



# the Skyscraper

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October 2018

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

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## Saturday, October 20, 7:00pm at Seagrave Observatory

Every year, astronomers dedicate one night to really concentrate on our only natural satellite, the Moon. Observatories around the world will be enjoying the sight of the Moon, in its waxing gibbous phase.

Seagrave Memorial Observatory will have its beautiful 1878 8-inch Clark refractor and other telescopes open for the evening. Members of Skyscrapers, Inc., guardians of Seagrave Memorial Observatory, will be available to interpret your observations, to make your visit truly a night to remember. Come and be a part of a worldwide effort to introduce, and appreciate, our nearest celestial neighbor.

## Phases of the Moon

- Last Quarter Moon**  
October 2 09:45
- New Moon**  
October 9 03:47
- First Quarter Moon**  
October 16 18:02
- Full Hunter's Moon**  
October 24 16:45
- Last Quarter Moon**  
October 31 16:40



## Upcoming Meetings

**Friday, November 2: Seagrave Observatory**  
Diana Hannikainen: "Stepping Through the Cosmos"

**Saturday, December 15: North Scituate Community House**  
Member Presentations, Holiday Party

**Friday, January 4: North Scituate Community House**  
TBA

**Friday, February 1: North Scituate Community House**  
TBA

**Friday, March 1: North Scituate Community House**  
TBA

**Friday, April 5: North Scituate Community House**  
TBA

## Skyscrapers Library Update

Thanks to member Roger Forsythe for his donation of books to our library a couple of months ago.

They will be added to our library inventory soon.

I just wanted to mention that the Skyscrapers library has some interesting titles in its collection.

A couple of classics are:

1) Starlight Nights: The Adventures of a Stargazer, by Leslie Peltier. This work is an autobiography of a young man chronicling his life, from farm boy to a famous comet hunter and variable star enthusiast.

2) The Glass Giant of Palomar, by David Oakes Woodbury- I read this work on a plane flight out to California many years back in anticipation of visiting the famous Observatory. It relates the fascinating history of the planning and fabrication of the 200-inch "glass giant". It is a great read, even if you are not planning a visit.

If you are interested in either of these works, or wish to borrow any of the other books in our inventory, please see Weston Ambrose or myself at a monthly meeting.

Dave Huestis

## Skyscrapers Food Basket

Skyscrapers has now started a food donation program! Just simply bring a caned good or two each time you visit the meeting hall or observatory; place it in the Food Donation box in the hall and they will be donated to our local food bank on a monthly basis.

## Skyscrapers Library Borrowing Procedure

The catalog of available items to borrow is available at <http://www.theskyscrapers.org/library-procedures>, as well as in the meeting hall in proximity to the bookcases.

To borrow an item a member can: 1) review the list online before coming to a meeting 2) review a hard copy of the list on a meeting night.

Once a member chooses an item they can ask **Dave Huestis** or **Weston Ambrose** to retrieve it from the bookcase. The member will then sign the item out. This check out procedure will occur only between 7:00pm and 7:30pm on monthly meeting nights held at Seagrave.

Borrowed items should be returned at the next meeting unless other arrangements are made.

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You shop. Amazon gives.

<https://smile.amazon.com/ch/05-0382371>



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.

### President

Steve Hubbard [cstahs@gmail.com](mailto:cstahs@gmail.com)

### 1st Vice President

Jim Hendrickson [hendrickson.jim@gmail.com](mailto:hendrickson.jim@gmail.com)

### 2nd Vice President

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### Members at Large

Bob Janus [janus68@cox.net](mailto:janus68@cox.net)

Tracy Prell [tracy.prell@gmail.com](mailto:tracy.prell@gmail.com)

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Jim Crawford [jcrawford@cox.net](mailto:jcrawford@cox.net)

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Linda Bergemann [lbergemann@aol.com](mailto:lbergemann@aol.com)

Francine Jackson [Francine\\_Jackson@brown.edu](mailto:Francine_Jackson@brown.edu)

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### New Member Steward

Tracy Prell [tracy.prell@gmail.com](mailto:tracy.prell@gmail.com)

### Librarian

Dave Huestis [dhuestis@aol.com](mailto:dhuestis@aol.com)

### Assistant Librarian

Weston Ambrose

### Historian

Dave Huestis [dhuestis@aol.com](mailto:dhuestis@aol.com)

### Editor

Jim Hendrickson [hendrickson.jim@gmail.com](mailto:hendrickson.jim@gmail.com)

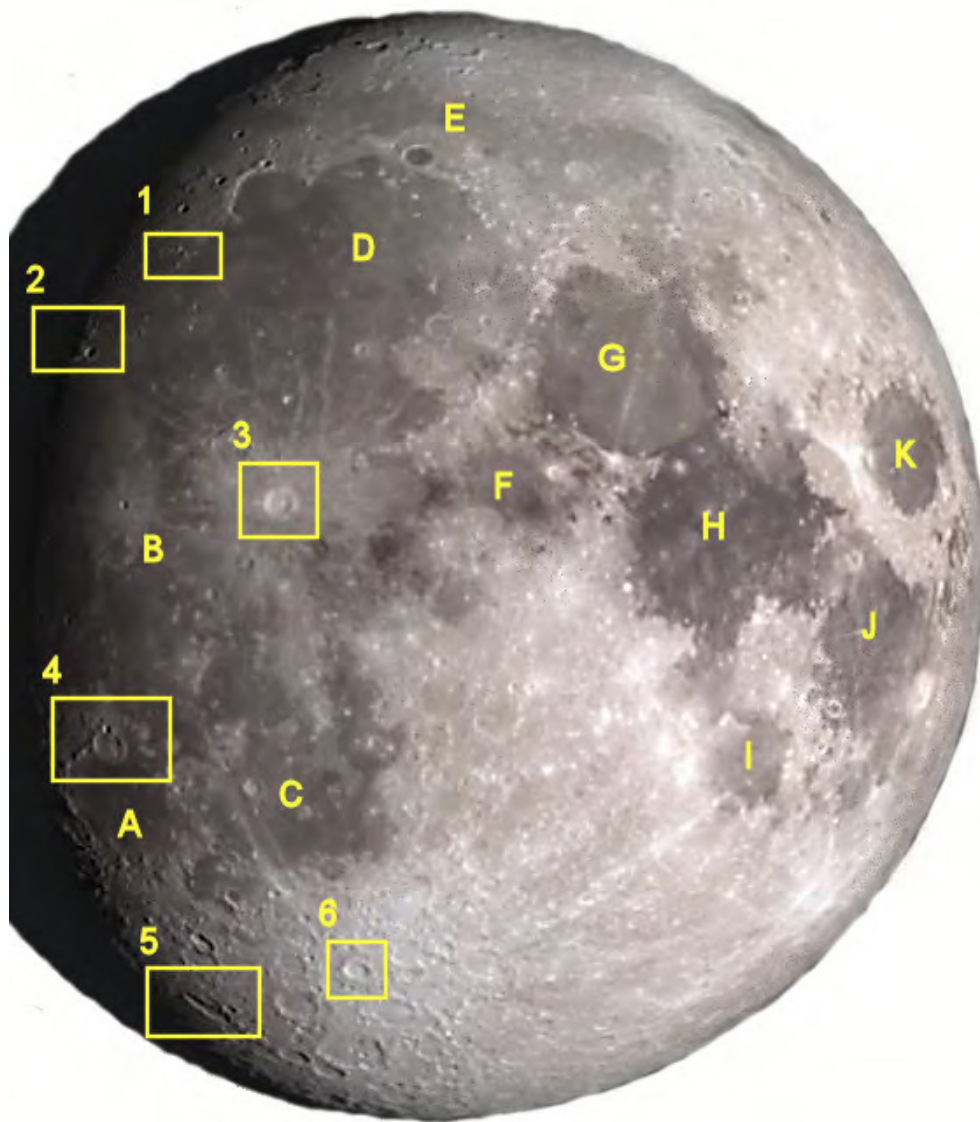
# International OBSERVE THE MOON NIGHT 2018

October  
SAVE THE DATE 20<sup>TH</sup>

**Northern Hemisphere Moon Map:** This map depicts the Moon as it will appear from the northern hemisphere at approximately 8:00 PM EDT and 5:00 PM PDT on International Observe the Moon Night, October 20, 2018. Many of the best views will occur along the terminator (the line between the day and night side of the Moon).

**Lunar Maria (Seas)**  
You can see a number of maria tonight. Once thought to be seas of water, these are actually large, flat plains of solidified basaltic lava. They can be viewed in binoculars or even with the unaided eye.

- A. Mare Humorum
- B. Oceanus Procellarum
- C. Mare Nubium
- D. Mare Imbrium
- E. Mare Frigoris
- F. Mare Vaporum
- G. Mare Serenitatis
- H. Mare Tranquillitatis
- I. Mare Nectaris
- J. Mare Fecunditatis
- K. Mare Crisium



**Selected Telescopic Objects:** Some of the more interesting lunar landforms that have favorable lighting for viewing tonight are identified here. Details for each are on the reverse side of this map.

- 1. Gruithuisen Domes
- 2. Aristarchus Plateau
- 3. Copernicus Crater
- 4. Gassendi Crater
- 5. Schiller Crater
- 6. Tycho Crater



[MOON.NASA.GOV/OBSERVE](http://MOON.NASA.GOV/OBSERVE)

#observethemoon

# Observe the Moon

By Jane Houston Jones and Jessica Stoller-Conrad

This year's International Observe the Moon Night is on Oct. 20. Look for astronomy clubs and science centers in your area inviting you to view the Moon at their star parties that evening!

On Oct. 20, the 11-day-old waxing gibbous Moon will rise in the late afternoon and set before dawn. Sunlight will reveal most of the lunar surface and the Moon will be visible all night long. You can observe the Moon's features whether you're observing with the unaided eye, through binoculars or through a telescope.

Here are a few of the Moon's features you might spot on the evening of October 20:

Sinus Iridum—Latin for “Bay of Rainbows”—is the little half circle visible on the western side of the Moon near the lunar terminator—the line between light and

dark. Another feature, the Jura Mountains, ring the Moon's western edge. You can see them catch the morning Sun.

Just south of the Sinus Iridum you can see a large, flat plain called the Mare Imbrium. This feature is called a mare—Latin for “sea”—because early astronomers mistook it for a sea on Moon's surface. Because the Moon will be approaching full, the large craters Copernicus and Tycho will also take center stage.

Copernicus is 58 miles (93 kilometers) across. Although its impact crater rays—seen as lines leading out from the crater—will be much more visible at Full Moon, you will still be able to see them on October 20. Tycho, on the other hand, lies in a field of craters near the southern edge of the visible surface of the Moon. At 53 miles (85

kilometers) across, it's a little smaller than Copernicus. However, its massive ray system spans more than 932 miles (1500 kilometers)!

And if you're very observant on the 20th, you'll be able to check off all six of the Apollo lunar landing site locations, too!

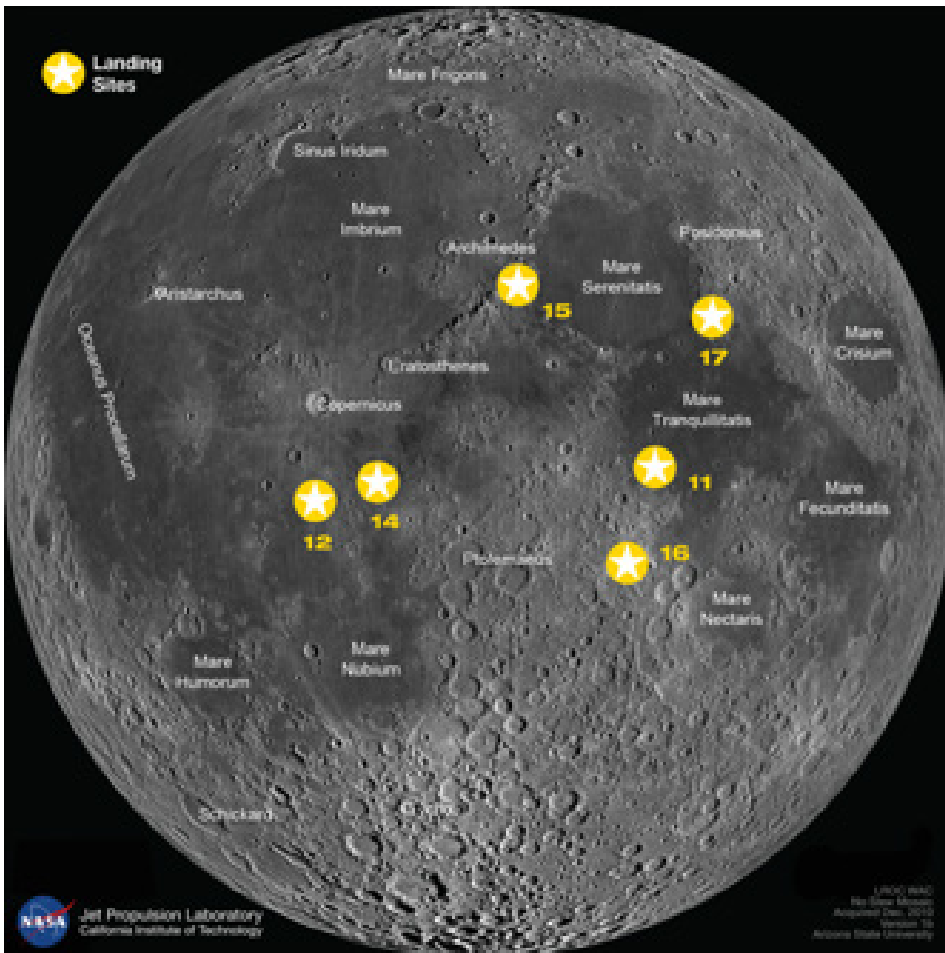
In addition to the Moon, we'll be able to observe two meteor showers this month: the Orionids and the Southern Taurids. Although both will have low rates of meteors, they'll be visible in the same part of the sky.

The Orionids peak on Oct. 21, but they are active from Oct. 16 to Oct. 30. Start looking at about 10 p.m. and you can continue to look until 5 a.m. With the bright moonlight you may see only five to 10 swift and faint Orionids per hour.

If you see a slow, bright meteor, that's from the Taurid meteor shower. The Taurids radiate from the nearby constellation Taurus, the Bull. Taurids are active from Sept. 10 through Nov. 20, so you may see both a slow Taurid and a fast Orionid piercing your sky this month. You'll be lucky to see five Taurids per hour on the peak night of Oct. 10.

You can also still catch the great lineup of bright planets in October, with Jupiter, Saturn and Mars lining up with the Moon again this month. And early birds can even catch Venus just before dawn!

You can find out more about International Observe the Moon Night at <https://moon.nasa.gov/observe>.



This image shows some of the features you might see if you closely observe the Moon. The stars represent the six Apollo landing sites on the Moon. Credit: NASA/GSFC/Arizona State University (modified by NASA/JPL-Caltech)

 This article is provided by NASA Space Place. With articles, activities, crafts, games, and lesson plans, NASA Space Place encourages everyone to get excited about science and technology. Visit [spaceplace.nasa.gov](https://spaceplace.nasa.gov) to explore space and Earth science!

# The Sun, Moon & Planets in October

This table contains the ephemeris of the objects in the Solar System for each Saturday night in October 2018. Times in Eastern Daylight Time (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
<b>Sun</b>	<b>6</b>	12 46.7	-5 00.8	Vir	-26.8	1919.4	-	-	-	1.00	06:48	12:34	18:19
	<b>13</b>	13 12.4	-7 40.2	Vir	-26.8	1923.3	-	-	-	1.00	06:56	12:32	18:08
	<b>20</b>	13 38.5	-10 14.4	Vir	-26.8	1927.2	-	-	-	1.00	07:04	12:31	17:57
	<b>27</b>	14 05.1	-12 41.2	Vir	-26.8	1930.9	-	-	-	0.99	07:12	12:30	17:47
<b>Moon</b>	<b>6</b>	10 11.7	12 41.1	Leo	-10.5	1942.9	42° W	13	-	-	03:33	10:33	17:22
	<b>13</b>	16 23.3	-18 11.1	Oph	-10.7	1840.7	48° E	17	-	-	11:29	16:27	21:21
	<b>20</b>	22 19.9	-13 53.9	Aqr	-12.3	1803.9	125° E	79	-	-	16:25	21:58	03:39
	<b>27</b>	4 08.1	15 48.8	Tau	-12.6	1910.7	151° W	94	-	-	20:11	03:40	11:15
<b>Mercury</b>	<b>6</b>	13 27.5	-9 10.4	Vir	-0.6	4.8	11° E	95	0.45	1.39	07:47	13:16	18:44
	<b>13</b>	14 08.1	-13 48.7	Vir	-0.3	5.0	15° E	92	0.47	1.35	08:18	13:29	18:40
	<b>20</b>	14 47.8	-17 49.9	Lib	-0.2	5.2	18° E	87	0.46	1.29	08:46	13:41	18:36
	<b>27</b>	15 26.6	-21 06.4	Lib	-0.1	5.6	21° E	80	0.45	1.20	09:11	13:52	18:34
<b>Venus</b>	<b>6</b>	14 24.0	-21 55.2	Lib	-4.4	50.8	29° E	13	0.73	0.33	09:30	14:08	18:46
	<b>13</b>	14 19.5	-21 48.7	Vir	-4.2	56.1	21° E	7	0.73	0.30	08:57	13:36	18:14
	<b>20</b>	14 08.4	-20 34.3	Vir	-4.0	60.4	13° E	2	0.72	0.28	08:12	12:56	17:41
	<b>27</b>	13 53.7	-18 16.0	Vir	-3.7	62.2	6° W	1	0.72	0.27	07:20	12:14	17:09
<b>Mars</b>	<b>6</b>	20 45.7	-21 44.8	Cap	-1.2	15.1	115° E	88	1.38	0.62	15:51	20:31	01:11
	<b>13</b>	20 58.3	-20 31.2	Cap	-1.0	14.1	112° E	87	1.39	0.66	15:31	20:16	01:02
	<b>20</b>	21 12.0	-19 10.6	Cap	-0.9	13.2	108° E	87	1.39	0.71	15:11	20:02	00:54
	<b>27</b>	21 26.5	-17 43.4	Cap	-0.7	12.4	105° E	86	1.39	0.75	14:52	19:49	00:47
<b>1 Ceres</b>	<b>6</b>	13 00.9	1 08.4	Vir	8.5	0.3	7° E	100	2.60	3.59	06:40	12:47	18:53
	<b>13</b>	13 12.3	-0 08.6	Vir	8.5	0.3	8° W	100	2.61	3.59	06:29	12:31	18:32
	<b>20</b>	13 23.8	-1 23.9	Vir	8.6	0.3	10° W	100	2.61	3.59	06:17	12:15	18:11
	<b>27</b>	13 35.3	-2 37.2	Vir	8.6	0.3	12° W	100	2.61	3.57	06:06	11:58	17:51
<b>Jupiter</b>	<b>6</b>	15 23.3	-17 48.0	Lib	-1.6	32.3	40° E	100	5.37	6.10	10:13	15:08	20:04
	<b>13</b>	15 28.9	-18 09.4	Lib	-1.6	31.9	35° E	100	5.37	6.16	09:52	14:46	19:40
	<b>20</b>	15 34.7	-18 30.8	Lib	-1.6	31.6	29° E	100	5.37	6.22	09:32	14:25	19:17
	<b>27</b>	15 40.7	-18 52.0	Lib	-1.6	31.4	24° E	100	5.37	6.26	09:12	14:03	18:54
<b>Saturn</b>	<b>6</b>	18 14.1	-22 45.8	Sgr	0.5	16.3	81° E	100	10.06	10.18	13:24	17:58	22:33
	<b>13</b>	18 15.7	-22 46.1	Sgr	0.5	16.1	74° E	100	10.06	10.29	12:58	17:32	22:07
	<b>20</b>	18 17.6	-22 46.3	Sgr	0.5	15.9	67° E	100	10.06	10.40	12:32	17:07	21:41
	<b>27</b>	18 19.7	-22 46.2	Sgr	0.6	15.8	61° E	100	10.06	10.51	12:07	16:41	21:16
<b>Uranus</b>	<b>6</b>	1 57.3	11 23.5	Ari	5.7	3.7	161° W	100	19.87	18.92	18:56	01:40	08:23
	<b>13</b>	1 56.3	11 17.7	Ari	5.7	3.7	169° W	100	19.87	18.89	18:28	01:11	07:54
	<b>20</b>	1 55.2	11 11.9	Ari	5.7	3.7	176° W	100	19.87	18.88	18:00	00:43	07:25
	<b>27</b>	1 54.1	11 05.9	Ari	5.7	3.7	177° E	100	19.87	18.88	17:32	00:14	06:56
<b>Neptune</b>	<b>6</b>	23 03.9	-7 05.1	Aqr	7.8	2.4	152° E	100	29.94	29.06	17:10	22:47	04:23
	<b>13</b>	23 03.3	-7 08.7	Aqr	7.8	2.3	145° E	100	29.94	29.12	16:42	22:19	03:55
	<b>20</b>	23 02.8	-7 11.8	Aqr	7.8	2.3	137° E	100	29.94	29.20	16:15	21:51	03:27
	<b>27</b>	23 02.3	-7 14.4	Aqr	7.8	2.3	130° E	100	29.94	29.29	15:47	21:23	02:59
<b>Pluto</b>	<b>6</b>	19 21.2	-22 05.6	Sgr	14.3	0.2	96° E	100	33.66	33.54	14:27	19:05	23:42
	<b>13</b>	19 21.4	-22 06.0	Sgr	14.3	0.2	89° E	100	33.66	33.66	14:00	18:38	23:15
	<b>20</b>	19 21.6	-22 06.2	Sgr	14.3	0.2	82° E	100	33.67	33.78	13:33	18:10	22:48
	<b>27</b>	19 21.9	-22 06.2	Sgr	14.3	0.2	75° E	100	33.67	33.91	13:06	17:43	22:20

# October Meteor Showers & Still Time to Observe Mars and Saturn

by Dave Huestis

Once again the Perseid meteor shower of August locally succumbed to bad weather. For a few days before and after the peak night of August 12-13 the skies above southern New England were hidden by persistent clouds. These days being an amateur astronomer in Rhode Island and nearby Massachusetts are extremely frustrating. As each successive year comes and goes I am optimistic that a new year can't be worse than the prior year. Unfortunately as we progress further into a new year I end up eating my words. Some of my associates jokingly blame me and suggest I move to California to potentially end their drought!

Well, I'm not ready or willing to make that journey. Californians suffer from other calamities more severe than clouds preventing folks from exploring the heavens. Despite our often inclement weather for many astronomical events I have written about, I will continue to provide guidance for observing future events in the hope we enter a more benevolent period of clear skies.

With that said, I wish to inform you that there is still time to observe Mars. The dust that got kicked up into that planet's atmosphere by its global dust storm is settling out now. The telescopes at the local observatories have provided fair images of Mars' south polar cap as well as surface markings. Back on July 31, Mars was at its closest to the Earth (35.8 million miles) until 2035. The Earth has been quickly moving away from Mars, and on October 1 our two worlds will be 55.6 million miles apart and increasing every day. Mars' image through our telescopes has been growing smaller, so the earlier you can view our planetary neighbor the more detail you may observe.

Beautiful Saturn will also be visible throughout October as well.

The skies of October do provide stargazers with the opportunity to observe two meteor showers. The first one of the month, a minor display of shooting stars called the Draconids, occurs on the night of October 8-9. I haven't written about the Draconids very often because the shower currently only produces only ten or less yellowish slow moving meteors per hour.

This year the Earth passes through the stream of debris more recently stripped off

short period comet 21P/Giacobini-Zinner, the source of the Draconids, soon after the comet's relatively close encounter (36 million miles) with our world. This circumstance could slightly enrich the meteor stream and provide astronomers with many more shooting stars than normal. However, the forecasts I've seen suggest no uptick in numbers. Regardless, I would strongly recommend giving the Draconids a try—just in case! Fortunately the Moon will be New on peak night, so it will not interfere with observing as many meteors as possible away from light pollution.

Best of all, this meteor display is favorably observed between sunset and midnight when the constellation Draco is highest in the northern sky. All you have to do is find Ursa Major (the Big Dipper asterism). It will be sitting just above the northern horizon. Draco stretches between Ursa Major and Polaris, the pole star, which is the end star in Ursa Minor (Little Bear), the Little Dipper asterism handle. While the meteors will emanate from this region of the sky, scan east and west up to zenith (directly overhead). These particles are fairly slow moving, hitting our atmosphere at only 12.5 miles per second.

The second shooting star display of the month occurs on the night of October 20-21 when the Earth passes through the remnants of Halley's Comet. It is called the Orionid meteor shower, because the meteors appear to radiate from within the constellation of Orion the Hunter. That radiant point is not far from the bright red supergiant star Betelgeuse which represents Orion's right shoulder (his perspective). Usually the Orionids are best viewed between midnight and dawn's early light, but a waxing gibbous Moon (Full on the 24th) won't set until around 3:38 a.m. local time. This scenario will leave you only about two hours of dark sky time until dawn's early light. Just be sure to position yourself away from stray light sources to observe as many meteors as possible.

An observer can expect to count about 20 or so yellow and green meteors per hour once the Moon is out of the sky. The Orionid meteors disintegrate in our atmosphere after smashing into it at around 41.6 miles per second. The shooting star display is also noted for producing fireballs that create persistent dust trains as they blaze across the sky.

Despite having observed countless me-



teors during my 45 years as an amateur astronomer, I never tire of sitting out under a starry sky waiting for “burning rocks” to annihilate themselves in our protective atmosphere. Just be sure to duck if you happen to observe a “stationary” meteor. What’s that? Think about it. It means the meteor is heading straight towards you!

Good luck to all of us for October meteor observing.

In conclusion, while you do not need a telescope to observe a meteor shower, the local observatories are open for you to ex-

perience other wonders of our universe. Be sure to check their respective websites for public observing schedules and closures. Seagrave Memorial Observatory (<http://www.theskyscrapers.org>) in North Scituate is open every clear Saturday night. Ladd Observatory (<http://www.brown.edu/Departments/Physics/Ladd/>) in Providence is open every Tuesday night. The Margaret M. Jacoby Observatory at the CCRI Knight Campus in Warwick (<http://www.ccri.edu/physics/observatory.htm>) is open every clear Thursday night. And don’t for-

get about our distant (by Rhode Islanders’ perception) associates down at Frosty Drew Observatory (<http://frostydrew.org>) in Charlestown. They open every clear Friday night.

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>*



## On the Change of Seasons

by Francine Jackson

When thinking about the change of season, we normally think of the next set of constellations arriving in the nighttime sky, but, if any of you wake up early, you might have also noticed another way to determine that an old season is coming to an end.

Every morning for many weeks, I was able to eat breakfast and read the morning paper (when it arrived on time) on my west-facing front porch. With a fairly comfortable outdoor couch and a tiny side table, spending a few minutes saying “Hi” to my neighbors while enjoying a cup of coffee and a bowl of cereal was a great way to start the day.

But, several weeks ago, it became impossible to sit there. With the Sun rising later in the morning, the sky wasn’t bright enough to sit westward, so I had to relocate to my back porch, on the east side of my house. Now, my couch became an outdoor rocker, and my table, a portion of a shelving unit. But, it was still a nice way to begin a day.

Unfortunately, even my back porch isn’t usable anymore. The morning Sun rises so late, that daylight begins, not at breakfast time, but when it’s actually time to pack up the car and leave for the day. I did try a couple times to stay on the porch and turn on the light, but the ambiance just wasn’t there,

and the moths were. For the next several months, breakfast will be an indoor activity, until the Sun once again rises early enough to enjoy morning repast with the neighboring dog walkers.



*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>*

# Cluster & Nebula in Cepheus

## NGC 7129

by Glenn Chaple for LVAS

(Mag: 11.5; Size: 7' x 7')

Young open star clusters are often embedded in the nebula that spawned them. An example is this month's Observer's Challenge, NGC 7129. This one-million-year-old cluster was discovered by William Herschel on October 18, 1794. Of NGC 7129 (H.IV-75 in his catalog), he wrote "Three stars about 9th magnitude involved in nebulosity." It's the nebulosity that must have impressed Herschel, as his Class IV was reserved for what he referred to as "Planetary nebulae." The cluster itself is rather unimpressive, being comprised of a handful of 9th to 11th magnitude stars that form a group similar in appearance to the constellation Delphinus.

Once you've captured NGC 7129 in the eyepiece field, look one-half degree to the southeast for the 9th magnitude open cluster NGC 7142 (the unlabeled dotted circle in Chart B). NGC 7142 consists of several dozen magnitude 12-14 stars in an area about 10' across. It was discovered by Herschel on the same night he found NGC 7129, and bears the Herschel identity H.VII-66 – his 66th Class VII (Pretty much compressed clusters) entry. NGC 7129 is about 3000 to 3300 light years away; NGC 7142 is some 2 times more distant. At an estimated age of 4 billion years, NGC 7142 is one of the oldest open clusters.

The charts below will help you locate NGC 7129, which is located about 4 ½ degrees NE of magnitude 2.5 Alderamin. Chart A shows the location of Alderamin in Cepheus. Chart B provides a star-hopper's route from Alderamin to NGC 7129 and NGC 7142.

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*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 ([rogerivester@me.com](mailto:rogerivester@me.com)) or Fred Rayworth ([queex@embarqmail.com](mailto:queex@embarqmail.com)). To find out more about the LVAS Observer's Challenge or access past reports, log on to*

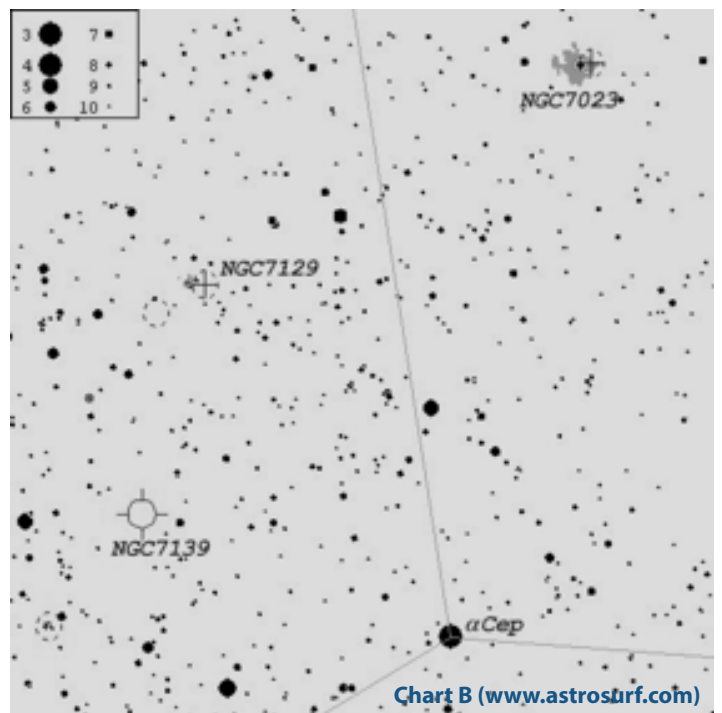
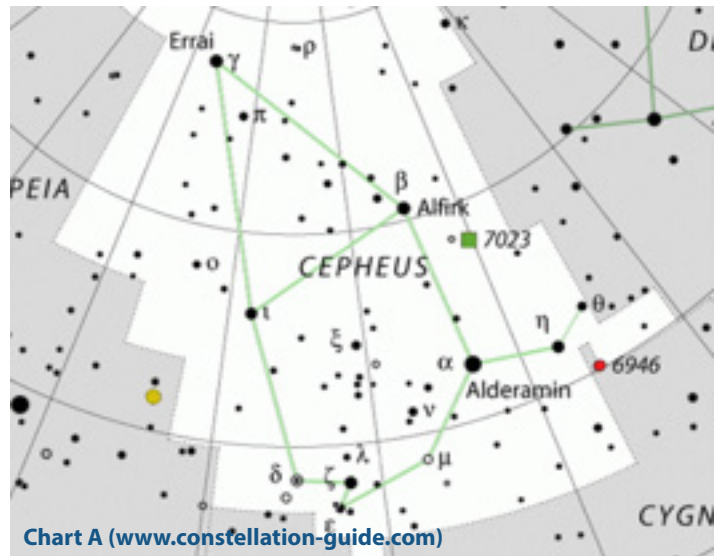


Image of NGC 7129 and NGC 7142 (cs.astronomy.com)



# August Reports

## Skyscraper Executive Committee Meeting Monday, August 20, 2018 Seagrave Observatory 7 PM

Present: Steve Hubbard, Jim Hendrickson, Matt Ouelette, Kathy Siok, Tracy Prell, Linda Bergemann, Bob Horton,

Lloyd Merrill, Bob Napier, Francine Jackson, Bob Janus, Jim Crawford, Jeff Padell, Steve Siok

### AstroAssembly – Sept 28 & 29, 2018

Members get \$5 off Registration. Advertising online – sites of Astronomy, S & T and other places

Emails to: Membership, last year's attendees, area astronomy organizations

Prizes are a little thin. Trustees will evaluate this year's donations of equipment and provide some items for the raffle. Raffle permit has been obtained from the Police Dept.

Potential Evening speaker will be contacted by Tracy: Jonathon McDowell of CFA Harvard

Ask for more Volunteers at Sept 7th meeting.

Probable dates for AstroAssembly 2019 Theme: 50th Anniversary of Apollo 11 (Moon walk)

Tracy mentioned a possible speaker: Michelle Thaller (NASA)

**Monthly Meetings:** September 7th – Rich Sanderson – speaker • No October Meeting • November 2 – no speaker yet • December 15th Holiday Meeting (August speakers) • Jim H will check with Scituate Town Hall about the dates for winter meetings.

**Star Parties:** Steve Hubbard will serve as Point Person for the present • The job includes: Be primary contact with the people asking for the party, Keep a schedule of dates, • Advertise to get volunteers, Coordinate with Trustees for parties at Seagrave, Handle donations. • Mentioned: Portable donation box for events away from Seagrave. • Dates: Sat 8/25 Members Star Party @ Seagrave, 9/21 Blackstone Valley Party • Two other events have been requested – Steve H will make contacts

**Website re-design discussion:** Steve Hubbard has done some research on "Club Express" platform that is used by ATMoB. • They have done extensive study and comparison of other possible platforms and provided that to us. • After a discussion of features and prices, a committee was ap-

pointed to study this further and come back with recommendations to the EC about further action at the next meeting. • The members are: Jim Hendrickson (chair), Lloyd Merrill, Tracy Prell, Bob Napier

**Member Issues/New members:** Badges to be worn at meetings- lanyards (At least by executive Committee) • Kathy will use the current format and update the badges for current members • The membership application will be revised and copies will be made for Seagrave • Simple renewal forms will be printed • The microphone must be used at meetings – Jim will make up a set of directions for its use. • Discussion of Astronomical League status (Jeff) • Discussion of update categories of contributing membership. Currently they are • Sponsor \$60, Supporter \$100, Patron \$250, Benefactor \$500 They should be much higher in 2018

Bob Horton asked for permission to purchase some small parts for \$10 - Approved

**Outreach Events:** Observe the Moon Night is scheduled for Saturday, October 20th at Seagrave • Francine will hold the Galileo telescope workshop for families during that afternoon.

Kathy mentioned that the American Chemical Society is celebrating Space Science during National Chemistry week (week of Oct 23). We plan to involve Skyscrapers in an ACS activity as possible.

As a result of a discussion of future purchases / activities, the idea of revisiting our 5 year plan and prioritizing for the future was introduced. This would help Skyscrapers get grants as well as focus member efforts and spending.

Next Executive Committee Meeting: Monday Sept 20th @ 7 PM Seagrave

To be discussed: AstroAssembly, Unpaid Dues strategies, Web update recommendations

Submitted, Kathy Siok, Secretary

## My First Telescope: A Family Program

Seagrave Observatory  
Saturday, October 20, 2018 2:00 – 4:00 P.M.

Contact Steve Hubbard, President, Skyscrapers, Inc.: [cstahhs@gmail.com](mailto:cstahhs@gmail.com)

On Saturday, October 20th, astronomers around the world will be spending their evening looking at the Moon. And, although that can be done with just your eyes, how would it appear if you had your own small telescope to observe it with? And, now, you will.

The members of Skyscrapers, Inc., will be introducing you to our nearest celestial neighbor, and then will be having you build your very own telescope to take home. Within just a short time, you will be able to observe the Moon and several other objects in the sky.

Because this telescope does contain several small parts, this program is open to family members with at least one adult. Cost is \$10.00, and is limited to four families only.

To register, please contact Skyscrapers, Inc. President Steve Hubbard at [cstahhs@gmail.com](mailto:cstahhs@gmail.com)



Photo of Mars taken Thursday, August 23 by Conrad Cardano.  
Scope: 6" f/9 Ritchey-Cretien, Camera Setup: ZWO 1774mm Camera + 2.5x barlow + filter wheel + 1.25" extensions, Software for capturing image: FireCapture, Software for stacking frames: AutoStakkert, Software for combining and enhancing images: AstroArt 6.0  
Three 60 second videos were taken. One for red, one for green, and one for blue.

# 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.

## 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 intersection 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.



47 Peeptoad Road  
North Scituate, Rhode Island 02857