



# STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

Volume 16, Number 2

February 2007

## In This Issue

### Page One

- WSP's Revenge
- President's Corner

### Inside Stuff

- 3 Even Solar Sails Need a Mast
- 4 Cedar Key Star Party
- 6 Meeting Minutes
- 9 Astro Imaging SIG
- 9 FAAC Meeting Agenda
- 9 Treasurer's Report
- 10 FAAC Events 2007
- 10 Items For Sale
- 10 New Members
- 11 FAAC Dinner Party

## The Key this Year – WSP's Revenge

Dale Ochalek



*Dennis Salliotte wields the rain poncho that came in handy, while in the entry line, and beyond...*

Looking back on this year's Winter Star Party, the week might have had disappointment written all over it, from the very start. But wait, there were some really good points, too.

*...continued on page 5*

---

## On the Road... Again!

### President's Corner

Don Klaser, President, FAAC

Two events kick off the start of the Club's outreach program - Lake Erie MetroPark's "Ice Daze" Festival, and the annual Science Fair at Forest Elementary School. The FAAC has been involved with both of these programs for years and I always look forward to attending them.

As the third weekend of January approached, I kept a concerned eye at the weather. With the temperatures running from forties to near 50 degrees, the

*...continued on page 2*

# STAR STUFF

FEBRUARY 2007 - Vol. 16 - No. 2

**STAR STUFF** is published eleven times each year by the

**FORD AMATEUR ASTRONOMY CLUB**  
P.O. Box 7527  
Dearborn MI 48121-7527

PRESIDENT:	Don Klaser
VICE PRESIDENT:	Doug Bauer
SECRETARY:	Ken Anderson
TREASURER:	Gordon Hansen
NEWSLETTER EDITOR:	Dale Ochalek

## CLUB INFORMATION

The Ford Amateur Astronomy Club (FAAC) meets on the fourth Thursday each month, except for the combined November/December meeting on the first Thursday of December – at Henry Ford Community College, Administrative Services and Conference Center in Dearborn. Refer to our website for a map and directions ([www.boonhill.net/faac](http://www.boonhill.net/faac)).

The FAAC observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting. The FAAC also has use of the dark skies at Richmond Airport, Unadilla, given prior permission. See the FAAC Yahoo Group\* for more information.

Observing schedules and additional info are available on our website, or via the FAAC Yahoo Group.\* Or call the **FAAC Hotline**, for info, and leave a message, or ask questions: **248-207-2075**. Or send email inquiries to [fordastronomy@comcast.net](mailto:fordastronomy@comcast.net).

Membership in the FAAC is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (F.E.R.A.). Membership fees:

Annual – New Member:	\$30	(\$15 after July 1)
Annual – Renewal:	\$25	(\$30 after January 31)

Membership includes the *STAR STUFF* newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

## ASTRONOMY or SKY & TELESCOPE MAGAZINE DISCOUNTS

Obtain the required form from the FAAC club treasurer for a \$10 discount. Send the completed form directly to the respective publisher with your subscription request and payment. Do not send any money directly to the FAAC for this.

## STAR STUFF NEWSLETTER SUBMISSIONS

Your submissions to *STAR STUFF* are more than welcome! Send your story and/or images to the editor at [dake00k@yahoo.com](mailto:dake00k@yahoo.com). Email text or MS Word is fine. *STAR STUFF* will usually go to press the weekend prior to each general meeting. Submissions received prior to that weekend can be included in that issue.

\* FAAC Members are welcome to join our **FordAstronomyClub** Yahoo! Group. Messages, photos, files, online discussions, and more! URL: [groups.yahoo.com/group/FordAstronomyClub](http://groups.yahoo.com/group/FordAstronomyClub).

## President's Corner *(continued from page 1)*

conditions for a successful ice festival were not looking favorable. Nonetheless, the FAAC was there, with a solid group of volunteers, who would bring knowledge of and enthusiasm for astronomy to the public. Fortunately, the weather returned to "normal" for Michigan in January, and there was just enough snow for the snow snake run, a mound for the kids to climb on and below freezing temperatures to keep the ice sculpture in front of the Marshland Museum solid.

As the sun ducked in and out of the clouds, several club members were showing folks sunspots and solar flares through their white light and H-Alpha scopes on display. Then, from 4:00-5:00 pm, we held our classroom program to a group of enthusiastic attendees. After our dinner break at Three Hermanos, we set up our scopes for an evening of viewing for the folks who returned. The skies were clear, which afforded us great views of Orion, Saturn and other targets.

Eleven days later we found ourselves gathering at Forest Elementary School. The two-hour fair is a great opportunity to see the projects that the students have been working so hard on to complete. The variety of subjects and the amount of thought that went into them was amazing. As in past years, the portable planetarium from the Detroit Science Center was there to show the wonders of the heavens to the kids.

Several FAAC members had set up their equipment in a multi-purpose room to demonstrate how telescopes and binoculars work to the attendees and their parents. And, just in case the clouds parted (yeah, right!) the room had a door to a playground, where we could set up to show the kids the real thing. But even though the clouds covered the sky like a muslin sheet, the kids' excitement was evident throughout the evening.

For me, the joy and enthusiasm from the adults and children who attend the events we support is more than enough reward to make up for any inconvenience to me. I wouldn't miss it!

And after looking over the club calendar of events, it looks like everyone will have an opportunity to experience it too.

See you there!!!

Don Klaser



## Even Solar Sails Need a Mast

Patrick L. Barry

Like the explorers of centuries past who set sail for new lands, humans may someday sail across deep space to visit other stars. Only it won't be wind pushing their sails, but the slight pressure of sunlight.

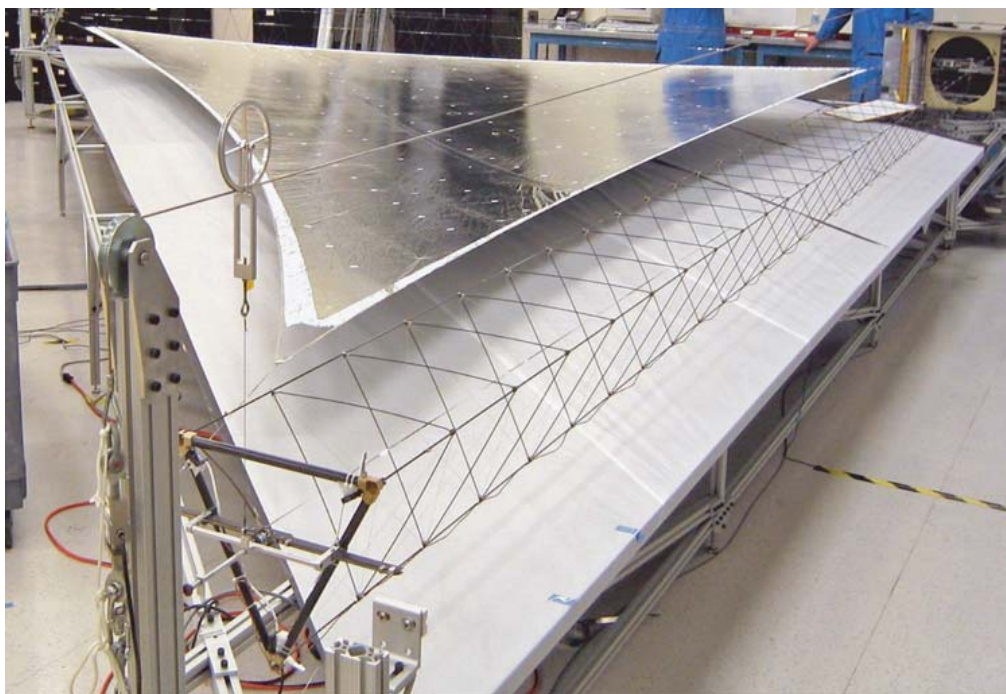
Solar sails, as they're called, hold great promise for providing propulsion in space without the need for a heavy

propellant. But building a solar sail will be hard; to make the most of sunlight's tiny push, the sail must be as large as several football fields, yet weigh next to nothing. Creating a super-lightweight material for the sail itself is tricky enough, but how do you build a "mast" for that sail that's equally light and strong?

Enter SAILMAST, a program to build and test-fly a mast light enough for future solar sails. With support from NASA's In-Space Propulsion Program to mature the technology and perform ground demonstrator tests, SAILMAST's engineers were ready to produce a truss suitable for validation in space that's 40 meters (about 130 feet) long, yet weighs only 1.4 kilograms (about 3 pounds)!

In spite of its light weight, this truss is surprisingly rigid. "It's a revelation when people come in and actually play with one of the demo versions—it's like, whoa, this is really strong!" says Michael McEachen, principal investigator for SAILMAST at ATK Space Systems in Goleta, California.

SAILMAST will fly aboard NASA's Space Technology 8 (ST8) mission, scheduled to launch in February 2009. The mission is part of NASA's New Millennium Program, which flight tests cutting-edge technologies so that they can be used reliably for future space exploration. While



*SAILMAST is the thin triangular truss in front of the picture. It is attached to a section of a silver foil solar sail section shown here in a laboratory test. The mast shown is a few meters long. The Space Technology 8 mission will test the SAILMAST, which is much longer at 40m.*

actually flying to nearby stars is probably decades away, solar sails may come in handy closer to home. Engineers are eyeing this technology for "solar sentinels," spacecraft that orbit the Sun to provide early warning of solar flares.

Once in space, ST8 will slowly deploy SAILMAST by uncoiling it. The truss consists of three very thin, 40-meter-long rods connected by short cross-members. The engineers used high-strength graphite for these structural members so that they could make them very thin and light.

The key question is how straight SAILMAST will be after it deploys in space. The smaller the curve of the mast the more load it can support. "That's really why we need to fly it in space, to see how straight it is when it's floating weightlessly," McEachen says.

It's an important step toward building a sail for the space-mariners of the future.

Find out more about SAILMAST at [nmp.nasa.gov/st8](http://nmp.nasa.gov/st8). Kids can visit [spaceplace.nasa.gov/en/kids/st8/sailmast](http://spaceplace.nasa.gov/en/kids/st8/sailmast) to see how SAILMAST is like a Slinky® toy in space.

*This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.*

## Cedar Key Star Party

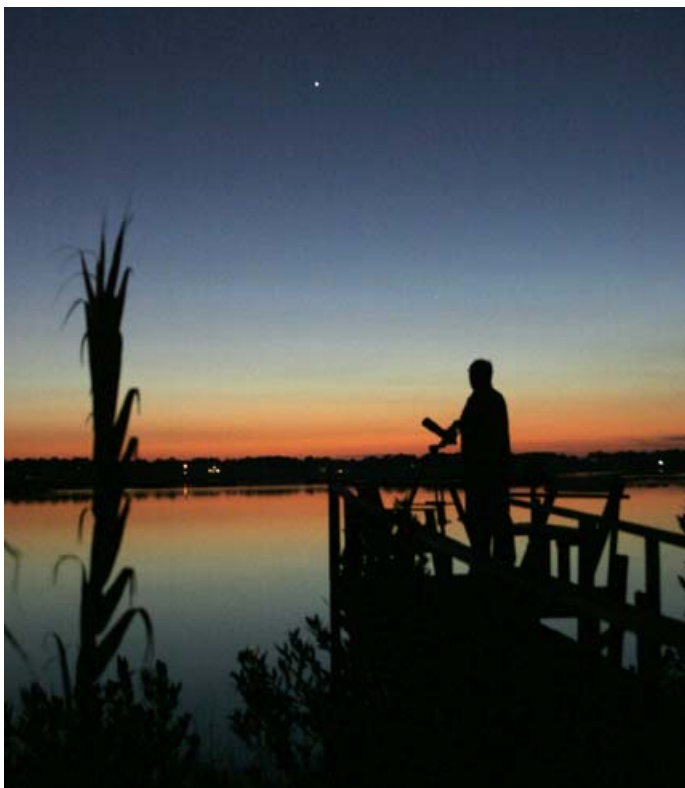
John Kirchhoff

The Cedar Key Star Party (February 11-17), does not have a sandy beach, or an island full of amateurs, vendors and astronomy equipment, like another winter star party. It is not almost to Cuba; you cannot see the Southern Cross, or attend endless imaging and equipment talks.

You will, though, have an opportunity to meet some very nice folks (not all avid astronomers), visit some gift shops in town, eat some great seafood, wander the historical museum and nature center and take a late night hay ride through the Cedar Scrub.

Cedar Key is located on the Gulf, about 100 miles north of Tampa, and 60 miles SW of Gainesville.

My wife and I decided to give this "other" Florida star party a try after seeing an announcement (in Sky & Tel or Astronomy magazine). We had considered the Winter Star Party in the keys, but only had a week of vacation, and wanted to take our RV and pets. The WSP is so well-attended the RV would have needed to be docked for a week; we figured the timing just wouldn't work.



Photos submitted by John Kirchhoff  
*John gazes at Venus at dusk.*

Cedar Key is one of the last places in Florida to enjoy truly dark skies, due to a lack of development, and a proximity to both the Lower Suwannee and Cedar Key National Wildlife Reserves. It is also a full day's drive closer each way, had a nearby RV park with the town of Cedar Key just a couple of miles down the road so we decided to give it a try.

With an overnight stay in Macon (thanks Wal-Mart), it was an easy drive, to Sunset Isle RV Park and Campground. Our site was right on the water's edge overlooking a magnificent tidal salt flat and marsh. I am not an avid birder myself, but this must be heaven if you are! Snowy Egrets, White Herons, Rails, White Ibis and Pelicans were abundant and within easy binocular view. Cedar Key still has active clam and seafood fishermen, and the birds make sure anglers don't get it all.



*Snowy egret favors onlookers with a pose.*

Sunset on the first night was magnificent, with the brilliant glow of Venus mirrored against the calm waters of the Gulf. The zodiacal light was plainly visible for a couple of hours after sunset, standing like a mock Milky Way, perpendicular to

*...continued on page 5*

## Cedar Key ... (continued from page 4)

the western horizon. After some binocular viewing I set up my 9¼ Celestron, and imaged Saturn with the web cam until shortly after midnight.

The air was fairly steady with seeing conditions around a 6 or 7. I went back to the binoculars until 3 am, with my first-ever look at Omega Centauri (HUGE), and the northernmost star in Crux – Gacrux - just cresting the southern horizon. The best part of all is that I only had to wear a sweatshirt with tee shirt underneath!

Good trips always leave a few life memories, and I will remember two in particular: the zodiacal light reaching to the zenith in the middle of the Cedar Scrub framed by a dark cloud, and the silhouette of a pine tree, along with my first-ever sighting of a wood stork (okay, I thought it was a Whooping Crane at first), flying over the Cedar Key Salt Marsh. Magnificent sights are on the edge of vanishing from view, ours to respect and protect!

For more information, check the web, including:  
<http://www.upstateastro.org/stars/cedarkey.html>

## WSP's Revenge ... (continued from page 1)

Yep, I read all about it – in the article submitted by Gordon Hansen (Star Stuff, March 2006) – last year's version of the annual Winter Star Party at Camp Wesumkee (West Summerland Key, Florida) in February, 2006. You did, too?

Bear me out, then. Didn't he say stuff like, how great the weather was there, sunny, warm, clear night skies...???? I was looking forward to this ... So I shipped a couple small telescopes down there, jumped on a plane, rented a car, bought the tent... Oh, well.

For my first time there, maybe the WSP decided to get revenge; never take it for granted. Or maybe they just wanted to let us Michiganders feel at home – and so kept placing a Michigan nebula façade overhead, just for us ...

In any case, we had about a night or night and a half, of clear viewing, total. The first day, a nearby Key recorded 9 inches of rainfall, and a tornado sighting (actually a waterspout). Not bad, for starters... Oddly, the days were often clear and sunny, although cooler toward the end of the week. By the end, the nights were nearly freezing, and mostly, cloudy.

Setting up and tearing down the campsite was no "picnic" either, during the twin monsoons, appearing like bookends, on the opening and closing days. Call it – the Windy Soaker Party?

I must say, I did manage, after drying out some, to hit some highlights throughout the week, lest I cast too great a pall on the whole event. I tracked down and observed Omega Centauri at its 3:00 – 4:00 am peak, through binoculars. I also peeked at some nice views of M42 and the Fornax cluster of galaxies, via the 24" F4 Dob of one Jim Richberg (see [jimrichberg.com/astronomy](http://jimrichberg.com/astronomy), and read his WSP summary), during clear skies.

The two presentations I attended were fabulous. Sue French (the author of Celestial Sampler) presented her "WSP Snowbird Delights," a starter kit of 30 telescope targets for those who be hankerin' for interesting sights not available in the north.

The famed Jack Newton talked about digital SLRs he has used for his astrophotography, mainly Canon – very amusing and entertaining, as well as informative.

Photos by Dale Ochalek (with some help)



Mr. Jack Newton stops for a photo-op, one sunny afternoon.

Also, Dennis Salliotte, the other half of FAAC's 2007 contingent, and I went on a snorkeling excursion to Looe Key, and enjoyed a few brews and dinners, when things got slow, as well.

It was nice to meet some really cool people there, and see all the equipment and intricate settings and setups. Meade even sent a team to interact with the campers, and pitched their newest, uhh,

...continued on page 6

## WSP's Revenge ... *(continued from page 5)*

"beast" – the 20-inch Advanced Ritchey-Chrétien (see photo). Six guys sweated to get it perched.

(Photo taken by Dennis Salliotte)



*Looks like I found my next 'scope (only \$40,000, the man said).*

Even the Meade folks had their troubles – a pallet of parts went wayward in shipping; replacements were Fed-Ex'ed and assembled by Friday, but the fickle skies - well, you know the rest...

The Meade group included Scott Roberts, VP of Consumer Solutions, who gave Dennis and me an intriguing earful regarding the Meade-sponsored 4M Community (see [www.meade4m.com](http://www.meade4m.com)).



*A "Tent-Cot" seemed a nifty idea for star-gazing power-naps.*

Also, I might mention buying a few nifty items at the swap meet, including this "Tent – Cot," and a few more items at the vendor stands. The week,

overall, though, had as many downs as ups, sad to say. Some frustrated WSP vets said these were the worst conditions they'd ever had there.



*A nearby Dob lays at rest, covered, under clouds and mist.*

So much for beginner's luck – although, I must admit, the DOOR PRIZE drawing was nice. Out of the looming clouds and mist on Friday, a voice boomed - my number! Suddenly, I had some new APM binoculars, 10x50, rubber-coated and waterproof – donated by Mark Ludes, and valued, nominally, at \$270. Wow. Take that, rain clouds...

OK, as I said, there were definite highlights. But for sunnier weather and reviews, you might try reading Gordon's account, from 2006, again.



*Assembling the world's longest Dobsonian?*

## January 26 Meeting Minutes

Ken Anderson

Meeting officially started at 5:30 pm with pizza and pop available 15 minutes earlier, in the Hackett conference room of the HFCC Health Careers Building. Don Klaser, President, chaired the meeting and led the introductions, and asked for observations.

Rob Walker was a guest who has been interested in astronomy for 25 years. Dave Baily from Oakland, Seven Ponds, and Warren, was also a guest who loves our presentations, but rarely observes. Ken Anderson observed Mercury, Jupiter, and Mars from Island Lake before/during sunrise when they all were within 1 degree in both 25x100 binoculars (for confirmation) and then in 17.5" Dob with Denk Binoviewers. Ken observed a bright "star" next to the moon; it was actually Saturn. Frank Carson did some observing. Gordon Hansen imaged M108 and M101 from a cabin up north. Clay Kessler observed naked-eye and photographed comet McNaught with Cannon DSLR. Jim Frisbie and John Kirchoff observed at the South Lyon Park site and took 75 exposures within 4 minutes of comet McNaught- the first comet they imaged in daylight! Jim also observed the space station and space shuttle as separate objects in binoculars and telescope with widest field eyepiece.

Tony Licata had a complaint with his Vixen telescope and customer service that he wanted to share. Clay shared similar experiences, and both concluded that Celestron had better quality and customer service. Jim Frisbie claims the older Vixens are good; however, their new 80mm refractor is not.

Dave Wright gave the Technical Talk "Stellar Distances." Dave started by saying the ancient Greeks considered all stars to be "painted" or holes punched in a giant sphere with radius of infinity. They believed the planets lay on concentric clear spheres. Most believed the Earth was at the center of the universe. In 230 BC Erathosthemis calculated the Earth diameter to be 39,000 km based on the sun angle from both Alexandria and Syrene (assuming the Earth to be a sphere).

In 270 BC Aristarchus calculated the Earth to Moon distance using the shadow of a lunar eclipse, but was very far off. In 128 BC Hipparchus used the geometry of a solar eclipse.

Kepler's three laws of planetary motion in 1609/1619 provided a breakthrough, even though this was still pre-telescope and all visual observations of the stars and planets just involved angle measurements (and location). His third law says the squares of the periods of revolution of the planets are in direct proportion to the cubes of the semi major axes of their orbits. Forcing the Earth's distance to the sun equal to 1 astronomical unit (AU) and earth's revolution equal to 1 year; the equation  $(P1/P2)^{**2} = (D1/D2)^{**3}$  is reduced to  $P^{**2} = D^{**3}$ . P is planets revolution period around sun in years and D is planets semi major axis distance in AU. This calculation gave humankind a very accurate relative scale of the solar in terms of AU, but still not an absolute distance.

The next obvious challenge was determining absolute distances by first determining the Earth's distance to the Sun with greater accuracy. In 270 BC Aristarchus of Samos was 50% off. In 1672 Giovanni Cassini and Jean Richer used parallax between the Earth and Mars. In 1716 Edmond Halley used the Transit of Venus moving across the face of the sun. In 1877 David Gill predicted the Earth to Sun distance with only 0.2% error using parallax to Mars. Today we know one AU equals 149,598,000 km or 93 million miles.

Parallax is the stars apparent motion relative to the background, due to the Earth's orbit around the sun. Parallax of stars very far away yields very small angles. For example the parallax of Alpha Centauri is less than one arc second. In 1837 Thoris Henderson was the first to measure the parallax of Alpha Centauri but he did not publish his efforts in a timely fashion, and hence did not get "official" credit, this was done in 1838. Modern measurements is limited by the Earth's orbit of 100 parsec (326 light years), compared to 1000 parsec in the time of Hipparchus.

Brightness uses an equation intensity =  $(1/\text{distance})^{**2}$ . Amateur astronomers are well aware of apparent magnitude as seen from Earth. Absolute magnitude is normalized/calculated at 10 parsec. However to determine distance using brightness requires a known standard candle. In 1910 Hertzsprung and Russell plotted luminosity (absolute magnitude) vs. temperature in their H-R diagram. This led to spectrographic parallax. In 1912, Levitt discovered the Cepheid variable has a relationship between its period and brightness, and thus was able to determine the distances of

*...continued on page 8*

## Meeting Minutes... *(continued from page 7)*

the Large and Small Magellanic Clouds, due to Cepheid variables inside. Polaris is the closest Cepheid variable star to the sun.

In 1918 Shapely determined the shape of our Milky Way Galaxy, since all/most globular clusters were off to one side (Sagittarius, Scorpio, Ophiuchus) around the galactic center, with the sun being off center. In 1925 Edward Hubble determined the Andromeda Galaxy (M31) was outside our Milky Way at approx 2 million light years, using Cepheid variables in M31. This was the first extra-galactic calculated distance. Then in 1929 red shift showed the entire universe was expanding. One problem was globular clusters were older than the calculated age of the universe. Now we know there are two types of Cepheid variables with different periods.

The last standard candle is a type 1A supernova created from a white dwarf sucking in mass (from a red giant, etc.). When the stars mass exceeds 1.4 solar masses, a runaway thermonuclear reaction initiates, ending in a type 1A supernova.

The main presentation was "Ask the Astronomer". Topics covered Aurora (OIII green, and H alpha/beta Red), light pollution, and other interesting questions.

The annual elections were next. Jim Frisbie from the nomination committee recommended Don Klaser for president, Doug Bauer for Vice President, Gordon Hansen for Treasurer, and Ken Anderson for Secretary. Additional nominations were requested before each vote. Only one additional nomination was requested, but that person was not present to accept the nomination. Hence the club unanimously voted to elect each nominee to the respective office.

Don Klaser led the business portion. Ken Anderson gave the Secretary's Report. There no corrections to the November minutes, found on the web and newsletter, and the minutes were approved. Gordon Hansen gave the Treasurer's report totaling \$5995 of which \$1500 is allocated towards GLAC. Don also informed us that Drew Feustel, the astronaut who spoke at GLAAC is scheduled to go on the shuttle mission fixing the Hubble telescope.

Next Don led the discussion of events, listed here in chronological order.

"Ice Daze" was held January 20 at Lake Erie Metropark. Bob MacFarland reported eight club members attended for daytime solar observing and night observing till 9 pm. Coronado solar filters revealed solar prominences. Orion and Saturn were sighted, between the clouds. Other activities included snow snakes. People also watched ice-carving, dog sledding. Approximately 15 people attended the 4 pm public astronomy presentation, and afterward club members enjoyed dinner at Three Amigos Mexican Restaurant. Unlike our many other sites, they had a bonfire to warm up, heated restrooms, and hot chocolate.

On January 31, there is a presentation at Forest Elementary School 6-7:30pm near Farmington Rd at 13 mile (try MapQuest for directions). Displays are provided, and observing, if clear. Setup is at 5 pm, program from 5:30-7pm. John Schroer from Detroit Science Center will set up the inflatable planetarium.

On February 3, the 4th Annual Swap Meet & Show goes from 9 am - 3 pm at Holy Cross Gymnasium on 6 Mile Rd, between Middle Belt & Merriman, in Livonia, MI. Details are provided in newsletter and also in files section of FAAC website. Tom Blaszak is coordinating, and they will have presentations plus a blow up planetarium (which fits in a gym). participants from SE Michigan clubs. \$15 per selling table. \$6 entry (\$5 advance) ticket.

Astrophoto SIG meetings are every second Thursday of each month. The next meeting is Feb 8th at HFCC Rosenau room, topic - Workshop.

On March 3, 2007 Lunar Eclipse Observing will take place at Cove Point Lake Erie Park. The FAAC Banquet will be Saturday March 24, at Station 885 in Plymouth, which is the same place as last year (see flyer later in this issue).

Tony Licata discussed the possibility of a Dark Sky Star Party for club members and families (not public in general) at Gladwin campground, possibly April 9-15, or April 16-20, 2007. Cherry Springs, Pennsylvania was discussed as a darker sky than Lake Hudson.

April 21, 2007 is Astronomy Day, with FAAC participation at Detroit Science Center and Island Lake. The Great Lakes Star Glaze is September 14-16 at Gladwin.

*...continued on page 9*



## Meeting Minutes... *(continued from page 8)*

GLAAC Astronomy on the Beach is Sep 21-22, at Kensington MetroPark for the general public.

Gordon Hansen reminded everyone at the meeting that \$25 annual dues are due Jan 30, 2007 (\$30 if late). This is the last time anyone can pay for life membership (no exceptions after this date). This was published in previous newsletters.

Dale Ochalek asked about a Beginner Astro Imaging Night, plus Astro Photography 101.

The FAAC is seeking 2007 speakers for both FAAC 30min-1hr main presentations, and the 15-20min tech talks. Call Don Klaser at 586-596-9150 or dklaser4750@wowway.com.

Jim Barnes from SUNSMA at Richmond Airfield had informed us that we no longer require two-day advance notice to observe. However they would like to be informed if 10 or more people observe, or plan to observe. Keep track of how many people actually are present and report back. We still plan to have the mid summer picnic.

The 2007 Calendars (with Whirlpool cover) from Astronomy Magazine are still available for purchase. Equipment Chairperson Wanted to store and track or log equipment in/out! We previously lost/misplaced a donated medium Dobsonian telescope a few years back.

Jim Frisbie is evaluating sound systems rental vs. purchase at the board meeting; however we may just continue renting. We also own projector and screen for presentations.

## Astro Imaging SIG

Tony Licata

The next meeting of the Astro Imaging SIG is Thursday, March 8th, 2007, 5:30 pm, Roseneau Rooms A-B, at HFCC in Dearborn, in the Administrative Services and Conference Bldg. (same as the FAAC General Meeting).

We will continue our discussion of a dark sky workshop, (date TBD). Other topics TBD. So look for updates on the Yahoo group list. Club members and their guests are invited. If you drive up to the Faculty parking lot gate, it should open, allowing parking close to the building.

## Meeting Agenda - February 23

5:30 pm

**Opening/Introduction/Member Observing**

**New Members and Guests** - Diane Worth

**Presentation: 'Venus Transits'** – Ed Halash

**Club Business/Secretary/Treasurer reports**

**Club Projects/Committees/Member support**

- Astronomy Day, April 21 – Don Klaser
- Astro-Imaging SIG – Tony Licata
- 4th Annual Swap Meet & Show Recap – Tom Blaszak
- Club Banquet – Doug Bauer
- Dues Renewal – Gordon Hansen
- Forest Elementary -Recap – Don Klaser
- Lunar Eclipse - Lake Erie and DSC, March 3 – Bob MacFarland and Don Klaser
- Club Field Trip – Jim Frisbie

## Treasurer's Report

Gordon Hansen

### Bank Accounts

Checking	\$	463.55
Savings	\$	2910.93

**TOTAL Bank Accounts** \$ **3374.48**

### Cash Accounts

Cash Account	\$	168.37
--------------	----	--------

**TOTAL Cash Accounts** \$ **168.37**

### Asset Accounts

GLAAC	\$	1497.21
Projector	\$	720.38
Scholarship	\$	235.05

**TOTAL Asset Accounts** \$ **2452.64**

**OVERALL TOTAL** \$ **5995.49**

## FAAC Events 2007

Bob MacFarland

<b>March</b>	<b>3</b> – Lunar Eclipse, Cove Point, Lake Erie MetroPark <b>24</b> – FAAC Annual Dinner
<b>April</b>	<b>21</b> – Astronomy Day - Detroit Science Center & Kensington MetroPark, with Beginners' Night, Island Lake Recreation
<b>May</b>	<b>19</b> – Beginners' Night, Island Lake Recreation Area
<b>June</b>	<b>23</b> – Beginners' Night, Island Lake Recreation Area
<b>July</b>	<b>21</b> – Beginners' Night, Island Lake Recreation Area
<b>August</b>	<b>18</b> – Beginners' Night, Island Lake Recreation Area
<b>September</b>	<b>14-15</b> – Great Lakes Star Gaze, Gladwin <b>21-22</b> – Astronomy on the Beach – GLAAC, Kensington Park
<b>October</b>	<b>20</b> – Beginner's Night - Island Lake
<b>TBD 2007</b>	– Sand Hill / FAAC Picnic – Detroit Symphony Orchestra night

## Items for Sale

**Coulter 10" Dobsonian** telescope. \$400.  
Contact Bob Stonik, 313-361-4954.

**Celestron Orange Tube 8"** (mid-1970s) Very good condition, no scratches, w/camera mount, tripod. RA bearings, slo-mo Dec fine. Corrector plate needs cleaning; needs a visual back and diagonal.

Contact Dr. Nicolle Zellner, Albion College  
nzellner@albion.edu

**Meade ETX Spotting Scope** 5-inch, Paragon Plus tripod, 26mm Super Plössl, 9.5mm Orion Epic, 13mm Orion Superwide Lanthanum. Nearly new, must sell. Could sell individually.

Contact Jack Fournier, 248-219-6222

## Items for Sale (cont.'d)

**AstroSystems 12.5" F5.26** TeleKit Dobsonian, 2" thk 1/15 peak to valley wave front Pegasus primary, new Sky Commander XP4 DSC, AstroSystems Phase IV focuser, 9 x 70 finder, internal filter slide, secondary heater, base mirror fan with 2 boundary layer fans, light shroud, full nylon cover, truss bag, wheelbarrow handles, other extras: \$4400 new, Asking \$2150.

Contact Bob, stargzr@wowway.com

**Schmidt-Newtonian 10"** – F5.35, 1360 mm focal length with 2" focuser. Includes 60 mm guide scope, Full aperture solar filter by Thousand Oaks (Mylar). Also includes cooling fan, extra set of "O" rings. Corrector plate made by Optron systems (division of Nazca Corp. of Callifornia).

Also available is the Crestliner mount (on wheels). Scope made by Nelson Lewis of Detroit Astronomical Society in 1962. Purchased Nov. 10, 1981.

Selling telescope for \$325.  
Mount for \$200.

Contact: Harold Thomason  
313-584-7465

## New Members

Gordon Hansen

The FAAC acknowledges and welcomes some new members for 2007:

- Pat Mog (via the Swap Meet)
- Eric Walker (via the Swap Meet)
- Frank Ancona
- Robert Walker

We hope your membership will be rewarding and enjoyable. Let us know how we can help you enjoy amateur astronomy.



# FAAC Dinner Banquet 2007

Saturday, March 24, 2007  
6:00 pm until ?

## Astro Slide Show – Prizes – Astro-Jeopardy

**LOCATION:** Station 885, located at 885 Starkweather, Plymouth, Michigan 48170, 734-459-0885.

### Dinner Selections:



*10oz. Prime Rib of Beef au Jus*

or

*Broiled Whitefish with Michigan Sun Dried Cherry Cream Sauce*

or

*Chicken Marsala with Mushrooms sautéed in Marsala Wine*



*Dinner entrees include fresh vegetable medley, Chef's roasted herb potatoes, and a mixed green salad*

*Dessert: Raspberry Sorbet*



Coffee, tea, iced tea, and soft drinks will be available throughout the evening.  
A Cash Bar is available. Ask your server for beer, wine, and mixed drinks.

**ADMISSION:** \$29.95 per person.

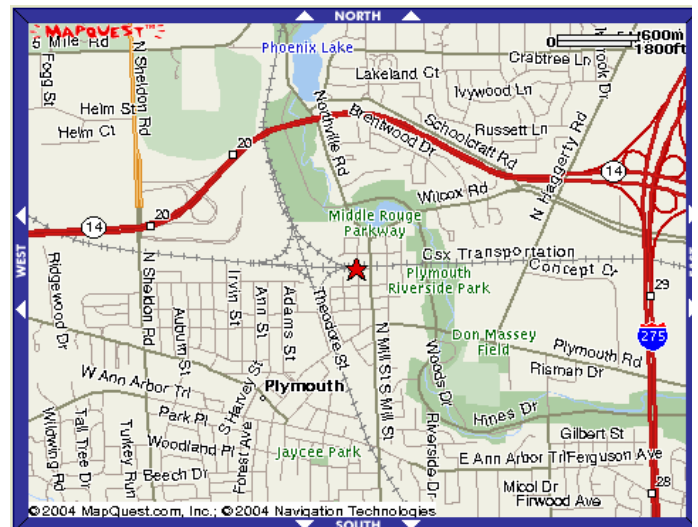
**Cocktails 6:00 pm (cash bar), Dinner 7 pm.**

**Make Checks Payable:** Please pay Gordon Hansen at the General Meeting, or send payment to Ford Amateur Astronomy Club, P.O. Box 7527, Dearborn, MI 48121-7527.

"Thank you for another great year. We hope to see you there. Please let us know if you are coming!"

- - **FAAC Board.**

**Location:** The restaurant, **Station 885** is located 3 blocks north of Plymouth Road, just east of downtown Plymouth. \* **See STAR on map\***



**For More Information:** Contact Doug Bauer via email: DougBauer@comcast.net or call (248) 828-7385

Star Stuff Newsletter  
P.O. Box 7527  
Dearborn MI 48121-7527



# RIDER'S<sup>®</sup>

## HOBBY SHOPS

<b>Store Hours:</b> M-F 11am-8pm SAT 10am-6pm SUN Noon-5pm	<b>Gen. Manager:</b> John Kirchhoff <b>Website:</b> <a href="http://www.riders.com">http://www.riders.com</a>	30991 Five Mile Road Livonia MI 48154 Tele: (734) 425-9720 FAX: (734) 425-2029
---	---	---

### **New Vendor - New Item!**

#### **William Optics Zenith Star 66SD**

**with Crayford dual speed focuser and fitted hard case  
Celestron Orange or Meade Blue**

**Only \$299.99**

**(See you at the Dinner? - see Flyer inside)**