



June 2025

SPACE

St. Petersburg Astronomy Club **Examiner**

Editor – Guy Earle

The St. Petersburg Astronomy Club has been the center of family astronomy in the Tampa Bay Area since 1927. Our 315 adult members are dedicated to promoting and sharing the wonders and science of astronomy. We host a dark-sky star party each New Moon at Withlacoochee River Park, along with local star parties, telescope-making workshops, science lectures, astronomy lectures, educational outreach sessions and much more.

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**Amazing astrophoto of Messier 16, The Eagle Nebula, from Bortle 8 skies over Tampa, FL
with the Seestar S50 alt/az mode, 20min of 10sec frames– by Ron Johnson**



July Preview

For July, SPAC member Bob Stelmock will be showing members on how to image using the Seestar s50 in a live-imaging and processing session. This was initially to have been the June presentation but was delayed until July.

This month we are meeting in the Social Arts (SA) building instead of the Natural Science (SC-W) like normal months. There's parking right in front of the SA building, which you may recognize as the location of our October and December meetings.

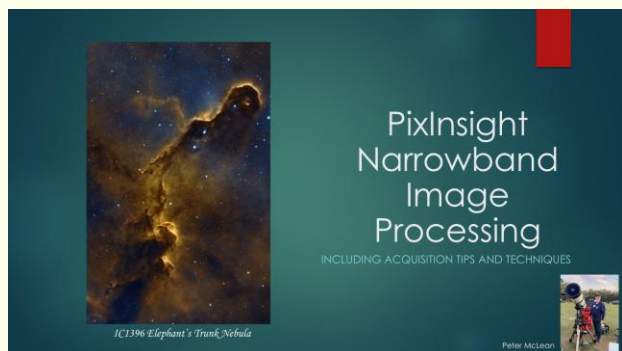


June General Meeting

This month's general meeting will take place on **Thursday, June 26th at 7:30 PM** at **St. Petersburg College, Gibbs Campus, 6605 5th Avenue North, Social Arts Building, Classroom 322**. The meeting will also be available virtually.



This month, **SPAC member Peter McLean** will be presenting **PixInsight Narrowband Image Processing** methods.

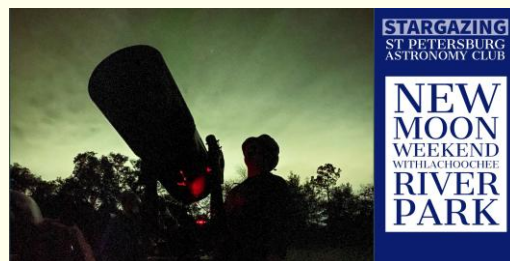


Join Zoom Meeting [HERE](#)

Meeting ID: 834 8435 3027

Passcode: 092807

The club's **New Moon observing weekend** is on June 20th and 21st at [Withlacoochee River Park](#) east of Dade City.



New SPAC Members

We would like to welcome Charlie White, Daymon Jenkins, Jonathan Thatcher, Sheldon Rice, and Stephen & Evalynn Mills to our family of members..

Examiner Staff

Editor	Guy Earle
Space News	Steve Robbins
Field Reporter	Kelly Anderson
Mirror Lab	Ralph Craig
Image Gallery	Peter McLean
Mirror Lab	Mike Davis
	Allen Maroney

President's Message

Well, Carli and I are sitting outside of Gettysburg on our way to the Cherry Springs Star Party. This will be our third year attending this event, and we have been visiting civil war battlefields along the way.

As a reminder, we still have our New Moon weekends over the summer at Withlacoochee River Park, but attendance is typically low because of the heat, humidity, and the ever-present thunderstorms. This New Moon weekend, Joe will not be in attendance. So, please, make sure you pay your camping fees online as he won't be there to collect for the club.

Over the next few months, our leadership is working on ways to modernize aspects of SPAC. We are looking at everything, from including a modernization of our website, expanding SPAC's social media presence, utilizing virtual meetings, and a new clubhouse. If you have any ideas or suggestions, please feel free to reach out to Guy or myself, as we would love to hear how we can grow our club. As always, if you know someone interested in astronomy, tell them about us and encourage them to join SPAC. Membership is an important way for us to grow our club, as many of the things we are able to do are through club dues and donations.

I know we are facing our summer dormitory period at the park, but fall will be right around the corner and will then be in another observing season. The new, small, digital telescope revolution is really changing our hobby. I see more and more of my fellow visual servers falling prey to the imaging bug through things like the Seestar and the Dwarf telescopes. I really can't talk much smack, because I own both of them myself, as they are fun and appealing. I'll have them out at the Cherry Springs, Pennsylvania star party in a few days. With this new technology, SPAC members have new opportunities to network our club together with other clubs, such as the Very Small Array, a group dedicated to collecting data and orchestrated a few months ago by our Vice President and Matthew Peters from Chiefland. As I've said before, networking is key to growth and learning. We should all be networking together as a group to learn new things, new techniques, and experiment with new equipment.

I hope everyone has a good summer and clear skies!

Clear skies,

Mike



MIKE PARTAIN

May General Meeting Recap

Thank you to Dr. John Spencer for joining us via Zoom to give a presentation on the Europa Clipper Mission, a current NASA exploratory spacecraft that will arrive at Jupiter in 2030 to begin a multi-year long mission exploring the icy Jovian moon, Europa. I heard from many members, both online and in-person, who thought Dr. Spencer was a fabulous presenter, with an informative and clearly explained purpose of the mission and its context in the understanding of Jupiter and its satellites. If you missed the meeting, you can watch a recording of it [HERE](#).



A



SPAC New Moon Weekend

Field Report

May 23rd-24th, 2025

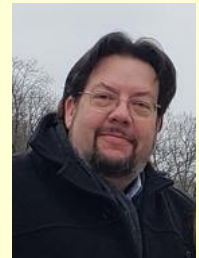
Our May observing weekend also included our spring picnic, which despite being a temperature equal to the Sun's corona, went really well.

I arrived late Friday afternoon, trying to time it so it wasn't so hot but still enough time to set up my 16" Dobsonian. The evening promised some clear skies, so I was eager to look at globular clusters, always a favorite of mine. I've used a Denkmeier binoviewer since 2006 and with the additional of a Tom O. equatorial platform a few years ago, looking at globs is a comfortable and wonderful experience. I noticed the field was



already busy with motor homes, a few tents, and others in the process of unloading their gear. I also brought my Seestar s50 and Dwarf 3 imaging telescopes to participate in a Very Small Array (VSA) event. I'm thankful for Tim Harris, who mercifully gave me a spot on his pullout couch in his air-conditioned motor home. Somehow, I still had no room leftover in my car despite not bringing all my tent gear.

I'm really thankful to Matthew Peters of the Alachua Astronomy Club and the partnership with the Chiefland Astronomy Village. The VSA started as an idea about sharing data for imaging with the Electronically Assisted Astronomy (EAA) telescopes such as the ZWO Seestars and Dwarf Labs Dwarf 3 telescopes. I'm writing this about two weeks after the picnic and in that time we now have a dedicated cloud storage for uploading files. Matthew and I are also discussing the nature of the VSA, a combination of in-person and online cooperation to keep it strong in participation and involvement. It's a work in process and is an exciting time for astronomy. We had chosen Centaurus A and NGC 5033, called the Waterbug Galaxy, as our targets for this evening, and VSA participants brought their telescopes together near our



GUY EARLE

setup. I was the first to set up and did so a bit further north, sort of at the southern end of the north field, thereby giving us a slightly better view of the southern horizon relative to the tree line.



I'm also thankful to Steve Robbins (pictured setting up his s50 on the following page), with whom I frequently text at night when the weather's good, comparing targets that we're both imaging. He always provides great input and ideas on targets. Allen Maroney had his s50 set up along with Mike Partain, Christian Rubach, and Ron Collins that Friday night. Joe Canz, lead member of the Sons of Arthritis, came riding around to collect park dues and to socialize.



The evening started off with very nice skies, but the eastern sky had a really nasty storm over Haines City, with a lot of lighting. Thankfully, the storms were forming and going west, but they continued to form progressively further each as time went on. As soon as it got dark enough, we all started imaging Centaurus A, a famous southern target that barely skims 10–15 degrees above the horizon. Sadly, all the glow from Zephyrhills, Wesley Chapel, and Tampa to the south does not make for dark skies, but it was worth a try.



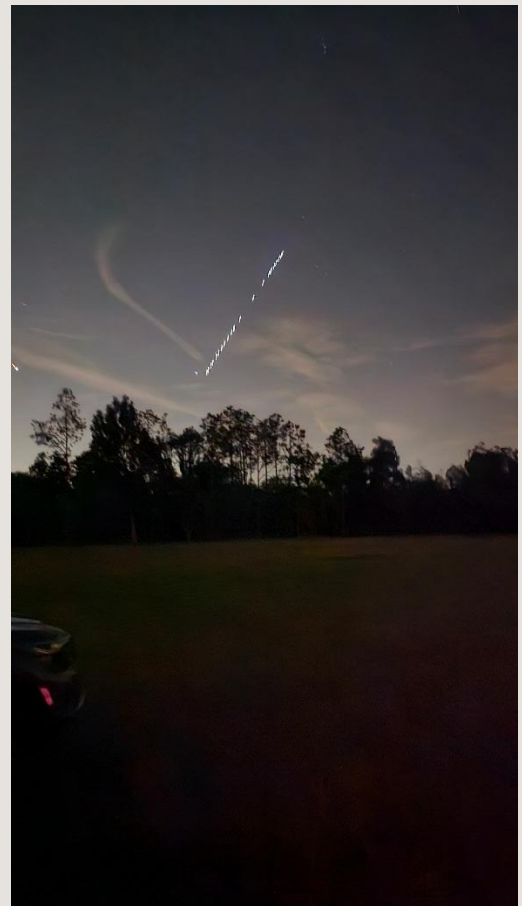
Above: We start to set up, looking back south, where we normally set up but instead came out about 40 ft. Below: Friday evening's imaging starts



Steve Robbins begins his setup amongst the EAA Scopes



Despite the storms in the east, the air was very dry and pleasant. Unfortunately, the skies continued to get more and more smeared with clouds, and we lost the sky completely by 1AM. We got the 16" Dobsonian going and did get some views of globular clusters M13, M3, and M5.



It hinted at some greatness, but the hazy conditions were really knocking down the brightness of all the globular clusters that night. Laura Lanier got everyone's attention early that evening, when she saw a trail of Starlink satellites rising in the northwest and heading to the north. This was the first time I had seen that quintessential line of satellites, and while pretty they have proven to be the absolute bane of astro-imagers. All too frequent, satellite trails will streak through images, but thankfully the software drops those frames so it doesn't ruin the photos. Other countries are also looking at their own satellite networks, and I'm quite fearful that in the coming years the skies will be absolutely littered with them.

But after some observing and imaging, the skies completely closed up around 1 o'clock and I called it a night, with the remaining people not too far behind. Saturday was the main event, the Spring Picnic that we were to have held in March but couldn't because of the weather. The skies were clear of storms but it was so very, very warm. SPAC hadn't done the picnic since before Covid, so I was very happy to bring it back. My wife, Kelly, joined us around Noon, as well as Christian's wife, Wendy. Mike was bust setting up his grill station and Laura was trying to organize the setup. It was great to see people arriving, both SPAC members and those from the Far Out Observatory (FOO), which has a location a few miles south of the Withlacoochee River Park. They've always been great participants in the swap meets that we do at the OBS star party, and since it was cancelled this year, Mike and I felt the need to include it in the picnic once Mark Jennings and Christian Rubach brought that to our attention.

We had a good crowd, about 40–50 people, and there was a lot of socializing. It felt good. It felt familiar, and reminded me what makes this club and hobby so great. We learned some lessons from this picnic and listened to feedback, most importantly to try and hold it earlier in the year when it's cooler, as some members went home after the swap meet because they were wiped out. We would love feedback on how to make things better next spring.



The swap meet kicked off a bit earlier than the scheduled 4 o'clock, mainly because everyone appeared to be done eating and the heat was so intense, it made no sense to just wait that last 45 minutes. SPAC sold most of the remaining telescopes that we had in the clubhouse, as we were looking to remove as much from there as possible in preparation for the hopeful establishment of a new clubhouse on the north field. Things seem to be going well as we work with Pasco County, and

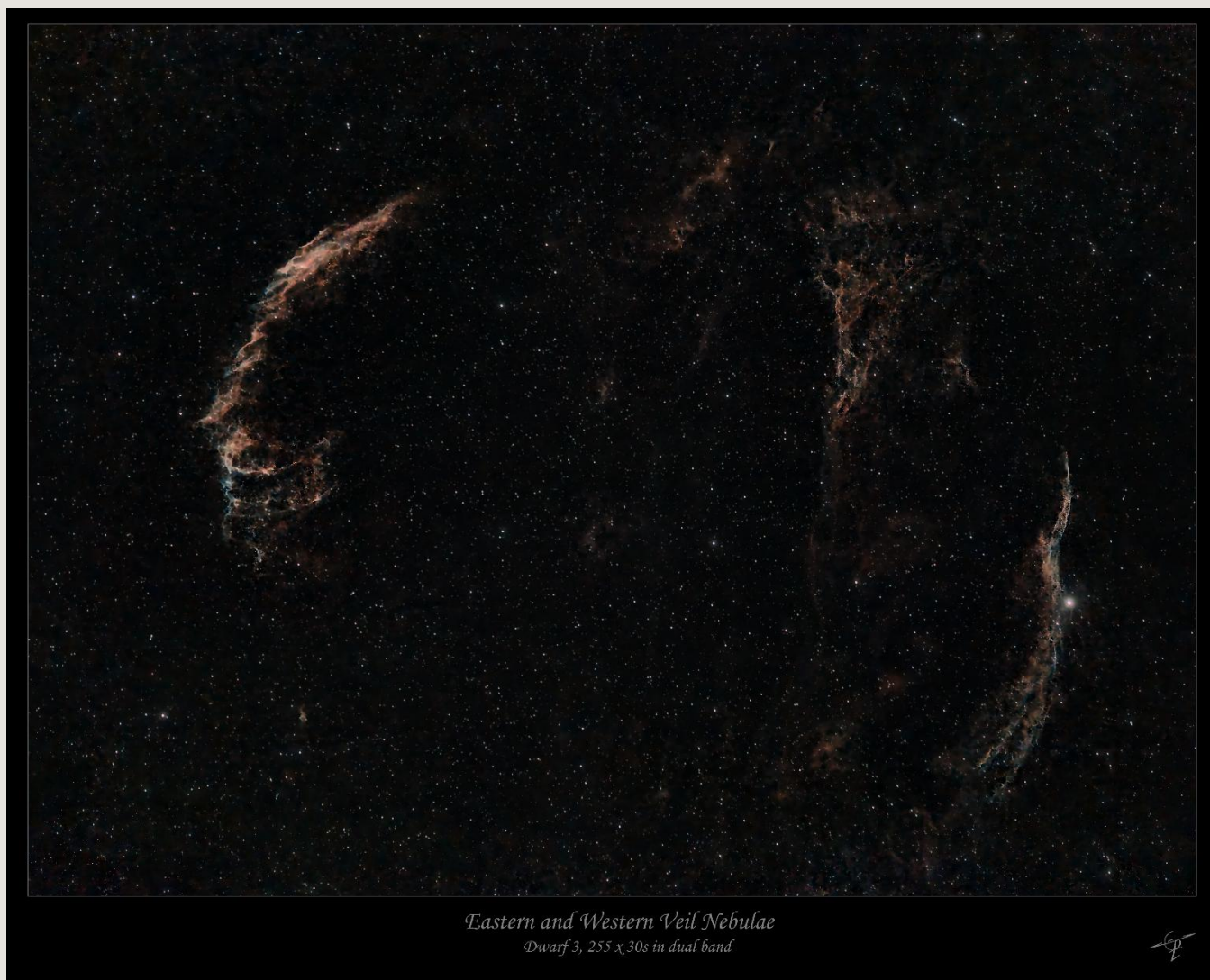
we'll keep everyone posted as that progresses. On a personal note, I got to connect with an old friend and colleague, Craig MacDougal, with whom I used to work at the MOSI Saunder's Planetarium back in the mid-90's. I was part of the planetarium staff, doing shows, night sky presentations, outreach events and our Skywatch program every Friday and Saturday night in



front of the museum. It had been 30 years since I had seen Craig, and as part of FOO, he came out to sell one of his telescopes. We talked about old times, old colleagues who have since left us, and got to reconnect. SPAC invites all the FOO members to feel comfortable and come out to WRP whenever we get together on New Moon weekends.

Once the swap meet was over and everything packed up, it was time for a very cold shower to cool down and feel human again. I decided to crash for about an hour for a nap, as the weather forecast for Saturday was better than the previous night, and although it was exceedingly warm the skies were good. Again, I need to thank Tim Harris for giving me an air-conditioned place to rest, as the idea of tenting in that heat was distressing. I got back up about 6 o'clock and found that some people, who were planning on staying that night, had left already because they weren't feeling well due to the extreme heat. The sky had also seriously degraded in the time since I laid down for a nap. It was now really cloudy and windy and I was concerned it might even rain. It did abate a bit at sunset but the sky never recovered and stayed cloudy in many parts of the sky during the evening. I was looking to image Antares and globular cluster M4 for part of the evening, but it just never cleared up in that part of the sky. Centaurus A was washed out so we all agreed to switch over to the Waterbug Galaxy, situated in one part of the sky that was relatively clear. People were packing up in the following hours after sunset, not seeing the sky getting any better and then heading home. I again called it a night at about 1 AM, setting my Dwarf 3 to record a mosaic of the Eastern and Western Veil nebulae, hoping that it would clear up. I think everyone felt pretty wiped out from the day's events and either headed home or headed to bed. By the time I crashed, there were few people up.

But it was still a great event and a lot of fun with everyone to have this one blast before the summer rains close down the observing season at WRP.



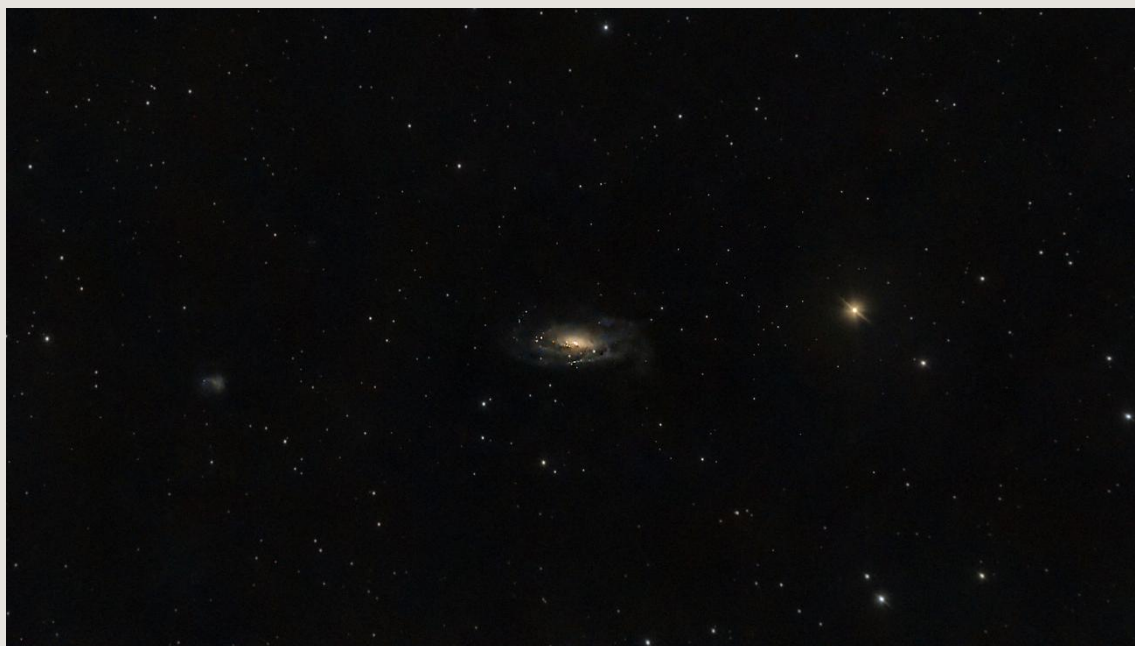


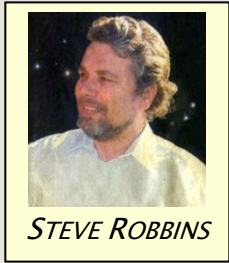
Previous page: the Dwarf 3 mosaic of the Veil Nebulae, labeled. Also, the D3 image of Antares and M4.

Above left: Centaurus A with the Seestar s50

Above: NGC 5139, Omega Centauri with the D3

Below: NGC 5033, the Waterbug Galaxy—this is an interesting target that will take a lot of frames and dark sky to show its unique barred-spiral details.





July Astronomical Events

First Quarter July 2

July 3, Earth will be at Aphelion: 1.01664 AU from the Sun

July 3, Spica will be 0.8° north of the Moon

July 3, Mercury will be at greatest elongation, 25.9° East of the Sun

July 7, the Moon will be at Apogee: 404,627 km from Earth

July 7, Antares will be $.4^{\circ}$ north of the Moon

Full Moon, July 10

July 13, Venus will be 3.1° north of Aldebaran

July 15, the Moon will cross the celestial equator going northward at the Ascending Node

July 16, Saturn will be 3.8° south of the Moon

Third Quarter July 17

July 20, the Pleiades will be $.7^{\circ}$ south of the Moon

July 20, the Moon will be at Perigee: 368,047 km from Earth

July 22, Mercury will be 4.9° south of the Moon

New Moon July 24
































July 26, Regulus will be 1.4° south of the Moon

July 27, will be the Delta-Aquarid Meteor Shower with a ZHR of ~15–20 in perfect seeing

July 28, the Moon will cross the celestial equator headed southward at the Descending Node

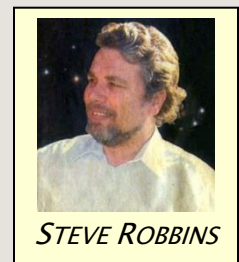
July 28, Mars will be 1.3° north of the Moon

July 31, Spica will be 1.0° north of the Moon

July 2025						
««						»»
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 	2 	3 	4 	5 
6 	7 	8 	9 	10 	11 	12 
13 	14 	15 	16 	17 	18 	19 
20 	21 	22 	23 	24 	25 	26 
27 	28 	29 	30 	31 		

Space Exploration News

Oops. SpaceX is famous for destructive iteration: using malfunction to advance progress at a greater rate than mere success. They may have found the point of diminishing returns. During fueling of Starship 36 for test firing June 18, [A massive explosion](#) destroyed both Starship 36 and major parts of SpaceX's Massey Test Facility. SpaceX had evacuated the test area during the procedure and [announced](#) that there were no casualties and surrounding residents were safe. There will be a delay in the Starship program, as there is only one Massey Test Facility and there is massive damage there.



If diversity in space is a priority, why don't governments seem to care? After Russian cosmonauts [found leakage in their Zvezda](#) service module in an ongoing test program active since the first major pressure leaks from there in 2019, and even after the leak was fixed, Axiom

space postponed their next private mission to ISS, AX-4, indefinitely, pending confirmation that the leak had been reliably stopped. AX-4 will take former NASA astronaut, Peggy Whitson and pilot Shubhanshu Shukla of India, Polish mission specialist Sławosz Uznański-Wiśniewski and Hungarian mission specialist Tibor Kapu to the ISS. No astronaut from Poland, India or Hungary [has ever visited ISS](#) or gone to space at all. That's diversity and private enterprise is bringing it, not diversity for the sake of diversity and progressive attaboys, but highly qualified astronauts from those nations. This is what diversity needs to look like.

NASA's Advanced Composite Solar Sail System has been deployed in space. That means that you can see and photograph it with your cell phone. Its designation at Heavens-Above.com is ACS3 Solar Sail, and it's satellite ID number 59588. It has a maximum brightness of magnitude +1.6 at perigee, fully illuminated at your zenith. Most of the time it's dimmer, but should still photograph well. At [Heavens-Above.com](#) you can find charts for visible passes, with the peak magnitude for each pass. Using [SkySafari](#), free edition ([Apple version also](#)), I set the field of view to the FOV of my cell phone, 74° in my case. Using a tripod, you can then aim at the area of sky that will show the satellite trail. It's essential that your cell phone mount allows you to remove the cell phone and replace it pointing exactly as it was before. Orient your phone exactly according to the trail shown in Sky Safari, unmount your phone and switch applications to whatever camera app you like. Set your focus to infinity, your exposure to about 15 to 30 seconds and begin the exposure at the time Heavens-Above says the satellite will enter your field of view.

Escaping our attention with great skill and ability is the [Bepi Colombo mission](#), co-sponsored by Europe's ESA and Japan's JAXA space agencies. Bepi Colombo is [only the third mission](#) ever to the inner planet, Mercury, after MESSENGER (2011 – 2015) and Mariner 10 (1974 – 1975), and is a shotgun approach, using gravity assist close approaches to Mercury to slow down for a propulsive entry to orbit Mercury scheduled for December 2025. Then Bepi Colombo will split into its two constituent satellites, ESA's Mercury Planetary Orbiter and JAXA's Mercury Magnetospheric Orbiter. How has such an imaginative and so far successful mission escaped our attention? On January 9 of this year, Bepi Colombo passed within 295 kilometers of the innermost planet of our solar system.

VSA Update



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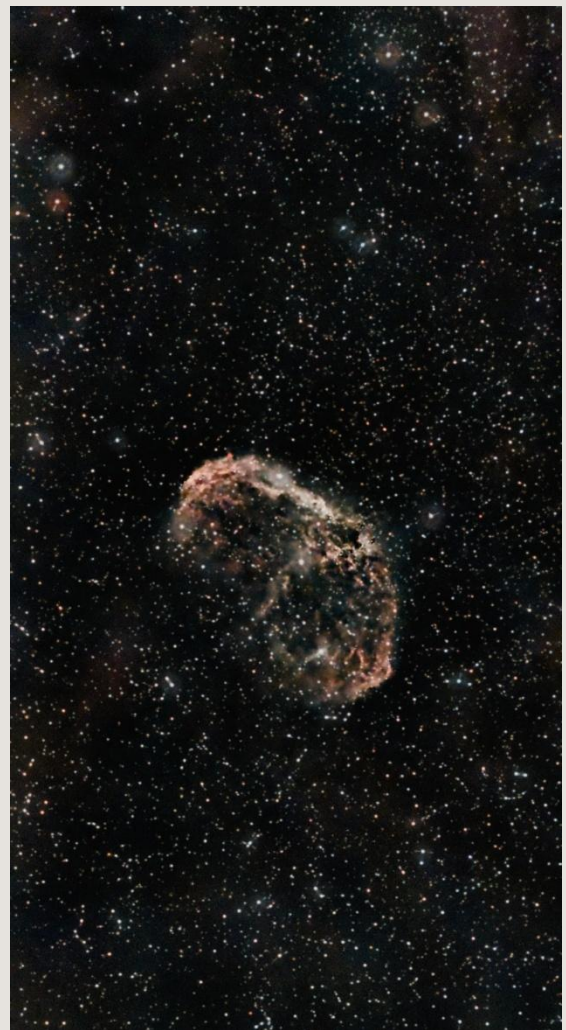


In the New Moon report above, I mentioned a few things about the Very Small Array. In addition, we have created a Google Group specifically for emailing VSA members, so if you'd like to join, please [email me](#) and I'll send you an invite. This has been set up for VSA members across multiple clubs to keep in contact with one another, talk about targets and planning ahead. This is very much a work-in-

progress, but I think it's very exciting. As I said above, thanks to Richard Hennig of the Chiefland Astronomy Village (CAV), we now have an unlimited Dropbox storage for members, wherever they may be located, to upload their data each month, with members able to pull it off to do their own processing.

At the moment, the VSA is comprised of three clubs: SPAC, the CAV, and the Alachua Astronomy Club (AAC). We're seeking sponsorship and looking to grow once we learn to walk, then we're gonna run.

This month's target is the Crescent Nebula, NGC 6888. Here is one night's imaging that I did from Riverview.

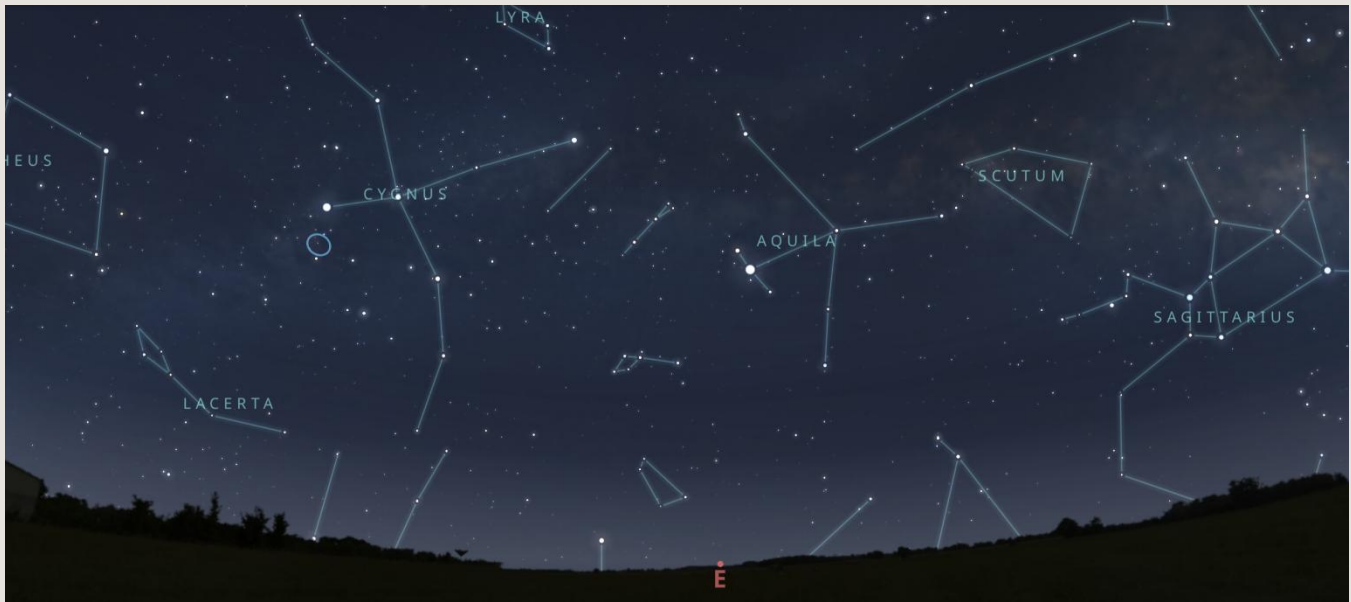




GUY EARLE

Here comes Saturn and Titan

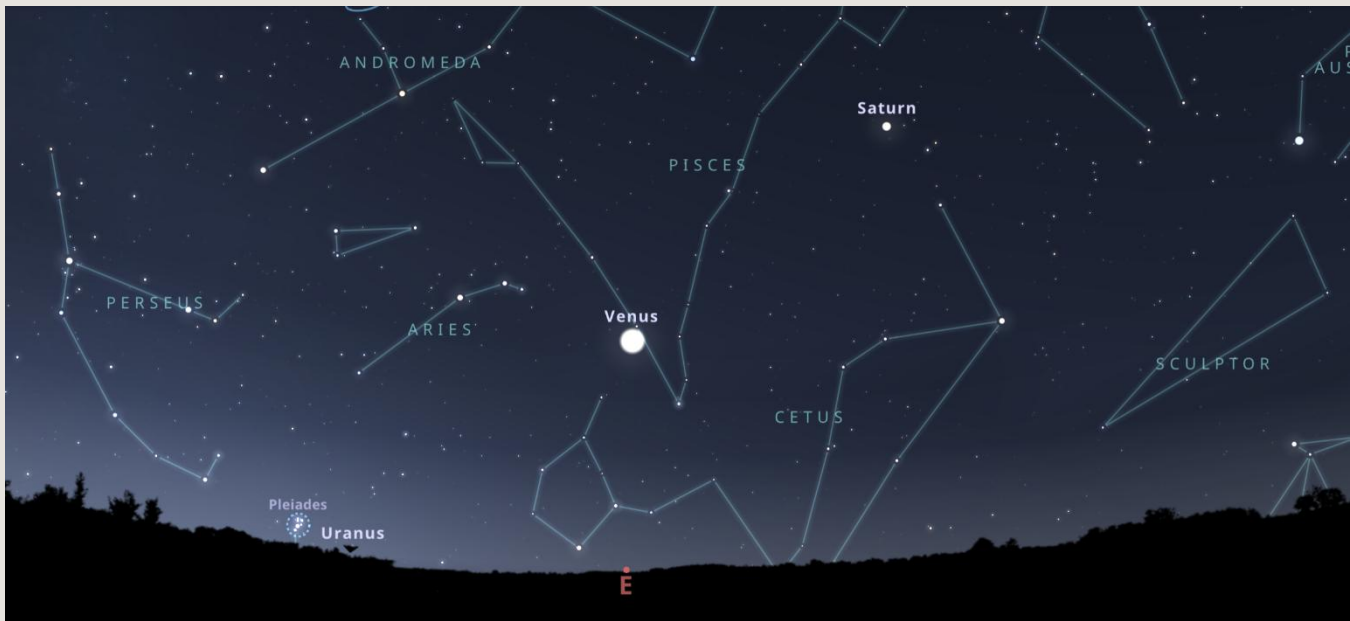
We're hitting the time of year where, at around midnight, the summer Milky Way is rising. There are tons of things to look at from Cygnus all the way down to the horizon in the south in the constellations Sagittarius and Scorpius, which is towards the galactic core, so naturally there'd be more



targets. If you don't realize, when you're looking at the Milky Way in the summertime, you're looking at an arm of the galaxy facing the core, whereas the winter sky's Milky Way is looking out to the edge of the galaxy at an arm behind us, towards Tootoone.

If you stay up to see the sunrise, you'll see Saturn about 30–40 degrees up, with Venus shining brightly below it and more due east. Saturn will not reach opposition, it's closest approach to the Earth, until September, so it's got quite a few months to rise higher and higher each night. Saturn appears nearly edge-on at this point in its 29.45 year tilting from our perspective here on Earth.





Here, to the right you can see a close-up screenshot from Stellarium, the web-based night sky version that is used for the other images above and which I highly recommend to plan your evenings.

During the time of Saturn being nearly edge-on, you have the greatest opportunity to see some of its moons transiting, or crossing, in front or behind the planet, especially the largest moon in the solar system, Titan.

Thanks to a post on Cloudy Nights, here's a table of transit dates that someone put together. Try and catch this spectacular solar system event.

Date	S begin	S end	T begin	T end
250413	11:10	17:36	14:18	19:53
250429	10:21	16:48	15:35	19:27 (shadow crosses rings)
250515	09:35	15:58	-	-
250531	08:50	15:07	-	-
250616	08:07	14:13	-	-
250702	07:25	13:18	-	-
250718	06:44	12:21	-	-
250803	06:07	11:21	-	-
250819	05:32	10:19	-	-
250904	05:02	09:14	08:44	09:28 (partial)
250920	04:37	08:04	04:33	08:37 (near opposition - shadow and moon close)
251006	04:26	06:42	01:25	06:44
251021-22	-	-	22:44	04:41
251106-07	-	-	20:32	02:45
251122-23	-	-	18:49	01:07
251208	-	-	17:37	23:52
251224	-	-	16:58	22:59

S = Shadow
T = Titan
begin = begin ingress
end = end egress



SPAC Image Gallery



Here are some excellent astrophotography photos from our fellow SPAC membership, shot from various locations and divided into categories similar to our annual star party imaging competition. If you would like to share your work, I encourage you to [email Peter](#) your image or share them on our SPAC Facebook page.



PETER MCLEAN

Deep Space (Galaxies, Star Clusters, Comets)



*NGC5033
from Chiefland Astro Ranch, FL
by Jamie Kenas*



*Markarians Chain
from Hudson, FL
by Yervant Parnagian*



*Messier 28
from Willow Oak, FL
by Peter McLean*



*Messier 101
from somewhere in WY
by Mike Davis*

Nebula

*Veil Nebulae Complex
by Ron Jones
from Tampa, FL*



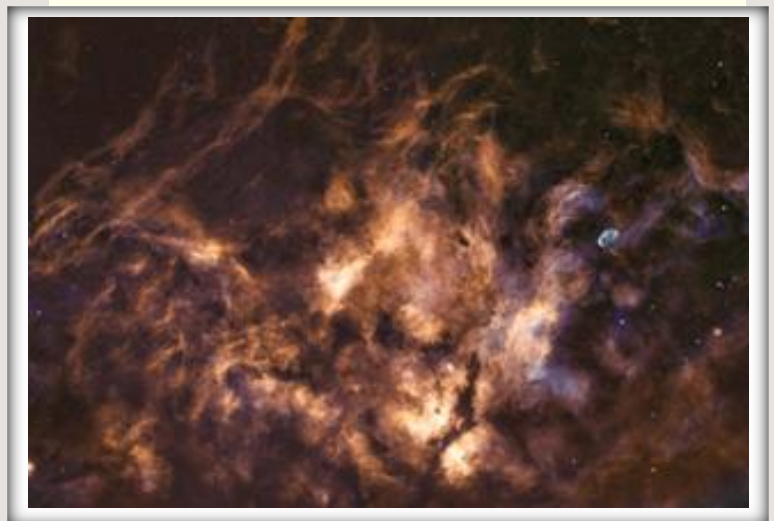
*Barnard 142, 143
from Chiefland Astro Ranch, FL
by Jamie Kenas*



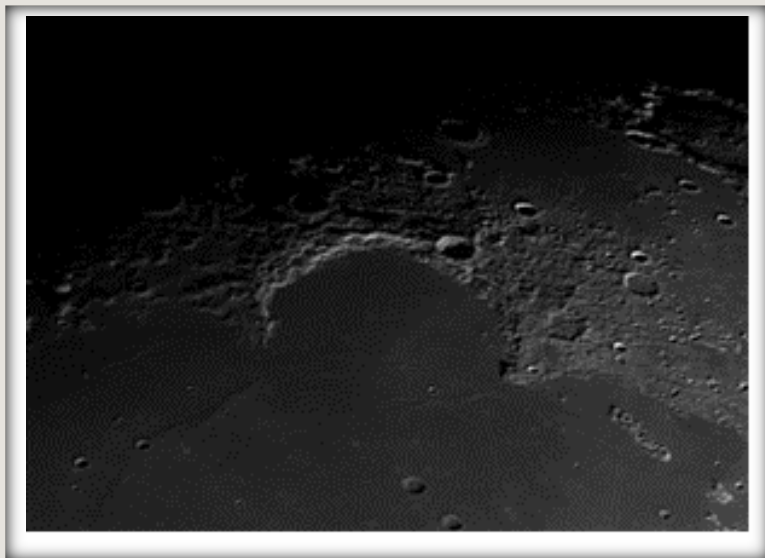
*Messier 108 and M97 Owl Nebula
from Hudson, FL
by Yervant Parnigian*



*Propeller, IC13186 and NGC6888 Crescent Nebulae
from Lakeland, FL
by Steve Miller*



Planetary-Lunar-Solar



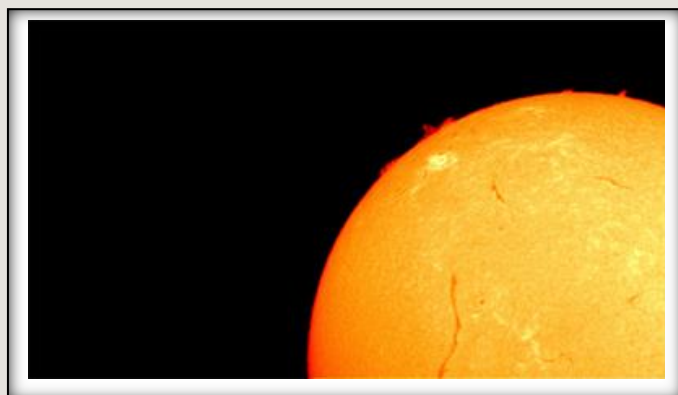
*Above -Sinus Iridum Below -1st Qtr moon both with the C11
from Riverview, FL
by Guy Earle*



*Lunar Composition
from Lithia, FL
by Les Gatchair*



*ALPO Submission, Shadow Transit of Saturn Moon Titan
by Gregory Shanos ALPO member 5066*



*Another Portrait of our
favorite Star
from Lady Lake, FL
by Steve Maiaroto*

Smart Telescope

Seestar S50 Images



*Leo Triplet
from New Port Richey, FL
by Jack Brockhurst*



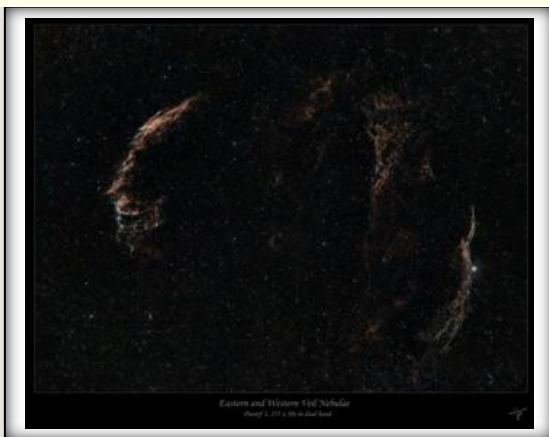
*Messier 27 Dumbell Nebula
From Tampa, FL
by Ron Jones*



*Above – Messier 13 Below – Veil Nebulae Complex
with the Dwarf III from Riverview, FL
by Guy Earle*



*Messier 104 Sombrero Galaxy
w/the Seestar S50
from Zephyrhills, FL
by Joe Canzoneri*



For Sale

For Sale: Celestron C11 Telescope and Celestron CEM-DX Mount with Tripod Plus Accessories

Celestron C11 Telescope

This high-quality Celestron C11 telescope offers exceptional clarity and precision for both amateur and professional astronomers. With its advanced optics and sturdy construction, it is perfect for deep sky observation and astrophotography.

Celestron CEM-DX Mount with Tripod

Just back from overhaul at Celestron ... works like it's new.

Included Accessories

- Dew shield to prevent condensation on the optics
- Carrying case for the scope
- Bahtinov masks for needle sharp focusing
- Dew zapper
- Extra Losmandy dovetail for attaching accessories
- Fiberglass tactical case for the mount (Ugly but bullet proof)



Condition

Everything in perfect working order. Some minor cosmetic details. Can't see them in the dark.

Price

Asking Price: \$1,500

Contact Information

Call Kelly @ 813-760-1720 or email to kander13@verizon.net

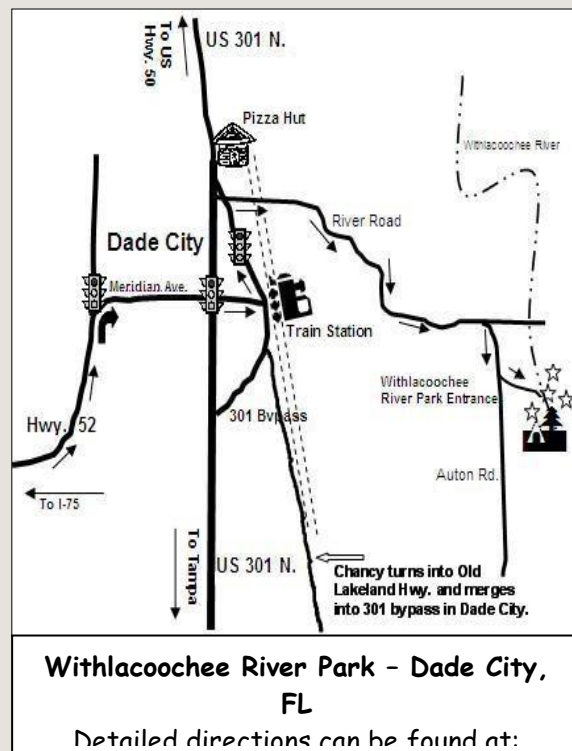
SPAC Business Meeting

Our next business meeting is **Wed., July 9th, at 8:00 PM** via conference call; details upon request. All interested members are invited to attend. All club business decisions are made at the business meeting so as not to encumber the general meeting.

Officers & Directors

President	Mike Partain
Vice Pres.	Guy Earle
Secretary	Peter McLean
Treasurer	Christian Rubach
Dir.-at-Large	Allen Maroney
Dir.-at-Large	Steven Gaber
Dir.-at-Large	Jack Fritz
SPACE Editor	Guy Earle
Public Relations	John O'Neill
Membership Chair	Peter McLean
Mirror Lab Chair	Paul McNabb
Outreach Chair	Steven Gaber
Star Party Chair	Mike Partain
Librarian	Ralph Craig
Club Webmaster	Allen Maroney
Dark Sky Chair	OPEN

Click on the name to send email



Withlacoochee New Moon Weekends

There's no need for reservations. However, the park closes at sundown, so you will need to arrive before then. The park rangers will give you the gate-code once you're inside the park. Please do not call for the gate code as they are not allowed to give it out over the phone.



Please join us! All astronomy enthusiasts are welcome. You do not need to be a club member to attend. Please refer to our [Club Calendar](#) for details and scheduled dates. There is a small fee to the park for using electricity, reduced even further for club members, which you can pay on our club website [HERE](#).



St. Petersburg Astronomy Club

Recognition of Patrons & Benefactors

Walter Brinkman	Benefactor	Darla & Peter Flynn	Patron
Dave & Deborah Catalano	Benefactor	Steve & Cindy Fredlund	Patron
Jack & Roni Fritz	Benefactor	Steve Gaber & Karen Sell	Patron
Matt Hughes & Manuel Ordonez	Benefactor	Richard & Mary Garner	Patron
Valerie Hyman	Benefactor	Timothy & Mary Ann Harris	Patron
Craig & Roberta Jameson	Benefactor	Michael Haworth & Melanie Otte	Patron
Jamie Kenas	Benefactor	Charlie & Linda Hoffman	Patron
David Knowlton	Benefactor	Eric Houghton	Patron
Laura & Roy Lanier	Benefactor	Mark Kepka	Patron
Tod Markin	Benefactor	Willy & Beth Lebihan	Patron
Kelly McGrew	Benefactor	Dave & Mary MacKenzie	Patron
Kevin & Karen Mulford	Benefactor	Steve & Jeri Maiaroto	Patron
David & Kathryn Musser	Benefactor	Allen Maroney & Tracee Elliott	Patron
Rath, Damon & Jean Futch	Benefactor	Ralph & Molly Merritt	Patron
Mike Rozycki	Benefactor	Joseph & Susan Miller	Patron
Christian & Wendy Rubach	Benefactor	Steven Miller & Lisa Alessi	Patron
Doug and Teri Sliman	Benefactor	Stephen Oros	Patron
Garrison & Ruth Smith	Benefactor	Yervant & Jo-Ann Parnagian	Patron
Jim & Robin Sumner	Benefactor	Michael & Carli Partain	Patron
Aleksander Trajkovic	Benefactor	Brad & Lisa Perryman	Patron
Andrew & Bonnie Watts	Benefactor	Alan Polansky	Patron
Johnny White	Benefactor	Tom Spano	Patron

Bill & Norma Amthor	Patron	Anthony Staiano	Patron
Steven Balke	Patron	Jonathan Stewart	Patron
Michael Brennan	Patron	Tom & Michelle Sweet	Patron
Michael Callahan	Patron	Jose & Mary Torres	Patron
Ralph & Christine Craig	Patron	Alexie Velez & Yanira	
Glynis Dilaire	Patron	Hernandez-Velez	Patron
Peter & Jaclynn Dimmit	Patron	Skip & Kim Walker	Patron
Guy & Kelly Earle	Patron	Richard White	Patron
Joseph & Pamela Faubion	Patron	Shawn Wilson	Patron
		Elizabeth Wood	Patron
		Pete Zapadka & Amy Johns	Patron



St. Petersburg Astronomy Club Membership Form

Membership in St. Petersburg Astronomy Club, Inc. (SPAC) is open to anyone, regardless of age, who is interested in astronomy. Benefits of membership include a monthly subscription to the SPAC Examiner newsletter, reduced camping rates and use of the club's bunkhouse at our dark sky site at Withlacoochee River Park, the ability to serve on the SPAC board and voting privileges. Dues are considered donations and are non-refundable. Membership options are available as listed below.

You are now able to choose how you wish to renew your membership:

Preferred On-line Website Option: New instructions as our website has been updated.

Go to https://www.stpeteastronomyclub.org/Sign_In.php on the SPAC website where you can view and update your membership profile, provide payment, and print your membership card.

Adult 1: _____ Adult 2: _____

Street: _____

City, State, Zip: _____

Home Phone: _____ Cell Phone: _____

Email Address: _____

Number of Children under 18: _____

Memberships:

Single: ☐ \$ 30.00/YR. Includes one adult, minor children, the "SPACE" newsletter, and all the rights and privileges of membership.

Family: ☐ \$ 35.00/YR. Includes two adults, minor children and the above rights and privileges.

Patron: ☐ \$ 50.00/YR. A Patron member is entitled to the above rights and privileges.

Benefactor: ☐ \$100.00/YR. A Benefactor member is entitled to the above rights and privileges.

Student: ☐ FREE. SPAC offers free membership to full time high school and college students.

Expected date of graduation: _____

Total Submitted: \$ _____

Your SPAC Membership Card is required for reduced fees at the campground.