

#### THE LOS ANGELES ASTRONOMICAL SOCIETY

THE BUILLET

#### FEBRUARY, 2018

VOLUME 92, ISSUE 02





LAAS ARCHIVE

"The image above is from our 1983 Annual Awards Banquet, held at Pikes Verdugo Oaks Restaurant in Glendale. Our keynote speaker that evening was science fiction author Ray Bradbury. I brought along one of his books for him to autograph and later glued the picture I took of him into the flyleaf. " Lew Chilton

Photo and photo description submitted by Lew Chilton, our LAAS Historian.

This photo can be found in the LAAS archives.

#### Seeking Volunteer Opportunities In the LAAS?

We need writers, thinkers, movers, and shakers! Blend new ideas with old and make a difference! Write articles for our website and newsletter, take photos at events, help our telescope operators with the public, use astronomy props to teach the public about the cosmos. Email <u>Coordinator@LAAS.org</u> for more info. The Answers, LAAS History.....Pages 2-5

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Please make your reservations for our Annual LAAS Banquet and Award Ceremony soon! All current members and guests are welcome to attend!

#### The Answers We Find Aren't Always the Ones We Are Looking For

by Lew Chilton, L.A.A.S. Historian

It was 1968 when I saw this old, yellowed photograph for the first time (see Fig. 1). It was in a pile of discarded papers that turned out to be our L.A.A.S. history from 1926 to 1929. The photograph was undated and offered no information on front or back. But a breakthrough came some years later when I was thumbing through the pages of an old copy of Amateur Telescope Making – Book 1. I found an illustration (Fig. 2) that was nearly identical to Fig. 1. The caption identified the makers of the three telescopes as Messrs. Herron and Ferguson. Jimmy Herron and George Ferguson were indeed early members of the L.A.A.S. when it was known as the Amateur Telescope Makers' Society of Los Angeles, and they were well known for their telescope making skills.



FIG. 1

It seemed logical that if these telescope makers were local to the Los Angeles area, so too were their telescopes. The background terrain in these pictures was suggestive of the Conejo Valley, so maybe that's where they were taken. Seeking confirmation, I posted the picture in Fig. 1 to our L.A.A.S. Members Group Facebook page in December 2017 and asked if anyone could guess the location. I received one reply.

Star member Chris Volk saw my post and replied. He pointed out that the picture had been taken in Holy City, California. He arrived at this conclusion by closely examining Fig. 1 and noting two words on a signboard directly behind the portly gentleman on the ladder. (See Fig. 3 below, an enlarged portion of Fig. 1.) The first word was clearly "Holy" but the second word wasn't so clear. Chris guessed correctly that the second word was "City" and was quickly proven correct by a Google search. Holy City? Holy cow! Where was that?!

FIG. 3



Chris' Google search revealed that Holy City, California was a small utopian community founded in 1919 by cult leader William E. Riker and thirty of his followers. It was located in Santa Clara County in the Santa Cruz Mountains on the old Santa Cruz Highway, between Los Gatos and Santa Cruz. It offered tourist services including a restaurant, gas station and, incongruously, an astronomical observatory! (See arrowed pictures on the following page.)



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FIG. 5



(Sources of Figures 4-7: www.mobileranger.com; "Holy City: Riker's Religious Roadside Attraction," by Betty Bagby Lewis)

Figures 1-3 and 4\*-6\* clearly show a big telescope (\*=arrowed), which looks suspiciously like a 10- to 12-inch refractor, yet the captions to Fig. 2 and to the corresponding picture on p. 245 of the March 1928 Scientific Ameri*can* magazine, state that all three telescopes are re<sup>P</sup>lectors. The author of the captions was almost certainly Albert G. Ingalls, the editor of Scientific American's Amateur Telescope Making department and a close associate of Russell W. Porter, the "patron saint" of amateur telescope makers. Was Ingalls right? Was the big scope a very long-focus Cassegrain reflector and not a refractor?

FIG. 6

Figures 1-6 show the big telescope mounted on a platform surrounded by a balustrade. The observing platform was the roof of a building that was built against a hillside. In figures 1-4, the big scope is uncovered and ready for action. In figures 5-6, it is covered in a stowed position. Fig. 7 looks out over Holy City from the telescope observing platform. The automobiles provide a means to roughly date the pictures. How and why did these telescopes, presumably built in Los Angeles, wind up in Holy City? We may never know the answer but we can speculate.

James H. Herron (1886-1960) was born in rural Alabama. He was orphaned at an early age and only received a grammar school education. He became an itinerant laborer and worked his way around the country

before arriving in Los Angeles in about 1918. He read voraciously and became fascinated with telescopes. He was wholly self-taught and was a genius in the field of optics. By 1920, he had moved on to Tulare County, where he worked briefly as a laborer for the Edison Company. Perhaps it was during this period that he passed through Holy City and met Riker or one of his followers. This is speculation, of course, but one that seems somewhat plausible. By 1925, Herron had returned to Los Angeles permanently.

Dr. George H. Ferguson (1867-1959), twenty years Herron's senior, earned a medical degree in 1889 from the University of Michigan but worked as a cabinetmaker and ornamental ironworker in Los Angeles, according to city directories and U.S. Census data. He was married with a family and lived for many years at the same ad-



DR. GEORGE FERGUSON AND THE GRINDING MACHINE This adjustable, power-driven machine was designed by Dr. Ferguson and constructed with club funds. It will take disks of glass from four to 18 inches in diameter. The two arms are thoroughly adjustable, permitting many motions This picture of ATMS-LA charter member George Ferguson appeared in Amateur Telescope Making-Book 1, and Scientific American magazine, March 1928, p. 245. It is one of the very few pictures of him. LAAS ARCHIVE

dress in Los Angeles. A picture of him, seen at right, appears in Amateur Telescope Making – Book 1, and in *Scientific American* magazine, March  $5^3 6^2$ , p. 689. Both he and his son Fred were early members of the Amateur Telescope Makers' Society of Los Angeles.

For years, William E. Riker preached a screwball doctrine of temperance, celibacy, segregation of the races and sexes, and white supremacy. It's hard to imagine that Herron or Ferguson, having built telescopes for this man or one of his adherents, believed in such a racist, sexist philosophy.

Holy City grew to three hundred residents in the 1930s, but with the end of the Depression, Riker's followers found work elsewhere and with the re-routing of State Route 17 in 1940, the town fell into further decline. There were only 12 residents left in 1952. The town was dis-incorporated in 1959 and several buildings mysteriously burned down afterwards. Riker lost financial control in 1960 while Holy City stumbled on the edge of extinction. Developers purchased the 142-acre site in 2006 but didn't find a buyer until 2016, when it sold for \$6 million. (Source: Wikipedia; "Modern American Communes: A Dictionary," by Robert P. Sutton)

What became of the Holy City telescopes? There is photographic evidence to suggest that the big one survived until at least 1938 or 1939. Perhaps some further detective work by Chris Volk will reveal their ultimate fate.

# Sixty Years of Observing Our Earth By Teagan Wall

Satellites are a part of our everyday life. We use global positioning system (GPS) satellites to help us find directions. Satellite television and telephones bring us entertainment, and they connect people all over the world. Weather satellites help us create forecasts, and if there's a disaster—such as a hurricane or a large fire—they can help track what's happening. Then, communication satellites can help us warn people in harm's way.

There are many different types of satellites. Some are smaller than a shoebox, while others are bigger than a school bus. In all, there are more than 1,000 satellites orbiting Earth. With that many always around, it can be easy to take them for granted. However, we haven't always had these helpful eyes in the sky.

The United States launched its first satellite on Jan. 31, 1958. It was called Explorer 1, and it weighed in at only about 30 pounds. This little satellite carried America's first scientific instruments into space: temperature sensors, a microphone, radiation detectors and more.

Explorer 1 sent back data for four months, but remained in orbit for more than 10 years. This small, relatively simple satellite kicked off the American space age. Now, just 60 years later, we depend on satellites every day. Through these satellites, scientists have learned all sorts of things about our planet.

For example, we can now use satellites to measure the height of the land and sea with instruments called altimeters. Altimeters bounce a microwave or laser pulse off Earth and measure how long it takes to come back. Since the speed of light is known very accurately, scientists can use that measurement to calculate the height of a mountain, for example, or the changing levels of Earth's seas.

Satellites also help us to study Earth's atmosphere. The atmosphere is made up of layers of gases that surround Earth. Before satellites, we had very little information about these layers. However, with satellites' view from space, NASA scientists can study how the atmosphere's layers interact with light. This tells us which gases are in the air and how much of each gas can be found in the atmosphere. Satellites also help us learn about the clouds and small particles in the atmosphere, too.

When there's an earthquake, we can use radar in satellites to figure out how much Earth has moved during a quake. In fact, satellites allow NASA scientists to observe all kinds of changes in Earth over months, years or even decades.

Satellites have also allowed us—for the first time in civilization—to have pictures of our home planet from space. Earth is big, so to take a picture of the whole thing, you need to be far away. Apollo 17 astronauts took the first photo of the whole Earth in 1972. Today, we're able to capture new pictures of our planet many times every day.

Today, many satellites are buzzing around Earth, and each one plays an important part in how we understand our planet and live life here. These satellite explorers are possible because of what we learned from our first voyage into space with Explorer 1—and the decades of hard work and scientific advances since then.



To learn more about satellites, including where they go when they die, check out NASA Space Place: https://spaceplace.nasa.gov/spacecraft-graveyard



This photo shows the launch of Explorer 1 from Cape Canaveral, Fla., on Jan. 31, 1958. Explorer 1 is the small section on top of the large Jupiter-C rocket that blasted it into orbit. With the launch of Explorer 1, the United States officially entered the space age. Image credit: NASA

This article is provided by NASA Space Place. With articles, activities, crafts, games, and lesson plans, NASA Space Place encourages everyone to get excited about science and technology. Visit spaceplace.nasa.gov to explore space and Earth science!



# Outreach Report Van Webster

Monte Vista Elementary School (Highland Park)

Date: Thursday, January 18, 2018 Time:5:00 pm – 7:00 pm

A strong turnout of members of the Los Angeles Astronomical Society ventured to northeast Los Angeles for an evening of star gazing with students and families at the Monte Vista Elementary School in Highland Park. This was the first outreach event for the 2018 season.

We had visited the school in previous years so it was easy to set up a line of scopes on the schools playground. Monte Vista Street is a small, residential thoroughfare in Highland Park that dates back to the early 20's. Running parallel to Figueroa St and the Gold Line railroad, this narrow passageway is also a center for community resources with blocks of schools, churches and vintage retail stores interspersed with cozy, cottage like homes. At night the lights from hot trucks, taco stands and street vendors creates a festive atmosphere, making for a lively street scene.

LAAS members brought a wide range of scopes for public viewing including two Dobsonians, two refractors, a large Schmidt-Cassegrain and Heven's astro-binoculars. Dave Pinsky was first to spot the thin sliver of the new moon as it did the Dance of the 7 Veils with the gossamer clouds on the western horizon.

As the moon dipped out of sight behind a giant tree, M42 the Orion Nebula became a popular target. Other objects on view included M45, the Pleiades, the Owl Cluster, The Double Cluster and some particularly bright individual stars.



This event was billed as an astronomy night so the students met first in the auditorium for a presentation and then came out to the playground for telescopic viewing. About 75 students and family members had what was often their first close-up view of night sky objects.

By 6:40 the public address announcement called the students back to the auditorium for a raffle and the astronomers packed up their gear and headed off into the night by 7:00 PM.

Photo credit: Van Webster

More photos on following page.





Sunny Kim Barden Daniel McGreal Matas Kulikauskas Robert Noss Evan Hilgermann Neel Shah and Family Daniel Husserl Geoffrey Robertson

#### **LAAS Board Meetings**

Our LAAS Board Meetings take place once a month at the Garvey Ranch Park Observatory. You can find the dates for these meetings on our event calendar. All members are welcome to attend all Board meetings. These meetings begin at 8 PM.

NEW: You may listen to recorded meetings by logging in to our website at LAAS.org and clicking on the "Members Only" tab.

Before you try to access the "Members Only" information, you need to request login credentials from our Webmaster. On the left hand side of the page, scroll down and find "Login." Click "Login" for further information.

#### **Volunteer Opportunities**



Every LAAS member is a volunteer at some point. Some members volunteer to share telescopes with the public, while others tackle administrative duties, help out at our community and public events, or join a club committee. Taking photos at our events and writing articles about events for our club newsletter are great ways to volunteer. Participating at one of our outreach events is another fine and fulfilling opportunity. This is YOUR club. Don't sit back and let other members do the work and have all the fun! Speak with a club officer and find out how you can volunteer and get more involved in the LAAS as a member.

#### **Time To Renew Your Membership?**

Please remember to renew your membership once you receive notice from the Club Secretary in your email inbox. Use this link to learn how to renew your membership: <u>https://fs30.formsite.com/LAAS/MemberRenewal/index.html</u>

Please send any new contact information to the club secretary at secretary@LAAS.org.



# A Guide To The Night Sky Tre Gibbs



Back on December 21st, the Winter Solstice marked the shortest day (and longest night) of the year in the Northern Hemisphere. By now, you probably have noticed the days getting longer as the sun has been slowly heading north, eventually setting in the northwest on June 21st, which will mark the Summer Solstice the longest day and shortest night of the year. This also means that Spring is on it's way, arriving next month on the Vernal (or Spring) Equinox, March 20th. On this day, the sun has moved north to the point where it rises directly east, sets directly west and as a result, both of Earth's Northern and Southern Hemisphere experience equal amounts of day AND night.

A strange happening this month - February has no Full Moon. February's usual "Full Snow Moon" happened on January 31st. This full moon, usually in February, corresponds to the time of year when the most snow accumulates, making hunting and trapping difficult for hunters. The next full moon will be on March 1st -"The Full Worm Moon". This is the time of year that the ground

begins to soften, allowing earthworm casts to reappear, thereby inviting the return of Robins.

Let's move on to the planets! All of the action is still happening in the early morning/pre-dawn skies. Early in the month, Jupiter, The Roman King of the Gods, rises in the east southeast around 12:30 am, followed nearly three hours later by Mars, The Roman God of War, appearing low in the southeast after 3:00 am. Mars is then followed by The Roman God of Agriculture, Saturn about an hour later.

But let's go back earlier in the month for a moment and see what the moon has in store... On the morning of the 7th, the moon, constantly heading eastward, travels the night sky just above mighty Jupiter. On the morning of the 8th, you'll notice the waning crescent moon in the southeast around 4:00 am, appearing to have slipped between Jupiter and Mars, until the following night when the moon will be to the left of Mars. Then on the 10th, the lower point of the crescent moon points to faint Saturn, both visible around 6:00 am in the pre dawn sky.

Looking ahead, Venus has slipped behind the sun, becoming The Evening Star next month (in March) through October as she graces our western skies after sunset. This year though, The Goddess of Beauty and Love doesn't climb quite as high in the sky as she did last year. She remains quite low to the horizon until mid April, reaching her peak in early June, then beginning her long slow descent southwest until she's below the horizon by mid October.

So until March, KEEP LOOKING UP!

Tre Gibbs

# ALMANAC

• **February 15** - **New Moon.** The Moon will located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 21:05 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

• February 15 - Partial Solar Eclipse. A partial solar eclipse occurs when the Moon covers only a part of the Sun, sometimes resembling a bite taken out of a cookie. A partial solar eclipse can only be safely observed with a special solar filter or by looking at the Sun's reflection. This partial eclipse will only be visible in parts of Chile, Argentina, and Antarctica. (NASA Map and Eclipse Information)

• March 2 - Full Moon. The Moon will be located on the opposite side of the Earth as the Sun and its face will be will be fully illuminated. This phase occurs at 00:51 UTC. This full moon was known by early Native American tribes as the Full Worm Moon because this was the time of year when the ground would begin to soften and the earthworms would reappear. This moon has also been known as the Full Crow Moon, the Full Crust Moon, the Full Sap Moon, and the Lenten Moon.

#### Source: <u>http://www.seasky.org/astronomy/</u> astronomy-calendar-2018.html

#### Need Help With A New Telescope?

Visit the Garvey Ranch Observatory on any Wednesday night 7 PM to 10 PM for tips and assistance by your fellow LAAS members. Learn more: The <u>Garvey Ranch Park Observatory</u>





Rewarding! Fulfilling! Fun! Be a part of something great! Join our Outreach team of volunteers today. Contact Heven Renteria, our Outreach Coordinator at <u>Outreach@LAAS.org</u>





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LAAS Members: Please log on to the Night Sky Network (NSN) to view all private events on the calendar. Be advised all scheduled events may not be visible on the calendar above, due to last minute changes.

If you have not registered on the network, please follow this link and register today:

https://nightsky.jpl.nasa.gov/club-apply.cfm?Club\_ID=1344&ApplicantType=Member





Orion Nebula, Hubble Space Telescope. Credit: NASA, ESA, M. Roberto (STSci/ESA), and the HST Orion Treasury Project Team.



Download the guide by following this link: https://nightsky.jpl.nasa.gov/docs/02UDGOrionNebula.pdf

#### IN THIS GUIDE:

ORION NEBULA, NURSERY OF NEWBORN STARS » SKY FEATURE: ORION NEBULA » TRY THIS! » ACTIVITY: STARS AND THEIR LIVES » CONNECT TO NASA SCIENCE

Always use Adobe Acrobat Reader to view the Guides on a computer.

#### NASA'S NIGHT SKY NETWORK - FREE WEBINARS

Each month, the NSN hosts a free online webinar for all registered members of the Night Sky Network.

Log on to your NSN account to learn more. 9:00 PM Eastern/ 6:00 PM Pacific *Topic and Speaker TBD* Check the NSN newsletter for further information.

YouTube Playlist : All NSN Astronomy Webinars All Past Webinars and Resources on NSN





Share your club spirit with the public and wear your club colors to help identify you as a member of the LAAS today by ordering a new jacket, t-shirt or cap.

If you would like to purchase club jackets, T-shirts, or caps featuring our club logo, please look for Richard Roosman at the public star party and at our general meeting. Richard will have the club merchandise on sale from 2 PM to 6 PM at the star party.

For further information, feel free to contact Richard at Richardinwalnutpark@msn.com.

You can also use the link on Paypal, if you would like to place an order for club merchandise by using the following link: http://laas.org/joomlasite/index.php/laas-merchandise



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John O'Bryan, Jr./Treasurer



### **Astronomy Magazine**

### **Subscriptions**

Discounts for astronomy magazines can be found on the internet. Look for the best deals possible. Send a copy of your LAAS membership card with your check or payment to receive a club member discount.

Below, are some subscription links and suggestions for your convenience, from our friends at NASA's Night Sky Network:

## Astronomy

#### **Astronomy Magazine**

As a member of the Night Sky Network, you may use the above link to renew your Astronomy Magazine subscription (or enter a new subscription) at the club discount rate. If this is a renewal, Astronomy Magazine will match your entered name and address and extend your subscription. For inquiries, please contact Astronomy Magazine customer service & sales at 1-800-533-6644.

#### Sky & Telescope Magazine



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If this is a new subscription or if you did not previously subscribe through your club or through the Night Sky Network, <u>click here for a NEW Sky & Telescope</u> <u>subscription at the club discount rate</u>.



**Join the Astronomical Society of the Pacific** and help support the cause of advancing science literacy through engagement in astronomy. Member benefits include a **subscription to the online** *Mercury* **Magazine**, published quarterly, and **Astronomy Beat**, a monthly on-line column written by "insiders" from the worlds of astronomy research and outreach.



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#### **Club Contact Information**

President: Timothy Thompson timthompson3@verizon.net Vice President: Kevin Gilchrist kevingilchrist59@yahoo.com Treasurer: John O'Bryan, Jr. Treasurer@laas.org Secretary: Spencer Soohoo Secretary@laas.org Outreach Coordinator: Heven Renteria outreach@laas.org Youth Coordinator: James Rochford jcrochford@gmail.com Webmaster: Steve Dashiell Webmaster@laas.org Club Communications: Andee Sherwood Communications@laas.org Mt. Wilson Coordinator: Darrell Dooley mtwilsoncoordinator@laas.org Bulletin Editor: Andee Sherwood communications@laas.org

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#### **Club Phone Numbers**

LAAS Message Phone:

213- 673-7355 Checked daily

Griffith Observatory:

213-473-0800

Sky Report:

213-473-0880

Lockwood Site:

661-245-2106

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Outgoing calls – Collect or calling card only.

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Call us for more information about our organization and outreach program. 213-673-7355

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