

**IN THIS ISSUE:**

ANOTHER STAR JOINS THE TCAA FIRMAMENT A TRIBUTE TO LENORE TRAINOR	1
PRESIDENT'S MESSAGE: TIME	2
WHAT'S BEYOND THE BLUE	3
ASSISTANCE NEEDED WITH TWO DISPLAYS	3
ILLINOIS DARK SKIES PARTY SEPTEMBER 13-16, 2007	3
OBSERVERS' LOGBOOK FOR AUGUST	4
SEPTEMBER SKY GUIDE	4
AUGUST POS ANOTHER SUCCESS	5
CHASING M13	5
PROFILES IN AMATEUR ASTRONOMY: LEE GREEN	6
HISTORY OF THE TCAA: PART 5	7
MISSING OUT ON OBSERVING SESSIONS?	7
MCDONALD OBSERVATORY VISIT	8
ASTRONOMY EQUIP- MENT	8
TREASURER'S REPORT	9
OCTOBER SKY MAP	

## ANOTHER STAR JOINS THE TCAA FIRMAMENT A TRIBUTE TO LENORE TRAINOR

It is with great sadness that we note the passing of longtime TCAA member Lenore Trainor. Lenore (shown in the accompanying 1996 photograph) succumbed to cancer on Friday, August 3, after a prolonged and heroic fight. She passed away at home with her husband and daughters at her side. She was only 50 years old.

Born to Edward and Mary Markovich on September 28, 1956, in Peoria, Lenore graduated from Manual High School and Illinois Central College where she received training as a nurse. She married Stephen P. Trainor in Peoria on June 13, 1981. Lenore was the mother of three lovely daughters – Briana, Katrina, and Laurissa.

Lenore joined the TCAA in November 1990 following participation in a club-sponsored adult education course taught at ISU. Thereafter she attended numerous club functions accompanied from time to time by her daughter Briana. Lenore evidently had developed a passion for amateur astronomy as demonstrated by her later attendance at the Universe '92 convention in Madison, WI, the Universe '94 convention in Phoenix, AZ, and the Universe '97 convention in Chicago to name but of few. She also attended the '94 NCRAL convention in Burlington, Iowa, and the '96 Astrocon convention in Rockford, IL. She made repeated visits to Astrofest near Kankakee at this time as well.

Lenore was enrolled in the Astronomical League's list of Binocular Messier Award winners on March 18, 1996. On March 23, 1996, she was shown in a *Pantagraph* article as one of several members of the TCAA who guided the public in viewing Comet Hyakutake the previous evening at Comlara Park. She even hosted one of the TCAA's most lively and best attended Christmas Party in the late 1990s. She was added to the list of

honorary Messier Award winners on February 19, 1997. Her passion for dark skies led Lenore to travel several times out west to vacation all alone to observe with her favorite telescope from dark sky sites. So pervasive was Lenore's commitment to amateur astronomy, she was inducted to the G. Weldon Schuette Society of Outstanding Amateur Astronomers in 1997. Up to that point only six other TCAAers had been so recognized in the 37-year history of the club.

Sharon MacDonald, Lenore's neighbor and perhaps closest friend within the TCAA remembers, "I first met Lenore in the fall of 1990 when she attended the Observational Astronomy course that Carl and I taught in the Bloomington-Normal Adult Education Program from 1985 to 1993. She quickly joined the TCAA and we easily became good friends and observing partners. She acquired a 10" Odyssey 'scope and frequently attended observing sessions or joined me in my back yard. One sure sign that Lenore was present somewhere in the dark was the ever-present package of Oreo cookies on the table by the sky charts. She became a dedicated amateur astronomer who persisted in searching for deep sky objects, and it was always fun to observe with her."

"We particularly liked to attend Astrofest together, in part, because for both of us, our idea of camping out was Holiday Inn. Our idea of "roughing it" was Motel 6. One year Sandy McNamara-Wolford enticed me to try camping at Astrofest. I really enjoyed the experience, but I was never able to convince Lenore that camping (at least the way Sandy did it) could be enjoyable. We always traveled to Astrofest in separate cars so that Lenore could attend church services on Sunday while I drove directly home to arrive in time for the start of the NFL game.



Lenore enthusiastically attended astronomy conferences. She could never learn enough, and her interest in the talks made the conferences all the more fun. The trip home from Universe '97 in Chicago was filled with good conversation about astronomy, only briefly interrupted by a stop at the Joliet Mall where she insisted on introducing me to their excellent cinnamon buns."

"I do find comfort that Lenore lived her life to the fullest. I regret that we never chased a total solar eclipse together, but we postponed that for the future only because Lenore's life was so occupied with other things she enjoyed and loved, most especially her family, her husband Stephen and her daughters Briana, Katrina, and Laurissa. Lenore was a kind and decent person whose gentle nature masked quiet strength and determination. It was a privilege to have been her friend and to have observed with her. The night sky will always bring back memories of good times and friendship."

(Continued on page 2)

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## **ANOTHER STAR JOINS THE TCAA FIRMAMENT (CONT.)**

*(Continued from page 1)*

As other evidence that Lenore had a lively faith life, Sandy McNamara-Wolford recalled with a grin “how – at the ‘96 Astronomical League convention – Lenore “had to go shopping for an emergency dress to attend church that weekend because she forgot to pack anything other than blue jeans.”

One of Jean Memken’s fondest recollections of Lenore was about 10 years ago when she ran into Lenore on the way to a professional conference. Jean noted, “As I was getting on the plane at the Bloomington-Normal airport, there was Lenore in the next seat. She was heading out to her first trip to Star Hill Inn in New Mexico on her own. We had a great chat on our way up to Chicago, and she showed me the brochures about Star Hill. She was going to live out in the woods by herself in a little cabin and spend the nights observing. I thought she was incredibly brave to do something like that. I couldn’t imagine doing that myself, but she was the inspiration for our family going out there and visiting Star Hill ourselves last summer. It is a wonderful place for amateur astronomers to vacation.”

Carol Beaman, writing on behalf of herself and her husband Barry, penned the following thoughts. “I believe our paths first crossed Lenore’s back on May 10, 1994, when Barry and I joined some of the TCAA members and a couple hundred students outside Mark Evans Observatory to watch the annular

eclipse that passed through there. It was several years later when we again ran across several TCAA members at an AstroFest star party. Because of our own history with the TCAA – we had been members back in the early 60’s – we struck up a conversation. We looked forward to seeing the TCAA representatives at AstroFest each fall. Usually that contingent consisted of Sharon, Sandy and Lenore. We shared many looks through telescopes and a lot of conversation at each star party.”

“Lenore often asked about our son, Alan, as did the other folks. We stayed in touch via the Internet throughout the year. We will always be grateful for the moral support that Lenore gave us as she joined us in court on several occasions.”

“When Lenore revealed to us over a year ago that she was facing a diagnosis of breast cancer, we were drawn especially close. I had faced the same decisions that she did some 17 years ago. I was the lucky one. Lenore’s cancer was not to be beaten. She kept up a brave face and updated us regularly on her progress. Her faith and spirit were inspirational. She mounted a good fight. We thought she had won and then the cruel trick that is cancer came back.”

“We will miss seeing Lenore at astronomy functions. I will miss seeing her e-mail address in my inbox. But one thing is for sure, she now has no pain, no fear and spectacular heavens to enjoy. God bless and keep her. We pray that Steve and their children will find comfort

in the peace and healing that she now has.”

Lenore’s struggle with breast cancer kept her from attending most TCAA events during the past year, and doing her beloved observing. The last TCAA event that Lenore attended was the 2007 Annual Meeting in February. During that event she sat with Carl Wenning. Carl subsequently remarked, “Lenore talked to me about her situation in a very forthright manner. While it was clear she was greatly concerned about her health, she appeared to be handling the situation with great courage and poise.”

With approval of the TCAA Board of Directors, a beautiful bouquet of flowers with condolences was sent to Lenore’s family on behalf of the membership. TCAA members William Carney, Duane Yockey, Jean Memken, Mike Rogers, Brian Barling, Sharon MacDonald, Carl Wenning, and Rebecca and Chrystian Vieyra attended the evening visitation on Monday, August 6<sup>th</sup>. Sharon, Carl, Rebecca, and Chrystian attended the funeral service when Lenore was laid to rest on Tuesday, August 7<sup>th</sup>, in the Holy Cross Cemetery just east of Merna, IL. As William Carney noted, “She always seemed to have a smile. That will be sorely missed.”

Donations in memory of Lenore can be made to the International Dark-Sky Association, 3225 N. 1<sup>st</sup> Ave., Tucson, AZ 85719-2103 ([www.darksky.org](http://www.darksky.org)).

## **PRESIDENT’S MESSAGE: TIME**

**By Lee Green**

When I was young I heard a joke.

“They say as you get older, time seems to speed by faster. By the time you’re 70 years old, you’re having breakfast every 15 minutes.”

While I used to think that was funny, it’s not so funny now that summer is nearly over.

All the tasks you wanted to accomplish while it was warm, there’s still time, but this month we will pass through the autumnal equinox. So get going, finish your summer projects, plan your autumn projects and don’t forget the include the TCAA this fall. We get some of our best skies during autumn, so plan to join in our upcoming observing sessions and make this a stellar autumn season.

## WHAT'S BEYOND THE BLUE?

~ reflections on life as an amateur astronomer ~

by Carl J. Wenning

A few years back, when I was still director of the ISU Planetarium, I received a phone call from an 80-year-old gentleman. He said that he had a question that he wanted answered before he died. "You know," he said, "when you look up at night you see all those stars. Then, when you look up during the day, all you see is blue. Tell me, what's beyond the blue?"

I was rather taken aback by this query. I asked the gentleman, "Have you not in all your 80 years taken the time to watch a single sunrise or sunset? Surely, had you done so you would know the answer to your question." He rather sheepishly replied that he had not. I resolved then and there to take advantage of what I saw as a teachable moment.

I replied, "I hope that you don't mind, but I'm not going to tell you the answer to your question. I really do think that you should watch a sunrise or a sunset. If you do, you'll find the answer to your question." The gentleman accepted my gentle admonition, and promised to do so. I don't know if he ever did, but I certainly hope so. Can you imagine living 80 years never having watched the stars come out at night to adorn the firmament, or having never seen the child of morning – rosy-fingered dawn – painting the eastern celestial vault?

I think that we as amateur astronomers often-times fail to take advantage of the many opportu-

nities available to us to observe the heavens. There are many members in this club who I have never met. Many are those who are happy enough to pay their membership dues, but never take advantage of the opportunity to gaze serenely at the heavens through our many TCAA offerings including MOOS, POS, and other "private" observing sessions.

Now, don't get me wrong. I, as well as all the more active observers of the TCAA, appreciate the financial support of armchair amateur astronomers, but I would much prefer to share the camaraderie that should be part and parcel of group of fun-loving astronomers. The very name "amateur" is derived from Latin meaning "to love." If one is truly an amateur astronomer, one would find time to enjoy the very thing that one loves. A few minutes here, a few minutes there, everyday, is what a hobby is all about.

Reverend Loyde Strouse, a very active member of the TCAA during the 1960s, once sensed this same feeling and wrote a poem called "The Sky is Yours." Early club members such as Bertha Kieviet and Weldon Schuette (seen in the 1985 photograph) sometimes referred to it, but could not provide any details about it when asked about it years later. Nonetheless, I have recently come across copies of the TCAA astronomy column "Central Illinois Sky" published in the *Panta-*

*graph* on April 10, 1966. The column, prepared by Rev. Strouse, states, "Let's get acquainted with the sky. It belongs to you, you know; all its glory, its beauty, its mystery and its challenge come to you entirely free. There are no taxes, no rent, no legal documents, and no time limit."

That was true more than 40 years ago, and is the same today. The only real difference is that today TCAAers have much more access to the sky with the Internet, e-mail, members-only and public observing sessions, and bigger and better equipment than ever before.... While in some ways things are worse today with so much light pollution and competition for our time – both day and night – amateur astronomers should make time to get to know the sky that few others ever do. Don't wait until you are 80 to do this; all too frequently time runs out long before that.



## ASSISTANCE NEEDED WITH TWO DISPLAYS

On Saturday, September 8th, the Normal Public Library will sponsor its second Annual Hobby Show from 1:00 to 2:15 p.m. Hobbies represented will be the likes of model trains, scrap book making, card collecting, woodworking, crafts, stamps, coins, miniature books, needlework, and even amateur astronomy. Lee Green has agreed to represent the TCAA at this event, and he can use some support. Please let Lee know if YOU would be willing to join him on this day ([lee@starlightsoftware.com](mailto:lee@starlightsoftware.com)).

SGNC's Angela Smith has asked the TCAA to participate once again in the Autumn Celebration. This year the event falls on Saturday, October 5. Setup is at 9 a.m. with the kickoff for the day beginning at 10 a.m. Carl Wenning has agreed to set up a telescope display (white light and Hydrogen-alpha) and a display with brochures and flyers. He could use some help with the Sugar Grove Observatory open-house which Angela has also requested. Please let Carl know if YOU can be of help to pass out brochures, answer questions, or watch over the observatory ([wenning@phy.ilstu.edu](mailto:wenning@phy.ilstu.edu) or 309-454-4164). No experience necessary!

## ILLINOIS DARK SKIES PARTY SEPTEMBER 13-16, 2007

The Illinois Dark Skies Star Party will be held September 13-16 at Jim Edgar Panther Creek State Fish and Wildlife Area, and several TCAA members are planning now to be in attendance. Among them are Sandy McNamara-Wolford and Carl Wenning. Sandy will be coming in from Indiana with her husband Mike, and Carl will be driving over from Normal on that Thursday evening. If anyone is interested in joining Carl, please contact him. He has plenty of camping equipment, and is willing to share.

There are several good reasons to attend this star party: 1) meeting up with old friends, 2) checking out the equipment you're thinking of buying, and 3) observing under dark skies. Observing is the reason and observing is the focus of the Illinois Dark Skies Star Party. Remember that new eyepiece you bought; the filters too? You may have bought them elsewhere but you'll get to put them through their paces at the Illinois Dark Skies Star Party. Check for additional information and registration forms at the following URL: <http://www.sas-sky.org/main.html>. For additional information, contact Ray Watt via e-mail at <[raywatt@hotmail.com](mailto:raywatt@hotmail.com)>.

## SEPTEMBER SKY GUIDE

02	Asteroid Pallas is at opposition, 7 P.M.	
04	The Moon passes 6° north of Mars, 9 A.M.	
08	The Moon passes 9° north of Venus, 2 P.M.	
09	Uranus is at opposition, 2 P.M.	
	The Moon passes 0.2° north of Regulus, 8 P.M.	
	The Moon passes 0.8° south of Saturn, 11 P.M.	
11	Partial solar eclipse, 8 A.M.	
13	The Moon passes 2° south of Mercury, 9 A.M.	
18	The Moon passes 0.7° south of Antares, 3 A.M.	
	The Moon passes 6° south of Jupiter, 10 A.M.	
22	Mercury passes 0.09° north of Spica, 4 A.M.	
23	Equinox (autumn begins), 5 A.M.	
	The Moon passes 1.4° south of Neptune, 1 P.M.	
	Venus reaches greatest brilliancy (magnitude -4.8), 6 P.M.	
25	The Moon passes 1.9° north of Uranus, Noon	
29	Mercury is at greatest eastern elongation (26°), 11 A.M.	

## OBSERVERS' LOGBOOK FOR AUGUST

The early part of August was dominated by hazy skies, and from time to time clouds. Nonetheless, three indefatigable observers took advantage of a brief break and headed out to the SGNC for some viewing on Thursday, August 9<sup>th</sup>. Lee Green, Chris Franklin, and Carl Wenning spent the evening viewing. Lee spent time imaging Jupiter with his SBIG 10 on his C-14 telescope, and Chris and Carl viewed a number of representative Messier objects as well as 11 NGC objects using Carl's CPC 11". In addition to Jupiter, they were also able to observe Neptune even though it was quite low in the sky. The blue-green coloration was clearly evident. Observers spent most of their time looking through breaks in passing clouds, but by 11 p.m. the sky cleared off. Chris and Carl left at this time, and Lee continued taking Jupiter pictures for a little while longer. He then shut down that operation and went to visual observing finding 6 new Herschel objects before his scope fogged up. He then packed it in and left at 12:30 p.m.

Carl returned the SGNC to conduct a solitary early morning observing session on Saturday, August 11<sup>th</sup>, to bag an additional 19 NGC objects for the Astronomical League's coveted Herschel 400 award. The sky was somewhat hazy and observing lasted only from 2:30 a.m. until 3:45 a.m. when the electrical cable powering his CPC 11" became entangled in the mount and was ripped apart. ☹️ He has now observed 176 of the required 400 objects, and has managed to fix the broken wire. Incidentally, and not surprisingly, the sky was hazy enough so that no Perseid meteors were observed during the entire time.

On the evening of August 11<sup>th</sup>, Meghana and Sameer Deshpande, Meghana's brother, Sameer's parents, Kent Ferguson, Sheri Rodgers, her son and his friend, and Carl Wenning traveled to Weldon Springs SRA to observe the Perseid meteor shower, and do a bit of telescope viewing with the general public. The Perseids did not disappoint. Between approximately 10 and 11 p.m. meteors were observed at an average rate of about once per minute, and many were bright with persistent trains. After that, the meteor shower inexplicably stopped. More than 100 people were present to view the meteor shower, and many took the opportunity to view celestial objects through Carl's CPC 11" telescope. Most of our intrepid observers stayed until about midnight.

Unfortunately, William Carney didn't recognize anyone at the McDonald's parking lot on that Saturday evening and left 3 minutes before Carl arrived in his "signature" red pickup truck at 8:53 p.m. (Carl was waiting at the Sale Barn across the street in the hope of catching anyone who didn't pick up on the change of meeting location due to events at the Sale Barn that evening.) William did drive to Weldon Springs SRA,

but couldn't find the group. On Sunday evening, things worked out a bit better. William first went out to SGNC then decided to drive to Moraine View Park for the darker skies. He stayed out observing under a very clear sky until 11:30 p.m. when clouds moved in. William reported, "The meteors seemed to have about a 8-10 minute interval between with some long trails."

On that same Saturday evening, Lee and Leslie Green went observing with Danny Rhodes and family at El Paso, IL. Danny, you might recall, recently worked on the SGO shelving. Lee brought his 14-inch telescope and everyone spent a few hours viewing a variety of objects. A few neighbors joined them. Lee reports, "We had some fun and added a few points on the 'ooh'-meter."

Carl Wenning tried out a "power Messier mini marathon" on Monday evening, August 13<sup>th</sup>. Even though the sky was rather hazy over Sugar Grove Nature Center, Carl observed 43 Messier objects between 9:22 and 10:00 p.m. – a mere 38 minutes! He observed all Messier objects between 16.283 hours and 23.403 hours of right ascension. This goes to show the power of the CPC 11" to find celestial objects quickly (and undoubtedly Carl's lack of attention to detail! ☺️).

With the moon approaching full phase, Carl – taking a lead from last month's article about Terry Lee Wright – turned his attention to the sun. Carl has been observing the sun in both white light and Hydrogen-alpha, but notes that there is little to report. With the exception of a random sunspot here and there, and a tiny prominence and faint filaments, there is little solar activity. The sun is just coming out of solar minimum, so there might not be a lot to report for a year or two.

Thanks to a reminder provided by a 4:50 a.m. news report, and despite encroaching dawn, Carl was able to observe the August 28th total lunar eclipse by eye and binoculars. He observed from the parking lot of Colleen Hoose School near his house from about 5:00 to 5:45 a.m. as the moon slowly sank into the haze of the west-southwestern horizon. At totality, the moon appeared dim to the right and brighter to the left. At central eclipse it had a reddish hue that faded to pink as the moon's light merged with that of the brightening sky.

Reports came in on the TCAA listserv indicating that members Sandy McNamara-Wolford, Kathryn Kerr, Kent Ferguson, and Brian Barling also viewed the eclipse. Sandy, observing from Indiana, and Carl might have seen the same bright meteor around 5:00 a.m. as it moved across the sky from north to south and left a momentary trail. It was about 60 degrees above Carl's horizon, and nearly level with the moon from Sandy's location.

Coordinators are needed still for several of the 2007 Public and Members Only Observing Sessions at Sugar Grove Nature Center. Additional POS coordinators are needed; two per session are preferred. Please sign up by contacting one of the Board members if you are willing to host or co-host one of these sessions.

Members Only Observing Sessions occur one week earlier than the above POS. Coordinators (who should be SGNC key holders unless they have their own telescope) are still needed for nearly all of these sessions. Please sign up by contacting one of the Board members if you are willing to coordinate one of these events.

MOOS 2007 Date	MOOS Coordinator(s)
September 8	1. Duane Yockey 2.
October 6	1. 2.

2007 Date	POS Topic(s)	POS Coordinator(s)
September 15	The Milky Way Galaxy	1. Carl Wenning 2. Dave Osenga
October 13	Double Cluster in Perseus	1. Lee Green 2.

## AUGUST POS ANOTHER SUCCESS

The August 18<sup>th</sup> Public Observing Session was successfully held despite rain and overcast skies earlier in the day. Hosted by Carl Wenning and Mike Rogers, some 16 members of the club and general public were present to hear Carl deliver a 30-minute talk about two prominent planetary nebulas, M27 (the Dumbbell) and M57 (the Ring). He included a bit of additional detail about the variety of deep-space objects visible in small telescopes.

Despite passing clouds and a very hazy sky, observing then ensued and lasted until approximately 10:30 p.m. Observers were able to glimpse the crescent moon, Jupiter, Neptune, and Messier objects 27, 57, 13, 15, 92, and 11 despite the ability to even see anything more than a handful of the brighter stars. William Carney staffed the SGO that temporarily houses the 10-inch telescope, and Carl used his CPC 11-inch from ground level. Prakesh (?) had brought his 3-inch "goto" refractor, but found out much to his chagrin that he had forgotten to bring some of the electronic components along. Around 9:20 p.m. Mike Rogers pointed out the International Space Station orbiting in conjunction with Space Shuttle *Endeavour* passing high up in the northeast. Mike commented later, "For me, the highlight of the evening was seeing the ISS. The last time I'd seen it, it was just a speck, and this time it looked like four Venus's glued together – amazingly bright!" Mike and his son Jonathan demonstrated the use of their "sky pilot" that evening as well. Also in attendance at this event was "probable future member" John Williamson from Lincoln, IL.

Incidentally, at our July POS reporter Nancy Saul and photographer Chris Walker from the *Lincoln Courier* joined the session. They interviewed nearly every TCAA telescopist and several attendees, and subsequently wrote a very extensive article about our group and our July POS (including three color nighttime photographs and a fourth black and white) on August 1<sup>st</sup> (page A6). The article covered nearly a full page and then some. Lee Green subsequently contacted them and was able to get five copies of the paper for that day which he distributed at the August POS. If you would like a copy, let Lee know and he will send you one if he has any left.

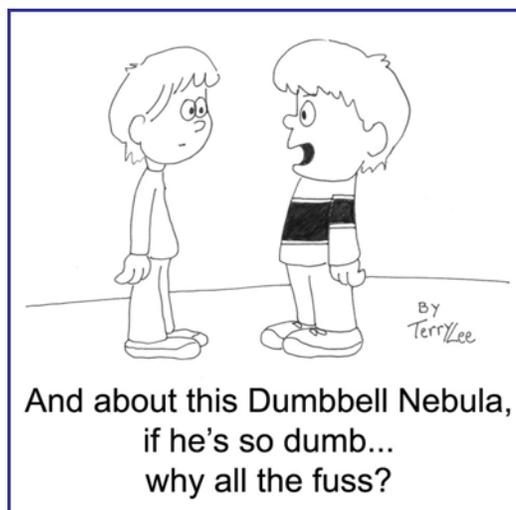
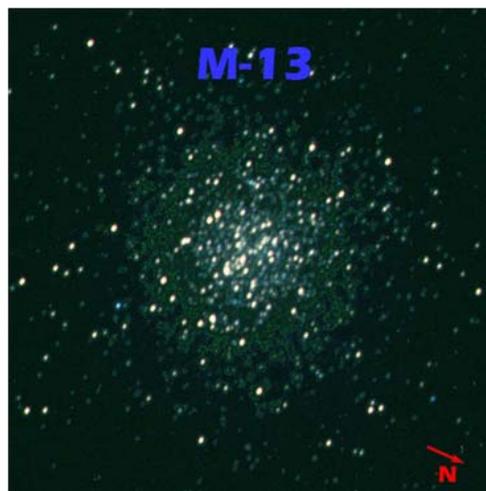
## CHASING M13

by Lee Green

At a recent imaging session on August 25, I took some guided exposures of M13. The conditions were not the best, a nearly full moon and in my back yard, but the Great Hercules Cluster is wonderful in its size and brightness.

My goal for the evening was to reduce period guiding error. Periodic error is caused primarily by imperfections of the right ascension motor's worm gear. Periodic error manifests itself in images when stars are elongated instead of circular. My mount supports Periodic Error Correction and I have been trying different techniques in training the mount and using PEC.

I used five minute guided exposures to capture filtered and unfiltered data. I made an LRGB image from 25 (luminance), 15 (red), 15 (green), 15 (blue) minutes exposures.



## PROFILES IN AMATEUR ASTRONOMY: LEE GREEN

By Carl Wenning

*Historian's note: Over the next few months I will focus the membership's attention on the TCAA's premiere observers with their help. The intention is to introduce our membership to one another and to provide opportunities to further develop relationships within our association*

Lee Green's passion for astronomy rocketed him from new member to president of the TCAA in just about one year. This passion can readily be seen at any observing session where he is often first to arrive and the last to leave. He clearly has spent a considerable amount of time and effort on his hobby. As Lee notes, "I've always been interested in the stars. My early years were on a farm and we would lay out and look at the stars. In grade school, the teachers brought in TVs so we could watch the Mercury and Gemini space flights, and who can forget when we landed on the Moon?"

These early "flights of wonder" brought Lee into the field of amateur astronomy over the course of many years. When only 9-10 years of age, Lee's mother sometimes took him to TCAA observing sessions that were held at Oakland School in Bloomington starting in 1964. He remembers meeting and getting to know Reverend Lloyd G. Strouse who lived on Vale Street close by the school, and who figured prominently in the early history of the TCAA. Lee remembers that these sessions typically featured one or two small telescopes, and about a dozen student observers. Lee recalls that there were no formal presentations, but that Dr. Strouse did take the time to point out constellations while observers waited in line for their telescopic views of the heavens.

While in high school, Lee purchased a used 4-1/2" Newtonian telescope. He was very impressed that it had an equatorial mount even though he had to manually advance the position. He would go out in the country – all the way to Towanda-Barnes Road – to get into dark skies. It's certain that his friends were rolling their eyes at how long it took him to find anything worth looking at. Today Lee owns a Celestron CGE-1400 – this is a 14" aperture SCT with full goto capacity, excellent optics, and equatorial mount. He's been using a companion SBIG ST-10 CCD imaging system to capture some of the sky shots that have recently graced the pages of *The OBSERVER*.

Besides astronomical imaging, Lee is currently involved in pursuing the Herschel 400 and Urban Observer clubs. Lee



thinks that the Astronomy League's observing clubs are "great" because they include all the best-in-class objects in their required observing lists. He also especially has great fun with the challenge of hooking up his scope to a computer. He claims that he is still learning to how to take images through the scope, but it is clear he is even now having considerable success. This seems to be natural for someone who works as a computer programmer for a living.

Lee's goal for amateur astronomy is someday to have a virtual telescope. "I want to logon to a telescope, upload a set of jobs I need to observe, and have the telescope email the results to me when they are ready. There should be a worldwide network of automated telescopes for everyone to use." He'd also like to continue to improve his imaging and automation techniques. According to Lee, "Astronomy is hitting the industrial age. There are more affordable, quality scopes available for amateurs than ever before. Professional astronomers have access to a rapidly expanding array of instruments such as the Spitzer Space Telescope and the Overwhelmingly Large (OWL) scopes under construction, helping them to expand science in new areas. What a magical time to be alive!"

Among the things that Lee would like to know is the following, "My grandfather was born in 1901, two years before Kitty Hawk. He lived to see aviation progress from humble beginnings to putting a man on the Moon. I was born in 1955, the year of the Eniac computer. I wonder where computers will go when their rocket engines kick in."

## HISTORY OF THE TCAA: PART 5

By Carl J. Wenning

*Historian's note: Beginning with the article, "The Origin of the Twin City Amateur Astronomers" in the May 2007 issue of The OBSERVER, Carl Wenning, TCAA Historian, began chronicling the history of the club. He will continue this series on a monthly basis, culminating with the 50<sup>th</sup> anniversary of the club in 2010.*

During the early 1960s, events relating to astronomy happened quickly. In October of 1963 the eminent astronomer Harlow Shapley lectured to the TCAA. Dr. Shapley, of Harvard College Observatory, spoke about "astronomy and astronomers" and focused attention on the international nature of astronomy. In January 1964 several members convened at Fairview Park after midnight to observe a lunar eclipse. In February of the same year the Peoria planetarium opened with a 33-foot dome and Goto G-1 star projector. Club members visited the facility the same month.

Regular public observing sessions became a reality during the summer of 1964. Among these were sessions held at Oakland Elementary School in Bloomington. On most occasions, Reverend Lloyd Strouse, who lived on Vale Street adjacent to the school, conducted these observing sessions attended by a few other TCAAers. The sessions were simple and included observations of brighter celestial objects using one or two small telescopes. There were no formal presentations at these events, but Rev. Strouse would point out planets and constellations while observers were standing in line waiting for their view through a telescope. A typical observing session would consist of about a dozen or so members of the general public – mostly school children with their parents. Among the student observers was a very young Lee Green who would one day also figure prominently in the history of the TCAA.

Several hundred persons attended these and other special functions but, to the disappointment of the club, only two members were gained by the numerous and widely publicized events. Several newspaper articles had featured the astronomy club and its activities, but the club failed to grow substantially. The membership had grown explosively during its earliest days, but now that rate of growth had begun to wane. Many other things kept the spirits of the membership high, however. One such thing was the opening of the Illinois State University Physics Department Planetarium on September 1, 1964.

At about the same time that the TCAA had its start, Illinois State University began to expand. With help from the National Science Foundation, a planetarium was added to construction plans for the new Felmley Hall of Science. Not part of the original building plan, the planetarium was added only as an afterthought when the agency funding the expansion project reviewed a wish list from ISU. At the very bottom of this 30-item list was a planetarium. This aspect of the wish list was viewed favorably, and the planetarium was added with little concern for staffing, parking, and restroom facilities.

Opening without a staff formal staff, IWU's astronomer Ray

Wilson was asked by Harold Born of the ISU Physics Department, under whose auspices it was to operate, to help with getting the new planetarium operational. During September of 1964 Ray gave several astronomy club members a peek at the new facility, and explained how the Spitz A-3P star machine could project sun, moon, planets, along with 1,354 stars and with the Milky Way. He subsequently was asked to "give a show" to the rest of the astronomy club.

He did this on October 1, 1964. Ray again explained the workings of the Spitz A-3P star projector, and allowed the membership the time to do a bit of constellation study as well. Thus began the long and cordial relationship between the ISU Planetarium and the TCAA

that has continued down to the present day under the guidance of various ISU Physics faculty members (1964-71), and planetarium directors Nerio Calgaro (1971-74), Pat McGee (1974-78), Carl Wenning (1978-2001), and Tom Willmitch (2001-present).

With June 1965 the detailed record of the TCAA comes to an end. David Williams, the editor of the club's newsletter, left town to further his education. The newsletter, *The Observer of the Twin City Amateur Astronomers*, was no more. The last item of importance noted in the final newsletter was the fact the David had introduced a program of regular Messier observing and had kicked off the project with a lecture about Messier himself. With the loss of the newsletter there was no widely distributed documentation of the club's activity. What was recorded appeared only in the minutes and newspaper articles. Unfortunately, some of the earliest secretary's minutes disappeared and later minutes were misplaced in 1981. The history that remains of the club's next fifteen years comes only from a few newspaper clippings and memories of some of the TCAA's early members.



### MISSING OUT ON OBSERVING SESSIONS?

Are you missing out on the many events taking place among the TCAA membership? Do you plan to attend members-only observing sessions, and then forget? Do you cross-schedule yourself with other obligations and find that you cannot make it to public observing sessions? Are you ever uncertain about whether an observing session will be held because of the condition of the sky? Do you ever want to ask a question about amateur astronomy, and not know who to ask? Have you missed announcements dealing with important last-minute changes? If these things are happening to you, you probably are not subscribed to the TCAA e-mail listserv and you should be. To join the TCAA listserv, send a blank e-mail message to [TCAA-subscribe@yahoogroups.com](mailto:TCAA-subscribe@yahoogroups.com) and our list manager will set up your account.

## McDONALD OBSERVATORY VISIT

By Lee Green

I recently had a chance to visit the McDonald Observatory in Fort Davis, Texas. The observatory is location about 150 mile east of El Paso in the Davis Mountains. The Frank N. Bash Visitor Center is open to the public and has an full-featured gift shop, the Star Date diner, exhibit hall and theater.

The public tour included a half hour presentation that introduced us to the observatory facilities and history. William Johnson McDonald, a Paris, Texas banker bequeathed in 1926 some \$1 million dollars to the University of Texas to build a large telescope. The university, having no department of astronomy, joined with the University of Chicago in a partnership to found McDonald Observatory and in 1939 dedicated the 82 inch Otto Struve Telescope. In 1969, the 107" Harlan J. Smith scope was dedicated and was the world's third largest telescope at that time. And in 1997, the Hobby-Eberly Telescope (HET) 382" segmented scope became operational.



We visited the 107" Harlan J. Smith scope, shown in the image. This research telescope is fully scheduled but one night a month near the full moon you can schedule use of the scope for private groups.

We also visited the Hobby-Eberly Telescope (HET) 382" segmented scope. The segmented scope uses a grid of hexagonal mirror segments approximately 24" across. Each element's orientation is controlled separately and must be precisely aligned. The facility was an early effort to use available commercial technologies to control costs.

Segmented telescope technology provides the means for achieving overwhelmingly large (OWL) telescopes at a fraction of the cost of single-element scopes and several next-generation telescopes are already being built. The July 2007 Astronomy magazine had a nice article about these large devices.

Since the Sun is our closest star, its study was featured in the presentation. They had a highly detailed videos, which they recorded at their facility using a 16" scope, that showed several solar events including sunspots, flares and coronal mass ejections.

As part of their public outreach programs, they host star parties every weekend. Behind the visitor center is a small amphitheater that is bordered by two 8 foot domes and fixed piers at several observing stations.

For area lodgings, we stayed at the Indian Lodge in nearby Fort Davis State Park. This architectural jewel was built by the Civilian Conservation Corps in the 1930s and expanded in the 1980s. The craftsmen and artisans who created this beautifully hand crafted facility were extremely talented.

I thoroughly enjoyed visiting McDonald Observatory and would recommend it as a fun and interesting destination.

## ASTRONOMY EQUIPMENT

by Terry Lee Wright

In many parts of the world, dew will steal as much of your telescope time as cloudy weather. Not much we can do about cloudy weather. But dew, yes, we can battle that. There are many products on the market that can save your time at the scope.

One I chose was the Kendricks DigiFire 7 Controller. This small computer box is a sophisticated power controller that will regulate up to six separate heaters. Four can be individually programmed to prevent dew, as on my Schmidt-Cassegrain's Corrector plate, eye piece, and finder scope. I can set the heater to power up at specific air temperatures or dew points, or stay at a set temperature. Kendricks also has optional software that allows you to control the unit remotely from your PC.

The small box has a Bar Graph Led, 12 VDC constant, programmable output, low voltage, cut-off indicator, and Power-on indicator leds and is supplied with a 7amp fuse. Maximum amperage is 8 amps. Low voltage cut-off is 11.6 volts.

The heater straps are optional, but very affordable depending on the size of the scope or brand you have. I use an Astrozap Heated Dew Shield, which plugs into my control box. All the Astrozap heaters will work with the Kendricks Controller.

If you already have a Dew Shield, just add on a heater strap and plug it in. My Astronzap Dew Heater Shield is all ready to plug into the Controller box and it works great. If I get a plain Dew Shield, I'll just get a heater strap. Some Dew Shields are made of Aluminum and has to be sized to fit your scope. The Astrozap Heated Shield uses Velcro. It fits tight and works great.

My DigiFire 7 Controller has a cigarette lighter end plug. I can plug it into my cars' socket, or plug it into a three outlet plug socket set that I have attached to a 33 amp battery system. Kendricks has a power pack that is great, but the cost is somewhat high. So you can make your own power station to run your scope, computers, controllers, etc.

This is the best system controller I've found so far. Check with other TCAA members, there might be another brand or price range that you're looking for.

# TCAA Treasurer's Report – August 2007

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OPERATING FUND BALANCE – July 31, 2007 - \$ 2,439.82 \*

Income

Ken Eckhardt (Elect. Dues Renewal) - \$ 25.00

John Williamson (membership dues) - \$ 40.00

Expenses

LYB Inc. (July Observer) - \$ 22.72

Carl Wenning (Lenore Trainor flowers) - \$ 70.49

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OPERATING FUND BALANCE – August 31, 2007 - \$ 2,411.61

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OBSERVATORY FUND BALANCE – July 31, 2007 - \$ 1,149.63

Income

None - \$ 0.00

Expenses

None - \$ 0.00

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OBSERVATORY FUND BALANCE – August 31, 2007 - \$ 1,149.63

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TOTAL TCAA FUNDS – August 31, 2007 - \$ 3,561.24

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Respectfully submitted,  
L. Duane Yockey, Treasurer

## **Sugar Grove Observatory**

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

Duane Yockey (renewed through 2007)

Michael Rogers (renewed through 2006)

William Carney (renewed through 2007)

Carl Wenning (renewed through 2007)

Brian Barling (renewed through 2007)

Christopher Franklin (renewed through 2007)

David Osenga (renewed through 2007)

Gerry Schroeder (renewed through 2007)

Josh Lindsey (renewed through 2007)

Andrew Morrison (February 2007)

Dan Miller (renewed through 2007)

Lee Green (April 2007, renewed through 2008)



## UPCOMING EVENTS

September 8— MOOS  
Perseid Meteor Shower  
Observing Session

September 12—TCAA Board  
Meeting

September 13-16—Illinois Dark  
Skies Star Party

September 15—POS



**Welcome New Member  
John Williamson**

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### **The OBSERVER**

Newletter of the TCAA, Inc.

Erin Estabrook, Editor  
314 Covey Court  
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/](http://www.twincityamateurastronomers.org/)