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MINUTES OF THE MAY 28TH TCAA BOARD MEETING

Lee Green called the Board meeting to order at 6:55 p.m. at Panera's Restaurant in Bloomington. In attendance were Duane Yockey, Terry Lee Wright, Dan Miller, William Carney, and Carl Wenning. Dave Osenga was unable to be present for the meeting due to a schedule conflict. Lee distributed the agenda, and then began with a quick review of the club's calendar of events. Dan noted that he gave a presentation to Cornerstone Christian on May 27th for about 30-40 students – two classes of students. He talked about evolution of stars. Duane noted that he is scheduled to give a presentation to Sunrise Rotary on June 17 at 6:30 a.m. Dan noted that ALCON 2008 is being held in Des Moines, IA, July 17-19. It was agreed at this point that the club's summer picnic will be held in August, as Carl will not be available along with Duane to present their talk about the February trip to Chile. The date for the picnic has been set as August 2nd and will coincide with that month's public observing session. Volunteers were then obtained for the remaining POS and MOOS sessions; the information will appear in the table Carl prepares for *The OBSERVER*.

Turning to old business, Lee talked about the equipment needs of the club – specifically, the need for a dedicated high-resolution (XGA, 1024x768) video projector and a low cost PC. At this point the Board was made aware of a \$1,500 pledge from a donor who wishes to remain anonymous to pay for a video projector and computer. Lee will take the lead on purchasing the video projector; William will take the lead on purchasing the computer. Carl was asked to see if he could find the club's official non-profit letter the he believes to be in his possession, and provide copies to William and Lee for making the purchases. The decision to purchase a 20mW or brighter laser pointer will be put off until later in the summer.

Logos for the TCAA were then reviewed. Both Terry Lee and Lee brought in a number of examples prepared by vol-

unteer graphic artists. Several suggestions were made for revisions. The final version(s) for the TCAA will be chosen at the August 2nd annual club picnic.

Lee spoke briefly about the club's new website which will be publicly "released" when it is ready to go. He then asked Board members to make recommendations for improvements and additions.

William, as property manager, then talked about problems with water leakage at the SGO. He suggested that a small skirt be added to the exterior dome base to prevent further flow through of rain under windy conditions. Painting of the dome was also mentioned. He pointed out the LX200 hand controller is acting up again, and that the 12" telescope's mirror lock mechanism appears to be broken. Both need to be repaired. William noted, too, that the Meade service agreement on the telescope expires during July and can be renewed for \$304.98. No firm decisions were made other than for William to contact Meade about getting another hand controller and getting a new mirror lock mechanism that William can readily replace by himself without sending in the whole telescope for repair.

In new business, Carl noted that he will be conducting another adult education course on behalf of the TCAA during September/October at Heartland Community College. Details will follow. Carl asked if additional POS brochures need to be printed; there appeared to be no immediate need. Terry Lee asked if the TCAA is still interested in having a display booth at the McLean County 4-H Fair in August. Great interest was expressed. Terry Lee will pursue details about getting this arranged, and will get back into contact with Lee with the details.

Business being concluded, the Board meeting adjourned at 8:13 p.m. at which time Lee went home to work on his Urban observing club and Carl and William went out to SGNC to get in a few observations.

THE WORLD AT NIGHT

The World At Night is a new online program that will produce and present a collection of stunning photographs and time-lapse videos of the world's most beautiful and historic sites against the nighttime backdrop of stars, planets and celestial events. It is part of the 2009 International Year of Astronomy.

The eternally peaceful sky looks the same above all the symbols of different nations and regions, attesting to the truly unified nature of Earth as a planet rather than an amalgam of human-designated territories. Those involved in global programs learn to see humanity as a family living together on a single planet amidst the vast ocean of our Universe.

This global perspective motivates us to work for a better, more peaceful planet for all the world's inhabitants. *Astronomers Without Borders* was created to work toward this goal. TWAN is an innovative new approach to expanding this global perspective. Learn more about TWAN by visiting their web site at www.TWANight.org.

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.

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Membership Dues

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

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

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MINUTES OF THE 2010 NCRAL PLANNING MEETING ON MAY 1ST

The NCRAL planning committee met over supper at LaBomba in uptown Normal starting at 6 PM. In attendance were Carl Wenning, William Carney, Duane Yockey, and Lee Green. Dave Osenga was not able to attend due to a schedule conflict. The meeting began with a review of the prior meeting's minutes.

Carl pointed out the need for detailed organizational activities in the following areas:

- Registrar (registration confirmation, arrange and print agenda, obtain and fill folders with detailed area and conference information, manage registration desk, prepare name tags, ticketing for meals, etc.)

- Food and conference services coordinator (arrange meals and refreshments, schedule conference rooms, get special hotel rates, Duane Yockey volunteered to lead these efforts)

- Speaker coordinator (Webb telescope speaker, Hubble astronaut, Galileo, and one other speaker possibly dealing with radio astronomy, Carl Wenning will coordinate these efforts)

- Tour/excursion coordinator (Challenger Learning Center, ISU Planetarium, SGNC, Normal Theater, Milner Library Collection)

- Publicity/promotions coordinator (Reflector, Sky & Telescope, Astronomy, create and send out information packets to AL member societies in region, promo through ALCors, put up signs at meetings, create presentation using video or PowerPoint, distribute materials at Astrofest and Dark Sky Star Party in 2009, etc.)

- Web services and competitions coordinator (develop web pages in cooperation with registrar, arrange for astrophotography competition, Lee Green will coordinate)

- Door prize and sales reps coordinator (solicit, obtain, display, distribute, thank, manage display placement, William Carney will coordinate)

- Group photographer (Erin Estabrook will do the photography, get prints made and return to meeting same day for distribution, work with registrar to secure orders in advance)

- Master of ceremonies (take charge of overseeing and running the meeting; should not be planning committee chairman)

- Chief financial officer (Duane Yockey)

It was agreed that we need to encourage club members to get involved with the efforts to host the 2010 meeting. Approximately 8-10 members are needed so we can share the load as many hands make for a lighter burden. We believe that this would be a golden opportunity for new club members especially to get to know the inner circle of the club, and learn much more about amateur astronomy as a result. Carl will put out a call

for volunteers over the TCAA listserv. Failing to get sufficient volunteers, efforts will be directed at recruitment of specific individuals.

The Astronomical League has prepared a set of guidelines (<http://www.astroleague.org/al/sitemap.html>) for each of these jobs, and these will be relied upon for planning and time lines. We need responsible people who will see to it that certain jobs get done following a time line. Once these people are identified, they will be asked to prepare a complete list of activities and then a time line for implementation that will be shared with the planning committee.

It was agreed that we might be able to get a joint NCRAL/Illinois Academy of Sciences speaker for a dual talk that weekend. Carl will work with Dan Miller to secure a mutually acceptable speaker.

It was agreed that logos are needed for both the TCAA and the 2010 NCRAL event using the "Generations" theme. Various committee members will bring ideas to the next TCAA board meeting for further consideration.

Duane pointed out that he has several conference centers to consider, the five most realistic sites being the following: The Chateau, Double Tree, Parke Hotel, Holiday Inn Suites, and Eastland Suites. He will check into each, and will give some consideration to setting out a contract with one of these after a decision has been made.

Carl will be speaking with the people at the Challenger Learning Center on Friday, May 2, to talk with them about obtaining an astronaut as a speaker. He noted earlier that the CLC will be moved to Heartland Community College in January 2010, and that they should be able to conduct a social mission for us on Friday evening for the conference.

The meeting was adjourned at about 7:00 PM.

Carl J. Wenning, Committee Chairman

Addendum: Carl spoke with the CLC staff and found out that Illinois native Scott Altman will be the commander of the next shuttle mission to repair the Hubble Space Telescope. We might be able to get him – in cooperation with the CLC – for a very low cost. There is an official procedure for getting astronauts to speak, and the CLC has been very successful in doing so. The staff there knows Scott quite well. We can't request a speaker until about 6 months before the presentation date. Jean Memken has offered to do the job of registrar; Dan Miller has offered to do the job of tour coordinator, master of ceremonies, or anything for which no one else volunteers. Mike Rogers volunteered to do any of the jobs that remain unfilled.

MINUTES OF THE 2010 NCRAL PLANNING MEETING ON MAY 28th

An expanded NCRAL planning committee met at Panera's Restaurant in Bloomington to get their "marching orders" from committee head Carl Wenning. In attendance were Duane Yockey, William Carney, Lee Green, Dan Miller, Terry Lee Wright, Jean Memken, and Michael Rogers. Dave Osenga was unable to be in attendance due to a schedule conflict. As the meeting proceeded, John Werner made a brief appearance. The meeting was called to order at 6:30 p.m.

After a brief review of the minutes from the May 1st meeting, Carl reviewed who had volunteered to take charge of the following duties:

- Jean will serve as Registrar
- Dave and Duane will serve as food and conference services coordinator
- Carl will serve as speaker coordinator and chair of the meeting committee
- Dan will serve as tour/excursion coordinator and master of ceremonies
- Mike will serve as publicity/promotion coordinator
- Lee will serve as web services coordinator
- John will serve as competitions coordinator
- William will serve as door prize and sales reps coordinator
- Duane will serve as financial officer
- Terry Lee will take charge of developing the meeting logo and marketing t-shirts, caps, etc.
- Erin Estabrook will serve as photographer

Carl then charged all volunteer coordinators with developing a task list and time line that will be presented for approval at the next planning committee meeting on Wednesday, July 2nd. Carl will forward to this committee the handbill developed and distributed at the 2008 NCRAL meeting in Port Washington, WI. William will attempt to find and distribute a concise PDF version of the AL planning guide to the committee membership as well so they can individually begin their work.

SO YOU WANT TO BUILD AN OBSERVATORY?

PART 2 OF 2

By John Werner

Getting Back to the Project

After a very nasty winter, I got back to the project in March, with much more to do - lifting the dome, placing and aligning the eight rollers for the 9 foot metal ring, water-proofing, painting, setting and leveling the pier, and getting to first light for the telescope! Although there are some minor details left, I officially called the observatory completed on Memorial Day.

Lifting the Dome

I rented a 10,000 lb. material handler for the lifting. Dan Miller was enrolled into this project. The first adventure was a trailer wheel flying off into a muddy field en route to the worksite. The rental firm was so embarrassed with not having done a safety check; they transported the handler by semi a couple days later! Once on location, safety was paramount - multiple cable straps and chains to do the hoist, which came off very well.

Placement of eight rollers was a challenge, as we had to achieve good spacing across the ring as well as proper height for 360 degree rotation, without too much of a gap for water intrusion. Handyman jack and muscle power to do this critical job. Initially it took two men to rotate the dome and after weeks of playing with adjustments, I have it down to a one-man capable effort to rotate. Only hurricane wind force will lift this dome!

You will see in the attached photo that I had to build out an aluminum skirt to manage water away from the base, as the base dimensions were slightly larger than the dome.

The Warm Room

I wanted a comfortable warm room. I included a small refrigerator, a microwave, a futon, a six-foot counter, a small window to the observing platform, and a radiant heater - all packed into an 7' by 10' footprint. Telescope cable routing to the warm room was easy, as I had the elevated platform for the dome area. Cables were routed through a dryer vent mounted into the warm room wall.

The eight, high-mounted warm room lights are on a rheostat. There are no windows to the outside of the observatory for security reasons. I can control the telescope pointing, camera operation, and photograph download from the warm room. Unfortunately, I have to manually rotate the dome at this time - a future project to automate! I have an astronomy-only dedicated computer. I installed low-



Farm View Observatory

Continued on page 6)

E/PO EVENTS DURING MAY

JUNE SKY GUIDE

07	Mercury is in inferior conjunction, 10 A.M.	
	The Moon passes 1.1° south of Mars, 9 P.M.	  
08	Venus is in superior conjunction, 11 P.M.	
09	The Moon passes 3° south of Saturn, 4 A.M.	 
12	Asteroid Juno is at Opposition, 11 A.M.	
17	The Moon passes 0.2° south of Antares, midnight	  
20	The Moon passes 2° south of Jupiter, 8 A.M.	 
	Pluto is at opposition, 3 P.M.	
	Solstice (northern summer/Southern winter begins), 7 P.M.	
23	The Moon passes 0.8° north of Neptune, 4 A.M.	 
25	The Moon passes 4° north of Uranus, 11 A.M.	
28	Asteroid Ceres is in conjunction with the Sun, noon	
30	Mars passes 0.7° north of Regulus, 11 P.M.	  

A dozen members of the general public (as well as a bulldog named Copper) attended the May 3rd POS. Eight club members (Carl Wenning, David Hahn, Duane Yockey, Lee Green William Carney, Brian Barling, Dan Miller and his son) were also present. With the sky clearing only around 6 p.m., a breeze, and cool temperatures, the session was not well attended. Nonetheless, Carl used the Night Sky Network's PowerPoint program "How telescopes changed our understanding of the universe" to make a 20-minute presentation. He followed this with a 10-minute laser-mediated sky lecture during which he was able to point out Mercury hovering about 4° above the western horizon during late twilight.

Following these introductory events, everyone moved to the telescopes for viewing. Dan brought a new 80mm refractor, Lee brought his 14" SCT, Brian brought his 12" Newtonian, Duane and Carl both brought their 11" SCTs, and William staffed the SGO's 12" SCT where he showed everyone in attendance the dim (mag 8.4) and diffuse Comet C/2007 W1 Boattini. The members of the general public remained until around 10:30 p.m. and many among the membership continued viewing until 11 p.m. with expectations of returning the next night.

Following this session, a nice letter of thanks was received from one of the participants, Stephen Thomas who wrote SGNC's Angela Smith, "ANGELA --- last Saturday evening, while visiting my elderly aunt who lives nearby, I came over for a sundown walk and found the Twin City Amateur Astronomers just arriving to set up their gear. It was a calm and clear night, and I was delighted to spend the next hour and a half with this group. They are very nice and well-informed people, several of them distinguished scholars in related fields. So this was a fine surprise, and a great treat for me. I knew that they came to Sugar Grove periodically, but this was my first face-to-face experience. This is a wonderful adjunct to the other fine

programs at Sugar Grove...."

On Thursday, May 8th, Carl Wenning, Dan Miller, and two of his students from Millikin University gave an 8 p.m. presentation to Marty's Morris' 4th graders at Weldon Springs interpretive center. Carl gave an hour-long constellation talk using Voyager 4 computer software, and Dan followed up with a brief description of telescopes and viewing the sky. Unfortunately, the forecast for partly cloudy skies by around 9 p.m. never reached fruition. Nonetheless, the 13 students and 16 parents enjoyed the offerings. TCAA members Marty and Carl worked with Weldon Springs SRA nature interpreter Carol Thompson to make this event possible.

Duane Yockey gave a presentation to the Bloomington Kiwanis Club on Monday, May 19th. His program was a PowerPoint photographic astronomy tour of the universe as we know it. He started at earth showing naked-eye views of the Milky Way and views of Earth from satellite or the moon missions. He then proceeded talking about solar system objects, and continued with objects in and around our galaxy (open clusters, globular clusters, nebula). He drew the program to a close with objects outside our galaxy (Andromeda galaxy, other galaxies, clusters of galaxies, the Einstein Cross, Hubble deep view, etc.). He finished with views of Earth at night (with discussion of light pollution). He took the opportunity to share the POS brochure with those in attendance, slightly more than 100 in number. Immediately following this presentation Duane was asked to give another such presentation at a Sunrise Rotary Club meeting in June.

Dan Miller noted at the May Board meeting that he had given a presentation at Cornerstone Christian on May 27th for two third-grade classes of students numbering between 30 and 40 total. He talked about evolution of stars.

MAY OBSERVERS' LOG

At the May 3rd POS members continued working on AL Observing Programs. William is one comet away from the Astronomical League's gold award for comet observing. Lee picked up about ten Herschel objects and his count now stands at 393 of the 400 required objects for the Herschel Club observing award (and six behind Carl who has 399).

Carl and Duane continued to work on their Southern Sky Telescopic Club observing program. On the night of February 19/20 this dynamic duo observed from the Southern Cross Observatory, recording 10 objects in the program's "far south group" [-65° to -90° declination], 21 objects from the "Southern Milky Way Band" [-48° to -64° declination], and three ob-

jects from "the rest of the Southern Skies list" [-48° to -11° declination] for a total of 31 of the total 50 objects required for award recognition. Most of the remaining 19 required objects can be readily viewed from central Illinois. Duane has a few of the remaining 19; Carl has 8 of them.

On Sunday evening, May 4th, there was a small turn out of dedicated observers who took advantage of the clear sky - Duane Yockey, David Hahn, Carl Wenning, Lee Green, and William Carney. Duane did some observing with the SGO earlier in the evening and picked off eight additional objects for his Southern Sky Telescope Club observing program. He left around 10:30

(Continued on page 5)

POS and MOOS COORDINATORS NEEDED

For the record, here is the list of the 2008 Public and Members-Only Observing Sessions at Sugar Grove Nature Center. Two coordinators per session are preferred. Please add your name to the list if you are willing to co-host one of these Saturday sessions. See the POS brochure available through the TCAA website for details about times.

2008 Date	POS Topics	POS Coordinator(s)
June 7	A Big Dipper Full of Stars – Ursa Major	Lee Green
July 5	Mighty Hercules and His Treasure – M13	Duane Yockey
August 2	Black Hole Survival and Cygnus X-1	Dan Miller
September 6	Our Galaxy, Our Universe	Lee Green
October 4	Andromeda and Her “Rock” – M31	Carl Wenning

Members-Only Observing Sessions occur one week earlier than the above POS – on Saturdays nearest the full moon. Two coordinators (one of whom should be an SGNC key holder unless they have their own telescope they can bring along) are desired for all of these Saturday sessions. Please sign up with Carl Wenning (309-830-4085, wenning@phy.ilstu.edu) if you are willing to assist with coordinating any of these events.

2008 Date	Location	MOOS Coordinator(s)
June 28	SGNC (9:33 p.m.)	Duane Yockey
July 26	John Werner’s	Details to follow in newsletter (9:13 tentative)
August 30	SGNC (8:18 p.m.)	Dan Miller, Carl Wenning
September 27	IDSSP, Springfield	Details to follow in newsletter (IDSSP)
October 25	SGNC (6:45 p.m.)	William Carney, Carl Wenning

MAY OBSERVERS’ LOG (CONT.)

(Continued from page 4)

p.m. at “even keel” with Carl who is also working on this program. David had a good time viewing using his 8” Dobsonian reflector; he left around 11 p.m. Carl began the Binocular Messier Observing Program that evening, and picked off 27 of the required 50 objects using 15x70 Celestron binoculars and the Voyager 4 computer program as a guide. He, along with several others, observed four identified third-magnitude satellites (among at least ten others) as part of another Astronomical League’s satellite observing program. Carl left at 11:45 p.m. Lee found another 11 Messier objects “by hand” bringing his total to 35. He also observed four more Herschel objects bringing that total to 397, and only two behind Carl. Lee departed SGNC around 1 a.m. leaving William Carney at work in the SGO. William ultimately observed 91 objects from among seven constellations for his Herschel viewing program. He stayed out viewing until just after 2 a.m. William later noted, “I only need one more asteroid for the regular award and eight comets for the gold award.”

On Monday, May 5th William went out and stayed till about 11:30 p.m. After checking the numbers, he noted that he has only 67 more objects to observe on his Herschel 400 list. Carl has one to go, and Lee has three to go. Brian Barling isn’t far behind. Hopefully, they will all earn their Herschel 400 observing awards this year. Brian is making his observations the old fashioned way, by star hopping! No “goto” telescope for this inveterate observer.

“Taking advantage” of the light-polluted city sky (along with a 25% crescent moon), Carl began the Urban Club observing program on Friday, May 9th. From 9:10 to 11:30 p.m. he was able to observe four double star systems and nineteen deep sky objects under the city lights of Normal. This constitutes 23 of the required 100 observations

for this Astronomical League observing award.

On the evening of May 21st Carl again took advantage of the clear city sky to make more observations for the Urban Club program (adding 14 more to his list for a total of 37) and started on the AL Double Star Award. Observing for about 2.5 hours starting around 10 p.m., he was able to observe, draw, and otherwise record 27 doubles. He has chosen to start this observing program so he can take advantage of the clear skies even if the moon is present that evening. City and moonlight have little affect on the observation of binary star systems.

Following the Board meeting on May 28th, William Carney and Carl Wenning headed out to SGNC to take advantage of the excellent observing conditions. Carl was joined by his friend Tom Holbrook, a physics teacher from University High School. Carl and Tom observed several dozen Messier objects with William joining them between astrophotos using the SGO. Carl and Tom observed from about 9:45 p.m. to 11:45 p.m., with William continuing until 12:40 p.m.

Upon returning home on the morning of May 29th, Carl set up shop with his CPC 1100 in his front yard to continue his urban and double star observing programs. He was able to observe an additional 17 urban objects and 23 double stars. He also obtained some exceptionally good views of Jupiter by the time he concluded observations at 3:15 a.m. He also viewed 8 additional Southern Sky Telescope Club objects giving him 46 of the required 50 objects.

The May 31st MOOS at SGNC was attended by William Carney, Duane Yockey, Sheri Rodgers and her two sons, Carl Wenning, and two new TCAA members whose names the author did not catch. The group spent time working with a Scout group camping on location, and making primarily double star (Carl) and southern sky telescope club observations (Duane).

STARGEEZER!

Reflections of an Aging Astronomer

The opinions expressed by the Stargeezer are entirely his own. They do not necessarily represent the opinions of the TCAA or any other of its members.

“When all the temple is prepared within,
Why nods the drowsy worshipper outside?”

– *Rubaiyat* by Omar Khayyam

It would be great if those TCAA members lurking on the fringes of the club would join us active observers out under the stars. Because they are not lacking an invitation to do so (with a comprehensive club newsletter, an active listserv, and plenty of examples of others regularly getting out to observe), I conclude that they simply don't know how to be amateur astronomers.

While this might or might not be the case, I'm going to offer some pointers about how one actually goes about being an amateur astronomer. According to the Online Etymology Dictionary, an amateur is “one who has a taste for (something)” from Fr. Amateur; “lover of” from O.Fr., from L. *amatorem* (nom. *amator*) “lover,” from *amatus*, pp. of *amare* “to love”. Meaning “dabbler” (as opposed to professional).”

I sort of like the characterization of the term dabbler and can see it now, “Twin City Dabbling Astronomers.” Well, that just doesn't have the ring to it I would expect, but one can get the drift. An amateur astronomer is one who dabbles. Here's how we can dabble in amateur astronomy:

- Borrow and read the club's astronomy books
- Build or buy a high quality telescope
- Subscribe to an astronomy magazine
- Surf the Internet for astronomical topics
- Download and use free planetarium software
- Get to know the constellations
- Study constellation mythology
- Watch the moon and planets
- Attend members-only observing sessions
- Using binoculars and star maps to find celestial objects
- Borrow a club telescope
- Use your own telescope

Don't be shy about your lack of astronomical knowledge. We all started out as quizzical as you might be right now; we overcame our shyness, put aside our embarrassment, and plunged right in. Within a few months we all found ourselves members of the “inner circle.” This summer will be a great time to get involved in amateur astronomy as a member of the TCAA. We have lots of events scheduled, and hope that you will make the effort to join us.

SO YOU WANT TO BUILD AN OBSERVATORY?

PART 2 OF 2 (CONT.)

voltage red lamps in the dome area. I have at least two outlets per wall installed. One can not have enough outlets to power astronomy equipment accessories!

In Conclusion

In a few words – I am pleased with the result. Sure, there were missed details – like not installing outside outlets for visiting astronomers. Now there will be more than a couple nights a year where I will be visiting this dark site – just because of the convenience and features of a permanent and comfortable observing site. Future plans include college student visits and arrangements with local school classes, neighbors, and TCAA members! Whew! On to the next project.



Warm Room

First Light from Farm View Observatory



Lagoon Nebula

CONSTELLATION OF THE MONTH: VIRGO—THE VIRGIN

Virgo is a large constellation visible in the early evening during the late spring months. One of the twelve Zodiac constellations, Virgo lies across the ecliptic and the Sun passes through between September 16 and October 31.

In mythology, Virgo is associated with several myths. In one, she is Atalanta, the only woman traveling on the Argo with Jason on his quest for the Golden Fleece.

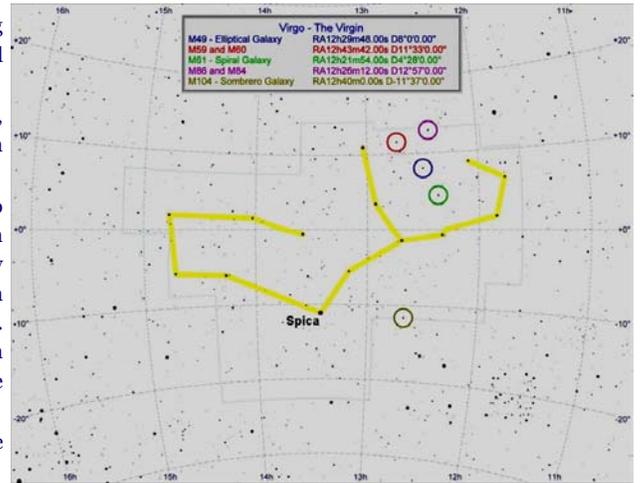
In another tale, Virgo is recognized as Ceres the goddess of corn, who is also known as Demeter, holding an ear of corn (represented by bright star Spica) in her left hand. When her beautiful daughter Proserpine was seen and abducted by Pluto, the god of the Underworld, Ceres was so distraught in her extended search of her missing daughter that she abandoned her fields, and all the crops failed. Jupiter intervened so that Proserpine could spend six months of the year with Ceres during the spring and summer, but must return to Pluto for the rest of the time. It is said that from this arrangement the seasons were born.

Astronomically, Virgo is the 2nd largest constellation covering 1294 square degrees. It is the 21st brightest constellation.

Among the named stars is the brightest star in Virgo named Spica which is a spectroscopic binary. Spica is easy to find by following the tail of Ursa Major in an arc through Arcturus in Bootes continuing on to Spica. The beta star, Zavijava and the gamma stars, Porrima, are two closely spaced stars that are listed as variable stars. The sigma star is called Vindemiatrix and the eta star is Zaniah.

Virgo is an important constellation because it is home to a large number of galaxies. There are so many galaxies that the area is referred to as the Virgo super-cluster. Its location away from the plane of the Milky Way galaxy avoids the obscuring dust lanes of the galactic plane and gives a clear view into the heart of this heavily populated area. There are 11 Messier objects in Virgo, more than any constellation except Sagittarius which has 14.

Among the large number of notable deep sky objects are M49, a bright Elliptical galaxy, M61, a spiral galaxy, M59 and M60 two closely spaced elliptical galaxies and M84 and M86 which are space even closer. M104 is also known as the Sombrero Galaxy is a spiral galaxy with a prominent dust lane around the edge.



AL OBSERVING PROGRAMS

What follows is a listing of the status observers pursuing AL observing programs as of May 2008. If you would like to have your information included in next month's listing, be certain to forward your observing totals to Carl.

	William Carney	Lee Green	Duane Yockey	Carl Wenning	Sandy Wolford
S. Sky Binocular 50			50*	50*	
S. Sky Telescope 50			34	46	
Messier Club 110	(110)	35		(110)	(110)
Binocular Messier 50	(100)	3		23	
Herschel 400	352	397		399	(400)
Urban Club 100	(100)	63		54	
E/O Satell. Club 24				4	
Comet Club (40)	32				
Arp Galaxy Club ()					53
Dbl. Star Club 100				55	(100)
Lunar Club ()	all				
Asteroid program ()	22				

- Program complete – will receive AL award at next TCAA Annual Meeting in February 2009. Numbers in parentheses (#) indicate that award has been both earned and received.

HISTORY OF THE TCAA

Beginning with the article, "The Origin of the Twin City Amateur Astronomers" in the May 2007 issue of The OBSERVER, TCAA Historian Carl J. Wenning began chronicling the history of the club. He will continue this series, culminating with the 50th anniversary of the club in 2010.

The End of an Era – Part A

1990-1994

It seems inauspicious to begin this chapter of the history of the TCAA by talking about endings; however, endings impacted the membership in this organization in a much greater way than ever before during this five-year period. First and foremost among these endings was the loss of our co-founder Bertha Kieviet on October 6, 1994. She had been an active member of the club since day one and continued to be so up to the very end – even attending the very last meeting before her death a few weeks later. Other club members, and past members, passed from the scene as well. This included Thomas Moore (1990), Howard Southerland (1991), Eugene Miller (1991), Miriam Johnson (1993), and Aubrey Johnson (1994). Somehow the club would never be the same without them.

Not only did people pass from the TCAA scene, so it was with certain club-sponsored events and activities. Among the casualties was Astronomy Day – least for several years; ARC (Astronomy Rendezvous and Conference) last held in August 1990; and Adult Education, last held in spring 1993 (to be started up again in 2006). There were several disappointing events as well during this era. Comet Austin, expected to rival Comet West of 1976, fizzled during the spring of 1990. The supposedly dazzling Perseid Meteor storms of 1993 and 1994 were abject failures for US observers, though a few bright meteors were observed by non-Illinoisans who had clear skies in choice locations. The Community Astronomy Rendezvous, the TCAA's answer to the DAAC Jamboree, scheduled in May and held in September 1993 also fizzed, but not for want of trying. The 1992-93 resurrection of the Junior Astronomers division of the TCAA also fell flat due to the fact that there was insufficient time available to those making an effort to resurrect the division. The TCAA involvement in ISU's College for Youth also went by the wayside. The traditional Christmas party has changed from the large event it once was to a simple pizza party. Nonetheless, many good things happened in the five years as well.

On January 25, 1991, the TCAA acquired by donation the Marie Antoinette Finnigan Observatory at Downs that was subsequently outfitted with a C-14 telescope through a loan by club member Michael Rogers. Through the generosity of the site owner, Mr. Jim Jones, the observatory continued on at the original location until the late 1990s.

Throughout the course of the five years chronicled in this section, the membership continued to follow its mandate to provide public service unabated. During the summer of 1990 the TCAA membership was instrumental in putting on a "Family Space Odyssey" at the ISU Museum in the former Red Bird IGA on Main Street in Normal.) They also assisted with science open house solar displays on the university campus.

Nighttime observing sessions for the general public were numerous. These included monthly summer sessions with the Bloomington Parks and Recreation Department at Ewing Park III, and solar observing at Fairview Park. Several special sessions were held for the public that featured the Shoemaker-Levy/Jupiter impacts during July 1994. Additionally, several lunar eclipses were successfully observed with the general public including a particularly beautiful lunar eclipse (eclipsed moon rising) on December 9, 1992. Eight-year-old Rebecca Wenning observed the lunar eclipse of November 28, 1993. During this event she was able to determine the longitude of Bloomington-Normal by working with her father. Using a both a salt-based hourglass and the method first employed by Christopher Columbus, she had an error of only one-quarter of one degree in longitude. An article about this feat appeared in *The Science Teacher* several months later.

Not to be missed was the phenomenally successful annular eclipse of the sun on May 10, 1994, when hundreds assembled for TCAA-sponsored observing sessions at Ash Park in Normal and on the IWU campus in Bloomington. (TCAA member and ISU Planetarium Director Carl Wenning prepared a 16-page booklet called "The Great Eclipse." Some 400 schools in Illinois adopted the publication as their official guide to the event.) Later that year, Sharon MacDonald, Roy and Barbara Ostberg, and Carl Wenning joined two other non-club members to travel to Sucre, Bolivia, to observe the November 3rd total solar eclipse from that location. They were quite successful.

Public service also extended to non-observational activities. Included in the extensive listing are the following: providing a guest speaker for the Decatur Area Astronomy Club's Jamboree (every year since its inception), writing three *Pantagraph* features (moon-Venus, Perseid meteors, and a lunar eclipse), sponsorship of *StarDate* on WGLT-FM since 1992 (made possible by the incredible generosity of Mike Rogers and Jean Memken), and *Skyline* (a monthly telephone update provided by Carl Wenning and later by Thomas Willmitch through the ISU Planetarium). During the summers of 1992 and 1993 Sharon MacDonald, David Portree, and Carl Wenning presented programs through ISU's College for Youth. Of particular note were the programs "Rockets to Space," "Junior Astronomers," and "Junior Planetarium Directors."

TCAA Treasurer's Report – May 2008

OPERATING FUND BALANCE – April 30, 2008 - \$ 2,533.49

Income

Martin Morris (dues renewal) - \$ 40.00

Jim Ryan (dues renewal) - \$ 40.00

Chris Franklin (dues renewal) - \$ 40.00

Expenses

LYB Inc. (May Observer) - \$ 20.88

Abrams Planetarium (sky calendars) - \$ 105.60

Secretary of State (Annual Report Fee) - \$ 8.00

Astronomical League (Annual Dues) - \$ 195.00

OPERATING FUND BALANCE – May 31, 2008 - \$ 2,324.01

OBSERVATORY FUND BALANCE – April 30, 2008 - \$ 1,944.69

Income

Donation (Jim Ryan) - \$ 60.00

Keyholder renewal (Chris Franklin) - \$ 5.00

Expenses

None - \$ 0.00

OBSERVATORY FUND BALANCE – May 31, 2008 - \$ 2,009.69

TOTAL TCAA FUNDS – May 31, 2008 - \$ 4,333.70

Respectfully submitted,
L. Duane Yockey, Treasurer

Sugar Grove Observatory

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

Duane Yockey (renewed through 2008)

Michael Rogers (renewed through 2008)

William Carney (renewed through 2008)

Carl Wenning (renewed through 2008)

Brian Barling (renewed through 2008)

Christopher Franklin (renewed through 2008)

David Osenga (renewed through 2008)

Gerry Schroeder (renewed through 2007)

Josh Lindsey (renewed through 2007)

Andrew Morrison (February 2008)

Dan Miller (renewed through 2008)

Lee Green (April 2007, renewed through 2008)

UPCOMING EVENTS

June 7—POS

July 2—NCRAL Planning Meeting

July 17-19—ALCON, Des Moines, IA

August 2—Annual Picnic & POS

IDSSP NEWS ALERT

Just a heads up for TCAAers that the Illinois Dark Skies Star Party is slated for September 25-28, 2008, at Jim Edgar Panther Creek State Park northwest of Springfield. TCAAers Lee Green, Carl Wenning, and Sandy McNamara-Wolford attend this session last year and can attest to

The OBSERVER

Newletter of the TCAA, Inc.

Erin Estabrook, Editor
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Normal, IL 61761

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

Visit the Twin City Amateur Astronomers
on the web at
www.twincityamateurastronomers.org/