

## February, 2013

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, which includes their quarterly publication, *Reflector*.

Individual Dues are \$30.00 per year

Family Dues are \$36.00 per year

Student (full-time) Dues are \$24.00

Dues include electronic delivery of the *HDO*. 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

ASLC members are entitled to a \$5.00 (per year) Sky and Telescope magazine discount.

#### ASLC Board of Directors, 2013

#### Board@aslc-nm.org

President: Chuck Sterling; President@aslc-nm.org Vice President: Jerry Gaber VP@aslc-nm.org Treasurer: Patricia Conley; Treasurer@aslc-nm.org Secretary: John McCullough; Secretary@aslc-nm.org Director-at-Large: Steve Shaffer; Director1@aslc-nm.org Director-at-Large: David Anderson; Director2@aslc-nm.org Immediate Past President: ronjkramer@aol.com Director Emeritus: Walter Haas

#### **Committee Chairs**

ALCor: Patricia Conley; tconley00@hotmail.com Apparel: Ron Kramer; ronjkramer@aol.com Education: Rich Richins; education@aslc-nm.org Grants: Sidney Webb; sidwebb@gmail.com Librarian: Brenner Fody; mebrennerf@live.com Loaner Telescope: Ron Kramer; ronjkramer@aol.com Membership: John McCullough: Secretary@aslc-nm.org Night Sky Network: OPEN Observatory:

- Leasburg Dam: Ron Kramer; ronjkramer@aol.com

- Tombaugh: Steve Shaffer; Director1@aslc-nm.org Outreach: Chuck Sterling; csterling@zianet.com Publicity: Daniel Giron; astrofix@comcast.net Web-Site; Joseph Clower; j.clower@hotmail.com *HDO* Editor: Ron Kramer; ronjkramer@aol.com

# **Table of Contents**

- 2 The President's Column-Inch...
- 2 Outreach Activities Roundup
- 4 Calendar of Events
- 4 Meeting Minutes
- 7 Information on the Grubb Mount at Tombaugh Observatory (NMSU)
- 8 Classifieds

# **February Meeting**

Our February meeting will be held on Friday, February 22, in Room 77 at Doña Ana Community College, with the following schedule:

7:00 pm - 7:30 pm Show & Tell

7:30 pm - 8:00 pm Business Meeting

8:00 pm - 9:00 pm Guest Speaker & Presentation

This month's speaker is Candace Gray, NMSU Astronomy Department. The subject of her presentation is:

#### The Moons of Jupiter

## **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.

We frequently offer solar observing at the Farmer's Market on Saturday mornings. For further information please visit our website at www.aslc-nm.org.

## **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 constellations in the sky.

## The President's column-inch...

The ASLC now has access to the new observatory at Leasburg, all the paperwork and insurance questions finally resolved. We moved the mount pedestal to the observatory this month and should have it mounted about the same time you read this. Once the glue sets we will install the telescope and test it; the scope has been idle for a few years since we replaced the busted motor that got it removed from its NMSU observatory, and it might need a tune-up.



The month of February now has additional events scheduled since last I wrote for this column. Clyde Tombaugh Day is being celebrated February 9th at the Museum of Natural Science in Las Cruces, with a star party the evening of Friday February 8th from 7 – 9 pm, hosted at Tombaugh Elementary School, and with a Solar Viewing event Saturday the 9th at the Las Cruces Farmer's Market near its north end, at the Museum. ASLC will support both events with public viewing through our telescopes. Unfortunately, the major minor planet Pluto will be beyond the reach of our instruments...

Our February Moon Gaze is Saturday the 16th in front of International Delights Café in Las Cruces, and on Friday the 22nd, our monthly meeting will feature a presentation by Candace Gray on the moons of Jupiter. The Moon Gaze starts at dusk. The monthly meeting starts at 7 pm, with the presentation at 8 pm, after the short business meeting at 7:30.

ASLC will support the Desert Hills STEM night (Science, Technology, Engineering, and Math) with public viewing though our telescopes, and a presentation table inside the school (exactly what to feature is still being considered).

It is a little early but not way early to discuss the April 20th Astronomy Day and almost too early to discuss the Holiday Party for December. But we're going to mention both at the meeting anyway.

Have a Good Year; keep looking UP.

Chuck Sterling

## Outreach Activities Roundup, by Jerry McMahan

### Friday, January 18; Tombaugh Observatory (NMSU) open house.

Steve Shaffer and Jerry McMahan were at the clubs' 12.5 Cassegrain. I was late since I was at Chuck's while he worked out a way to mount a 8-inch Schmidt Cassegrain to my new mount. Steve does all of the work anyway, so he didn't notice when I snuck in. We were on the Moon and had fair seeing. Again, it was obvious that the scope out performs the telescopes in the other domes, at least on the Moon and planets. Brenner Fody and his mother also made an appearance at the dome.

### Saturday, January 19; Moongaze at International Delights

Chuck Sterling, Steve Shaffer and Jerry McMahan brought telescopes and Trish Conley was there to help out. It was cold, but Jupiter looked good in Chuck's 10-inch. Like last month, we started to run out of observers early. We were finished by 10:00 PM due to a lack of customers and getting cold. Not much exiting happened except for getting rear ended on the way home. No damage was done to my car. Her car looked like it had front end damage, but she said it was already that way. I guess I was not the first person she hit.

#### Tuesday, January 22; Hermosa Heights Elementary

We had a good turnout people with telescopes at this event. Steve Shaffer, Rich Richins, Robert Williams, Chuck Sterling, Ron Kramer, Tracy Stuart, Jerry McMahan and Bert Verstraete were present and Brenner Fody and his mother again made an appearance.

From now on, I will refer to Bert as Bert V just to save time and space.

Chuck had both the 10-inch and the 100mm refractor. Rich brought a 6-inch Dobsonian and Robert had an 8-inch Dobsonian (or was it the other way around?). Steve had the 4.5-inch Dobsonian and I brought the 120mm refractor and Bert had his 8-inch Schmidt Cassegrain. Ron did presentations inside the school.

I was trying to do an alignment using Rigel, and Tracy was in the process of aligning on Betelgeuse when the students came out to observe. Neither of us could get off of the stars due to the long lines forming. I thought it was going to be boring for the students, but it turned out they wanted to see those two stars. Ron had done an indoor presentation including them.

#### Wednesday, January 23; J. Paul Taylor Charter School

Bert V, Chuck Sterling, Steve Shaffer, Sid Webb and Jerry McMahan were present. Sid had his 10-inch GOTO Dobsonian and the rest of us brought the scopes mentioned in the previous events. New member, Joe Spracklen, brought a 10-inch Dobsonian. We did have some cloud problems, but not enough to make the evening a total wash out.

#### Friday, January 25; Highland Elementary

Sid Webb, Steve Shaffer, Bert V, and Jerry McMahan attended the event. It is very rare for Chuck Sterling to miss an event, but it was also the club meeting night and Chuck had to be there for his first meeting as President. Chuck did show up to the school for a few minutes before leaving to the meeting. It was very cloudy so we did not have a lot of success. It seems that we have had bad luck with clouds, at that school, several times.

The telescopes were the same as before with the exception of mine. This was my first use of the 8-inch Celestron Schmidt Cassegrain that I had obtained from Jerry Gaber. It is the scope that Chuck worked on, as mentioned earlier, so that it could be mounted on the Meade LX 80 mount. I had it on the nearly full Moon with the crater Aristarchus near the terminator. It worked well. At least I think it did since the viewing was limited by the clouds.

#### Wednesday, January 30; Central Elementary School

Chuck Sterling, Steve Shaffer, Rich Richins, Sid Webb, Bert V and Jerry McMahan were there. Bert attended all of the school events as did Steve who was at all events period. Again, the same scopes appeared except I went back to the 120mm refractor since there was no Moon to observe.

I had problems with aligning the scope since the red dot finder fell off and hit me in the head while I was trying to center Capella. The second star, in the right angle finder, was apparently not Rigel. I know, I should have known just by the brightness. I wound up on the Pleiades until I was able to get an alignment later on.

We had a clear night and pretty good conditions considering we were in the city. Jupiter looked good as did several deep sky objects. Chuck told the school Principal that he was impressed by the intelligent questions that the students were asking.

#### **Added Notes**

The club had about 54 man hours (and 4 more from Trish) of outreach participation in January. This does not include the time that Chuck spent organizing these events. It also does not include time that the solar scopes may have been used since I am not aware of when they might have been used. There may also be time spent in the classroom, other than the indoor presentation given by Ron at Hermosa Heights.

Calendar of Events: February 2013 - April 2013 (Mountain Time - 24 hr. clock)

FEB 17 21 22 25 28	13:31 12:00 19:00 13:26 18;30 23:56	First Quarter Moon OUTREACH EVENT; PRESENTATIONS AT CESAR CHAVEZ ELEMENTARY ASLC MONTHLY MEETING Full Moon OUTREACH EVENT; DESERT HILLS ELEMENTARY STAR PARTY Moon - Spica Conjunction
MAR 02	08:20	Moon - Saturn Conjunction
04	14:53	Last Quarter Moon
09	sunset	Messier Marathon; Upham Dark Sky Site
11	13:51	New Moon
16	19:00	OUTREACH EVENT; MOONGAZE; International Delights Cafe
	sunset	Messier Marathon rain date; Upham Dark Sky Site (only if not held on Mar 9)
17	19:15	Jupiter - Aldeberan Conjunction
	19:16	Moon - Jupiter Conjunction
19	11:27	First Quarter Moon
20	05:02	Spring Equinox
22	19:00	ASLC MONTHLY MEETING
	21:00	OUTREACH EVENT; TOMBAUGH OBSERVATORY Open House
27	03:27	Full Moon
28	08:29	Moon - Spica Conjunction
29	14:18	Moon - Saturn Conjunction
31	15:59	Mercury Western Elongation
APR 02	22:36	Last Quarter Moon
10	03:35	New Moon
14	12:23	Moon - Jupiter Conjunction
18	06:31	First Quarter Moon
19	21:00	OUTREACH EVENT; TOMBAUGH OBSERVATORY Open House
20	19:00	OUTREACH EVENT; MOONGAZE; International Delights Cafe
22	05:03	OUTREACH EVENT; ASTRONOMY DAY Lyrids Meteor Shower
22	18:10	Moon - Spica Conjunction
24 25	13:57	Full Moon
20	20:28	Moon - Saturn Conjunction
28	01:42	Saturn Opposition
20	01.72	

Be sure to visit our web site for the latest updates: www.aslc-nm.org

### Minutes, January 25, 2013 ASLC Meeting

#### Show & Tell:

David Anderson started the session by talking about the variety of star guides available. Two guides he recommends are *Night Watch* and *Turn Left at Orion*. Fred Pilcher followed with a discussion of accurate timing sources when his WWV clock failed. To begin with, he called for the accurate time.

Bill Stein pointed out there are locations on the Internet that provide accurate timing. Ron Kramer also described using radio station programming for a timing signal.

#### Call to Order:

Chuck Sterling, President, Astronomical Society of Las Cruces (ASLC), called the business meeting to order at 7:19 pm, 25 January 2013, Room 114M, Dona Ana Community College, Las Cruces, New Mexico.

#### **President's Comments:**

Chuck Sterling, President, welcomed the group to tonight's meeting. He thanked David for the "Show and Tell" session and the various volunteers for addressing the several problems, questions and dilemmas. There were several guests at tonight's meeting including Robert Kimball, Tim and Phyllis Gordon, and Robert Brink. This is the first meeting attended by Robert Kimball, who is joining the Society tonight, and the Gordons, but Robert Brink has attended previous meetings. Chuck asked that all members be sure to check in on the roster.

#### Secretary's Report:

The Secretary, John McCullough, reported that the minutes for the November 2012 meeting were submitted for publication in the January issue of the Society newsletter, the High Desert Observer (HDO). Ron Kramer moved the minutes be accepted as published; Robert Williams seconded. The motion passed by acclamation. There was not an additional Secretary's report.

#### **Treasurer's Report:**

The Treasurer, Trish Conley, was not present at tonight's meeting. There was no Treasurer's report.

#### **Committee Reports:**

#### **Apparel Committee:**

Ron Kramer, temporary Committee chair, reported on apparel sales and noted that jackets, "hoodies" and other items will be available after the meeting. An order for additional items is pending requests for specific items, particularly cool weather items. Ron will continue to fill in as temporary Committee chair, but a new, permanent chair is required.

#### **Education:**

Rich Richins, Committee Chairman, reported he is coordinating future events with TAAS. He notes that students enjoy hands-on demonstrations, especially if they can eat them at completion. He welcomes any suggestions. Dr. Nancy Chanover pointed out that phases of the Moon with Oreo cookies tends to be a big hit.

#### **Fund-Raising and Grants:**

Sidney Webb, Committee Chairman, was not present at tonight's meeting. There was no committee report.

#### Society Library:

Brenner Fody, Society Librarian, arrived late. He reports there are currently 185 titles in the library published from 1840-1990 and the listing is available on the Yahoo! group. Volumes are available for checkout by members with advanced notice. The listing may eventually include the book publisher and the publishing date. Additional donations are welcome. There have been no new donations or requests.

#### Loaner Telescope Program:

Ron Kramer, acting Committee Chairman, reported the program is doing well. There are currently five (5) telescopes in the program: 12" and 10" Dobsonians, two (2) ETX 90s, and a Unitron refractor. Additional telescopes are being repaired/refurbished, including a 4 ½" and 6" Newtonian, and will be available soon. The loan agreement is in place, is working well, and has generated some income for the Society. This is a good way for new members to work with a variety of telescope systems if they are uncertain about which type will fit their needs. Cost is \$10 per month and members must sign the loan agreement. Members may contact Ron if they have questions about the loaner policy, including how to donate equipment to the program.

#### Membership:

John McCullough, Committee Chairman, reported that membership for 2012 was up with the addition of twentysix (26) new members, some of whom are very active in the Society. However, it was noted that more participation is needed from the longer-term membership.

#### Leasburg Dam State Park (LDSP) Observatory Committee:

Ron Kramer, Committee Chairman, reported that a new insurance policy is in place. This was required by the

state of New Mexico before issuing a Certificate of Occupancy and allowing the Society to move into the new observatory. Ron needs a reimbursement check to pay for the policy. Installation of the 16" Meade LX200 and pier should start in the next two weeks.

#### Tombaugh Observatory:

Steve Shaffer, Committee Chairman, was not present as he is supporting a star party at Highland Elementary tonight. There was no committee report.

#### **Outreach Committee:**

Chuck Sterling, Outreach Coordinator, reported on recent events. A Moon Gaze will be held at International Delights Café (IDC) on 16 January and 16 February. Star parties will be held at Hermosa, J. Paul Taylor, Highlands, Central, Desert Hills, and Tombaugh schools in the coming weeks. Members can check the Yahoo! group for details.

#### **Publicity:**

Daniel Giron, Committee Chairman, reported that the Society was mentioned in the *Pulse* magazine along with other local astronomy organizations and activities. Tonight's meeting was announced in the *Las Cruces Bulletin* but not the *Pulse*. Daniel is working on preparations for Astronomy Day in April.

#### Society Website:

Joseph Clower, web master, and his assistant, Steve Barkes, continue to work together to resolve broken and suspect links on the website. They continue to need updates to activities on the site; David Anderson has submitted several.

There were no additional committee or officer reports.

#### Old Business:

1. State-wide Star Party - Ron Kramer has been in communication with the TAAS (The Albuquerque Astronomy Society) president. This event will likely be in April 2013 to not conflict with the Messier Marathon. Participating clubs are expected to include Albuquerque, Silver City, Carlsbad, El Paso, Alamogordo, and Las Cruces.

2. Field trip - William Wren, assistant director at McDonald Observatory, has offered the Society a "behind the scenes" tour of the facility. Ron Kramer is still working on the details.

There was no additional old business discussed.

#### New Business:

There was no new business for discussion.

#### Items for Sale:

No items were announced for sale.

#### Announcements:

Merideth Hildreth suggests the Society maintain a log of volunteer hours to support future grant applications.

Ron Kramer needs articles for the *High Desert Observer*. Ron also noted he is the new editor-in-chief of the Astronomical League's quarterly newsletter, *Reflector*. He would like Society members to submit articles that can be published in the *Reflector*. Fred Pilcher asked what size article is desired. Ron says they should start at 2,000 words but can be up to 10,000 words.

Ron Kramer has Royal Astronomical Society of Canada (RASC) 2013 handbooks and calendars for those members that ordered them.

There were no additional announcements made.

#### **Recognitions/Achievements:**

John Kutney has submitted requirements for another certificate from the Astronomical League. This one will be the Local Galaxy and Neighborhood Award. This was a long process as it requires a detailed log and sketches for submittal. The award is pending.

There were no other recognitions or achievements announced at tonight's meeting.

Fred Pilcher offered a motion to adjourn and Tracy Stuart seconded. The motion passed by acclamation and the business portion of the meeting was adjourned at 7:46 pm

#### **Presentation:**

This month's presentation was made by Dr. Nancy Chanover, Associate Professor, New Mexico State University Astronomy Department, on "Development of In Situ Instrumentation for Biomarker Detection." Her team on this project includes members from three departments at NMSU, NM Tech, and NASA's Goddard Space Flight Center (GSFC).

In Situ means not remote, done by an apparatus in place, something like the Mars Science Laboratory's (MSL) Curiosity. She noted that this year marks the ninth anniversary of the Opportunity probe.

Biomarker detection can be either global or local and can only result from the presence of life, i.e., ozone and methane. She described how this process differs between the Earth and Mars.

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

The January meeting of the Astronomical Society of Las Cruces concluded at 8:55 pm.

-Respectfully submitted by John McCullough, ASLC Secretary

### Information on the Grubb Mount at Tombaugh Observatory (NMSU)

Submitted by ASLC member, Steve Shaffer, Chair, Tombaugh Observatory

This is post #17 from Yahoo Groups list "Antique Telescope Society". it was provided by John W. Briggs, via email on June 8, 1999:

I am absolutely amazed how helpful RETE has been to me, thanks to the great people who came forward to help on the issue of this telescope lens. The effort has had very interesting and unforeseen consequences. Here are the latest developments, many of which have been off-list:

Thanks especially to Charlotte Bigg, we now know that the Steinheil lens #32400 was made in 1891 and was sold to a George W. Hewitt of Philadelphia. This information alone made me very happy.

But further, Bart Fried, of the Antique Telescope Society, found information regarding Hewitt, who proved to be a well-known architect, and we thus now know from Bart and an ASP publication that Hewitt owned a Grubb instrument. I take this as strong circumstantial evidence that the Grubb mounting now surviving in New Mexico (which was locally remembered to be associated with the Steinheil lens) is probably the long-lost Hewitt instrument. We also know from Bart that Hewitt was a member of the Rittenhouse Astronomical Society.

Then Ken Launie, also of the Antique Telescope Society, shared obscure information from his remarkable files: Hewitt was an amateur telescope maker, and Ken once saw and photographed a high-quality 4-inch refractor of Hewitt's making. Ken went on to inform us that Hewitt is documented as "the dearest astronomical friend" of Elihu Thomson of General Electric, and that an enormous correspondence passed between them.

Thomson, who himself had a homemade 9-inch refractor, encouraged Hewitt to move up from his 4-inch glasses to a 6-inch and to a 9-inch. And here is where the story unexpectedly came back to where I could add a bit more to it:

The 9-inch Hewitt objective survived in storage at Trinity College in Hartford, Connecticut, till at least circa 1979, when I visited and photographed it. I did not learn till a few months ago that this 9-inch had been made by "George Hewitt," and until now, I had no idea who Hewitt was. The objective, which was praised by Thomson, is sadly now unaccounted for, but perhaps an effort at Trinity can be renewed to find it. Hewitt died in 1916 (we know thanks to Ken). Fragments of Hewitt's 9-inch equatorial head, and his large weight-driven drive mechanism, are presently in my collection (I got them last year).

How did the Steinheil objective come to New Mexico (and to my collection)? It was evidently long ago given to Harvard College Observatory, whereupon it came to Sacramento Peak, New Mexico, with solar astronomer Richard Dunn. (The mighty vacuum solar telescope here in Sunspot in now named for Dunn.) The Grubb mounting that came with it from Harvard was long ago given to Clyde Tombaugh and a local amateur society; the Steinheil objective was recently given by Dunn to me.

As an aside, there were other historic telescopes associated with Trinity College: a 6-inch Fitz and a 6-1/2-inch Brashear/Warner & Swasey. The Fitz has been in my collection since the early 1980s; the 6-1/2-inch came to me last year. I now regret, of course, not picking up the 9-inch Hewitt object-glass years ago, when there was opportunity to preserve it.

THANKS very much to everyone who has helped sort out this telescope history! Seems to me, this is the Internet at its best. Much follow-up sleuthing is of course suggested by all this new understanding.

--John.

### Classifieds

The following items are on a "first-come, first-served" basis, to all readers of the ASLC's *High Desert Observer*. If you are interested in a particular item, please contact the individual listed next to the item. In some cases the ASLC is assisting the seller, so you can contact the ASLC member.

All items are sold "as is" unless otherwise warranted by the seller. It is suggested that the buyer inspect and evaluate the item prior to purchasing. Items are non-refundable and non-returnable, unless prior agreement is made between the seller and the buyer.

### If you have an item to sell, please contact ronjkramer@aol.com

Vintage Mayflower Refractor. 60mm F15.1 Focal length 910mm. Japanese manufacturer. Includes a wellmade sturdy equatorial mount with slow-motion control knobs, wooden tripod, a hybrid .965 inch to 1.25 inch mirror diagonal to accept modern 1.25 inch eyepieces, the original .965 inch prism diagonal, 2X Barlow, wooden storage box, and a 1.25 inch 25mm Vixen Orthoscopic eyepiece. At 60mm it is not a powerful scope but it performs admirably on the moon and planets and offers sharp crisp low-power views between 28x to 72x. Its best high-power range is from 72x to 130x. (I have pushed it to 182x on the moon and still had a very good image). Chromatic aberration is almost nonexistent. A great grab-and-go scope. Asking \$190.00. Contact Joseph Mancilla 575-647-2676

**From the Kile estate**. Please contact Ron Kramer (ronjkramer@aol.com) if you're interested in the following:

Meade, 10" LX200 with ETC-60AT Autoguider, dew remover, field tripod, JMI dolly, solar filter, rolling cart with computer and loaded software for telescope/image control, added counter weights, box with cables and accessories, etc.; \$2250.00

# ASTRONOMICAL SOCIETY of Las Cruces PO Box 921 Las Cruces, NM 88004

Astronomical Society of Las Cruces

ASLC - Sharing the Universe With our Community for Over 60 Years

