

# The Night Sky

# The Newsletter of The Astronomy Club of Akron

www.acaoh.org

Volume 32 Number 2 February 2010

## Next Meeting: Friday February 26, 2010 8:00PM

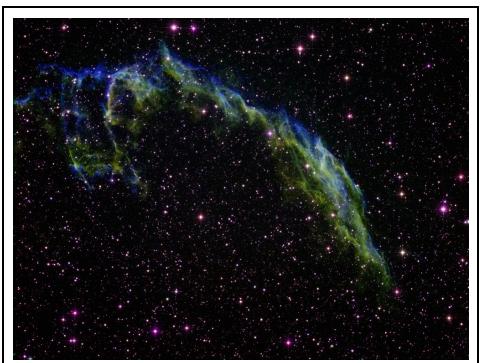
## Ramblings of the President

By Glenn R. Cameron

Hello my cosmic friends. Be sure and come out to our next club meeting on February 26th and listen to our old friend Clyde Simpson from the Cleveland Museum of Natural History. He will be talking about meteorites and will be bringing samples of meteorites from the museum's collection. So come on out. It's at 8 PM.

Now here's something unexpected. Astronomers have discovered two suns that are denser than any others ever observed. Now before you say, "But Glenn, I think my son is...," check the spelling again. These two stars appear to be denser than neutron stars and are therefore made of a new kind of matter. It appears that they are composed of quarks. Now you may know that neutrons are composed of quarks but these stars seem to be made of quarks smashed down into spaces smaller than neutrons. Heavy!

Another story in the news is the fact that President Obama has proposed the cancelation of the Constellation program that would take manned missions back to the moon. This is disappointing but of course, we're not made of money. I do



Veil Nebula (eastern portion), NGC 6992. Taken Sunday October 25, 2009 with a Tele Vue Genesis SDF. Total of three hours of exposure using the Hubble Palette. Three narrowband filters used: SII (which is assigned to red), Ha (assigned to green) and OIII (assigned to blue). By ACA Member Lenny Marek.

appreciate his encouragement of commercial endeavors into space. This has already been encouraged with the well remembered "X-prize" which saw the first commercial launch of a reusable ballistic spacecraft by Scaled Composites. Alas, we haven't seen a whole lot since then but there are plans for commercial orbital spacecraft with paying passengers.

MINIMUM 15 OF

Finally, be sure to come out to the club observatory on February 13th and March 13th for our public star parties. The March 13th event will be our annual Messier marathon. Come on out and let your eyes absorb that ancient star light!

Article by Glenn R. Cameron ACA President

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## **Activities Calendar**

### Club

February 13 - Open House at Portage Lakes Observatory, August 14 - MVAS-OTAA meeting at the MVCO. 6:30 pm.

May 15 - OTAA Scenic Vista Stargaze.

#### **Celestial**

February 5 - Last Quarter moon at 23:48 UT. February 28 - Full Moon at 16:38 UT.

February 8 - Alpha Centaurid meteor shower peaks at 5h UT.

February 14 - New Moon at 2:51 UT.

February 22 - First Quarter Moon at 0:42 UT.

February 28 - Jupiter at conjunction with the sun 11h UT.

The deadline for article submission is the 6th of each month. All word processing files should be saved in straight ASCII text files or any version of Word to minimize import problems. We will not turn away any submission, as long as the article's subject is relevant to our forum. If you do not have access to a computer a handwritten article will suffice as long as it is legible. Any images submitted should be saved in .jpg format.

#### — PLEASE SEND IN YOUR ARTICLES —

Send your articles, items for sale, and comments to:
Jason Shinn
1579C Treetop Trail, Akron OH 44313
truemartian@aol.com

The ACA would like to extend a warm welcome to new member:

#### Thomas Laskowski

We are thrilled to have you with us and look forward to seeing you at all Club functions!



## ACA Membership Meeting

by Gary Smith

Friday February 26, 2010 8:00PM Kiwanis Hall 725 Portage Lakes Drive Portage Lakes, OH 44319

#### **Guest Speaker**

Clyde Simpson (B.A., Geology, Cleveland State University) is observatory coordinator of the Ralph Mueller Observatory at the Cleveland Museum of Natural History and has been a member of the Astronomy Department since 1984. Clyde teaches astronomy and geology classes in the planetarium and museum galleries, and maintains the observatory with its 10 1/2 inch Warner & Swasey refracting telescope, which was made here in Cleveland in 1899. He leads field trips of astronomical interest, including several to view total eclipses of the Sun, and monitors sunspots on a daily basis for the American Association of Variable Star Observers.

#### **Topic**

#### "A Simple Sampling of Solar System Stones"

Since before the beginning of recorded history, man has looked to the heavens. Perhaps the question most commonly asked was "What are the Heavens made Of?" Most answers to this question were versed in terms of Myth, Mysticism, and Legend. However, a major change came about in the year 1609 when Galileo turned a crudely constructed instrument to the Sky. He was the first to see "Craters on the Moon", large "Pasteur-like Fields of Stars", and the "Moons of Jupiter" as they orbit around its parent planet. The Science of Astronomy has progressed a great deal since then. And astronomers have much better answers to the age-old question "Of What are the Heavens Made?"

## Treasurer's Report - January 2010 By Lew Snodgrass

Checking Beginning Balance	\$2,504.44
Income	
Dues	60.36
50/50 Drawing	17.00
Total Income	\$77.36
Expenses	
Observatory Improvements	16.94
PayPal	3.35
Microsoft Publisher 2007	144.97
Guest Speaker's Dinner	10.64
Website Expense	45.00
Total Expenses	\$220.90
Checking Ending Balance	\$2,360.90
Charter One Ending Balance	2,360.93
Difference	\$0.03
Savings Opening Balance	\$5,923.79
Savings Opening Balance  Earned Interest	<b>\$5,923.79</b>
Earned Interest	
	0.00
Earned Interest  Savings Closing Balance  Checking Ending Balance	0.00 <b>\$5,923.79</b>
Earned Interest  Savings Closing Balance	0.00 <b>\$5,923.79</b> 2,360.93

Dear ACA members, I have been perplexed by a deficit of \$3.32 for some time now; however there is good news. I found a discrepancy between what was recorded as a Pay Pal payment (dues) and what was actually deposited in Charter One bank. After reconciling the books with Charter One, PayPal, and Microsoft Money I accounted for the deficit. In fact, we are plus 3 cents. Wow!

Lew

## **Observatory Report**

By Ron Kalinoski

The observatory staff has been busy getting ready for the 2010 star party season. We fitted the 14 inch telescope with a new focuser and diagonal. The new assembly will allow us to reach the zenith without any software or mechanical limitations. Due to the dimensions of the previous focuser, a software limit had been programmed into the telescope processor to prevent a collision between the diagonal and fork base. This action resulted in a loss of observing area approximately 24 degrees in diameter centered on the zenith. Observing near the zenith is the best place to view celestial objects because light penetrates the least amount of atmosphere compared to other parts of the sky; therefore adding this sky area to the telescope's domain is a significant achievement. Even with the new focuser, securing clearance to prevent a collision was not an easy task. We needed to make several modifications to reach our objective. Our efforts will provide the highest quality images obtainable with the 14 inch telescope at its present location. Thanks to Dave Jessie and Fred Huffman for their help in this task.

With the completion of the brick pad, we were able to do some housekeeping at the observatory. All construction tools and materials have been removed from the building. Glenn Cameron has donated a cabinet to the club and Fred Huffman has completed its installation. We also installed several storage hooks on the walls to hang items such as extension cords, chairs, brooms, etc. We have many items in the observatory that are of little use to the observatory's operation. The ACA board has voted and passed a proposal to auction these items at our February meeting. Included in this issue is a list of items you can bid on at our February meeting.

In addition, the observatory security

# OBSERVATORY AUCTION FEBRUARY 26, 2010

The ACA board has voted and passed a proposal to auction these items during our February meeting at Kiwanis Hall. Below is a list of items you can bid on at the meeting.

- Moon Globe
- Photocopy Lens
- Camping Mat
- Aluminum Camp Table w/Storage Bag
- Dining Canopy (three units)
- Projector Screen (or donate)
- Tool Box
- Shears
- Telescope Mounting Brackets
- 1 1/4 Focuser
- 14" Telescope Stand
- Orion Single Axis Drive Motor and Controller w/26mm Eyepiece
- Orion Case w/25mm Eyepiece and Set of Tools
- Evepiece Case
- Off-Axis Guide System
- 12 volt DC Power Supply (two units)
- Observing Stool



## **Observatory Report Con't**

Light was repaired last month and is on-line again. Special thanks to Tom Mino for donating Observer's Handbook 2010. This is a great source for amateur and professional astronomers and we'll be using the handbook this year at our star parties.

Article by Ron Kalinoski ACA Observatory Director

## **Selling the Universe**

By John Shulan

I discovered a great use for my telescope. I auction my services for a private star parties for charitable causes. I did one last fall (Alzheimer's) and even though the sky was terrible, the friendship and food

was great. That one has become an annual event. In the next two months, I am auctioning off my services to a school and Boy Scouts. So, if you are charitable minded, take your talents and scope and sell the universe at your favorite organization's fund raising auction.

Article by ACA member John Shulan

# The Hoover-Price Planetarium 2010

By Dave Richards

I appreciate Jason Shinn giving me an opportunity to contribute to this month's issue. It's been 10 years since I became Director of the Hoover-Price Planetarium, and I owe quite a bit to The Wilderness Center Astronomy Club (TWCAC). When I began at the Museum, I made a point of visiting planetariums in California, Illinois, Pennsylvania, Florida, Arizona and Ohio. Many of the big, well-known institutions employed professional lecturers who very often were just that; lecturers. Many did not know astronomy or cosmology, and couldn't or wouldn't, answer questions; they just spoke well.

I quickly learned that amateur astronomers make the best planetarium lecturers. Most of our lecturers here at Hoover-Price have been members of TWCAC, and this has made an incalculable addition to our program. They love the avocation, and the public can tell. They establish a rapport with the audience, they know the sky, they know cosmology, they answer questions clearly, and they really know optics. I must tell you it's a great moment when someone compares us favorably to Shafran, or Adler Allegheny, Planetarium. This is because we have been extremely fortunate to be able to draw great lecturers from the ranks of TWCAC and also the ACA.

I haven't mentioned the many occasions when we have had a joint venture out under the stars. Let's just say it's a great experience, and great fun for me, the community, and I presume, you too. Right now, I have no particular plans for a gettogether... but who knows when Mars will be as large as the Moon in the night sky, the next comet comes around or maybe – whoa- a daytime supernova!? I'll be calling.

Article by Dave Richards Director Hoover-Price Planetarium, McKinley Presidential Library/Museum

## **Hoover-Price Planetarium programs for 2010**

## "Jupiter Takes One for the Team" Jan. 2nd - Mar. 7th

Twice in the last two decades the giant gas planet has been struck by large bits of cometary debris. Learn what this means to Jupiter, and more importantly to the Earth!

#### "And Now for the Smallest Planet" Mar. 13th - May 9th

With Pluto's reclassification in 2006, Mercury becomes the Solar System's smallest member. The MESSENGER Probe launched by NASA has sparked renewed interest in Mercury. See what NASA has learned about this seemingly dead orb.

#### "Back to the Moon?" May 15th - Jul. 11th

Within the last few years, many nations have sent probes and orbiters to our Moon. Find out what we have learned about our closest neighbor in space.

#### "Hubble Update" Jul. 17th - Sep. 12th

Last May the Space Shuttle Atlantis completed the last service mission to the Hubble Space Telescope. We will look at what new wonders this amazing instrument has found.

#### "The New Solar System" Sep. 18th - Nov. 14th

Many of us think of the Solar System as an accumulation of planets and moons. In the last decades, many more objects in very strange orbits have been discovered- to say nothing of other solar systems out there.

## "Season of Light" Nov. 20th - Dec. 31st

The West's traditional view of the Heavens has been greatly influenced by Greek mythology and tradition. We will learn how other cultures and people across our planet view the night sky.

#### Become a Member of

## The William McKinley Presidential Library & Museum

#### **Benefits include:**

- Free admission to the William McKinley Presidential Library & Museum
- Reciprocal admission privileges to more than 250 science centers and museums across the country.
- Free admission to planetarium programs.
- Free parking for attendance at museum functions.
- Free use of our research library facilities.
- Free subscription to the William McKinley Presidential Library & Museum Newsletter.
- A 10% discount on purchases from the Museum Shoppe.
- An opportunity to share your talent as volunteer.
- Invitations to exhibit previews, lectures, workshops, open houses, and special events of the museum.

Visit us on the web at www.mckinleymuseum.org and see all that the Museum has to offer!

# Cleaning Eyepiece and Telescope Optics

By Tele Vue Optics, Inc.

Optics of any type should be cleaned only in a clean environment. Most optics get scratched by being cleaned too often, under less than ideal conditions. Never clean lenses under "field" conditions. And never try to clean lenses using a red light; you won't be able to see the scratch-causing particles that need to be blown off.

Prepare a clean work area, such as a freshly washed kitchen table. Get a bulb-type puffer from the pharmacy (an ear syringe will do), some Q-tips and clean tissue, such as untreated facial tissue or bathroom tissue. Avoid tissues with perfumes or lotions, as they will leave a film on the lens. Also, an inspection lamp would be helpful.

Choosing a cleaning fluid is the most widely debated topic involving lens cleaning. The anti-reflective coatings on eyepieces and objective lenses are durable enough so that almost no liquid (short of a corrosive) is going to damage them, although some cleaning fluids can leave a film. Reagent grade acetone and methanol are ideal, and may be available in some pharmacies, but alcohol or acetone from a hardware store can also be used. Do not use nail polish remover, as this usually contains perfumes and oils which will leave a film. Windex or Glass Plus can be used to remove water-soluble deposits. If you have a favorite lens cleaner, feel free to continue using it. Methodology is what's most important.

First, use the bulb-type puffer to blow off any dust or loose particles from the lens surface. Don't blow the dust off with your mouth, as droplets of moisture can get on the lens, causing spots. If the eyepiece or objective lens has particles stuck to it that can't be blown off, moisten (do not soak) a tissue with Windex and gently blot the surface, without



Nebula NGC896 by Peter Clausen. Imaged with a Meade DSI Pro III, an Orion 102mm f/7 ED Refractor on an Atlas EQ6 mount. Exposures of 5 h Ha filter, 3 h OIII filter, and 3 h SII, 11 hours total. SII combined to Red, Ha combined to Green, and OIII combined to blue.

rubbing. On smaller lenses, use a Q-tip or fold a tissue into a steep triangle, moistened with Windex. Use the puffer again to blow off any more dust.

Second, moisten (do not soak) a Otip or tissue with alcohol, acetone or your favorite lens cleaner and gently wipe from the center out to the edge, using a circular motion. Move the Qtip or tissue slowly enough so that the cleaning fluid appears to "follow" the O-tip or tissue around and is reabsorbed. If you move it too quickly, some of the liquid will "break away" and dry separately, leaving spots. You'll probably use several tissues or Q-tips to thoroughly clean a lens. Use a new tissue or Q-tip after each swipe; this will prevent any contaminants from getting back onto the lens or scratching it. Do not touch the lens with your fingers, as the grease on your hands and fingers will cause smudges. Also, be careful the grease from your hands and fingers does not get on the Q-tips or tissues; it will smudge the lens. If it does, throw it away and use a clean one.

Cleaning the edge of a lens is the most difficult part, especially where

the Q-tip or tissue is lifted from the surface. Don't use too much liquid or put the liquid directly onto the surface being cleaned, because capillary action could draw the liquid inside. Try folding a tissue into a sharp point, moistening it slightly and use it to wipe around the edge.

If, after cleaning, any spots remain, try "fogging" the lens surface with your breath, then wiping it with a Qtip or tissue moistened with alcohol. This method usually works with spots that are water-soluble. Because pure alcohol and pure acetone contain no water, without the moisture from your breath to help, neither can remove water-soluble spots.

IMPORTANT NOTE: Don't use acetone on binocular or camera lenses, only alcohol. Many of these lenses have painted surfaces surrounding the lenses; acetone will dissolve and smear this paint across the lens and may damage any parts made from plastic or other materials."

Article by Tele Vue Optics, Inc. Reprinted with permission of Al Nagler at Tele Vue Optics. http://www.televue.com/











By Tom Alexander

Once I was new; my optics had never known dew My owner unpacked me and took me out for first light "Wow!" He exclaimed. "Look at Saturn; my God, what a sight! I am taking this scope of my dreams out every clear night."

But that was years ago, and my how times have changed. Now he sits in a chair, says it's cold, and starts watching a game. My optics are clean, my mount is stable I am still ready to go out whenever he is able.

I can see in the cold, just let me get acclimated. I can see in the heat, just keep the bugs swatted. The sights I can show you will still astound Just get up off your chair and take me out on the ground.

I know that it's winter and your fingers and toes may freeze But put on some heavy clothes and some padding for your knees. Messier marathon time is coming in a month or so So take me out for viewing, if the sky isn't filled with snow.

You once thought you couldn't live without me There was so much in the sky you wanted to see. Have you seen it all? Is there nothing more? If so, then put me in a closet and just close the door.

But if that spark still burns to get out under the stars And take me to a dark sky sight in that comfortable car, Then let's just do it(!) remember the first night And take this old scope out for some evening delight.























## The Night Sky

Newsletter of the Astronomy Club of Akron c/o Jason Shinn, Editor 1579C Treetop Trail Akron, OH 44313

For Club information, please visit our website: www.acaoh.org. Astronomy Club of Akron annual member-
ships renew in the month of May.
To join the ACA, or to renew your membership, please fill out the form below, place in an envelope and
mail to:

Lew Snodgrass, Treasurer, Astronomy Club of Akron 1865 Stabler Rd Akron, OH 44313-6124

Yes! I want to become a member of the Astronomy Club of Akron

rather have the B&W print version mailed to my address via USPS.

(PLEASE PRINT)

NAME:	PHONE:					
ADDRESS:						
CITY: S	TATE:	ZIP:				
EMAIL ADDRESS:						
Please be sure to enclose payment for the membership level desired.						
ADULT (ages 18 and older)\$30.00 JUNIOR (ages 12 to 17)\$15.00 ADDITIONAL ADULT member\$15.00 FAMILY MEMBERSHIP\$40.00						

☐ I realize that the full color edition of *The Night Sky* newsletter is automatically sent via email, but I would