



**THE DARK SKY OBSERVER**

The Dark Sky Observer is a publication of the North Jersey Astronomical Group (NJAG), whose purpose is to promote the study and knowledge of the science of astronomy.

The Dark Sky Observer needs your input! Letters, comments, suggestions, book and product reviews, and articles are welcomed and encouraged. Contact the editor at 973-340-5963, kdconod@earthlink.net, or at this address:

Dark Sky Observer

North Jersey Astronomical Group  
P.O. Box 1472, Clifton, NJ 07015-1472  
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**VISIT OUR WEB PAGE AT**

<http://community.nj.com/cc/njag>.

Mary Lou West also maintains a web page at:  
<http://www.csam.montclair.edu/~west/njag.html>

**MEMBERSHIP**

Dues are only \$15.00 per year (\$20.00 for family and \$10.00 for student memberships). Benefits of membership include: \$10 discount on subscriptions to "Sky & Telescope" or "Astronomy" magazines ("Sky & Telescope" subscribers also get a 10% discount on all books, maps, and products at Sky Publishing); a subscription to this newsletter; an e-mail list for the latest club and astronomy news; use of our dark sky sites; field trips to local planetariums, science centers, and star parties; a lending library of astronomical books; a Telescope Loan Program; and star parties for special celestial events.

Make checks out to the NJAG and mail to: North Jersey Astronomical Group, P.O. Box 1472, Clifton, NJ 07015-1472. If you have any questions regarding membership, contact our Acting Membership Committee Chair, Kevin Conod at: kdconod@earthlink.net or 973-340-5963.

**UACNJ**

The NJAG is a member of the United Astronomy Clubs of New Jersey (UACNJ), a consortium of more than a dozen astronomy clubs, united to better help support, coordinate, and communicate ideas between stargazers in and around the state. The UACNJ operates an observatory at Jenny Jump State Forest near Hope, NJ which serves as the NJAG's dark sky site.

**ASTROPHOTOGRAPHY CONTEST AWARDS**

I would like to congratulate the winners of the Y2K Astrophotography contest. The winner for the wide field category is Kevin Conod for his spectacular photo of the summer Milky Way. How did you keep this one from us Kevin? There were three entries for the General topic and John Miksits took it away with his beautiful picture of Sundogs. Jim Piombino is the winner out of three entries for Solar System. It was a great shot of the Christmas eclipse. Good work Jim...it was cold out there. I, Angelo Restivo, was the winner of Deep Sky. My photo was of the easily recognized Orion Nebula. And the Best of show goes to....Kevin Conod with the Summer Milky Way. Kevin will not only get his name on the Astrophotography Plaque, but also receives a free year's membership to the NJAG. Congrats Kevin.

I would also like to recognize Grace Casalino and Ruth Koenig for their entries in the contest. And a special thank you goes out to Jim Piombino for helping me set up the Astro board and in the two previous years for running the contest in my absence. Thanks again Jim!

Well another contest is over so it's time to start opening the shutters for 2001. Good luck next year and keep snapping!



**To see all the contest photographs, please visit our web site at <http://community.nj.com/cc/njag> and click on "Photo Gallery" on the left hand side of the page.**

Angelo Restivo  
*Chair, Astrophotography Committee*

**MAY MEETING**

*Telescopes*

The May meeting will be held on Wednesday, the 9th. Ernie Rossi, a member of Amateur Astronomers Inc. of Cranford, NJ, will give a presentation called "Optical Telescopes: Past, Present, and Future." Mr. Rossi will show some of the unusual ways early astronomical instruments were mounted, how using them differed from modern practices, and a display a variety of different eye-pieces. He will also discuss the large telescopes being planned for the future. Meetings begin promptly at 8:00 p.m. in Richardson Hall, room 226, on the campus of Montclair State University. Call 973-680-8420 or see our web page for directions.

**JUNE MEETING**

*A Rose Colored Universe*

The June meeting will be held on Wednesday, the 13th. Gloria Villalobos of the Rose Center's Hayden Planetarium will be our guest speaker. Ms. Villalobos is the supervisor of the Planetarium's Earth and Space Explainer Program. Her presentation will focus on the trials, tribulations and humor of dealing with the science of the new Hayden Planetarium and its 4 million visitors.

Meetings begin promptly at 8:00 p.m. in Richardson Hall, room 226, on the campus of Montclair State University. Call 973-680-8420 or see our web page for directions.

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## TELESCOPE NIGHTS END

**ON MAY 3**

*Thursdays at 8:00 p.m.*

Thursday Nights are Telescope Nights at Montclair State through May 3! Everyone is invited to look through our telescopes from 8:00 to 9:00 p.m. Weather permitting telescopes will be set up in front of Richardson Hall (the math and science building). For directions, call 973-680-8420. Note: our telescopes can't see through clouds! Telescope Night will be canceled if the skies are not clear.

## ELECTION RESULTS

*New Officers for 2001*

Elections were held at the March meeting and we are pleased to announce the new officers for 2001:

**President:**

Jim Coughlin  
973-890-9669 - woodwrench@aol.com

**Vice President:**

Kevin Conod  
973-340-5963 - kdconod@earthlink.net

**Treasurer:**

Gene Faulkner  
973-779-7932 - ebfaulkner@msn.com

**Recording Secretary:**

Jim Piombino  
201-794-8590 - coacheastside@aol.com

**Corresponding Secretary:**

Heidi Cramer  
973-340-5963 - hlcspsy@scils.rutgers.edu

**Trustee:**

Angelo Restivo  
201-358-1381 - agrestivo@aol.com

***Congratulations!***



## ASTROPHOTOGRAPHY WINNER

John Miksits won the General Category with this spectacular shot of sundogs.

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**S** **TUMP THE ASTRONOMERS**

Have a question about astronomy?  
Send it in to Kevin Conod at the address on page 1  
or to [kdconod@earthlink.net](mailto:kdconod@earthlink.net)  
and we'll try to have an answer in the next newsletter.

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## GET YOUR COPY OF THE ASTRONOMER'S JOURNAL!

The NJAG is making copies of *The Astronomer's Journal* available to its members at cost. The *Journal* is a great 100 page notebook for writing down info and sketching objects while stargazing. Price is only \$7.00 (Please include \$4.00 for postage and handling if you want it mailed to you).

*The Astronomer's Journal* is a daily log designed to be used at the eyepiece by amateur astronomers of all skill levels. Each page has 16 fields of entry, two sketching circles, and ample room for detailed notes. In addition, The Journal has a blank table of contents that the user fills in with a brief description of each entry; it acts as a valuable reference for information contained in the book. Spiral bound and three-hole punched for observing convenience.

Make check or money orders payable to the North Jersey Astronomical Group and send to: *Astronomer's Journal*, NJAG, P.O. Box 1472, Clifton, NJ 07015-1472.

## MINUTES

Minutes of Regular Meeting of the NJAG April 11, 2001

The meeting opened with the introduction of the night's speaker, Dr. Edward Groth of Princeton University. Dr. Groth's lecture was on the search for extraterrestrial intelligence (SETI).

At 9:20 p.m. the meeting was called to order by President Jim Coughlin.

### Vice President:

Kevin Conod reported that the club will have a table at the Northeast Astronomy Forum on May 5 and 6. Volunteers are needed, please call Kevin.

### Treasurer:

Kevin Conod reported a Balance of \$583.42 He had also opened up a new banking account, and was looking for a checking account.

### Corresponding Secretary:

Heidi Cramer reported that Ruth and Dennis Koenig sent the club a thank you note, thanking the club for the gifts of a small brass telescope and lifetime membership.

### Membership:

Stands at 55 members. Several members need to pay their overdue dues. Subscriptions to magazines are starting to come up for renewal.

### Observation:

Dr. West reported that due to the weather there were only two successful public nights so far this semester, with views of Jupiter, Saturn, and the Orion Nebula.

### Astrophoto:

Angelo Restivo reported the winners of the clubs astrophotography contest. He also had nameplates made to be mounted on the club's plaque.

### Old Business:

The club's dinner was a success with 25 member attending.

### New Business:

Plans for a public Night were made to be held at Riker Hill Park, on Aug. 12 and Nov. 17, Public nights at Jenny Jump have begun.

### New Ideas:

Joe Marzullo and Dr. West are attempting to use their CCD camera to detect planets revolving around other stars by observing variable stars. The new roof pier for the telescope has been vibrating and must be repaired. Lighting on the Student Center roof has been fixed.

Meeting adjourned at 10:24 PM

*James Piombino*

## UACNJ ASTRONOMY DAY 2001

Saturday, April 28, 2001

The afternoon program will be held at the Warren County Branch Library on Route 46 in Hackettstown, from 1:00 to 5:00 p.m. The evening program will be held at Jenny Jump Observatory, from 7:30 to 11:00 p.m. The program and presentations are directed towards educating the general public about astronomy and related topics and issues. There is day-time observing, displays, and a variety of presentations.

### Astronomy Day Presentations

*(At the Warren County Branch Library)*

**1:30** - The Planisphere as an Observing Tool - Joe Molnar, Morris Museum Astronomical Society

**2:30** - Dance of the Periodic Comets - John Lowe, Optical Sales Engineer

**3:30** - Astronomy Through Paper Money - Gordon Bond, Sperry Observatory, Union County College

*(At Jenny Jump Observatory)*

**8:00** - Hubble Highlights - Phil Harrington, Author and Astronomer

For details see:

<http://users.erols.com/njastro/orgs/ast-day01.htm>

## NORTHEAST ASTRONOMY FORUM & TELESCOPE SHOW

May 5 - May 6, 2001

In the 10 years since its inception, the Northeast Astronomy Forum & Telescope Show (NEAF) has grown from a small local event to a nationally recognized trade show. Last year NEAF moved the show to a new, larger venue at the Rockland Community College. This year it will grow again as the show is expanded to two days. NEAF is also continuing the tradition of bringing together the very best vendors in amateur astronomy (more than 70 of them), as well as a group of distinguished speakers from the field. The staff are making every attempt to make this the best NEAF yet, and hope you will enjoy the show.

For a schedule, directions, and more information visit the Rockland Astronomy Club's web site at: <http://www.rocklandastronomy.com/neaf.htm>

## JERSEY STARQUEST 2001

June 22 - 24, 2001

Jersey StarQuest 2001 is sponsored by the Amateur Astronomers Association of Princeton, Inc. (AAAP). This gala star party is held at the Hope Conference and Renewal Center in Hope, New Jersey.

**FEATURES:** Ideally dark skies - some of the finest viewing in New Jersey, Astrophotography workshop, Lectures, Swap table and flea market offering a bonanza of telescope accessories, Catered meals, Extensive camping facilities, Swimming pool available, Lake on the grounds, and a Tour of nearby observatories.

StarQuest is one of the premiere amateur astronomy gatherings in the Northeast! Come join us. Deadline for registration is June 8, 2001.

Visit the AAAP website for a complete StarQuest registration form and price schedule: <http://www.princetonastronomy.org/starquestpage.html>

If you have questions regarding StarQuest, please contact:

Greg Mauro, Registration Chairman, Jersey StarQuest 2001, 915 Princess Drive, Yardley, PA 19067, or [k3ea@arrl.net](mailto:k3ea@arrl.net).

## SKY CALENDAR

### May

- 7 Mercury near Saturn
- 15 Venus in morning sky
- 16 Mercury near Jupiter
- 21 Mercury at greatest elongation
- 24/25 Moon near Mercury and Jupiter

### June

- 1 Moon near Spica
- 7 Moon near Mars
- 8 Venus at greatest elongation
- 17/18 Moon near Venus
- 21 Summer Solstice
- 24/25 Moon near Regulus



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**SPACE DICTIONARY**

Twilight, as everyone knows, comes after sunset (or before sunrise in the morning). But when does it actually begin and end?

There are actually three types of twilight:

Civil Twilight ends when the center of the Sun is 6 degrees below the horizon.

Nautical Twilight ends when the center of the Sun is 12 degrees below the horizon.

Astronomical Twilight ends when the center of the Sun is 18 degrees below the horizon.

In practical terms, civil twilight is when most street lights come on. At the beginning of nautical twilight, the brightest stars become visible. At the end of astronomical twilight, the sky is as dark as it can get.

For example, on June 1:

- Sunset . . . . . 8:23 p.m.
- Civil Twilight Ends . . . . . 8:56 p.m.
- Nautical Twilight Ends . . . . . 9:37 p.m.
- Astronomical Twilight Ends . . . . 10:25 p.m.



**MOONSTRUCK**

A fine mosaic of the Moon by Gene Faulkner.  
Exposure was 1/1000 sec. at f/10 on Fuji 800 film.

**STARLINE**

For a weekly update on the night sky, call the StarLine at 973-680-8420.

