PAS-Times

The newsletter of the Pontchartrain Astronomy Society
visit us online www.pasnola.org

August 2007
Volume 48, Issue 8

General Meeting
Friday, August 24th, 7:30 PM,
UNO Science Bldg., Room 1001

August Presentation:

The Vega Observatory - The Katrina Experience

See page 6

By: Gary Barabino

PAS Officers for 2007

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President's Message

By: Ron Keating

Long time PAS member Gary Barabino will be our speaker at the August 24th PAS Meeting. Gary has been hooked on astronomy since 1970 when he and friend Melvin Dawson began keeping observing journals. Gary will tell us how he makes his journals and how he restored his flood damaged records after Katrina. Don't miss this exciting story.

Recently the PAS was requested to help with a public stargaze at the Diamond Park Emergency Communities location. About 35-40 people viewed through telescopes set up by PAS volunteers Mike Sandras, Mike & Cindy Rizzo, Errol Winn, and John Cerniglia. The event meant a lot to the numerous residents who lost so much to Hurricanes Katrina and Rita. Everyone had a pleasant evening and the sky was great. Thanks to South Shore Outreach Coordinator John Cerniglia for organizing the activity and thanks especially to the PAS Members who volunteered their time to help with the event. John Cerniglia also serves as Kenner Manager and he has had several instances where people wanted to find out when they could look through the telescope, but they could not get any information from the planetarium. In an effort to make this information easier for the public to obtain, we have changed the link on the PAS web site so that clicking on Kenner Observatory will take you to a message with the information.

Do you want to get to know other PAS Members better? If so try attending an Observer's Group Meeting. We have meetings on both the north shore and south shore making it easier for members to attend. Unlike the PAS General Meeting, the Observer's Group Meetings are very informal and usually have an attendance of about a dozen people. This gives everyone a chance to get to know each other, seek help and advice, and socialize. It's a lot of fun so you should really try to attend one.

I am writing this after getting home from a delightful night at our dark sky site, LPMOS. It was the night before the peak of the Perseid Meteor Shower and we witnessed quite a few spectacular meteors in the early morning hours. It was also a fantastic night for the telescopes due to the dry weather we've had lately. The Milky Way shone overhead while the many splendid deep sky objects embedded within revealed their full glory. Bright Jupiter shone in the south and in the early morning Mars appeared. Mars will be rising earlier each night and steadily increasing in size until it reaches its closest approach to the Earth in December. Visit the PAS Message Board where you'll see some of the very nice sketches that Bruce Housey has been doing. Also on the subject of Mars, those hoax e-mails are going around again, the ones that proclaim Mars will come so close to the Earth that it will compete in size with the full moon. Get ready, soon all of your friends will be asking you about it. Tell them it will be as big as the full moon, but only in a telescope, and they can visit the Kenner Observatory if they'd like to see it.

Thank you,
Ron Keating
President, Pontchartrain Astronomy Society
president@pasnola.org

September PAS-Times Deadline

Sunday, September 16th

Please submit all things astronomical to be included in the next edition of PAS-Times to the editor @ the following address:

2vpresident@pasnola.org

On the Cover

On August 29, 2005, Hurricane Katrina, a large category three storm, hit the metro New Orleans area, packing 125 mile an hour winds. As the storm moved inland, there were several major levee breeches throughout the New Orleans area, the largest of which occurred on the Surekote levee (Industrial Canal). The breech allowed a 12 foot storm surge unfettered access into the Lower Ninth Ward where PAS member Gary Barabino's house and Vega Observatory was located (inside the circle).

Gary Barabino will be giving this month's main presentation. See page 6 for more details.

Secretary's Report

By: Remy Bosio

General Meeting notes of the Pontchartrain Astronomy Society, Inc. for July,27,2007.

There were 49 members and guests in attendance.

President Ron Keating opened the meeting by welcoming all present and asking that cell phones be turned off or set on vibrate.

Raffle Czar, Mike Sandras displayed the evening's raffle prizes, one of which was a Celestron eyepiece case with eyepieces and a flashlight.

Some winners were: Teresa Keating-eyepiece case, Mike Danielson-DVD, Ralph Junius-book, Randal Schexnayder-book, Barry Simon-book, Lowell McCormick-audio CD.

Kenner Observatory/Outreach Report: John Cerniglia, Kenner Obs Man. and South Shore Outreach Person, mentioned that the Kenner Observatory is functioning AOK and volunteer operators are needed. The FEMA trailer city stargaze in Diamond, LA. was a complete success and John thanked those who participated.

John Cerniglia mentioned the tragic accident that occured at the Space Ship One test site killing 3 personnel. He asked that we keep them in our thoughts.

Ron Keating mentioned that the Perseid Meteor Shower is fast approaching during August 11-12,07.

South Shore Observer's Group Meeting is scheduled for August 1,2007.

North Shore Observer's Group Meeting is Scheduled for August 15,2007.

Lowell McCormick mentioned that the PAS TImes newsletter is going great and asked that when submitting photos or graphic data, please give a narative describing same.

LPMOS: The recent LPMOS work party did a great job of tree trimming allowing better travel down the access road. Thanks was given to manager Walter Sarrat and the volunteer road crew.

Barry Simon mentioned that the Deep South Regional Star Gaze is just around the corner and this years event will be special as it is the 25th. anniversary! It will run through November 6-11,07.

Ron Keating congratulated Barry for his 25 years as founder and managing director of the DSRSG.

MAIN PRESENTATION: This evening's lecture featured Donna Young the educational director for Chandra Observatory. Donna gave a spirited and enlightening talk on the workings of this unique orbiting observatory titled "Chandra's X-Ray Vision And Backyard Astronomy". She also brought everyone up to date on the goings on at the AAVSO. Donna conducted a Chandra teachers workshop this week here in New Orleans.

With no further business for the good of the society, Ron Keating adjourned the meeting at 9:45PM.

Remy Bosio

Reader Feedback

We have received a couple of complimentary emails about last month's issue of PAS-Times. Since they were from very esteemed individuals, we've decided to share them with the rest of the club. From Nancy J. Leon (Space Place/JPL/NASA) comes this:

You have such a nice newsletter! We are proud to be a small part it!

Best,

Nancy

And from long time member Don Clement comes:

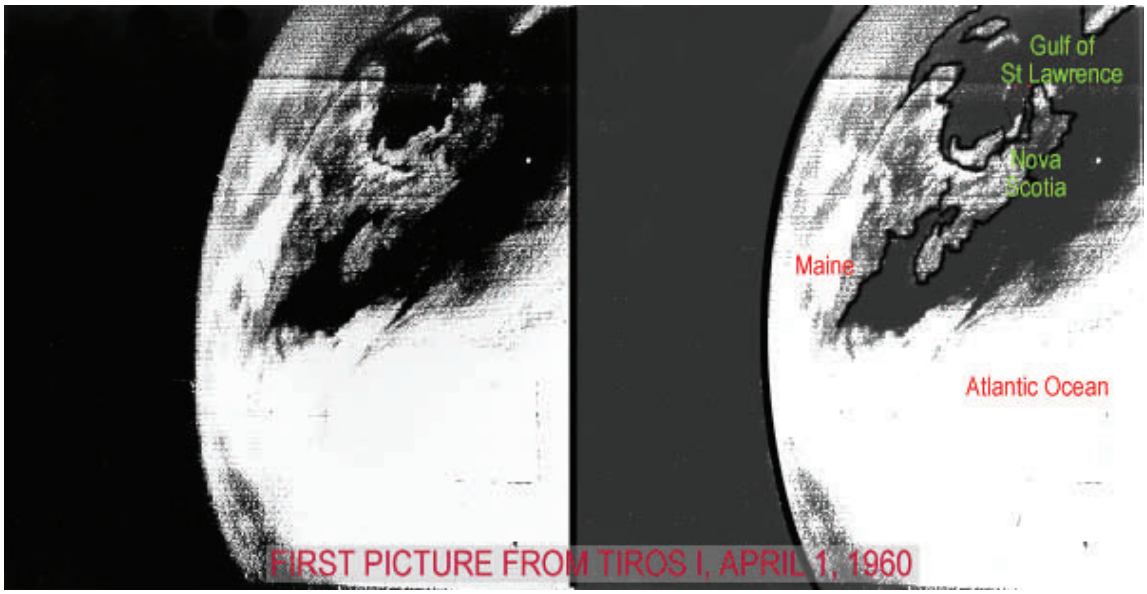
This is one of the best issues of PAS-times…keep up the good work, and thanks for the e-mail.

Don Clement

Editors note:
A wonderful framed set of Don's solar eclipse photos hang on the kitchen wall at Manufab, Inc. on Third Street in Kenner, my place of employment. I use them to explain solar eclipses to anyone interested enough to be curious about the photos.

Don and my boss are long time friends. I have been getting to visit with Don once or twice a year at a classical music series that the boss sponsors at the Main Branch of the Jefferson Parish Library. Don is as sharp as a tack and has the twinkle of a teenager in his eyes. I will publish the time and date of the next free concert for those that are interested whenever it is announced.

TIROS
The First Meteorological Satellite



The first image taken from TIROS I on April 1, 1960. When stations on Earth received data from TIROS, technicians recorded it on 35 millimeter film for making prints and large projections of the image. Forecasters dreams of watching weather from space had finally come true.

For many years, weather prognosticators dreamed of observing weather systems from afar so they could view and predict storms moving over the surface of the earth. As early as 1939 George Mindling, a visionary and poetic Weather Bureau official, predicted:

Television is coming, it is not far away;
We'll be using that too in a not distant day.

Photographs will be made by the infra red light
That will show us the clouds both by day and by night.

From an altitude high in the clear stratosphere
Will come pictures of storms raging far if not near

Revealing in detail across many States
The conditions of weather affecting our fates....

In the coming perpetual visiontone show
We shall see the full action of storms as they go.

We shall watch them develop on far away seas,
And we'll plot out their courses with much greater ease.

During the 1950s weather scientists gave serious thought to capturing images of meteorological phenomena from satellites launched into space by powerful rockets. Dr. Harry Wexler, chief scientist of the Weather Bureau during that period, strongly advocated meteorological satellites. In March 1958, the President's Science Advisory Committee stated "The satellite that will turn its attention downward holds great promise for meteorology and the eventual improvement of weather forecasting." Two months later, Project TIROS (Television and Infra-Red Observation Satellite) was born when the U.S. Committee on Meteorological Satellites began its initial planning sessions.

Not quite two years later, George Mindling's vision came true when NASA launched the world's first meteorological satellite, TIROS I, on April 1, 1960, aboard a aboard a Thor-Able rocket. This ushered in a new era of weather observations from space and an era when human beings could see their planet from above and better comprehend its beauty and fragility.
TIROS I demonstrated the ability to acquire images of the Earth's cloud cover over much of the planet. The spacecraft contained two compact television cameras (one wide angle and one narrow angle), two video recorders, a command and control electronics system, a communication system, solid rockets for spin control, power supply with rechargeable batteries, and a cylindrical solar array. It weighed 122kg (268 pounds), was 1.1 meter (43 inches) in diameter, and stood 0.6 (23 inches) meter high, not including antennas on the top and bottom of the spacecraft.
The satellite survived 1,302 orbits before it ceased operating in mid-June 1960 due to an electrical failure. It generated nearly 23,000 pictures of the Earth. During its 78-day lifespan TIROS I cameras captured a tropical storm, the cloud system of a large extra-tropical cyclone in the Gulf of Alaska, and pack ice conditions in the Gulf of St. Lawrence. Although the television technology and techniques for processing the images sent back to Earth were crude by today's standards, the launch of TIROS I not only led the way to new understandings in meteorology, but also broadened humanity's view of our Earth, its natural wonders, and its place in the universe.

All info and photos from NOAA's website. It's NOAA's 200th birthday.
http://celebrating200years.noaa.gov/events/tiros/welcome.html#early
For NOAA's beginnings go here:
http://celebrating200years.noaa.gov/about.html

Queen Guitarist to Complete Doctorate

Jul 25, 7:05 PM EST
The Associated Press

LONDON -- Brian May is completing his doctorate in astrophysics, more than 30 years after he abandoned his studies to form the rock group Queen.

The 60-year-old guitarist and songwriter said he plans to submit his thesis, "Radial Velocities in the Zodiacal Dust Cloud," to supervisors at Imperial College London within the next two weeks.

May was an astrophysics student at Imperial College when Queen, which included Freddie Mercury and Roger Taylor, was formed in 1970. He dropped his doctorate as the glam rock band became successful.

Queen were one of Britain's biggest music groups in the 1970s, with hits including "Bohemian Rhapsody" and "We Will Rock You."

After Mercury's death in 1991, May recorded several solo albums, including 1998's "Another World." But his interest in astronomy continued, and he co-wrote "Bang! The Complete History of the Universe," which was published last year.

He was due to finish carrying out astronomical observations at an observatory on the island of La Palma, in Spain's Canary Islands, on Tuesday, the observatory said.

May told the British Broadcasting Corp. that he had always wanted to complete his degree.

"It was unfinished business," he said. "I didn't want an honorary Ph.D. I wanted the real thing that I worked for."

Brian May, top center, with his Queen bandmates. Visit Brian's website at http://www.brianmay.com/. Brian also has a site called Brian's Soapbox where he answers questions and writes about music and astronomy. The site is at http://www.brianmay.com/brian/brianssb/brianssb.html.

Small Distances II

Quotes and facts from the book
"The New Science of Strong Materials"
Or
Why You Don't Fall Through the Floor
by J.E. Gordon

One Angstrom Unit is 1/10,000 of a micron. That would be one ten billionth of a meter.

One Nanometer = 10 Angstrom Units or one billionth of a meter.

These are favorite units with electron microscopists and they are the units used for measuring atoms and molecules. The newer electron microscopes can see - as rather wooly blobs - particles about five angstroms across, that is about a thousands times smaller that the best optical microscopes can achieve.

Atoms are what all matter is made of. Atoms themselves consist of a very small and heavy nucleus surrounded by a large or small cloud of planetary electrons which are waves, particles or negative charges of electricity and are very small indeed, The whole affair varies a good deal in weight and size according to the kind of atom but may be thought of as a hard by fuzzy ball very roughly two Angstroms in diameter. This is inconceivably small by ordinary standards and is quite impossible that we should ever see individual atoms by ordinary visible light - though obviously we see them in the mass when we look at any solid.

It may be worth emphasizing that the smallest particle one can see with the naked eye is about 500,000 atoms across and the smallest particle one can see with the optical microscope is about 2,000 atoms across. With the electron microscope one can see arrays of atoms in crystals, like soldiers on parade, quite easily and with a device called the field emission microscope one can see individual atoms - at least one can see that there is something which looks like a sheep in a fog on a dark evening. However, if the microscope resolution were much better, as it may perhaps become, this merely raises the rather metaphysical question of what one would expect to "see" anyway, Nothing very concrete surely?

ASTRO – PUZ

Unscramble the four astronomy-related words, then use the indicated letters to solve the astronomy-related clue.

Clue: Misnomer for a Bubbled Star

FWARD

LECCY

ANGOLO

OTHONP

Answer: _____

Answers on next page

By Henry Bertrand

LPMOS Grass Cutting Schedule

Date	Crew
Sept. 1	JC Ciolino Walter Sarrat Al Blancher
Sept. 15	Jack Huerkamp Leonard Middle-brooks
Sept. 29	Ron Marcella Sid Gelpi Walter Sarrat

END OF THE SEASON WOO HOO!!!

Bring on Orion and the cool weather. I'm tired of sweating and swatin' skeeters while observing.

Thanks to all the volunteers who contribute to keeping the site functioning. A special thanks to site manager Walter Sarrat, LPMOS's "Daddy", and his unofficial assistant Bill Price for all the unheralded things they do.

Moon On a Hook

Photo from the photo website http://www.pizdaus.com/

The photo has no attribution. If anyone knows who the photographer is, please let us know. Here is a link to the photo:

http://www.pizdaus.com/pics/6pePXJPxUzhZ.jpg

August Meeting Presentation

By: Ralph Junius

The August 24th PAS Meeting will feature a presentation by PAS' Gary Barabino. Gary's interest in astronomy dates to August 16, 1970 when he observed a partial lunar eclipse with his friend, Melvin Dawson, in the Desire Housing Project with a 60mm Selsi Variable Power Telescope and a 4" Selsi Newtonian Star Gazer. Gary and long time friend Melvin began keeping annual observing journals in 1970 and had compiled 34 volumes when Katrina hit. Gary will present a synopsis of the events that led to the demise and then resurrection of his 37 year old Vega Observatory. Gary's house was only three blocks from the levee breach and is one of only two houses that were not washed completely away. Gary had double bagged the journals and stored them in the attic, but two months after the storm when he was allowed back, he found them waterlogged and badly damaged. He lost everything in his house including many telescopes. Gary has restored some of the Journals and will bring a few to the meeting to show entries and explain how he goes about making them. The entries include many drawings, photographs and written descriptions of the Sun, Moon, Planets and deep sky objects. His observatory includes a dedicated solar telescope. He intends to bring a recently acquired Classic scope for a "Show and Tell" and for observing after the meeting. This presentation promises to be a real treat for anyone interested in astronomical observations, which should include just about the whole club.

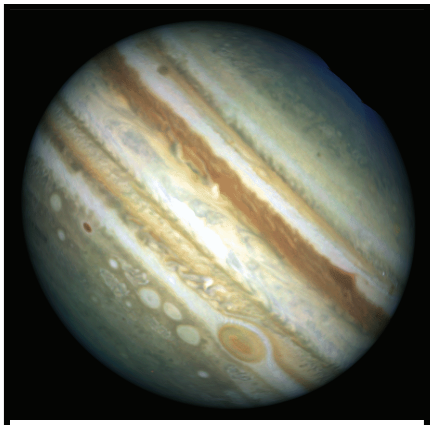


Photo credit: NASA

Planet Watch

times shown for New Moon

Mars rises at 12:07am
Venus rises at 4:28am
Mercury optimum at 7:18pm
Jupiter transits at 6:27pm
Pluto transits at 7:31pm
Neptune transits at 11:15pm
Uranus transits at 12:57am

NEW MEMBERS

During the past month one new member has been added to the PAS roster. Please welcome:

Joe Breault

PAS memberships as of August 13th. 2007 total 139.

New members are encouraged to contact any of the PAS Officers or Committee Members listed in the newsletter if they have any questions about the club or getting started in astronomy .

2007 meeting dates

August 24
September 28
October 26
November 16
December 14th (tentative)

The PAS is a proud member of these organizations:

Moon Phase

1st Quarter - August 20th

Full Moon - August 27th

3rd quarter - Sept. 3rd

New Moon - Sept. 10th

1st Quarter - Sept. 18th

Astro-Puz Solutions

DWARF
CYCLE
LAGOON
PHOTON
PLANETARY

2008 Deep Space Mysteries Wall Calendar Order Form

Order Deadline: September 28, 2007

No. of Calendars	Cost per Calendar	Total cost: No. Cal. X $7.00
	$7.00	

Name:

Make checks payable to the PAS.

You may mail your payment to:
PAS Treasurer
16082 Lake Ramsey Road
Covington, LA. 70435-5548

Upcoming Events

Southshore Observers Group Meeting - Wednesday, September 5th, UNO Jeff Center, 3330 N. Causeway Blvd., Metairie, La., 7:30 PM to 10:00 PM

Northshore Observers Group Meeting - Wednesday, September 19th, PJs' Coffee Shop, Slidell, La., 7:30 PM to 9:00 PM

2007 Star Parties

Okie-Tex - October 6th - 14th; Camp Billy Bob, Kenton, Ok.

Deep South Regional Star Gaze - November 6th - 11th; near Norwood, La. Dark skies combined with it's close location make it a favorite for many PAS members along with members of other astronomy clubs in the Southeast region .

LPMOS Dark Sky Weekends

Times shown indicate the time of complete darkness

Near New Moon
Friday, September 7th - 8:42pm to 3:54am
Saturday, September 8th - 8:41pm to 4:55am

Near First Quarter Moon
Friday, September 14th - 8:40pm to 5:28am
Saturday, September 15th - 9:11pm to 5:29am

If the skies are clear on the weekends listed above, it is very likely that a group of regulars will be at the site. Come join us for an enjoyable night under the stars. Check the PAS message board in the Forums section of the PAS website to help plan your LPMOS dark sky weekend. See the Members Only section of the website for directions to LPMOS and lighting restrictions for the site (no white lights after dark). See you there.

Extra

This newsletter continues online with bonus material and feature rich content (hyperlinks).

Cosmic Cockroaches

By Dr. Tony Phillips

Cockroaches are supposed to be tough, able to survive anything from a good stomping to a nuclear blast. But roaches are wimps compared to a little molecule that has recently caught the eye of biologists and astronomers—the polycyclic aromatic hydrocarbon.

Polycyclic aromatic hydrocarbons (PAHs for short) are ring-shaped molecules made of carbon and hydrogen. "They're all around us," says Achim Tappe of the Harvard Center for Astrophysics. "PAHs are present in mineral oils, coal, tar, tobacco smoke and automobile exhaust." Aromatic, ring-shaped molecules structurally akin to PAHs are found in DNA itself!

That's why Tappe's recent discovery may be so important. "PAHs are so tough, they can survive a supernova."

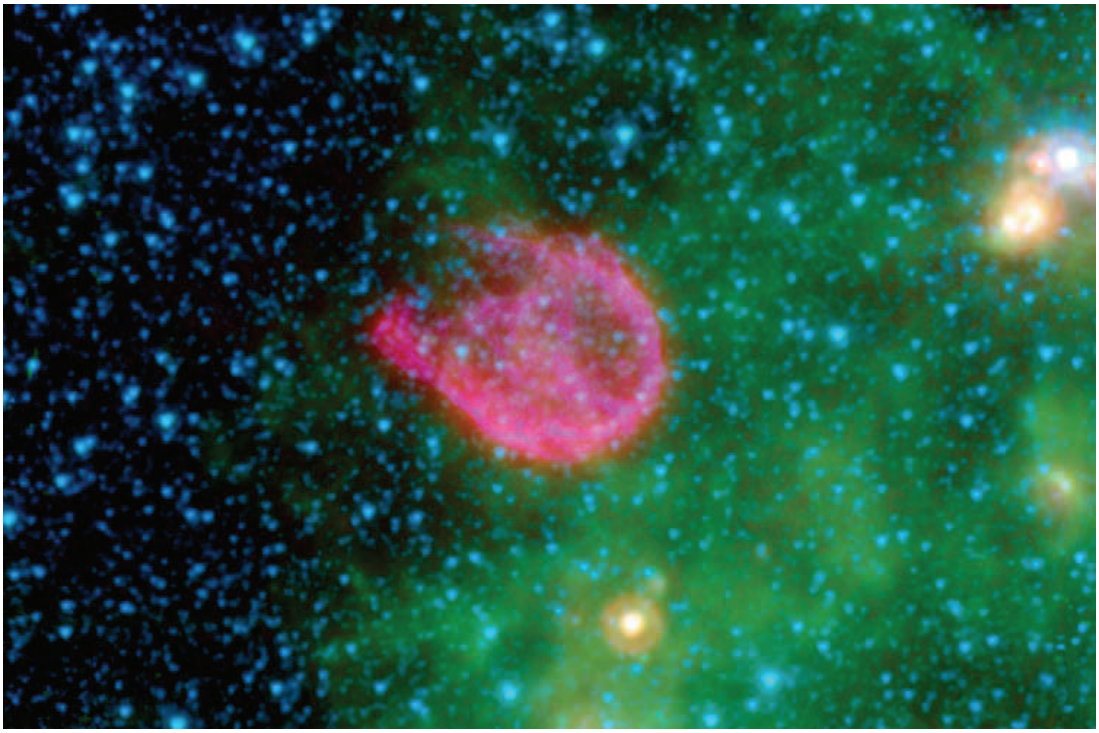
The story begins a few thousand years ago when a massive star in the Large Magellanic Cloud exploded, blasting nearby star systems and interstellar clouds with hot gas and deadly radiation. The expanding shell, still visible from Earth after all these years and catalogued by astronomers as "N132D," spans 80 light years and has swept up some 600 Suns worth of mass.

Last year "we observed N132D using NASA's Spitzer Space Telescope," says Tappe. Spitzer is an infrared (IR) telescope, and it has a spectrometer onboard sensitive to the IR emissions of PAHs. One look at N132D revealed "PAHs all around the supernova's expanding shell. They appear to be swept up by a shock wave of 8 million degree gas. This is causing some damage to the molecules, but many of the PAHs are surviving."

Astronomers have long known that PAHs are abundant not only on Earth but throughout the cosmos—they've been found in comet dust, meteorites and many cold interstellar clouds—but who knew they were so tough? "This is our first evidence that PAHs can withstand a supernova blast," he says.

Their ability to survive may be key to life on Earth. Many astronomers are convinced that a supernova exploded in our corner of the galaxy 4-to-5 billion years ago just as the solar system was coalescing from primitive interstellar gas. In one scenario of life's origins, PAHs survived and made their way to our planet. It turns out that stacks of PAHs can form in water—think, primordial seas—and provide a scaffold for nucleic acids with architectural properties akin to RNA and DNA. PAHs may be just tough enough for genesis.

Cockroaches, eat your hearts out.



Using the IR spectrometer on the Spitzer Space Telescope, scientists found organic molecules in supernova remnant N132D

Find out about other Spitzer discoveries at www.spitzer.caltech.edu.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

A Blast From the PASt

Originally printed in the September 1979 PAStimes
Contributed by Jamie Wallis

I was thinking for this month I would show the first time the pas newsletter had a logo. Looking at the first few years of newsletters this is the first with the old PAS logo. Also, this pages talks about Gary doing a talk for the PAS. With Gary speaking this month I thought it would be good to show everyone how long he has been a part of the club. - Jamie

Pontchartrain ASTRONOMY SOCIETY

September, 1979

PAStimes. . .

the newsletter of the Pontchartrain Astronomy Society

Dear Members:

Our regular meeting will be held on September 21 at the Dominican College Planetarium. It will begin at 8 P.M.

This month long time member Archie Estopinol will present us with "Astronomical Pronouncements-Part II. "This should be a very educational lecture. Also, Gary Barabino will share with us some of his latest findings and observations of our closest star. If time permits, Gary Meibaum and o others will show a few slides of the September 6 total eclipse of the moon. Many viewers had clear skies and secured fine photographs.

Since our secretary, John Johnson, will be out of town on the day of the meeting, I will fill in for the "object of the month."

I would like to remind you that October is prime time for observing due to its dry, clear air and moderate temperatures. Please consider some possible dates for private and public star-gazes so they may be discussed at the meeting.

I hope to see everyone in attendance.

Sincerely,

John J. Martinez

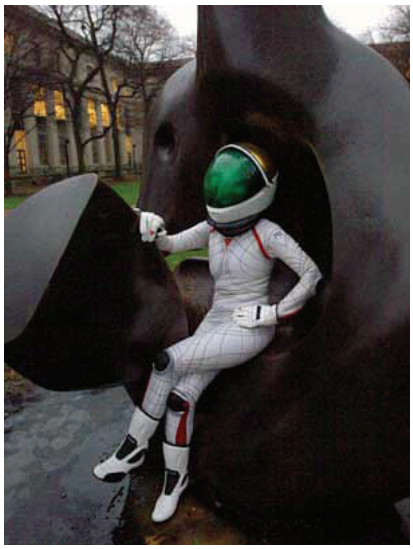
John J. Martinez
President

Web Wanderings

wasting time on the internet so you don't have to

Take the elevator to outer space.

Rubber duck and ocean currents



Fashionable space suits

A day in the life of a solid rocket booster
Camera on the SRBs show ignition, take off, in flight, seperation, free fall, parachute and splash down from multiple angles on each of the SRBs. We've all seen the seperation from 140 miles away, now see it close up. Alas these cams have no audio. Some amazing sequences...
From STS-117 on 6/13/07.

It's raining space junk
An awesome video of space debris breaking up in the atmosphere LIVE during Good Day Colorado around 6:15 a.m. Thursday, January 4, 2007. SkyFOX pilot Rob Marshall and photojournalist Josh White captured the event at about 6:15 a.m. Mountain Standard Time while they were flying over Denver.

More scary news about space junk

Croatian meteorite
Multiple video clips of a meteorite on a Croatian newscast. I'll bet Don knows what they're saying.

Incredible RC helicopter video

Starship Enterprise
How private investment has launched a new space race.

It Came From Outer Space
"Did life begin in space? New evidence from comets"

Digitized Apollo flight films

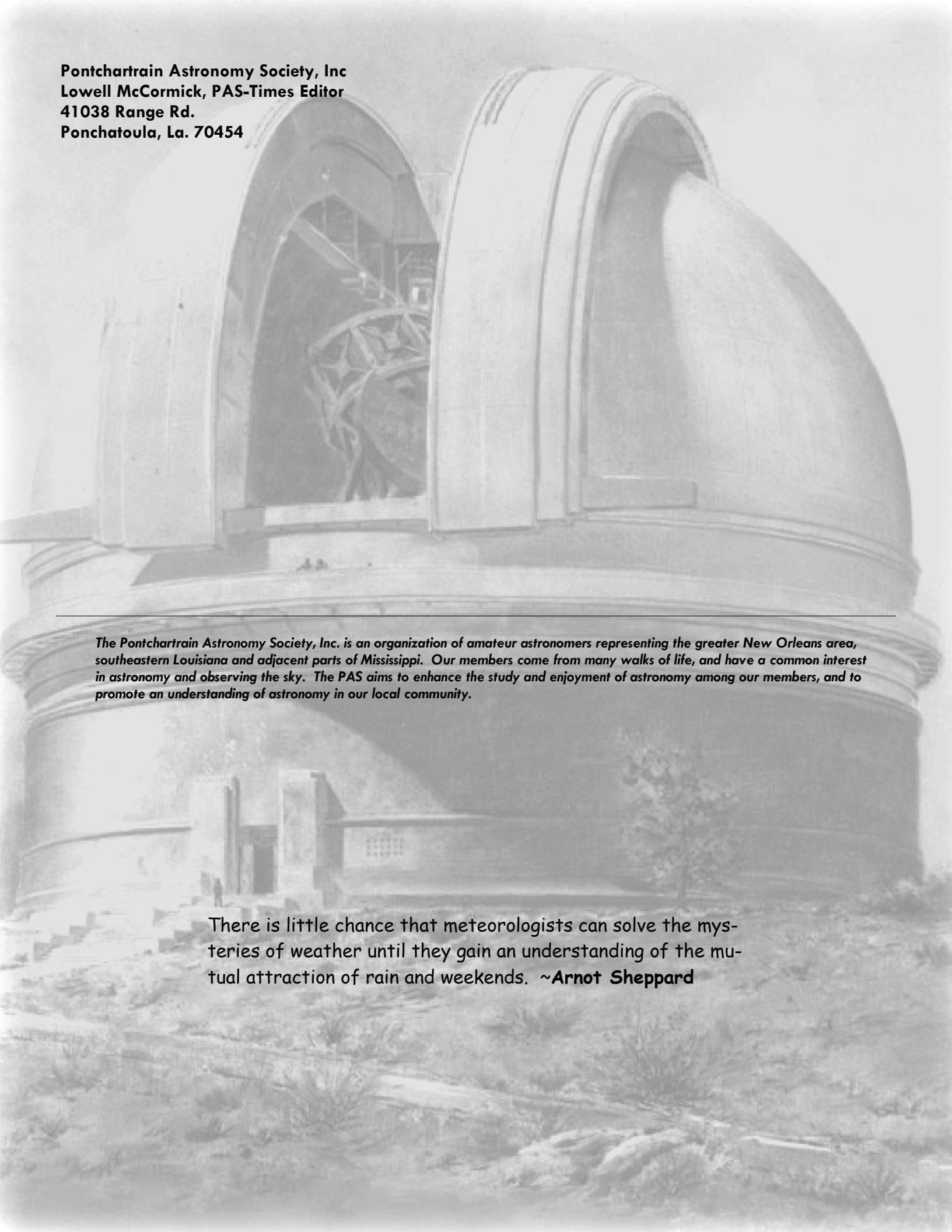
Plan your space vacation
More space vacation plans
Even sooner than they thought - Just watch out for that space junk.

"We have broken the speed of light."
A pair of German physicists claim to have broken the speed of light - an achievement that would undermine our entire understanding of space and time.

UCF physicist says Hollywood movies hurt students' understanding of science
Movies such as Spiderman 2 and Speed generate excitement among audiences with their cool special effects. But they also defy the laws of physics, contributing to students' ignorance about science. Duh!

Hey Barry, how about these binoculars as a prize at the next DSRSG?

Pontchartrain Astronomy Society, Inc
Lowell McCormick, PAS-Times Editor
41038 Range Rd.
Ponchatoula, La. 70454



The Pontchartrain Astronomy Society, Inc. is an organization of amateur astronomers representing the greater New Orleans area, southeastern Louisiana and adjacent parts of Mississippi. Our members come from many walks of life, and have a common interest in astronomy and observing the sky. The PAS aims to enhance the study and enjoyment of astronomy among our members, and to promote an understanding of astronomy in our local community.

There is little chance that meteorologists can solve the mysteries of weather until they gain an understanding of the mutual attraction of rain and weekends. **~Arnot Sheppard**