

## The Skyscraper

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### The Amateur Astronomical Society of Rhode Island

47 Peepload Road  
North Scituate, RI 02857

[www.theskyscrapers.org](http://www.theskyscrapers.org)

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Jim Hendrickson 354-4906

See back page for directions to Seagrave Observatory.

Please submit items for the newsletter by November 15 to Jim Hendrickson, 1 Sunflower Circle, North Providence, RI 02911 or e-mail to [jim@distantgalaxy.com](mailto:jim@distantgalaxy.com)

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# The Skyscraper

November 2002

## November Meeting

Friday, November 1, 7pm at Seagrave Observatory

Skyscraper members Al Hall, Steve Hubbard, and Bob Horton will speak on their recent astronomical excursion to the west coast and Dave Hurdis will discuss his recent trip to Mauna Kea, Hawaii while attending the AAVSO meeting.

## Skyscrapers Calendar

Public observing is held on the 2<sup>nd</sup> and 4<sup>th</sup> Saturday of the month at Seagrave Observatory, weather permitting.

**November 1 Friday 7:30pm November Meeting** at Seagrave Observatory. Public welcome.

**November 9 Saturday 5:00pm Executive Committee Meeting** at Seagrave Observatory. All members welcome

**7:30pm Public Observing Night** at Seagrave Observatory

**November 23 Saturday 7:30pm Public Observing Night** at Seagrave Observatory

## President's Message

*Steve Hubbard*

My fellow Skyscrapers, Another AstroAssembly has passed us by. As I look out over the purple mountains majesty and fruited plains of this great and bountiful land of ours, I think back to the great time we all had and how well things went. MANY thanks to all who had a hand in making AstroAssembly a success. It takes a lot of work and to paraphrase someone else you may or may not know, as it takes a village to raise a child, so too does it take a village to run this event.

As for the future, we're all looking forward to the Leonids next month. While the moon will be full, the prospects for a strong display of meteors remains strong, so who knows?

In December, I hope you all will be able to make it for our special holiday party. First vice president Dan has lots of food and entertainment planned and the best part is that, in keeping with long standing Skyscraper tradition, all I have to do is to show up, take credit and then start eating. If this isn't an endorsement of the president's job that will make dozens of you volunteer to run next time, I don't know what would be! Anyway, for those of you who like to pay dues and then never show up again, I hope you reconsider. We have a lot of fun, have a

lot to offer and you really lose out if you don't come. See you around the observatory some time.

## Editor's Note:

### *The Skyscraper online*

In the process of updating and improving the Skyscrapers web site (<http://www.theskyscrapers.org>), we now have the ability to publish and post *The Skyscraper* on the web as a downloadable and printable PDF file. With the cost of postage on the rise, added to the regular printing expense, it has been determined that Skyscrapers could achieve a significant cost reduction if members who had access to the web and email opted to receive the newsletter electronically rather than traditional mail. Another advantage is that the newsletter is posted to the web at least a week sooner than printing and post mail can deliver it.

If you would like to forgo the paper version and instead get your monthly newsletter from the web, please send your name, address, and email address to [jim@distantgalaxy.com](mailto:jim@distantgalaxy.com). Your postal mail subscription to the newsletter will discontinue, and you will instead be notified by email when the new newsletter is published on the web.

## One More Time: Leonid Meteor Storm Watch

*David A Huestis, Librarian*

If you are reading this column, I bet I know what you were doing last year on the night of November 17-18! No, I'm not a stalker or a peeping Tom! You and thousands like you, if not tens of thousands, were watching for shooting stars to blaze across some of the darkest sky locations in southern New England. I also know you were not disappointed with the grand display of meteors that peaked just before dawn on the 18th.

Well, we've got another opportunity this November to observe possibly hundreds or maybe thousands of meteors fall from the sky during the peak of this year's Leonid display.

Though the Moon will unfortunately be Full during peak night on November 18-19, one should not give

up hope. Remember how many meteors you observed well into morning twilight last year?

Astronomers predict we will encounter the first stream of particles around 11:00 pm on the 18th. (This debris field was deposited by Comet 55P/Tempel-Tuttle's inner solar system passage back in 1767.) Astronomers also believe this encounter could possibly produce anywhere from 1000 to 3000 per hour at that time.

However, we will not be favorably positioned to observe such high numbers of meteors. Despite this fact, it could prove interesting for us around here because around 11:00 pm, the constellation Leo, the storm's radiant, is just on or slightly above our eastern

horizon. We could then be witness to some so-called Earth-grazing meteors.

These particles will be encountering the upper atmosphere by running parallel to the Earth's surface. Hitting the atmosphere at such a low angle will make many of them appear to "skip," like skipping a stone across the surface of a lake. Some may skip back out into space, but most can't resist the Earth's gravity, despite their high velocities and they'll be annihilated like the rest.

Furthermore, we'll also have to contend with a very bright Full Moon well up in the eastern sky at that time. This scenario will further reduce the number of meteors that can be seen. Just remember, the key to successful meteor watching is perseverance!!

Later on the morning of the 19th, the Earth will encounter a stream of particles deposited by the comet back in 1866. The peak activity is predicted for around 5:30 am. The Moon will then be low in the west with the radiant high in the south-southeast. With moonlight still interfering, estimates call for possibly 700 to 1000 meteors per hour thru morning twilight.

We can only hope the predictions come true, and we are treated to a fine display once again, despite the bright moonlight. And why not? Astronomers been right on the money during the last several years. Still, I'd even be satisfied with about one-half of the 800 meteors per hour we observed locally last year.

I suggest you start observing sometime just before our encounter with the first stream of particles around 11:00 pm on the 18. Make yourself comfortable and warm in a lounge chair and direct your gaze in the general direction of the eastern horizon. Try to observe with a friend and keep up the chit-chat. That should keep you awake until the meteors begin raining down. As the night wears on, continue to follow Leo as he rises higher and higher into the sky. By 5:30 am this constellation will be high in the south-southeast sky.

The Leonids are the swiftest of all the meteor showers, hitting our atmosphere at a blazing 44 miles per second. They are green and blue in coloration and usually bright. Remember, last year many bright fireballs were once again reported. Some even left long persistent dust trains high in the sky.

The experts say this will be the Leonid "Grand Finale" for many more years to come. In fact, due to a variety of circumstances, the Earth may not encounter another Leonid "storm" until the year 2098 or even 2131. So unless you plan on cryogenic preservation sometime

after November 19, 2002, make every effort to observe the Leonid meteor shower. Despite the bright moonlight you will be well rewarded with a grand finale view!

Let's hope the skies are clear and the predictions come true.

Keep your eyes to the skies.

## Gallery



**The Very Large Array (VLA) at Night.** Photo by Al Hall, November 1999.



**M-45, the Pleiades cluster.** Photo by Al Hall, White Mountain, CA; October 1999

### Directions to Seagrave 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.
- 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, RI 02857