

**The Skyscraper**  
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**The Amateur Astronomical Society  
of Rhode Island**

47 Peepthead Road  
North Scituate, RI 02857

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

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See back page for directions to Seagrave Observatory.

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

**Email subscriptions:**

To receive *The Skyscraper* by email, send email with your name and address to [jim@distantgalaxy.com](mailto:jim@distantgalaxy.com). Note that you will no longer receive the newsletter by postal mail.

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# The Skyscraper

January 2003

## January Meeting

**Friday, January 10, 7:30pm at Cormack Planetarium**

Our January meeting, normally scheduled for January 3 has been moved to January 10 to allow for members to recover from the holidays -- it also opens up the opportunity for us to have our meeting at the Cormack Planetarium located at the Museum of Natural History in Roger Williams Park. The planetarium features a new Zeiss Skymaster ZKP3 projector – Zeiss is known as the “premiere” manufacturer of planetarium projectors in the world! After our regular business meeting and refreshment break, we will be treated to a planetarium show by the Director, Fred Surowiec. Please join us for what’s sure to be an entertaining evening.

### Directions to Cormack Planetarium:

#### From Providence and points north:

Take Interstate Route 95 south to exit 17 (Elmwood Ave). Turn left at the light. The Park entrance is the second left.

#### From points south:

Take Interstate Route 95 north to exit 16. Take the right on the exit ramp, and then turn left at the light. Drive for ½ a block. The Park entrance is on the right.

#### Enter Roger Williams Park; Pass the Casino building on your right;

Pass the Betsy Williams Historical Cottage (also on your right); Follow signs toward Zoo; Following Zoo signs, go down a large hill; At bottom of hill find a rotary; Enter rotary and travel to opposite side of rotary, past Pulaski equestrian statue on your right; Proceed to Zoo entrance over bridge; Go past Zoo (which will be on your left); At rotary at top of hill, bear right; Natural History Museum will then be a few hundred yards on your left; Park autos and enter museum (home of the Cormack Planetarium).

**Note: In case of inclement weather please listen to WPRO 630 AM for any changes or cancellations.**

## 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.

**January 10 7:30pm January Meeting at Cormack Planetarium.  
Friday**

**January 11 7:30pm Public Observing Night at Seagrave  
Saturday Observatory**

**January 25 7:30pm Public Observing Night at Seagrave  
Saturday Observatory**

# President's Message

*Steve Hubbard, President*

My fellow Skyscrapians, Four score and 7 hours ago, our first vice president brought forth a holiday celebration for us, the likes of which have been seldom seen in our meeting hall. Despite the adversity of early winter weather, the troops were rallied, the hall readied and the food rounded up providing a festive time for all. Despite having to wait for a week to eat, a magnificent effort was put forth by everyone in attendance and all 9 pounds of shrimp was consumed in record time. Thanks again to all who contributed either with money, time or both to make this a memorable event for all.

For the one or two of you who actually read what I have to say, our meeting for January 2003, will NOT be on Jan 3 due to the holiday week. It will be on the following Friday, Jan 10, 2003. See the rest of our newsletter for details.

For 2003, I want to express some of the goals that I have for the club. Remember, much of what I do is the result of input from you all. Your desires and interest in what we do make this an ever better place to be, so get involved.

Firstly, we are well on the way towards defining what sort of imaging equipment, software and the like we need to get the 16" up and going for ccd imaging, both on site and remotely. It is my goal to have this information submitted to either RINET or the Champlin Foundations in the near future so that this could be in place before the end of the year.

Secondly, we are also well on the way towards having a new/updated web site on line with expanded features and interactivity. This has been a goal of mine since the beginning of my term and it looks like we are only a couple of months away from having this up and running.

Thirdly, an acknowledgment of those groups who have contributed to Skyscrapers is in order. We have started down this road with our meeting with the RINET folks who have donated our high speed internet connection and I have sent a letter to the executive director of the Champlin Foundations expressing our thanks for their long running and tremendous support of our group. An invitation has been extended to them for a private visit if so desired.

Fourthly, I see a need for more use of our facilities. Specifically, while we advertise as being open on two Saturday nights a month to the public, bad

weather has created a situation where the observatory is almost never open. I believe that we should be open to the public on the two Saturday nights we say we are, rain or shine. I feel that there should be a program of some sort available, should people come up even when it is cloudy. One of our expressed purposes is public education. Nothing says that that always has to be only at the telescope. I will be working with the Trustess and the observatory committee to explore this further.

In conclusion (for the one of you left reading this till the end), we've had a great year, we're getting a lot of new members and I hope that you are all enjoying being a part of the great tradition that is Skyscrapers as much as I am. Heres to a great 2003!

## Letter to Champlin Foundations

November 28, 2002

Dear Mr. King,

I am the current president of Skyscrapers Inc. and am writing to you on the behalf of our group and its members. We are amateur astronomers and maintain grounds and facilities in North Scituate RI.

Over the years, your foundations have been most generous to us allowing needed repairs to our buildings, the purchase of telescopes and in general helping us to maintain a 60+ year tradition of education in astronomy both for our members and the public. Your most recent grant has allowed us to purchase a large computer controlled telescope. We are currently working with RINET to outfit this equipment with what's needed to remotely take images of planets, asteroids, galaxies and the like by students in RI and even outside the state. We greatly appreciate the support extended to us.

We would like to extend an invitation to you, other directors and staff, as well as their families to visit us and see what we are doing in terms of astronomy education and the unique resource that we are. We extend this not only in our effort at thanking the Champlin Foundations for the support, but also in the hope that you would all enjoy something fun, educational and unique. If you are able, we would like to suggest that a special time could be arranged for a private tour and hopefully, with some good weather, observing some night sky objects.

If you are able, please communicate with me at my home address of 45 Church Street, Auburn, MA 01501, or you may email me at [cstars@att.net](mailto:cstars@att.net). I also invite you to visit our web site: [theskyscrapers.org](http://theskyscrapers.org)

This will give you a good idea of who we are and what we do.

Thank you for your time and attention.

Sincerely,

Steve Hubbard

# A Brief Leonid Update and Meteor Shower Prospects for 2003

*David A Huestis, Librarian*

As Agent 86, Maxwell Smart, used to say, "Missed it by that much!"

It appears we ended up in the doldrums between two Leonid peaks. I've seen reports from Western Europe suggesting peak rates for a time topped out at about 3300 meteors per hour. That rate is a little deceiving because the calculations that derive that number are based upon ideal conditions. Still, the raw meteor counts from a team of observers in France were impressive. Regrettably this activity occurred with the constellation Leo below our horizon. By the time the Earth rotated a few more hours to the west, the Earth had traversed and exited the first stream.

Our bad luck didn't end there. Between 2:00 am and 5:00 am high thin cirrus clouds rolled in, blocking out everything but Jupiter, the Moon, and later Venus. I don't believe we missed much activity during that three-hour period. Why? The second peak was to occur around 5:30 am. Unfortunately it came about 20-30 minutes late for us.

I saw very few meteors between 5:15 and 6:00 am, despite the fact that the clouds had completely dissipated. By 6:00 am only Jupiter and Venus were visible in increasing twilight. Again, wrong place, wrong time. Folks a little farther west observed the second peak. Though it was not at storm levels, preliminary reports indicate the rates may have rivaled last year's dawn peak if it hadn't been for the interfering moonlight. Calculated rates were between 650-700 per hour at peak. The southwest appears to have had the best seat in the house for this early morning display. Better luck next storm, in about a century or so!

The prospects for the major meteor showers of 2003 are somewhat poor. The Quadrantids are good, but the Perseids and Geminids will be washed out by bright moonlight. Also, the Leonids will be back to their non-storm rate of 15-20 meteors per hour. Let's hope the weather on any peak meteor shower night is to our advantage to observe as many shooting stars as possible. A quick glance at the accompanying chart will highlight 2003's meteor showers and Moon phases.

I believe the year will begin on the right track if the weather cooperates for the Quadrantid meteor shower. This shower peaks on the night of January 3-4. I've seen conflicting data for the actual peak time of this shooting star display. One scenario has the peak occurring at around 7:00 pm on the 3rd, while another scenario has the peak occurring on the early morning of the 4th.

This uncertainty does pose a dilemma because one has to keep in mind the Quads have a very sharp peak, usually lasting only about an hour. Though past rates have risen as high as 100

meteors per hour, the predicted peak has often been "off" by about six hours. I know that from first-hand experience.

Many moons ago I observed the Quadrantids until 4:00 am, and then retired due to the cold and lack of meteors. At 4:15 am, I later learned, the heavens opened up and for about an hour the rate reached somewhere between 80 & 100 meteors. Then just as quickly as the meteor activity increased, it subsided just as fast. That's the Quadrantids! Just remember, it's going to be quite cold out there, so be sure to do whatever is necessary to stay warm and alert!

Normally 40 or so bright, blue and fast (25.5 miles per second) meteors will radiate from the constellation Bootes. Cast your gaze towards the northeast sky and scan around. Bootes will rise higher into the sky as the morning progresses, and when the activity increases you'll know exactly where to train your eyes.

The Moon will be just past New, so it will not interfere with observing this shower. However, to maximize your chances of seeing as many shooting stars as possible, try observing from a non-light polluted site. The Quads often blaze more than halfway across the sky, and a small percentage of those leave persistent dust trains.

Good luck and stay warm.

Following are the major meteor shower specifics for 2003. Clip & save these meteor shower prospects for future reference. I'll provide updates in my monthly column as each shower draws near.

## 2003 Meteor Showers

Date	Shower	Moon Phase
Jan 3-4	Quadrantids	Just past New
Apr 21-22	Lyrids	Last Quarter
May 5-6	Eta Aquarids	Waxing Crescent
June 14-16	Lyrids	Full Moon
July 7-9	Capricornids	First Quarter
July 28-29	Delta Aquarids	New Moon
Aug 12-13	Perseids	Full Moon
Oct 21-22	Orionids	Waning Gibbous (almost Last Qtr)
Nov 17-18	Leonids	Last Quarter
Dec 13-14	Geminids	Waning Gibbous (almost Last Qtr)

### 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