



# STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

Volume 22, Number 10

October 2012

## In This Issue

### Page One

**A Cosmic Tease: Trials of the Herschel Space Telescope Science Teams**

**President's Corner**

### Inside Stuff

**5 Treasurers Report**

**5 Classifieds**

**5 Astro-Imaging SIG**

**7 FAAC Meeting Minutes - August 23, 2012**

**7 Meeting Agenda**

**8 HJRO Update**

**9 3D Article Had Errors**

**9 HFCC Welcome Back Days**

## A Cosmic Tease: Trials of the Herschel Space Telescope Science Teams

by Dr. Marc J. Kuchner

Vast fields of marble-sized chunks of ice and rock spun slowly in the darkness this week, and I sat in the back of a grey conference room with white plastic tables spread with papers and laptops. I was sitting in on a meeting of an international team of astronomers gathered to analyze data from the Herschel Infrared Observatory. This telescope, sometimes just called Herschel, orbits the Sun about a million miles from the Earth.

The meeting began with dinner at Karl's house. Karl charred chorizo on the backyard grill while the airplanes dribbled into Dulles airport. Our colleagues arrived, jetlagged and yawning, from Germany, Sweden, and Spain, and we sat on Karl's couches catching up on the latest gossip. The unemployment level in Spain is about twenty percent, so research funding there is hard to come by these days. That's not nice to hear. But it cheered us up to be with old friends.

The meeting commenced the next morning, as the vast fields

of ice and rock continued to spin —shards glinting in the starlight. Or maybe they didn't. Maybe they didn't exist at all.

*(continued on Page 3)*

## President's Corner

By Gordon Hansen

It doesn't seem possible that the year is almost up. Our last Beginner's Night was on Saturday, October 20th, and true to form the weather was not great. Our last scheduled event for the year is the trip to the Wayne State Planetarium on Saturday, October 27th. If you haven't made reservations yet – what are you waiting for??

**Reminder – There will not be a regular club meeting in November.** In keeping with our normal yearly scheduling we combine the November and December meetings, on Thursday, December 6th. Back by popular demand, the main presentation is a peak at nifty astronomy goodies that just might find their way into your Christmas stocking if you're really good! Jeff Hineline of Great Red Spot Astronomy Products will host the temptation.

*(continued on Page 2)*

# STAR STUFF

October 2012 - Vol. 22 No 10

STAR STUFF is published eleven times each year by:

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

PRESIDENT: Gordon Hansen  
VICE PRESIDENT: Jon Blum  
SECRETARY: Doug Bauer  
TREASURER: Chuck Jones  
WEBMASTER: Greg Ozimek  
NEWSLETTER EDITOR: Jennifer Zdanowski

## 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 Administration Services and Conference Center in Dearborn. Refer to our website for a map and directions ([www.fordastronomyclub.com](http://www.fordastronomyclub.com)).

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 a private observing site near Gregory Michigan and Lake Erie Metro Park. 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: 313-757-2582. or send email inquiries to [info@fordastronomyclub.com](mailto:info@fordastronomyclub.com).

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 Members: \$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 subscriptions request and payment. Do not send any money directly to the FAAC for this.

## Star Stuff Newsletter Submissions

Your submissions to STAR STUFF are welcome! Send your story and/or images to the editor at [jenzdanowski@yahoo.com](mailto:jenzdanowski@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 the 15th can be included in that issue.

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

*This months background photos of the moon Page 1 courtesy of John Kirchhoff. See more of John's photos at:*

<http://www.flickr.com/photos/33926475@N06/with/4311533997/>

## President's Corner

(continued from Page 1)

Other year end business:

- Membership Renewal – Its not too early to renew your club membership. Renewal cost stays at \$25 (\$30 if you pay after January 31, 2013.) See Doug Bauer and/or Chuck Jones at the meeting or send your check to:

FAAC

PO Box 7527

Dearborn, MI 48121

- 2013 Club Officer's – Elections will occur at the January 24, 2013 meeting. The nominating committee, chaired by Jim Frisbie, will announce their recommendations at the December meeting. You will have the opportunity to nominate someone for each office prior to the election in January.

- Sirius Award Nominations – The club presents this, its highest honor, to a club member every year at the club banquet (May 4, 2013.) The board will accept nominations for this award till January 31, 2013. This year's recipient was Bob MacFarland truly one of our club's shining stars. That's the caliber of person you should consider nominating. The person nominated must be an active club member and cannot be one of the elected club officer's. Please forward your nomination, including a concise explanation of the person's qualifications to [President@fordastronomyclub.com](mailto:President@fordastronomyclub.com) All submissions will be kept confidential.

(continued on Page 4)



*Samuel Pierpoint Langley, who developed the bolometer in 1878. His instrument detects a broad range of infrared wavelengths, sensitive to differences in temperature of one hundred-thousandth of a degree Celsius (0.00001 C). In 1961, Frank Low developed the germanium bolometer, which is hundreds of times more sensitive than previous detectors and capable of detecting far-infrared radiation.*

## A Cosmic Tease: Trials of the Herschel Space Telescope Science Teams

*(continued from Page 1)*

You see, this team is looking at a series of images of stars taken by a device called a bolometer that is blind to ordinary starlight. Instead, the bolometer inside Herschel senses infrared light, a kind of light that we would probably refer to as heat if we could feel it. But the idea of pointing the bolometer at the stars was not to collect ordinary starlight. It was to measure heat coming from the vicinity of these stars, like an infrared security camera, in case there was something else to be found lurking nearby.

And lo and behold, for a handful of stars, the bolometer measurements were off the charts! Maybe something was orbiting these stars. From the details of the bolometer readings—which channels lit up and so on—you would guess that this stuff took the form of majestic fields or rings of icy and rocky particles. It would be a new kind of disk, a discovery worth writing home to Madrid about.

There are several teams of astronomers analyzing data from the Herschel Space Telescope. They call themselves by oddly inappropriate sounding acronyms: GASPS, DUNES, DEBRIS. For the time being, the scientists on these teams are the only ones

with access to the Herschel data. But in January, all the data these teams are working on will suddenly be released to the public. So they are all under pressure to finish their work by then. The team whose meeting I was sitting in on would like to publish a paper about the new disks by then.

But it's not so simple. The stars that this team had measured were relatively nearby as stars go, less than a few hundred light years. But the universe is big, and full of galaxies of all kinds—a sea of galaxies starting from maybe a hundred thousand light years away, and stretching on and on. Maybe one of those background galaxies was lined up with each of the stars that had lit up the bolometer—fooling us into thinking they were seeing disks around these stars.

The team argued and paced, and then broke for lunch. We marched to the cafeteria through the rain. Meanwhile, vast fields of marble-sized chunks of ice and rock spun slowly in the darkness. Or maybe they didn't.

What else did Herschel recently uncover? Find out at <http://spaceplace.nasa.gov/comet-ocean>

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

## Treasurer's Report

### October 9, 2012

By Chuck Jones

#### Ford Amateur Astronomy Club Balance Sheet As of October 9, 2012

	Oct 9, 12
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
CD 200599272	1,055.80
CD 205196033	1,001.01
CD 89265268	1,101.20
Checking	29.53
<b>FAAC Savings</b>	
Equipment	1,308.22
Scholarship	140.81
<b>Total FAAC Savings</b>	1,449.03
<b>Petty Cash Account</b>	170.38
<b>Total Checking/Savings</b>	4,806.95
<b>Other Current Assets</b>	
<b>GLAAC</b>	1,563.35
<b>Total Other Current Ass...</b>	1,563.35
<b>Total Current Assets</b>	6,370.30
<b>TOTAL ASSETS</b>	<b>6,370.30</b>
<b>LIABILITIES &amp; EQUITY</b>	0.00

### Club Wear

To our "New and Current Members" Our club has "FAAC" Official Club Wear with our Logo Embroidered.

Anyone with an interest or need in FAAC Club Wear, I will be placing an order in the next few months, for more information please call me - Diane at 248 980-7832. The FILES section in the Yahoo group has a form noting each ITEM with PRICES. The listing name - "FAAC Club Wear" - please do not hesitate to call me.

### Meeting Agenda - October 25th

HFCC – Berry Auditorium -Admin. Services & Conference Center [www.fordastronomyclub.com](http://www.fordastronomyclub.com)  
5:30

#### Opening/Introduction/Member Observing

#### Main Presentation:

Planetarium

Bob Clubb

#### Club Projects/Committees/Member Support

- October 20th – Astronomy Day – Solar Observing at Kensington MetroPark Nature Center
- October 27th – Wayne State University – Tour of Planetarium and Adjacent Facilities – 6 PM

#### Club Business/Secretary/Treasurer/Equipment Reports

## Items For Sale

Up for sale is my recently acquired Orion Starblast 6. I bought it off Astromart a few months ago, and it is in truly like-new condition. I have only had a couple opportunities to take it out and it performs well. I have one too many scopes and this one is overshadowed by my 8" dob. Scope comes with dust cover and red dot finder, but no eyepieces. Retail for \$279 currently plus \$30 s/h.

**PRICED TO SELL: \$175**

Pictures are posted here:

<http://groups.yahoo.com/group/FordAstronomyClub/photos/album/982235276/pic/list>

Contact Syed at: (734) 945-5162 if interested or e-mail me.



## Astro Imaging SIG

Gordon Hansen

All are invited to join us in the Astro Imaging SIG meetings, to share and discuss images, experiences, and techniques.

We always have a good time, with lively discussion, and sharing of valuable information.

Next meeting is **November 8th**. The meeting room location – HFCC Admin. Services and Conference Center (same building), Berry Amphitheater Auditorium.

Topics invited. Pizza served.

## FAAC Events 2012

**October 27th - Wayne State University – Tour of Planetarium and Adjacent Facilities – 6 PM**

**November 8th-SIG Meeting-Berry Amphitheater Auditorium (HFCC)**

*Background Photo from Lunt Solar Scope Image taken at the Hector J Robinson Observatory, June 28, 2010*

### One FAAC members blog

<http://hjrobservatory.blogspot.com/>

A few updates on the observatory, quick articles and photos. I'll try to improve my writing on this blog. Also, I try to keep daily updates on this blog. - Greg Knekleian, HJRO volunteer.

## Items For Sale

*(continued from page 5)*

- 8 inch Zhumell Dobsonian Telescope
- F/5
- 2 inch Crawford low profile focuser with 1.25 inch adapter.
- 26 mm 2 inch eyepiece and 9 mm 1.25 inch eyepice
- 8 x 50 right angle finderscope
- Laser Collimator
- cooling fan with battery pack
- 2 " and 1.25" eyepiece rack and glow-in-the-dark tape on bearing box.
- Extras Include: Desert Storm Shield, padded carrying case for optical tube, Telrad
- \$300 Firm Call John 248-538-1514 or email to [ka8grh@gmail.com](mailto:ka8grh@gmail.com)

REMINDER: FAAC membership renewals are due by January 31, 2013.

We are trying to get renewals done by the end of the year to reduce the number of renewal notices that we send out in January. It costs the club to send renewal notices by mail, so early renewals will save us money.

- Annual–New Member: \$30
- Annual–Renewal: \$25 (\$30 after Jan 31)

Send your check for \$25 to:

FAAC  
P.O. Box 7527  
Dearborn, MI 48121-7527

Or bring your money to the FAAC General Meeting at 5:30 PM in the Berry Amphitheater Auditorium in the Administrative Services and Conference Center on the campus of Henry Ford Community College.

Membership includes the STAR STUFF newsletter, discounts on magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake and Lake Erie Metropark observing sites, use of the FAAC Yahoo Group, and mentoring program.

# FAAC General Meeting Minutes September 27th, 2012

By Doug Bauer Secretary

## Opening:

- The meeting was called to order in the Berry Amphitheater Auditorium of at HFCC at 5:30 pm by FAAC Secretary, Doug Bauer.
- Doug Bauer Announced the FAAC prize winners from the AATB Raffle.
- All attendees introduced themselves. There were 40+ people present. We had nine members of the Henry Ford Community College Astronomy Club attending the meeting.
- Members contributed their observing experiences. Most of the attendees had attended at least one night of the Astronomy At the Beach event. Larry Hoffman described using his Hyperstar to do astrophotos. Mohammed Mroue described having a star party for his family.

## What's Up In October:

- John Schroer gave the What's Up in the Night Sky talk. He included:
- Moon Phases:
  - Oct 8 - First Q
  - Oct 15 - New
  - Oct 21 - Last Q
  - Oct 29 - Full
- Mars is very low in the evening sky
- Jupiter and Venus are Morning Objects
- Orion is rising in the early morning

## Main Program:

Bob Berta of the Warren Astronomical Society (also Seven Ponds and Oakland Clubs) gave a presentation entitled: How to Get People Involved in Astronomy. His talk described how astronomy enthusiasts can get others involved in Astronomy. Some ideas are to work with other hobby groups you belong to, churches, clubs, scouts, and schools. Volunteer to give presentations, offer a night under the stars as an auction items, talk to others about astronomy, get involved with schools by talking to teachers and giving presentations to their classes. Use social media to draw in younger people with different demographics.

## Tech Talk:

Bob MacFarland gave a Tech Talk on Alternative Ways to Observe Solar Transits. He described various safe ways to view the Sun including: Solar projection, a funnel projector, solar filters, a flower pot solar projection, and various other set ups. Bob had build a funnel solar projector which he passed around and described how it was built. He had also built a flower pot solar projector which he passed around and described how he had built that as well.

## Business Meeting:

- Secretary's Report was printed in the StarStuff. It was approved as printed with some corrects being submitted by Milton French.
- Treasurer's Report was printed in the StarStuff and approved as printed.

## Upcoming Project and Events:

- Thursday, October 11th- 5:30 PM - Astro-imaging SIG meeting in the Berry Auditorium at HFCC
- Saturday and Sunday, October 20 and 21 - Noon until 5:00 PM -Astronomy Day with Solar Observing at Kensington Metropark Nature Center
- Saturday, October 20th - 6:00 PM - FAAC Beginners Night at Island Lake Recreation Area - Spring Mill Pond
- Saturday, October 27th - Tour of the WSU Planetarium and adjacent buildings at 6:00 PM. Anyone interested in going to dinner first will meet at the Traffic Jam and Snug Restaurant at 4:00 PM.

## New Business:

- Greg Ozimek will be ordering the 2013 Royal Astronomical Society of Canada Observers Handbook. Go to the Yahoo Group and add your name to the Observers Handbook database if you would like to get one.
- The New Michigan Science Center (formerly the Detroit Science Center is hoping to open for the Noelle Night in Detroit)

Thanks to Greg Ozimek for bringing the pizza and to Doug Bauer for bringing the pop!

## HJRO Update

by Greg Knekleian

Eduardo Gonzalez brought a radio controlled hexicopter to the observatory this month. He flew it over the observatory as hexicopter (helicopter) took video from above using a lightweight GO cam. Some FAAC members and at least five visitors showed up to see the RC fly over HJRO. Some of the video will likely be used for a short clip showing the observatory on a future FAAC cable show.

Greg Ozimek and I shot video from the ground viewpoint of the flying camera. Mike Stamey, Tony Godin and son (Eli) arrived to see the hexicopter fly. One father brought by his two sons to tour the observatory that day as well. The father mentioned he attended Lincoln Park schools a long time ago and never was able to look inside the observatory. I gave them a tour of the telescopes and showed them the old mirrors.

After the hexicopter flew, clouds arrived, so Eduardo wasn't able to get a decent night viewing through the C14.

Some FAAC members spent perhaps one or two nights viewing this month at HJRO, generally poor weather prevented more observing. The night I wrote this (Saturday October 21), Ben Cline called the observatory hotline to see if we were observing at HJRO and if we were seeing any meteors from the Orionid meteor shower. I wasn't at the observatory, but went outside to see if I could see any from my house.

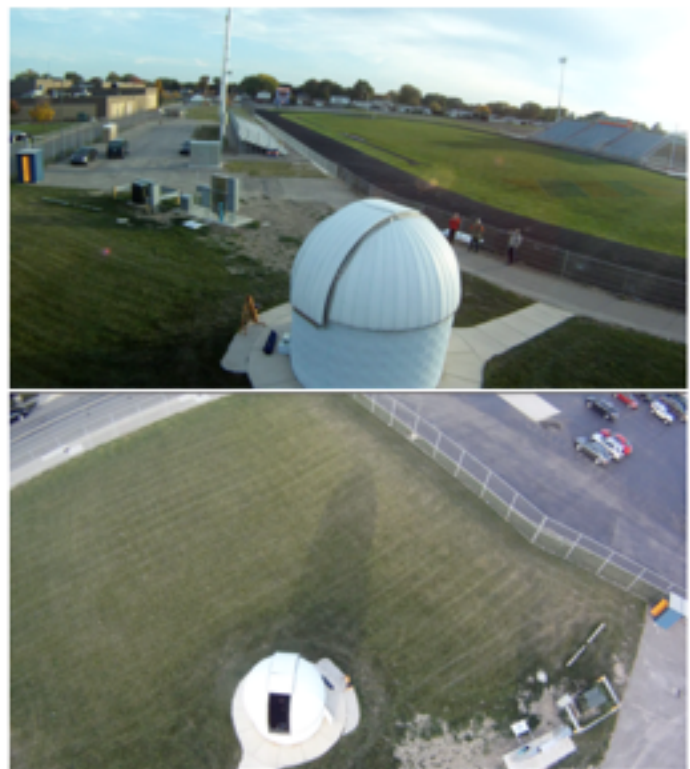
Friday (October 27) if the weather is clear, we plan on opening up HJRO for the HFCC Astronomy club. If the weather isn't clear we will open up on an alternate clear night. Tim Campbell stopped by one evening briefly to donate a digitizing component that might help the Stellacam feed video into the PC. We are still working on a few internet glitches from the newer installation at the school system.

I'm thinking about moving Big Bertha out for the Friday HFCC visit, M45 is up in the evening sky and should be a nice target for a wide field telescope.

Also HJRO had a visitor show up and bring his homebuilt Dobsonian telescope, to see if we could help him diagnose an optical problem. He was inspired to start a telescope building project after attending the HJRO Venus transit.



Above : Eduardo Gonzalez pushes the 6 bladed hexicopter during hover, showing it's ability to remain in a programed stabilized location.  
Below: Greg Ozimek, Mike Stamey and I stand near the track looking up as the hexicopter shoots video of HJRO.



Ford Amateur Astronomy Club  
Star Stuff Newsletter  
P.O. Box 7527  
Dearborn MI 48121-7527



## FAAC General Meeting Minutes August 23th, 2012

*(continued from page 7)*

### **New Business:**

- Greg Ozimek will be ordering the 2013 Royal Astronomical Society of Canada Observing Handbook. Let him know if you would like to get one.
- Bob MacFarland is organizing a tour of the Wayne State University Observatory for Oct 6 or Oct 27th.
- The HFCC Planetarium shows are about to resume. Bob Clubb will post the schedule when it is completed.
- The Cranbrook observatory is being updated and will open November.
- Shepler's Ferry in Mackinaw is running some moon viewing tours.
- Doug Bock is looking for some help on Sept 29th to refurbish his backyard observatory so that he can host a star party there next Spring. Contact Doug Bock if you can help.

Thanks to Greg Ozimek for bringing the pizza and to Ellen Duncan for bringing the pop!