

North Central Florida's **Amateur Astronomy Club** 29°39' North, 82°21' West

# March / April 2008 Issue 67.1/68.1



Member Astronomical League



Member International Dark-Sky Association





#### Lifelong Learning, PodCasts, and Book Sales



It began with a birthday gift from my daughters. They gave me a 7-CD set on astronomy from Barnes and Nobles' "Portable Professor" series, this one entitled "Vault of the Heavens." It deals primarily with the Solar System and the Earth's place therein. I thoroughly enjoyed it. I found that I enjoyed learning while I drove. It was practically painless and much better than the music or talk radio available locally. I soon began scouring local libraries, etc., for non-fiction books on tape or CD's.

Then I was introduced to the Teaching Company. I found "The Joy of Science," a 48 hour science survey course on CD, on Astromart. TeachCo provides college level course lectures (no homework, no exams!) on a variety of subjects, including science, math, history, economics, philosophy, art, and religion. Some of you may remember

Dr. Fred Gregory, one of our excellent speakers from last year. He is one of TeachCo's professors, and presents a course on the history of science. It was fascinating to talk to him about how the courses are prepared and produced. I now own several of TeachCo's courses on a variety of topics. Their website is www.teach12.com.

Things really took off when I got my iPod. About the size of a pack of cards, it can store audio, video, photos, etc. I mainly use audio files, so I can store about one day or more of recording per gigabyte. A 30-gigabyte player can store some 720 hours of audio. I bought a car adapter, and play the iPod through my car's FM radio. Then I discovered the wonderful world of podcasts. These are free audio (a few are video) downloads available from a huge variety of sources. You can subscribe to monthly podcasts from Astronomy Magazine and Sky and Telescope, and from various NASA and observatory websites. Most major news outlets provide daily podcasts. But my favorite place to locate podcasts of interest is Apple's iTunes Store. iTunes is Apple's PC and Mac software for downloading, organizing, and playing music, video, and podcasts. It can also be used to rip audio files and burn them to CD. It is a free download from www.Apple.com. Apple sells the audio (music) and video (TV show and movie) downloads, but the podcasts are free. When you access the store, you can type a subject, such as "astronomy" or "science," into the search box, and find the relevant podcasts. You can search by topic, title, speaker, etc. Once you have downloaded the media, you can play it on your computer, burn it to CD, or load it on your iPod.

One of the great new features on the iTunes store is iTunesU, a collection of podcasts by universities and colleges from Miami Dade Community College to Duke, Cal Berkeley, and MIT. They include courses on a variety of subjects, including astronomy, as well as individual lectures by distinguished guest speakers.

Some of you may be familiar with Alex Fillipenkko's Teaching Company course on astronomy. AAC owns a 1993 version on videocassette. His 2006 astronomy course, Astro C10 is available as an audio download from iTunes. Other astronomy course podcasts I have found are Richard Pogge's Astronomy 161 and 162, from Ohio State, and Josh Bloom's Astro 10P from Cal Berkeley. Other podcasts of interest to amateur astronomers might include David Levy's "Let's Talk Stars," available at http://www.letstalkstars.com/archive.asp?year=2007, and, of course, the weekly podcasts from NASA, Astronomy Magazine and Sky and Telescope. Most are available from the iTunes Store podcast section.

Finally, you can get some great book bargains (10-20% of list) at the Alachua County Library "Friends of the Library" semi-annual book sale. I have found several good astronomy books and sky charts at the FOL sale. The next sale is scheduled for Saturday, April 19 through Wednesday, April 23, 2008.

You will note that I have shared my experiences with the iPod, iTunes, and the iTunes Store. I have no financial ties to Apple, nor own any Apple stock. I write about them because I am familiar with them, though I believe they have the best integration of player, software, and sales store. There are several other portable audio players, including Microsoft's Zune, and others. There are other audio file organization programs, and other sources of media beside the iTunes Store. If you are interested, visit your local electronics store, and talk to the sales staff. Or, just ask a teenager!

Here's wishing you clear skies, and many happy hours as a lifelong learner.

Bill Helms Alachua Astronomy Club, President@FloridaStars.org

#### **AAC Meeting Location**

AAC regular meetings are held on the second Tuesday of each month **at 7:00 p.m.** at the Florida Museum of Natural History, **Powell Hall**, in the Lucille T. Maloney Classroom, on UF campus, unless otherwise announced. All meetings are free and open to the public. Join us for some great discussions and stargazing afterwards. Please visit our website for more information (floridastars.org).

There will be no monthly meeting in

December.

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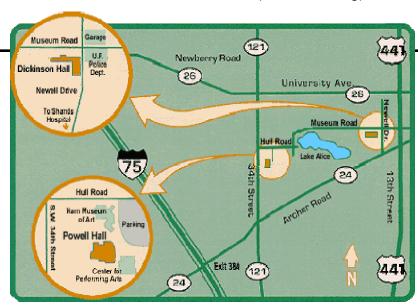
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#### Submitting Articles to FirstLight

The AAC encourages readers to submit articles and letters for inclusion in *FirstLight*. The AAC reserves the right review and edit all articles and letters before publication. Send all materials directly to the *FirstLight* Editor.

Materials must reach the *FirstLight* Editor at least 30 days prior to the publication date.

Submission of articles are accepted **by e-mail or on a CD**. Submit as either a plain text or Microsoft Word file. (In addition, you can also send a copy as a pdf file but you also need to send your text or Word file too.) Send pictures, figures or diagrams as separate gif or jpg file.

#### Mailing Address for Hard Copies or CDs

**Note:** Since our mailbox is *not* checked daily, mail materials well before the deadline date. (Hence, submission by e-mail is much preferred!)

c/o FirstLight Editor

The Alachua Astronomy Club, Inc.

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By E-Mail; Send e-mail with your attached files to

FirstLight@floridastars.org.

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#### **March Club Meeting**

Tuesday, March 11 2008, 7:00 p.m. EST

Speakers: Tyler Desjardins
Title: To Be Announced

Location: Powell Hall, Florida Museum of Natural History,

Lucille T. Maloney Classroom, UF Campus, Gainesville, Florida

#### **Star Party Report**

It's been a challenging winter for astronomy. One cold front after another has delivered clouds, rain and turbulent skies in between. It certainly is difficult motivating oneself to observe on the few ideal nights in between when weekend plans are repeatedly spoiled. All the more reason why outreach events help keep the cobwebs out of the telescope.

We were involved in several successful outreach programs in January and February including Stargazing at Hickory Ranch, the Villages Starry Starry Night and the lunar eclipse at Sante Fe Community College. My thanks to everyone who participated.

Despite being completely overcast with some drizzle, the hayrides, campfire and live music were enough to draw over 350 visitors to Hickory Ranch -- an all time high for that event! Fortunately, Howard Cohen was there to provide the stars -- in the way of a rotating slide show.

At the Villages, we had another two to three hundred guests. This time, a cold front cleared through just minutes before we set-up our telescopes.

March sets out with a visit to Gary Cook's residence a little ways east of Gainesville. Restroom and power are available. Some really awesome fudge brownies always seem to be available as well.

On April 5, our monthly star party will be at Hickory Ranch -- this time for our own, private star party. Hopefully we'll have clear skies this time around.

I'll be Australia for the better part of April where I plan to tackle at least a portion of the Southern Skies Telescopic Observing Club with the Orion StarBlast. In the interim, Tandy Carter will handle the star party reminders and bring along the observing club materials. I'll be back in time for Moondance Hill on May 3. Until then, no worries (and clear skies!)

Mike Toomey

## **STAR PARTY SCHEDULE: Upcoming Events - 2008**

Star Party	Date 2008	Location Check the website for directions and map	Start/End Time
AAC March Star Party	March 1st	Gary Cook's Residence - Little Orange Lake	Sunset 6:29 pm EST
AAC April Star Party	April 5th	Hickory Ranch	7:00 pm - midnight Sunset 7:51 pm EDT
AAC May Star Party	May 3rd	Moondance Hill	Sunset 8:08 pm EDT

#### Alachua Astronomy Club at the 2008 Winter Star Party

The Alachua Astronomy Club was well represented at the 2008 Winter Star Party. The annual Star Party held in Key West is sponsored by the Southern Cross Astronomical Society of Miami, Florida. The next one will be held February 19th through March 1 2009 (yes - an entire 10 days) and will be the 25th anniversary of the Winter Star Party.

The event covers topics beyond Amateur Astronomy including Astrophotography, Telescope



Making and Mirrorgrinding. Nationally recognized guest speakers are scheduled daily throughout the event.

Look up their website at www.scas.org for more information and order your tickets early as they sell out every year in advance.

Photo courtesy of Tim Malles.

**Note:** Next year brings the longest total eclipse of the Sun in your lifetime, truly a celebration of the *International Year of Astronomy 2009*. This article by longtime AAC member, Howard Cohen, who has traveled to nine total and annular eclipses, argues why one should see a total solar eclipse. In our next issue (2008 May/June) he will describe the "Great Solar Eclipse of 2009." Stay tuned.

### Why See a Total Eclipse of the Sun?

A chilling wall of darkness rushes from the west; ghostly shadows descend upon the earth. Stars and planets appear as the sky consumes the Sun. The brain panics as a black hole opens in the heavens, like an eerie cosmic eye bordered by crimson spikes and surrounded by a divine halo of white light. Nothing can prepare the mind for this. Science, magic and religion have finally come together.

by Howard L. Cohen 2008 February

ost people have never observed a total eclipse of the Sun. This is especially true for the continental USA where none has occurred in almost 30 years and none will occur until 2017. The path of a total eclipse of the Sun is only visible in limited regions extending along a very narrow but long corridor often passing through vast stretches of ocean and sometimes unreachable land masses. These paths can also travel through regions famous for startling scenery, prolific wildlife or magnificent treasures both old and modern. Such eclipses provide an "excuse" for journeys to places that might otherwise go unseen.

Solar eclipses occur when the Moon passes between the Earth and Sun partially or completely obscuring the Sun from our view as part or all of the Moon's shadow sweeps over the Earth's surface. Solar eclipses come in several flavors (*partial*, *annular*, *total* or *hybrid*, an annular-total combination). When the axis of the Moon's shadow intersects the Earth's surface, the eclipse is central producing an annular, total or hybrid solar eclipse.

**Total eclipses of the Sun produce one of nature's most awe-inspiring spectacles.** The sight and feelings of such an eclipse cannot be adequately described in words, pictures or video, an event that often brings chills and tears once seen and felt.

"The foreboding approach of the Moon' deepening shadow cast down from the heavens; the startling appearance of a dazzling diamond ring set into the cradling arc of the lunar limb; the glorious splendid appearance of the Sun's white electrifying corona; the sinister black lunar disk surrounded by the reddish glow of the solar chromosphere; protruding flaming red, pointy tongue like prominences; occasional blazing bright beads of light flashing out to a darkened sky sprinkled with bright planets and stars; an eerie, encircling and colorful sunset glow; and falling temperatures with a light wind joining to intensify an already shivering mind."

In fact, it is nearly impossible to explain why one should see a total eclipse of the Sun to a person who has never seen this sight!

"What you see in an eclipse is entirely different from what you know."

- Annie Dillard (1982)

Many people "think" they have seen a total eclipse of the Sun. But, most usually confuse a total solar eclipse with a partial or annular solar eclipse, or perhaps a total lunar eclipse. However, total eclipses of the Sun are unique events transcending most anything else one can perceive. To see the Sun turn into darkness during daylight is the closest we can come to seeing our familiar planet transformed into

an alien world.

"Some people see a partial eclipse (of the Sun) . . . and wonder why others talk so much about a total eclipse. Seeing a partial eclipse and saying that you have seen an eclipse is like standing outside an opera house and saying that you have seen the opera. In both cases, you have missed the main event."

- Jay M. Pasachoff (1983)

Lunar eclipses and partial solar eclipses bear little relation to a total eclipse of the Sun. Annular eclipses too are a poor substitute for no experience can prepare the mind for totality. Total eclipses of the Sun are not only for science but also for our souls. During totality our spirits seem to revert to those of our early human ancestors as emotions become primeval feelings felt eons ago.

"I look up. Incredible! It is the eye of God. A perfectly black disk, ringed with bright spiky streamers that stretch out in all directions."

- Jack. B. Zirker (1980)

Witnessing these indescribable events are why so many become "eclipse chasers" after seeing their first total solar eclipse. Indeed, some even say that "one has not lived a full life until one has experienced a total eclipse of the Sun."

"From all the hills came screams . . . in the night sky was a tiny ring of light . . . there was no world . . . in the sky was something that should not be there . . . in the black sky was a ring of light."

- Annie Dillard (1982)

It is both unfortunate and fortunate that the Moon's shadow does not often come near one's home territory. In fact, a given location must often wait several centuries before having a total eclipse of the Sun. *This is unfortunate.* In fact, the last time a total solar eclipse took place in the continental USA was almost thirty years ago, in 1979 (Washington, Oregon, Idaho and Montana). The next for the USA is still years in the future (2017 August 21). So, for stay-at-home types, many more years must still pass before the Moon's shadow will race across the USA (maximum duration 2m40s in western Kentucky).

On the other hand, total solar eclipses also provide a pretext to travel to distant places that might never be visited. And this is fortunate. Not only do eclipses of the Sun stimulate travel, they also help decide where to journey in a world so full of wonderful destinations. So, when trying to plan your next perfect travel experience, consider letting a total solar eclipse be your guide. Your trip will then be truly extraordinary.

"If you want to experience the ultimate in human emotion, curiosity, and imagination . . . then see a total eclipse of the Sun. Even if you are poor, starving, in hock, in trouble with the law, unbalanced, and totally addicted . . . see it anyway, it's worth it!"

—Glenn Schneider (1977)

**Next Issue:** "A Long Eclipse in an Exotic Land"

**Howard Cohen** 

#### In Memoriam: Peter Wlasuk

By Bob O'Connell



Photograph of Peter at the control panel at Yerkes Observatory provided by Patty Wlasuk

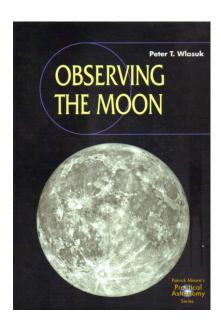
AAC member, Peter Wlasuk passed away on September 8, 2007 at North Florida Regional Medical Center after a three-year battle with a debilitating illness. Peter had come to Gainesville with his wife Patty for medical treatment and had looked forward to becoming an active member in the AAC. Although unable to attend meetings, Peter kept up-to-date on club activities by reading *FirstLight* which his wife Patty said he looked forward to reading. For those who did not know Peter, here is a brief overview of a man who Bill Dembowski of the Lunar Section of the Association of Lunar and Planetary Observers (ALPO) called: ". . . A brilliant scientist and talented writer. "

Peter held a Bachelor of Science degree in Mathematics and Physics from Yale University where he served as research assistant under Dr. Dorritt Hoffleit working on the *Yale Bright Star Catalogue*, 4<sup>th</sup> edition and co-authored its supplement. Later, based on his research with the SARA telescope on Kitt Peak National Observatory using a NSF grant, Peter completed a paper on active galactic nuclei (AGN) photometry for publication in *The Astrophysical Journal*. Peter also wrote a very interesting paper accessible on the NASA ADS website titled 'So much for fame!': The Story of Lewis Swift. Peter's article can be found at this link:

http://articles.adsabs.harvard.edu/cgi-bin/nph-iarticle\_guery?1996QJRAS..37..683W

While Peter held a Juris Doctorate in law from the University of Florida, his passion always remained astronomy – an interest which started early in life. In high school, Peter used an 8-inch Newtonian reflector for visual observations and he also built his first radio telescope. In 1994, Peter was elected as a Fellow of the Royal Astronomical Society and was Adjunct Professor of Astronomy at Florida International University.

Peter's book, *Observing the Moon*, was published in 2000 and is an excellent resource for lunar observers. Peter spent thousands of hours observing the Moon since 1970 and all of his lunar observing experience shines through on this book's pages. One aspect of the book which distinguishes it from previous lunar guides is his chapter titled "A Crash Course in Lunar Geology." Peter states that:



". . . it is not too difficult to learn a little bit about our Moon's geology and geologic history, and the amateur lunar observer who takes the time to do this will find that they will better understand and appreciate the vistas that unfold in the eyepiece. "

Peter recognized that a modern amateur lunar guide should incorporate what science has learned about lunar geology since the start of the space age. Up until Peter's book, lunar guides simply described lunar features without reference to the latest knowledge of lunar geology.

Since 2006, I have spent many nights at the telescope using Peter's book as a guide to lunar observing and I plan to finish the complete book during 2008. Peter's wife Patty donated a copy of his book to the AAC and any interested member is encouraged to check it out from the club's library and take it to the telescope.

Peter's memorial service and blessing of his ashes was held on October 30, 2007 at Holy Faith Catholic Church in Gainesville. Patty is very grateful to two organizations which assisted her in caring for Peter during his illness. Members can send a tax-deductible donation to either of these organizations in memory of Peter Wlasuk who will be greatly missed by all who knew him:

- ◆ The Center for Independent Living (provides free wheelchairs and other equipment), 222 SW 36<sup>th</sup> Terrace, Gainesville, FL 32607
- Catholic Charities (provides respite volunteers), 1717 NE 9<sup>th</sup> St,, Gainesville, FL 32609.

#### **April Club Meeting**

Tuesday, April 8 2008, 7:00 p.m. EST

Speakers: Tim Malles

Title: Astronomy and Space Art - An Artist's Impression Location: Powell Hall, Florida Museum of Natural History

Lucille T. Maloney Classroom, UF Campus, Gainesville,

Florida

**Preview:** Tim Malles will give a brief history of astronomy and space art, from cave paintings to computer generated images. He will discuss the important contribution artist's have made in the development of the space program. Tim will also display examples of his own astro art and

t, Tim Malles

give club members the inspiration along with some basic knowledge and tips for creating their own space art.

Tim would like to invite club members to bring a piece of their own astro art that they have created to share, show and tell.

**About the Speaker:** Tim has been an active AAC member since 2001, serving as star party chair, board member, and volunteer at numerous public outreach events. He also volunteered in the construction of the Gainesville Solar Walk including the design and installation of the bronze information plaques.

#### Space Shuttle & the ISS Passing Through Cetus The Whale

Chuck Broward took this photo of the Space Shuttle Atlantic and the International Space Station passing though Cetus the Whale February 18th around 7:25 pm. The photo was taken with a Nikon D-80 (DSLR) with a wideangle lens, 15 second exposure. The shuttle is the fainter trace.



- 1. TC Presence of a Quorum: a. 6 Members present
- 2. BH Call to order: a. The meeting was called to order at 7:00 PM
- 3. Roll Call: a. TC Board members present: i. Bill Helms (BH), David Liles (DL), Howard Cohen (HC), Larry Friedberg (LF), Pamela Mydock (PM), Bob O'Connell (BO'C); b. TC Chair persons present: i. Charles Broward (CB), ALCOR,
- ATM; Michael Toomey (MT), Star Parties; c. TC Club members attending: i. Thomas Olmsted, Marian Cohen
- 4. BH for TC Reading and approval of the minutes of last meeting: a. Corrections; i. There was general agreement that the attendance section should be limited to the following: Board members present; additional chairs present; and other members present; b. Acceptance: i. HC moved and LF seconded to approve the November and December minutes with those changes; ii. The motion passed on a voice vote; iii. The minutes were accepted
- 5. Officer, board and standing committee reports: a. LF distributed the Treasurer's report
- b. TC reported on the status of club Telescopes:
- i. SkyQuest XT-8 Larry Friedberg (C) 1. with MT for routine maintenance
- ii. Museum telescope (6" equatorial Newtonian) Don Loftus (C): 1. with custodian
- iii. Celestron C8 Gary Cook (C): 1. with custodian; iv. 4 ½" Reflector Marianne Gamble (C): 1. with custodian
- v. 8" Parks Dobsonian Don Loftus (C): 1. with custodian; vi. RLT Chuck Broward (C): 1. with custodian
- vii. PST Scott McCartney: 1. with custodian; viii. Collimating Tools Michael Toomey (C): 1. with custodian
- ix. Banner Tandy Carter (C): 1. with custodian; x. Apogee AP-6 CCD David Liles (C): 1. with custodian c. MT reported on Star Parties
- i. The Villages Star Party scheduled for January 12, 2008 Rain/Cloud date February 9, 2008
- ii. Friends of Paynes Prairie January 26, 2008; d. SM reported on the speaker schedule: i. BH and HC to contact SM regarding updating the Speakers page; e. BO'C reported on LOG activities; i. The next event is February 20, 2008 Lunar Eclipse outreach event at Santa Fe Community College; 1. BO'C is working with Dr Sally Hoffman; 2. More planning will occur at the ATM meeting January 15, 2008
- 6. Special committee reports: a. PM reported on the plaque and murals at the Royal Park Stadium Theater; i. No Change; ii. OPEN; 7. Special orders: a. None
- 8. Old Business: a. BH reported on posting club policies to the club website; i. Still in work; ii. No ECD; iii. OPEN
- b. LF reported on the club tax exempt status; i. OPEN
- c. BH reported on YMCA State Wide Pow-Wow outreach Program; i. BH to decline on behalf of AAC, but to refer YMCA to SFCC Planetarium Director; ii. CLOSED; d. BO'C reported on the Lunar Eclipse Outreach Program; i. BO'C is continuing to coordinate with Dr. Hoffman SFCC; ii. Things are proceeding well toward the February 20, 2008 eclipse; iii. OPEN; e. BO'C reported on the disposition of the NEFAS telescopes; i. BO'C delivered most of the telescopes to the Duval Elementary School; ii. BO'C will follow up with any telescopes the AAC has; iii. OPEN
- f. BH requested a discussion of the AAC dues structure; i. BH appointed a study group consisting of LF, TO, TC, and MT regarding revisions to the AAC dues structure starting 2009; ii. Report is due to the AAC Board meeting during the April meeting; iii. OPEN; 9. General orders: a. None
- 10. New Business: a. BO'C reported on an outreach program for the Duval Elementary School
- i. BO'C plans to have an outreach program with the Duval Elementary School
- ii. BO'C will get details from the Duval Elementary Schools for the possibility of having an observing session for the students at Camp Crystal in Keystone Heights in late January; iii. OPEN
- b. HC requested a discussion of the AAC's roll in the 2009 International Year of Astronomy (IYA)
- i. HC reported that the IAU has proclaimed 2009, which is the 400th anniversary of Galileo's first use of a telescope for astronomy, the International Year of Astronomy; ii. HC encouraged all members to explore http:/
- www.astronomy2009.org; iii. HC suggested involving UFAD, FLMNH, etc.; iv. BH will open discussions with both organizations at a meeting scheduled for later in the week; v. OPEN
- 11. Good of the Order: a. BO'C suggested that the club use copies of FirstLight in addition to the club brochure when soliciting new members; i. BO'C suggested that copies of FirstLight can be handed to visitors at the general meetings with the brochure; ii. BO'C volunteered to greet potential new members at general meetings with copies of FirstLight printed off the website
- 12. Announcements: a. BH announced that the AAC is slated to participate on April 17, 2008 with the UFAD and FLMNH in Starry Night; i. The AAC will provide telescopes for viewing, but will be able to attend the special speaker's presentation; b. HC announced that there will be a parking conflict the night of the January AAC general meeting due to a concert that same night; c. HC announced that the City of Gainesville has approved funding to provide the aphelion and perihelion points of Comet 1P/Halley; i. The City of Gainesville plans a website and brochure; ii. The City of Gainesville would like AAC participation
- 13. BH Time and location of next meeting: a. The next meeting will be at Grill Masters restaurant; b. The next meeting will be at 6:30 PM on February 5, 2008: 14. BH Adjournment: a. BO'C moved and HC seconded to adjourn; b. The motion passed on a voice vote; c. The meeting was adjourned at 8:37 PM.

# **FirstLight** March / April 2008

February 20, 2008 Lunar Eclipse: Chuck Broward took this photo of the Lunar Eclipse last month around 11:00pm on the night of the 20th. The camera used was a Nikon d-80 on a 102 See our website for more photos taken by club

Floridastars.org

members at:

refractor.





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