

Volume 15, Number 5

# In This Issue

### Page One

- Not a Moment Wasted
- President's Corner

### **Inside Stuff**

- 4 Meeting Minutes
- 5 FAAC Meeting Agenda
- 5 Treasurer's Report
- 6 FAAC Calendar of Events 2006
- 6 Astro Imaging SIG
- 6 Items For Sale
- 6 Clavius
- 7 FAAC Annual Income Summary



May 2006



# Not a Moment Wasted

Dr. Tony Phillips

You punch in coordinates and your telescope takes off, slewing across the sky. You tap your feet and stare. These Messier marathons would go much faster if the telescope didn't take so long to slew. What a waste of time!

Don't tell that to the x-ray astronomers.

"We're putting our slew time to good use," explains Norbert Schartel, project scientist for the European Space Agency's XMM-Newton x-ray telescope. The telescope, named for Sir Isaac Newton, was launched into Earth orbit in 1999. It's now midway through an 11-year mission to study black holes, neutron stars, active galaxies and other violent denizens of the Universe that show up particularly well at x-ray wavelengths.

For the past four years, whenever XMM-Newton slewed from one object to another, astronomers kept the telescope's cameras running, recording whatever might drift through the field of view. The result is a stunning survey of the heavens covering 15% of the entire sky.

Sifting through the data, ESA astronomers have found entire clusters of galaxies unknown before anyone started paying attention to "slew time."

...continued on page 3

# "Tempus Fugit!"

# President's Corner

Don Klaser, President, FAAC

Time. It's as new as the moment in which I write this sentence, and as old as the universe itself. It's something we all seem to want more of, but to what purpose? When did time become a commodity, to be bought, sold, traded or wasted? This phenomenon can probably be traced back to the arrival in Europe of the first mechanical clocks, in the mid-Fourteenth Century. Before that, time was measured by Nature, using the motions of the sun, moon, and stars, as well as the changing seasons!

...continued on page 2

### Page 2

# STAR STUFF

MAY 2006 - VOL. 15 - NO. 5

STAR STUF is published eleven times each year by the

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

PRESIDENT: VICE PRESIDENT: SECRETARY: TREASURER: NEWSLETTER EDITOR: Don Klaser Ed Halash Ken Anderson Gordon Hansen 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).

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 information are available by calling the FAAC Observing Hotline at 313-390-5456, on our website, or via the FAAC Yahoo Group.\*

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 Annual – Renewal: \$25 Life Membership: \$150	(\$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*. 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

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

Since before recorded history, mankind has looked to the heavens to better understand his place in the world. In doing so, he created stories and placed special importance on certain astronomical occurrences that over the eons developed into religions. This is entirely logical if fear and evil came from beneath the earth in the form of earthquakes and fiery volcanoes, then certainly good must be in the sky above that also held the sun and sent the nurturing rain to grow crops and sustain man and animals.

Over the centuries, man discovered through his study of the sky, that certain events on Earth would coincide with celestial markers, such as the flooding of the Nile with the rising of Sirius, or the arrival of Spring with the sighting of the constellation Leo.

All of these attributes were assigned to the various gods that were believed to inhabit the heavens; to ensure that these things would continue, rituals were designed to appease them. More importantly, these rituals had to be performed on a consistent basis.

Of vital concern as well, was knowing when to plant and harvest, and the best times to hunt and fish. Before mechanical time, before the sundial and the hourglass, man developed a method of timekeeping that wove the festivals, observances and customs of humanity onto a tapestry that would serve as a landscape of time; not a description of it, but of what it means. This timekeeper was called the calendar.

It helps us in planning agricultural cycles as well as religious and civil events, serving as a source of social order and cultural identity. Making them fulfills a need of human nature to organize and attempt to control the world around us. While some calendars were carefully structured around astronomical observations and codified in law, others were handed down by oral tradition. Either way, they served as a link between ourselves and the cosmos.

If the subject of the development of the calendar, including some of the quirks in it, interests you, then don't forget to 'mark your calendar' so you don't miss this month's membership meeting.

See you there!

## Not a Moment Wasted... (continued from page 1)



The image on the left is the Vela Supernova Remnant as imaged in X-rays by ROSAT. On the right are some of the slew images obtained by XMM-Newton in its "spare" time.

Some already-known galaxies have been caught in the act of flaring—a sign, researchers believe, of a central black hole gobbling matter from nearby stars and interstellar clouds. Here in our own galaxy, the 20,000 year old Vela supernova remnant has been expanding. XMM-Newton has slewed across it many times, tracing its changing contours in exquisite detail.

The slew technique works because of XMM-Newton's great sensitivity. It has more collecting area than any other x-ray telescope in the history of astronomy. Sources flit through the field of view in only 10 seconds, but that's plenty of time in most cases to gather valuable data.

The work is just beginning. Astronomers plan to continue the slew survey, eventually mapping as much as 80% of the entire sky. No one knows how many new clusters will be found or how many

black holes might be caught gobbling their neighbors. One thing's for sure: "There will be new discoveries," says Schartel.

Tap, tap, tap. The next time you're in the backyard with your telescope, and it takes off for the Whirlpool galaxy, don't just stand there. Try to keep up with the moving eyepiece. Look, you never know what might drift by.

See some of the other XMM-Newton images at http://sci.esa.int. For more about XMM-Newton's Education and Public Outreach program, including downloadable classroom materials, go to http://xmm.sonoma.edu. Kids, learn about black holes, play "Black Hole Rescue" - The Space Place, http://spaceplace.nasa.gov/, under "Games."

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

## April 27 Meeting Minutes Ken Anderson

Attendees: 22+

Don Klaser, President, opened the meeting at 5:30 PM chaired and led the introductions and observational/equipment discussion. Guests included my daughter Alexa. Gordon Hansen bought a Coronado PST. Yesterday and this morning at 2am, Mark Deprest observed P73 Voxman Comet segments C&B which he says was very bright. The comet has broken into 40 pieces, and is bright enough to be seen in binoculars at 2am near zenith. Clay Kessler conducted a CCD experiment with Jeff Thrush yesterday on both M51 and 73P comet, which was dimmer than he expected. Clay is disappointed that it is hard to get astronomy film now.

Jeff Thrush aligned the optics of his C8, and commented on the Orion Star 2 camera being better than Meade's, and that it is actively cooled. Mark Deprest added Meade VSI Pro Monochromatic with color wheel system works well for black & white. Harry Juday said there are color balancing issues (w/ Meade camera), and observed both an aurora borealis and the modest Clay Kessler discussed the color wheel comet. size and blockage issues, and packaging recommended monochromatic. Harold Thomason observed Saturn and the Sun (H alpha) with his new C14 is much better than an 8" & 10". Bob Boswell informed us of a new 6 hour battery 0.5" x 8" x 8" which you can purchase a Best Buy for \$150.

Finally, everyone was reminded that Richmond Airfield requires 24-hour advance sign up (on the Yahoo Group message board), and that there is absolutely no penalty for deciding not to go.

For the Tech Talk, Steve Harvath had set up his new Takahashi 150. Tony Licata is teaching Steve how to do astrophotography, and Steve's first picture of Saturn was excellent! Polar alignment is easy. He imaged Saturn at high power and there was very low 7mm drift almost staying centered. Steve uses Registac and a webcam. Tony was impressed with how accurate the Goto was, using PDA on just one star, and how stable/rigid the mount was. Tomorrow he and Tony will photo M101 at Richmond.

Mark Deprest, from the University Lowbrow Astronomers, gave the main presentation "Comets – My Personal Obsession". Comets are described many ways, among them, as "dirty snowballs" consisting of mostly hvdroaen, nitrogen, cyanogens, ammonia, carbon dioxide, methane, and water. The Stardust mission also proved they contain heavy elements. They can also be one time long period comets originating from the "ort cloud" 50-70 times further than Neptune's orbit. In the past, comets were viewed as "harbingers of doom" shaped like swords. Recently, comets are viewed as "bringers of life" due to their organic materials which could produce life, and the belief that comets bombarding the Earth in the past may have sparked life here.

There are 10-15 comets in the sky, at any time, but most are very small or dim. Comets parts include of a nucleus, normally 6-20 miles wide, and sometimes 100 miles in diameter, but it is the coma that you see. The tails consist of three parts. The hydrogen envelope points away from the sun and is 100,000 deg K. The dust tail lies in the path of the comet and appears yellow, brown, or orange (this is also the source of meteor showers). The ion tail produces pretty blue images, and this is where sublimation occurs from solid directly to gas (similar to frozen CO2 on earth). Mark observes without filters, from dark skies, and is not impressed with the Swanband filter. Mark then discussed details and showed images of specific comets.

In club business, the April newsletter was posted the week before the club meeting. March minutes by Ken Anderson were approved/accepted without corrections. Gordon Hansen gave the treasurer's report (details elsewhere in the newsletter).

Gary Stahl is seeking submissions for the club library, especially the imaging CD library, so please provide your digital images along with your name and details. Astronomy Day, May 6, 2006. Gordon Hansen is seeking volunteers to sign up on the message board for the different sites, at Detroit Science Center, Kensington Metropark Nature Center, and Island Lake Beginner Night after dusk.

Don led a discussion about submitting for a \$2500 award for Astronomy Magazine Outreach Program. The application is due July 13, 2006.

Dale Ochalek and John Schroer volunteered to lead this committee to gather letters of thanks, photos, and public outreach documentation, and fill out the application and submit the packet before the deadline.

... continued on page 5

### Meeting Minutes ... (continued from page 4)

May 11th at 5:30pm is the next SIG Astro Imaging meeting, discussing "Photoshop." Don thanked Jim Frisbie and Diane Worth for their efforts scheduling the successful FAAC Dinner Party on April 8th at Station 885. Tonight he passed out awards for those missed the dinner.

Bob MacFarland discussed the two GLAAC events: June 2-3, 2006 Kensington Summer Star Gazing/Observer Night Sky Tours and Public Invited Beginner Night and Sky Orientation (reservations recommended for one-on-one help). Concessions/rest rooms/sales tables are open, no presentations, no shows (mini-star party).

September 29-30, 2006 10th Annual Astronomy on the Beach. NASA guest speaker – TBD, but may be astronaut Jack Lousma or Tony England, who live locally in Michigan. Other presentations and shows.

Gordon Hansen reported FAAC scholarship committee has received one application before the 30 March deadline.

Don Klaser mentioned there is a FERA is offering 10% off the Henry Ford/Greenfield Village passes, and the Ford motorcycle club is being initiated.

HFCC Science Building Planetarium Presentations have resumed for "Spring Sky" on Tuesdays with doors opening at 7:15PM, and presentations starting either when all seats are full or NLT 7:30 PM when doors are locked.

Mike Bruno and Don Sommers are FAAC club volunteers giving the ad-lib "Spring Sky" presentations.

Bill Bears says the 5th Annual Cadillac Star Party is May 24-29th, sponsored by Warren & Seven Ponds. RSVP to him directly for Camper/Tent site.

Great Lake Star Gaze – River Valley RV Park Campground is approximately \$45; download and mail in form.

Black Forest Star Party Aug 25-27 in Terry Spring State Park, Earth's End (North Central) Pennsylvania. 450 participants first come first serve and always sells out.

The meeting was adjourned a little after 7:30 pm.

# Meeting Agenda – May 25 (5:30 pm)

Opening/Introductions/Member Observing New Members & Guests – Diane Worth Tech Talk: Binocular Observing - Jim Frisbie Presentation: Calendar / Western Culture - Don Klaser Club Business / Secretary/ Treasurer Report Club Projects / Committees / Member support

- Astronomy Day Recap Don Klaser / all
- DFC Astro-Imaging Results John Schroer
- Astro-Imaging SIG Jim Frisbie
- Scholarship Committee Gordon Hansen
- GLAAC Update Bob MacFarland
- Richmond Airport Picnic Ed Halash
- The Henry Ford Discount Card Don Klaser
- Walk-ins

# Treasurer's Report

Gordon Hansen

В	an	k	Ac	СО	unt	ts

Checking	\$ 349.52		
Savings	\$ 4741.01		
TOTAL Bank Accounts	\$ 5090.53		
Cash Accounts			
Cash Account	\$ 177.65		
TOTAL Cash Accounts	\$ 177.65		
Asset Accounts			
GLAAC	\$ 776.45		
Projector	\$ 548.12		
Scholarship	\$ 385.60		
Accounts	\$ 1710.17		
OVERALL TOTAL	\$ 6978.35		

# FAAC Calendar of Events 2006

Bob MacFarland

June	2 & 3 – Spring Stargaze - GLAAC (w/o Presentations – Kensington MetroPark)
July	1 - Beginner's Night - Island Lake Recreational Area
TBD	Summer FAAC / Sand Hill Soaring Club Combined Picnic
August	5 - Beginner's Night - Island Lake Recreational Area
September	22-24 - Great Lakes Star Gaze – Gladwin
	29-30 - Astronomy on the Beach - GLAAC (Kensington MetroPark)
October	28 - Beginner's Night - Island Lake

# Astro Imaging SIG

Jim Frisbie

The next meeting of the Astro Imaging S.I.G. is Thursday, June 8, 5:30pm, Roseneau Rooms A-B at Henry Ford Community College in Dearborn, in the Administrative Services & Conference Bldg. (same as the FAAC General Meeting). All Club members and their guests are invited. The topic for the meeting is TBD If you drive up to the Faculty parking lot gate, it should open, allowing you to park close to the building. LXD55 Schmidt Newtonian

**Meade 10" LXD55 Schmidt Newtonian** telescope Autostar guided, German Equatorial mount, "T"- adapter, Super Plossl 26-mm eyepiece, 1.25" and 2" eyepiece holders, battery pack for 8 "D" cell batteries, 25ft. 110v. power cord. Bought in 2002 for \$1200, will sell for \$1000, or possibly trade for another scope.

E-mail inquiries to: eddyelectro@talkamerica.net

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

**8" LX200 'classic" F/10**, low hours, great shape. 2nd owner, new in 2001. Includes all std. plus optional - Scopestuff long Dec. cord, Scopestuff collimation knobs installed, Meade 1812 power adapter, Meade heavy duty Cordura soft case, Kendrick Dew Strap, Homemade counter weight and rail, dew shield, and scope transporter, Telrad base. On display at Rider's Livonia. \$1400.00 OBO

Call Jim: 313-386-6944 day, 313-928-9042 eve.

**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.

### Clavius Gary Strumolo



### 2005-2006 INCOME SUMMARY STATEMENT

Name of Club:	Ford Amateur Astronomy Club	Name of Treasurer: e-mail address/ phone number:		r:	Gordon Hansen
Number of Members:	146				
5/1/2005	Beginning Balance		\$	4,782.55	
	INCOME				
	Calendar Rec	\$	113.00		
	Dinner Party Rec	\$	1,258.40		
	Dues	\$	2,764.95		
	Equipment Fund	\$	391.26		
	Interest Income	\$	22.38		
	Miscellaneous Rec	\$	50.00		
	necklaces	\$	3.00		
	Newsletter Advertising	\$	500.00		
	Scholarship Rec	\$	235.00		
	Star Party Rec	\$	1,273.45		
	tshirts & glows	\$	466.75		
	TOTAL INCOME		\$	7,078.19	
	EXPENSES				
	Dinner Party	\$	1,430,96		
	Equipment	\$	92.85		
	Insurance	\$	327.00		
	Library	\$	41.34		
	Meeting Expense	\$	715.03		
	Miscellaneous	\$	669.36		
	Newsletter	\$	706.32		
	Office	\$	349.62		
	Post Office Box	\$	38.00		
	Site fees	\$	50.00		
	Star Party	\$	890.56		
	TOTAL EXPENSES	Ŧ	\$	5,311.04	
					_
	OVERALL TOTAL		\$	1,767.15	
	Ending Balance		\$	6,549.70	

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



