The Skyscraper

Vol. 31 no. 12

the monthly publication of



The Amateur Astronomical Society of Rhode Island

47 Peeptoad Road North Scituate, RI 02857

www.theskyscrapers.org

President

Dan Lorraine

1st Vice President

Steve Hubbard

2nd Vice President Bob Horton

Secretary

Joel Cohen

Treasurer

Bill Kirby

Trustees

Ted Ferneza

Jack Szelka Richard Arnold

Members at Large

Ken Dore

Mercedes Rivero-Hudec

Membership Committee Chairperson

Pat Landers

Librarian

Dave Huestis

Editor

Jim Hendrickson 354-4906

See back page for directions to Seagrave Observatory.

Please submit items for the newsletter by December 15 to Jim Hendrickson, 1 Sunflower Circle, North Providence, RI 02911 or e-mail to jim@distantgalaxy.com

Email subscriptions:

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

© 2004 Skyscrapers, Inc.

The Skyscraper

December 2004

December Meeting

Friday, December 3, 2004; 7:30pm at Seagrave Observatory

Dr. Owen Gingerich, professor of Astronomical history at the Harvard Smithsonian Center for Astrophysics will give a presentation about his new book: "The Book Nobody Read: Chasing the Revolutions of Nicolas Copernicus." Gingerich will offer copies of the book for sale and will also be autographing them during the meeting.

Our December meeting is also our annual holiday meeting. Refreshments will include shrimp cocktail, crackers and cheese, fruit platter, eggnog and apple cider. Additionally, the very talented Gerry Dyck has agreed to entertain us with a live performance of holiday music. Be sure not to miss this one; it is a great time for fun, fellowship and lots of food.

Skyscrapers Calendar

Public observing is held every Saturday at Seagrave Observatory weather permitting and when the grounds are accessible.

December 3 Friday	7:30pm	December Meeting at Seagrave Observatory
December 4 Saturday	8:00pm	Public Observing Night at Seagrave Observatory
December 11 Saturday	8:00pm	Public Observing Night at Seagrave Observatory
December 18 Saturday	8:00pm	Public Observing Night at Seagrave Observatory
December 25 Saturday		Seagrave Observatory closed for the holiday.

Reminder

If you have borrowed books or DVD's from the Skyscrapers Library, please return them at the December meeting so that we can get them back into circulation.

President's Message

Dan Lorraine, President

Dear Skyscrapers Members,

It's hard to believe that another year is about to slip away. As 2004 closes the Society continues to get larger and stronger mostly due to the hard work of the Executive Committee who are committed to making your experience with Skyscrapers an educational, rewarding and fun one. Our commitment as an organization also goes out to the community through public education and outreach programs and we've done that very successfully as well. Seagrave is, and will continue to be, the heartbeat of astronomy in southern New England! I would like to thank the Executive Committee team and all of the many members that have volunteered their time to make 2004 another great year for Skyscrapers!

Now, let's all keep our fingers crossed for cooperative weather on Friday December 3rd so everyone can come out to help us celebrate the Holiday season at the observatory. Steve Hubbard's got another fantastic speaker lined up; Gerry Dyck has agreed to play some live Holiday music for us; and as always, lots of food!! Shrimp, cheese & crackers, fruit & vegetable platter, eggnog & cider, and good friends – what could be better? I hope to see all of you there.

To you and your families I send my very best wishes for a joyous Holiday season and a happy and healthy new year. Peace.

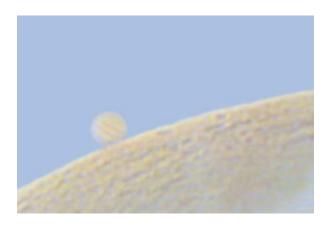
Skyscrapers Gallery

Here is a sampling from the ever expanding Skyscrapers photo gallery. More photos from recent events at Seagrave Observatory are available on the web site.



Lunar Eclipse sequence, October 27, 2004. Images taken at 5 minute intervals. A video animation is available at.

 $http://www.theskyscrapers.org/contentmgr/showdetails.php/id/2031\ Krys\ Rucz\ and\ Mike\ Futoma$



Daytime occultation of Jupiter b the Moon, November 9, 2004. Krys Rucz and Mike Futoma



The Moon, Venus & Jupiter in the morning sky, November 10, 2004. Marian Juskuv

Mid-December Meteor Shower

Dave Huestis

Did you take some time to observe the total lunar eclipse on October 27? More than likely you didn't. Seagrave Observatory had its own curse that night ... the historic comeback of the Boston Red Sox to take Game 4 and sweep the St. Louis Cardinals in the World Series.

Only a handful of public joined about a dozen Skyscraper members to enjoy the Moon's transformation. We concentrated on watching our lunar neighbor slide deep into the Earth's dark shadow, all the while listening to the game on the radio. It was a great night for everyone. Congratulations Red Sox.

It was a nice mild evening on the 27th. The clouds disappeared earlier than the forecast had indicated. As the Moon's bright surface was covered by the Earth's shadow, you could see a light rusty or orange hue in the shadow zone. To the naked eye it looked more orange than it did through binoculars or a telescope.

As more and more of the Moon was eclipsed, the colors seen on the lunar surface in the shadow didn't change. The orange coloration was still more apparent to the naked eye. Just before totality, with a little area of brightness still shining, the Moon looked like Mars with a very big and bright polar cap.

As I predicted, the Moon never completely disappeared from view. It was a very beautiful sight. One of our members commented that it looked like a painting. About mid-way through totality the clouds began to roll in, and before totality ended the Moon was completely obscured by clouds. With the ball game and the eclipse both done for us, we all packed up and went home. Hopefully the Sox will win another World Series before the next total lunar eclipse in 2007.

The final meteor shower of 2004 is the Geminids of December, now undeniably the most reliable meteor shower of the year. This year the peak is on the night of December 13-14, Monday night to Tuesday morning. Though it is unfortunate that its peak is on a week night, observing conditions make this shower the one you should get out there and watch.

The two-day old crescent Moon sets early, so it will not flood the sky with unwanted light. To ensure you see as many meteors as possible without having to stay up all night, I would begin observing around 10:00 pm and continue until 3:00 or 4:00 am. As long as you choose an observing location well away from light pollution you have a very good opportunity to observe from 60-to 75-meteors per hour streak across the sky.

Because the stream of particles intercepts the Earth's orbit at a right angle, the meteors hit our atmosphere at a moderate speed of 21.75-miles per second. The Geminids are characterized by their multi-colored display (65% being white, 26% yellow, and the remaining 9% blue, red and green). They are fairly bright and also have a reputation for producing exploding meteors called fireballs. The Geminids are the most dependable display because they are an old shower and therefore the individual meteors are evenly distributed throughout the meteor stream.

To make the most of this meteor shower observing experience you should dress warmly and position yourself in an environment well away from annoying outdoor lighting of any kind. Some folks may think you're crazy, but you can still use a lawn chair or chaise lounge from which to observe comfortably.

Good luck and stay warm and alert.

In conclusion, it doesn't seem possible, but the Winter Solstice occurs at 7:42 am on December 21. Another year gone by! Predictions I've seen call for a cold and snowy winter once again. As I get older I'm beginning to understand why the birds migrate south in the winter!!!

If the weather cooperates Seagrave Observatory will continue to be open to the public every Saturday night. Check our web site - http://www.theskyscrapers.org - for further information, especially if the snow starts flying.

Happy holidays and clear skies to you all.

Secretary's Report

Joel Cohen, Secretary

Monthly Meeting

November 5, 2004, Skyscrapers Meeting Hall

Meeting called to order at 7:40 PM

Secretary's Report – No business meeting held during Astro Assembly

Treasurer's Report - Delivered verbally and accepted

Trustee's Report - Jack Szelka estimated that the final cost of repairs to wall in the Clark Ante Room would run between \$100 and \$300. Some of the initial repairs have been started.

Librarian/Historian's Report - Dave Huestis called for returns of books and other items, which have been out on loan since the summer time. Dave donated a copy of SETI Powers and had several additional copies available for sale. Dan Lorraine also donated three books and a DVD to the library.

New Business - Al Hall moved that we establish an auction as a fundraiser. Motion carried. After some discussion it was recommended that Al, with a group of others, discuss the different options to be presented to the membership at a future meeting.

Jack Szelka made a motion that up to \$50 be allocated to have printed Skyscrapers business cards to hand out with our address, and website information. Motion carried.

The following membership applications have come in over the past few months and all were introduced at the meeting: Raymond Ricard, Joe Sanandrea Jr., Stan and Marilyn Steliga, Jim Brenck, Miroslav Futoma, Krzysztof Ruiz and Dan Kowall. They will be voted in at the December meeting..

Old Business - None

Good of the Organization - Steve Hubbard announced that we would have the Scituate Community Center available for a snow date December 4 if our December Holiday Meeting were postponed due to inclement

weather. Steve also announced the following speakers: December, Dr. Owen Gingrich "The Book Nobody Read", January, Members Potpourri, February, Dave Huestis, a historical view of the "Planetarium Project". Al Hall asked us to circle June 11 for StarConn at Wesleyan and suggested that anyone thinking of making a mirror at Dick Parker's workshop this winter visit the ASGH website and click on the workshop link.

Roger Forsythe mentioned the current conjunction of Venus and Jupiter. Dave Huestis asked for additional contributions to the Skyscraper and announced a session for Archive Preservation November 6.

Dan Lorraine thanked Bob Horton for a job well done with this year's AstroAssembly. Dan related that Tom Rinaldi had donated parts for the 10" Meade portable telescope and that Rick Lynch had donated the ticket worth \$400 to fly Tony Misch, our AstroAssembly keynote speaker, from San Jose to Providence. Dan announced that directions to Oak Ridge for the Star Party scheduled for November 12th will be posted on the website. Dan also mentioned the upcoming trip to Arizona in April 2005 with an estimated cost of less than \$1,000.

Lastly, Dan thanked RINet for hosting our website previously and announced that Jim Hendrickson's employer, the Newfangled Web Factory has commenced hosting our website.

The meeting was adjourned and after a short break members were treated to a presentation by Dr. Robert Gendler who spoke on "The Hybrid Image" and simply delighted us with his imagery. His talk covered modern techniques of astroimaging combining image capture and then processing with software. Following Rob's talk, Dave Huestis presented a brief slide show of some of the sites that we will be visiting on our trip to Flagstaff Arizona.

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. 1116 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