

AMATEUR ASTRONOMICAL SOCIETY OF RHODE ISLAND * 47 PEEPTOAD ROAD * NORTH SCITUATE, RHODE ISLAND 02857 * WWW.THESKYSCRAPERS.ORG

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Skyscrapers Board Meetings Third Monday of the Month All Members Welcome

Phases of the Moon

Full Corn Moon September 6 07:03

Last Quarter Moon September 13 06:25

New Moon September 20 05:30

First Quarter Moon September 28 02:54

Friday, September 8 at Seagrave Observatory

Special Report: Eclipse Day at Seagrave Observatory

In addition, anyone interested in presenting at this meeting must contact Ian Dell'Antonio (ian_dellantonio@brown. edu) by Wednesday, September 6th by email. Please include your name, where you viewed the eclipse and any other information you wish. Last minute presentations may not be possible, so please plan ahead. Our guidelines for the 10 minute presentations will be emailed to you if you show interest.

If you would like to bring some snacks, please contact Kathy Siok (kathys5@cox. net) by Wednesday September 6th. Water and coffee will be provided.





Seagrave Memorial Observatory Open Nights

Saturdays st 8:00 pm weather permitting

Astronomy Nights at River Bend Farm

Joshua Bell is one of the rangers at Blackstone River Valley National Historical Park and contacted us suggesting that Skyscrapers might be interested in attending the upcoming Night Sky Programs to be held at River Bend Farm.

The park has partnered with local Civil Air Patrol Squadrons to run the program. They'll be explaining basic stuff to visitors like how telescopes work and what it is that they'll be looking at. They'll have some beginner telescopes, but folks should feel free to bring their own. The following dates are scheduled: June 16 – 9:00-10:00pm • July 14 – 9:00-10:00pm • August 11 – 8:30-9:30pm • September 15 - 7:30-8:30pm • October 20 - 6:30-7:30pm If we have poor weather an email will be sent out that day to let you know that the program has been postponed until the next evening (Saturday). If both days give us bad weather, we'll just have to wait until the following month.

Please don't hesitate to contact Josh with any questions at joshua bell@nps.gov



Welcome the Season of Autumn with Cosmic Colors at the University of Rhode Island Planetarium

University of Rhode Island Planetarium Upper College Road

Kingston, RI

Saturday, September 9th, 2017, 6:00 P.M. Contact: Francine Jackson: 401-527-5558

As the new season of fall begins, thoughts turn to the beautiful colors all around us. But, how are we able to view these varied colors? What causes them? Cosmic Colors, an introduction to the way we see and feel, by means of the electromagnetic spectrum, will take you back to the days of Sir Isaac Newton, to the surface of Mars, and every place in between, to show you the origins and importance of such everyday phenomena as X rays, microwaves and infrared waves, and their relation to the colors we love so much.

Cosmic Colors, a planetarium program for audiences of all ages, will be shown at the URI Planetarium, Upper College Road, on the URI campus, at 6:00 P.M. Admission, to benefit the URI Planetarium Memorial fund, is \$5.00. Cosmic Colors will be preceded by a 6-minute award-winning presentation on light pollution, Losing the Dark, and will be followed by a live segment showing the Skies above the URI campus.

Come and see the beauty of color! The University of Rhode Island Plane-



The Skyscraper is published monthly by Skyscrapers, Inc. Meetings are held monthly, usually on the first or second Friday or Saturday of the month. Seagrave Memorial Observatory is open every Saturday night, weather permitting.

Directions

Directions to Seagrave Memorial Observatory are located on the back page of this newsletter.

Submissions

Submissions to The Skyscraper are always welcome. Please submit items for the newsletter no later than **September 15** to Jim Hendrickson, 1 Sunflower Circle, North Providence, RI 02911 or e-mail to jim@ distantgalaxy.com.

E-mail subscriptions

To receive The Skyscraper by e-mail, send e-mail with your name and address to jim@distantgalaxy. com. Note that you will no longer receive the newsletter by postal mail.

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The Sun, Moon & Planets in August

This table contains the ephemeris of the objects in the Solar System for each Saturday night in September 2017. All times are in Eastern Daylight (UTC-4). Ephemeris times are for Seagrave Observatory (41.845N, 71.590W).

Object	Date	RA	Dec	Const	Mag	Size	Elong	Phase(%)	Dist(S)	Dist(E)	Rise	Transit	Set
Sun	2	10 45.1	7 55.2	Leo	-26.8	1902.2	0° W	-	-	-	06:13	12:45	19:17
	9	11 10.3	5 19.3	Leo	-26.8	1905.5	0° W	-	-	-	06:20	12:43	19:06
	16	11 35.5	2 38.9	Leo	-26.8	1908.9	0° W	-	-	-	06:27	12:41	18:53
	23	12 00.6	-0 03.9	Vir	-26.8	1912.5	0° W	-	-	-	06:34	12:38	18:41
	30	12 25.8	-2 47.4	Vir	-26.8	1916.4	0° W	-	-	-	06:42	12:36	18:29
Moon	2	19 24.9	-19 48.4	Sgr	-12.3	1804.5	130° E	82	-	-	17:14	22:16	03:22
	9	1 25.2	3 18.5	Psc	-12.6	1906.9	146° W	91	-	-	20:42	03:10	09:46
	16	8 03.1	17 19.0	Cnc	-11	1917.4	54° W	21	-	-	02:18	09:40	16:57
	23	14 08.3	-8 41.1	Vir	-9.9	1822.2	33° E	8	-	-	09:52	15:25	20:51
	30	19 57.1	-19 13.1	Sgr	-12.1	1810.2	111° E	68	-	-	15:50	20:56	02:06
Mercury	2	10 01.7	9 12.8	Leo	2.4	9.8	11° W	8	0.35	0.69	05:23	11:59	18:36
-	9	10 05.1	11 13.4	Leo	0.3	8.0	17° W	31	0.32	0.84	04:53	11:37	18:21
	16	10 33.2	10 17.3	Leo	-0.7	6.5	17° W	63	0.31	1.04	04:59	11:40	18:19
	23	11 16.1	6 40.7	Leo	-1.1	5.6	13° W	86	0.32	1.21	05:29	11:56	18:21
	30	12 02.6	1 38.4	Vir	-1.3	5.1	7° W	97	0.36	1.33	06:06	12:15	18:22
Venus	2	8 42.4	18 21.1	Cnc	-3.9	12.5	32° W	84	0.72	1.35	03:31	10:44	17:55
	9	9 16.7	16 18.7	Cnc	-3.9	12.2	30° W	86	0.72	1.39	03:46	10:50	17:53
	16	9 50.4	13 53.5	Leo	-3.8	11.9	28° W	87	0.72	1.42	04:02	10:56	17:50
	23	10 23.6	11 08.8	Leo	-3.8	11.6	27° W	89	0.72	1.46	04:18	11:02	17:44
	30	10 56.2	8 08.2	Leo	-3.8	11.4	25° W	91	0.72	1.49	04:35	11:07	17:38
Mars	2	10 01.7	13 18.9	Leo	1.8	3.6	12° W	100	1.66	2.63	05:10	12:01	18:52
	9	10 18.8	11 45.0	Leo	1.8	3.6	14° W	99	1.66	2.62	05:05	11:51	18:36
	16	10 35.6	10 07.8	Leo	1.8	3.6	17° W	99	1.66	2.60	05:01	11:40	18:19
	23	10 52.3	8 27.7	Leo	1.8	3.6	19° W	99	1.66	2.58	04:56	11:29	18:01
	30	11 08.8	6 45.4	Leo	1.8	3.7	21° W	99	1.67	2.56	04:51	11:18	17:44
1 Ceres	2	7 36.0	23 53.3	Gem	8.9	0.4	48° W	98	2.64	3.21	01:59	09:35	17:11
	9	7 47.7	23 43.2	Gem	8.9	0.4	52° W	98	2.64	3.14	01:44	09:19	16:55
	16	7 59.2	23 31.8	Gem	8.9	0.4	56° W	97	2.63	3.06	01:29	09:03	16:38
	23	8 10.3	23 19.7	Cnc	8.8	0.4	61° W	97	2.63	2.97	01:13	08:47	16:20
	30	8 21.0	23 07.4	Cnc	8.8	0.4	65° W	97	2.63	2.89	00:57	08:30	16:03
Jupiter	2	13 23.7	-7 37.3	Vir	-1.6	32.0	42° E	100	5.45	6.15	09:47	15:22	20:56
	9	13 28.6	-8 07.6	Vir	-1.6	31.6	37° E	100	5.45	6.22	09:26	14:59	20:32
	16	13 33.8	-8 38.6	Vir	-1.6	31.3	32° E	100	5.45	6.28	09:06	14:37	20:07
	23	13 39.1	-9 10.1	Vir	-1.5	31.1	26° E	100	5.45	6.33	08:45	14:14	19:43
	30	13 44.6	-9 42.1	Vir	-1.5	30.9	21° E	100	5.44	6.37	08:25	13:52	19:19
Saturn	2	17 22.1	-21 59.6	Oph	0.4	16.9	101° E	100	10.06	9.81	14:41	19:19	23:57
	9	17 22.7	-22 01.4	Oph	0.5	16.7	95° E	100	10.06	9.93	14:14	18:52	23:30
	16	17 23.5	-22 03.4	Oph	0.5	16.5	88° E	100	10.06	10.04	13:48	18:25	23:03
	23	17 24.7	-22 05.7	Oph	0.5	16.3	82° E	100	10.06	10.16	13:22	17:59	22:36
	30	17 26.2	-22 08.1	Oph	0.5	16.1	75° E	100	10.06	10.27	12:56	17:33	22:10
Uranus	2	1 45.6	10 16.1	Psc	5.7	3.7	132° W	100	19.92	19.23	21:05	03:45	10:24
	9	1 44.9	10 12.2	Psc	5.7	3.7	139° W	100	19.91	19.15	20:38	03:17	09:56
	16	1 44.1	10 07.7	Psc	5.7	3.7	146° W	100	19.91	19.08	20:09	02:48	09:27
	23	1 43.2	10 02.6	Psc	5.7	3.7	153° W	100	19.91	19.02	19:37	02:16	08:54
	30	1 42.3	9 57.1	Psc	5.7	3.7	160° W	100	19.91	18.97	19:09	01:47	08:25
Neptune	2	22 58.6	-7 34.0	Aqr	7.8	2.4	177° W	100	29.95	28.94	19:19	00:54	06:29
	9	22 57.8	-7 38.5	Aqr	7.8	2.4	176° E	100	29.95	28.94	18:52	00:26	06:00
	16	22 57.1	-7 42.9	Aqr	7.8	2.4	169° E	100	29.95	28.96	18:24	23:58	05:32
	23	22 56.4	-7 47.2	Aqr	7.8	2.4	162° E	100	29.95	28.99	17:56	23:30	05:03
	30	22 55.8	-7 51.2	Aqr	7.8	2.4	155° E	100	29.95	29.03	17:28	23:01	04:35
Pluto	2	19 13.5	-21 41.2	Sgr	14.2	0.3	127° E	100	33.40	32.78	16:31	21:10	01:49
	9	19 13.1	-21 42.6	Sgr	14.2	0.2	120° E	100	33.40	32.88	16:03	20:42	01:21
	16	19 12.9	-21 43.8	Sgr	14.3	0.2	114° E	100	33.41	32.99	15:35	20:14	00:53
	23	19 12.8	-21 44.8	Sgr	14.3	0.2	107° E	100	33.41	33.11	15:08	19:47	00:26
	30	19 12.8	-21 45.7	Sgr	14.3	0.2	100° E	100	33.42	33.23	14:40	19:19	23:58

September Stargazing by Dave Huestis

Amateur astronomers and casual stargazers look forward to the month of September. Here in Southern New England the hazy, hot and humid days of summer are mostly behind us. With humidity levels much lower the skies become more transparent. Combine those conditions with earlier sunset times, and the nighttime heavens can be explored at a reasonable time in the evening. Let's examine a few objects that can be observed with either your unaided eyes, binoculars, or a telescope. And if you don't have a telescope to explore some of these in greater detail, then visit one of the local observatories and ask the volunteer telescope operators to acquire your favorite.

At the beginning of September Jupiter will be very low in the west after sunset. You'll need an unobstructed view of the horizon to observe this Jovian world. Jupiter will soon be too close to the Sun in the sky to be seen. Beautiful Saturn will be visible through the end of October, depending on one's view of the west south-west horizon. Its ring system is wide open, tilted 27 degrees. Crank up the magnification and marvel at the spectacle before you. On nights of steady seeing, the kids who visit Seagrave Observatory or Ladd Observatory often exclaim "cool" or "awesome," followed by "it looks like a sticker."

In addition, this month would be a good time to catch a glimpse of the most distant planets in our solar system. Well, two planets and one dwarf planet. Since the demotion of Pluto to dwarf planet status in 2006, those planets now are Uranus and Neptune. These gas giants look like little blue-green disks through a telescope. You won't see any detail, but you can boast of catching a glimpse of these distant worlds.

Unless you know specifically where to look, these distant bodies can be difficult to locate. Finder charts can be accessed on



Conrad Cardano took this image of Pluto with an ES 102 APO and ZWO 174mm camera, composed of 20 frames at 30 seconds each and processed with Astro Art.

the internet. While Uranus can be seen in a dark moon-less sky with the naked-eye, Neptune requires at least binoculars to find. Both planets reveal a blue-green disk under medium- to high magnification. A fairly large computer-controlled telescope is required to locate Pluto. This dwarf-planet will look like one of the many faint stars occupying the same field of view. Assuming the computer correctly positioned the telescope, Pluto will be one of those points of light you can see through the eyepiece. Computer-assisted telescopes at the local observatories can guarantee your sighting of these far away worlds.

On September 5 the distances in miles these three objects will be from the Earth and the constellations in which they can be found are as follows: Uranus (1,784,000,000 in Pisces), Neptune (2,690,000,000 at 1:13 a.m. closest to the Earth for 2017 in Aquarius) and Pluto (3,051,000,000 in Sagittarius).

If you wish to get a good look at our own Milky Way galaxy soon after twilight fades, then the month of September provides a continued opportunity. From many light-polluted locations in Rhode Island our "island universe" may only appear as a milky patch of light spanning the sky from north to south. (That is, if it is visible at all.) Some casual stargazers may mistake this glow as thin cirrus clouds. However, it is really the light from some of the 400 billion stars of our Milky Way galaxy.

From a really dark sky location, like that found at Frosty Drew Observatory in Charlestown, one can still observe the spender of the Milky Way as it stretches from the constellation Perseus towards the southern horizon. A pair of binoculars will show beautiful clusters of stars within its boundaries. And if you have a small telescope, just scan up and down the Milky Way's length with a wide-field eyepiece. You'll be rewarded with many fine views of dense star fields.

In the region of the constellation of Cygnus the swan (also known as the Northern Cross), the Milky Way divides into two bands, separated by obscuring dust called the Great Rift. Take a look with binoculars to start and scan this area. It is a very beautiful region of space. If you have a telescope of any size, don't hesitate to sweep this area. Farther along one can find a wide variety of star clusters and nebulae.

In the constellation of Scutum we come to a star cloud of the same name. In a dark sky, your eye will see a much greater expanse of milky haze. This eastern band is one of the brightest in the Milky Way because there is no intervening dust and gas to block our view of the stars. Astronomer E.E. Barnard (1857-1923) wrote, "the stars pile up in great cumulus masses like summer clouds." A prominent open cluster known as the Wild Duck Nebula can be found here. You can spend many hours exploring the riches of our galaxy.

Did you know that an observer in a relatively dark sky can see another galaxy with just the naked eye? After sunset look towards the northeast sky for the constellation of Andromeda. At the top of a chain of fairly bright stars you will notice an elongated fuzzy path of light. This object is the Great Andromeda Galaxy, the nearest spiral galaxy to our own Milky Way. It is a barred spiral like the Milky Way, containing about 400 billion stars. Recent measurements indicate it is 2.5 million light years distant. A pair of 7 X 50 binoculars will reveal a little more of its elongated shape.

Telescopes of increasing aperture will reveal more of the structure of our galactic neighbor. Telescopes at Seagrave and Frosty Drew observatories actually reveal the spiral arms and dust lanes. The view is quite impressive. If clear skies prevail during the open nights at the local observatories, ask one of the volunteer sky interpreters to show you the Great Andromeda Galaxy.

Keep your eyes to the skies.



Dave Huestis is Skyscrapers Historian and has been contributing monthly columns to local newspapers for nearly 40 years. See more at http://theskyscrapers.org/dave-huestis

A Farewell to Cassini

by Francine Jackson

Now that we are all reveling in the beauty of last month's total solar eclipse, we have another exquisite sight to prepare for, although this one, originally a total surprise, now will probably become one of the solar system's most vivid remembrances: the last gasp of the Cassini mission.

The beginning of this mission was, for many of us, one of those "I remember where I was" moments when the journey started. It was October 15th, 1997 when it blasted off the Earth via a Titan IVB/Centaur for what seemed a forever time frame, flying by Venus twice, in April, 1998 and June of 1999, and then for an almost rendezvous (700 miles) with Earth, all for gravity assists to enable it to proceed to its destination a bit faster.

Some of us forget that Cassini neared Jupiter while the Galileo spacecraft was already there. Although it only came within 6 million miles of the planet, its flyby was useful in giving us additional information on our gigantic neighbor.

Cassini's first trial run at imaging Saturn came in late October, 2002, when it was still over 175 million miles away. It then zeroed in on two storms becoming one in April of 2004, discovered two tiny moons a month later, and then arrived to begin its many years of Saturnian orbiting in early summer

By the end of the year, it had deployed its passenger Huygens lander, introducing us to the surface of Titan, a body so encompassed with atmosphere that it never previously had a chance to show us what it looked like.

And, now, it is time to wish Cassini a

very fond good-bye. At first, the idea of virtually "throwing it away" by casting it into the very harshness of the planet it had served so well for such a long time was not something many of us thought was deserving of the great craft; however, now it is realized Cassini, by its planned ring crossings and eventual disintegration, will be still serving us, showing what will possibly never be seen again: Saturn as up close and personal as any body, robot or human, will ever view again.

On the morning of Friday, September 15th, pause for a few moments and wish a fond farewell to one of the finest workhorses ever to leave the surface of our planet.

Cassini, you've done great things for us, in introducing Saturn as never before. We'll never forget the beauty and information you have sent back for us. Thanks for all you've done to allow us to learn so much about this beautiful member of our neighborhood.



Francine Jackson is Skyscrapers Public Relations Spokesperson, writes the weekly newsletter for

Ladd Observatory and serves as planetarian at the University of Rhode Island. See more at http://theskyscrapers.org/francine-jackson



Planetary Nebula in Delphinus NGC 6905

by Glenn Chaple for LVAS

(Mag. 11.1; Size 42" X 35")

This month's LVAS Observer's Challenge takes us to the northwest corner of Delphinus and the 11th magnitude planetary NGC 6905, also known as the Blue Flash Nebula. The challenge begins right away when you try to find NGC 6905. At the 2000 coordinates RA: 20h22m23.0s Dec: +20°06'16", it's positioned in a star-rich part of the Milky Way, but away from any nearby bright stars. The best route for star-hoppers might be a 4 degree trip eastward from 5th magnitude eta (n) Sagittae (see charts below). In his book Cosmic Challenge, author Phil Harrington offers an interesting way to locate NGC 6905 without resorting to star-hopping or using GoTo technology. Simply center eta Sge in a low power evepiece and wait 16 minutes. Earth's 4 degree rotation during that time will bring NGC 6905 into view.

The next challenge is in determining the smallest aperture that will pick up NGC 6905. It has reportedly been seen with a 4-inch scope, bit its low surface brightness mandates dark skies. Larger instruments will reveal a north-south elongation. Can you detect its bluish color (not as obvious as the nick-name might imply) and glimpse its 14th magnitude central star?

NGC 6905 was discovered by William Herschel in 1784, hence its designation H.IV 64 or 164 (signifying the 16th entry in

Class 4 [Planetary Nebulae] of his deep sky catalog) on older star atlases. Its distance uncertain, but may be in excess of 4000 light years.

The purpose of the LVAS Observer's Challenge is to encourage the pursuit of visual observing. It is open to everyone that is interested, and if you are able to contribute notes, drawings, or photographs, the LVAS will be happy to include them in our



monthly summary. If you would like to contribute material, submit your observing notes, sketches, and/or images to either Roger Ivester (<u>rogerivester@me.com</u>) or Fred Rayworth (<u>queex@embarqmail.com</u>). To find out more about the LVAS Observer's Challenge or access past reports, log on to <u>Ivastronomy.com/observing-challenge</u>.





August Reports

Skyscraper Monthly Meeting August 4 2017

Prelude to the meeting: Numerous flashes and camera clicks from the vicinity of Tracy Prell's camera preceded the meeting which was officially started at 7:40 by President Steve Siok.

Trustees Report: Jim Crawford reported that all of the cabling for our security camera system is in. Cameras to monitor the property and encourage proper behavior by members and visitors will be added shortly. The system will also allow us to do live streaming of images produced by our electronic telescopes.

Solar Eclipse Preparations: Member Jeff Padell is heading this up. There will be a program at the observatory from 1 to 4pm, anyone coming up to help, please be here by noon. Anyone bringing a telescope to help out needs to understand that the scope can NOT be unattended for any reason during the event for safety reasons.

There will also be a program for eclipse viewing at Brown University.

Radio Club: We received a donation of \$100 from the radio club that was allowed to use our facility recently. This is the second year of working with them. They took over the meeting hall for 36 hours to talk with as many people as possible via short wave radio. They contacted 2000 people this year.

Events: Francine Jackson reported that There is an observing event at Riverbend Farm next Saturday August 11 starting about ½ hour after sunset. There will be another opportunity on the second Friday of September.

Library Telescopes: 3 telescopes have



been finished, 2 have been delivered. The Charlestown library wanted one, but is now not sure. The town of Coventry library bought 2 telescopes, contacted Linda Bergemann and we will modify the scopes for them.

AstroAssembly: Kathy Siok reported that there is a volunteer signup list going around. We could use more donations for door prizes and raffle prizes. The evening banquet will be at the Scituate Senior Center.

Congratulations to Bob Horton! President Siok had Bob stand and publicly congratulated him for his accomplishment at this year's Stellafane. Bob won first prize for his 6 inch telescope in the Master Class level of the optical excellence competition.

At 8pm, Ian Dell'Antonio introduced our speaker, Rainer Weiss.

Respectfully submitted by your humble society secretary, Steve Hubbard

Solar Eclipse Star Party August 21, 2017

I was interviewed by both Channel 6 and Channel 12 for both the noon 5 and 6 p.m. Reports I pushed AstroAssembly several times and our website and we had over 200 people show up and made \$342 in donations.

Jeff Padell

Special thanks to Bob Janus and Matt for all the great support.

We didn't turn anybody away. I went to Howie and Betty's place in the a.m. but not home. They did come home and saw all the cars.... they stopped and let us know that their driveway was available and we had many cars to send down.

Tracy took many pics as I did. We live streamed both the full and partial eclipse in meeting hall. Matt and Bob handed out a pair of glasses with our membership form.

Donation request was first thing mentioned along with AstroAssembly, star parties and open nights. Jeff did a fantastic job with his solar scope. We also had Conrad there with his scope...plus three other scopes.

It was a great success. Thanks Team. Jim Crawford

Hello Everyone,

Just wanted to add that Kathy Babcock was also present, very busy greeting visitors and providing them with solar glasses and Skyscrapers pamphlets.

Hope everybody had good seeing yesterday.

Bob Janus

Whoa! - Our solar eclipse event at Skyscrapers, Inc. Amateur Astronomical Society of Rhode Island was a huge success - certainly beyond my expectations with hundreds of people arriving to witness this *Fascinating* Astronomical event.

I am so glad that our visitors, adults and the children alike had such an enjoyable time!

Skyscrapers is always open Saturday night for FREE viewing of our beautiful night sky (weather permitting). You can visit us at online at www.skyscrapersinc.org but we'd love to see you in-person!

I would like to personally thank our Skyscraper members, Jim Crawford, Matt Ouellette, Jeffrey Padell, Kathy Babcock, Bob Janus as well as the news media - my friends T.J. Del Santo and Erica Croce from WPRI 12, Meteorologist Tim Studebaker ABC6 along with Vanessa Cristina Villon, The Woonsocket Call, and Motif Magazine for doing such an outstanding job in covering this rare event.

Many galactic kudos's to Stephen W. Ramsden, Director of the Charlie Bates Solar Astronomy Project for donating 500 solar sunglasses that helped provide the viewing of the solar eclipse event for the hundreds of people that arrived at Skyscrapers, Inc. Amateur Astronomical Society of Rhode Island!

We are a 501(c)(3) organization so donations are always welcome to help maintain our grounds, observatories, and to provide FREE workshops and lectures from the experts at Brown University, Harvard-Smithsonian Center for Astrophysics and the Massachusetts Institute of Technology (MIT) to name a few.

These are the images I took at Skyscrapers, Inc. home to the Seagrave Memorial Observatory during the Solar Eclipse Star Party which was held from 1 to 4 pm on August 21st, 2017. I used my Canon EOS 70D with the 18-135 mm lens.

Tracy Prell

Following is a sampling of eclipse photos from Skyscrapers members. More will be published in the October issue of The Skyscraper.

Please send eclipse photos to hendrickson.jim@gmail.com













Solar Eclipse Star Party at Seagrave Observatory. Photos by Tracy Prell

Solar Eclipse 2017 Maximum Partial Eclipse Seagrave Observatory Rhode Island Lunt LS80 ZWO ASI174mm-cool



©Jeff Padell



Partial eclipse sequence by Ronald Zincone







Total solar eclipse from Anderson SC



Near second contact (above) and totality with corona, by Pat Landers





Solar corona composite by Bob Horton, image processing by Scott MacNeill

Total solar eclipse over Grand Teton by Jim Hendrickson



AstroAssembly 2017 October 13 & 14

47 Peeptoad Road North Scituate, Rhode Island www.theSkyscrapers.org/astroassembly2017

Highlighting Interesting Projects in Amateur Astronomy

Special Notes: Wear your eclipse T-shirt for a group picture sometime during the day! Astrophoto contest will include special category for eclipse photos.

Friday Evening Talks & Stargazing at Seagrave Observatory

If you would like to give a Friday Evening Talk, please contact Kathy Siok (kathys5@cox.net).

All day Saturday at Seagrave Observatory

Poster Session, Swap Table (please bring your own table), Solar Viewing, Astrophotography Contest, Homemade Telescopes (bring yours!), Famous Astro Bake-off Contest!

- 10:00am **Eclipse Stories:** Individuals who traveled to the 2017 Solar Eclipse are invited to share a story about their experience.
- 11:15am Cubes in Space by Julie Sage
- 12:00pm Lunch at the Skyscrapers Grill
- 1:15pm Amateur Telescope Making in South Africa by **Francis O'Reilly**, Springfield Telescope Makers
- 2:30pm Installation of APASS at Cerro Tololo Inter-American Observatory by Alan Sliski, ATMoB

Directions to Seagrave Memorial Observatory

From the Providence area: Take Rt. 6 West to Interstate 295 in Johnston and proceed west on Rt. 6 to Scituate. In Scituate bear right off Rt. 6 onto Rt. 101. Turn right onto Rt. 116 North. Peeptoad Road is the first left off Rt. 116. From **Coventry/West Warwick:** Take Rt. 116 North. Peeptoad Road is the first left after crossing Rt. 101. From Southern Rhode Island: Take Interstate 95 North. Exit onto Interstate 295 North in Warwick (left exit.) Exit to Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116. From Northern Rhode Island: Take Rt. 116 South. Follow Rt.

3:45pm Imaging and Monitoring Variable Stars using CCD Imaging by **Stella Kafka**, AAVSO

Saturday Evening Program

at Scituate Senior Center, 1315 Chopmist Hill Road

- 5:15pm Reception & Antipasto Bar
- 6:00pm Evening Banquet: Italian-style dinner (pre-registration required) catered by Quik Stop
- 7:15pm Words of Welcome, Awards, Raffle Drawing
- 7:30pm The Discovery and Monitoring of the Disintegrating Planetoid WD 1157 by Mario Motta, AAVSO, ATMoB

116 thru Greenville. Turn left at Knight's Farm intersection (Rt. 116 turns left) and follow Rt. 116. Watch for Peeptoad Road on the right. **From Connecticut:** Take Rt. 44 East to Greenville and turn right on Rt. 116 South. Turn left at Knight's Farm intersection (Rt. 116 turn left) and follow Rt. 116. Watch for Peeptoad Road on the right. • or • Take Rt. 6 East toward Rhode Island; bear left on Rt. 101 East and continue to in- tersection with Rt. 116. Turn left; Peeptoad Road is the first left off Rt. 116. **From Massachusetts:** Take Interstate 295 South (off Interstate 95 in Attleboro). Exit onto Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.

Registrations	x \$25 each = \$	Name	
Registrations (children under 12)	Free	Address	
Banquet lickets	x $$25 each = $$		
Banquet Tickets	x \$10 each = \$	Email	
	Total = \$	Send completed form and check (Made payable to Skyscrapers Inc.) to:	Linda Bergemann 41 Ross Hill Road

Charlestown, RI 02813-2605

www.theSkyscrapers.org

Directions to Seagrave Memorial Observatory

From the Providence area:

Take Rt. 6 West to Interstate 295 in Johnston and proceed west on Rt. 6 to Scituate. In Scituate bear right off Rt. 6 onto Rt. 101. Turn right onto Rt. 116 North. Peeptoad Road is the first left off Rt. 116.

From Coventry/West Warwick area:

Take Rt. 116 North. Peeptoad Road is the first left after crossing Rt. 101.

From Southern Rhode Island:

Take Interstate 95 North. Exit onto Interstate 295 North in Warwick (left exit.) Exit to Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.

From Northern Rhode Island:

Take Rt. 116 South. Follow Rt. 116 thru Greenville. Turn left at Knight's Farm intersection (Rt. 116 turns left) and follow Rt. 116. Watch for Peeptoad Road on the right.

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47 Peeptoad Road North Scituate, Rhode Island 02857