



The Meridian

The newsletter of the
Quad Cities Astronomical Society

March 2010

<http://www.qcas.org>

Secretary's Notes

Joe Bannon

WELCOME! Bill Mahoney, who
joined at the February meeting!

Members in attendance at the February meeting:

Joe Bannon	Jay Cunningham	Dana Taylor	Cecil Ward
Ken Boquist	Joyce Erickson	Steve VanHyfte	
Craig Cox	William Mahoney	John Waack	

The meeting began with a Treasurer's report and Craig provided an update on membership. Currently, there are 12 members up to date with dues. In the prior two years, there were 19 and 21 paid members. Some of the reduction is attributable to people being active but just not having paid their dues. There was discussion of the club's practice to have a "grace period" for paying dues that extends until April and whether that is practical or desirable.

Dana asked if it was OK to purchase up to \$100 worth of shelving designed to easily fit on block walls. The question was asked whether we should first complete the inventory of items in the block house and attempt to get rid of excess materials. Once that is complete, we can reassess whether additional shelves are needed. Dana volunteered to take a photographic inventory of items in the block house that can be discussed at the March meeting. Some of these items may be able to be donated to the Putnam Museum for a display on local astronomers. Cecil commented items with an historical link to Quad Cities are preferable and said things that Augie Wendt or Wayne Jens built might be good candidates. Dana will use the photographs to sell the idea of a display to museum staff and was asked to also discuss with them the possibility of hosting an observing session near the opening of the Hubble IMAX movie.

Steve mentioned he received a spreadsheet of club equipment that Jim had previously developed. Some of the equipment is missing and may have been in Mike Valdez's possession before he passed away, making them unrecoverable. One of the items that should be located is paperwork associated with the club's Articles of Incorporation. If any member has these, they should contact Steve or a board member.

Dana showed a British astronomy magazine he recently purchased, Sky at Night. While more expensive than its American counterparts, approximately \$9, each issue comes with a CD and this one included not only additional articles and astrophotographs, but also plans and pictures of the construction of a backyard observatory.

The meeting adjourned at approximately 9:10.

Spaceweather.com

John Baker

Everybody has their favorite web links. One that I visit at least once or twice a week is Spaceweather.com. It is updated daily with solar images and interesting articles about atmospheric anomalies. Just the other day I saw something that I had never seen before. It was an article about NASA's Solar Dynamics Observatory (SDO) being launched into geosynchronous orbit aboard an Atlas V rocket. This in itself was not all that interesting but what the rocket did shortly after liftoff was pretty startling. As the rocket rose into the high cirrus clouds it killed a sun dog. Yes, I said that correctly, it **KILLED** a sun dog! You can actually see the sonic shock waves created by the rocket passing through the ice crystals and temporarily disrupt the sun dog as it goes by. Below are two images that show this happening.

For the full video, go to: <http://www.youtube.com/watch?v=SsDEfu8s1Lw>





Another reason I visit Spaceweather.com is for more of a morbid curiosity reason. It keeps count of all potentially hazardous asteroids known to man and shows which ones that will be coming close to hitting the Earth and how close in the upcoming month (Happy-Happy Joy-Joy!). When I first started monitoring this statistic the count was below 800 objects. It is now up to 1,103. What's REALLY scary is when they add a new object to the list and the encounter date was LAST WEEK!!! I was coming home from work one day and heard on the radio that a large meteor (10 meters or so) was going to hit the Earth somewhere around Syria. Sure enough, the next day Spaceweather.com showed the asteroid with a Lunar Miss Distance of "IMPACT!". (They then decremented the count by 1)

Near-Earth Asteroids

Potentially Hazardous Asteroids (PHAs) are space rocks larger than approximately 100m that can come closer to Earth than 0.05 AU. None of the known PHAs is on a collision course with our planet, although astronomers are finding [new ones](#) all the time.

On February 25, 2010 there were **1103** potentially hazardous asteroids.

Feb. 2010 Earth-asteroid encounters:

Asteroid	Date(UT)	Miss Distance	Mag.	Size
2009 UN3	Feb. 9	14.3 LD	12	1.2 km
2010 CK19	Feb. 17	0.9 LD	17	11 m
2001 FD58	Feb. 19	58.5 LD	17	0.9 km
2010 CJ18	Feb. 19	3.3 LD	18	20 m
2002 EZ11	Feb. 24	77.5 LD	18	1.0 km

Notes: LD means "Lunar Distance." 1 LD = 384,401 km, the distance between Earth and the Moon. 1 LD also equals 0.00256 AU. MAG is the visual magnitude of the asteroid on the date of closest approach.

How about other members. What are some of your favorite astronomy related web sites?

Observations

Joe Bannon

It's hard to be motivated when it's minus-something degrees outside and that's understandable. Compounding this has been a string of overcast nights, leaving me to wonder what I can do to feel like I'm staying in touch with astronomy in some manner. The answer for me was a visit to the library and reading a couple of books by Phil Plait.

Plait authored a web site about bad astronomy that debunked misconceptions and theories/rumors that have little basis in science. He's since moved to a new blog at the [Discover magazine](#) web site and from there you can still access the original Bad Astronomy page. In fact, that's the title of his first book and in it, he explains away the false belief that you can balance an egg on its end only on the first day of spring; water swirling down toilets in opposite directions in different hemispheres; why the sky is blue; and debunks the theory the Apollo moon landings were a hoax. Film buffs will enjoy the chapter on common errors in science-fiction movies. It's all done in a conversational manner and with a fair amount of wit.

His second book, *Death from the Skies* continues in this vein, though it brings more science to the table. Still, it's hard not to laugh when he refers to our little corner of the Milky Way as the cheap seats in the universe. Or when he discusses time scales like this, "But the time scales! Billions of years, nonillions of years, vigintillions of years..." then adds a footnote admitting he had to look up those two words. At its best, this book explains the ways the universe, and our home planet, will likely end. His wit and perspective help readers understand the low probability of many of these events and the futility of worrying about them.

It may not be the same as peering through the eyepiece and seeing a faint fuzzy, but on nights when that isn't possible, either of these books will give you a chuckle and some astronomical education.

Karl's Astronomical Junkyard

Karl Adlon

Long, long time ago - I bought a Lumicon Deep Sky filter. They said it was good for visual and astrophotography (AP) – film in those days. I never got around to doing much film AP and only used this filter a couple times a year, if that, for visual work.

At home, we have a street light in the front yard which light pollutes the yard on the west side of the house. Here's a picture toward the northwest.

Note the local light pollution illuminating the trees and the Quad Cities light pollution illuminating the thin (somewhat) clouds.

So, imaging from my yard is out, right?





Well, what if I shot using the Deep Sky filter?

I have to expose longer through the filter, maybe 2 – 3 times the time without a filter, but . . .

Look at that!

I can see more stars! The clouds are still there but not as bright! And the streetlight lit trees are black.

Unbelievable!

Now I have to try some imaging from the yard through a scope – when it warms up. And I'll have to find a spot not illuminated by the neighbors' incandescent porch lights (the filter won't screen those out). But if I don't have to load equipment into a car,

drive an hour (more coming back) to the observatory, unpack and set up to do some imaging . . . well, I can see doing much more in the future.

Now, if you are thinking “I need a Deep Sky filter!” might I suggest the HUTECH LPS filter page at <http://www.sciencecenter.net/hutech/idas/lps.htm> and decide which filter you think is best. IF you still think you want a Deep Sky, I know a junkyard where you can get a used one - at a discount!

FOR SALE

Cecil is selling this Pristine TeleVue 101 refractor for a friend. This scope was used only occasionally and has been meticulously taken care of. Included: TeleVue OTA with TeleVue Qwik Point, TeleVue Telepod, TeleVue padded hard case, TeleVue 20mm Plossl, Orion 9mm orthoscopic, Orion Skyglow and 80A filters, Meade #140 2X Telenegative Amplifier, 2' diagonal, and padded eyepiece case. The tripod does show some minor marks, the 20mm Plossl has very minor use marks, and the Meade 140 is missing the set screw. New this would sell retail for over \$4,000; selling price is \$3,000. Shipping to CONUS paid by buyer. Money order or certified check.



Upcoming Celestial and Club Events

Mar. 1	Saturn is 8 ^o left of the Moon
Mar. 2-17	Look for the zodiacal light about 80 minutes after sunset
Mar. 3	Spica is 4 ^o to 6 ^o above the Moon
Mar. 13-14	Messier Marathon
Mar. 14	Daylight savings time begins at 2 a.m.
Mar. 16-17	Venus and the crescent Moon adjacent to one another at dusk
Mar. 20	Moon and the Pleiades adjacent to one another
Mar. 20-21	Messier Marathon backup date
Mar. 21-22	Saturn is at opposition
Mar. 23-25	Moon passes beneath the arc formed by Mars, Pollux and Castor in the south
Mar. 30-Apr. 6	Mercury visible after sunset, low in the west, to the lower right of Venus

Jens-Wendt Observatory – Quad Cities Astronomical Society – Located at Sherman Park in Dixon, Iowa

Monsignor Menke Observatory – St. Ambrose University – Located at Wapsi River Environmental Education Center in Dixon, Iowa

QCAS Contacts

Elected Officers			Volunteers and Committees		
President	Dana Taylor	dana@nelsontaylor.com	Facilities	Jim Rutenbeck	jrutenbeck@frontier.com
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Treasurer	Craig Cox	Admiralcox2000@yahoo.com	Programming	Jim Rutenbeck	jrutenbeck@frontier.com
Director	Karl Adlon	Kmja79@yahoo.com			

All other contacts can be sent to the club at P.O. Box 3706, Davenport, IA, 52808.

Members are also reminded that anyone can submit articles for *The Meridian*. Submit articles to Joe Bannon at jbannon@midamerican.com and mzbannon@aol.com.