Society of Las Cruces

December, 2009

President's Message December 2009



Year end has arrived and I have been busy. We had a great Year end party after a rocky planning debacle, the school Star Parties are coming fast and furious, and the holidays are upon us. Not much time to stop and smell the roses.

November was election month and we now have some new officers to grab the reins and guide us through another year. Our new president is Bert Stevens. Our vice president is again Kirby Benson. Secretary and treasure remain the same, John McCullough and Janet Stevens respectively. We have one new and one returning board member at large. Our new board member is Steven Shafer and Wes Baker is our returning member and of course, the immediate past president is myself, Jerry Gaber replacing Nils Allen.

I would like to take this opportunity to thank you all for a wonderful year. For the most part I have enjoyed serving as your President and I really appreciate all the help that many of you provided. I have enjoyed the many events we participated in during this International Year of astronomy. I especially enjoyed facilitating a Galileo telescope building event with a group of special needs students at North Valley Elementary School and the many school star parties in which we participated. I would like to especially thank the board members and special committee members that gave so much of their time to support the Club. I would also like to thank the many members of this club that continuously stand up and give of themselves to serve this club and the community. I applaud each and every one of you.

We didn't make much headway on the club observatory or the solar scope purchase as the wheels of progress in these areas seem to move very slowly if at all. Oh well, next year is another year and perhaps under new leadership we will make more progress.

Last month was the Renaissance fair and I thought it was an appropriate month to have my Ragnar picture in the news letter but apparently I was too long winded and there was no room for it so this month I will keep it short.

Thank you, Thank you, Thank you, Thank you!

Your now past president and humble servant
Jerry Gaber, 575 382-9183

The Astronomical Society of Las Cruces (ASLC) is dedicated to expanding public awareness and understanding of the wonders of the universe. ASLC holds frequent observing sessions and star parties and provides opportunities to work on club and public educational projects. Members receive the High Desert Observer, our monthly newsletter, membership in the Astronomical League, including AL's quarterly A.L. Reflector. Club dues are \$35.00 per year. Those opting to receive the ASLC newsletter electronically receive a \$5.00 membership discount. Send dues payable to ASLC with an application form or note to: Treasurer ASLC, PO Box 921, Las Cruces, NM 88004

ASLC members are entitled to a \$10.00 discount to Sky and Telescope magazine.

ASLC OFFICERS, 2010

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President: Bert Stevens
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Walter Haas

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Next Meeting

To be announced.

Events

ASLC hosts both a deep sky viewing and imaging at our dark sky location in Upham and a public in-town observing session for the public at the International Delights Cafe. Both sessions begin at dusk. For information on these and other events, please see the ASLC website.

[Http://www.aslc-nm.org](http://www.aslc-nm.org)

January Issue of the HDO

A note to all members, we need more contributors! Sharpen your writing skills, share your knowledge and help bolster our newsletter! Articles for future issues should be sent to Tony Gondola by the 10th of the month. Text should be submitted as email (acgna@comcast.net) or as an attached Microsoft Word format document. All Images should be in jpg format.

If you have any questions about submitting materials for publication in the HDO, please don't hesitate to contact Tony at 373-5104, acgna@comcast.net

Thanks in advance!

Minutes, November 2009 ASLC Meeting

Call to Order:

Jerry Gaber, President, Astronomical Society of Las Cruces (ASLC), called the meeting to order at 7:32 pm., 20 November 2009, Rm. 77, Dona Ana Community College. The monthly meeting is being held a week earlier than usual to not conflict with the Thanksgiving holiday.

President's Comments:

Jerry Gaber welcomed the group and recognized new members and/or visitors present. Pat Temple and Ron Carter are attending a meeting for the first time after visiting the Club's booth at the 2009 Renaissance ArtsFaire.

Secretary's Report:

The minutes for the October meeting were submitted for publication in the current (November) issue of the Club newsletter, the *High Desert Observer (HDO)*. Publication of that issue is pending. Rich Richins moved that the minutes from the last meeting be accepted pending publication in the *HDO*; Bert Stevens seconded. The motion was passed by the members present. There was not an additional Secretary's report.

Treasurer's Report:

The Treasurer gave an update on the status of Club accounts. She will transfer \$1500 from the checking account to the savings account at a later date. There was no additional Treasurer's report.

Committee Reports:

Observatory Committee:

Rich Richins, Committee Chairman, reported another change in Leasburg Dam State Park (LDSP) managers. The new manager does not seem to be as enthusiastic about the proposed Club observatory as the previous manager and states that the State architect's concerns need to be addressed before proceeding. Rich is considering approaching the manager of the Mesilla Bosque State Park (MBSP) about locating the observatory there. This may attract greater public participation because it is closer to the Las Cruces and Mesilla communities and also may address concerns about a new waste treatment facility proposed for the LDSP area.

Nominating Committee:

Nils Allen, Committee Chairman and Club Past-President, went over the slate of candidates that have agreed to serve if elected and then opened the floor to nominations. There were none offered. George Hatfield and Muhammad Hijazi volunteered to count and confirm the ballots. Following the count, election results are as follows:

President	Bert Stevens
Vice-President	Kirby Benson
Secretary	John McCullough
Treasurer	Janet Stevens
Director	Wes Baker
Director	Steve Schaeffer

Jerry Gaber noted that members' dues status must be current for ballots to be valid. Of 85 members on the roster, only 40 are in a dues current status. Members have been responsible for monitoring the expiration of their membership from the entries in the Member Directory. This has not been effective, so Bert Stevens has offered to send out notices in the future.

There were no additional committee reports.

Old Business:

1. Club-logo Apparel – Ron Kramer announced he is still waiting on a Back Order of sports shirts. He does have t-shirts, caps, long-sleeved denim shirts and hooded sweatshirts (“hoodies”) available for purchase. Please see him after the meeting to pick up items requested. He has some items for sale that were not pre-ordered.

There was no additional old business discussed.

New Business:

1. Star Parties – Bernie Joplin, Outreach Coordinator, was not present, and since moving recently, does not have Internet available. Rich Richins is not aware of any upcoming “scheduled” star parties. An alternate contact to help coordinate telescopes and operators is necessary in the interim. Jerry Gaber volunteered to help Bernie. The Club has supported several star parties and the 2009 Renaissance ArtsFaire in the last couple of months and more help is always welcome. Contact Bernie or Jerry to volunteer.
2. Club Workshops - The How-to-Buy-a-Telescope and New Telescope User workshops are usually conducted around the end of the year, which is coming soon. Rich Richins asked if dates had been selected so he could update the calendar on the Club website. Some information and associated links are already on the site.
3. MoonGaze - The November MoonGaze at International Delights Café is on the calendar for 21 November. Because first quarter moon falls in mid-week, another event is possible on 28 November, weather permitting. Depending on the number of telescopes present, this may be the only pre-Christmas opportunity for the Buyer's guide workshop.
4. Corn Maze - Ron Kramer visited the local Corn Maze on Picacho Avenue and visited with the owner/host Anna Lyles. She is interested in having the Club participate next year to demonstrate the connections between agriculture and astronomy. It would be similar to the Renaissance ArtsFaire event (minus the period costumes) and hosts, on average, 12 school buses per day for thirty days.
5. December Meeting/Social Event – After some controversy, the December meeting and social event will be held at the Experimental Aircraft Association hanger (EAA) (a \$100 donation to EAA was offered) at the Las Cruces airport on 12 December starting at 5:00 pm. The hanger has kitchen facilities and the event will be a potluck dinner. The Club will provide brisket as a main dish, Club members with last names ending in A-M are asked to bring side dishes and members with last names ending in N-Z are asked to bring salads or desserts. There will be a gift exchange (Nils Allen asks that members bring astronomy-related items) and Rich Richins will present a slide show of the Club's activities in 2009. Please send him images from Club events to be included. An email will be sent out requesting attendance confirmation and will include a map to the hanger. Family members are welcome.
6. Pre-meeting Presentations – Thanks to Ron Kramer for presenting prior to tonight's meeting.

Rich Richins will have the presentation at the December meeting. The January pre-meeting will be the Imagers group. Volunteers are needed for future monthly meetings.

7. Presenters – Volunteers to do program presentations are always needed. Bill Stein and Mike Sherrick have volunteered to make presentations in 2010. Kirby Benson will coordinate.

8. Member Name Tags – Ron Kramer has created name tags for all Club members on the current roster. Please pick yours up as you arrive at the meeting/event and leave the tag at the end.

9. Las Cruces lighting Ordinance – A rough draft is available for review and comment. There is no enforcement provision included and all currently legal lighting already in place will be “grandfathered” in under the proposed ordinance. A public meeting is planned for January 2010. More information is available on the web site and will be at the MoonGaze(s).

There was no additional new business for discussion.

Muhammad Hijazi offered a motion to adjourn and Janet Stevens seconded. The motion passed and the business portion of the meeting was adjourned at 8:13 pm.

Announcements:

Items for Sale:

No items were announced for sale.

Recognitions/Achievements:

Jerry Gaber announced the following recognitions and presented the associated certificates:

Dave Dockery	Astronomical League (AL) Public Outreach Award
Dave Dockery	AL Public Outreach Stellar Award

There were no additional announcements made.

Presentation:

The November program was “Adaptive Optics and the Amateur Astronomer” by Club member Jerry Gaber. Adaptive optics refers to optical systems which adapt to compensate for the effects of intervening medium, i.e., the earth’s atmosphere. The earth’s atmosphere disrupts the light coming from stars, which act as point sources. The largest ground-based telescopes achieve no better resolution than good 8-inch diameter telescopes. Jerry showed several comparisons of resolution with non-adaptive and adaptive optics. He then presented a list of equipment required to perform optical adaptation. Obviously, a telescope and camera are needed. A guide star, either real or artificial, is also required. An artificial guide star can be created using a laser pointing at a spot in the atmosphere 95-115 km high. Jerry then demonstrated how adaptive optics works in both large professional telescopes and “smaller” amateur telescopes. Unfortunately, most amateurs don’t have the required deformable “rubber” mirror for full “adaptability”. He concluded by discussing the available options regarding price, compatibility, set-up, etc., for the amateur astronomer.

This presentation was not recorded for rebroadcast on the Internet. Other meeting presentations can be accessed on the web at <http://www.aicsresearch.com/lectures/aslcnm/>.

The November 2009 monthly meeting concluded at 9:10 pm.

-Respectfully submitted by John McCullough, ASLC Secretary

Visiting Kennedy Space Center

By Tony Gondola



Like most people in my age group (50+) who have a strong interest in science and astronomy, the US space program has always been a subject of awe and fascination. Along with Houston Texas, Kennedy Space Center is one of those special places I dreamed about as a kid and was fascinated by as an adult. To actually visit the places where “history happened” is almost like a personal pilgrimage. Luckily, NASA has made a visit to KSC a fun and educational experience that almost anyone will enjoy.

My visit took place over 2 days in early December which it turns out is an excellent time to visit, there were no crowds, parking was easy and all the exhibits were easy to access. Beware of visiting between Christmas and New Years as I'm told by park personal that it's the most crowded time of the year.

The KSC visitor center is located just outside the main gate and is an easy 40 min. drive from Orlando. Like most area theme parks, the basic admission fee is fairly steep at \$38.00 for each adult and \$28.00 for children under 12 however, you do get a lot for your money. The basic fee includes access to the entire visitor complex, bus tour with stops at the Saturn 5 Center and the International Space Station facility along with admission to the Astronaut Hall of Fame and the Shuttle Launch Experience. In addition, admission is good for two days making it possible for those who are really interested to see everything. For those of you who really want to get close to the action there are additional tours available including Nasa Up Close, Cape Canaveral: Then and Now and Lunch with an Astronaut.

My day at KSC started with the Nasa Up Close bus tour of the launch and prep. Facilities (\$21.00/\$15.00 additional.) The tour guide was very knowledgeable and didn't “talk down” to us which was a pleasant surprise. The first stop was on the NASA Causeway, a spot which affords a sweeping panoramic view of all the launch pads. From there we proceeded to the vertical assembly building or VAB as it's called. Shown in the photo at the beginning of this article, originally constructed to stack the hug Saturn 5 moon rockets, it's now used to stack and prepare the Space Shuttles for the trip to the pad. The tour guide gave us many examples of how large this building really is but sitting out in that flat landscape with nothing much around it to give a sense of scale, it's just impossible to appreciate just how large it really is, even when you're standing right there in the parking lot.

From the VAB we proceeded past the space shuttle orbiter processing facility when the shuttles are refurbished after a flight. Not a lot to see there but it was interesting to contemplate that inside these rather small, unassuming brown buildings, the primary assets of our national space program were being prepared for flight. It was a feeling that would stick with me for the entire tour. Mainly, just how plain and unassuming this place is. The buildings are far and few between and a certain, government issued plainness pervades the place. It's hard to reconcile that with what actually happens there. The space program may cost billions but one gets the feeling that it's all business, nothing fancy here.

After leaving the VAB the bus proceeded down the same road that astronauts take to the launch pad, destination launch pads 39A and 39B. Originally built to launch the giant Saturn 5 moon rockets, they are now used for all Shuttle launches.



39A is currently being outfitted to serve as the pad for the Aries-1, the manned rocket for the new Constellation program that promises to take us back to the moon and beyond. 39B, shown to the left was the point of departure for all the Apollo program moon flights and as such stands as a significant bit of space history that's still in use today.

Visiting these launch pads brings up the advantage of the “up close” tour. The standard admission tour stops at an

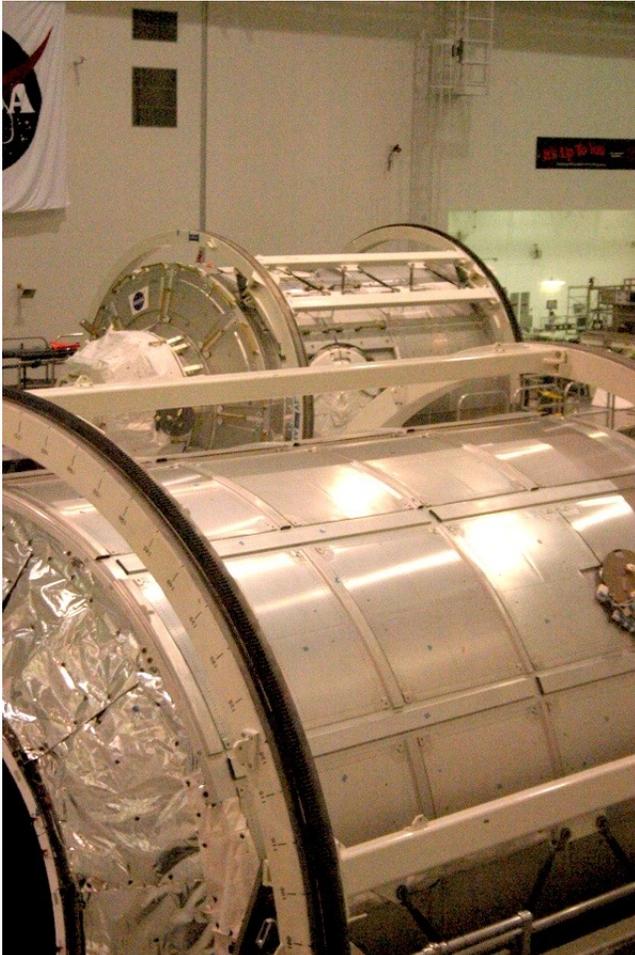
observation gantry for viewing the VAB and launch complex 39 from a distance rather than driving right up to them, a significant difference that to me, was well worth the extra cost.



The last significant stop on the “up close” tour was the Shuttle Landing Facility. Nearly 3 miles long, this is one of the longest runways in the world. Although the tour bus drives right up to it, it's very hard to appreciate how long it really is as you can't get a good elevated view. Still is a spot that the regular tour never sees so well worth the time.

The “up close” tour ended at the Saturn 5 Center. Located away from the main visitor complex, on the grounds of KSC itself, the center houses a complete and very real Saturn 5 moon rocket. Recently restored, it's displayed on it's side, separated into stages. The pictures just do not convey what an awesome sight this is. The shuttle mock ups at the visitor center are big alright but no more outlandish than a 747. This beast is something else again. Gazing up at the business end of the first stage it's hard to imagine that anything this huge could actually fly. It's a sobering thought and also somewhat sad to see this sleeping giant that will never have the chance to shake the ground of central Florida as it hurls another crew moonward. The Saturn 5 Center also houses an Apollo Lunar Landing Module that hangs suspended over the cafe. Like the Saturn 5, this is actual flight hardware that was built but never flown.

After leaving the Saturn Center you can rejoin the regular tour as it heads over to the International Space Station Facility. This is the location where all of the space station nodes as well as other shuttle payloads are prepared to fly. The tour begins with a walk through of a series of space station node mockups (much neater than the real thing!) and ends with a walk through of the clean room visitor's gallery where you can see the actual hardware being readied for flight.



The picture at left shows the Tranquility Node and cupola, that last segments to be added to the American side of the station in order to reach “core complete” status. The other nodes on the shop floor are for the Russian side.

The Space Station facility is the last stop on the regular tour which then takes you back to the main visitor's center. Once there your day isn't over as there are a number of additional displays and attractions to visit. Most notable are the rocket garden displaying Saturn 1B, Mercury Redstone, Atlas and Gemini-Titan launch vehicles, the Space Shuttle full sized display and the Shuttle Launch Experience.

The SLE is the most recent addition to the center and offers a “thrill ride” style simulation of an actual Shuttle Launch. While riding in a container in the Shuttle cargo bay, you're swung up to the vertical to experience all of the noise, vibration and commotion that the astronauts feel as they leave the pad for orbit. The most convincing and surprising part of the ride for me was the moment when the shuttle engines shut down at the end of powered flight. The compartment

swings down rapidly from the vertical and really gives you a sense of being unloaded from 3 g to zero g. It's a fun ride and included with your basic entry fee.

Lastly, don't overlook the Astronaut Hall of Fame. About a mile up the road from the main visitor complex the AHF offers a huge array of NASA artifacts including flown Mercury and Gemini space capsules. While you're there give the Space shuttle landing simulator and G force trainer a try. The latter will let you experience a full 4 g's which is 0.5 g's more than Shuttle Astronauts experience during a launch.





ASTRONOMICAL SOCIETY of Las Cruces
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ASLC - Sharing the Universe
With Our Community
for Over 50 Years

