



December, 2005

Volume XXXV, Issue 12

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Jamboree '05!



Image, courtesy Tom Madigan

Jim Eagan receiving *The Golden Dome Award*, an award for many years of selfless, dedicated service to Custer, having manned the telescope, answered questions from fascinated members of the public and put in many a night when no one else would open up the institute. Donna McCormick, having just presented Jim with the award during this year's Friday night Jamboree festivities, looks on with Dr. Jeff Katz to Jim's right. Please see inside for additional details. *Congratulations*, Jim!

This year's Jamboree, while not as well attended as in prior years, featured a star lineup that included professors of Astronomy from SUNY, Stony Brook, Radio Astronomers that spoke about radio emissions from Jupiter and the Sun, Custer's own Phil Harrington, 7-time author, teacher and lifetime amateur astronomer and this editor who held a workshop on the history of telescopes, their contribution to astronomy and how one can make their own. Featured as an example during the workshop, this editor used his 6" F4.2 Richey Field Telescope (<http://tmadigan.home.netcom.com/Stellafane/RFT>) to demonstrate the dynamics of a Newtonian reflector. Also featured at the Jamboree was 'A Sidewalk Astronomer', a film dedicated to the life and contributions of John Dobson, recently hosted by Custer as a guest lecturer and featured in Smithsonian magazine for November, 2005, as one of 35 persons of distinction 'who made a difference' (http://www.smithsonianmag.si.edu/smithsonian/issues05/nov05/35_dobson.html).

While Saturday constituted the heart of the Jamboree, the Friday night events provided a warm, relaxed atmosphere of camaraderie and friendship that featured The Homegrown String Band and Custer's traditional poetry reading hosted by Bob Chapin. For additional Jamboree pictures, please see inside.

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Editor's Column

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Cutoff for submissions is the 15th of the month preceding publication

Visit the new Custer Website at
<http://www.custerobservatory.org>

Custer Comment Archive:
<http://tmadigan.home.netcom.com/custer>

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Southold, NY 11971
631-765-2626

"I have loved the stars too fondly to be fearful of the night."

Sarah Williams

As anyone who's read this journal on a regular basis would know, I've been running a full-page invitation for those who have a personal computer and Internet access to send me their email address in order to receive the Custer Comment electronically. This issue will be the last issue that I'll be including that page because there will be no further need to do so for the foreseeable future. Starting with the January, 2006, issue, the **full** version of the Custer Comment will be available only to those who are on my electronic distribution list. For those who, for one reason or another, haven't signed up for electronic receipt of the Custer Comment or don't have a personal computer or Internet access, a condensed version of the Custer Comment, consisting of a single page highlighting the upcoming events at Custer, will be mailed out. As is so often the case with decisions such as this, it is directly related to operating costs, in this case the cost of publishing the Custer Comment every month combined with the basic monthly expenses necessary to keep Custer's doors open, outpacing income. A number of events can be identified as contributing factors but each, in and of itself, is not the singular cause. In addition to normal expenses, these events include a less than healthy turnout at the annual Jamboree and other events, unforeseen expenses related to Custer's new dome and restoration project combined with certain investments that haven't performed as expected.

A number of options were floated including a \$20 / per year / member surcharge attached to the membership fee to help defray printing and mailing costs, but ultimately that solution was rejected in deference to this one by Custer's Board of Directors. There are a number of ideas being considered that could accommodate those who find this decision a true hardship. In the meantime, we're open to suggestions.

Best,
Tom

Tom Madigan, Editor

"To the youngsters of today, ***I say believe in the future***, the world is getting better; there still is plenty of opportunity. Why, would you believe it, when I was a kid I thought it was already too late for me to make good at anything."

Walt Disney

Gift Corner & Classifieds

We Have Meteorites!

Great sets mounted in beautiful display cases. Perfect for gifts.

Custer coffee mugs, only \$4. Do you have yours yet?

An Evening With John Dobson

VHS or DVD format, \$15.00, \$3.75 S & H

On September 17, 2005, noted sidewalk astronomer and cosmologist, John Dobson, visited Custer. He presented his classic cosmic slide show, packed with information and delivered with inimitable wit; he shared stories about his life as a monk, secretly grinding mirrors, making telescopes and introducing the public to the wonders of the night sky. Board member, Rich Huber, filmed this memorable event and has made copies on VHS and DVD. Running time is approx. 90 minutes. The cost: \$15 with 25% of the proceeds going to John Dobson's San Francisco Sidewalk Astronomers Association and a nominal \$3.75 for shipping and handling. You can pay for your tape using Paypal by sending \$18.75 to CusterPaypal@yahoo.com or by sending a check or money order (made payable to *Custer Institute*) to: Dobson at Custer, P.O. Box 1204, Southold, New York 11971. Please specify whether you would like VHS or DVD. If you have any questions, please contact Donna McCormick at mccormick@scientific-consultants.com.

Custer T-Shirts



Image, courtesy Tom Madigan

The editor's daughter, Kaitlin, sporting a Custer T-Shirt at Horton Point Lighthouse on Jamboree '05 night! The shirts are 100% heavy-weight cotton, machine-washable, and are available in adult sizes S-M-L-XL-XXL. The cost is \$15 plus \$3.75 S & H and the shirts are available only while supplies last. Custer would also like to *thank the East End Shirt Company* in Port Jefferson for their generosity and for having done an excellent job in producing such fine quality shirts on such short notice.

We have Susan Harder's patented & dark sky friendly **PARSHIELD®**

Outdoor Floodlight Shields

for PAR 38 type bulbs. Controls glare, reduces light trespass & allows you to direct the light where you need it.

Two shields per box in your choice of Off White or Bronze finish. \$20.00, tax incl.

ASTRONOMY FOR ALL AGES

By
Phil Harrington

&

Ed Pascuzzi

The Gift Shop still has a number of copies of this latest volume by Phil Harrington with co-author Ed Pascuzzi. Get your copy while supplies last. At just \$20, this is a real bargain! As an added bonus, copies are signed by Ed.

PARALLAX

By

Alan W. Hirshfeld

We also have a limited number of copies of this excellent volume by 2003-Jamboree guest speaker Alan Hirshfeld. Quantities are limited so hurry and add this well-written and informative volume to your collection while supplies last.

WINTER 2006 CLASS: SPECIAL TOPICS IN ASTRONOMY

Custer Board and Staff members will teach this five-week course. Each week a different instructor will present a topic of special interest. You can register for as many of the sessions as you like (a discount is available to those who register for all five). After class, students are invited to remain at Custer for the evening, participate in any other events that are scheduled, and enjoy refreshments while Custer staff show you around the night sky. Classes will be held Saturdays from 6:00 P.M. to 7:30 P.M., Jan. 21, 28, Feb. 4, 11, and 18.

Jan. 21. Comets and Other Small Bodies in Our Solar System

Custer member and Tupper Planetarium Director, David Cohn, will present an illustrated lecture on comets, meteors, asteroids, and objects of the Kuiper Belt and Oort Cloud. The findings of recent NASA missions investigating such objects will also be covered.

Jan. 28. The Life Cycle of Stars

Custer Comment Editor and former Vanderbilt Planetarium staff member, Tom Madigan, will present an illustrated lecture on the evolution of stars, from birth to death. Coverage will include the relationship between spectral class luminosity, the Main Sequence, Red Dwarfs, stellar collapse, supernovae and more.

Feb. 4. Telescopes and Binoculars

Custer Board Member and AOS Observatory Director, Rich Huber, will present this hands-on class on observing equipment and the basics of getting started in amateur astronomy. The discussion will include optics, the designs of various types of telescopes, binoculars, and accessories, as well as advice on purchasing equipment to fit every budget. This class is also ideal for those who already have equipment and want to know how best to use it.

Feb. 11. An Introduction to Astrophotography

Board Member, Kurt Massey, will take students through step-by-step instruction on how to get started photographing the night sky and deep space objects. Students will learn how to select and use the necessary equipment, as well as process and polish the resultant photos. There will be demonstrations and illustrations of the wondrous objects that can only be seen through the camera's eye.

Feb. 18. Cosmology, Science, and Science Fiction: What is Really Possible?

Board member, Jeffrey Owen Katz, Ph.D., will present an illustrated lecture on the universe as seen through the eyes of science fiction writers and modern physicists. If you've ever wondered about worm holes, cosmic strings, black holes, faster-than-light communication and space travel, ET, or if Scotty could ever really beam anyone up, this is the class for you.

Pre-registration is **required**. Cost for Custer members: \$35 for all 5 weeks or \$10 per session; Non-members: \$50 for all 5 weeks or \$13 per session. We accept Paypal (to the account of CusterPaypal@yahoo.com), checks or money orders (made out to Custer Institute). Please send the form below to: Custer Winter Class, P.O. Box 1204, Southold, NY 11971. For further information contact Donna McCormick (mccormick@scientific-consultants.com or 631-696-3333).

Custer Class and Membership Application

Name _____ Email _____

StreetAddress _____

City _____ State _____ Zip _____ Phone _____

I am a Custer Member: ___ All 5 classes at \$35, or the following sessions at \$10 each: ___ 1/21, ___ 1/28, ___ 2/4, ___ 2/11, ___ 2/18;

I am not a Member: ___ All 5 classes at \$50, or the following sessions at \$13 each: ___ 1/21, ___ 1/28, ___ 2/4, ___ 2/11, ___ 2/18;

I would like to become a Custer Member: ___ \$45 Individual; ___ \$60 Family; ___ \$25 Senior (65+); ___ \$25 Junior (12-18).

_____ I have made payment via Paypal or _____ enclosed my check/mo (payable to Custer Inst.) for \$_____. Confirmation of registration **will only be sent by email**.

Please mail your form to: Custer Institute
P.O. Box 1204
Southold, New York 11971.

Custer Clean-Up

The Observatory Staff is in the process of doing an inventory of Custer's equipment and other resources. During the course of this project, a major clean-up will be undertaken; the basement is the main target. If you have any personal items stored at Custer, and you would prefer not to see them thrown into the dumpster, absorbed into Custer's collection, or sold, please contact Jeff Katz (katz@scientific-consultants.com or call 631-696-3333) as soon as possible. If you would care to assist in the clean-up project, let him know because we could sure use the help!

Skilled Labor Wanted

The renovation of the dome is underway. The Observatory Staff is going to need assistance to complete this project and other related ones. If you have any skill with carpentry, electrical work, painting, etc., and could volunteer a few hours of your time, please contact Jeff Katz (katz@scientific-consultants.com or call 631-696-3333) as soon as possible.

Observatory & Other Staff Wanted

Custer is in the process of improving its facilities and expanding the services it offers to the public. The Observatory Committee is looking for individuals who are interested in volunteering just a few hours a month. People are needed for all kinds of jobs-from helping to give the public a tour of Custer and the night sky on Saturday nights, to assisting with events, research, fund raising, secretarial work, and even providing refreshments to our guests. If you are able to lend a hand on a regular basis or would just like to volunteer to help with a specific project, please contact Donna McCormick (mccormick@scientific-consultants.com or call 631-696-3333).

Events for December

"The Celestial Art Of Tim Haley",

Local artist, Tim Haley, expresses his love of astronomy through his oils on canvas which depicts the planets, stars and other-worldly landscapes and will be featured as "Artist of the Week" in an upcoming issue of Dan's Papers.

When: Opening: Saturday, Dec. 3, 2005, 8:00 P.M; the exhibit will run through January;

Where: Custer Institute, Main Bayview, Southold;

Cost: Free

Custer Holiday Party

Come celebrate the season at the Custer Institute and Observatory. The festivities will include a home-cooked dinner by Chef Chuck Cardona, pop jazz / r&b / holiday tunes by the musical duo of Ahmad Ali and Henry Good and, weather permitting, observing the night sky. Bring a gift (\$10 and under), get a gift: grab-bags for adults and kids. Edible contributions welcome.

When: Saturday, December 10, 2005, 6:00 P.M;

Where: Custer Institute, Main Bayview Road, Southold;

Cost: \$10 suggested donation

The Planets by Dava Sobel

A Book Signing Event

Former *NY Times* science reporter, internationally best-selling and award winning author and Custer's own, Dava Sobel, will discuss her latest book. Dava has become best known for her books, *Galileo's Daughter* and *Longitude* (which was made into both a PBS documentary and a dramatized mini-series by Granada Films/A&E). Her new book, *The Planets*, is an acclaimed literary exploration of the origins, characteristics, and attributes of nine of the heavenly bodies orbiting our sun and how they have been seen through the lens of art, science, mythology and popular culture throughout history. Book signing, refreshments, and observing, weather permitting, will follow.

When: Saturday, December 17, 2005, 8:00 P.M;

Where: Custer Institute, Main Bayview Road, Southold;

Suggested donation: \$5 Custer members, \$7 non-member

More info: <http://www.custerobservatory.org> or 631-765-2626;

Contact: Donna McCormick, Custer Programs Chairperson
mccormick@scientific-consultants.com, 631-696-3333

"Dark Sky Park" Star Party!

A "Star Party" is planned at the first New York State *officially designated* "Dark Sky Park", located in Montauk at the County's Roosevelt Park. The Park is located about 2.3 miles east of Montauk Village on the left. There will be observing if weather permits with the event being sponsored by the Montauk Science Department.

When: Saturday, Dec. 3, 2005 at 7:00;

Where: Montauk; Suffolk County's Roosevelt Park;

Cost: Free

Star Party Etiquette: come warmly dressed. Families are welcomed, but all children 16 and under need to be accompanied by their parents. If you bring a flashlight, only aim it downward (not outward) to protect our night vision. A piece of red acetate over the lens will provide illumination without destroying your night vision. The area will be dark, so wear sturdy shoes and be careful walking around. Ask for help if you need it.

No alcohol, dogs, or smoking is permitted at the park and **NO CAMERA FLASH BULBS**, please(!) as it will destroy your night vision (and those within the field of the flash).

The astronomers bring their own telescopes and come as volunteers to show us the night sky. Astronomers are educators at heart: ask questions. Please be patient if people are lined up to look at various objects in the sky. Different telescopes give different views of the same objects. Expect to see planets, constellations, and Messier Objects.

It always helps to know about the night sky beforehand, and there are many websites with information, notably the site for Sky & Telescope Magazine.

Susan Harder

Dark Sky Society

Editor: Susan has worked very hard to get the 'Dark Sky' designation at this park and to have our cause officially recognized and validated by a government agency, in this case Suffolk County. Our hats are off to Susan for her tireless efforts and indefatigable determination and to Suffolk County Executive Steve Levy for allowing the will and voice of the people to become reality. This event, hopefully, will be the first of many such events. Let's come out to support Susan and show our solidarity with the cause.

Events for January, 2006

Aside from the winter course schedule published in this issue and in last month's issue, the following are events of note. Mark your calendar and make plans to attend!

Special Meeting of the Membership

A special meeting of the membership has been called to address certain election procedures that are codified in Custer's Constitution and which pertain to the election of the Board of Directors. As it stands now, these procedures may not be in compliance with New York State regulations that govern Not-for-Profit entities. It is crucial that the membership be adequately represented at this meeting and that as many members attend as possible, as the objective will be to amend the constitution. A separate notice with a full explanation has already been mailed by Donna McCormick and this notice serves as a reminder. Please refer to that notice for additional details and the full explanation of the issues to be addressed. If you haven't received a copy of the notice, please contact Donna McCormick (mccormick@scientific-consultants.com or call 631-696-3333) or this editor. As always, my contact information is located on page 3.

When: Saturday, January 14, 2006, 6:00 PM;

Where: Custer Institute, Main Bayview Road, Southold;

As always refreshments will be served with observing to follow, weather permitting.

Classical Music Concert

Violinist, Ann Verticchio, daughter of Custer Board Members, Rico and Anna Verticchio, will be performing a Beethoven concerto with accompaniment. Rumor has it that a small orchestra will be assembled for the accompaniment!

As always, refreshments will be served with observing to follow, weather permitting.

When: Saturday, January 28, 2006, 8:00 P.M.;

Where: Custer Institute, Main Bayview Road, Southold

Suggested donation: \$5 Custer members, \$7 non-member

Barlow Bob's Corner

The Dob is my telescope; I shall not want. It maketh me go out on dark nights;
It leadeth me through the Messier objects. It restoreth my night vision;
It leadeth me to star parties; yeah though I walk through the valley of the shadow of large scopes,
I will fear no evil, for my Naglers and Widefields, they comfort me. Thou preparest a star chart
before me in the presence the galaxies;
Thou anointest my head and optics with dew; my eyepieces cloudeith up;
Surely good seeing and no mosquitoes shall follow me, all the days of my life
and I will dwell in the deep skies of the night forever.

This article was first published a few years ago, in The Reflector newsletter.
This appeared in a column called *Tales of the Unknown Astronomer*.

Rudolph

When you see a red blinking light in the sky, as you are walking with a small child on
Christmas eve, ask the child: "Do you think that could be Rudolph"?

The Little Book of Christmas Joys, 1994

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 Aldeberan, 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 1st, 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.

North Pole Road Signs

Look for the union label, United Elf Union.
Support the vertically challenged; hire an elf.
Be naughty, save Santa a trip.

Barlow Bob

Jamboree, 2005

The Board of Directors would like to thank the members of the Jamboree Committee, David Cohn, Chuck Cardona and Barbara Lebkuecher, for a fun, interesting, and successful event. They would also like to thank the presenters, Kurt Massey, David Cohn, Tom Madigan, Ronnie Milione, Fred Walter and Phil Harrington, as well as all the members who contributed their services: registration: Charlie Cardona; publicity: Donna McCormick and Tom Madigan; distribution of flyers: Jill Howell, Anna and Rico Verticchio; giftshop and sales: Nikki Longo, Bob Vanson and Anna Verticchio; Dobson film production: Rich Huber and Stuart Selkin; observatory workers: Bill Crispino, Rich Huber, Steve Orlando and Rico Verticchio; refreshments and t-shirts: Donna McCormick and Jeffrey Katz.

Even though I highlighted it on the front page, additional mention should be made of Jim Eagan's selfless devotion to Custer and the presentation of *The Golden Dome Award*, the first of it's kind at Custer: an award presented to a member as official recognition by the Board and membership of that individual's contributions to Custer. Having said that, the following inscription was embossed on the plaque awarded to Jim amid loud applause: "*In Appreciation of Your Many Years of Outstanding Service and Dedication to our Observatory.*" Jim was modest in his acceptance of the award, downplaying his contribution by stating that there have been others who probably deserved it more. Classic Jim Eagan!

Jamboree Memories



Image, Courtesy Tom Madigan
Jim Eagan, having just received the Golden Dome Award, shakes hands with Jeff Johns while Donna McCormick and Jeff Katz look on.



Image, Courtesy Tom Madigan
During the Friday night program, everyone is gathered around the table and listening intently as Bob Chapin hosts the annual 'Astronomer's Poetry Reading' event.



Image, Courtesy Tom Madigan

Following the Saturday morning events and in cooperation with the weather, some eager amateurs set up their telescopes, providing the public and all who would venture to the eyepiece with spectacular images of the sun and sunspots.

Editor: Regrettably, due to time and budget constraints as well as content requirements for this month's issue, I'm confined to the front page and this single page to convey all that this year's Jamboree was. By early next week, I'll have a comprehensive set of digital photos posted to the Custer Comment Archive web site that I maintain: <http://tmadigan.home.netcom.com/custer>. Look for the link early next week.

HEAVENLY EVENTS TO WATCH FOR DECEMBER, 2005

“Perseus! Do you not resent it
Mythology should so present it?
Algol! From afar. Your very
variation Incites the imagination
To overwhelming admiration
For the so-called Demon Star. “

- Mallie Mae Kramer

December turns out to be a good month for planet watchers, even though the planets are well scattered. MERCURY makes its best morning-sky showing for 2005 as it leads Antares and the “head” of the Scorpion into the dawn sky low in the southeast. In the southwest evening sky, the crescent VENUS reaches greatest brilliancy at - 4.5 magnitude and begins her rapid disappearing act as she prepares to swing between us and the Sun. As the month progresses her crescent shape gets much slimmer. December 10 brings to an end MARS’ brief retrograde loop through Aries. Also, by New Year’s Day Mars has “shrunk” to 12 arcseconds in diameter, so detailed telescopic observations of its markings won’t be easy after that. At mid-December Mars is due south around 8:45 PM and sets around 3:45 AM, just as JUPITER rises along the east-southeast horizon. SATURN is slowly retrograding toward M44, the Beehive Cluster in Cancer. At midmonth it rises in the east-northeast around 8 PM and is due south around 3:15 AM.

- 4 The 3-day crescent Moon joins Venus in the southwest this evening. Compare crescents by telescope!
- 9 This morning the 7.5 magnitude asteroid (3)Juno reaches opposition. It can now be found due west of Orion’s Belt, drifting northwestward in the dim starfield about 3° north of the star Cursa, β Eridani.
- 10 Retrograde ends for Mars, only 71 days after it began. Its eastward prograde motion will now carry Mars farther than once around the ecliptic path in about two years time.
- 11 Mars chases the waxing gibbous Moon toward the western horizon this evening.
- 12 Mercury is at greatest elongation west of the Sun. It stands about 15° above the southeastern horizon by sunrise (but try to find it by 6 AM.) Jupiter stands about 20° above and to the right of Mercury.
- 13 Around 1:20 AM the 5.0 magnitude star ζ (Zeta) Arietis will be occulted by the dark left edge of the waxing crescent Moon.
- 14 This morning’s Geminid meteor peak is ruined by bright moonlight. Full Cold Moon will come tomorrow.
- 16 Algol, β Persei, is in mid-eclipse at 10:09 PM, and again at 6:58 PM on the 19th. (For the first 9 lines of the accompanying poem, “The Demon Star”, see the November Heavenly Events.)
- 18 Saturn rises beneath the waning gibbous Moon this evening.
- 21 Winter begins at 1:35 PM today when the center of the Sun’s disk reaches 18 hours right ascension in the sky and also is directly above the Tropic of Capricorn.
- 22 Twenty years ago today Comet Halley reached its peak sunward velocity of 16.65 miles per second. It had already passed inside Mars’ orbit and could be seen as a 6th magnitude fuzzball in northern Aquarius.
- 23 Around 4:38 AM the 3.8 magnitude star β Virginis, Zavijava, emerges from behind the dark upper-right edge of the third quarter Moon.
- 25 A Christmas bonus for scopers? Find the waning crescent Moon by 9 AM (not so easy!) About 9:09 AM Spica will vanish along the Moon’s sunlit left edge, and will reappear along the invisible upper-right edge of the Moon around 10:27 AM.
- 26 The crescent Moon rises to the right of Jupiter by daybreak.

Prepared by Robert Chapin

Seeing the Light

By Steve Chapin

I oft recall, on chilly nights,
a friendly kind of guy
who loves to show the heaven's art
to every passer-by.

The bitter cold deters him not.
The winter air is chill,
but those who brave the coldest nights
see more than most men will.

Through telescopes, binoculars,
or with the naked eye,
he'll show you what is best that night;
the beauty of the sky.

The comet Halley came one year...
in 86' or so.
When thousands came to see the sight,
he gave each one a show.

He knows each speck up in the sky,
the stars, the planets too.
He knows of even fainter things
too dim for us to view.

The city streets are brightly lit
and safety is assured,
but shorelines offer darker skies
where stars are less obscured.

But even so, some streetlights find
the refuge of the beach,
so here we stand behind the fence
where even they can't reach.

Each dot, I thought, looked much the same,
but much to my surprise
the colors and the magnitudes
look different through his eyes.

The clouds in summer make the sky
seem friendlier by day,
but for tonight, I hear him wish
they all would GO AWAY!

A two-edged sword, our pock-marked moon.
Its details show up clear;
but dim things wait for moonless nights
before they will appear.

Each shining star will keep its place
and rise without a sound,
then set again when morning comes,
next night to come around.

The bright North Star, stands firm and fixed
and guides us on our way.
Despite it all, "And yet it moves."
this fellow likes to say.

The South-Pole stars are only seen
in far-off southern skies.
This daunts him not. He knows them, too...
through other people's eyes.

He taught me many wondrous things...
of constellations bright,
of legends from the distant past
all drawn in points of light.

Red Betelgeuse, the Pleiades,
he showed me these as well.
Much easier they are to find
than either is to spell.

The treasures there for all to see
are recognized by few.
It's thanks to him, I take with me
a different point of view.

To see the forest for the trees,
I've found is good, and wise.
He's given me a precious gift...
The beauty of the skies.

What can I do to thank this man,
repay him, if I might?
"Just spread the word." he said to me,
"Help others see the light."

Dedicated to my father

By Steven Chapin

The Moon and Mars

A Photo by Kurt Massey



Image, Courtesy Kurt Massey

As we're all aware by now, whether you've gone outside and looked up during the early evening hours or have read about it in the pages of this journal, Mars is well placed for observing, either as a brilliant, yellow-orange point high in the southeast or as a detailed orb, floating against the jet-black background of a high-power eyepiece. As such, we won't be afforded an opportunity to observe this enigmatic planet at such close proximity again until June, 2018. Seizing upon this opportunity was Custer Board member and Observatory technician, Kurt Massey. Kurt was kind enough to forward this stunning photo for publication along with the configuration and technique specifics that were required to produce this image. The image presented here is a composite image, composed of 2 images, both obtained at the same image scale, using the same digital camera. This technique results in an image that is as close to an authentic, naked-eye view as is possible. Without elaborating any further, I'll let Kurt speak for himself:

"Both Images were taken with the Digital Rebel XT, FI 55mm , F Ratio 5.6. The Image with mars, and a washed out moon was ISO1600 exposure 1/30sec. The image with the moon surface was ISO100 exposure 1/160sec. Then in Photo Shop I selected a larger area including the moon and dragged it over the washed out moon flattened and cropped. Next I darkened what was left of the glow around the moon."

Editor: Thanks for sharing, Kurt!

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