

The Rosette Gazette

Volume 20, Issue 2

Newsletter of the Rose City Astronomers

February, 2008

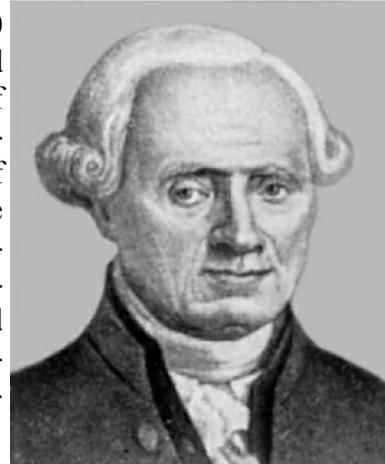


RCA FEBRUARY 18 GENERAL MEETING

In This Issue:

- 1 .. General Meeting
- 2 .. Club Officers
 - Magazines
 - President's Message
- 3 .. Classic Telescopes
- 7 .. The Observer's Corner
- 9 .. Lunar Eclipse at OMSI
10. Board Minutes
11. Telescope Workshop
 - Science SIG
 - RCA Library
 - Site Committee
 - Cosmology SIG
12. Calendar

With the March Messier Marathon coming up, this month's presentation will be on Charles Messier, his objects, and Messier Marathons. Doug Huston, RCA's Vice President of Observing will speak. Doug has been a member of RCA for nearly 10 years and has served on the Board in various positions for most of that time. He is particularly interested in the theoretical aspects of astronomy and is one of the founding members of the Cosmology/Astrophysics Special Interest Group. He recently served as the secretary for the Astronomical League's 2007 Convention Executive Committee.



Charles Messier
(June 26, 1730 - April 12, 1817)

HST Messier Catalog Images Courtesy NASA, ESA and the Hubble Heritage Team (STScI/AURA)



RCA is a member of the
Astronomical League.
<http://www.astroleague.org>

All are Welcome! Monday February 18
Social Gathering: 7 pm. Meeting Begins: 7:30 pm.
Location: OMSI Auditorium

©Copyright 2008 The Rose City Astronomers All Rights Reserved.
Hubble Deep Field above courtesy R. Williams (STScI), the Hubble Deep Field Team and NASA.
Moon photos below courtesy David Haworth

New Moon
February 6

First Quarter Moon
February 13

Full Moon
February 20

Last Quarter Moon
February 28



Club Officers				
President	Sameer	Ruiwale	(503) 681-0100	sameer_ruiwale@yahoo.com
Past president	Carol	Huston	(503) 629-8809	StarsCarol@comcast.net
VP Membership	Ken	Hose	(503) 591-5585	khose@comcast.net
VP Observing	Doug	Huston	(503) 629-8809	geometer@comcast.net
VP Community Affairs	Patton	Echols	(503) 936-4270	mpecho@rdrop.com
VP Programming	Matt	Brewster	(503) 740-2329	renaissant@comcast.net
Treasurer	Larry	Godsey	(503) 675-5217	larrygodsey@comcast.net
Secretary	Margaret	Campbell-McCrea	(503) 232-7636	mmcrea@nwlk.com
Sales Director	open			
Newsletter Editor	Larry	Deal	(503) 708-4180	Gazette_ed@comcast.net
New Member Advisor	Jim	Reilly	(503) 493-2386	jim-lorien@granitic.net
Web Master	Dareth	Murray	(503) 957-4499	darethlee@comcast.net
Alcor, Historian	Dale	Fenske	(503) 256-1840	fenskedw@msn.com
Library Director	Jan	Keiski	(503) 539-4566	jikeiski@comcast.net
Telescope Director	Greg	Rohde	(503) 629-5475	gfrohde@yahoo.com
Observing Site Director	David	Nemo	(503) 224-6366	david@nemoworld.com
Media Director	Patton	Echols	(503) 936-4270	mpecho@rdrop.com
IDA Liaison	Bob	McGown	(503) 244-0078	bobmcgown@comcast.net
OSP Liaison	Larry	Godsey	(503) 675-5217	larrygodsey@comcast.net
Subscription Director	Larry	Godsey	(503) 675-5217	larrygodsey@comcast.net
SIG Director	Tom	Nathe	(503) 641-3235	tmnathe@verizon.net
OMSI Liaison	Jan	Keiski	(503) 539-4566	jikeiski@comcast.net
Youth Programs Director	open			



RCA MAGAZINE SUBSCRIPTIONS

One of the benefits of RCA Membership is a reduced rate subscription to Sky & Telescope and Astronomy magazines. The RCA member rate for Sky & Telescope Magazine is \$32.95 for one year or \$65.95 for two years. The RCA member rate for Astronomy magazine is \$34 for one year or \$60 for two years. For more information go to the RCA web site index and click on any of the links for magazines. Larry Godsey, Treasurer, 503-675-5217, will be taking renewals and new subscriptions at the Magazine Table before General Meetings. Please make checks out to "RCA" and allow two months for your subscription to be renewed.

President's Message By Sameer Ruiwale

After the long winters and cloudy, rainy nights, the observing season for 2008 starts this month. The RCA has a great star party schedule lined up this year. What better way to kick off this season than a joint OMSI-RCA star party at OMSI on Feb 20th for viewing a total eclipse of the Moon! The moon enters partial eclipse at 5:43pm and enters totality at 7:00pm. Totality lasts for about 52 minutes. I do hope that all of you can make it and get a chance to view the eclipse – indeed, this is the last total lunar eclipse visible from the US until the next one Dec. 20-21, 2010. Let us hope that the weather cooperates!

There are many other star parties coming up this year that I am excited

about. We have our regulars – Kah Nee Ta Messier Marathon, Camp Hancock and others. We also have two star parties at the new Maupin site following the great success of last year. And then we have a couple of star parties scheduled at Stub Stewart State Park in Vernonia – I am excited about these for two reasons – this promises to be a great dark sky location close to all our members on the Westside. Second, it builds up on the great relationship we have with the Oregon State Parks system at Rooster Rock SP! I am looking forward to this year eagerly! Many thanks to our VP Observing – Doug Huston for putting together an exciting star party schedule.

Finally I would like remind our members of our ongoing efforts and fund-raising for a RCA observing site. Having our own observing site would be a great benefit and asset to our club members. Our efforts on this are being coordinated by David Nemo and a few others on the Observing site committee and they have been doing a great job so far. I would encourage the RCA members to donate to the fund-raising campaign in any way they can – RCA is a non-profit organization and all donations are tax-deductible. Here's hoping to a RCA club observing site in the near future! Until next month..

Clear skies!

CLASSIC TELESCOPES

Meeting the deep-sky challenge of Taurus with an Edmund Scientific 8-inch reflector.

By John W. Siple and Keith T. Gordon

The rainy season, starting in late Fall, is heralded by the appearance of the constellation Taurus the Bull. Occupying a prominent position in the night sky just eastward of Aries and Cetus and partially immersed in the soft watery glow of the winter Milky Way, the area is rich in notable open star clusters.

The Taurus region is a favorite stomping ground for casual observers who love to scan the skies with binoculars. Two dazzling configurations of naked eye stars—the V-shaped grouping of the Hyades in the stern face of the Bull and the stubby dipper of the Pleiades at the right shoulder—adorn the zodiacal constellation. Telescopists can appreciate the gossamer glow of the “Crab Nebula,” the still expanding gaseous remnant of a daylight supernova recorded by Chinese astronomers in A.D. 1054.

Edmund Scientific’s 8-inch f/8 Newtonian, sold during the 1960s and ’70s, was selected for meeting the deep-sky challenge of Taurus. This supreme grade telescope, their “largest and best” reflector, was manufactured in-house at Barrington, New Jersey, and then distributed by mail order countrywide.

Edmund Scientific Company (trade name Edscorp) was founded in 1942 by Norman W. Edmund. Later billed as “America’s Greatest Optical Market Place,” it is considered by many hobbyists and educators as the king of low-cost innovative scientific gadgetry and optics. (The commercial giant was re-fashioned into two companies, Edmund Optics and the consumer science division of Edmund Scientifics, in the 1970s.)

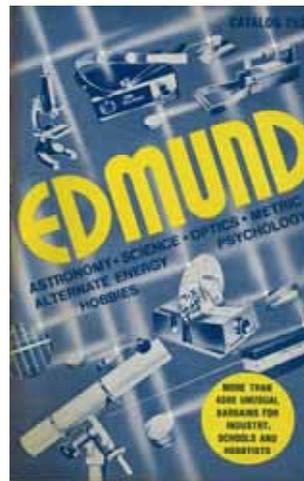
Sky & Telescope magazine’s first ad for the 8-inch telescope appeared in the December 1961 issue, where the 210 lb. behemoth was priced at \$389. However, the customized nature of the big reflector resulted in very low annual production runs. Only several dozen completed instruments made it out the factory doors each calendar year.



Pictured above is the December 1974 catalog advertisement for the now classic Edmund Newtonian reflector. At left is the authors' 8-inch telescope. The attractively illustrated outside front cover of the Edmund Scientific catalog is shown immediately below.

By late 1974, with the cost spiraling to \$660, Edmund decided to discontinue the oversized Newtonian in favor of their already more popular, cheaper 6-inch model. And then in 1977, as a “30-year commitment to Astronomy,” Edmund introduced a revolutionary new 8-inch f/5 reflector of “light weight” and “professional” design.

With its hefty cast iron equatorial mounting, ultra-light polished tube, and intricate clock drive mechanism, customers could expect the old-style Edscorp 8-inch reflector to be furnished with only the best optics. “Quality controlled” full-thickness Pyrex mirrors were supplied by Universal Precision Optical Co. (UPCO Optics) of Shamokin Dam, Pennsylvania. This was the same re-



nowned company that made the superb mirrors for Criterion’s famous Dynascope line of reflector telescopes. (As proof of authenticity, the backside of each primary mirror has several identifying marks: a sticker from the maker UPCO Optics and cast-into-the-glass lettering that says “Pyrex” and “Made in USA.”)

According to Edmund’s very popular illustrated booklet *How to Use Your Telescope*, the 8-inch reflector can discern stars as faint as magnitude 13.3 and can separate double stars 0.6 arcseconds apart. With such capability at the amateur astronomers’ fingertips, splitting close doubles and finding deep-sky objects in Taurus is a breeze.

(Continued on page 4)

Classic Scopes (Cont'd from page 3)

A reconnaissance of the Hyades with the wide-field 6 X 50 finder quickly shows a long line of impressive double stars extending northwest from the "V" shaped core of the rich cluster. Selected binaries in this astral string of celestial beauties include many wide pairs, enjoyable in both modest-size telescopes and binoculars.

The naked eye optical (line of sight) pair Theta¹ (θ^1) and Theta² (θ^2) Tauri, separated by 347", is found just to the west of the 1st magnitude reddish-orange Royal Star Aldebaran. At a magnification of 41x in the Edmund scope, 3.4-magnitude Theta² appears white, while 3.9-magnitude Theta¹ has a strong yellowish tint. Membership in the Hyades places the two stars around 150 light-years away.

A fine target for opera glasses and binoculars is the double star 65 (κ^1) and 67 (κ^2) Tauri. Closely matching the apparent separation of its stellar cousin Theta¹ and Theta², found $6\frac{1}{2}^\circ$ to the south, this stunning pair of white and pale yellow stars (magnitudes 4.4 and 5.4) gleam intensely at all powers. Peering closely midway between the two major stars, keen-eyed observers will notice another fainter pair of suns. $\Sigma 541$ (mags. 9.5, 9.8; Sep. 5.3"), a diminished clone of the wider bracketing pair, is cleanly split by boosting the magnification to 271x.

Moving $3\frac{1}{2}^\circ$ northward we encounter 59 (γ) Tauri, an attractive pair with unequal white and blue components. The 5.5-magnitude primary has a 7.6-magnitude companion 19.4" to the north-northeast. The couple is well split through the Edmund scope at 130x.

The capstone in this jewel-laden chain of double stars is 52 (ϕ) Tauri, a binary system known for its intense, vibrant colors. The visual color impression is especially strong at 65x, where the 5th-magnitude primary glows deep orange. The 8.4-magnitude secondary star, 52.1" distant to the west-southwest, is a striking cerulean blue.



The constellation Taurus holds one of the heavens most cherished open star clusters. The Pleiades (M45), known in Greek mythology as the seven fair daughters of the Titan Atlas and the Oceanid Pleione, inhabit an area of the sky nearly equal to that of four full Moons. The Pleiadian stars Alcyone, Merope, Electra, and Maia form the bowl of the dipper-shaped asterism, and their other sister sun Taygeta is found at the tip of the pouring spout. The remaining sibling stars Asterope

The Pleiades or "Seven Sisters," viewed from an ice world 50 light years away, is illustrated in Kim Poor's *Ladies of the Lake* above. Directly at left is Pleione by artist Don Dixon. A planet orbiting this rapidly rotating shell star is bathed in strong ultraviolet radiation.

(Sterope I and II) and Celaeno lie nestled nearby, while the watchful parents Atlas and Pleione make up the stubby handle of the small heavenly dipper.

The dazzling sapphire-blue gems of the brood vary in brightness from magnitudes 2.9 (Alcyone) to 5.4 (Celaeno). The lesser Pleiadian orbs of Sterope I and II shine at magnitudes 5.6 and 6.4, respectively. Under average seeing conditions, the unaided eye normally picks up six of the seven principal cluster members; from dark rural sites numerous fainter Pleiads can be counted—some sharp-sighted people have recorded as many as eighteen!

Vested heavily in stellar folklore, the legend of the missing seventh star or "Lost Pleiad" has lead astronomical sleuths to conclude that Pleione is the most likely suspect. Located only 5' N of Atlas at the end of the short handle of the "Dipper-Bowl," Pleione is a variable star known as BU Tauri. The star's

(Continued on page 5)

Classic Scopes (Cont'd from page 4)

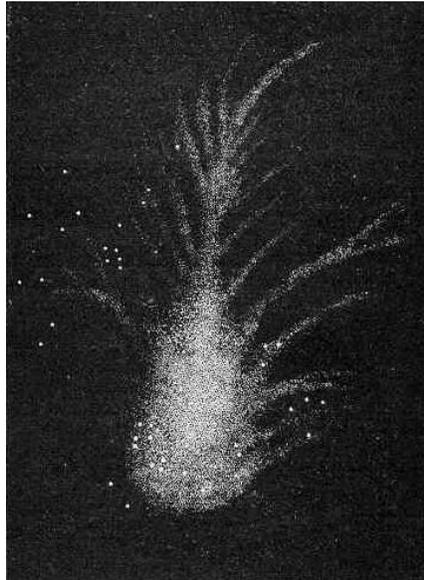
superfast spin has distorted its shape and spun off a ring of gas. In ancient times, Pleione could have shone with greater brilliance, completing the naked eye septet.

The celebrated young star cluster, less than 100 million years old, is embedded in dusty swirls of nebulosity. The brightest portion of the delicate feathery wisps encircles the star Merope. In the Edmund reflector, the tear-shaped Merope Nebula or Tempel's False Comet (NGC 1435) appears like "a stain of breath upon a mirror," embellishing the rich background of over two hundred Pleiadian suns.

In his observing guide *Celestial Harvest: 300-Plus Showpieces of the Heavens for Telescope Viewing & Contemplation*, astronomer James Mullaney aptly describes the scene: "In a dark sky the 8 or 9 bright members glitter like an array of icy blue diamonds on black velvet; the frosty impression is increased by the nebulous haze which swirls about the stars and reflects their gleaming radiance like pale moonlight on a field of snow crystals."

The sky's brightest supernova remnant, familiar to amateur astronomers as the "Crab Nebula," is located only one degree northwest of Zeta (ζ) Tauri, the tip of the Bull's southern horn. Famed astronomer Charles Messier independently discovered the expanding shell of gas in 1758 while comet hunting and then made the object the first entry (M1) in his deep-sky catalog. He described the object as "a whitish light, elongated like the flame of a taper." In the year 1844, the 3rd Earl of Rosse coined the term "Crab Nebula" after observing the fringy outer appendages through the 36-inch reflector at Birr Castle in Ireland. The moniker stuck and has been in use ever since.

One of Taurus' greatest showpieces, the "Crab Nebula" is a remarkable sight in the 8-inch reflector—far grander in appearance than anticipated.



Lord Rosse's representation of M1
(from Birr Castle).

A University 17mm Wide View Plössl (96x) reveals M1 as an oval mass of grayish-white light with its major axis orientated NW-SE (pointed toward Zeta). A hint of the legendary filamentary structure is visible as a serration or granulation on the outer fringes of the 8.4-magnitude nebula. (The brighter inner portions of the 6' X 4' nebulosity are bent into an "S" curve.) The 16th-magnitude pulsar NP 0532, a rapidly spinning neutron star and core of the exploding sun, is found at the heart of the complex.

A tempting target in northern Taurus for users of backyard telescopes is the lone planetary nebula NGC 1514. This somewhat challenging deep-sky object is distinguished by a bright central star of magnitude 9.4 and its dumbbell-shaped nebulous shell. NGC 1514 is sandwiched between two bright guide stars, separated by only 16', which makes finding the magnitude 10.9 planetary easy.

At a power of 130x, NGC 1514 resembles the round head of a comet. The Edmund scope shows the planetary nebula, 2.3' X 2.0' in diameter, as an almost featureless smudge of light. The view does not dramatically improve when using an O-III filter. However, in moments of calm seeing, the even tex-

ture is interrupted by the presence of several intruding dark patches on the NE and SW sides of the fuzzy disk.

The galactic clusters NGC 1807 and 1817 are found by following the pattern of naked eye stars that form Orion's upraised shield into southern Taurus. Because of their close proximity to each other in the eyepiece field, this duo has been likened to the famous Double Cluster in Perseus.

NGC 1807, shining at magnitude 7.0, is the brightest member of the pair. It also contains the fewest number of stars; at 63x in a 26mm Plössl, only a smattering of twenty-five luminous specks are visible scattered throughout an area of 17'. The cluster is irregular and loose with little central concentration. The zigzag of the brighter stars forms a rough "T" shape. Outliers extend to NGC 1817, which lies 20' to the NE.

NGC 1817, its total light equivalent to that of a magnitude 7.7 star, has over seventy 9th-magnitude and fainter suns packed into the same apparent diameter of space as its companion cluster. The Edmund reflector telescope does not completely resolve the rich collection of stellar pinpricks; careful scrutiny shows scores of suns embedded in a misty background haze. Experienced deep-sky observers have commented on NGC 1817's uncanny resemblance to M46 in Puppis (albeit missing the planetary nebula NGC 2438) and to NGC 7789 in Cassiopeia.



The planetary NGC 1514. Courtesy of
Adam Block/NOAO/AURA/NSF.

(Continued on page 6)



Mars occasionally passes through the Hyades and Pleiades in its journey around the Zodiac. During its visits to the stars of Taurus, Mars' reddish-ochre light often surpasses that of 1st magnitude Aldebaran. Hubble Space Telescope image courtesy of NASA and the Space Science Institute. The sketch by Antony Cooke—drawn with the most natural appearance, contrast, and coloration possible—mimics the telescopic view through the Edmund Scientific 8-inch reflector at the best positions.

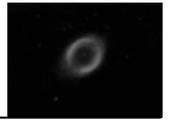


The Pleiades is a naked eye star cluster found 440 light-years from Earth. The intense bluish starlight of the hot, young stars is reflected by particles in an interstellar dust and gas cloud called the Taurus Dark Complex. The feathery appearance of the nebulosity results from the effect of local magnetic fields.

Jim Thommes



A wonderful pair of diverse galactic star clusters in southern Taurus for deep-sky hunters. NGC 1817 is the globular-shaped swarm of suns at upper left; the other relatively sparse cluster in the photograph is NGC 1807.

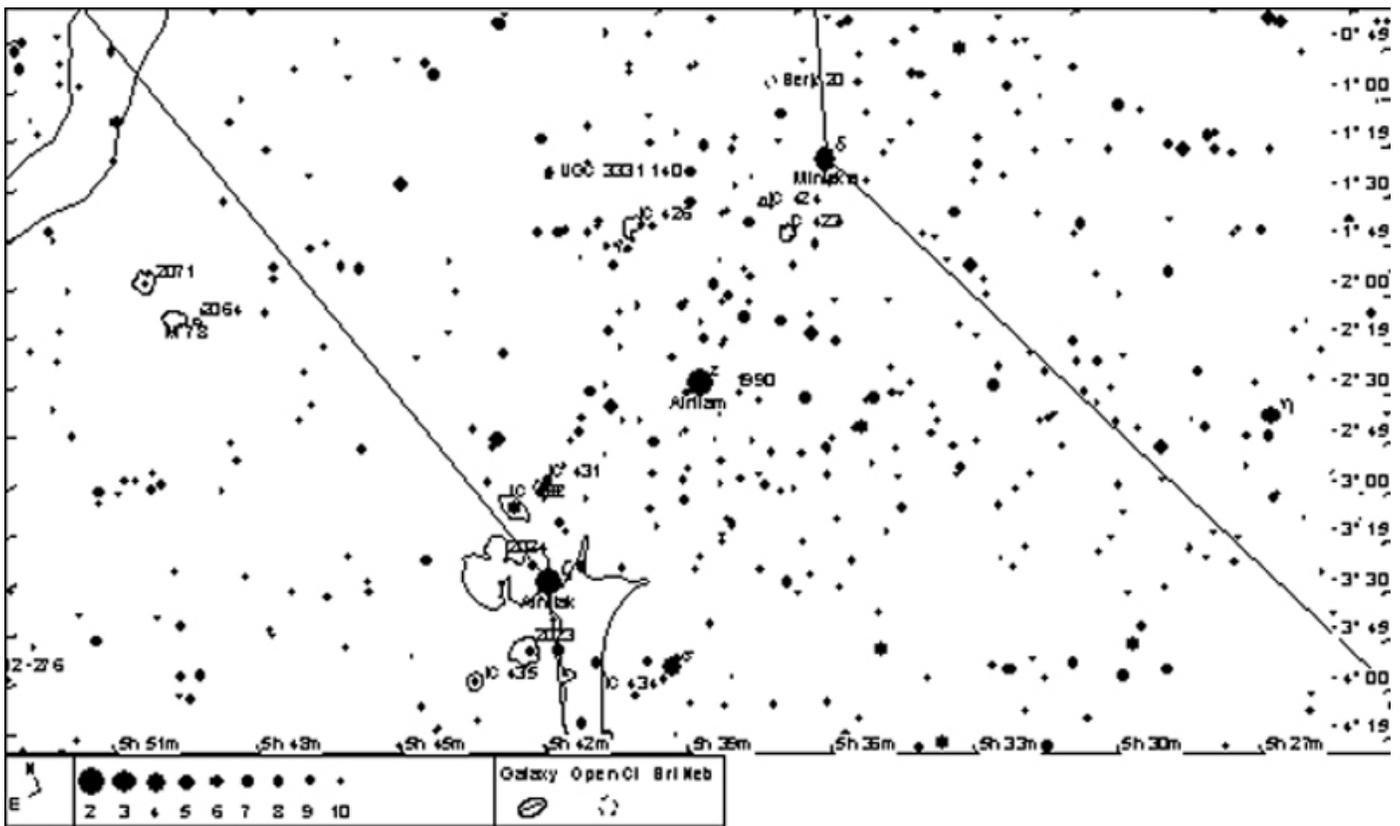


Orion's Back Roads - the Horsehead Nebula

Although the Horsehead Nebula is one of the more famous objects in the sky, it's often overlooked by visual observers because it takes a dark and transparent sky to see it, and its apparent size often throws off visual observers. I also think that the perceived difficulty of seeing the Horsehead keeps many observers from trying even though a large scope is not required. A h-beta filter coupled to a moderate size scope will do the trick, especially if you know exactly where to look and what to look for.

Gauging the apparent size of the Horsehead in relation to the surrounding area and nearby objects is an important aid in seeing it. Fortunately there are several nearby nebulae and a distinct naked eye star pattern that will make this surprisingly less daunting than you may think.

One of the most distinctive star patterns in the sky are the three stars that make up the belt of Orion, and that's where we start on the road to the Horsehead. The eastern most star in the belt is 1.9 magnitude Alnitak, and this is where we begin. Aim your scope at Alnitak with a medium power eyepiece and insert an h-beta filter. Just to the east of Alnitak is the fairly bright emission nebula, NGC 2024, which is often called the Flame or Tractor Tire Nebula.



Horsehead and NGC 2024 and 2023

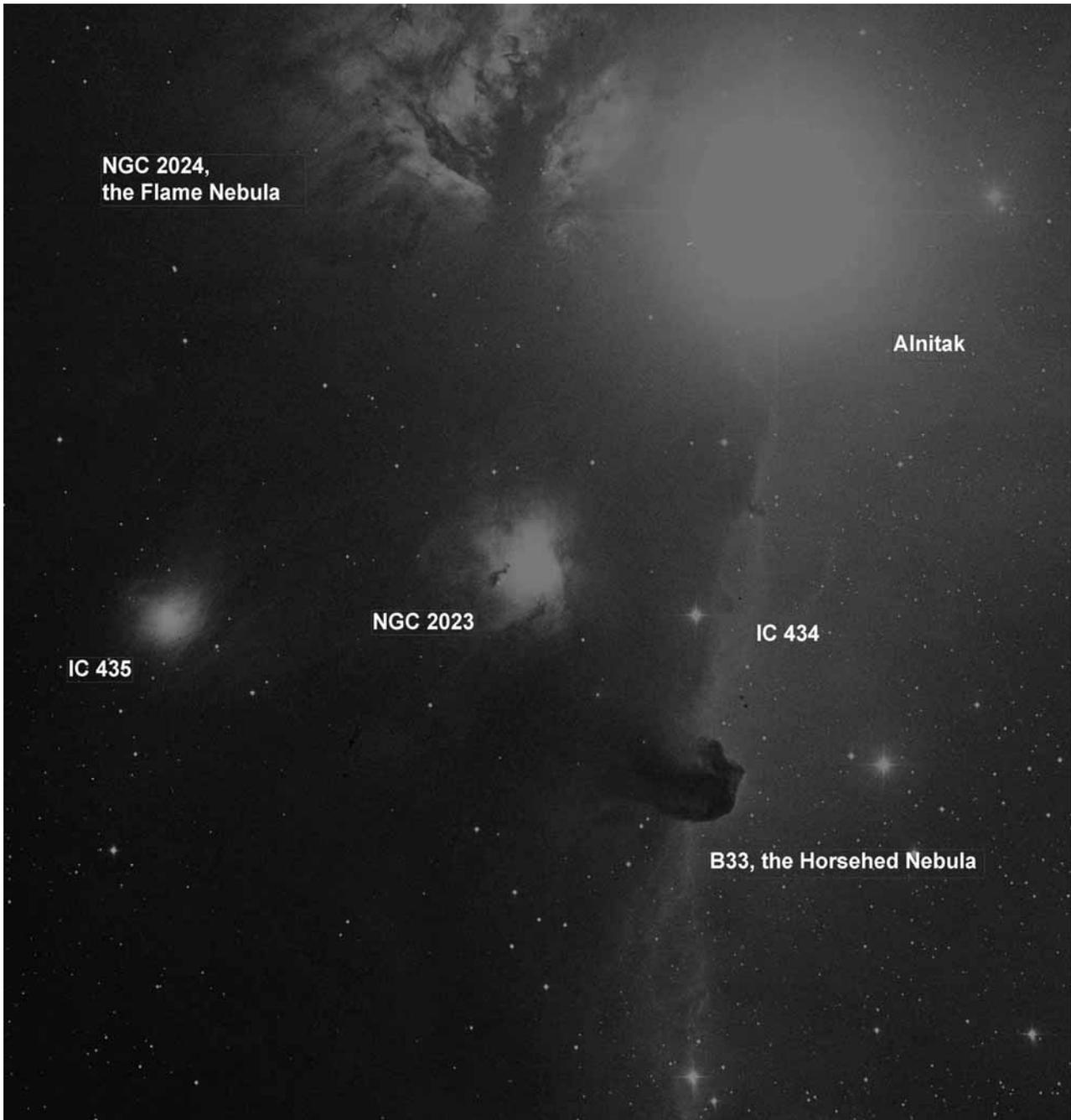
This MegaStar chart shows the 3 belt stars of Orion and the nebulae NGC 2024, 2023 and B33 clustering around the eastern most star of the belt, Alnitak.

If the Flame nebula is visible with the h-beta filter continue slightly south to NGC 2023, a faint nebula surrounding a magnitude 7.8 star. You're likely to notice the star before the nebula, which will be faint even under the best of circumstances. But if you can see 2023, continue slightly west to IC 434, a very, very

(Continued on page 8)

The Observer's Corner (Continued from page 7)

faint nebula running almost directly north – south. If you can see the faintest trace of IC 434 you can now turn your attention to the Horsehead.



This DSS photo shows the area around Alnitak with the nebulae labeled. IC 434 extends south of the Horsehead as well.

The Horsehead will look like a dark notch in the middle of IC 434 and will probably look more like a dark rectangle than the Horsehead shape so easily seen in photographs. It will also probably be larger than expected because you'll need a magnification of about 100x to 125x to see it well, which makes the image scale larger than the typical photo of this area.

(Continued on page 9)

The Observer's Corner (Continued from page 8)

It's also good to note that the apparent size of the bright nebulae in the above photos is larger than what can be seen visually, so it's a good idea to carry a photo of this area with you to the telescope so you can judge the size of the Horsehead in comparison to the background stars, especially the three directly north, south and west of the dark nebula. These three stars range between magnitude 7.5 to 7.9.

I've seen the Horsehead well in large scopes but also fairly distinctly in scopes down to a 4.25 inch Newtonian. The key is a dark, transparent sky and the use of an h-beta filter. Although the Horsehead can be seen without the filter under a truly great sky it does make it much easier, particularly if you've never seen it before. Good luck.

Ok, that's how to find and see the Horsehead, but in the process we've zoomed by a noteworthy destination by itself, NGC 2024 the Flame Nebula. It can show much of the detail shown in photos, with a branching dark nebula giving it a distinctive and appealing look. Try all your nebula filters on this one and keep Alnitak just out of the field of view so it doesn't wash out the fainter detail. You can see 2024 in a sky considerably less dark and transparent than is needed for a good look at the Horsehead.

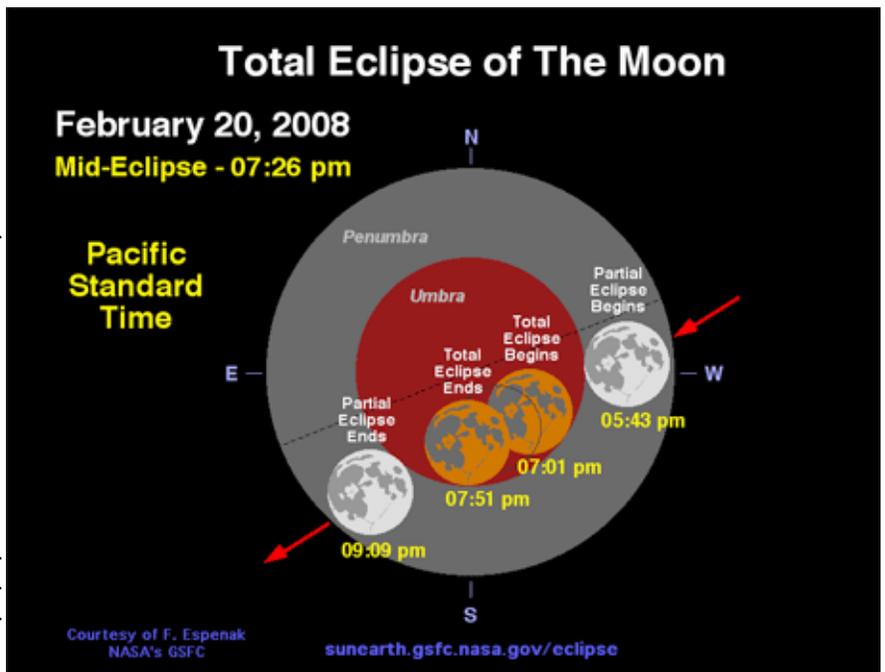
It's rare for most of us to be at a true dark sky site in February, but with the star party season scheduled to start in March, these nebulae are still accessible and can be seen well from Kah-Nee-Ta, Camp Hancock and other quality central Oregon sites.

During the night of Wednesday, February 20, 2008 the Full Moon will slide through the dark shadow of our planet. For 50 minutes, the only light hitting the Moon will be the reddish glow from all of Earth's sunrises and sunsets - a Total Lunar Eclipse! Weather permitting; OMSI and Rose City Astronomers Club will set up telescopes at the east parking lot of OMSI to view the lunar eclipse. Learn how to view the eclipse with the experts and be apart of the event! The entire event is visible from South America and most of North America, as well as Western Europe, Africa, and western Asia. The entire eclipse will be visible from start to finish.

As the moon rises from the east, the eclipse gets underway at 5:43 p.m. PST when the umbral shadow takes a small, dark bite out of the left edge of the Moon. For 73 minutes of the partial phase, the darkness engulfs more of the Moon's disk as it slides into the shadow. The partial eclipse ends and totality begins at 7:01 p.m. PST, when the Moon slides completely within the umbra. The total phase lasts 50 minutes, with mid-eclipse (when the Moon looks darkest) occurring at 7:26 p.m. PST with the moon at 18 degrees above the eastern horizon. What makes it so much fun is that no one can predict what color the Moon will turn during totality. Will it be bright orange, or blood red? Only the shadow knows. Moreover, this eclipse comes with a rare bonus. The planet Saturn will be shining three degrees from the Moon. The total eclipse will end at 7:51 p.m. as the moon exits the umbra. Then at 9:09 p.m., the moon will exit the earth's umbral shadow. Unlike solar eclipses in which the sun's rays can damage the eyes, lunar eclipses are safe to watch with the naked eye. Binoculars and telescopes will enhance the view.

For future visitors to the moon, the Earth during a total lunar eclipse would appear dark and surrounded by a glowing red ring. The eclipse occurs during what early Native American tribes called the full Snow Moon, since winter's heaviest snows often occur in February.

The last total lunar eclipse in the Northwest occurred in August 28, 2007, with the moon appearing burnt orange. If you miss this one, another total eclipse will be December 21, 2010.





BOARD MEETING MINUTES

January 7, 2001

OMSI Classroom 1

Margaret Campbell

Attending: Larry Godsey, Greg Rhode, Patton Echols, Ken Hose, Dale Fenske, Sameer Ruiwale, Jan Keiski, Dareth Murray, Tom Nathe, David Nemo, Carol Huston, Doug Huston, Matt Brewster, Margaret Campbell.

A quorum was met. The meeting was called to order at 7:06.

Officer Reports

- Secretary: Margaret Campbell. Reported receiving the Secretary's materials from Andy Phelps and asked where the minutes are for 2006 – 07. Larry Godsey will send out the RCA Board website URL tonight.
- Treasurer: Larry Godsey reported that the RCA Operations fund has \$17,406.34 and the RCA Site fund has \$16,130.44. There is \$1868.78 in the ACLON bank account and we are waiting on a \$180 check from PSU before closing the account. That will bring the RCA portion of the profits from ALCON up to \$2056.78. The board will vote on what account to place it in.
- Programs: Matt Brewster. The Information Fair will have the usual SIGS and SIG tables. The February program will be a Messier presentation. Doug Huston was suggested as a speaker on that topic.
- Observing: Doug Huston. Star party schedule not done. Kahneetah contract is signed. The 2008 star party schedule will be circulated by email and posted on the Board webpage, and will be ready for handout at the Information Fair.
- Community Affairs: Patton Echols. An additional page for the website will be added for people who contact us seeking information about putting on a star party for their group. (Is it an application form?)
- Media Director: Patton Echols. No contacts this month; will send out publicity on Information Fair.
- Membership: Ken Hose. Seven new members and four renewals. Total of 267 family memberships. Compared to 280 in 2006 and 281 in 2005.
- New Members: Jim Reilly emailed a report to the Board.
- Sales: Sameer Ruiwale reported \$981 sales in December. Ken Cone will still help out at the sales table, but the club still needs a Sales Director.
- Library: Jan Keiski. There have been more donations, and the database is getting updated.
- Scope Library: Greg Rhode. Another donation has come in, a 6" Newtonian reflector. The telescope library is becoming over-grown, and there was some discussion of donating extra scopes to local or international non-profits. Margaret will report back to the Board about donating to international organizations.

- IDA: Bob McGown will send an annual report to IDA from RCA.
- Webmaster: Dareth Murray. The new officers have been added to the website, and the Gazette has just been posted.
- Site Search: David Nemo. Has plans to start a new raffle - - one of the big binoculars that are being sold at the meetings (?),
- SIGs: Tom Nathe. Tim Crawford will be the speaker at the next Science SIG, speaking about variable stars, Jan. 19, 2008, 3:00 p.m. at TMS, right after the ATM meeting.
- ALCOR: Dale Fenske. Our ALCOR dues are due at the end of December.
- OSMI Liaison: Jan Keiski: For the December holiday potluck Jim Todd had a very nice table setup for us in the auditorium. He says that he will be happy to do this for future potlucks as well. Jan reports that Jim Todd is very supportive and appreciative of RCA. .

Goals for 2008, presented by Sameer Ruiwale

1. Have a bigger, better Astronomy Day, May 10th, in a more public place, such as downtown.
2. Improve our focus on new members.
3. Need to find better funding sources, perhaps grants, for larger amounts.
4. Review and revise the by-laws.
5. Strengthen sister club relationships
6. Update our web presence and forums.

Old Business

1. Improving and updating the web presence: there will be a meeting on Jan. 12th by the Forum Committee, and recommendations will be made at the next Board meeting. Ninety people responded to the survey.
2. Mentorship program: Jim Reilly and Tom Nathe haven't connected this month. Ken Hose mentioned that he has talked to a new member about working with kids. She's a teacher in Hillsboro. He will put her in touch with Carol. Carol also has access to lots of material for youth programs. There was some discussion about adopting (and paying for) ASP program materials, but we decided to focus on getting a Youth Director first.
3. Awards: Dareth has a page of all RCA members who have AL awards, and will add in the ASP Youth Award. Doug will review the criteria and our Galileo Award page and bring suggestions back to the Board in February. There was some discussion about having a new, "lesser," award for those people who have contributed to the club but can't meet the high standards of the Galileo award. Also, we want to avoid looking like we just give ourselves and each other all the awards. However, the Galileo is meant to have high standards, and does not have to be awarded every year.

(Continued on page 11)

Board Meeting Minutes (Continued from page 10)

4. Sister Clubs: Carol, Dareth and Margaret did not meet during the month, but have done some email conversation and have worked up some ideas. We agreed to get together in January. Margaret suggested inviting Leo to have a monthly column in our Gazette. However, Larry Deal, the editor, has final say over such issues. We decided to invite Leo to submit articles, but not to ask him for a monthly column. Sameer will send the invitation. We have at least two members visiting Mendoza. The first half of February Jan Keiski will visit; and then later in March, Joe Rottmann will visit. They will bring greetings from RCA. Jan and Leo are planning to collaborate and submit an article with photos of her visit for the March Gazette issue.
5. Astronomy Day: Dareth and Doug will make a list of what needs to be done. Patton will do the publicity, Larry has contact information for A.D. resources.

Observing Site Committee

To lead and coordinate efforts of the Rose City Astronomers (RCA) in securing and managing a variety of observing sites for private use by members, and for community outreach and special events organized by the RCA.

Please Check

<http://nemoworld.com/RCA/sitehome.htm>

for more information.

Or Contact: David Nemo <david@nemoworld.com>

RCA LIBRARY

The Rose City Astronomers maintains a comprehensive club library of astronomy related articles, books, CDs and videos. These items can be borrowed by members through check-out at the general meetings for a period of one month with renewals available by phone or e-mail to the club library director, Jan Keiski.

The RCA library is constantly growing through many donations and the purchase of new materials. A listing of library materials (PDF format) can be found at the library web page: <http://www.rca-oms.org/library.htm>

Jan Keiski (jikeiski@comcast.net) 503-539-4566



New Business

1. SIGs: Carol took Tom Nathe's draft and made changes, using the "track changes" mode. Carol and Tom will finalize the document.
2. ALCON funds: Some discussion about what to do with the money earned from the ALCON conference. David Nemo made a motion to put the money into the Site Fund, since that was the original purpose of taking on the task, and a major reason that he was so involved in the project. Motion carried.
3. Starlight Parade: Margaret suggested that RCA have an entry in the Starlight Parade. Jan has information on this and will forward it to her.
4. Yuri's Night: Dareth is in touch with Evergreen Museum in McMinnville about putting on a Yuri's Day star party. It's April 12th, which is a Saturday.

The meeting adjourned at 8:35 p.m.

Telescope Workshop

When: Saturday, February 16, 10:00 AM - 3:00 PM

Place: Technical Marine Service, Inc.
6040 N. Cutter Circle on Swan Island

For more information contact:

Director: John DeLacy johncdelacy@comcast.net

Assistant: Don Peckham don@dbpeckham.com

The Rose City Astronomers, **Science Special Interest**

Group (SCI-SIG) will be meeting on February 16th at 3pm. Following the Telescope Workshop at Technical Marine Services.

Information about SCI-SIG

This group is for people who would like to advance their skills in astronomy beyond casual observing. Various projects that some group members are involved in include; variable and double star observing, occultations, photometry and astrometry. A science background is not required, however a curious mind does help.

Location of TMS -

<http://www.rca-oms.org/clubprojects.htm#telescope>

Tom Nathe <tmnathe@verizon.net> RCA SIG coordinator

ASTROPHYSICS / COSMOLOGY SIG

Date/Time: Wednesday, February 20, 7 PM.

Topic: "Quantum Physics & the Delayed Choice"

Presented by: Matt Brewster

Place: Linus Pauling Complex,
3945 S.E. Hawthorne St., Portland.

Contact: Bob McGown (503-244-0078)

or Dareth Murray, (503-957-4499).

<http://www.rca-oms.org/cosmologysig.htm>

Oregon Museum of Science and Industry
 Rose City Astronomers
 1945 SE Water Avenue
 Portland, Oregon 97214-3354



February 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

February 2008

Feb 1	Fri	Downtowner's Luncheon	TBD	Noon
Feb 4	Mon	RCA Board Meeting	OMSI Classroom 1	7pm
Feb 16	Sat	Telescope Workshop	Swan Island	10am-3pm
Feb 16	Sat	Science SIG	Swan Island	3pm
Feb 18	Mon	General Meeting	OMSI Auditorium	7pm
Feb 20	Thurs	Astrophysics/Cosmology SIG	Linus Pauling Complex	7pm
Feb 20	Thurs	Lunar Eclipse Star Party	OMSI	

March 2008

Mar 3	Mon	RCA Board Meeting	OMSI Classroom 1	7pm
Mar 7	Fri	Downtowner's Luncheon	TBD	Noon
Mar 15	Sat	OMSI Star Party	Rooster Rock S.P.	
Mar 16	Sat	Telescope Workshop	Swan Island	10am-3pm
Mar 16	Sat	Science SIG	Swan Island	3pm
Mar 17	Mon	General Meeting	OMSI Auditorium	7pm
Mar 19	Thurs	Astrophysics/Cosmology SIG	Linus Pauling Complex	7pm
Mar 28/29	Fri/Sat	Messier Marathon Star Party	Kah-Nee-Ta	

The RCA General Meeting falls on the third Monday of each month. We usually meet in the Auditorium at OMSI, next to the Murdock Planetarium. Occasionally the meeting is held in Murdock Planetarium. Check here each month for details, or look us up at the RCA web site (<http://www.rca-oms.org>).

RCA CLUB INFORMATION
 Message Line: (503) 255-2016
 Web Site: <http://www.rca-oms.org>