

The High Desert Observer

April 2018



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 Society and public educational projects. Members receive the *High Desert Observer*, our monthly newsletter, plus membership to the Astronomical League, including their quarterly publication, *Reflector*, in digital or paper format.

Individual Dues are \$30.00 per year

Family Dues are \$36.00 per year

Student (full-time) Dues are \$24.00

Annual dues are payable in January. Prorated dues are available for new members. Dues are payable to ASLC with an application form or note to: Treasurer ASLC, PO Box 921, Las Cruces, NM 88004. Contact our Treasurer, Patricia Conley (treasurer@aslc-nm.org) for further information.

ASLC members receive electronic delivery of the HDO and are entitled to a \$5.00 (per year) Sky and Telescope magazine discount.



Table of Contents

- 2 *What's Up ASLC*, by Howard Brewington
- 3 *Outreach Events*, by Jerry McMahan
- 5 *Calendar of Events, Announcements*, by Charles Turner
- 6 *March Meeting Minutes*, by John McCullough
- 8 New Loaner Telescope
- 9 Poem by Ed Montes
- 10 *Photos of the Month*: J Kutney, JUNOCam, A. Woronow and J Johnson,
- 14 *Items for Sale*

ASLC Board of Directors, 2018

Board@aslc-nm.org

President: Howard Brewington; President@aslc-nm.org

Vice President: Rich Richins; VP@aslc-nm.org

Treasurer: Patricia Conley; Treasurer@aslc-nm.org

Secretary: John McCullough; Secretary@aslc-nm.org

Director-at-Large: Steve Barkes; Director1@aslc-nm.org

Director-at-Large: Ed Montes Director2@aslc-nm.org

Past President: Chuck Sterling; csterlin@zianet.com

Committee Chairs

ALCor: Patricia Conley; tconley00@hotmail.com

Apparel: Howard Brewington; comet_brewington@msn.com

Calendar: Chuck Sterling; csterlin@zianet.com

Education: Rich Richins; Education@aslc-nm.org

Grants: Sidney Webb; sidwebb@gmail.com

Loaner Telescope: Sidney Webb; sidwebb@gmail.com

Membership: Open

Observatories:

Leasburg Dam: David Doctor; astrodoc71@gmail.com

Tombaugh: Steve Shaffer; sshaffer@zianet.com

Outreach: Chuck Sterling; csterlin@zianet.com

Web-Site: Steve Barkes; steve.barkes@gmail.com

HDO Editor: Charles Turner; turner@milkywayimages.com

Masthead Image: February 10, 2017 From Las Cruces, Moon rising over the Organ Mts in Penumbral Eclipse.

April Meeting --

Our next meeting will be on **Friday, April 27**, at the Good Samaritan Society, Creative Arts Room at 7:00 p.m.

The speaker will be Ed Montes He will tell us about his African Sky Safari.

Member Info Changes

All members need to keep the Society informed of changes to their basic information, such as name, address, phone number, or email address. Please contact Treasurer@aslc-nm.org with any updates.

Events

ASLC hosts deep-sky viewing and imaging at our dark sky location in Upham. We also have public in-town observing sessions at both the International Delights Cafe (1245 El Paseo) and at Tombaugh Observatory (on the NMSU Campus). All sessions begin at dusk.

At our Leasburg Dam State Park Observatory, we hold monthly star parties. Located just 20 miles north of Las Cruces, our 16" Meade telescope is used to observe under rather dark skies. Please see *Calendar of Events* for specific dates and times.

What's Up ASLC?

April 2018



The mission of the Astronomical Society of Las Cruces is to create learning opportunities for astronomers and the general public as we share the incredible wonders of the southern New Mexico night sky. Our mission is realized through various activities that include our monthly meetings, post-meeting refreshments at the Pecan Grill, astronomical events, club publications, monthly observing sessions, national star parties, our Christmas party, as well as ASLC's ongoing outreach programs. Outreach, in my opinion, is the lifeblood of our club and the primary means of maintaining a reasonable membership roster annually. We currently schedule about thirty-five outreach sessions each year, which include Astronomy Day and our Renaissance Fair exhibit. But, we also make ourselves available when local schools contact us for astronomical expertise. In March, though, we had yet another opportunity to advertise the ASLC.

Rob Hinton of KTAL radio spoke with ASLC board member, Ed Montes, about the possibility of sponsoring our club on his Thursday evening broadcast, i.e., Chicken Pot Pie. Arts and various forms of entertainment are his normal fare, but Ron likes to mix things up with a little science every now and then too. So, Ed, Steve Woods, and I met Rob for lunch at the Luna Rosa Café on Avenida de Mesilla to discuss the details. The pre-show interview lasted for about two hours, but Rob was able to gather enough background information about the ASLC and basic astronomy to build a very healthy outline. Then on Thursday 25 March at 5:00 PM, we were joined by ASLC VP, Rich Richins, at the KTAL studio for the club's radio debut. The air time of Rob's show was two hours, but the time went by very quickly as Ed, Steve, Rich, and I did our best to convey to his Chicken Pot Pie audience that amateur astronomy is the absolute BEST hobby on the planet.

I'd like to personally thank Ed for acting as liaison between the ASLC and KTAL radio. And, thanks also to Steve and Rich for their time. The viability of our club depends on such involvement of our members to promote amateur astronomy and the ASLC. Although we have our regular team of volunteers that handle our various outreach programs and events, new faces are always welcome. It is, after all, the responsibility of all members to share in the fun of running our club. If you don't normally help with club chores like outreach, there are many opportunities for involvement. Please feel free to contact me or our outreach chairman Chuck Sterling for details. Thanks!

Howard Brewington
ASLC President
April 2018

* * *

Outreach

Outreach is a very important part of ASLC. We are always looking for more volunteers to help us educate the public. Even if you do not have a portable telescope to bring to the events, please consider attending our public outreach programs to help answer questions, share knowledge and point out objects in the sky.

Outreach Events

March 2018 Report

by Jerry McMahan

Leasburg, Saturday, February 10, 2018

Chuck Sterling, Howard Brewington, Sid Webb, Steve Wood and Jerry McMahan showed up. Unfortunately the cloud and wind also showed up. The result was the roof of the observatory remained closed due to wind concerns. The clouds would have prevented observing anyway. That did not prevent teaching entirely. People were allowed to see the 16 inch scope and the interior of the observatory.

Desert Hills Elementary, Thursday, February 15

Observing canceled. Rain earlier, clouds later. I fell like I am giving weather reports rather than outreach.

Tombaugh Observatory, Friday, February 23

First the weather report. Breezy, but clear skies. This allowed Steve Shaffer and I to put the 12.5 inch scope on the Moon. The Astronomy department had the Orion nebula and a globular star cluster. We had a good crowd. Steve counted 60 observations.

Steve fixed the problem of not being able to move the scope in declination. He squirted in a magic juice called WD-40. It no longer requires an Olympic weight lifter to aim the telescope.

On the negative side, all of the gates to the domes were locked when I arrived. Access to the running track is cut off to the public. It is also cut off to us. The Astronomy department has a key to one of the gates, but we don't. Steve was told who to talk to in order to obtain a key.

Moongaze, Saturday, February 24

A cold, but clear night. We had a good session attended by Steve Wood, Mike K, Howard Brewington, and Jerry McMahan. Chuck Sterling, getting over a mild case of Pneumonia, made an appearance.

The Moon was the main target again. Steve did get the Orion Nebula. The nebulosity was visible, even with the bright lights of the area

Sunrise Elementary, Thursday, March 1

Howard Brewington, Sid Webb, Tracy Stuart, Chuck Sterling and Jerry McMahan participated. Unfortunately there was a full Moon. Howard and I were on the Moon. People seemed to enjoy the view since most don't realize that the craters are not easy to see at this phase. Chuck had his 8 inch on the Pleiades with an eyepiece that provided a good fit. Full Moon or not, the cluster still looks great. Sid was on the Orion nebula while Tracy observed other open clusters.

A slight breeze made it feel colder than it really was, but the turnout was very good. Tracy pointed out that it had been warmer at the North Pole than we were experiencing. Bad news of Polar Bears.

Leasburg, Saturday, March 10

Again, clouds and no observing. One group was here last month and we were clouded out, so they tried again this month and again, we were clouded out. Maybe next time we'll have better results.

We did have the observatory open so people could see the scope. Steve Barks, Chuck Sterling and Howard Brewington also worked on determining how to back up the software.

Tombaugh Observatory, Friday, March 16.

The open house was a week early due to Spring Break coming up the next week. Early clouds made the observing look unlikely, but it cleared enough for us to have observing. Steve Shaffer had the 12.5 inch on the Orion Nebula. The scope worked well again. Even though there was no Moon in the sky, thin clouds did prevent a clear view of the Nebula. The Trapezium was easily seen most of the session.

Moongaze, Saturday, March 24

The wind was blowing and it was raining when I left home. The clouds never disappeared, but became thin enough for us to see the Moon, so we did have an event after all.

I set up the ETX 125 and viewed the Moon at low magnification. Steve Wood viewed the Moon at a higher magnification. Also in attendance was Howard Brewington and Rob Westbrook. Rob rejoined the club. It was great to have him back again. Since we never lost the Moon and it was not very cold, we stayed later than we have during the last several months.

Radio Station 101.5, Thursday, March 30

This qualifies as outreach since four of our members were on a radio discussing the club and Astronomy. It is not the first radio appearance since Bert Stevens has been on radio a number of times.

The brave participants were Howard Brewington, Rich Richins, Ed Montes and Steve Wood. I could get the station on the car radio, but not from the house since the station was low power. I was able to listen to the two hour program on the computer.

The moderator did some history research so most of the early questions concerned history. I don't know if our panel expected history rather than science questions, but they managed to hold their own. The moderator was not as well prepared on science, which allowed our members to respond to his questions.

Our members did the club proud. The club has been invited to come back on air in the future.

Leasburg, Saturday, April 7

The curse of Leasburg continues. This time we has clear skies, but high winds prevented use of the observatory again. There was observing this time.

Steve Wood set his scope up on the grass near the parking lot. He was alone in that area. I brought the ETX 125 to set up in that area, but did not set up, partly due to the wind. Chuck Sterling brought his scope, but did not set up since he opened the observatory to let people look at the 16 inch and the observatory. The really busy person was Sid Webb. Sid set up a 12 inch Dobsonian and had large viewing crowds the entire evening.

We also had a low pass of the International Space Station.

* * *

Calendar of Events (Mountain Time - 24 hr. clock)

Apr	01	19:27	Sun Sets
	07	19:30	OUTREACH; Dark Sky Observing at Leesburg Dam State Park
	08	01:18	Last Quarter Moon
	15	19:57	New Moon
	20	21:00	OUTREACH; Tombaugh Observatory open at NMSU; 9 -10 pm
	21	00:00	Astronomy Day - Everywhere
	21	19:30	OUTREACH; MoonGaze, International Delights Café
	22	15:46	First Quarter Moon
	27	19:00	ASLC Monthly Meeting; Good Samaritan Society, Creative Arts Room
	29	18:58	Full Moon
May	01	19:48	Sun Sets
	01	20:16	Jupiter Rises
	05	19:48	OUTREACH; Dark Sky Observing at Leesburg Dam State Park
	06	09:00	Texas Star Party begins; runs through May 13
	07	20:09	Last Quarter Moon
	08	18:26	Jupiter Opposition
	11	21:00	OUTREACH; Tombaugh Observatory open at NMSU; 9 -10 pm
	15	05:48	New Moon
	19	20:00	OUTREACH; MoonGaze, International Delights Café
	21	21:49	First Quarter Moon
	25	19:00	ASLC Monthly Meeting; Good Samaritan Society, Creative Arts Room
	29	08:21	Full Moon

Be sure to visit our web site for ASLC information: www.aslc-nm.org

* * *

Announcements

1. The program for the April meeting will be a presentation by Ed Montes The title of his talk is “Through the Looking Glass: From ASLC to SDL and Back. (My adventures in Namibia.”
2. The field trip to Safford, AZ to see the Pope’s Telescope and the Large Binocular Telescope has been set for September 22nd. Unless the mountain catches on fire again or some other calamity occurs, Mike Nuss will be presenting information and details of the trip in the near future.
- 3 The agreement to use the facilities at Good Sam for our meeting prohibits members from bringing in ANY food or beverages, except water in a container with a screw lid. Take note: no more Starbucks or Saturn Cookies!

* * *

Meeting Minutes
ASLC Monthly Meeting
March 2018 Minutes

Show & Tell:

Fred Pilcher has a 12" Meade Dobsonian he will give to the Society if someone will come to his home and pick it up. Charles Turner offered to come get it when it is convenient for Fred. Fred noted that the telescope needs a thorough cleaning and some repairs. No additional topics were offered for discussion.

Call to Order:

Howard Brewington, President, Astronomical Society of Las Cruces (ASLC, the Society), called the March 2018 business meeting to order at 7:09 pm, 23 March 2018, Creative Arts Room, Good Samaritan Society Las Cruces Village, 3011 Buena Vida Circle, Las Cruces, New Mexico.

President's Comments:

Howard Brewington, President, welcomed the group to tonight's meeting. He announced that he and Ed Montes will be interviewed on the radio (101.5 FM) next Thursday (30 March) between 5:00 and 7:00 pm at the station on Wyatt Street, Suite 9. They could use some additional support; contact Howard if you can be there.

Howard asked that all members and guests sign-in on the roster sheets available at the rear of the room.

Howard thanked Charles Turner for the March edition of the High Desert Observer (the Society's newsletter, the HDO). He also thanked Bert Stevens for diligently submitting informative monthly articles for the HDO for the last four years. However, Bert can no longer do this. Therefore, replacement content is needed. Charles Turner says he would like to know what the members want in the newsletter. The HDO has been a full-featured publication in the past – does this continue? The HDO is a good vehicle for communicating information among members but article submitters do not have to be professionals. Any member could write a brief article on just about any topic. Articles can be technical, about current events, topics in astronomy (New Horizons' status), etc. Charles is especially interested in the phenomenon of Integrated Flux Nebula (IFN); perhaps someone could research this and write a short article.

The minutes of the February meeting were published in the HDO. If there are no corrections or discussion, Howard asked that the minutes be accepted as submitted; they were accepted by acclamation.

Treasurer's Report:

Trish Conley, Treasurer, presented a status of the Society's accounts. She reported a net deficit for the month of \$655 (insurance paid) but the working balance is still positive for the year.

Outreach:

Chuck Sterling, Outreach Coordinator, was not present. Howard reported there will be a Moon Gaze at International Delights Café (IDC) on 24 March, tomorrow night. Other events are posted on the web site. Howard noted Moon Gazes are an excellent opportunity to get to know other members of the Society as well as interact with the public. He encourages all members to participate.

Loaner Telescope Program:

Sid Webb gave a brief overview of the program, particularly noting the future addition of the telescope from Fred Pilcher.

Presentation:

This month's presentation is by Dr. Al Grauer of the Catalina Sky Survey (CSS) on "2017 – A Record Year for Asteroid Hunters". Dr. Grauer noted the CSS might put asteroid hunters like Howard Brewington and Bert Stevens out of business. The CSS located nearly 1000 near-Earth asteroids last year from its facility on Mt. Lemmon outside Tucson, AZ, for survey and follow-up. Dr. Grauer went on to describe the set-up and control of the telescope/camera and other equipment the CSS uses including the process of finding and confirming objects.

Dr. Grauer completed his presentation with an update of activity at the Cosmic Campground International Dark Sky Sanctuary and a drawing for calendars.

The April presentation will be by Ed Montes about his recent adventure in Namibia, Africa.

The March meeting of the Astronomical Society of Las Cruces concluded at 8:47 pm. A social time followed at Pecan Grill.

-Respectfully submitted by John McCullough, ASLC Secretary

* * *

New ASLC Loaner Telescope:

The ASLC received a Meade 12", focal length 1524mm (f/5), LightBridge Dobsonian Reflector Telescope as a generous donation from member Fred Pilcher. We have incorporated it into our Loaner Telescope program and it is ready for use.



Figure 1: Assembled Meade 12 inch f/5 telescope with black cloth partially covering truss, loaded onto a wheeled cart.



Figure 2: Telescope disassembled, showing front optical tube, mount, rear optical tube, and the three truss bars.

It is a neat 'scope. At 12" it is big, but it's open truss design makes it ultra-portable. I was able to take it apart and reconstruct it in 7 minutes. The total weight is 47 pounds, with the mount by itself weighing 33 pounds. It also comes with a cart that one can use to move it around, intact, if desired. It has a 25mm eyepiece and a Telrad finder. (If any ASLC member has an extra eyepiece he can donate, it would be most welcome). It is easy to align on visible stars using the Telrad finder. Using iPhone compass and inclinometer apps, along with a planetarium program that provides current alt/az data, one can find more obscure objects as well. Best results come with luck and experience.

When I was first shopping for a telescope I borrowed another 12" Dobsonian from the ASLC and settled on a slightly smaller model that I could fit in my car. I wish this model had been available. If you have any "aperture envy", this would offer a good first look!

This is one of six loaner telescopes we have. Others include refracting telescopes, Schmitt-Cassegrain, Maksutov-Cassegrain, and other Dobsonians, big and small. The only requirement for borrowing a telescope from ALSC is a current membership in the club. One can keep the 'scope for two months minimum, with longer periods allowed if no one else asks to borrow it. There is no fee. If you are interested, give me a call.

Sid Webb
Loaner Telescope Committee
(575) 915 5017

S

Poem of the Month

**On the Occasion of the Mars-Jupiter Triple Conjunction of 1980:
A Poem in 3 Parts**

By Edward Montes

I.

Running across
Two stars
Each different
From all the others
But brothers
 alike by birth.
Racing it would seem
 When watched by
 the generations
 that cared to watch
Repeating
 When thought
 performs as
 perhaps it must
Chasing sister light
 Would be wife,
 burning clearly,
 passion's brightest
 child;
 Uncaught by any
 seemingly pursuing;
 Tethered only
 by birthstrings
To the unquestioned
 Father of the sky

II.

Mother, ancient
 you are the
 child of my night
 the center of my vision
 the mirror of my dreams
 the only burning pearl
Mother, ancient
 you are the
 lifeless rock
 the airless globe
 the celestial desert
 the shaper of my world
Floating, changing
 gazing at this
 blue-green face
Waiting for the final story
The one whose ending
 you already know
The one whose start
 is yet untold

III.

There are
 Surprises for the
 foolish student
Sitting naked
Believing cosmic fortune
 will be found
 in the numbers of
 the elders
Believing stories and
 and equations,
charmed quarks
 and
particles as truth
There are
 Surprises
 for the wisest
For whom knowledge
 is as fleeting
 as the ages
Faster even
 than the light
 from the running stars
 from the racing
 Brothers
from the mother
and the sister
and the father
of the
World.

Photo of the Month



Sharpless 2-302 (LBN 1046 and Gum 6) is a small emission and reflection nebula located in Puppis. It is called the Snowman Nebula due to the two separate parts. The small bright grouping of stars just below is open cluster NGC 2409 and the blue reflection to the top left of SH2-302 is vDB 97.

The dark strip which separates the nebula is curious. My interpretation is that there were two events creating this object.

RC10/ FLI ML16200/ LRGB 5x5min 2x2/ Ha 10x10min 2x2/

CCDstack/ PS6/ Las Cruces 1-14-18 by John Kutney



Jupiter from JUNO

See intricate cloud patterns in the northern hemisphere of Jupiter in this new view taken by NASA's Juno spacecraft.

The color-enhanced image was taken on April 1 at 2:32 a.m. PST (5:32 a.m. EST), as Juno performed its twelfth close flyby of Jupiter. At the time the image was taken, the spacecraft was about 7,659 miles (12,326 kilometers) from the tops of the clouds of the planet at a northern latitude of 50.2 degrees.

Citizen scientist Kevin M. Gill processed this image using data from the JunoCam imager.

JunoCam's raw images are available for the public to peruse and process into image products at: www.missionjuno.swri.edu/junocam

More information about Juno is at:

<https://www.nasa.gov/juno> and <http://missionjuno.swri.edu>

Image credits: NASA/JPL-Caltech/SwRI/MSSS/Kevin M. Gill

Last Updated: April 6, 2018

Editor: Tony Greicius

Ed Note: Am I the only one who thinks this stuff is A m a z i n g??? Wouldn't someone like to research the current scientific implications of all the fantastic photos and write an article for the HDO? There are several "experts" on JUNO at NMSU. Speaker hint.

Photo of the Month



© Jeff Johnson | jeffjastro.com

OBJECT **NGC 2264 (Cone Nebula) and surroundings** **Distance: 2,700 light years**

Telescope **Takahashi TOA-130F @ f/7.7**

Mount **Takahashi EM200 Temma II**

Camera **QSI 690wsg @ -15C**

Filters **Astrodon Ha (3nm), Astrodon Tru-Balance I-Series LRGB Gen 2**

Guider **SX Lodestar**

Settings **8x20min Ha, 2x5min L (bin1x1); 4x5min ea RGB (bin2x2); AstroArt5, CS4 (slightly cropped, 10xdarks/flats/fdarks/bias)**

Date/Location **15 December 2017 - Las Cruces, NM**

Notes: **This image is LHaRGB, where Ha was used in combination with Luminance and Ha:R (80:20) was used for the Red channel.**

Copyright Jeffrey O. Johnson

ITEMS FOR SALE

Item #1

- * Meade 8" f10 LX200 GPS Ultra High Contrast Coatings

Includes: Tripod, Super wedge, JMI telescopes Event Horizon EV2c focuser, 25mm Meade Eyepiece, 2x Barlow lens, 1 1/4' Diagonal, Counter wight set (2).

Price: \$1,500.00

- * SBIG CCD camera ST-7XMEI 4.6 x 6.9 mm area 765x510 pixels, 9x9 u pixels.

Includes SBIG CFW 9 filter wheel, with U,B,V,R,I filters., NextGen Maxfield .33 telecompressor lens. This lens covers about a 25' wide field on the above telescope.

Price: \$350.00

- * PIC-OSD Video text overlay unit. STV5730A GPS time display unit. (For Occultation timing.)

Price: \$50.00

- * Meade Series 5000 2' Enhanced Diagonal. 99% reflectivity: New

Price: \$75.00

Contact: Robert James **575-222-0198 or jamesroa@comcast.net** CASH ONLY please

Item #2

- * CPC-Edge-HD-800

Please reply to **fooie@tularosa.net** if you are interested: From the Alamogordo Astronomy Club Facebook page. - Chris Jones If you know anyone that might be interested, I'm selling:

Celestron CPC Edge HD 800
Celestron Tripod
Celestron Power pack
Celestron Wifi connector
JMI Wheeley, heavyduty

Too big of a telescope for me to use and sadly we have far to many trees to make observing worth the effort.

No trades, asking \$2000

Located in Alamogoro