Volume 23.1 Spring 2013 **First Quarter**

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3-2-1... BLAST OFF INTO THE NEW YEAR

The New Year is off to an exciting start and so is PSF News with a new look and special features to celebrate the year leading up to the PSF's 25th anniversary. In this issue, we have a member spotlight with Dave Lauerman, co-founder of the Planetary Studies Foundation and recognition of Charlie Duke's presentation on C-SPAN, as well as the young women who volunteer at the PSF.

In addition to the extra things happening with the newsletter, we also have a brand new lecture series for the spring season featuring workshops, stargazing and a special presentation by Paul Sipiera. For more information regarding upcoming events and what's happening visit our website:

WWW.PLANETS.ORG



The United Launch Alliance (ULA) Atlas-V rocket with the Landsat Data Continuity Mission (LDCM) spacecraft onboard is seen as it launches on February 11, 2013 within the organization, be sure to at Vandenberg Air Force Base, California. The mission is a collaboration between NASA and the U.S. Geological Survey that will continue the Landsat Program's monitoring of the Earth's landscapes from space. Photo courtesy of NASA.

ANNUAL MEMBERS MEETING SAVE THE DATE: AUGUST 24, 2013

MARK YOUR CALENDARS AND JOIN FELLOW PSF MEMBERS TO DISCUSS THE ORGANIZATION'S PROGRESS, VOTE ON IMPORTANT ISSUES AND SHARE IDEAS FOR THE FUTURE.

PRESIDENT'S MESSAGE

2013 is off to a good start for your Planetary Studies Foundation. After a rather short holiday break we are back in action at the *1876 Banwarth House & Museum* with the resumption of our lecture series. On February 9th we celebrated a triple event with a special presentation followed by cake and coffee. It was in honor of Sir Ernest Shackleton's 139th birthday, the 1969 fall of the fantastic *Allende* meteorite, and most important, the 24th anniversary of the founding of your Planetary Studies Foundation. In addition, PSF chose this event to announce the discovery and confirmation of the new *Elizabeth*, Illinois iron meteorite. It took over two years to analyze and submit the appropriate data to have this specimen accepted by The Meteoritical Society as a distinct meteorite. The *Elizabeth* iron now becomes only the tenth meteorite discovered in Illinois and the second from Jo Daviess County. Special thanks goes out to PSF research associate, **Tony Irving** (University of Washington - Seattle) and **Chris Herd** (University of Alberta), for all their efforts in analyzing and classifying this very important meteorite.

February and March have been very exciting months for astronomers and those interested in meteorites. The sky over Russia literally exploded with the fall of a small asteroid on February 15th and recent reports suggest that it may be related

to the March 26, 2003 fall of the Park Forest meteorite. Several PSF members across the nation appeared on both radio and television programs discussing what happened and the implications of future impacts. Meteorite enthusiasts from around the world were extremely anxious to get to Russia and hunt for fragments, but travel conditions and politics seems to have left the hunting to local residents and government officials. PSF scientists involved with the 2003 Park Forest, IL and 2010 Mifflin, WI meteorite falls can clearly relate to the excitement and frustration generated by a spectacular meteorite fall. March should also provide some excitement with the appearance of two bright comets in our nighttime sky. There will be a few scheduled viewing sessions (dates available at www.planets.org) at the *JETS OBSERVATORY* in Freeport, IL. These two cosmic visitors will certainly wet our appetites for the magnificent November comet that promises to be as bright as a full moon and may even be visible in daylight. It is a very good thing that the world did not end last year on December 21st or we might have missed out on some very exciting events! Please remember that our Elizabeth/Galena area is famous for having a very dark nighttime sky and the viewing is terrific, so come out and enjoy the heavens with us.

I would also like to take this time to thank all of our members and friends who contributed to our Year End Giving Campaign. Unfortunately, I must report that our campaign to continue restoration of the 1876 Banwarth House & Museum fell way short of our goal. Given the nation's current economic state, I realize that most people are having a very difficult time just trying to make ends meet. This is why I am so grateful to those who have contributed either their time or money in 2012. PSF truly appreciates your dedication and devotion to all our programs. To make-up for the short-fall in our campaign, PSF has submitted a grant request for the balance of the anticipated expense of restoring the veranda and the construction of an entrance ramp to make our facility more accessible to visitors who are in need of special assistance. Our grant team has written an excellent proposal and we look forward to a positive response by mid-May. Wish us luck!

Paul P. Sipiera

DONOR'S SPOTLIGHT

ANNUAL FUND

1876 Banwarth House & Museum Restoration Project

Goal: \$7,500 - Contributions: \$3,325

\$1,000

James R. Lancaster Family Foundation

\$100 - \$500

Art Frigo
Galena State Bank
Todd Gephart
Larry Knight
David M. Lauerman
Capt. James A. Lovell
Robert Renguso - Marlin Environmental
Jennifer Schwartz - Yahoo Matching Gifts Program
Paul & Diane Sipiera
John & Jane Yoder

\$15 - \$99

Leo & Karen Baran
Cecelia Cooper
Michael Dittmar
Kathie & Jess Farlow
Joe & Bonnie Garrity
Eugenia Krzyzanski
Jim & Lou Paglin
Larry & Joan Reylek
Jim & Pat Tierney
Kim Thorsen

MEMBER'S CORNER

RENEWING MEMBERS

CONTRIBUTING

Dave Kahn

FAMILY

Sindy Main Dan Tindell

INDIVIDUAL

Jan Buedel
Cecelia Cooper
Connie Kahl
Sharon Madden
Jim Paglin
Sharon Westenfelder

NEW MEMBERS

John Wallanches

CONGRATULATIONS & RECOGNITION

- A special thank you to **Gavin Glaskow** and **Hannah Jackson**, who are high school students who have donated their time and talents this quarter.
- A very safe trip to Wulf Clifton and Tina Hollis on their travels to New Zealand and Australia.
- Congratulation to Dan & Pam Tindell on their 25th Wedding Anniversary, which they spent in Hawaii.
- We wish Jim Paglin a speedy recovery and looking forward to him participating in our events.
- We would like to compliment Charlie Duke on his C-SPAN television program that was at the Explorer's Club
 of New York this past month.
- We are proud of astronauts **Richard Garriott de Cayeux** and his father **Owen Garriott** who were recently on the DOC channel entitled 'Man on a Mission: Richard Garriott'.

CALENDAR OF EVENTS

LECTURE SERIES & WORKSHOPS

WORKSHOP: PHOTOGRAPHY

SATURDAY, MAY 11TH 1:00-2:00PM

If you have ever aspired to become a photographer, want to take better pictures or just can't find the shutter button, consider taking time to learn the basics of photography in this simple presentation. Local amateur photographer, Elizabeth Myelle, will share basic tips, advice on technique, explain the rule of thirds and how some rules can be broken. Learn how to avoid blurry pictures and a simple trick to get the perfect shot.

MEMBERS SPRING GET-TOGETHER

SATURDAY, MAY 11TH 3:00-6:00PM

Celebrate the end of winter and welcome the spring season with a potluck dinner for PSF members. Please contact Diane Sipiera if you plan to attend and the dish you intend to bring.

STARGAZING

SATURDAY, MAY 11TH BEGINS AT SUNSET

Enjoy the first stargazing session of 2013! Join Diane and Paul Sipiera as they guide you through the heavens and share Native American stories behind the constellations. This event is weather-sensitive and will be cancelled if there is cloud cover or other bad weather conditions.

SPECIAL PRESENTATION: ELIZABETH METEORITE

SATURDAY, MAY 18TH 1:00-2:00PM

Paul Sipiera will present one of the PSF's latest meteorite discoveries. The *Elizabeth* meteorite is directly related to the Village of Elizabeth, Illinois. Originally acquired at a local estate auction, this unassuming chunk of metal turned out to be an actual iron meteorite. After extensive chemical analyses and study it has been certified by the Meteoritical Society as the Elizabeth, Illinois meteorite.

WORKSHOP: EDWARDIAN PERIOD WOMEN'S RIDING HAT

SATURDAY, MAY 25TH 12:00-2:00PM

Join Jolene Foat as she demonstrates how to make a women's riding hat typical of the early 1900 Edwardian period. Please contact Diane Sipiera if you plan to attend.

CONTACT DIANE SIPIERA -DSIPIERA@PLANETS.ORG 815.858.2014

MEMBER SPOTLIGHT DAVID LAUERMAN

PSF CO-FOUNDER

Dave Lauerman is co-founder of the Planetary Studies Foundation and one of the most dedicated members of the PSF having been involved with the organization's mission for over 25 years! Dave currently lives in Palatine, Illinois and has three children; Jill, Holly and Owen and two "marvelous" granddaughters. Dave is also a combat Vietnam veteran and former Marine. Dave met Paul Sipiera first as a friend and 19 years later the two would form the Planetary Studies Foundation together with Mary J. Becker, Raymond Moehrlin, D.A. and Meyer Rudoff. Dave's first wife was an educator and the sciences were very important to them both. Along with Paul, Dave instantly saw the potential in using the foundation to teach science outside the typical avenues and he has been backing the educational outreach of our programs ever since. Most notably, for the members who have visited the 1876 Banwarth House & Museum, is the downstairs museum portion that was dedicated to Dave's late wife, Karen Sue Lauerman.



DAVE LAUERMAN

WHAT PROFESSIONS HAVE YOU WORKED IN AND WHAT LEAD YOU INTO THAT CAREER?

I have a degree in diamond appraisal and grading and worked in the jewelry business for 17 years. Honestly, I got started in the gem business on accident. I have worked at Harper College for the last 25 years and look forward to retiring.

WHAT ARE SOME OF YOUR HOBBIES?

In my free time I enjoy playing golf, photography and building train sets.

WHERE IS YOUR FAVORITE PLACE YOU HAVE TRAVELED AND WHY?

I have a few favorite travel places, all for different reasons. I enjoyed traveling to Hong Kong, Vietnam, space camp with Paul Sipiera and a Mexican solar eclipse trip with my children Jill and Owen.

WHAT IS YOUR FAVORITE AREA OF SCIENCE AND WHY?

My favorite areas of science are geology and astronomy. I strongly believe kids should study in these areas because they connect our past and future. I started

having an interest in astronomy when I was 17 years old when I viewed the Southern Cross and other constellations located in the Southern Hemisphere

HOW EXACTLY DID YOU MEET PAUL SIPIERA?

I met Paul at Northeastern college in 1970. We were both pledging the fraternity TKE and we've been close friends since.

WHAT IS ONE OF YOUR MOST MEMORABLE STORIES ABOUT THE PSF?

Some of the most memorable stories are centered around past PSF dinners. I had a wonderful time meeting Majel Barrett, Gene Roddenberry's former wife, she had some of the best stories. I also found it to be incredibly fascinating to meet astronaut, Alan Bean and to see his artwork he creates with moon dust. Overall, I would say it's been great to meet so many people who have been a part of the organization who shared our original dream.

SPECIAL RECOGNITION

These young women are actively involved with the PSF and busy competing in various academic areas. We are extremely proud of their accomplishments.

Hannah Jackson: History Fair



A junior at River Ridge High School, she displayed the 1876 Banwarth House & Museum as part of her project at the Illinois History Fair in DeKalb. Her project concentrated on the businesses of the Banwarth family and included interviews with the tour guides at the Banwarth House to gain their perspective. Hannah has been a dedicated volunteer for the past two years at our museum.

Elizabeth Myelle: Dairy Bowl



A junior at Thomas Edison University and PSF administrative assistant, she participated in the Illinois State Dairy Bowl Competition held in Bloomington early this spring. Contestants compete as a team and answer questions related to the dairy industry; milk production, animal nutrition and related studies. Similar to academic bowl, teams score points by 'buzzing in' to answer a question. Elizabeth qualified in the top ten for the state.

Caroline Sipiera: Academic Bowl



A sophomore at River Ridge High School, she was part of the Worldwide Youth in Science and Engineering. The River Ridge team took first place in this Division I regional competition and is proudly on their way to sectional competition. Test material is drawn from senior high school and freshman level college curricula featuring a variety of subject areas including biology, chemistry, computer science, engineering graphics, English, mathematics and physics.

CELESTIAL CALENDAR

MARCH 27—FULL MOON

The moon will be directly opposite the Earth from the Sun and will be fully illuminated as seen from Earth. *Did you know?* 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 soften and the earthworms would reappear.

APRIL 14—CONJUNCTION OF THE MOON AND JUPITER

The moon will pass about two degrees of the giant planet, Jupiter in the evening sky. Look for both objects in the west after sunset. The pair will be visible in the evening sky for about three hours after sunset.

APRIL 22 & 22—LYRIDS METEOR SHOWER

The Lyrids is an average shower, usually producing about 20 meteors per hour at its peak. Meteors will radiate from the constellation Lyra, but can appear anywhere in the sky. However, the nearly full moon may block only but the brightest meteors. *Did you know?* It is produced by dust particles left behind by comet C/1861 G1 Thatcher, which was discovered in 1861.

APRIL 25—FULL MOON

The moon will be directly opposite the Earth from the Sun and will be fully illuminated as seen from Earth. *Did you know?* This full moon was known by early Native American tribes as the Full Pink Moon because it marked the appearance of the moss pink, or wild ground phlox, which is one of the first spring flowers.

APRIL 28—SATURN AT OPPOSITION

The ringed planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. This is the best time to view and photograph Saturn and its moons. A medium-sized or larger telescope will allow you to see Saturn's rings and a few of its brightest moons.

MAY 4&5—ETA AQUARIDS METEOR SHOWER The Eta Aquarids is an above average shower, capable of producing up to 60 meteors per hour at its peak. Most of the activity is seen in the Southern Hemisphere, however in the Northern Hemisphere, the rate can reach about 30 per hour. Meteors will radiate from the constellation Aquarius.

*'EXPLORING LEGENDS'*THE EXPLORERS CLUB

AN EVENING WITH CHARLIE DUKE

ANDREA COSENTINO

Having recently moved to New York City, I was excited to get a call from Paul Sipiera telling me that there was a special event taking place in Manhattan. He had received an invitation from the Explorers Club that Charlie Duke, lunar module pilot for Apollo 16, youngest man to have walked on the moon and long-time PSF member, would be participating in a lecture series titled 'Exploring Legends'. Without hesitation, I quickly searched for the event online and purchased tickets for my boyfriend and I to attend.

The Explorers Club building is located in the Upper East Side neighborhood of NYC and is elegant and full of character from the inside out. Upon entering, I was greeted with a masculine décor and everything you would expect from a "club for explorers" and more. A large, marble globe stood on guard in the front lobby, elephant tusks outlined the fireplace in the sitting room and upon walking up the stairs to get to the presentation room, a mounted Polar Bear stood tall, reminding every guest that this was no ordinary club.

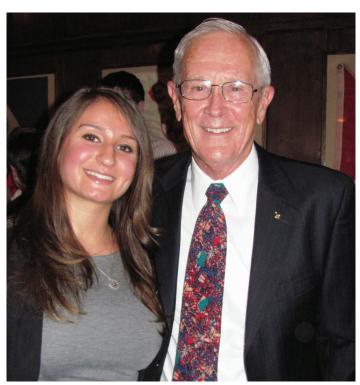
I let Charlie know ahead of time that I was going to be at his event and he couldn't have been more gracious. I was fortunate to have interviewed him in 2008 and one of the questions I asked was, "What is one thing you wish people knew about you?" You would assume most people in his position, with as many accomplishments as he has, would have had an exciting story to boast or hobby most of us would be envious of, but Charlie's response was, "I really enjoy people and interacting with them." He truly is a thoughtful man and is extremely humble.

The entire event was well done. Jim Clash, an adventure journalist and author, interviewed Charlie which was in a unique format because it felt like I was watching a conversation between two friends. Many members may remember when Charlie was the guest speaker at the PSF's 20th Anniversary, he is a presenter who is insightful, funny, well-prepared.

Some of the best moments from the night was when

Charlie showed his own video compilation of his trip to the moon in 1972. One of the stories which was hilarious and showed one of his many "human moments" on the moon was when Charlie and Apollo 16 Commander, John Young were performing experiments outside the lunar module. The TV camera was pointed at the two of them and you can see John diligently working away at his lunar experiment. During the footage of John, you see Charlie walk out of the camera frame and unbeknownst to Charlie, the camera pans right to follow him. As he's moon walking to the next test site, he drops the entire experiment he is carrying, \$10 million worth, and looks up to realize the camera is on him. Charlie said that was easily one of the most embarrassing moments of his trip. Fortunately, the experiment was unharmed but I'm sure his ego was not!

The other story he shared along with footage, was that he and John had decided to participate in their own Lunar



ANDREA COSENTINO AND CHARLIE DUKE IN NYC

Olympics consisting of the high jump and long jump. Due to the fact that they were behind schedule, Mission Control in Houston was insisting that they return to the module, but neither Charlie nor John were willing to leave without competing in one of the sports. So the video starts with John and Charlie bouncing and you see John's attempt to jump, which looks pretty high, then he floats for a couple seconds and comes down. Then you see Charlie's attempt and in true competitive fashion, Charlie jumps as high as he can, straightens up and you can tell his focus is more on his jump and forgets his backpack weighs 150 pounds. As he comes back down, he starts flailing his arms and lands backwards.

Indeed, this makes for a funny story to see grown men bouncing in space suits trying to beat each other's lunar high jump records, but it ultimately was very dangerous and it was the one time he and John experienced fear on the moon. If his backpack broke upon impact with the lunar surface, it was likely that Charlie would have died. Charlie said "Mission Control became exceedingly upset with that maneuver." Plus his wife, Dottie, and his Mom and Dad were all in Mission Control watching the entire situation play out.

As I'm sure you can tell, I found Charlie's stories and experiences to be very entertaining. I highly recommend all of our members take an hour either by yourself, with your family or even with a classroom (for the many teachers who are members) to watch this presentation. We were fortunate enough that when we walked into the presentation room, we saw bright lights and cameras around the room. C-SPAN was there that night to film the entire presentation. I was able to find it on C-SPAN online but inconveniently, it was broken down into 5 minute segments. I did find the full video at this link:

http://wwhttw.c-spanvideo.org/program/310334-1

Along with taking a photo with Charlie, I was able to ask him a couple of quick questions:

YOU ARE VERY OPEN ABOUT YOUR FAITH AND THE IMPORTANCE IT PLAYS IN YOUR LIFE. DO YOU EXPERIENCE ANY CONFLICT BETWEEN YOUR RELIGIOUS BELIEFS AND YOUR EXPERTISE IN SCIENCE?

I have no conflict between my Christian faith and science. I don't believe there is a conflict between religion and

science. When that question is asked, what is really meant is how do you reconcile evolution and creation? It is assumed that most scientists believe in evolution and most Christians believe in creation and that is probably correct. In my view, I don't believe that you can scientifically prove evolution is true nor do I believe you can prove creation is true. So if you can't prove either one, then you are making a faith statement. You are saying I believe in evolution or I believe in creation but I can't prove either one.

IN EARLY 2008, I INTERVIEWED YOU FOR *PSF NEWS* AND ASKED YOU WHERE YOU SAW YOURSELF IN 10 YEARS. YOUR RESPONSE THEN WAS "GOOD HEALTH, STAYING ACTIVE, ENJOYING TIME WITH YOUR GRANDCHILDREN AND ANTICIPATING THE NEXT LANDING ON THE MOON." FIVE YEARS SINCE THAT INTERVIEW, DO YOU STILL LOOK FORWARD TO A FUTURE MOON LANDING, OR IS THERE SOMETHING ELSE YOU WOULD LIKE TO SEE IN SPACE TRAVEL?

I am still pushing for another moon program and I am optimistic about the future of commercial space flight. I still believe many young people are enthusiastic about space exploration.

INTERESTING FACTS ABOUT APOLLO 16

- Launched April 16, 1972
- Landed on Moon April, 21, 1972
- Landing site Descartes
- Moon rocks collected 95.8 kilograms
- Time on Lunar Surface 71 hr. 2 min.
- Mission Duration 265 hr. 51 min. 5 sec.
- First uses of the Moon as an astronomical observatory

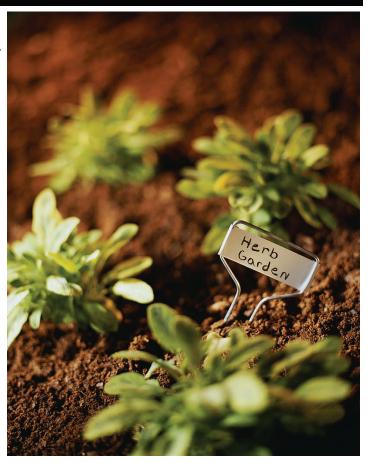
SPRING & SUMMER GARDENING

TIPS AND SECRETS FOR SPRING GARDENERS

ANDREA COSENTINO

The spring season is an exciting time for so many people. Gardeners, both veterans and rookies, eagerly watch the color green spread across their gardens. While some of us have a natural green thumb, others have to work a little bit harder. Whichever category you fit into, here are some tips to help you have a fun and successful growing season!

- 1 A nutrition drink for plants. The next time you boil or steam vegetables, use the leftover water in potted patio plants. Plants will respond well to the "vegetable broth" full of vitamins and nutrients. Just be sure to let the water cool to room temperature before watering your plants.
- Reuse your refuge. Use leftover tea and coffee grounds to acidify the soil of acid-loving plants such as azaleas, rhododendrons, camellias, gardenias and even blueberries. A light sprinkling applied once a month will keep the pH of the soil on the acidic side. Chamomile tea (cooled to room temperature) is also a great solution to warding off bacterial and fungal infections. Also try crushed egg shells to make a great, inexpensive fertilizer. Give them a quick spin in a blender and sprinkle them around your garden to enrich the soil.
- A quick tip for drying herbs. Lay a sheet of newspaper on the seat of your car and arrange the herbs in a single layer, then roll up the windows and close the doors. The herbs will dry out in record time, plus the car will smell great.
- 4 Feed the soil, not the plant. So often, plant lovers find themselves more concerned with the plants than with the soil. A healthy plant depends on healthy roots and healthy roots need a soil rich in organic matter (compost). When the soil is rich in nutrients those benefits will be passed along to the plant.



- Diminish dirty nails. To prevent accumulating dirt under your fingernails while you work in the garden, draw your fingernails across a bar of soap and you'll effectively seal the undersides of your nails so dirt can't collect beneath them. Use a nailbrush to remove the soap and your nails will be nice and clean.
- Add some culture. For less than \$15, you can have humming birds visit your garden for some fresh sugar water. Watch the temperature, the water solution can spoil quickly. Change every two days during hot weather. And don't use soap when cleaning a bird feeder, it can make birds sick.
- **Plant in pairs.** There are many plants that have unexpected allies, for example cucumbers will be sweeter when planted near sunflowers. They require the same soil nutrients and the sunflowers give cucumbers something supportive to climb.

PLANET BEWDIP, CLONAL CHRONOSPHERES, DIMENSIONS OF DAMNATION











SCENES FROM A MULTIVERSE + FEB 20, 2013 + AMULTIVERSE.COM

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5 THINGS YOU MAY NOT KNOW ABOUT EARTH



The Earth's shape is best described as an oblate spheroid. It's like a sphere, but the Earth's rotation causes the equator to bulge out.



Earth actually takes 23 hours, 56 minutes and 4 seconds to rotate on its axis.



You may feel like you're standing still, but you're actually moving — fast. Depending on where you are on the globe, you could be spinning through space at just over 1,000 miles per hour.



The hottest spot on Earth goes to El Azizia, Libya, where temperature records from weather stations hit 136°F (57.8°C) in 1922, according to NASA Earth Observatory.



It may comes as no surprise that the coldest place on Earth is Antarctica. The lowest temperature ever recorded was -128.6 °F (-89.2°C) in 1983, according to USGS.

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SPRING HANNA

SEASON JACKSON

ASTEROID ELIZABETH

STARGAZING MYELLE

METEORITE CAROLINE

DAVE SIPIERA

LAUERMAN CHARLIE

GARDEN DUKE

PHOTOGRAPHY EXPLORERS

EDWARDIAN CLUB

MEMBERSHIP FORM

Regular Membership		\$	20.00	1 year	or \$ 3	5.00	for 2 years				
Family Membership		\$	35.00	1 year	or \$ 6	0.00	for 2 years				
Sponsoring Membership		\$	50.00	1 year	or \$ 9	0.00	for 2 years				
Contributing Membership		\$	100.00	1 year	or \$18	30.00	for 2 years				
Student Membership		\$	10.00	1 year							
Life Membership		\$	500.00								
Please accept this donation		\$									
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Address:						_	Planetary Studies Foundation				
City:						_	Please mail the membership form				
State:	Zip Code:					along with a check to the address below.					
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Our mission is to promote the study of planetary science and astronomy with emphasis on meteorites; and to sponsor, encourage, and assist in the physical, astronomical, earth, environmental and cultural sciences so as to broaden our knowledge of all phases of the universe.

CONTACT US

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General questions, membership inquiries and comments please send to:

amcplanets@gmail.com

PLANETARY STUDIES FOUNDATION ONLINE

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www.planets.org

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Planetary Studies Foundation - and - 1876 Banwarth House & Museum