

# The OBSERVER

The Newsletter of the Twin City Amateur Astronomers, Inc.

March 2006 Volume 31, Number 3



## ANNUAL MEETING REPORT

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The Annual Meeting was held on Saturday, February 11, 2006 in room 104 of Turner Hall on the ISU campus. Thirty-four members and guests were in attendance for the banquet that started at 6:00 p.m. following a social hour. Participants feasted on a variety of delightful foods including baked chicken, vegetable lasagna, cheesy noodles, vegetable and fruit salads, refreshments and cake.

President Kal Kumar called the group to order at 6:30 p.m. for a business meeting. Following a moment of silence for Lyle Rich and other deceased members of the TCAA, Kal gave his president's report which was a summary of the amazing number of education/public outreach events – dozens of public and private observing sessions, talks to various groups, library presentations, and an adult education program to name but a few. Treasurer Duane Yockey gave a follow-up report about the financial status of the club. He indicated that the club was doing quite well, and that we might consider spending some money on such necessities as a video projector for use during public observing

sessions.

Duane then gave a brief notice about the North Central Region Astronomical League convention being held April 21-22 in Appleton, Wisconsin. Carl Wenning then played a 10-minute video clip of the conference host inviting the membership to attend. The goal of this conference is to have at least one member of every NCRAL club in attendance. Several TCAAer's



indicated that they would be going.

Kal then turned the membership's attention to the election for the Board of Directors. He noted that William Carney, Brian Barling, and Duane Yockey have agreed to run for office. He then called for nominations from the floor and Dan Miller and Neil Lehmkuhl were nominated to fill the remaining two spots. It was moved, seconded, and unanimously agreed that the nominations be closed, and that the Board be elected by acclamation.

Kal then noted that Sharon MacDonald is the official Registered Agent of the TCAA, and provided her contact information

## TCAA Calendar of Events

- March 25, Members-Only Observing Session, SGO, 7:00 p.m. CST
- April 1, first Public Observing Session, SGNC, 8:00 p.m.
- April 16, Astronomy Day display at local mall (tentative)
- April 21-22, TCAA road trip to NCRAL convention in Appleton, Wisconsin

## The Observer

Newsletter of the TCAA, Inc.

*The Observer* is a monthly publication of the Twin City Amateur Astronomers, Inc., a registered 501(c)(3) non-profit educational organization of amateur astronomers interested in studying astronomy and sharing their hobby with the public.

### TCAA Officers

President	Dan Miller damiller@mail.millikin.edu
Vice-President	Brian Barling 309-454-5493 res2213h@verizon.net
Secretary/Historian	Carl Wenning 309-454-4164 cjwennin@ilstu.edu
Treasurer	Duane Yockey 309-452-3936 duane@lybinc.com
Publicity/Web	Michael Rogers 309-825-6454 mprogers@mac.com
5th Director	Neale Lehmkuhl 309-378-4335 PETREALEHM@aol.com

### Property Manager

William Carney 309-829-7748  
willcarney@aol.com

### Observer Editor

Rebecca Wenning Submissions  
21 Grandview Dr. must be  
Normal, IL 61761 received by  
309-454-4164 the end of  
rwennin@ilstu.edu each month.

### Membership Dues

Individual Adult/Family \$40  
Full-time Student/Senior \$25

To join the TCAA, send your name, contact info, and dues payment to:

Duane Yockey  
508 Normal Avenue  
Normal, IL 61761

as required by law. Following a round of door prize drawings (prizes donated by Sharon and Carl), Kal thanked everyone for their service and contributions during the previous year and encouraged continued participation. The meeting was officially adjourned at 7:30 p.m. at which time the membership moved to room 200/201 for the keynote address.

This year's keynote address was given by Dr. Roger J. Phillips who graced us with his presence at the invitation of Mike Rogers. Mike introduced the speaker and gave the title of his presentation, "MESSENGER, Mercury, plus a bit of Venus & Mars." Some 60 people—members, guests, and general public—were present for this presentation that was profusely illustrated with images and data from the three planets. Following a 50-minute presentation with questions and answers, the event drew to a close at 8:30 p.m.

### **BOARD MEETING MINUTES**

February 15, 2006

~ Mike Rogers ~

The newly elected TCAA Board of Directors (BOD) met on February 15, 2006, at 6:00 PM, at the offices of Lewis, Yockey and Brown. In attendance were continuing board members William Carney, Duane Yockey, and new board members Brian Barling and Dan Miller. Neale Lehmkuhl was off doing fatherly-duties. Also in attendance were Kevin Brown and Michael Rogers. The meeting began with the welcoming of the new board members, and the appointing of officers:

President: Dan Miller  
Vice-President: Brian Barling  
Secretary: Carl Wenning  
Treasurer: Duane Yockey  
Newsletter Editor: Rebecca Wenning  
Historian: Carl Wenning  
Publicity: Michael Rogers  
Equipment Manager: William Carney  
Webmaster: Michael Rogers



Invited Speaker  
~ Roger J. Phillips, Ph.D ~

Donning his ALCor hat, Duane discussed the 60th Annual NCRAI Convention to be held April 21-22, 2006, in Appleton, Wisconsin. It was hoped that the TCAA would have a large turnout for what promises to be a very exciting convention, including such noted speakers as Guy Consolmagno (author of "Brother Astronomer"), Dr. Carolyn Porco (leader of the Cassini Science Imaging Team, and a lead scientist on the New Horizons mission), and Dr. Harrison Schmitt (one of the last Apollo astronauts to walk on the moon). At least 6 TCAAers are planning to make the trip.

Duane then discussed rising cost of liability insurance—currently provided by the Astronomical League. Duane will contact Eric Funk to see if he can provide a more reasonable rate.

In his role as equipment manager, William explained that a USB cable was required to obtain better Internet connectivity at the SGO; Dan will obtain such a cable and install it. William also noted that the LX-200 at the SGO should not be allowed to go into sleep mode when it is cold out, as it tends to go into hibernation mode instead.

It was agreed that the Annual Meeting went well, with parking being the only slight difficulty. It was explained that the speaker's tight schedule, and the ISU basketball team's unwillingness to reschedule, were the joint causes.

A brief discussion about membership then transpired. Board members will attempt to locate new member packets, and discuss them at the next meeting, on March 25. We will also conduct a survey to see what our members want out of the club—Michael will write the questions.

A need for extra POS schedules was expressed; Michael will arrange for 400 to be printed. Some coordinator assignments for the MOOS and POS schedules were made (see below); it is hoped that other members will chip in, in response to an appeal made in the newsletter and on the mailing list.

**MOOS schedule**

February 25 — Dan  
 March 25 — William  
 April 29 — Duane  
 May 27 — Mike  
 June 24  
 July 22  
 August 19  
 September 23  
 October 21  
 November 18  
 December 16

**POS schedule**

April 1 — Michael, Dan  
 May 6 — Dan, Kevin  
 June 3 — Kevin, Michael  
 July 1 — Brian, William  
 July 29  
 August 26  
 September 30  
 October 28

Two picnics will be held this year, on July 22nd and August 19th. Carl, as Sugar Grove Nature Center liaison, will be asked to verify with the SGNC that there are no conflicts (e.g., ISU basketball games). Some members have suggested that the club is stretched thin when it comes to public outreach; the same few members having to do the majority of the presentations. So, it was felt that, rather than hold special events for school groups, our preferred (but not exclusive) strategy will be to encourage everyone to attend our public observing sessions.

Planning for Astronomy Day was discussed at length. It was noted that Eastland Mall is not as accommodating as they used to be, with most of their public spaces are occupied by (gasp!) tenants. So, Board members will investigate alternative sites including the Bloomington Public Library, and Barnes & Noble (Michael), Hobby Lobby and the ISU Planetarium (Dan). Duane will inquire at Eastland as to the possibility of getting a better location for our booth.

Michael will ask our Bloomington Public Library liaison about continuing our public lecture series this year. It was noted that the last adult education astronomy course was a huge success — fully-booked with a waiting list for the next course — thanks to Carl. We will discuss with Carl timing for the next series.

Michael is in charge of the “Observer Cheerleading Program”, and will, through a combination of cajoling, belittling, and occasional pleading, drag club members, kicking and screaming, out to observing sessions. “They will be better for it”, he was quoted as saying.

It was noted that the electronic newsletter distribution is already occurring, and that when members renew, if they wish to switch to the electronic newsletter, they can get a sizable membership discount. Duane will check with our newsletter editor to see how many people are currently participating, and how the newsletter is distributed (mailed directly, or a note referring them to the web site).

The notion of a warming room was put on ice, as was the concept of a second observatory.

Noting that the club coffers are relatively flush, members pledged to remedy that as soon as possible. Specifically, we plan to investigate acquiring some higher quality eyepieces. At the MOOS on February 25th, we will try a number of Televue eyepieces, to see how they look through the 12” LX-200.

A video projector is still probably out of the club’s reach, and considering that it would only be used once or twice a month, it was felt that the current procedure — borrowing from members — is the most cost effective.

We have not received many reports of members working on observing lists, but those who do should report their numbers to the newsletter editor, for inclusion in *The Observer*.

Michael reported that he has had less than stellar success getting new t-shirts. He had ordered several samples from Facts On The Back, but they do not do wash well. It was thought that a contest, to design a new t-shirt, might be in order. Michael will write something up for *The Observer*. The winner could get ... a free t-shirt!

The question of a “Young Members Committee”, to help design astronomy activities specifically for our younger

members, was raised. We will solicit opinions from members with small children, and hopefully they will find the time to respond.

We have been asked to participate in Family Science Day at ISU by the Challenger Learning Center. Duane will attend an orientation session

The meeting adjourned (finally!) at 7:38 PM. The next meeting will be on February 25th at 6 PM, at the SGO, to discuss Astronomy Day.

**BIGFOOT AT SGNC?**

~ by Carl Wenning ~

The radio airwaves have been crackling recently with the news of supposed Bigfoot sightings at Funk’s Grove. Local TV stations have run several reports. *The Pantagraph* ran two successive days of articles on February 14 and 15 reporting sightings by two area residents. A Bigfoot “researcher” has flown in from California in pursuit of these elusive creatures — one said to be 9 feet tall, the other 7 feet tall. But, is it safe to observe in the open on the grounds of SGNC? Is observing even inside the relatively secure confines of SGO recommended? These are serious questions for the cautious observer.



According to a *Pantagraph* report, at least six sightings of Bigfoot have taken place since as early as last June. The creatures were

reportedly observed along the roadside in Funk’s Grove during evening twilight. There are three possible explanations: 1) hoax, 2) misidentification, or 3) Bigfoot. If I were a betting man, I’d place my money on options 1 or 2. I suspect that the greater danger could be from crazy people who might be driving around in the dark with guns looking for the reputed Bigfoots (Bigfeet?!)

Go out, observe the sky, and have fun, but keep your eyes open for both Bigfoot and for crazy people. Just keep a camera at the ready. Who knows? You just might run into Bigfoot!

## TCAAers HAVE DINNER WITH GRACE CORRIGAN

TCAA members Rebecca and Carl Wenning were invited by the Challenger Learning Center to have supper with Grace Corrigan – mother of Challenger L-51 astronaut Christa McAuliffe – on Friday, February 24th. Members of a very select group asked to join Mrs. Corrigan, Rebecca and Carl had a nice private conversation, and were fortunate to hear about the personal life of Christa McAuliffe. Mrs. Corrigan was delighted to hear that Rebecca is a teacher education major.

The evening concluded with Mrs. Corrigan delivering a short presentation and showing a touching video about Christa's life as an astronaut that featured a song of John Denver who wrote both music and lyrics for the program. The evening concluded with a tour of the CLC and a "trip" aboard Athena, the new earth-to-space transport module installed during January.

## FEBRUARY 25th MOOS SUCCESSFUL

Mike Rogers reports that, "It was cold out, but tolerable once the wind died down, and the skies were fantastic. We had around 15 people at one point or another in time. Dan, Duane and William evaluated eyepieces in the [SGO] 12", and we spent some time poking around Orion with our 20". We loused up the collimation the first time we tried it – the stars looked like bars – but once we got the collimation right, the views were great. We found M42, M43 and M78 by hand – no difficult feat, but necessary for the Messier list. The highlight of the evening was when Dan found the Horsehead nebula."



## MICRO-SATS WITH MACRO POTENTIAL

~ By Patrick L. Barry ~

Future space telescopes might not consist of a single satellite such as Hubble, but a constellation of dozens or even hundreds of small satellites, or "micro-sats," operating in unison.

Such a swarm of little satellites could act as one enormous telescope with a mirror as large as the entire constellation, just as arrays of Earth-bound radio telescopes do. It could also last for a long time, because damage to one micro-sat wouldn't ruin the whole space telescope; the rest of the swarm could continue as if nothing had happened.

And that's just one example of the cool things that micro-sats could do. Plus, micro-sats are simply smaller and lighter than normal satellites, so they're much cheaper to launch into space.

In February, NASA plans to launch its first experimental micro-sat mission, called Space Technology 5. As part of the New Millennium Program, ST5 will test out the crucial technologies needed for micro-sats—such as miniature thrust and guidance systems—so that future missions can use those technologies dependably.

Measuring only 53 centimeters (20 inches) across and weighing a mere 25 kilograms (55 pounds), each of the three micro-sats for ST5 resembles a small television in size and weight. Normal satellites can be as large and heavy as a school bus.

"ST5 will also gather scientific data, helping scientists explore Earth's magnetic field and space weather," says James Slavin, Project Scientist for ST5.

Slavin suggests some other potential uses for micro-sats:

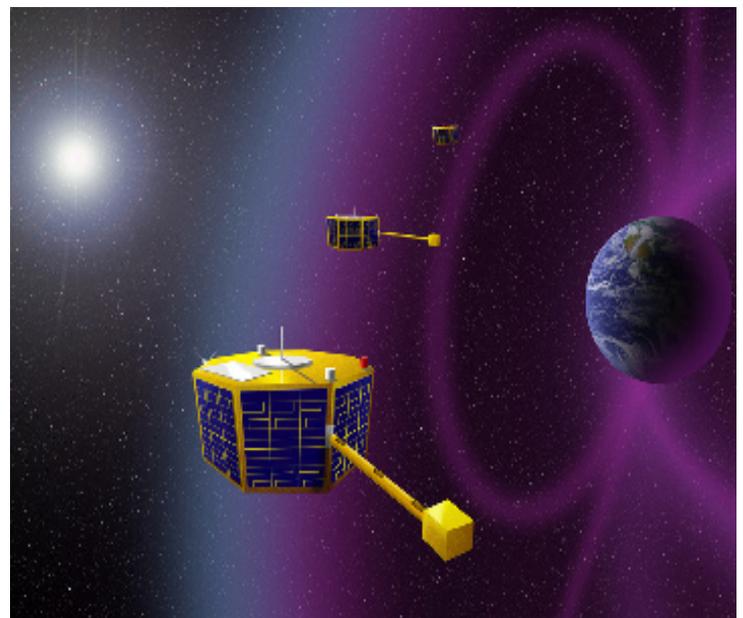
A cluster of micro-sats between the Earth and the Sun—spread out in space like little sensor buoys floating in the ocean—could sample incoming waves of high-speed particles from an erupting solar flare, thus giving scientists hours of warning of the threat posed to city power grids and communications satellites.

Or perhaps a string of micro-sats, flying single file in low-Earth orbit, could take a series of snapshots of violent thunderstorms as each micro-sat in the "train" passes over the storm. This technology would combine the continuous large-scale storm monitoring of geosynchronous weather satellites—which orbit far from the Earth at about 36,000 kilometers' altitude—with the up-close, highly detailed view of satellites only 400 kilometers overhead.

If ST5 is successful, these little satellites could end up playing a big role in future exploration.

The ST5 Web site at [nmp.jpl.nasa.gov/st5](http://nmp.jpl.nasa.gov/st5) has the details. Kids can have fun with ST5 at [spaceplace.nasa.gov](http://spaceplace.nasa.gov), by just typing ST5 in the site's Find It field.

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



## TCAA Treasurer's Report – February 2006

OPERATING FUND BALANCE – January 31, 2006 - \$ 1,720.47

### Income

Gary Showers (Dues Renewal) -	\$ 40.00
Michael Rogers (Dues Renewal) -	\$ 40.00
Sharon MacDonald (Dues Renewal) -	\$ 40.00
Genung family (Dues) -	\$ 40.00
Brian Barling (Dues Renewal) -	\$ 40.00
Lee Green (Dues) -	\$ 40.00
Lenore Trainor (Dues Ren., elect. News) -	\$ 25.00
Gerry Schroeder (Dues, elect. Newsletter) -	\$ 25.00
William Carney (Dues Renewal) -	\$ 40.00
Annual Meeting Income -	\$ 360.00

### Expenses

Rebecca Wenning (February Observer) -	\$ 22.41
Roger Phillips (honorarium & mileage) -	\$ 250.00

OPERATING FUND BALANCE – February 28, 2006 - \$ 2,138.06

OBSERVATORY FUND BALANCE – January 31, 2006 - \$ 1,304.08

### Income

Keyholder Renewal (Kevin Brown) -	\$ 5.00
Keyholder Fee (Ed & Karen Duran) -	\$ 10.00
Keyholder Renewal (Chris Franklin) -	\$ 5.00
Keyholder Renewal (Brian Barling) -	\$ 5.00
Keyholder Renewal (William Carney) -	\$ 5.00
Keyholder Fee & Ren. (Gerry Schroeder) -	\$ 15.00

### Expenses

None -	\$ 0.00
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OBSERVATORY FUND BALANCE – February 28, 2006 - \$ 1,349.08

TOTAL TCAA FUNDS – February 28, 2006 - \$ 3,487.14

Respectfully submitted,  
L. Duane Yockey, Treasurer  
Sugar Grove Observatory

### Listing of Official Keyholders (Paid \$10 deposit/\$5 renewal)

Duane Yockey (April 2001, renewed through 2006)	Kevin Brown (May 2005, renewed through 2006)
Michael Rogers (August 2001, renewed through 2006)	Sothilingam family (June 2005)
William Carney (March 2002, renewed through 2006)	Christopher Franklin (July 2005, renewed through 2006)
Carl Wenning (January 2004, renewed through 2006)	Kal Kumar (renewed August 2005)
Brian Barling (February 2004, renewed through 2006)	David Osenga (January 2006)
Lenore Trainor (December 2004, renewed through 2005)	Gerry Schoeder (February 2006, renewed through 2007)
	Karen & Ed Duran (February 2006)



*Welcome New Members:*

Lee Green

David Osenga

Gerry Schroeder



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**The OBSERVER**

Newsletter of the TCAA, Inc.

Rebecca Wenning, Editor  
21 Grandview Drive  
Normal, IL 61761-4071

Are Your Dues Due?

**The Dues Blues?**

If you see a check in the box above, it means your dues are due. To retain membership, please send your dues renewal to our esteemed Treasurer:

Duane Yockey  
508 Normal Avenue  
Normal, IL 61761