

The Skyscraper

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the monthly publication of



The Amateur Astronomical Society of Rhode Island

47 Peepoad Road
North Scituate, RI 02857

www.theskyscrapers.org

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See back page for directions to Seagrave Observatory.

Please submit items for the newsletter by May 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.

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The Skyscraper

May 2004

May Meeting

Friday May 7, 7:30pm at Seagrave Observatory

Our featured speaker for this meeting will be Dr. James Lowenthal, assistant professor at Smith College, dept of astronomy. He will be presenting a talk entitled "Deeper than deep...How far back can we see?" This will be a talk about the Hubble deep and the Hubble Ultra deep fields, some new high-redshift galaxy records and plans for the UMASS/ Mexico Millimeter Telescope in Mexico.

If interested, I invite you to visit his website: <http://earth.ast.smith.edu/james/>

Some of his research interests are: high redshift galaxies, primeval galaxies, galaxy evolution, ultra-faint radio sources and starburst galaxies.

Elected officers will be sworn in at the May meeting.

Skyscrapers Calendar

Public observing is held every Saturday at Seagrave Observatory weather permitting.

May 1 Saturday	dusk	Public Observing Night at Seagrave Observatory
May 7 Friday	7:30pm	Monthly Meeting at Seagrave Observatory
May 8 Saturday	dusk	Public Observing Night at Seagrave Observatory
May 15 Saturday	dusk	Public Observing Night at Seagrave Observatory
May 22 Saturday	dusk	Public Observing Night at Seagrave Observatory
May 29 Saturday	dusk	Public Observing Night at Seagrave Observatory

Notices:

It is renewal time. Please complete the enclosed renewal form and return it with your check at the May meeting.

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

President's Message

Dan Lorraine, President

Dear Skyscrapers Members,

At the end of the May meeting the new administration will be officially taking office. I would like to welcome to the team veteran Bill Kirby in his role as Treasurer and Mercedes Rivero in her role as Member at Large. Special thanks for a job well done to out-going members Dolores Rinaldi and Bob Napier. Their hard work and extra efforts have gone a long way in advancing the organization to where it is today. And thanks to all of the Executive Committee members for making the last year another great one for Skyscrapers members!

On April 10th, a full bus of 55 Skyscrapers members and friends made a special trip to the American Museum of Natural History in New York City. The weather was perfect, the bus ride to and from was event free, and the museum was fantastic! Other than some tired feet at days end, everyone had a great time. Please see the photos of the trip on the Skyscrapers web site.

We are currently planning another field trip for mid to late June to MIT's Haystack Observatory (see their web site <http://hyperion.haystack.edu>) in the morning and then over to America's Stonehenge in the afternoon, formerly known as Mystery Hill (web site address www.stonehengeusa.com). We will meet at the Observatory and car pool from there. It's approximately a 1_ hour ride to Haystack and America's Stonehenge. If we can get more than 20 people to go, admission to America's Stonehenge is only \$5.00. More details to follow so please watch the web site and the next newsletter for more details.

Lastly, don't forget to renew your Skyscrapers membership as soon as possible and be sure to take advantage of the \$10.00 savings on Sky & Telescope and Astronomy magazines subscription rates. If you already receive either of these magazines but you would like to take advantage of the savings, they will automatically extend your subscription.

Let's keep our fingers crossed for good weather ... it will be nice to be back at Seagrave in May!

Another "NEAT" Comet

David A Huestis, Historian

In my last column I talked about the appearance of Comet LINEAR in our skies. Now it's time to turn our attention to the second one of these icy visitors to wander into our local neighborhood. This one is called Comet C/2000 Q4 NEAT. From the beginning of April though early May, Comet NEAT has been a prominent southern hemisphere object. Now its orbit will cause it to migrate into the skies of the northern hemisphere for us to observe.

You should begin looking for Comet NEAT above the southwestern horizon at dusk on or about May 4. At that time it will still be very low in the sky during evening twilight. Again, when it is this low and within a bright dusky sky, binoculars may be needed to detect it. Depending upon how bright NEAT has become, you might even be able to locate it with the naked-eye.

Each night NEAT will rise higher and higher on an arc that takes it further north, eventually appearing almost due west about 50 degrees off the horizon by May 20 or so. With the comet quickly rising out of the bright twilight and into a darker sky, the increasing contrast and higher sky position should make NEAT an easy target. Of course during those first few days of May, with NEAT so near the horizon, you'll need an unobstructed view to maximize your chances of

observing it. Any cloud cover will obviously cause observing difficulties.

To find NEAT during the latter part of the first week in May, find the bright star Sirius in the southwest sky. The comet will be a little further to the south (left). Comet NEAT will be fading daily, and the hopefully long and prominent tail will also continue to shorten and fade. Those of you who have telescopes will be able to continue to observe this comet for some time as it recedes to the icy regions of the outer solar system from whence it came.

Will Comet NEAT also survive its encounter with the Sun? Like many first time comets before it, NEAT could break apart. If that should happen to NEAT and/or LINEAR, we could have more than two comets in the western sky at the same time. Wouldn't that be exciting!!

Yes, LINEAR will join NEAT in the west-southwest sky from late May though mid-June. Two bright comets within a small region of the sky!! That doesn't happen very often! Will both be visible to the naked-eye at the same time? You know the drill about the predictability of comet behavior. I can only say I hope so.

Two comets at once!! This would be an opportune time to get out your cameras, both film and digital, and attempt to capture an image. If you get something good, send them to the Skyscraper website. LINEAR will remain within 12 degrees of the horizon, while NEAT will climb higher and higher into the western sky.

At the time I prepared this column for publication, Comet NEAT was behaving as predicted, so it should attain naked-eye visibility if all goes well. NEAT is closest to the Earth on May 6 (29,840,197 miles). On May 15th, it's at its closest to the Sun (89,427,631 miles). The coma or head, and the tail are comprised of ice, dust and gas particles sandblasted off the comet's surface by the solar wind, a stream of particles from the sun. Like LINEAR, this is Comet NEAT's first encounter with the sun. Anything can happen. It could be bright. It could fizzle. It could fragment into pieces. Time will tell.

Don't forget, if you can't see NEAT or LINEAR with your naked-eye., then try a pair of binoculars. After you've located it, you may then get it in view of a telescope if you've got one. The view could be quite stunning.

In conclusion, remember that anything is possible with comets. Don't take anything for granted. Surf the web for up-to-date information on both these interlopers. Be proactive and research whether they are performing as predicted, or if they undergo some major transformation. I will try to get the word out though this media if any of the observing scenarios change. Enjoy the cosmic snowballs gracing our skies this spring.

Remember, Seagrave Memorial Observatory on Peeptoad Road in North Scituate is open to the public on any clear Saturday night. Come out and visit us once the sky darkens enough to see the stars. Our members will be happy to share their love of the sky with you. More information, including directions and membership, can be found at our website: (www.theskyscrapers.org). Our website can also link you to a Sky And Telescope article about Comet NEAT and LINEAR, including graphics to help you locate the comets.

Two last comments. Forget about the Eta Aquarid meteor shower on the night of May 5-6. The Moon is full on the 4th, so all but the brightest of the meteors will be washed out. And finally, coming in early June, an event that no one alive has ever witnessed -- the transit of the planet Venus across the face of the Sun. The last time it occurred was 122 years ago. My June column will present the history of this event and how one can safely observe it.

As always, keep your eyes to the skies.

Secretary's Report

Bob Napier, Secretary

Monthly Meeting

March 5, 2004

Scituate Community Center

Meeting Start - 7:40 PM

Secretary's Report - Approved as published in the Skyscraper.

Treasurer's Report - Approved as published in the Skyscraper.

Trustee's Report - Senior Trustee Ted Ferneza reported that the Seagrave Observatory grounds were too wet for public access. He announced that a spring cleanup would be done soon and volunteers would be needed to help out. Ted reported he and Tom Rinaldi had take some CCD images through the 16" Meade with the ST9 CCD camera. A power supply for the 16" dew heater was obtained by Trustee Jack Szelka.

Nominations Committee - Chairperson Dave Huestis reported that the slate of officers for 2004-05 will be: President - Dan Lorraine; 1st VP - Steve Hubbard; 2nd VP - Bob Horton; Secretary - Joel Cohen; Treasurer - Bill Kirby; Members-at-Large - Mercedes Rivero and Ken Dore and Trustee - Rich Arnold.

New Business - Two motions were made: #1) motion to purchase an LCD computer projector and would cost about \$1800 - \$2000; there was some discussion about secure storage and maintenance cost, i.e., since there is no heat in the buildings during the winters, it would be too cold to store the projector there; the LCD projector "bulb" replacement cost is about \$400; the projector would need to be both PC and Apple compatible. #2) motion to purchase the Starry Night Pro software for about \$150. The software would be used on the club's laptop computer to control the 12/16" Meade telescopes.

Old Business - One new member applicant voted into membership. The Nominations Committee presented the 2004-05 slate of officers to be voted on at the annual meeting in April will be: President - Dan Lorraine; 1st VP - Steve Hubbard; 2nd VP - Bob Horton; Secretary - Joel Cohen; Treasurer - Bill Kirby; Members-at-large - Ken Dore and Mercedes Rivero. The Trustee to be voted on is Rich Arnold. The Officers and Trustee will take office at the end of the May meeting.

Good of the Organization - Gerry Dyck donated a book on the moon; the April meeting speaker will be Gary Walker from the ATMob who will talk on

variable star observing; the May meeting will have a speaker on galaxies; the June meeting is still open; the July meeting will be Alan Hirshfield on the origins of celestial photography; the August meeting will be Dennis di Cicco, senior editor from Sky and Telescope, who will talk on the June 8, 2004, transit of Venus; there will tentatively be a trip to Van Vleck Observatory at Wesleyan Univ. in Middletown, Ct., on March 20, to observe the planets with the 20" Clark refractor (the rain date is March 27); a dome installation meeting will be held soon; the trip to the NY City Museum of Science & Hayden Planetarium has been upgraded to use a 55 passenger bus - Bill Luzader will do an astro-quiz during the trip; membership dues are due April 1; Bob Horton completed grinding an 8" f.8 mirror.

Adjournment - 8:10 PM

Annual Meeting

April 2, 2004

Barus-Holley Building, Brown University

Meeting Start - 9:30 PM (after speaker program)

SECRETARY'S REPORT - March report deferred until published in the May Skyscraper.

TREASURER'S REPORT - March report deferred until published in the May Skyscraper.

LIBRARIAN'S REPORT - There are several borrowed library items that need to be returned - please see Dave Huestis for arrangements.

TRUSTEE'S REPORT - no report (see under New Business).

NEW BUSINESS - There were two new applicants for membership. They will be voted on at the next monthly meeting.

The Ash Dome Committee (Trustees Ted Ferneza, Rich Arnold and members Joel Cohen and Al Hall) presented four motions for the disposition of the 15-foot Ash Dome donated to Skyscrapers by the Raytheon Co. (motions subsequently tabled until the legality of selling the dome can be ascertained): Motion #1) Modify Patton roll-Off or the Meade 16" roll-off and mount dome there. Motion #2) Store dome until options become clearer. Motion #3) Sell the dome. Motion #4) Donate the dome to another IRS qualified 501(c)3 non-profit organization.

There was considerable discussion about what to do with the dome since it was donated to Skyscrapers by Raytheon on the specific conditions that it was to be used for public education outreach and observing programs. Raytheon was already going to donate the

dome to one of two other non-profit astronomy clubs in the local states area. Skyscrapers intervened and made a convincing argument that we could make better use of the dome since we had an established public observing program and a new observatory with a 16" Meade telescope (purchased by a Champlin Foundations grant for the purpose of enhancing our public observing program). Raytheon decided that Skyscrapers proposal was a better match for the dome donation and agreed to give it to us provided we pick it up expeditiously, otherwise, it would go to one of the other non-profit astronomy groups that had asked for it. Skyscrapers' members picked up the dome about six months ago and stored it for the winter at Seagrave Observatory in Scituate.

Most of the discussion revolved around selling the dome to a private party or to donate it back to another non-profit 501(c)3 educational organization - such as one of the clubs Raytheon was originally going to donate it to - with the same stipulations that Raytheon gave us. One suggestion was to sell the dome and use the money for other purposes. Al Hall said he would offer as much as \$2,000 and others(?) may offer as much as \$5,000 to \$7,000 for the dome (original new price was stated as over \$20,000). Bob Horton, Bob Napier, and others, said it would be unethical to sell the dome since the donation from Raytheon was acquired under a pretense of using it for public education benefit in accordance with our corporate charter. It was also stated that if we did not use the dome and subsequently sold it without first offering it to one of the other astronomy groups that wanted it, we could lose our integrity and standing in the amateur astronomy community. IRS rules regarding donations to 501(c)3 non-profit charitable organizations (which Skyscrapers falls under) may be violated if the dome is sold, especially to a member since it presents a possible conflict of interest, and could result in the loss of our tax-exempt non-profit status. Loss of our 501(c)3 IRS status would prevent us from ever receiving tax-exempt grants or donations in the future. Pat Landers was asked to inquire into the legality of selling the Ash Dome and if such a sale violated any IRS regulations. One of the several ATMoB (Amateur Telescope Makers of Boston) members present at the meeting said he would find out if they were interested in acquiring the dome for use on one of their new observatories if it were offered for donation.

OLD BUSINESS - Election Results - (Those elected take office at the conclusion of the May meeting)

The Officers elected for 2004-05 are:

President - Dan Lorraine

1st VP - Steve Hubbard

2nd VP - Bob Horton

Secretary - Joel Cohen

Treasurer - Bill Kirby

The Members-at-Large elected for 2004-05 are:
Ken Dore and Mercedes Rivero

The Trustee elected for a three year term 2004-07 is:
Rich Arnold.

Two motions made at the March meeting were tabled:
#1) motion to purchase an LCD computer projector and would cost about \$1800 -\$2000; there was some discussion about secure storage and maintenance cost, i.e., since there is no heat in the buildings during the winters, it would be too cold to store the projector there; the LCD projector "bulb" replacement cost is about \$400; the projector would need to be both PC and Apple compatible. #2) motion to purchase the Starry Night Pro software for about \$150. The software would be used on the club's laptop computer to control the 12/16" Meade telescopes.

Memberships: One new applicant was voted into membership.

GOOD OF THE ORGANIZATION - The May meeting will have a speaker on galaxy formation; Because of Independence day falling on Monday, July 5 and people will probably take a long weekend away, the July meeting will NOT be the first Friday of the month, but will be held the second Friday on July 9; The September meeting will be held the Friday after Labor Day weekend; Al Hall announced that there are two naked eye comets visible; Starconn will be held June 5 this year and will feature a talk by a person from the JPL Mars Rovers Team; Dave Huestis mentioned the two naked eye comets visible at once in the sky are LINEAR and NEAT and were expected to be about 2nd magnitude; Dan Lorraine said NASA recognizes the Skyscrapers' web site as one of the better amateur astronomy web sites in the country; Joel Cohen is looking for volunteers to participate in a project to interview club members, especially those who have been around the longest; Dave Huestis announced that Borders Book Store were currently offering 20% off on astronomy books; Boston Telescope is going out of business after starting up just a little over a year ago; NEAF (North East Astronomy Forum) will be held the weekend of April 17, in Suffern, NY; Membership dues

are now payable and there is an option to subscribe to Sky & Telescope and Astronomy magazines for \$10 off the regular subscription price.

Adjournment - 10:45 PM

Checking Account Report

2/16/2004 Through 4/2/2004

Category Description	2/16/2004- 4/2/2004
INCOME	
Uncategorized deposits	2,991.00
donation	70.00
dues	620.00
publications	259.65
TOTAL deposits	949.65
interest	5.75
TOTAL INCOME	3,946.40
EXPENSES	
electric	26.01
library	44.90
materials	58.71
postage	0.00
printing	198.74
propane	4.28
Reimbursement	2,991.00
subscription	65.90
TOTAL EXPENSES	3,389.54
OVERALL TOTAL	556.86

Account Balances Report11

(Includes unrealized gains)
As of 4/2/2004

Account	4/2/2004 Balance
ASSETS	
Cash and Bank Accounts	
checking acct	1,890.60
savings	10,070.49
TOTAL Cash and Bank Accounts	11,961.09
TOTAL ASSETS	11,961.09
LIABILITIES	0.00
OVERALL TOTAL	11,961.09





Seagrave Memorial Observatory
 47 Peeptoad Road
 N. Scituate, Rhode Island 02857

Name: _____

Email: _____

Address: _____

- Junior (13-17)** \$10.00
- Regular (18+)** \$40.00
- Family** \$50.00
- Senior (65+)** \$10.00
- Sponsor** \$60.00
- Supporter** \$100.00
- Patron** \$250.00
- Benefactor** \$500.00

Skyscrapers now offer subscriptions to both leading astronomy magazines at a \$10 savings per year!!! If you currently subscribe they will extend your subscription.

Sky & Telescope subscription	\$32.95 _____	Astronomy Magazine subscription	\$29.00 1 year _____ \$55.00 2 years _____ Do you presently subscribe to Astronomy Yes / No
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I would also like to make an additional tax-deductible donation of \$ _____ to help with the expenses of operating and maintaining Seagrave Memorial Observatory.

Total enclosed \$ _____

Mail check to: Skyscrapers Inc., Attn: Membership Chairperson, 47 Peeptoad Road, North Scituate, Rhode Island 02857



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