

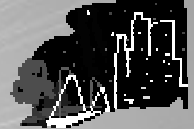


North Central Florida's
Amateur Astronomy Club
29°39' North, 82°21' West

August / September 2007
Issue 60.1/61.1



Member
Astronomical



Member
International

FirstLight

Newsletter of the Alachua Astronomy Club

Star Parties

Mike Toomey

Our next star party will be August 11 at the Loftus Family Farm. The Perseid meteor shower peaks the following evening so we may see a little activity. Then we'll visit Kitty Hawke Aviation on September 8. This is a change of venue from previous calendars.

Please don't forget, you are requested to pre-register for our October 13 star party at Gold Head Branch State Park. Cabins fill up early, and campsites could fill up as well. You can retrieve reservation information and a registration form on our website at: floridastars.org/goldhead.2007.html

Scott McCartney and I anxiously await a clear summer star party so we can wrap up our Messier list. It's never too late (or too early!) to begin the hunt, whether it takes you 5 days or 5 years to see all 110 targets.

I know its tempting to throw in the towel early during these soggy summer months, but if you plan ahead and make yourself comfortable while the skies settle down, you'll typically be rewarded with clear and steady skies later in the evening. The only trick is to keep your optics dry in the meantime. Leaving your equipment under the awning should do the trick. Please remember to bring your own tables, however.

News Release from THE VILLAGES ASTRONOMY CLUB

The Villages Astronomy Club (and the AAC) has been invited by the Ocala Horse Park on Sunday Evening August 12 at dark (approx 8:45 PM) to view the Perseid Meteor Shower and Jupiter. This will be a perfect opportunity due to the darkness of the venue to see the Shower and the heavens (weather permitting). Bring a comfortable beach chair, flash lights, your binoculars and telescopes or just yourself to this wonderfully dark viewing spot. Members and the general public is invited. Admission is free.

Directions to the Ocala Horse Park** South on I-75 to RT484 head east and turn left (north) at RT 475 then 2.7 miles to the Ocala Horse Park on the left.

For more information please contact Bill Santos 352-750-0332 or Burt Salk 352-259-7217.



Last month, I wrote about a variety of phenomena we can observe within our own atmosphere, including rainbows, fogbows, and light scattering. This month, I will discuss more cloud phenomena, and close with twilight and early evening phenomena.

If you notice a dark cumulus cloud high in the sky, backlit by the sun, look carefully around its edges for delicate colors such as mother-of-pearl pinks and greens, and, occasionally, blues. They can also be seen in higher cirrocumulus and altocumulus clouds, and especially in high, bright white altostratus clouds. Wearing sunglasses and gazing through the dark band at the top of your car's front window helps bring out these colors in these iridescent clouds.

Another remarkable phenomenon, which can be seen from your window seat on an airliner, is the glory. Only seen from the down sun side of the airplane, look for it when the airplane's shadow is projected onto a cloud. Look for colorful rings surrounding the shadow as it races along the cloud tops. The rings may grow and shrink as the clouds approach and recede from the plane. A similar effect can sometimes be seen when the early morning sun projects your own shadow onto nearby fog.

As the sun sinks into the west, we see a variety of optical effects. If there are clouds between the observer and the lowering sun, you may see crepuscular rays. Bright rays occur when sunlight shines between clouds, and dark rays occur when clouds cast shadows on the air. The rays apparently diverge from the solar point, a matter of perspective like railroad tracks diverging as they approach you, and may even converge in the east toward the antisolar point.

If clouds do not block the sun, you will see your shadow growing longer toward the east as the sun sinks lower in the west. Walking in my south meadow, I have watched my shadow grow to nearly 90 feet! Considering that I am a few inches short of six feet, you should be able to calculate the height, in degrees, of my western treeline. If you have never watched your shadow grow this long, give it a try. It is a memorable experience.

As the sun sets, the sky grows orange, and the illuminated clouds turn a buttery yellow, then orange, and finally a pinkish-red. This, of course, results from the shorter wavelength blue light being scattered away by the long path the air must take through the atmosphere at sunset, leaving the redder hues. As the sun sinks lower below the horizon, the western sky darkens until there is only a yellow band stretching nearly 90 degrees either side of the sun. This is the twilight arch.

Turning and looking east, we see a dark blue band rising above the horizon, with a pinkish band of light above it. This is the earth's shadow, surmounted by the pinkish antitwilight arch, sometimes called the Belt of Venus.

Finally, the light fades, and the sky turns black. As the sky becomes completely dark, a wedge of light appears in the west, tilted along an angle matching the ecliptic. This is the Zodiacal Light. It is caused by sunlight scattering off of interplanetary dust orbiting along the ecliptic. It can be as bright as some parts of the Milky Way. I have seen it as recently as Spring, 2007, at Chiefland Astronomy Village. I could trace it to a height of sixty degrees, and some observers thought it reached nearly to the zenith. It requires very dark skies, especially to the west, to be seen in the evening. It can easily be mistaken for light pollution.

I hope this has opened your eyes to some new things to be seen in the sky. There is more there than the Solar System and Deep Sky. If you see some interesting phenomenon that is new to you, I'd like to hear about it. Shoot me an email. And keep your eyes open for interesting sights in the Near Sky.

Bill Helms, Alachua Astronomy Club President@FloridaStars.org

August Club Meeting

Tuesday, August 14, 2007, 7:00 p.m. EDT

Speaker: Bob O'Connell

Title: *Why and How to Observe the Moon*

Location: Powell Hall, Florida Museum of Natural History
(Lucille T. Maloney Classroom), UF Campus, Gainesville FL



Bob O'Connell

About the Speaker: Bob O'Connell has a Bachelor's degree in Political Science from the University of Colorado at Denver and nursing degree from Santa Fe Community College. Bob is currently a registered nurse at Shands at AGH. Bob got his first telescope at age 5, a Sears 2.4" refractor; the first object he observed was the Moon. During the ensuing 40 years, he has owned several other telescopes and currently uses a 5" Meade refractor in his lunar studies. His interest for the past three years has been researching the controversial issue of Transient Lunar Phenomena, on which he gave a presentation at the August 2006 AAC meeting with Don Loftus.

Alachua Astronomy Club, Inc.

2007 Officers

President: Bill Helms

Phone: 352-542-8227

Email: president@floridastars.org

Vice-President: Howard L. Cohen

Phone: 352-495-1811

Email: vicepresident

@floridastars.org

Treasurer: Larry Friedberg

Phone: 954-290-6872

Email: treasurer@floridastars.org

Secretary: Tandy Carter

Phone: 386-546-3387

Email: secretary@floridastars.org

Board of Directors

Bob O'Connell

Thomas Olmstead

Pamela Mydock

Chairs and Committees:

Star Parties: Mike Toomey

Phone: 352-219-0572

Email: starparty@floridastars.org

Programs: Scott McCartney

Phone: 352-495-1811

Email: programs@floridastars.org

Webmaster: Howard L. Cohen

Scott McCartney

Email: webmaster@floridastars.org

FirstLight Editor: Jackie Owens

Phone: 386-462-7366

Email: firstlight@floridastars.org

ATM SIG: Chuck Broward

Email: ATM@floridastars.org

ATM Observer List:

ATM-Observers-L@lists.ufl.edu

Astronomical League Correspondent

Charles S. Broward

Phone: 352-475-1014

FirstLight is the bi-monthly publication of the Alachua Astronomy Club, Inc., Gainesville, Florida.

© Copyright 2007,
Alachua Astronomy Club, Inc.

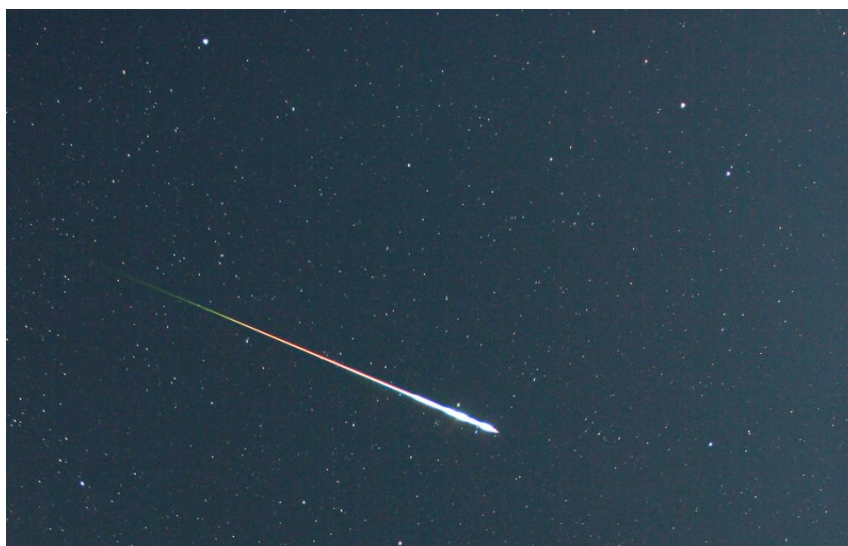


AAC Meeting Location

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).

Got a calendar? Circle this date: Sunday, August 12th, 2007. Next to the circle write "*all night*" and "*Meteors!*" Attach the above to your refrigerator in plain view so you won't miss the 2007 Perseid meteor shower.

"It's going to be a great show," says Bill Cooke of NASA's Meteoroid Environment Office at the Marshall Space Flight Center. "The Moon is new on August 12th--which means no moonlight, dark skies and plenty of meteors." How many? Cooke estimates one or two Perseids per minute at the shower's peak.



Above: A Perseid fireball photographed August 12, 2006, by Pierre Martin of Arnprior, Ontario, Canada.

The source of the shower is Comet Swift-Tuttle. Although the comet is nowhere near Earth, the comet's tail does intersect Earth's orbit. We glide through it every year in August. Tiny bits of comet dust hit Earth's atmosphere traveling 132,000 mph. At that speed, even a smidgen of dust makes a vivid streak of light--a meteor--when it disintegrates. Because Swift-Tuttle's meteors fly out of the constellation Perseus, they are called "Perseids."

Note: In the narrative that follows, all times are local. For instance, 9:00 pm means 9:00 pm in your time zone, where you live.

The show begins between 9:00 and 10:00 pm on Sunday, August 12th, when Perseus rises in the northeast. This is the time to look for Perseid Earthgrazers--meteors that approach from the horizon and skim the atmosphere overhead like a stone skipping the surface of a pond.

"Earthgrazers are long, slow and colorful; they are among the most beautiful of meteors," says Cooke. He cautions that an hour of watching may net only a few of these--"at most"--but seeing even one makes the long night worthwhile.

As the night unfolds, Perseus climbs higher and the meteor rate will increase many-fold. "By 2 am on Monday morning, August 13th, dozens of Perseids may be flitting across the sky every hour." The crescendo comes before dawn when rates could exceed a meteor a minute.

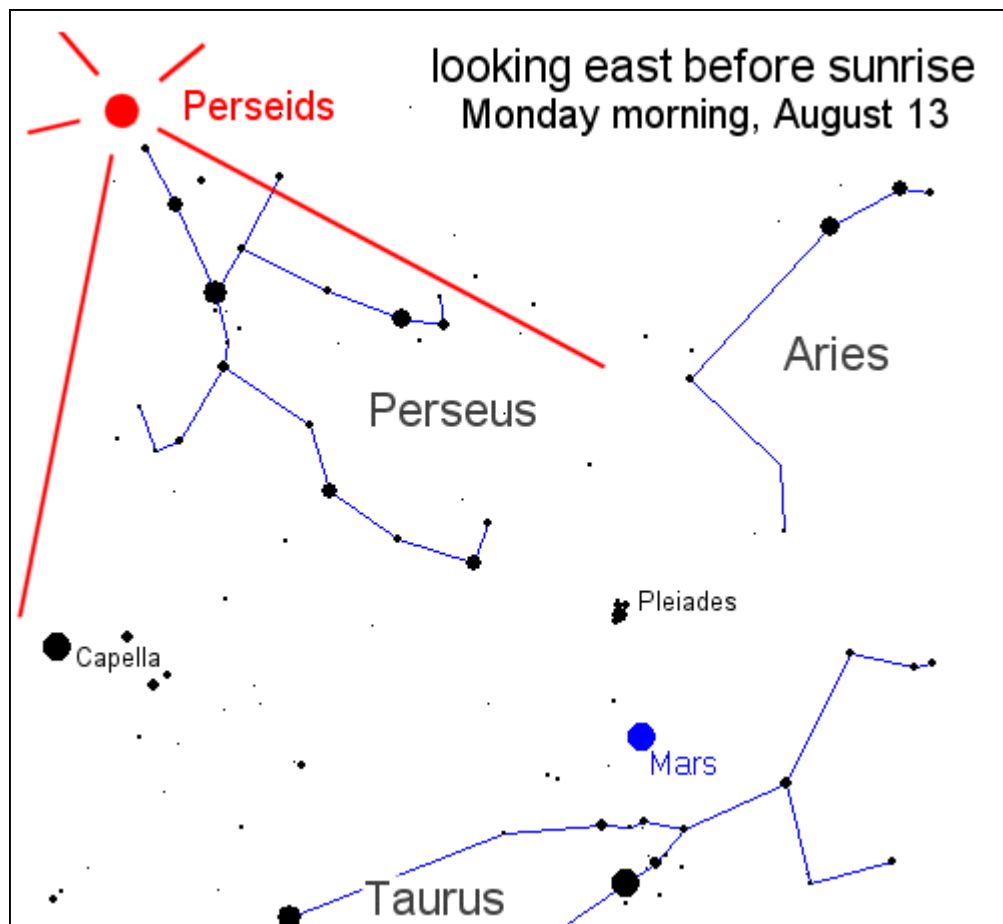
For maximum effect, Cooke advises, "get away from city lights." The brightest Perseids *can* be seen from cities, he allows, but the greater flurry of faint, delicate meteors is visible only from the countryside. Scouts, this is a good time to go camping.

And there's a bonus: Mars. In the constellation Taurus, just below Perseus, Mars shines like a bright red star. Many of the Perseids you see on August 12th and 13th will flit right past it. Instead of following the meteor, you may find you have a hard time taking your eyes off Mars. There's something bewitching about it, maybe the red color or perhaps the fact that it doesn't twinkle like a true star. You stare at Mars and it stares right back.

Earth and Mars are converging for a close encounter in December 2007. NASA is taking advantage by launching a new mission to Mars--the Phoenix Lander. Phoenix will touch down on an arctic plain where it can dig into the ground and investigate layers of soil and ice, searching for, among other things, a habitable zone for primitive microbes. The launch window opens on August 3rd, so by the time the Perseids arrive Phoenix may be hurtling toward the Red Planet. Landing: late Spring 2008.

It's something to think about at four in the morning, with Mars rising in the east, meteors flitting across the sky, and a summer breeze rustling the legs of your pajamas. Maybe you should go circle your calendar again.

Below: The eastern sky, viewed during the hours before sunrise on Monday, Aug. 13, 2007.



An Early Morning Eclipse

— Howard L. Cohen

August brings this year's second total eclipse of the Moon but observers will need to rise before the rooster crows to catch this one

Last March, Earth experienced its first total lunar eclipse since 2004. Florida observers expected to see the Moon rise in eclipse but, unfortunately, cloudy weather hid the eclipsed Moon from view. However, Florida observers now get a second chance to see a lunar eclipse in 2007 though this time the Moon will *rise* during eclipse.

In Gainesville, just before four o'clock on the morning of Tuesday, August 28, the Moon will enter Earth's penumbral shadow. About one hour later, the Moon's eastern limb will show a noticeable "bite" as the lunar disk begins its march into Earth's umbral shadow. After about another hour totality starts but, unluckily for the East Coast, maximum eclipse occurs near time of sunrise. Thus, Florida observers will see the Moon sink below the western horizon as the sky rapidly brightens from a rising Sun.

Florida residents know August usually brings strong thunderstorms but such storms often dissipate during the evening and early morning skies can be clear. So, perhaps an early morning eclipse in August brings the best chance of viewing this celestial event though we will miss the final curtain call. After all, half an eclipse is better than none at all. So, get up before the roosters crow to see this one.

2007 August 28 Total Lunar Eclipse Timetable for Gainesville

Moon Enters Penumbra	03:52 a.m. EDT	(Moon's altitude	36°)
Moon Enters Umbra	04:51 a.m. EDT	(Moon's altitude	26°)
Start of Totality	05:52 a.m. EDT	(Moon's altitude	15°)
Maximum Eclipse	06:37 a.m. EDT	(Moon's altitude	6°)
Sunrise	07:04 a.m. EDT	(Moon's altitude	1°)
MOONSET	07:08 a.m. EDT	(Moon's altitude	0°)
End of Totality	07:23 a.m. EDT	(Moon's altitude	-4°)
Moon Leaves Umbra	08:24 a.m. EDT	(Moon's altitude	-16°)
Moon Leaves Penumbra	09:22 a.m. EDT	(Moon's altitude	-28°)

And for late risers, know that 2008 February 20 brings yet another total lunar eclipse for Gainesville! This time the eclipse runs from about 7:30 p.m. EST Feb. 20 to about 1:15 a.m. the next morning so we will have the opportunity to see the whole show.

BEWARE THE MARS HOAX

It's August, which means it's time for the annual Mars Hoax. An email is going around claiming that Mars will approach Earth on August 27th; the encounter will be so close, the email states, that Mars will rival the full Moon in size and brightness. (Imagine the tides!) Don't believe it. The Mars Hoax email first appeared in 2003. On August 27th of that year, Mars really did come historically close to Earth. But the email's claim that Mars would rival the Moon was grossly exaggerated. Every August since 2003, the email has staged a revival.

Star Party Pics!

Below: Alyssa McCartney using giant binoculars at the Loftus Family Farm in May.



Above: Mike Toomey's visit to Osceola National Forest to view the occultation of Iota Cancri last April. Hope there aren't any gators in there!

STAR PARTY SCHEDULE: Upcoming Events - 2007

Star Party	Date 2007	Location Check the website for directions and map	Start/End Time
AAC August Star Party	Saturday, August 11th	Loftus Family Farm	Sunset 8:15 pm EDT
AAC September Star Party	Saturday, September 8th	Kitty Hawke Aviation	Sunset 7:44 pm EDT
AAC October Star Party	Saturday, October 13th	Gold Head Branch State Park (Register Now!!)	Sunset 7:02 pm EDT

Notes from the ATM-Observers Group

The summer doldrums are upon us! I've wandered outside for several weeks now and have discovered that seeing was murky at best! So, say some people, this is the time to make new astro-gadgets, and to fix up existing equipment, to get ready for the AAC Starparty at Goldhead State Park, and other late summer, early fall stargazing evenings.

Well, I hope you all have the time to do that! Some of us in the club have managed at least one evening a month for getting together and sharing our hobby with one another. This past meeting (July) was a treat! Remi Trujillo was in town with his lovely wife, and he shared some of the events of his life since leaving Gainesville. He explained that observing in his area of Mexico (about 60 miles south of Mexico City) is plagued with evening rain. He is contemplating the organization of an observing club in his town.

Another ATM-Observer regular, Bob O'Connell shared his experience of heading to Canada for a lunar/planetary conference in Alberta, Canada. Bob, if you are not aware, is the club's resident serious lunar observer, and if his research proves fruitful, will become a recognized name in astronomy. Bob, by the way, has gotten this observer into lunar observing (along with the fact that I can't see a darned thing except the Moon, and planets from Gainesville). Turn your scope to the Moon, and grab a pen and paper, or camera and record an ever-changing visual treat.

David Liles (a person who owns more scopes than this writer!) has consistently shown up with something new and unique in the back of his car. The latest item was a dramatically long carbon-fibre tube telescope. David also reps for a company selling a nifty easy-to-assemble mini-observatory.

Another club member, Robert Duvall shared an impressive computer program he has been developing for several years. He has taken lunar images, combined these with a mapping program, and has created a very special way of looking at the Moon on his laptop. Most impressive!

We also have explored making and using an intriguing gizmo called a Hartmann Mask. This easy to make device makes it easier to focus your telescope, especially if it is one of the faster, shorter focal length scopes. Other material has been shared between participants in the group.

There is a lot, a real lot, of special talent in the Alachua Astronomy Club! The ATM-Observers group, which meets the third Tuesday of the month at 7 pm in Gainesville. The location can be seen on the web page, or call my cell number (352-214-3085) to be talked in to the location. Be prepared to get involved with sharing your items of interest with the rest of us!

In the coming months we will look at perhaps making our own scopes (pushing glass anyone?), building small scopes and mounts, and experimenting with useful accessories. I would also like to experiment with photography techniques. Come check us out!

Charles Broward

September Club Meeting:



Tuesday, September 11, 2007, 7:00 p.m. EDT

Speaker: Bill Helms, President Alachua Astronomy Club

Title: *Building the Suwannee Skies Observatory*

Location: Powell Hall, Florida Museum of Natural History (*Lucille T. Maloney Classroom*), UF Campus, Gainesville FL

About the Speaker: Bill Helms is the President and past Programs Coordinator of the AAC. He has a Bachelor's degree in Physics and a Master's degree in Management from Florida State University. Bill retired to the dark skies of North Florida after a 35-year career with NASA at the Kennedy Space Center (KSC), where he was a Firing Room launch console operator for both the Apollo lunar landing missions and the early Space Shuttle missions. While at NASA, Bill designed launch complex instrumentation for the Space Shuttle, and designed the Hazardous Gas Detection System used at the launch complex for over 20 years. The instrumentation he designed was credited with saving three shuttle missions from launch with potentially catastrophic hydrogen leakage. Bill established and managed KSC Instrumentation Development Labs for 20 years. He has been awarded two NASA Exceptional Service Medals.

Bill has been an amateur astronomer for 35 years, and is a percussionist in the Gainesville Community Band.

This is Bill's third presentation to the Alachua Astronomy Club; he has previously given talks on purchasing a telescope in November 2005, and reviewed lunar atlases, books, and maps in February 2006.

Public Night at UF Observatory

There will not be public nights at the UF Observatory on August 10 and 17 due to school break. The Public Night program will resume its regular schedule on Friday August 24.

I want to thank Naibi and PC who helped and participated during the summer and even took over public nights while I was on vacation. Also I want to thank the members of the UAS who came and helped during the summer, in particular Alex Weinert who has helped out almost every Friday. Without the help from these dedicated volunteers it wouldn't be possible to have public nights during the summer.

What I have heard from the public is how much they appreciate to have had the chance to talk about black holes, neutron stars, white dwarfs, and exoplanets with our volunteers! Please consider coming and helping out when we start back up on August 24th.

Francisco Reyes

Executive Council Meeting Minutes

May 1, 2007, Grill Masters Restaurant

1. TC reported the presence of a quorum; a. Seven (7) members were present
2. BH called the meeting to order at 6:52 P. M. May 1, 2007
3. TC in attendance was: Thomas Olmstead (TO), Charles Broward (CB), Pam Mydock (PM), Bob O'Connell (BO'C), Howard Cohen (HC), Marian Cohen (MC), Larry Friedberg (LF), Tandy Carter (TC), Bill Helms (BH).
4. BH Approval of minutes of April meeting; a. Corrections: i. HC questioned item 21;
 1. BH said he would check his notes
 - b. HC moved and BO'C seconded to approve the minutes as published subject to amendment
 - c. Motion passed on a voice vote; d. Minutes approved
5. LF gave the following financial report: a. Income: i. Contributions \$20.00; ii. Membership Dues \$96.00
iii. Total Income \$121.10
b. Expenses: i. FirstLight \$201.73; ii. Total Expenses \$201.73
c. Savings: i. Interest income \$5.10; ii. Total savings \$6,038.34
d. Overall Total: i. Checking \$1,580.34; ii. Savings \$6,038.34; iii. Total \$7,618.68
6. TC status of AAC telescopes: a. SkyQuest XT-8 – Larry Friedberg; i. No change
b. Museum telescope (6" Equatorial Newtonian) – Don Loftus; i. No Change
c. Celestron C8 – Gary Cook ; i. No Change; d. 4 ½" Reflector – Marianne Gamble (C); i. No Change
e. 8" Parks Dobsonian – Don Loftus (C); i. No Change; f. RLT – Charles Broward (C)
i. Telescope accessories include: 1. 10 mm eyepiece; 2. 25 mm eyepiece; 3. several 1 ¼" filters
4. Telrad finder; 5. SkyCommander digital setting circle system
6. Roll around wheels, (handles and tracks to load into a station wagon coming soon.)
ii. Mechanical condition: 1. Good; 2. Primary mirror needs to be cleaned (possible ATM project)
3. Holds collimation well; 7. BH in lieu of MT reported on star parties
a. BH reported on the AAC monthly Star Party.; b. BH reminded of the Gold Head Branch Star Party in October
i. BH reminded that the park fills quickly.
8. SM No report on the status of Speaker Schedule; 9. CB reported on outreach programs
a. CB to update during the July meeting; b. OPEN
10. TC reported on inspecting AAC telescopes; a. TC to report on procedures during the June meeting; b. OPEN
11. BH reported on the AAC 20th anniversary; a. BH reported that he had not received any volunteers to run the party; b. BH reported that he would send out an email to the AAC mail list; c. BH reported that he would announce the need for volunteers at the May general membership meeting; d. OPEN
12. TC reported on the repair and modification of the AAC banner; a. TC reported there were no updates
b. TC to further report at the June meeting; c. OPEN
13. BO'C reported on the telescopes offered to the AAC; a. BH suggested that the majority of the telescopes be donated to rural school systems that might not have access to telescopes; b. HC volunteered to inspect the telescopes before they are donated; c. OPEN
14. CB reported on posting the FirstLight on the AAC web page; a. CB reported that JO has a program to create .PDF files to post the FirstLight to the web page.; b. OPEN
15. PM reported on the status of the plaque and the mural at the Royal Park Stadium 16 Theater.
a. PM reported that the mural might be removed; b. A discussion of the ownership of the mural ensued
c. PM to contact the theater manager about the status of the plaque and mural; d. OPEN
16. BH reported on the AAC policy list: a. BH reported he has the policy document in hand; b. BH reported the policy list needs more work; c. BH requested HC to post the AAC policy document on the board section of the AAC web site for board members to review and make suggestions; d. OPEN
17. BO'C wants to start a Lunar Observing SIG; a. BO'C to report on policies; b. OPEN
18. HC reported on the Iota Cancri occultation; a. HC reported he has not received the observers final reports from all members that successfully observed the occultation; b. HC reported that IOTA has requested AAC to participate in more occultations.; c. HC reported that the AAC was highly successful in observing the occultation of Iota Cancri.
d. HC suggested that all AAC members who observed the occultation be highly praised for their efforts.
e. HC suggested that there be an ATM/Observing meeting to discuss future occultation observations
f. HC will discuss a general membership meeting presentation on the results of the AAC participation of the occultation of Iota Cnc with SM; g. OPEN
19. CB reported that the AAC ATM meetings may have to move; a. CB reported that MT reported that the Florida Museum of Natural history may be taking over the entire suite at the warehouse; b. CB is to work the problem; c. OPEN
20. CB enquired about purchasing a laser collimator for the AAC telescopes; a. TC moved and BO'C seconded for CB to research the purchase of laser collimators up to \$300.00; b. Motion passed on a voice vote; c. OPEN
21. HC reported that BO'C gave a presentation to NEFAS; a. CLOSED
22. BO'C reported that the AAC has been invited to the NEFAS Star Party at Camp Shands on May 12, 2007; a. BH pointed out that these star party conflicts with the AAC monthly star party.; b. BO'C to coordinate with MT; c. OPEN
23. BH location and date of next AAC board meeting: a. BH announced that the meeting will be June 4, 2007 at 6:30 P. M. at Grill Masters; b. HC questioned returning to Grill Masters; i. Numerous board members suggested the room at Grill Masters was too small; c. HC/MC to look for new places to meet; d. OPEN
24. BH Adjournment; a. TC moved and TO seconded to adjourn; b. Motion passed on a voice vote; c. The meeting was adjourned at 8:44 P. M.

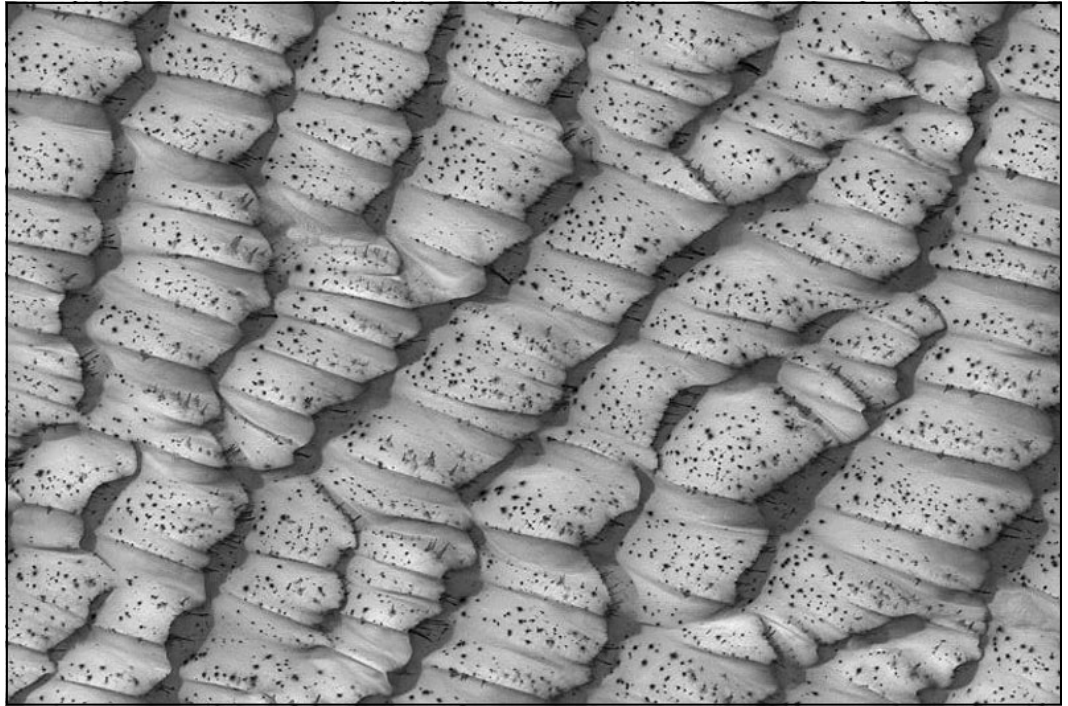
Respectfully submitted,
Tandy W. Carter Jr., AAC Secretary

Executive Council Meeting Minutes

June 5, 2007, Grill Masters Restaurant

1. TC reported the presence of a quorum; a. Eight (8) members were present;
2. BH called the meeting to order at 9:17 P.M. June 5, 2007;
3. TC the following members were present: Charles Broward (CB), Thomas Olmstead (TO), Howard Cohen (HC), Marian Cohen (MC), Larry Friedberg (LF), Scott McCartney (SM), Bob O'Connell (BO'C), Bill Helms (BH), Tandy Carter (TC)
4. BH approval of the minutes of the last meeting; a. There were no additional changes to the minutes; b. LF moved and BO'C seconded the motion to approve the minutes as published; c. Motion passed on a voice vote; d. The minutes were approved
5. LF Treasurer's report: a. Income: i. Contributions: \$ 0.00; ii. Interest income: \$ 4.99; iii. Membership Dues: \$ 16.99
b. Expenses: i. Bank Charge: \$ 0.00; ii. First Light: \$ 149.31; iii. Insurance: \$ 0.00; iv. Licenses & Permits: \$ 0.00
v. Speaker's Dinner: \$ 0.00; c. Savings; i. Interest income: \$ 4.99; d. Total: i. Income: \$ 16.99; ii. Expenses: \$ 149.31
iii. Savings: \$6043.33
6. TC Status of Club Telescopes: a. SkyQuest XT-8 – Larry Friedberg (C); i. No change
b. Museum Telescope (6" Equatorial Newtonian) – Don Loftus (C); i. No change; c. Celestron C8 – Garry Cook (C); i. No change
d. 4 1/2" Reflector – Marianne Gamble (C); i. No change; e. 8" Parks Dobsonian – Don Loftus (C); i. No change
f. RLT – Chuck Broward (C); i. No change
7. BH in lieu of MT reported on Star Parties ;a. There will be no July Star Parties; 8. SM reported on the speaker schedule
a. There was a long discussion of the seating availability for the July general membership meeting at the Santa Fe Community College; b. SM reported that all general membership speaker slots have been filled through March of 2008
9. HC in lieu of PM reported on the status of the plaque and murals at the Royal Park Stadium 16 Theater; a. The plaque is in the possession of the AAC; b. Because of the size of the murals, it is difficult to find a new location for them; c. OPEN
10. TC reported on the changes to the policies for loaning out club telescopes; a. TC to send the updated policies to HC for posting on the web page; b. CLOSED
11. BH reported on the AAC 20th anniversary; a. It was determined to add the 20th anniversary celebration to the Holiday Party
b. CLOSED
12. TC reported on repair and modification of the AAC banner; a. TC reported the current banner is beyond economical repair
b. TC reported on the estimated price of a new banner; c. After some discussion of possible layouts for the new banner, it was decided to have the new banner to be a duplicate of the original banner; d. TC to report on a final price of a new banner
e. TC to report on the price of 1" X 4" stickers for the telescopes to be donated to local schools; f. OPEN
13. BO'C Reported on the telescopes offered to the AAC by NEFAS; a. BO'C reported the AAC received the following telescopes from NEFAS; i. 15 – Telestar 40 AZ w/microscope (RE) Part # 70040-RE; ii. 5 – Polaris NGC-60AM (RE) Product: 50204RE
iii. 2 – Jupiter 50AZ-P (RE) Product: 04710RE; iv. 5 – 10061-RE (same as Jupiter 50AZ ? – boxes are the same size)
v. 8 – Meade NG-60(RE) Product: 20200RE; b. BH to write a Thank You letters to Mike Reynolds who obtained the telescopes from Meade, Mark the president of NEFAS, and Carl who warehoused the telescopes; c. OPEN
14. HC reported that current issue has been posted to the FirstLight page of the AAC web page; a. CLOSED
15. HC reported on posting AAC policies to the web page; a. HC reported that the policies have been posted to the board section of the web page; b. BH to sort the policies by topics; c. OPEN
16. BO'C reported on the policies for the Lunar Observing Group; a. BO'C reported on some preliminary policies for the Lunar Observing Group; b. BO'C requested help from CB in fleshing out the policies; c. OPEN
17. HC reported on the Iota CnC; a. HC reported there are still a few observing reports to be turned in; b. There was a discussion about the upcoming occultation of Regulus by the Moon; c. CLOSED
18. CB reported on the location of the AAC ATM meeting; a. CB reported the location AAC ATM meeting will be:
i. 2240 NW 14th Avenue, Gainesville, Fl; b. CLOSED
19. BH reported on the purchase of a laser collimator for the AAC ATM; a. BH reported the collimator will be placed on order in two (2) weeks; b. OPEN
20. HC/MC/LF reported on the research they performed for the location of future AAC board meetings.; a. One (1) new location was discussed; b. OPEN
21. TC inquired about the AAC's desire to compete for the 2007 Astronomy Magazine's "Out-of-This-World" Award
a. It was determined that the board was not opposed to entering; b. TC requested help to complete the entry forms
i. BH volunteered to help; c. TC will send the URLs to the board; d. OPEN
22. Good of the Order; a. None;
23. Announcements; a. None
24. BH reported on the location of the next meeting; a. The meeting will be at Grill Masters at 6:30 PM on July 3, 2007
25. BH Adjournment; a. TO moved and LF seconded to adjourn
b. The motion passed on a voice vote
c. The meeting was adjourned at 9:01 PM

Respectfully Submitted
Tandy W Carter Jr.
AAC Secretary



The Dotted Dunes of Mars **Credit:** Malin Space Science Systems, MOC, MGS, JPL, NASA

Explanation: What causes the black dots on dunes on Mars? As spring dawned on the Northern Hemisphere of Mars in 2004, dunes of sand near the poles begin to defrost. Thinner regions of ice typically thaw first revealing sand whose darkness soaks in sunlight and accelerates the thaw. The process might involve sandy jets exploding through the thinning ice. By summer, the spots expanded to encompass the entire dunes that were then completely thawed and dark. The carbon dioxide and water ice actually sublime in the thin atmosphere directly to gas. Taken in mid-July, the above image shows a field of spotted polar dunes spanning about 3 kilometers near the Martian North Pole.

