THE ASTRONEWS

HUI KILOLANI

Volume 76, Issue 4

April 2026

www.hawastsoc.org

A word from your editor by Sapavith 'Ort' Vanapruks

We are moving toward the end of the 2025 -2026 school year. The request for a school star party will be less. However, there will be other organizations like Boy Scouts or Girl Scouts requests that would come in. There were 2 school events in March at Pearl Harbor Kai Elementary School & Iolani School. Your involvement will help with bringing in more club memberships and promoting the club.

We helped Bishop Museum's Star Tonight on Friday, 3/27/2026. There were 2 groups attending The Stars Tonight (Trivia Night). Bill & I were there to help. We were able to show Moon, Jupiter, & Orion Nebula.

We had 2 of the 3 star parties that happened in March. Our public star party at Dillingham Airfield on 3/7/2026 was great. We had 7 members & 10 visitors. Moon rose at 10:44 PM at 83.5% waning gibbous. It was dark enough to be able to catch nebulas. The club star party on 3/14/2026 was canceled due to very bad weather.

Monkey Head Nebula from last night taken with DWARF. 3 byHiroko. (EQ mode, 30s exposure, 80 gain, Duo band, a little over 200 images taken.)

(Continued on page 8)

Inside this issue:

Upcoming Events:

- The next Board meeting is Sun., Apr. 5th 3:30 PM. (**Zoom Meeting**)
- The next meeting is on Tue., Apr. 7th at the Bishop Museum at 7:30 PM. —**Hybrid (In person and Zoom) Meeting**
- Bishop Museum's planetarium show "Star Tonight" is every 3rd Friday, 4/17/2026, of the month at 7:00 PM.

President's Message
April 2026

I often say (although I just made it up): The first rule of astronomy is: You can't control the weather. We have certainly witnessed some out-of-control weather in Hawaii lately. The back-to-back Kona low storms (with the unforecasted day of heavy rain at the end) were much more than just an inconvenience to astronomers, but we were certainly affected. One example of that was the March 14 club-only event at Dillingham.

I was in charge of running that event. The first Kona low was winding down on Oahu, and earlier in the week clearing was predicted for Saturday night. By Saturday afternoon, however, it appeared very unlikely that conditions would be good by the evening. I called Peter Besenbruch to see if we should put out a cancelation notice even though it was rather late, but he informed me that his internet service was out so nothing could be done.

I called the security guards at Dillingham and was informed that the weather was indeed bad out there and that there was flooding on the highway near the West Gate entrance, so I decided that it was not a good idea for me to go out. I told the guard to whom I was talking that I would not be going out there and that he should check (after the gate was locked) to see if any observers had showed up and to make sure they had the phone number to call to be let out. Since it was a club-only event, I was confident that I had done enough.

We have never, to the best of my knowledge, had a formal policy on event cancelations. It would probably be a good idea to discuss this and come up with some formal procedures that everyone can clearly understand. I have a few ideas to run by the board of directors. If you have any suggestions, please bring them to the meeting on Tuesday. While we can't control the weather, we can certainly control how re react to it.

Hawaiian Astronomical Society
P.O. Box 17671
Honolulu, Hawaii 96817

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Observer's Notebook—April 2026 by Ort

Planets Close to the Moon

Times are Hawaii Standard Time

Apr 15, 5h, Moon 4.6° NNW of Mercury; 25° from Sun in morning sky; magnitudes -6.5 and 0.0
Apr 15, 9h, Moon 3.5° NNW of Neptune; 23° from Sun in morning sky; magnitudes -6.3 and 7.9
Apr 15, 12h, Moon 3.3° NNW of Mars; 21° from Sun in morning sky; magnitudes -6.1 and 1.2
Apr 15, 17h, Moon 4.7° NNW of Saturn; 19° from Sun in morning sky; magnitudes -5.9 and 0.9
Apr 18, 21h, Moon 4.6° NNW of Venus; 25° from Sun in evening sky; magnitudes -6.5 and -3.9
Apr 19, 6h, Moon 5.2° N of Uranus; 31° and 30° from Sun in evening sky; magnitudes -7.0 and 5.8
Apr 22, 14h, Moon 3.5° NNE of Jupiter; 75° from Sun in evening sky; magnitudes -9.6 and -2.1

Other Events of Interest

Times are Hawaii Standard Time

Apr 12, 23h, Mars, Saturn, and Neptune within circle of diameter 4.49°; about 19° from the Sun in the morning sky; magnitudes 1, 1, 8
Apr 15, 5h, Moon, Mercury, and Neptune within circle of diameter 4.59°; about 24° from the Sun in the morning sky; magnitudes -6, 0, 8
Apr 15, 9h, Moon, Mars, and Neptune within circle of diameter 3.66°; about 22° from the Sun in the morning sky; magnitudes -6, 1, 8
Apr 15, 15h, Moon, Mars, and Saturn within circle of diameter 4.67°; about 20° from the Sun in the morning sky; magnitudes -6, 1, 1
Apr 20, 13h, Mercury, Mars, and Saturn within circle of diameter 1.65°; about 23° from the Sun in the morning sky; magnitudes 0, 1, 1
Apr 22, 1h, Lyrid meteors; ZHR 18; 2 days before First Quarter Moon

Planets in April

☿ Mercury

is visible as a morning object, having recently passed greatest elongation west. From Honolulu, it is visible in the dawn sky, rising at 05:00 (HST).

♀ Venus

will soon pass behind the Sun. From Honolulu, however, it will become visible at around 19:04 (HST), 18° above your western horizon, as dusk fades to darkness.

♂ Mars

recently passed behind the Sun at solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 5° above the horizon at dawn.

♃ Jupiter

recently passed behind the Sun at solar conjunction. From Honolulu, however, it will become visible at around 19:04 (HST), 76° above your western horizon, as dusk fades to darkness.

♄ Saturn

recently passed behind the Sun at solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 3° above the horizon at dawn.

♅ Uranus

recently passed behind the Sun at solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 19° above the horizon at dusk.

♆ Neptune

recently passed behind the Sun at solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 19° above the horizon at dusk.

♇ Pluto (Dwarf Planet)

is visible in the dawn sky, rising at 02:04 (HST) and reaching an altitude of 35° above the south-eastern horizon before fading from view as dawn breaks at around 05:16.

⚹ 7 Iris (Asteroid)

is visible in the evening sky, becoming accessible around 19:44 (HST), 65° above your south-eastern horizon, as dusk fades to darkness.

Meeting Minutes

H.A.S. Secretary

March 3rd 2026 7:30 PM (Bishop Museum Planetarium and Zoom Meeting)
Andy Stroble

Meeting convened by President Chris Peterson.
Motion to accept minutes from the February meeting passed unanimously.

February star parties were plagued by poor weather.

Attending for the first time was Caroline Kunitake.

The club received a request concerning George W. Bunton, Jr., Kilolani planetarium manager from 1962 to 1980, by a party interested in naming an asteroid after him, but it seems the deed has been done,

Mp_number:	"244888"
Name:	"Bunton"
Reference:	"WGSBN Bull. 6, #3, 11"
Citation:	"George W. Bunton, Jr. (1910–1995) was an American astronomer. Known for his work in public education at the Griffith Observatory in Los Angeles and the Morrison Planetarium in San Francisco, he was manager of the Bishop Museum Planetarium in Honolulu from 1962 until his retirement in 1980. George educated and inspired thousands of all ages."

President Chris pointed out that there is also an asteroid named for HAS!

School Star Party Coordinator Leilani Gamboa reported that we have lots of events in March. Tiger Den Scout troop on Sunday, 3/22, from 4-5pm; Pearl Harbor Kai Elementary second attempt on Wed., 3/25; Bishop Museum Planetarium "Stars Tonight" on 3/27, and a possible star party at Maryknoll school in April. Volunteers are appreciated.

President Chris mentioned that the State Science Fair is coming up, and we could use some members to be judges in the awarding of our prizes for astronomy.

From the AstroLeague, there is a project in the planning stages to deploy huge mirrors in orbit to provide sunlight during the night. Light pollution impacts are obvious. Members are encouraged to express opposition, look for more information via e-mail.

Vice President Bill surveyed the Planetarium on experiences of the Lunar Eclipse of Monday night, and it seems there were some clouds involved. But many did see the totality.

Several members shared recent astrophotography, and Sabina presented a report on viewing the Aurora Borealis during a visit to Iceland, with some in depth science on how the Northern Lights work. Sadly, she noted that Dwarfie did not do well trying to capture a moving object. Great photos from a phone!

Leilani ran the Planetarium for us, giving us a simulation of the Parade of Planets that has been much hyped of late, and a recreation of the Total Lunar Eclipse.

Meeting adjourned at 9:01pm.

Faithfully submitted,
James Andy Stroble, Secretary.
Honolulu, Hawaii

Hawaiian Astronomical Society
Event Calendar

April 2026

◄ Mar | May ►

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1  Full moon 4:11 PM Pink Moon	2 Holy Thursday	3 Good Friday	4
5 Easter BoD Meeting 3:30PM Zoom	6	7 General Meeting Planetarium 7:30PM Hybrid	8	9  3rd Qtr 6:51PM	10	11 **Onizuka's Day** **UH West Oahu** Club Star Party Dillingham Airfield Gate Closes 7:00P
12	13	14	15 Tax Day (Taxes Due)	16	17  New Moon 1:51AM The Star Tonight Bishop Museum	18 Public Star Party Dillingham Airfield Gate Closes 7:00P
19	20	21	22 Administrative Professionals / Earth Day Lyrids Meteor Shower	23  3rd Qtr 4:31PM	24 Arbor Day	25 Public Star Party Geiger / Kahala Sunset 6:54PM
26	27	28	29	30	Notes:	

<<Upcoming Star Parties>>

Public Party-Dillingham April 11 — Gate closes 7 PM
Club Party Dillingham April 18 — Gate closes 7 PM
Public Party Geiger/Kahala April 25 — Sunset 6:54 PM

Upcoming School Star Parties

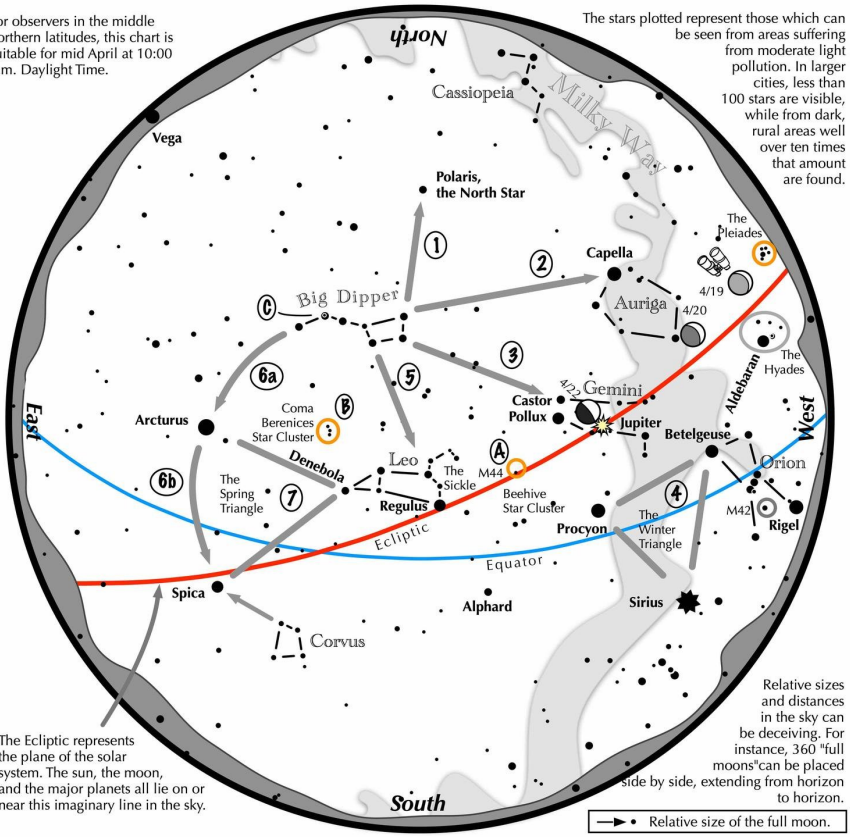
Date	Time	Location

April means warmer weather and warmer observing!

Navigating the mid–April Night Sky 2026

For observers in the middle northern latitudes, this chart is suitable for mid April at 10:00 p.m. Daylight Time.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons"can be placed side by side, extending from horizon to horizon.

Relative size of the full moon.

Navigating the April night sky: Simply start with what you know or with what you can easily find.

1. Extend an imaginary line north from the two stars at the tip of the Big Dipper's bowl. It passes Polaris, the North Star.
2. Draw another imaginary line west across the top two stars of the Dipper's bowl. It strikes Capella low in the northwest.
3. Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
4. Look in the west-southwest for the bright Winter Triangle stars of Sirius, Procyon, and Betelgeuse.
5. Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
6. Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica.
7. Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.

Binocular Highlights

A: M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux.
B: Look nearly overhead for the loose star cluster of Coma Berenices.
C: In the Big Dipper's handle shines Mizar next to a dimmer star, Alcor.

Astronomical League
www.astroleague.org

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(Continued on page 10)

Meteor Log—April 2026

by Tom Giguere

The Lyrids are a medium strength shower that usually produces good rates for three nights centered on the maximum. These meteors also usually lack persistent trains but can produce fireballs. These meteors are best seen from the northern hemisphere where the radiant is high in the sky at dawn. Activity from this shower can be seen from the southern hemisphere, but at a lower rate. In 2026, maximum activity is predicted to occur near 20 UT on April 22nd. On this date the waxing crescent moon will set before the radiant reaches a favorable elevation therefore lunar interference will be minimal in 2026. Parent object: C/1861 G1 (Thatcher), on the peak night the moon will be 27% full.

This month continues the tutorial on "how to photograph meteor showers" with the remaining steps. Part 2 of 2:

3. Critical Step: Achieving Focus

Autofocus does not work on the night sky.

1. Turn Autofocus (AF) to Manual (MF) on your lens.
2. Turn on Live View and find the brightest star or planet (like Jupiter).
3. Magnify the image on your screen ($5\times$ or $10\times$ zoom).
4. Slowly turn the focus ring until the star becomes a tiny, sharp pinprick.
5. Pro Tip: Use a piece of gaffer tape to secure the focus ring so it doesn't nudge during the night.

4. Shooting Technique

- Aim Away from the Radiant: While meteors originate from a "radiant" point (e.g., the constellation Perseus), they appear longer and more dramatic about 45° to 90° away from it.
- Continuous Shooting: Set your intervalometer to take photos with only a 1-second delay between them. This ensures the shutter is open as much as possible.
- Patience: Plan to shoot for at least 3–4 hours. Out of 500 photos, you may only catch 5–10 good meteors.

Image credit to Getty Images.

Phases of the Moon (courtesy timeanddate.com)

First Quarter	Full Moon	Last Quarter	New Moon
April 23	April 1	April 9	April 17

Shower	Activity	Maximum		Radiant		V_∞	r	ZHR
		Date	$\lambda_\odot$	α	δ	km/s		
Lyrids (006 LYR)	Apr 14–Apr 30	Apr 22	32.32°	271°	+34°	49	2.1	18
π -Puppids (137 PPU)	Apr 15–Apr 28	Apr 24	33.5°	110°	-45°	18	2.0	Var

The Lyrids peak during the first quarter Moon, making the early morning hours a great time to observe! Tom Giguere, 808-782-1408, Thomas.giguere1@gmail.com. Credit: AMS for meteor shower info

Treasurer's Report

by Peter Besenbruch

Cash Flow - 1/10/2026 to 3/9/2026

Beginning Balance	**$9,782.65**
Money into selected accounts comes from	
Income:Donation	$45.00
Income:Membership - Electronic	$140.00
Income:Membership - Family	$10.00
Income:Membership - Paper	$26.00
Total Money In	**$221.00**
Money out of selected accounts goes to	
Expenses:Snacks	$93.03
Total Money Out	**$93.03**
Difference	**$127.97**
Ending Balance	**$9,910.62**

Here are the financials up through March 9. Thanks to everyone who renewed, and donated.

Covid wastewater Oahu figures remain very low. Nationally, avoid Maryland, West Virginia (the worst), Mississippi, and Wyoming. Influenza A remains very low. RSV, peaked in March and is declining. You defend against all three similarly, with a vaccine, and N95 masking.

It's nice the weather cleared in time for the full moon. It's also nice that the Artemis II mission is on its way.

(Continued from page 1) *A word from your editor*

Our in-town star parties at Geiger Community Park and Kahala Community Park on Saturday, 3/28/2026 were on. There was no report from Kahala. Tom and Steven were at Geiger. According to Tom, they had 4 very enthusiastic observers. Tom said on Discord "Don't you agree that they were just that...! The younger guy seemed to know every M# by heart, and he was non-stop talking with the other guy that just found his telescope in the closet two days ago. The father/daughter team stayed for quite a while. All in all, a very nice night of observing."

In April on top of our scheduled star parties, we have 2 other events coming up. On Saturday, 4/11/2026, we have 2026 Onizuka Day of Exploration from 9:00 AM – 3:00 PM at UH West Oahu. We will be doing solar viewing and handing out brochures about HAS. Then on Friday, 4/17/2026, we have Bishop Museum, The Star Tonight. We will be talking about these 2 events in our meeting.

(Continued on page 11)

Message From Your Vice President
April 2026

by Bill Barr

Have you tried using AI to plan your visual or imaging sessions?

AI can provide a wealth of information to plan your imaging sessions. Whether for imaging or visual observation you can put together quite a list. On that note, visual observation, the Messier Marathon is coming up, and AI can help you plan your night!

I decided to provide an example using equipment many club members have; here is my query:

Find 15 astrophotography imaging targets for either a Dwarf or Seastar automated device. Parameters are April 11th after 7:00pm HST, at least 30 degrees above the eastern horizon. The FOV should be appropriate for the devices mentioned.

And the answer:

Here's an **extended list of 15 recommended astrophotography targets** for April 11th after 7:00 PM HST from Honolulu (~21°N latitude). All are primarily galaxies (with a couple of bright globular clusters for variety), well-suited to the **Dwarf II** (wider ~3° × 2° telephoto FOV) or **Seestar S50** (narrower ~1.3° × 0.73° FOV). They appear at least 30° above the eastern to southeastern horizon shortly after 7 PM and rise higher through the evening.

April evenings offer excellent "galaxy season" viewing in Leo, Virgo, Coma Berenices, Canes Venatici, and Ursa Major. Moonlight is minimal (waning crescent), and these objects are bright enough for automated stacking on smart telescopes. Dwarf II excels at framing larger groups or pairs in one shot; Seestar delivers sharper detail on compact objects (or use mosaic/framing mode for wider scenes).

1. Leo Triplet (M65, M66, NGC 3628)
Interacting spiral galaxies spanning ~1–1.5°. Striking trio with dust lanes and tidal features. Dwarf II: Fits the full group perfectly. Seestar: Sharp individual frames or quick mosaic. Position: Southeastern sky (Leo), well above 30° early evening.

2. Whirlpool Galaxy (M51 + NGC 5195)
Classic face-on grand-design spiral with interacting companion. Compact and high-contrast. Fits both devices well; Seestar resolves spiral arms beautifully. Position: Rising in the east-northeast (near Canes Venatici/Leo border).

3. Sombrero Galaxy (M104)
Iconic edge-on spiral with prominent dust lane and bright bulge. ~9′ × 4′ size. Excellent for both—Seestar highlights the lane crisply. Position: Virgo, low east-southeast after 7 PM, climbing steadily.

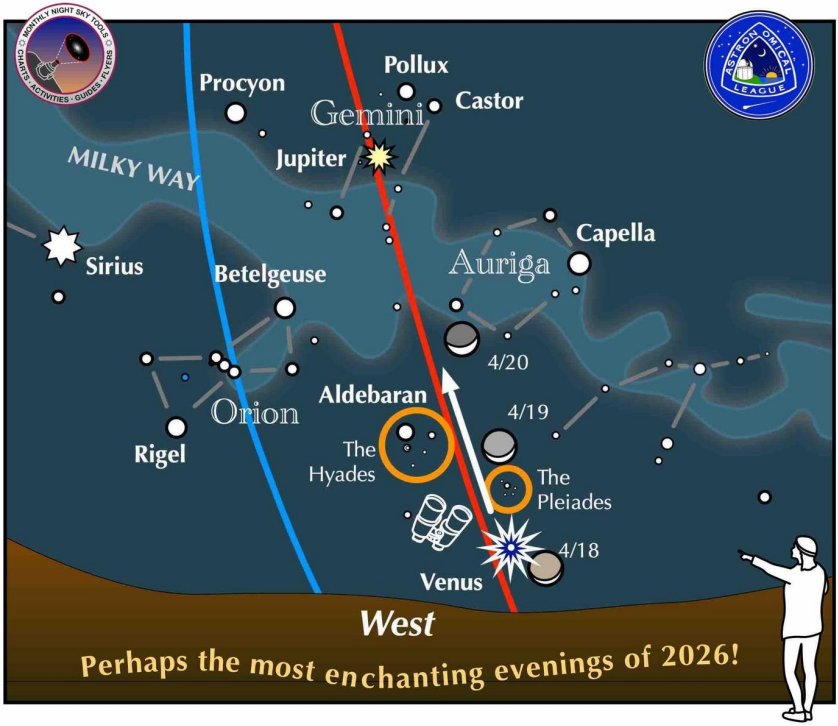
4. Bode's Galaxy (M81) & Cigar Galaxy (M82)
Bright pair: grand spiral (M81) next to edge-on starburst (M82) with tidal distortion. Spans ~1°. Dwarf II: Frames both together. Seestar: Resolves fine details in each. Position: Northern/eastern sky (Ursa Major), comfortably above 30°.

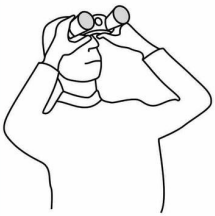
5. Pinwheel Galaxy (M101)
Large, face-on spiral with loose arms and star-forming regions. ~28′ diameter. Dwarf II: Captures the full extent nicely. Seestar: Mosaic recommended for outer arms. Position: Ursa Major, high in the northeast.

(Continued on page 11)

(Continued from page 6) Astronomical League

If you can see only one celestial event this April, see this one.





Enhance the scene – use binoculars!

On April 18, 19, & 20, look low in the west-northwest 60 minutes after sunset.

- On the first evening, the crescent moon, glowing full with earthshine, floats near brilliant Venus, while on the second evening, it moves just above the delicate Pleiades star cluster, and to the right of the bright star Aldebaran and the intriguing Hyades star cluster.
- On the third evening, the slightly thicker, but more pronounced crescent moon hangs above the Pleiades and the Hyades.
- Above it all, bright Jupiter plows through Gemini, shining near Castor and Pollux.

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(Continued from page 9) Message From Your Vice President

6. Black Eye Galaxy (M64)
Spiral with dramatic dark dust lane across the core (the "black eye"). Compact and photogenic. Fits both easily. Position: Coma Berenices, rising in the east.

7. Needle Galaxy (NGC 4565)
Stunning edge-on spiral with thin dust lane and bright core. One of the best edge-ons. Seestar shines for detail; Dwarf II frames it with room to spare. Position: Coma Berenices, eastern sky after dusk.

8. Markarian's Chain (Virgo Cluster galaxies)
String of bright galaxies (including M84, M86, and others) spanning several degrees. Dwarf II: Captures long sections in one wide field. Seestar: Mosaic multiple overlapping frames for the chain. Position: Virgo/Coma border, southeast and rising.

9. M95, M96, M105 (Leo Galaxy Group)
Another Leo trio/group of spirals and ellipticals near the Leo Triplet. Dwarf II: Good for framing multiples. Seestar: Individual high-res shots. Position: Leo, southeastern sky.

10. M106 (Canes Venatici)
Bright spiral with prominent arms and unusual dark lanes/jets in deeper images. Fits both; rewarding for longer stacks. Position: Northeast, climbing after 7 PM.

11. M94 (Crocodile Eye Galaxy)
Compact, bright face-on spiral with a bright inner ring. Excellent compact target for Seestar; easy for Dwarf II. Position: Canes Venatici, eastern sky.

12. M63 (Sunflower Galaxy)
Spiral with fluffy, sunflower-like arms. Good size for both devices. Position: Canes Venatici, rising east-northeast.

13. M3 (Globular Cluster in Canes Venatici)
One of the brightest and richest northern globulars (~18′ diameter). Fits both perfectly; resolves stars well with stacking. Position: High in the east-northeast.

14. M49 (Virgo Cluster elliptical)
Bright, large elliptical galaxy—easy entry to the Virgo Cluster. Fits both; nice core with surrounding faint members possible. Position: Virgo, southeast.

15. M87 (Virgo Cluster—famous for its black hole jet in pro images)
Giant elliptical with active nucleus. Compact and bright, ideal for Seestar detail or Dwarf II context. Position: Virgo, eastern-southeastern sky.

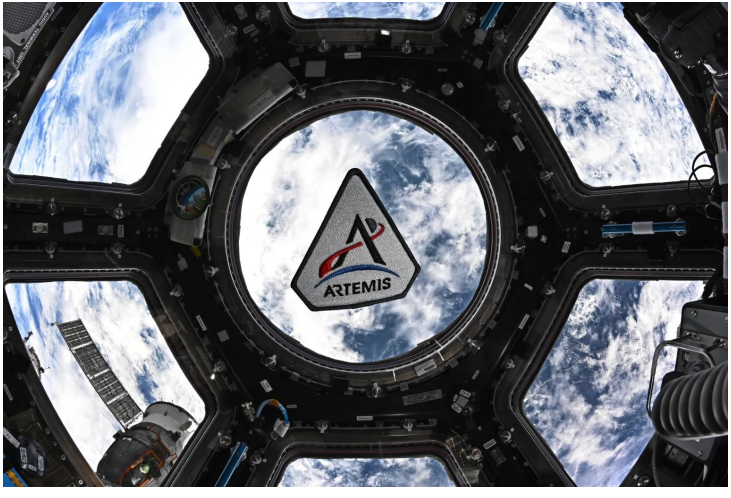
William Barr, HAS VP

(Continued from page 8) A word from your editor

Let's hope many of us watch the launch of Artemis II like I did. I was pretty cool to watch a live feed. We will discuss this at the general meeting also.

Many members now use Electronically Assisted Astronomy (EAA) devices. So, if you are observing and able to capture any night sky object. You can share it in AstroNews by emailing it to me at astronews@hawastsoc.org with some detail. I will post it. I will be needing more of your photos & articles than ever to fill up the May AsroNews.

H.A.S.
P.O. Box 17671
Honolulu, HI 96817



Godspeed, Artemis II!

NASA astronaut Jessica Meir took this photo of an Artemis program patch floating in the International Space Station's cupola. She posted it on X on March 30, 2026, with the following caption: "Our work on the @Space_Station has provided the foundation to explore further, preparing us to return humans to the Moon this week. Stay tuned as we enter the @NASAArtemis era! Expedition 74 will certainly be keeping a close watch. Godspeed, Artemis II!"

Image credit: NASA/Jessica Meir