



December 2019

Editor - Guy Earle

The St. Petersburg Astronomy Club has been the center of family astronomy in the Tampa Bay Area for decades. Our 281 adult members are dedicated to promoting and sharing the wonders and science of astronomy. We host dark-sky and local star parties, telescope-making workshops, science lectures, astronomy lectures, educational outreach sessions and much more.

President's Message

KYLE BRINKMAN



Something about this time of year brings out the kid in us. One of the nice things about kids is the ability to shamelessly laugh at funny things. When I was doing star shows at the FSU planetarium you could always count on some kid to ask to point out Uranus. The laughing would soon start. Of course I had to point to the dome and explain that it was too dark to see Uranus despite its great size.

The public doesn't always get our hobby, and they certainly don't get why observational astronomy at the professional level has anything to do with them. The wealth of ignorance is astounding. That is precisely why we need to keep up our public outreach programs.

The founder of the Griffith observatory got his idea to make that observatory in Los Angeles available to the public because he spent one night on Mount Wilson and saw the planet Jupiter through the 60 inch



telescope. He gave a park and observatory to the city knowing that every great city in the world made room for parks and seeing the planets for yourself gave him a perspective that he wanted to share with everyone free of charge.

Our home city of St Petersburg has a wonderful parks as well. The city is growing and its infrastructure needs resources to keep up with the public needs. That is one reason the city is taking over the old science center. They are expanding the sewage treatment plant. However, the city doesn't really need the building and has made a priority for us to have space for our programming. The primary tenant is PARC. PARC has a mission of helping people with learning disabilities. So the science center will remain an educational facility. We will be working out a plan with them for shared use of space to re-establish our mirror lab.

As a registered charitable organization I must withhold an endorsement and stay out of politics. I would however state that our city of St Petersburg and specifically the mayor's office have looked out for our

club's needs. Thank you mayor for the supporting science and education and specifically the St Petersburg Astronomy Club.



New Members

We would like to welcome Russ & Cindy Hislip, Timothy & Mary Ann Harris, and Jessica Naylor to our family of members.

General Meeting

This month's general meeting will take place on Friday, December 13th at **7:00 PM**, at St. Petersburg College, Gibbs Campus, 6405 5th Avenue North.

Main Program

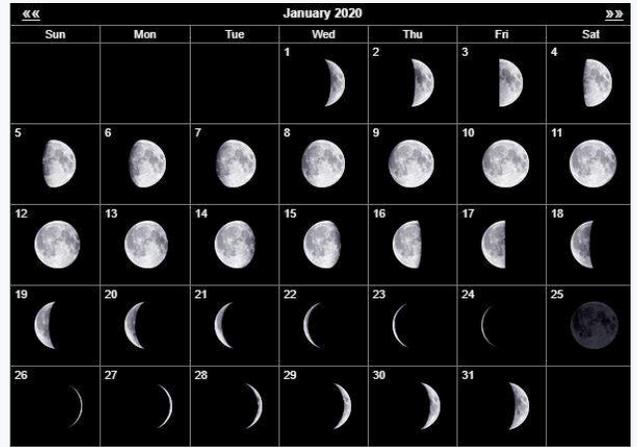
The December meeting is our Christmas party, so please come on by, bring a dish to share, and enjoy the festivities!

January Lunar Phases

GUY EARLE



- First Quarter – January 3
- Full Moon – January 11
- Third Quarter – January 17
- New Moon – January 25



SPAC Christmas Party

GUY EARLE



The December 13th SPAC meeting will be our annual Christmas party at 7 PM. There is a map to the location near the end of the newsletter. Hope to see you there!

November New Moon Weekend

KELLY ANDERSON



The weather for the November New Moon Weekend was better than we had experienced during the Summer and Fall, but it didn't quite rise to the level we were hoping for. About a dozen members arrived on Friday and Saturday, including two new member couples, and clouds cleared, kinda,

for some viewing, but imaging wasn't on the agenda.

Temperatures were very comfortable during the day, and the nights were a bit cool-ish. The field played host to hundreds of Palm Warblers, beautiful little birds who constantly moved while they foraged in the grass. If you sat still for a few minutes they'd get really close, and as soon as you moved there'd be an explosion of tiny, fluttering wings. I'm always amazed that they never collide in mid-air.

On Friday night I was able to view two of my favorites, Saturn and Sirius rising through my 125mm APO refractor. You never forget the first time you see our ringed planet through a telescope, and after all these years it's still breath-taking for me. Several of our first-time viewers provided the obligatory "Wows!" And then we turned our attention to the Dog Star.

Sirius is the brightest star in our night sky, and when it is low on the horizon you're seeing it through a dense layer of atmosphere, which does some magic to the light. Because of the turbulence in the air, the various parts of the visible spectrum are refracted at different angles in a very dynamic way. The result is that the star is a light show of brilliant colors that are constantly changing. You'd swear it was loaded with colorful stroboscopic projectors. I remember the first time I saw it through a telescope. I couldn't believe my eyes. Another series of "Wows!" from our first-time viewers.

On both evenings clouds were sporadic, varying from thin-scattered to total coverage. The moisture in the air was the

densest I've seen at Withlacoochee River Park; contrails spanned long stretches of sky, proving the extreme moisture suspended at altitude. The dew accumulated very fast and thick, lending another challenge for our intrepid astronomers.

Nonetheless, we had a great time enjoying the campout and talking astronomy with fellow enthusiasts.

The next New Moon Weekend will be neatly sandwiched between Christmas and New Year, so keep your social calendars free for December 27 - 29. If you're on holiday, then maybe extend the weekend a bit, because awesomely clear skies are guaranteed to make this the best DOTM of the year!

Astronomy Outreach

JIM HUNTER AND TOM SPANO

★ 11/20 - Great American Teach In at Gulf Trace in Tarpon Springs. Three presentations to first, second and fifth grades - about 80 each. It is a new school for us

11/20 - Stewart Middle School in Tampa. Seven presentations to grades 6, 7, and 8. We've been there for six years.

11/21 - Literacy Academy near Riverview. Scheduled for seven but only did five. We've been there about six years.

Meade Telescopes Declared Bankruptcy

GUY EARLE

★ The following is an article in the Orange Country register from December 5 concerning a lawsuit that Meade lost to Orion telescopes. As a result of that lawsuit, Meade and its affiliated optical company have declared bankruptcy. Below is the text and the link to the article itself is [HERE](#).

Irvine telescope maker Meade Instruments has filed for bankruptcy protection just days after its Chinese owner lost an antitrust case alleging a conspiracy to squeeze a competitor out of business.

Meade, bought by Ningbo Sunny Electronic Co. Ltd. in 2013, filed Wednesday, Dec. 4, in U.S. Bankruptcy Court's Central District, claiming debts of \$10 million to \$50 million. A Meade affiliated company, Sunny Optics, filed for bankruptcy protection, too.

The filing includes an unspecified and disputed debt to Orion Telescopes & Binoculars, a Watsonville-based telescope marketer well-known in the sky-watching industry.

According to Law360, [a California federal jury on Nov. 26 awarded Orion \\$16.8 million](#) after it found that Ningbo Sunny, through Meade, was fixing telescope prices for American consumers with a manufacturing monopoly created after it bought Meade. Orion's attorney, Noah Hagey, told Law360 damages could be tripled.

"Orion has bravely led the charge against supplier collusion, and its example should serve as a path forward for other brands beset by this sort of unlawful conduct," Hagey was quoted.

Meade, a big name in the home telescope market, fell on hard times a decade ago as foreign-made products scooped up market

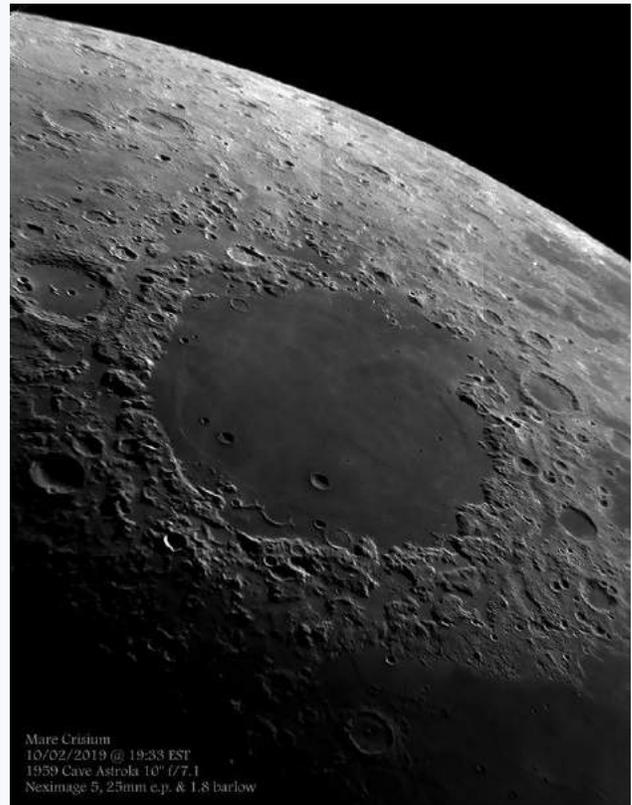
share from domestic makers. Whatever business was left then shrank during the Great Recession.

Orion had tried to acquire the then financially ailing Meade but was outbid first by another Asian manufacturer and finally by Ningbo Sunny. Orion alleges that after the Meade merger with its Chinese buyer, Orion's ability to buy products from the combined entities ended.

SPAC Astrophotography

GUY EARLE

Here are some outstanding SPAC photographs. I encourage members to [email the editor](#) to submit for future newsletters or share them on our [SPAC Facebook page](#).

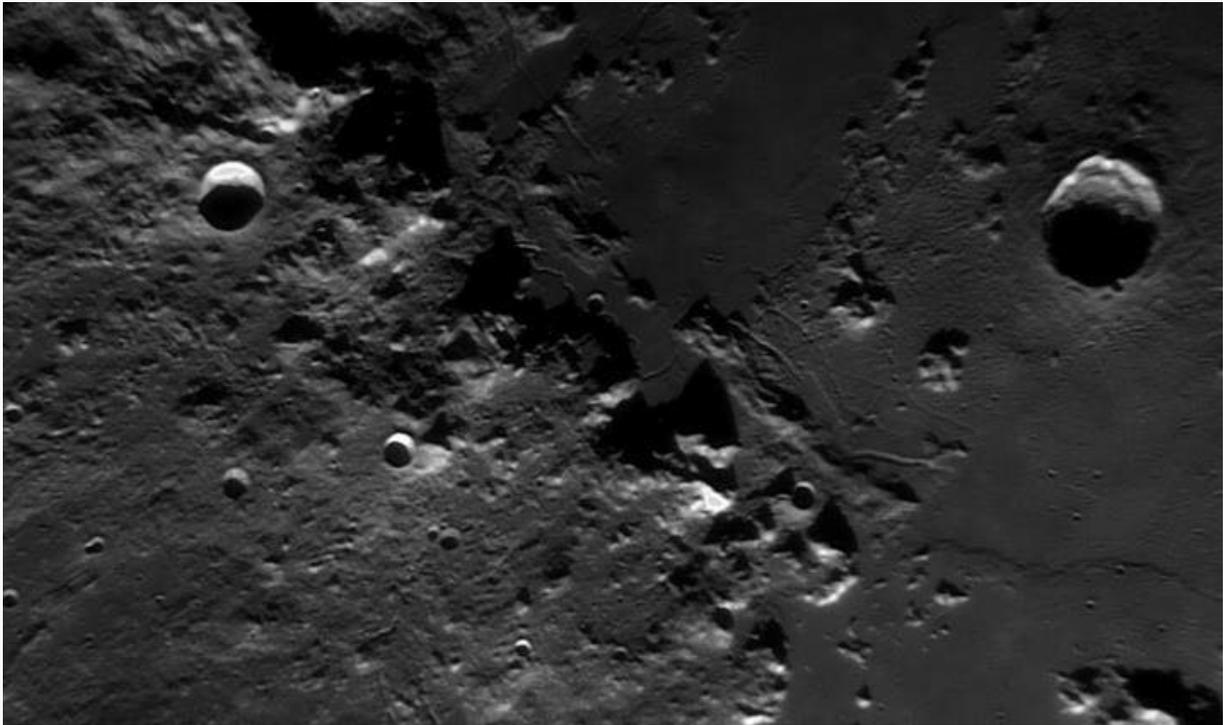




Top: A 35 minute long exposure of Orion. The Trapezium area is badly over exposed, but the faint outer dust and gas nebulae show up nicely
by Mike Davis



Right: The Veil Nebula. An Explore Scientific 4 inch refractor on an iOptron goto mount, with a Nikon D5100 camera body, a guide camera,
by Mike Davis



Top: Crater Autolycus (on rt.) and the eastern side of Mare Imbrium, and the Hadley Rille (center), where Apollo 15 landed.
Neximage 10 with Cave 10" f/7.1
by editor



Left: Dec 4 Moon with Orion 80 MM ED 80 mm diameter 600 mm F.L. F/7.5 with my Cannon on video mode. 1 minute with about 1800 images
by Steve Maiaroto

SPAC Mirror Lab Report

BRAD PERRYMAN

★ It's been a slow month for the mirror lab. We are still looking for a new location, but we do have a couple of prospective sites. So, we are hopeful to have the lab up and running again in a few months.



Mike P. is getting closer to completing the refiguring of the 16" mirror he won at the club auction. It started out with about a 1/2 wave accuracy of the mirrors surface which is below the standard that the mirror lab likes to see. It also had the outer zones over-corrected which can greatly reduce image quality. In reshaping the mirror, the edge zones swung in the other direction, moving it to only 1 wave accuracy, which was actually good as it blended the overall surface of the mirror together and provided a better Strehl ratio for sharper images. After further work on the mirror it is now almost a 1/4 wave accuracy and Ron is confident that Mike will have a 1/6 wave or better mirror within two more sessions of working on the mirror.

National Weather Service

SHIRLEY VUILLE

★ The impacts of hazardous weather are experienced by many Americans each year. To obtain critical weather information from eye witnesses, the National Weather Service (NWS) established the



SKYWARN program. Volunteers help keep their local communities safe by providing timely and accurate reports of severe weather directly to the NWS. Consider becoming a SKYWARN Spotter volunteer by registering and taking the online training. SPAC partners with our local NWS in Ruskin. <https://www.weather.gov/tbw/skywarn>

Editor's Note

Guy Earle

★ I hope each and every member here has a very happy holiday season with friends and family, and I look forward to seeing what new astronomy scopes and gadgets are shown and discussed at the next observing session or meeting.

Also, please always feel free to reach out and [email me](#) about the newsletter, good or bad, and any suggestions you might have for the betterment of the club.

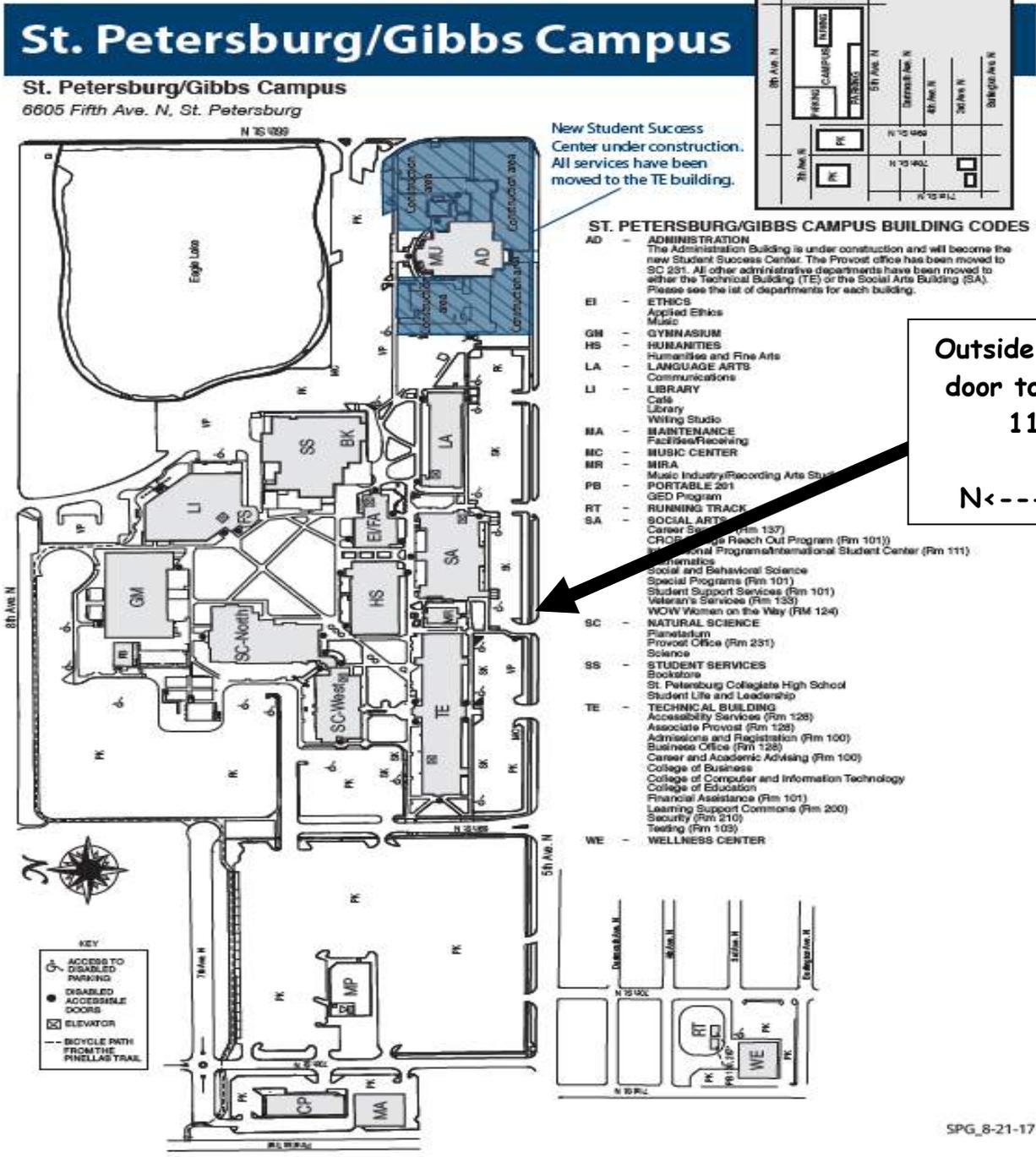
Clear skies to all, and to all a good night!

the

mirror.

SPAC December Christmas Party 7:00PM Friday, 12/13/19
Location: Philip Benjamin Social Arts Building - Room 114
 Please bring a dish to share.

Park on the south side of the building. It is ok to park in several Staff Parking spaces during this time. The only unlocked door to the building will be the Room 114 outside access door facing the south parking lot. The rest of the building's outside doors will be locked.



SPAC Business Meeting 

Our next business meeting is Wednesday, January 8th, 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	Kyle Brinkman	727 455-6931
Vice Pres.	John O'Neill	727 637-5945
Secretary	Shirley Vuille	727 864-2624
Treasurer	Jim Hunter	813 507-8415
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Dir.-at-Large	David Pearson	727 215-1526
Dir.-at-Large	David Richmond	727 692-9831
SPACE Editor	Guy Earle	813 785-1972
Public Relations	John O'Neill	727 637-5945
Membership Chair	Shirley Vuille	727 864-2624
Outreach Chair	Jim Hunter	813 507-8415
Star Party Chair	Mike Partain	859 339-0828
Librarian	Ralph Craig	727 384-2086
Club Webmaster	Jack Fritz	813 508-5680

Click on the name to send email

Recognition of Patrons & Benefactors:

Clifford B. Benham	Benefactor
Walter Brinkman	Benefactor
Andy Demartini	Benefactor
Jack & Roni Fritz	Benefactor
David Knowlton	Benefactor
David & Tara Pearson	Benefactor
John Stepanov	Benefactor
Ronald & Sterling Algieri	Patron
Bruce Berger	Patron
Peter & Jaclynn Dimmit	Patron
Joseph & Pamela Faubion	Patron
Steve & Cindy Fredlund	Patron
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Valentino Hernandez	Patron
Charlie & Linda Hoffman	Patron
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Matt Labadie	Patron
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Robert Myers	Patron
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Alan Polansky	Patron
David & Rusty Richmond	Patron
Howard Jr. & Cynthia Ritter	Patron

Anthony Staiano	Patron
Wally & Ramona Vazquez	Patron

Examiner Staff

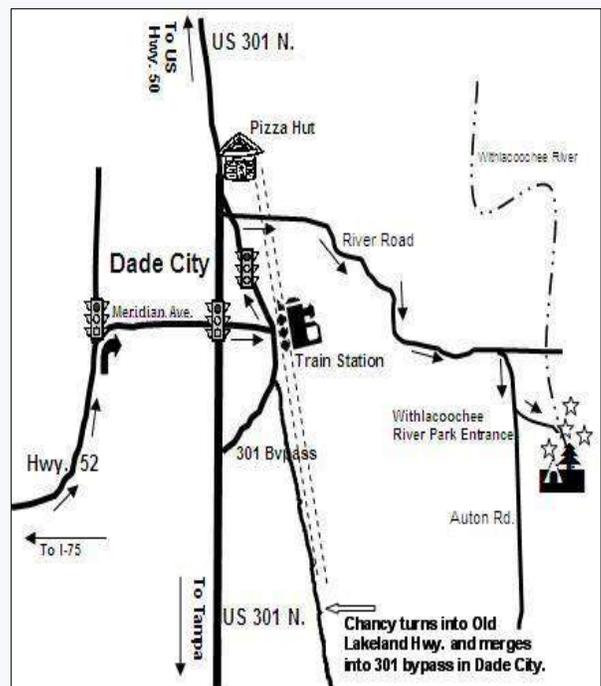
Editor	Guy Earle	813 785-1972
Reporter	Kelly Anderson	813 672-2751
In the News	Steve Robbins	386 736-9123
Mirror Lab	Ralph Craig	727 384-2086

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.

Reservations are not necessary. Please print and display our [Friends-Of-The-Park Pass](#) on your dashboard.

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.



Withlacoochee River Park - Dade City, FL
 Detailed directions can be found at:
www.StPeteAstronomyClub.org



SPAC, INC. MEMBERSHIP INFORMATION

Membership in St. Petersburg Astronomy Club, Inc. is open to anyone, regardless of age, who is interested in astronomy. Dues are considered donations and are non-refundable. Membership options are available as listed below:

To join or renew your membership:

Complete the following form and return it with your payment to: Jim Hunter - Treasurer, 17316 Oak Ledge Dr., Lutz, FL 33549-7626 - Telephone number (813) 909-7013 (checks should be made payable to SPAC, Inc.)

Name: _____ Telephone Number: _____

Spouse: _____ Children (*Under 18*): _____

Address: _____ City: _____ St. ____ Zip: _____

E-Mail address: _____

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.

Student: [] Free. Expected date of graduation: _____

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.