



image by Jeff Johnson

Black Eye Nebula (M64)

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October Meeting

Our next meeting will be on Friday, October 24, 2014, at the DACC Main Campus, Room 141, Technical Studies Building, starting at 7:00 p.m.

Jim Eckles from White Sands Missile Range will present "Astronomy at White Sands Missile Range."

New & Existing Member Package

Membership Chair, Judy Kile has sent member packages to all current members before the June meeting. These were sent via Yahoo!Groups email. If you did not receive your package, please let her know (jkile@elp.rr.com) and she will send you a regular email with the package.

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.

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.

Annual Dues

Please note that annual dues are due in January. Contact our Treasurer, Patricia Conley (treasurer@aslc-nm.org) for further information. Dues can be paid at the next meeting or via mail, sent to Treasurer ASLC, PO Box 921, Las Cruces, NM 88004.

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, 2014

Board@aslc-nm.org

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

Vice President: Steve Shaffer; VP@aslc-nm.org

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

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

Director-at-Large: Tracy Stuart; Director1@aslc-nm.org

Director-at-Large: Jerry Gaber; Director2@aslc-nm.org

Immediate Past President: csterlin@zianet.com

Director Emeritus: Walter Haas

Committee Chairs

ALCor: Patricia Conley; tconley00@hotmail.com

Apparel: Ron Kramer; ronjkramer@aol.com

Calendar: Chuck Sterling; csterlin@zianet.com

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

Grants: Sidney Webb; sidwebb@gmail.com

Librarian: *****OPEN*****

Loaner Telescope: Frank Fiore; ffchilehead@gmail.com

Membership: Judy Kile; jkile@elp.rr.com

Night Sky Network: *****OPEN*****

Observatory:

Leasburg Dam: Rich Richins; President@aslc-nm.org

Jerry Gaber; jerrygaber@gmail.com

Tombaugh: Steve Shaffer, VP@aslc-nm.org

Outreach: Chuck Sterling; csterlin@zianet.com

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

HDO Editor: Ron Kramer; ronjkramer@aol.com

Recent Outreach Events

by Jerry McMahan & Steve Shaffer

Saturday, September 13; Leasburg Dam State Park Observatory (Music and the Stars)

There have been many cloudy nights lately, but not this one. We had a very nice, clear night for this event. Ron Kramer and Daniel Giron spent many hours at the park, for the Music Under The Stars session and for the star gazing evening.

Dave Doctor manned the 16-inch in the observatory. Sid Webb set up his 10-inch GOTO Dobsonian. I brought the 8-inch Schmidt. Daniel and Ron assisted wherever needed. After two Saturdays in a row at Moongaze and the upcoming trip to Okie-Tex, Chuck Sterling decided to preserve his marriage and sit this one out. It is rare for Chuck to miss an event.

Saturn was still high enough to be seen, early in the evening, from the observatory. Several spectators raved about the view of the planet through the 16-inch. We also had excellent views of deep space objects in Sagittarius and Scorpius as well as the double cluster in the North. The Andromeda galaxy and the Whirlpool were also among the targets. Globular clusters M22, M13 and M4 added to the viewing. It was a very good night for star gazing.

Saturday, September 27; Sky Safari at Tombaugh Observatory

This event was published in the Saturday Las Cruces Sun News. All three domes were open and there were 41 views through our 12.5" telescope. I started the night looking at Saturn low in the west, followed by Mars. Next I went looking for M15 globular cluster in Pegasus, could not find it, later discovered I was looking in the wrong place. Then I tried to find M22 in Sagittarius, more trouble. Kept finding a globular cluster which was not in my book, turned out to be NGC 6638 Mag. 9.20. Took a few minutes to find M70. Two minutes after everyone said good night I found M22 by using the spotting scope. I had not used it before, always using the Telrad. The spotter has a very short eye relief, so I had to use it without my glasses, but there seems to be no way to focus it. Spent the next 40 minutes trying once again to find M15, gave up and went home.

Friday, October 3; Open House at the Tombaugh Observatory

Steve Shaffer was occupied at the Fairgrounds, so he gave me the keys to the dome housing the clubs 12.5-inch Cassegrain. That was a brave, or foolish, move on his part, since I don't know if I have ever gone through the procedure alone. Chuck Sterling came so that saved me from a lot of mistakes.

We pointed at the just past first quarter Moon. The tracking was very good at first. We did have to reset the position for the drive. It stopped tracking. All the gears were moving correctly but the scope was not keeping up. Chuck concluded, correctly, that the clutch was slipping. He placed three small counter weights on the big (very big) counterweight and the scope started tracking. A student joined us. She intends to join the club.

When we were closing up, we attempted to cover the scope. Steve will be shocked. I took the cover off just three hours before and I have helped Steve put it on many times. We put the cover around the telescope tube. When I got home I remembered that it goes around the mount, not the tube. In my defense, I did not have my coffee that morning (flies got into it). How about a temporary insanity plea? No, I have already used that excuse.

I was tempted to not sign out in the log book. If I left out evidence that I was there, Steve could be blamed for the mistakes. My better nature won out, along with the fact that Chuck was a witness, and I did fill out the entry. I promise to do better next time.

Saturday, October 4; Moongaze at International Delights Café

Chuck put the 10-inch on Saturn (early), Mars, Uranus, and the Ring Nebula. I had the ETX on the Moon for the entire evening. Frank Fiore and John McCullough joined us as well. It was a nice clear night. Cold temperatures are not yet a problem, but it is getting cool when the Sun goes down.

As usual, several people wanted to know when we would be out with the scopes again. We are getting a number of observers that watch for us to be there.

The next outing will put us ahead of last years total outreach hours.

* * *

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

OCT 16	14:32	Mercury - Inferior Conjunction
18	17:30	OUTREACH: Music & the Stars; Leasburg Observatory; Jamie O'Hara
21	10:26	Orionid Meteor Shower
23	15:35-17:50	Partial Solar Eclipse
23	15:57	New Moon
24	19:00	ASLC Meeting; Room 141, DACC Main Campus, Technical Studies Bldg.
25	10:04	Moon - Saturn Conjunction
25	Dusk	OUTREACH: DSO Upham
30	19:48	First Quarter Moon
31	TBD	OUTREACH: Renaissance Faire Setup, Young Park
NOV 01	09:00-17:00	OUTREACH: Renaissance Faire, Young Park
02	09:00-17:00	OUTREACH: Renaissance Faire + Teardown, Young Park
04	05:10	Mercury - Spica Conjunction
05	> midnight	Southern Taurids Meteor Shower
06	15:23	Full Moon
12	> midnight	Northern Taurids Meteor Shower
14	08:16	Last Quarter Moon
14	19:00	OUTREACH: Open House, Tombaugh Observatory
15	18:30	OUTREACH; Leasburg Dam State Park Observatory
17	01:17	Leonids Meteor Shower
18	09:01	Moon - Spica Conjunction
21	19:00	ASLC Meeting; Room 141, DACC Main Campus, Technical Studies Bldg.
		NOTE: ASLC Meeting is one week earlier than normal due to Thanksgiving Holiday
22	05:32	New Moon
22	Dusk	OUTREACH: DSO Upham
27	Dusk	OUTREACH: MoonGaze, International Delights Café
29	03:06	First Quarter Moon

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

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September Meeting Minutes

by John McCullough

Show & Tell

Sid Webb gave a report on attending the 2014 Enchanted Skies Star Party, 24 - 26 September in Socorro, NM. There were several good presentations from Very Large Array (VLA) personnel and excellent dark skies. Most events were held at the Camino Real Historic Trail Site and museum outside Socorro.

Trish Conley presented information on the 2014 Renaissance Arts Faire that will be held 01-02 November at Young Park. She also circulated a sign-up form for volunteers for setup, teardown, and working the ASLC booth those two days.

Call to Order

Rich Richins, President, Astronomical Society of Las Cruces (ASLC, the Society), called the September business meeting to order at 7:30 pm, 26 September 2014, Room 141, Doña Ana Community College (DACC), Las Cruces, New Mexico.

President's Comments

The President, Rich Richins, welcomed the group to tonight's meeting. Rich welcomed two guests to tonight's meeting: Emma Fuchs and Jacki Beacham. Emma is a local student building a telescope as a science fair project; Jacki is her mother. Rich also recognized new member Joe Alvarez. Joe is from La Union and owns EMI Technologies. He had been interested in astronomy during his college days in the 70's and 80's and got hooked again at a recent Tucson Equipment Expo. Gary Starkweather, a transplant from Florida who now lives in the Astronomy Village outside Deming where he is in the process of building three domes, has attended several previous meetings and is joining the Society tonight.

Officer's Reports

Secretary's Report

Rich Richins reported the minutes for the August meeting had been submitted by the Secretary, John McCullough, for publication in the September issue of the Society newsletter, the *High Desert Observer (HDO)*. John noted that Ron Kramer, *HDO* editor, had noted and corrected some inconsistencies in the submitted minutes. If there were no other corrections or discussion, Rich asked that the minutes be accepted as published. Bert Stevens moved that the minutes be accepted as published, Judy Kile seconded and the motion passed by acclamation. There was not an additional Secretary's report.

Treasurer's Report

The Treasurer, Trish Conley, provided a status of the Society's various accounts. She also noted that she still has one 2014 RASC Observer's Handbook available for \$6.00. She will be placing an order for the 2015 issue in the near future. There was not an additional Treasurer's report.

Committee Reports

2015 Budget

Rich Richins, Ron Kramer, and Trish Conley, members of the committee, discussed the budget that was published in the September issue of the *HDO*. There was a question from the floor regarding funds allocated to support ALCon 2015, which was not listed. It was explained by the committee that ALCon 2015 is not an ASLC event, thus expenditures or potential income are not a part of the ASLC budget.

Officer Nominations

Chuck Sterling, Committee Chairman, was not present (he was attending the Okie Tex Star Party). In his absence, Rich Richins reported the slate of officer candidates for 2015:

President: Daniel Giron Director-at-Large #1: Ron Kramer

Vice-President: Steve Barkes Director-at-Large #2: Tracy Stuart

Secretary: John McCullough

Treasurer: Patricia (Trish) Conley

Rich Richins will serve on the Board of Directors as Immediate Past President.

Rich opened the floor for additional nominations. When there were none, Bert Stevens moved that nominations be closed and Ron Kramer seconded. Voting will be conducted during October with officers to be announced at the annual meeting in October. Ballots will be forthcoming.

ALCon 2015

Ron Kramer, Committee Chairman, reported that with nine (9) months to go until the convention, most speakers/presenters are confirmed. Joel Levine will not be the keynote speaker at the closing banquet because of conflicting commitments to NASA; thus, the search for a speaker has been reopened. There will be multiple social and observing opportunities available to convention attendees including the Star-B-Que at Leasburg Dam State Park (LDSP) on 10 July, and the banquet on 11 July, where Walter Haas is planned to be the guest of honor. Several area tours are also planned including trips to the Very Large Array (VLA), Spaceport USA, Sun Spot, the White Sands Missile Range Museum and missile garden, and the Space Hall of Fame and Museum in Alamogordo.

The Hotel Encanto will be the convention headquarters and venue for the event. There will be a two-page announcement/advertisement in the next *Reflector* magazine. Ron emphasized the need for “active” volunteers from the Society membership. Contact Ron or Judy Kile to volunteer. There may also be “Pluto-mania” or “Pluto-palooza” events as the New Horizons spacecraft approaches Pluto in July 2015.

Apparel

Ron Kramer, acting Chairman, has six (6) items in stock and will be replenishing the inventory in October. Members should contact him if they have special requests or size requirements. He will be ordering caps, hoodies, green sport shirts, etc.

Loaner Telescope Program

Frank Fiore, program coordinator, reports the telescopes in the program not currently on loan are located at his home. It was decided not to store the telescopes at Tony Levatino’s property because of limited physical security. One telescope is currently on loan, another one may be loaned to Emma Fuchs. A question was asked if the Society’s solar telescopes are available for loan. These telescopes are intended for public outreach and as such are not included in the Loaner Program. The Treasurer keeps track of the telescopes as they are Society assets.

Membership

Judy Kile, Committee Chair, announced she will send out new member packets, including membership applications, to facilitate a current information update including current email addresses. All current members are asked to return the applications as soon as possible.

Outreach

Chuck Sterling, program coordinator, was not present. The final 2014 “Music and the Stars” at LDSP will be 18 October. The fall Astronomy Day is 04 October. Because that is next weekend, no activities are planned other than the Moon Gaze at International Delights Cafe (IDC). A total lunar eclipse occurs early on 08 October, but no public activities are planned.

Publicity

Daniel Giron, publicity chairman, reports he has gotten Moon Gaze information published in the *Pulse* magazine inserts for October. He also noted there was a lot of local astronomy activity coverage in the current *Las Cruces* magazine, much of it ASLC related. Janet Stevens asked about current information cards or brochures to hand out public events.

Holiday Party/December Meeting

Judy Kile asked about any planning including booking a venue for the December meeting. Rich reported that he is addressing the issue and will have an update at the October meeting.

Website

Rich Richins and Steve Barkes are attempting to keep the website up-to-date. Please contact one of them if you notice any issues.

Old Business

Kitt Peak Excursion - The excursion planned for October had to be canceled because of limited participation commitments.

New Business

1. 2015 RASC Observer’s Handbook - Bert Stevens reports the list price for the 2015 Handbook is \$27.95 per issue plus shipping & handling, but drops to \$17.95 per issue if ordered in quantities of 10 or more.

2. Imaging Workshop - Rich Richins asked for an indication of interest in such a workshop. Depending on participation, the workshop could be classroom instruction or informal “field” training on techniques.

Ron Kramer moved to adjourn the business portion of tonight’s meeting, Fred Pilcher seconded. The business meeting concluded at 8:14 pm with two dissensions.

Presentation

This month's presentation was a discussion of The ASLC Observatory at Leasburg Dam State Park (LDSP) and outreach led by ASLC President Rich Richins. Some of Rich's ideas include presentation of heliocentric versus geocentric models of the Solar System and the explanation of the phases of Venus each model provides. This could include a demonstration at LDSP that would allow the public to relate/connect with what is seen in the eye-piece. Another possibility is to set-up a geo-cache exercise with relative planetary distances and images at the park. Ron Kramer believes he can work with "Skeeter" Giron, LDSP manager, to set this up. Sid Webb would like to work with the Friends of LDSP on public outreach. Judy Kile pointed out the need to have Society members commit to attend and support the events.

Rich said that the Society needs to focus more in the Stars portion of the "Music and the Stars" events. There need to be additional activities for the public between the completion of the music and when it is dark enough to see more than a few objects.

Charles Turner has lived in Oakland, CA, and encountered astronomy public outreach there. He noted that most presenters made the events as much "entertainment" as science. Daniel Giron tries to engage the public in astronomy "trivia" at Moon Gazes. He also wondered if providing simple planispheres to get people to come back and perhaps join the Society is workable. Daniel also noted he has gotten no real response from local television outlets other than KRWG, the local PBS affiliate. He has had more success with the *Sun News*, but may work more with local access community television, such as CLCTV. Charles also noted that several television stations in northern California have "official astronomers" to provide comment on astronomical events. The Society might consider using the upcoming partial solar eclipse as a hook. Rich has considered having the Society participate in the annual 03 July Electric Light Parade to emphasize issues with light pollution and light trespass.

Rich and Daniel also discussed demonstrating a comparison of star size. Sid would like to incorporate similar presentations at monthly meetings to "dry run" them prior to going before the public. There are several sources for ideas on the Internet. Trish Conley plans to use everyday items to demonstrate proportion of stellar objects as part of the RenFaire participation.

Rich presented additional ideas. Fred Pilcher talked about demonstrating phases of the Moon using Earth and Moon globes and a light source as the Sun. There have also been demonstrations of various weights on other planets. "Learn How to Operate a Telescope" using an inexpensive telescope is also possible. Rich noted a solar system bracelet has been used to engage a younger audience. Bert Stevens noted that Wes Baker used to set up a solar scope at the Saturday Farmers' Market to attract the public. Bert also suggested partnering more with the Las Cruces Museum of Nature and Science. Rich pointed out that Sky & Telescope reported on a club in New Hampshire that is working with libraries to loan out "ruggedized" telescopes with club information on the telescope. Trish suggested having a permanent demonstration in the library. Sid reported that there was a presentation at the 2014 ALCon about library telescope programs.

Daniel would like to have 30-40 minute programs at LDSP to prepare for the evening viewing.

Rich would like to get several ideas in development in time for the upcoming 2015 Renaissance Arts Faire and then transition them to LDSP. Daniel would like to promote an overnight "Astronomy Camp" at the Park. He may also pursue involvement with local Boy Scout units to promote astronomy events.

The September meeting of the Astronomical Society of Las Cruces concluded at 9:03 pm.

-Respectfully submitted by John McCullough, ASLC Secretary

* * *

Back at the Telescope

by Berton Stevens

One of the most interesting astronomical events is a lunar eclipse. These events have been observed by humans for thousands of years. A bright full moon suddenly turns a dull red or dark grey. Ancient people viewed these events with suspicion and terror. To them, the Moon belongs to the heavenly realm and it appears as an attack on the rightful order of things. Today we know that lunar eclipses are caused by the Moon passing through the shadow of the Earth.

We had one of these events scheduled to occur on the morning of October 8. Unfortunately, we also had a visit from the remnants of Hurricane Simon at the same time. What should have been clear post-monsoon skies were completely overcast, blocking our view of this wonderful eclipse.

A lunar eclipse can only happen at full moon. At most full moons, the Moon travels north or south of the Earth's shadow. This is because the Moon's orbit around the Earth is tilted 5.16 degrees from the plane of the Earth's orbit around the Sun. This plane is projected onto the sky as an imaginary line called the ecliptic. The Sun makes its yearly journey around the sky on the ecliptic. Since the Earth's shadow is centered on the point in the sky exactly opposite that of the Sun (called the anti-solar point), then the center of the shadow must also be on the ecliptic. Only when the Moon is passing near the ecliptic as it reaches the full moon point can a lunar eclipse occur.



The Moon traveled through the Earth's shadow earlier this year on April 15. This is a mosaic of images taken during that eclipse. Each image is taken around the time of an eclipse contact as well as the time of central eclipse.

To have any part of the full moon dimmed by the Earth blocking the light from the Sun, the Moon's center must be within 1.5 degrees of the ecliptic. When within this distance, centered on the anti-solar point, part of the sunlight is cut off from the Moon in a penumbral lunar eclipse. At no time is any point on the Moon completely cut off from the Sun's light.

If the Moon's center is within 0.95 degrees of the ecliptic at full moon, then at least part of the Moon will be completely cut off from the Sun, in a partial lunar eclipse. The darkened part of the Moon is in the Earth's umbral shadow and receives no direct light from the Sun.

Finally, if the Moon's center is within 0.44 degrees of the ecliptic at full moon, then the entire Moon will be cut off from the Sun's light. The entire Moon will be within the Earth's umbral shadow, in a total lunar eclipse. But even in the umbral shadow, the Moon does not become completely dark.

When the Moon is in the umbra, sunlight from all the sunrises and sunsets all around the world can illuminate the Moon. Since sunrises and sunsets are mainly reddish, this red light filtering through our atmosphere can light up the Moon during the eclipse and give it a reddish glow. While astronomers can compute the times of the eclipse very precisely, what the Moon will actually look like during the eclipse is usually a surprise.

If the weather in the areas where the Sun is setting or rising during the eclipse is clear, then there will be an abundance of red light to reach the eclipsed Moon. This gives us a bright red Moon during the eclipse. If there are many storms in these areas, then they will block much of the red light, resulting in a dull red glow.

Finally, if there is a major volcanic eruption before the eclipse, as there was in December 1963, this can throw ash particles up into the stratosphere. The ash is very effective in blocking the sunlight from reaching the Moon and the eclipsed Moon will be a very dark grey, almost invisible in the sky.

Eclipses occur during two 6-week periods that are six months apart each year. These “eclipse seasons” move through the year over an 18.6-year period. This total lunar eclipse is the second this year, with the first having occurred on April 15, during our first eclipse season. Each of next year’s eclipse seasons will also have a total lunar eclipse. This is somewhat unusual, since there are usually partial lunar eclipses scattered in among the total eclipses. This grouping of four total lunar eclipses in a row is called a tetrad. There will be only eight tetrads during the Twenty-First Century.

Lunar eclipses have little scientific value today, though some amateur astronomers still time the instant that the Earth’s shadow falls on or leaves certain craters to estimate how much Earth’s atmosphere enlarges the Earth’s geometrical shadow. Beyond that, lunar eclipses are just fun to watch.

Eclipses were used in the past to learn more about the universe. The ancient Greek philosopher Aristotle observed lunar eclipses and used them to deduce that the Earth must be round, since only a sphere can project a circular shadow no matter what angle it is at during the eclipse. It became generally accepted that the Earth is round.



Knowing when an eclipse occurs was sometimes very useful. If you ever read Mark Twain’s *A Connecticut Yankee in King Arthur’s Court*, you remember that Hank used his knowledge that a solar eclipse was about to occur to get himself out of a jam. This is not limited to fiction

A lunar eclipse saved Christopher Columbus on February 29, 1504, when he was stranded in Jamaica. The natives had been providing Columbus with provisions, but after six months and his men stealing from them, the natives stopped providing supplies. Having an ephemeris, Columbus discovered that there was a lunar eclipse coming shortly. He told the natives that his god was angry with them and a sign would be provided to prove it.

The eclipse occurred as scheduled and the natives ran to Columbus and begged him to ask his god cease being angry with them. After a short while “praying in his cabin” he emerged to tell them that his god had forgiven them and the Moon would return. It did so and the natives resumed providing supplies until he was able to leave Jamaica.

This is a telescopic picture of the total eclipse of the Moon that occurred on April 15, 2014. This eclipse was the first of the tetrad of four eclipses. The October 8 eclipse will be the second in this group. The Moon is near the southern edge of the umbral (total) shadow, so the southern part of the Moon is much brighter than the northern part which is near the center of the umbral shadow.

On August 28, 412 B.C., a lunar eclipse caused the superstitious Athenians to delay their departure for home during the Second Battle of Syracuse, part of the Peloponnesian War. The Athenians tried to decide if the eclipse was an omen and they decided to wait another 27 days to depart. The Syracuseans took advantage of this indecision to attack the unprotected Athenian fleet in the harbor and win a decisive victory.

In 1453, the Ottoman Empire was attacking the Byzantine Empire. The Ottomans held siege over the city of Constantinople, the Byzantine capital. After forty-seven days, an omen was fulfilled when the partially eclipsed “Blood Moon” rose on the evening of May 22. Seven days later, Constantinople fell to the Ottomans, ending the war and establishing the 21-year-old Sultan Mehmet ruler of the Byzantine Empire.

Back to the future in 2015, the final two eclipses in this tetrad occur on April 4 and September 28. The first one will be in the morning sky and totality will be just five minutes long. Like this month's event, the Moon will be going down in the west during the end of the eclipse. The second will occur in the evening and totality will last from 8:11 p.m. to 9:23 p.m. on September 27 (MDT). The Moon will rise in the east already moving into the penumbra, so we will need an observing site with a good eastern view. This may be an interesting event for a public observing session that should draw a good crowd.

* * *

Received the following (excerpted) from Mary Alba, who is the daughter of Walter Haas. For those of you who don't know the name "Walter Haas," he is one of the founding members of the ASLC (along with Clyde Tombaugh -- yeah, *that* Clyde Tombaugh -- and others).

I thought it would be appropriate for me to update you all on Dad.

First, THANK YOU for all the Birthday cards, he truly enjoyed them. He is now 97 years old as of July 3.

He had his 3 month check up with the doctor this morning. Other than age, he is so blessed. He has no life threatening illnesses. His appetite is still good, loves his chocolate as always, and enjoys his yogurts in the morning.

Almost every afternoon he walks with his walker down the hall and back. He is still able to get around his studio apartment; except for meals - then he is taken down the elevator in his wheelchair and to any doctor appointments.

Here is Dad with the caregivers at his assisted living facility.



* * *

Photo of the Month

On the next page is this month's photo of the dark nebula LDN 778, in Vulpecula (The Fox) region. This is a faint constellation in the northern sky. The bright orange star near the top center of the image is the red giant, magnitude 4.4, Alpha Vulpeculae (α Vul), also known as Lukida. In addition, a companion dark nebula LDN 772 is at lower right with blue portions of an apparent reflection nebula in the same area.

Taken by frequent contributor and ASLC member Jeffrey Johnson on August 30, 2014, this was imaged with a QSI 540wsg @ -10°C, mounted to a Takahashi FS-60C @ f/6.2 telescope on a Takahashi EM200 Temma II mount. Using an SX Lodestar guider, Astrodon Tru-Balance I-series LRGB Gen 2 filters, with settings of 5x10min L; 2x5 min ea RGB (all bin1x1), AstroArt5, CS4 (slightly cropped, 10xdarks/flats/fdarks/bias).



* * *

Please consider offering a submission (article, image, blurb, etc.) to future issues of *High Desert Observer*. The aim is to have the best Society newsletter in the United States, and it can only be accomplished with contributions by our members. Thank you for your consideration.

Ron Kramer, Editor

Astronomical Society of Las Cruces

Ballot for Society Officers, 2015

And

Annual Meeting Announcement

Vote for one (1) candidate for each position **OR** write-in the member of your choice:

Position:		Candidate		Write-in
President-		<input type="checkbox"/> Daniel Giron		<input type="checkbox"/>
Vice-President-		<input type="checkbox"/> Steve Barkes		<input type="checkbox"/>
Treasurer-		<input type="checkbox"/> Patricia Conley		<input type="checkbox"/>
Secretary-		<input type="checkbox"/> John McCullough		<input type="checkbox"/>

Vote for two (2) of the candidates below **OR** write in the member of your choice:

Position:		Candidate		Write-in
Director-at-Large (Position #1)		<input type="checkbox"/> Ron Kramer		<input type="checkbox"/>
Director-at-Large (Position #2)		<input type="checkbox"/> Tracy Stuart		<input type="checkbox"/>

Member Signature

Printed Name

Date

Note: Write-in candidates must be current voting members of the Astronomical Society of Las Cruces (ASLC) and agree to serve if elected.

For confirmation purposes, please sign and date your ballot. Mail or email your ballot to the Secretary at P.O. Box 921, Las Cruces, NM 88004 or Secretary@aslc-nm.org to arrive no later than 23 October 2014. Ballots may also be hand delivered at the Annual Meeting.

ANNUAL MEETING ANNOUNCEMENT

The Annual Meeting of the Astronomical Society of Las Cruces will be held at 7:30 pm on 24 October 2014 in Rm 141, Dona Ana Community College, Main Branch