# The High Desert Observer

August 2024





## In Remembrance - Chuck Sterling

Sometimes you don't know what you've had until it's gone. With my limited time at ASLC, I barely knew Chuck Sterling — he was a fellow member, an astro-imager, a past ASLC president and outreach coordinator. What I didn't know is what a treasure he was, to the ASLC, and to his family and friends. Many of the ASLC stalwarts were very close to Chuck, and the news of his passing hit hard. When I joined the ASLC in 2018, I had neither knowledge nor appreciation of its members, but as I was introduced to Chuck, it was obvious that he was a kind, caring gentleman — soft-spoken.

As I took on some responsibilities of the ASLC, particularly with the HDO Newsletter and scanning the postings in the Groups.io site, I became more familiar with Chuck and his contributions. The astro-images he posted were not as artistically fashioned as some, but were impressions that were characteristically Sterling-esque — often striking in their simplicity. He typically had a detailed description of his submissions, and seemed to have a particular fondness for galaxies. One of his images that sticks with me as capturing his spirit is the M51 Whirlpool Galaxy shown below. We're



all very familiar with this magnificent object, observed it, sketched it, imaged it. But Chuck's framing of M51 with a nearby singular bright star, adorned with graceful diffraction spikes, to me, is stirring.

I wish I'd have gotten to know you better, Chuck. I'd have been a better person for it.

- Tim Kostelecky



## This Month's Meeting - August 23th

IN-PERSON & Zoom, Friday at 7 p.m. Mesilla Valley Radio Clubhouse 6609 Jefferson Ave. Las Cruces, NM

At the corner of Wilt and Jefferson -- take the Porter exit from US 70, about 5 miles east from the I-25 interchange. Go south on Porter until you come to Jefferson. From there, turn left and go to the corner of Jefferson and Wilt. The meeting will also be available to members via Zoom.

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## Tombaugh Lecture Series Presentation for the Month

## **Protecting Dark Skies in New Mexico**

## Jon Holtzman IDA Representative & NMSU Professor

Jon Holtzman is tackling the problem of light pollution and provides approaches for how to mitigate it. He'll discuss the formation of the NM chapter of DarkSky International and its activities, and means by which the ASLC can contribute!

Jon is a semiretired emeritus Professor of Astronomy at NMSU the current chair of the State Council of New Mexico DarkSky, the state chapter of D a r k S k y International that was formed in 2023.



He has been instrumental in getting the Tortugas Mountain Observatory running and is involved in multiple projects at Apache Point Observatory, including the Sloan Digital Sky Survey and, currently, the construction of a very high resolution spectrograph for a new Planewave 1m at APO to study stellar oscillations.

## 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, providing opportunities to work on Society and public educational projects. Members receive electronic delivery of The High Desert Observer, our monthly newsletter, plus membership in the Astronomical League including their guarterly publication, Reflector, available in either paper or digital format. ASLC members are also entitled to a discount on a subscription to Sky and Telescope magazine. Annual Individual Dues are \$36; Family \$42; Student (Full Time) \$24. Dues are payable in January and partial year prorated for new members. Please contact our Treasurer, Patricia Conley, treasurer@aslc-nm.org for further information.

## **Coming Events**

Monthly, on an evening close to the first-quarter moon, ASLC hosts a public "MoonGaze" observing session in Las Cruces. We also hold periodic special evening sessions at Tombaugh Observatory on the NMSU campus.

Also monthly, the ASLC welcomes public viewing at the Haas Observatory in Leasburg Dam State Park, located just 20 miles north of Las Cruces. Our 16-inch Meade LX200 telescope at this site is used to observe under rather dark skies.

Keep updated on the dates, times, and locations through this <u>link</u> with additional information available at our website <u>www.aslc-nm.org</u> as well as our Facebook page.

ASLC Board of Directors		board@aslc-nm.org	
President:	Tim Kostelecky	president@aslc-nm.org	
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## **Committee Chairs**

ALCOR:	Patricia Conley	treasurer@aslc-nm.com
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Tombaugh:	Open	ASLCObservatory@aslc-nm.org
Tombaugh: Outreach:	Open Stephen Wood	ASLCObservatory@aslc-nm.org outreach@aslc-nm.org

## **Featured Article**

## **Marvelous Moons**

By Kat Troche



This article is distributed by NASA's Night Sky Network (NSN). The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

September brings the gas giants Jupiter and Saturn back into view, along with their satellites. And while we organize celebrations to observe our own Moon this month, be sure to grab a telescope or binoculars to see other moons within our Solar System! We recommend observing these moons (and planets!) when they are at their highest in the night sky, to get the best possible unobstructed views.

#### The More the Merrier

As of September 2024, the ringed planet Saturn has 146 identified moons in its orbit. These celestial bodies range in size; the smallest being a few hundred feet across, to Titan, the second largest moon in our solar system.

Even at nearly 900 million miles away, Titan can be easily spotted next to Saturn with a 4-inch telescope, under urban and suburban skies, due to its sheer size. With an atmosphere of mostly nitrogen with traces of hydrogen and methane, Titan was briefly explored in 2005 with the Huygens probe as part of the Cassini-Huygens mission, providing more information about the surface of Titan. NASA's mission Dragonfly is set to explore the surface of Titan in the 2030s.

Saturn's moon Enceladus was also explored by the Cassini mission, revealing plumes of ice that erupt from below the surface, adding to the brilliance of Saturn's rings. Much like our own Moon, Enceladus remains tidally locked with Saturn, presenting the same side towards its host planet at all times.

## The Galilean Gang

The King of the Planets might not have the most moons, but four of Jupiter's 95 moons are definitely the easiest to see with a small pair of binoculars or a small telescope because they form a clear line. The Galilean



Stellarium Web - Saturnian System: https://i.imgur.com/pozFNom.png

Moons – Ganymede, Callisto, Io, and Europa – were first discovered in 1610 and they continue to amaze stargazers across the globe.

 Ganymede: largest moon in our solar system, and larger than the planet Mercury, Ganymede has its own magnetic field and a possible saltwater ocean beneath the surface.

 Callisto: this heavily cratered moon is the third largest in our solar system. Although Callisto is the furthest away of the Galilean moons, it only takes 17 days to complete an orbit around Jupiter.

- lo: the closest moon and third largest in this system, lo is an extremely active world, due to the push and pull of Jupiter's gravity. The volcanic activity of this rocky world is so intense that it can be seen from some of the largest telescopes here on Earth.
- Europa: Jupiter's smallest moon also happens to be the strongest candidate for a liquid ocean beneath the surface. NASA's Europa Clipper is set to launch October 2024 and will determine if this moon has conditions suitable to support life. Want to learn more? Rewatch the July 2023 Night

Sky Network webinar about Europa Clipper here.

Be sure to celebrate International Observe the Moon Night here on Earth September 14, 2024, leading up to the super full moon on September 17th!



Cassini's Enceladus Mosaic: https://i.imgur.com/ wH6JFol.png



Stellarium Web - Jovian System: https://i.imgur.com/ 3ufZUky.png



Galilean Moon Family Portrait: https://i.imgur.com/ 2qVslvo.png

# Monthly Meeting Minutes July 2024

## John McCullough - Secretary

#### Call to Order:

Tim Kostelecky, President, Astronomical Society of Las Cruces (ASLC, the Society), called the July 2024 meeting to order at 7:01 pm on 26 July 2024 at the Mesilla Valley Radio Clubhouse. There were eleven (11) members, spouses, and guests in attendance, as well as nine (9) attendees via Zoom at the start of the meeting.

Tim welcomed the group to tonight's meeting. He announced that the meeting minutes from May and June 2024 were published in the July 2024 issue of the Society newsletter, the High Desert Observer (HDO), because of a publishing schedule conflict. Patricia Conley, Treasurer, noted that the May meeting minutes incorrectly report a Treasurer's report was not provided; Steve Barkes provided information to the Secretary at the meeting. The Secretary noted that a correction will be made to the May meeting minutes. Bernard Jezercak moved that the May and June minutes be accepted as amended and Rani Bush seconded the motion. The minutes were accepted by acclamation.

#### Presentation:

Tonight's Tombaugh Series presentation was by ASLC President Tim Kostelecky on "T(au) Corona Borealis – Yet Another Once-in-a-Lifetime Opportunity? Dodging the Hyperbole". Later this year, the cataclysmic variable star "T CrB" is predicted to exhibit an eighty-year cyclic explosion from a very dim 10th magnitude to near 2nd magnitude, which places it well into the brighter naked-eye visibility range (see Rich Richins' article in the June HDO). Some news reports describe this as a once-in-a-lifetime spectacularity that will "light up the sky." In fact, there will be no visual spectacularity to it, other than the sudden and temporary appearance of a reasonably bright star (like Polaris, the North Star), in the constellation Corona Borealis. Tim discussed much of the media hyperbole around this and other astronomical events that may, unfortunately, set expectations too high for the public in general. Yes, the periodic explosion of T CrB is a once in a lifetime event, but it would be better served if some in the media didn't set it up for disappointment.

Tim recognized an online visitor from Washington, Bob(?), who is considering relocating to the Southwest. Steve Meadows, previously a member of the Society, is rejoining now that he has retired.

#### Officer/Committee Reports:

#### Treasurer:

Trish Conley, Treasurer, presented a report on the status of the Society's finances. The ASLC has a net

positive income of \$128 for the current fiscal year. She has made several payments recently, including for the recent purchase of the SeeStar unit.

#### Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming events. Events and attendance were:

Event	Date	Members	Visitors
LDSP (3 <sup>rd</sup> Qtr. Moon)*	29 Jun	-	-
June Moon Gaze	13 Jul	4	200

<sup>\*</sup>This event was cancelled because of bad weather

Upcoming events are:

Event	Date
LDSP (3 <sup>rd</sup> Qtr. Moon)	27 Jul
August Moon Gaze	10 Aug

Contact Stephen if you can support any or all events. He would like to see more members support the smaller events with telescopes.

#### Apparel:

Rani Bush, committee chair, presented several options for caps and polo shirts to display the ASLC logo. She will post the information on the groups io for members to vote on their preferences.

#### ASLC-West:

The Deming group is on hiatus for the rest of the summer for 'monsoon' season.

#### Old Business:

There was no old business for discussion.

### New Business/Announcements:

Nominating Committee – A committee must be formed to provide a slate of officer and director candidates for 2025. Three (3) positions must be filled, i.e., President, Vice-President, and one Director-at-Large (current office holders are term limited). All other officer positions are available.

Budget Committee – A member at large is needed to serve on this committee with the President and Treasurer to establish a proposed budget for 2025. Bernie Jezercak volunteered.

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Auditor – A volunteer member is needed to review the Society's books before the end of the year.

Early morning events – On 13 August, one of member Howard Brewington's five named comets will be visible. The Perseid meteor shower will be at its peak around 2-3 am on 11-13 August.

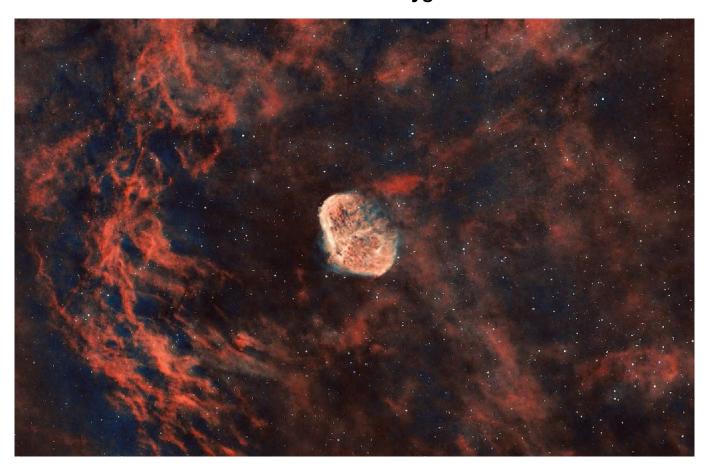
There was no additional new business offered for discussion.

The July 2024 meeting was adjourned at 8:21 pm.

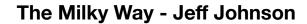
-Respectfully submitted: John McCullough Secretary, ASLC

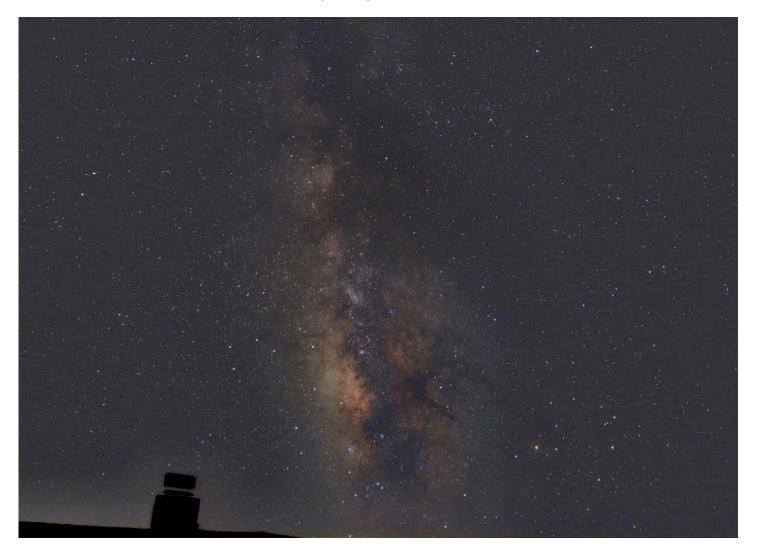
## **Member Images**

## NGC 6888 "Crescent Nebula" in Cygnus - Mark Gorman



I snuck in some imaging between cloudy nights this month, capturing the Crescent Nebula with my hyperstar C11 using an Optolong L-Enhance filter...with the moon out. Starnet software was used during processing that helped give a striking 3-D effect.





Here is the Milky Way over my house in Las Cruces.

Tracked and stacked - SkyWatcher again amazing at tracking. This was much better than previous since the moon was not bothering - it had set last night by this time. So picked up more structure to the west.

21x60sec, Canon T3i (stock), ISO800, Samyang 14mm lens @14mm f/2.8 10xDarks this time during calibration phase

## Aircraft Crossing the Moon - Tom & Jennifer Miller



Took a few exposures from my back patio...with the little Zwo Seestar. Thought at first this was just a commercial airliner. Used the Zwo Seestar telescope. Amazing grab and go scope!

My Wife and I just recently joined the club. Hopefully we'll get to meet everyone over time.