

# *D I S T A N T* *L I G H T*

Rockland Astronomy Club Journal ~ December 2006



HAPPY  
HOLIDAYS  
FROM  
RAC

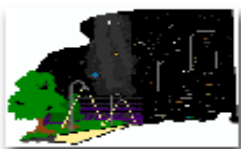


**DISTANT LIGHT** is published 10 times a year by the Rockland Astronomy Club, 225 Route 59, Suffern, NY 10901-5203. Subscriptions are included with annual RAC membership dues. Send address changes to Bill Thys at the address above. Contributions to and inquiries about this journal can be emailed to the Editor/Design Director Mies Hora: Editor@rocklandastronomy.com

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International Dark Sky Association



**PLEASE NOTE OUR NEW ADDRESS:**

Rockland Astronomy Club,  
 225 Route 59, Suffern, NY 10901-5203

Cover photo montage courtesy of Barlow Bob

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[CLICK HERE FOR RAC MEETINGS SCHEDULE AND ADVISORY COMMITTEE: P. 6](#)

**LETTERS TO THE EDITOR**

**OBSERVING REPORT**

Lake Taghkanic, Saturday November 24, 2006

**Hi Everyone,**

Now last night is what an astronomy club should be!!! A common interest among people, good conversation, some laughs, lots of nice scopes, great skies.... you get the picture, lots of fun and a really great time!!!

Nice to have met all of you and I look forward to our next session.

Regards,  
 Bob Riedelf

**What a totally awesome viewing session!!!!** Very dark skies, great transparency, only an occasional breeze and not too cold! To the gentleman who found the Intergalactic Tramp GC... Thank you!  
 Best,  
 Chris

**I got up to Lake Taghkanic around 6:15pm.** The drive up and back took only about 1:15, no traffic. On the way back, I didn't pass a car going in the same direction for an hour. It was great to see everyone there. Those I knew like Bob, Bill, Scott, Chris, Keith. And it was nice to meet the rest of you, including John and Ken.

**Now the observing**

The sky was great; the only problem was in the south, too much ambient light. Bob pointed out something I didn't think of. All the trees have lost there leaves and now the light can escape skywards.

The Vail was still up when I got there and I must say the Northeast side was the best I've ever seen (the side without the star).

*(Continued on next page)*

**RAC MEMBERSHIP APPLICATION**

Club members receive this journal, enjoy special prices for annual subscriptions to S&T and ASTRONOMY magazines, discounts to club events and much more. Make checks payable to RAC and mail with this form to: Rockland Astronomy Club, Attn: Memberships, 225 Route 59, Suffern, New York 10901-5203.

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*Note: The Journal is sent to Members via email. For mailed hard copies, add \$18/year.*

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Senior Citizen (65+)	\$15	\$28	\$40	\$65	+\$18/yr.	_____
High School Student	\$10	\$18	\$25	\$40	+\$18/yr.	_____
<b>Grand Total</b>						<b>_____</b>

## BARLOW BOB'S CORNER

## Celestial Symbols

Use a planisphere to create the sky, as it would appear at 8:00 PM, on December 25th. The large upright image of the Northern Cross, in Cygnus, appears on the western horizon. The M44 star cluster, in Cancer, appears on the eastern horizon. M44 is also called Praesepe, a Latin word meaning manger.

In the northeast to eastern horizon, the following stars, of the winter hexagon: Capella, Pollux, Procyon, Sirius, Rigel and Aldebaran, could be connected, to form the points of the Star of David. If a crescent Moon appears in the sky at this time, you would have celestial symbols of, the Christian, Jewish and Muslim religions.

On May first, around Easter and Passover, the Northern Cross, in Cygnus, rises on the northern horizon. The M44 star cluster, in Cancer and the stars of the winter hexagon, set on the western horizon. ✨

## LETTERS

Continued from previous page

Then I looked at the North American and the Pelican Nebulas. I spent time looking at a lot of the galaxies in Pegasus, Thanks Chris for helping me find Stephan's Quintet. Too many NGC's to list. But NGC 7331 was spectacular! I also took a look at the glob M15 in Pegasus as well. We looked at all the Globos in Aurigae... M36, M37, M38. The sky was dark enough in the North to take in M81 and M82. Time and time again I kept coming back to M1, the Crab Nebula, hoping to see some structure and I think I did, but it also could have been my eyes playing tricks. As the Pleiades got higher you could see some nebulosity in the cluster. There were two dark lanes in Andromeda that I saw and it was also a naked eye object. Although I looked and looked, I could never find M33, but other people did. Good job Bob!



Photo: Courtesy Barlow Bob

As the night wore on the constellations just kept on coming. Gemini's M35 was great too look at, but the star of the show was Orion. You could spend hours just looking at the Orion Nebula and some people did. The Trapezium was magnificent. M78 looked like I had dew on the eyepiece but I didn't. It's rather dim. I should have looked for the Witch Head Nebula but I forgot it was there. Now the fun part; I've looked for the Horse Head Nebula before and I have seen something off the belt, but this time I brought out my H-Beta filter that I bought for such an occasion. I, of course, know where it is, or at least I think I know where it is. I saw something, what I don't know. But what ever I was looking at was better without the filter. Now I've had a chance to take a look at my astronomy software and I now think Bob was right. I was definitely looking at the Flame Nebula not the Horse Head, I think (LOL). I guess December's new Moon has something for me to look forward to.

By this time the light winds that started off the night had calmed down, and Saturn was on the rise. I could definitely see some equatorial bands. And with the 22

Nagler I counted about 5 moons. After Saturn, we packed it in. and I left at 2:05 am. What a night, the weather never got to cold, and the viewing was magnificent. – George D. Andrew

**It was a treat to be shown the Inter-galactic Wanderer.** This globular orbits some 300,000 LY away from us, and is the furthest known satellite of the Milky Way. Stealing a peak from a couple of the 30-cm class Dobs present, you could resolve an asymmetrical shape, and some of the peripheral stars. As for M42, I was also pleased to resolve 2 extra stars in the Trapezium (E & F), accompanied by gossamer-fine detail in the surrounding gas.

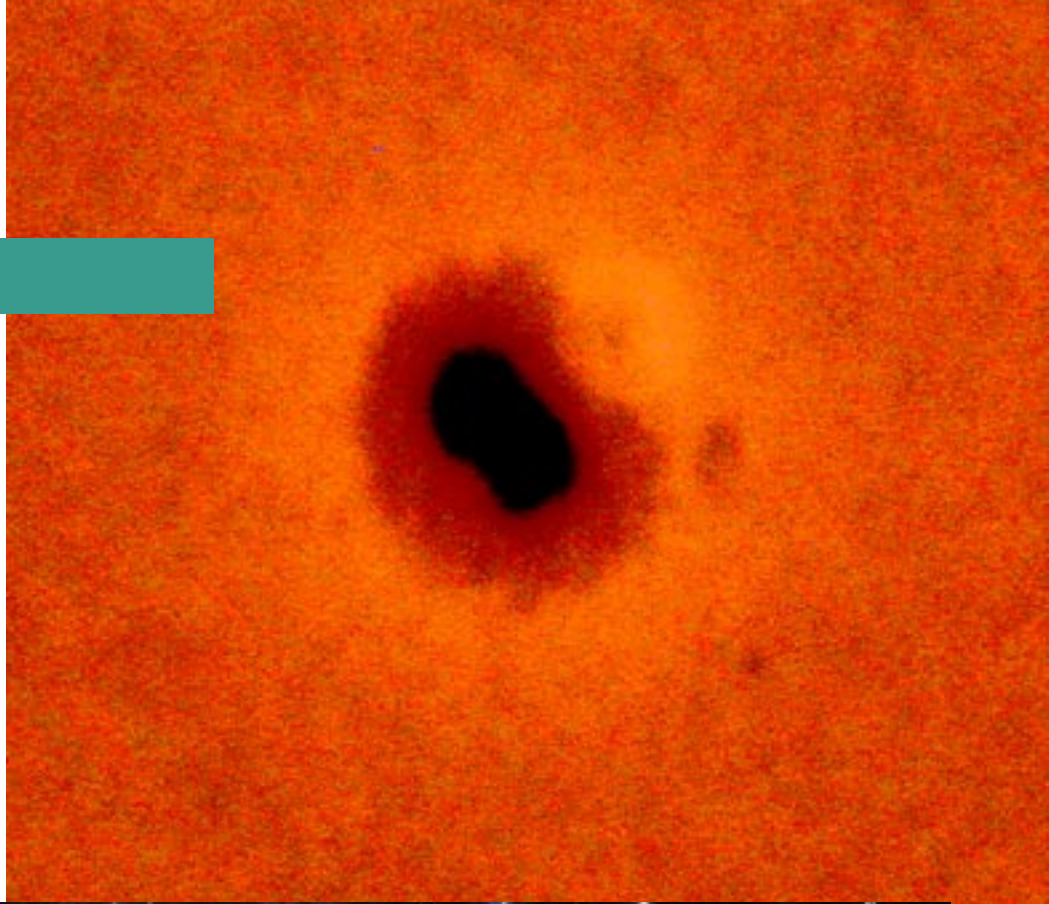
The M43 companion nebula was clearly visible as well. Saturn yielded several equatorial bands, with subtle shadings between them clearly visible. Curiously, seeing did not allow much detail on the rings themselves. However, the ring shadows, and Saturn's shadow on the rings were sharp and distinct. In my borrowed 140-mm refractor, five moons also appeared as tiny jewel-like pinpoints. – Keith Murdock ✨

## MEMBER SIGHTING

To the right is an image of the naked eye sunspot seen right now pretty centrally located on the sun's disk.

On the day of the Mercury transit (11/08/2006) this large sunspot was just rotating around the limb of the sun north of where Mercury would appear. It appears to have grown in size over several days and is now what I would consider to be a naked eye sunspot and easily seen in properly filtered binoculars.

Tom Massey, Clearwater, FL



## HUBBLE SEES LIGHT ECHO STAR V838 MONOCEROTIS





Full Dec 5      Last Qtr Dec 13      New Dec 20      First Qtr Dec 27

## DECEMBER SKYDATA

### Highlights

- Dec 6 Saturn stationary
- Dec 9 Mercury 1.0° north of Mars
- Dec 10 Saturn 1.2° south of Moon
- Dec 10 Mercury 0.1° north of Jupiter
- Dec 11 Mars 0.8° south of Jupiter
- Dec 13 Geminid meteors**
- Dec 15 Spica 0.8° north of Moon
- Dec 18 Jupiter 6° north of Moon
- Dec 18 Mars 4° north of Antares
- Dec 18 Antares 0.4° north of Moon
- Dec 18 Mars 5° north of Moon
- Dec 21 Winter solstice 7:22 A.M.**

### Don't Miss the Geminids!

The best viewing window for the Geminids is Wednesday evening December 13th around 9 pm through Thursday morning December 14th. The Geminids are a beautiful, prolific and reliable shower. While

December nights can be bone-chilling, for many areas sky transparency is better than it is during the August Perseids. The Geminids are also accessible for many Southern Hemisphere locations, unlike the Perseids. This year, there is slight interference from a waning crescent Moon (about 1/3 lit). However, the Moon doesn't rise until about 1am, allowing a lot of dark sky time. And even after it rises, the Moon shouldn't discourage continued observing. The radiant is highest in the sky at around 2am, but from mid-northern latitudes it is at a decent elevation from around 9pm until the beginning of morning twilight.

The Geminids can produce observed rates of up to 100/hour at maximum. Even if those numbers are a bit optimistic for this year, this will be a shower that just about anyone can enjoy if the weather cooperates. Decent numbers of sporadic meteors (~10-15/hour from dark sites) will add to the display. The shower often shows a plateau-like maximum, with near-maximum rates being sustained for many hours before dropping off rather sharply.

Geminids are medium-speed meteors. Most of them don't leave glowing trains, but the brighter ones are often colored (yellow, green and blue are most common). The proportion of bright meteors and fireballs is higher during and after maximum than on pre-maximum nights. The shower is active from December 7-17; observations before the peak night will be impeded by a bright Moon this year, although December 12/13 is worth a shot. December 14/15 may be worth watching as well, although as stated above activity tends to fall off sharply after the peak. ★

### Prime Observing Window

Friday Dec 15 through Sunday Dec 24

### Sun & Moon Rise & Set Times

Date	Sunrise	Set	Moonrise	Set	Phase
Dec 5	16:45	08:06	16:45	08:06	Full
Dec 13	07:13	16:29	00:19	12:30	Last Qtr
Dec 20	07:17	16:31	07:44	16:18	New
Dec 27	07:20	16:35	11:41	Next Day	First Qtr

### Planetary

#### Visible Planets in the Night Sky

##### December 1

	Rise	Transit	Set	Mag
Mercury	05:24	10:29	15:35	1.6
Venus	07:47	12:22	16:58	-3.9
Mars	06:01	10:52	15:44	1.8
Jupiter	06:24	11:13	16:03	-2.3
Saturn	22:10	17:05	12:00	0.4

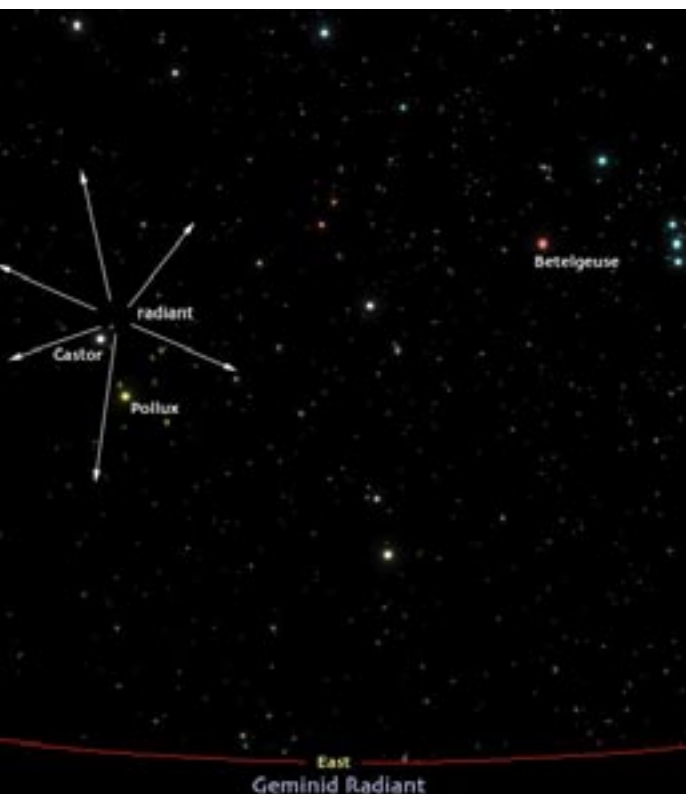
##### December 15

	Rise	Transit	Set	Mag
Mercury	06:16	10:58	15:40	4.6
Venus	08:13	12:44	17:16	-3.9
Mars	05:56	10:39	15:22	1.8
Jupiter	05:44	10:31	15:19	-2.4
Saturn	21:14	16:09	11:05	0.4

##### December 31

	Rise	Transit	Set	Mag
Mercury	07:14	11:43	16:12	1.3
Venus	08:29	13:08	17:48	-3.9
Mars	05:50	10:25	15:01	1.8
Jupiter	04:58	09:42	14:27	-2.1
Saturn	20:08	15:04	10:01	0.3

All data calculated for Suffern, New York, Eastern Time:  
Latitude: 41:06:48 N; Longitude: 74:08:38 W



# The RAC Essentials

## MONTHLY CALENDAR

**201-768-2238  
or 845-47STARS**

**Message Hotline: The latest information or last minute changes to club events.**

### Prime Observing

**December 15 thru 24**

**Fri, Dec 1, 8pm**

**Lecture at Suny RCC Suffern, NY, 'Extinction Theory: Death of the Dinosaurs; Lecture/Frank Bifulco**

Tues, Dec 12, 8pm

Advisory Board Committee Meeting  
LHVCC, Airmont, N.Y.

Fri/Sat, Dec 15 & 16

Observing at Wawayanda  
(members night)\*

Sat, Dec 16

Up all night Observing at Taghkanic  
State Park (members night)\*

## LOCATIONS

## ADVISORY CMTE.

**North Rockland High School Planetarium**  
Hammond Road, Thiells, NY

**Rockland Community College**  
College Road, Suffern, NY

**Lower Hudson Valley Challenger Center**  
Rt. 59, Suffern, NY

**Anthony Wayne Recreation Area\***  
Exit 17, P.I.P., NY

**Silvermine Ski Area\***  
Exit 18, P.I.P., NY

**Wawayanda State Park\***  
973-853-4462,  
Highland Lakes, NJ

**Taghkanic State Park\***  
Taconic State Parkway,  
Ancram, NY

Jose Alvira  
Frank Bifulco  
Jim Burnell  
Mark Hettinger  
Mies Hora  
Rob Lyons  
Keith Murdock  
Al Nagler  
Dr. Jack Rosen  
Audry Salvatore  
Len Salvatore  
Ed Siemenn, *Chair*  
Bernie Sokolowski  
Bill Thys  
Alan Traino

### Life & Honorary Members

Tom Massey (L)  
Al Nagler (L)  
Don Urban (L)  
Dr. Saeed Safaie (H)  
Andrew Warrington (H)

\*Special permits required to observe at these locations. Contact Frank Bifulco for permit info.

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