



Gerry Samolyk honored by AAVSO

by Sally Waracynski

Some time, someone must have convinced Garry Samolyk that he should choose one endeavor and do it extremely well. As most of us know, Gerry is relentlessly devoted to observing variable stars. On February 13, our intrepid Observatory Director logged his 55,000th observation. Such tenacity is difficult for most of us to understand much less emulate; but we all can applaud his achievements.

Since 1986, Gerry has been working with Marvin and Ron Baldwin of Indiana to produce a compilation of observations of eclipsing binary stars, the particular type of variable that is their specialty. They wrote the software for the reduction of data, then spent three years entering and verifying observations dating to 1975. O-C diagrams incorporate

-See Samolyk, page 4

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Field Trip!

In place of the March meeting, there is a trip planned to the University of Wisconsin Whitewater, on Saturday evening, March 26, to hear Frank D. Stekel, a professor with the UWW department of Physics, talk about ancient navigation. There will also be a talk about the research being done at the UWW observatory, which houses a 16" Ritchey-Chretien telescope. There will be a tour and weather permitting, observing opportunities.

Meet at the MAS observatory parking lot at 6:30 p.m. where there will be carpools to the observatory. The program starts at 8 p.m. at the UWW observatory. A \$2 per person donation to the drivers will be appreciated. Maps to the observatory will be available to the drivers. Anyone with questions should call Tim Burrus at 783-6572. The program will go on, rain, snow or starlight.

A good way to reach the observatory is to take I-43 to the Highway 20 exit at East Troy. Take Highway 20 west to Highway 12. Follow Highway 12 west through Whitewater (It's called Main St.) Turn right on S. Prince St., then turn right again at Florence St. Parking is straight ahead in lot #4 at the base of the hill near the observatory.

Calendar of Events

March 26, 8 pm.....Field trip to the University of Wisconsin Whitewater
 Meet at the observatory at 6:30 pm for carpooling.

April 6, 7:30 p.m.....First Wednesday meeting
 At the observatory

April 11.....Board Meeting
 At the observatory

April 15--Membership meeting

April 16--Astronomy Day

May 4----First Wednesday mtg.

May 6-8---Greenbush campout

May 10----Solar eclipse in Illinois

May 20----Combined Board and membership meetings

June 1----First Wednesday

June 13---board meeting

July 6----First Wednesday

July 11----board meeting

July 23----Picnic

Aug 3----first Weds.

Aug. 5-7--Campout (site TBA)

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Library news

-by Sally Waraczynski

Astrofest '93 was captured on film by Sally Jo Michalko, making this the 7th time she has generously shared prints with the Society. The photo albums (in the history files at the observatory) provide quite a record of telescope designs over the years and the fun MAS Fest-goers have at Camp Shaw-Waw-Nas-See.

New books in the library include:

Exercises in Practical Astronomy Using Photographs M. T. Bruck, 1990. The photographs used are of professional research quality, and the exercises require mathematical ability to the level of using logarithms and simple trigonometry. The 12 main topics include the sun, asteroids, supernova 1987A, Halley's Comet, nearby galaxies and more. Photographs within each topical section generate at least two lines of investigation. Even if one is unable to perform the exercises, the background information provides insight to methods of professional research.

Binary Stars: A pictorial Atlas - Terrell et.al., 1992. Here are depicted models for more than 300 interacting binary star systems produced from computer simulations based on published estimates of their properties. With one system to a page, the reader is given a score of parameter values (semi-major axis, period, etc.,) light surges in 3 spectral regions, and fascinating visualization of the system in 9 phases of the orbit from primary to secondary minimum.

Finally, to fill a gap in our "classics" collection, we have Bart and Priscilla Bok's The Milky Way, 1981 fifth edition.

Our A/V collection received a major boost with James Greenwald's wonderful donation of almost 200 slides. Included are Viking, Mariner, and Pioneer planetary missions, a "Renaissance Astronomy" set and an assortment of deep sky, solar system and cosmology subjects. See the Slide Index pages for a more complete list of what's new. We even had to add a file box!

Marty Brunet saw a need and filled it with his donation of a video tape file box. Tucked away inside was a bonus gift - "Apollo XI-The Eagle Has Landed". Thanks, Marty.

Book Review: Lonely Hearts of the Cosmos--The

Story of the Scientific Quest for the Secret of the Universe, 1991, by Dennis Overbye.

From Edwin Hubble to Stephen Hawking, Dennis Overbye intimately covers the people and the science with clarity and humor. I found myself laughing out loud often as on p. 109 in the midst of some heavy quantum theory, Overbye quotes Niels Bohr as once commenting that a person who wasn't outraged on first hearing about quantum theory didn't understand what had been said.

With three dozen pictures, mostly of the scientists, and an epilogue, the reader really feels involved in the struggle to understand the secrets of the universe. Overbye takes his time to explain the science so that each hard-earned discovery can be appreciated and the unsolved mysteries pondered intelligently.

Saturday Night Keyholders

| | |
|---------------|------------------------------|
| March 19..... | Brian Caniere 961-8745 |
| March 26..... | Chris Hesseltime 482-4515 |
| April 2..... | Lee Keith 425-2331 |
| April 9..... | Dan Koehler 662-2987 |
| April 16..... | Jim Kube 453-8858 |
| April 23..... | Scott Lascowski 421-3517 |

More on Houston

Sally Waraczynski mentions a few things that we have in our history about Walter Scott Houston.

Houston first appeared on a register of members paying dues in 1934. Dues then were \$3.00, and Houston paid in installments.

He was apparently deleted in 1936. In the 1934-35 folder, he apparently helped build an observatory at Camp Minikani. He appeared in a photo with the group and with Harlow Shapley. From the 35-36 folder- left Madison Society editorial staff to work with MAS. In September, 198, an asteroid was named after him- 3031 Houston. See *Sky & Telescope*, May, of 1987 for an extensive article and pictures, including one of him from 1937 in Milwaukee with his telescope.

Intrigues to get telescope time or funding, personal factors including health and relationships, or the intuition to choose the right project at the cutting edge of ones' discipline, even the prejudice against women, are artfully woven, revealing the connections in more than a century's worth of discoveries in astronomy, astrophysics cosmology, mathematics and quantum physics. A quote from the book, p. 307. refers to Vera Rubin, who discovered dark matter and was refused a Cambridge senior professorship. "For 300 years, astronomers had been presuming the universe was what they saw. Now this woman was claiming that the cosmos was what they did not see."

Overbye is a past editor at *Sky & Telescope* and in 1980 received the American Institute of Physics Science Writing Award. This is his first book. ---Reviewed by Pamela Roper.

1993 Observations - Gerry Samolyk, observatory director

The cloudy weather of the past year had a negative impact on all of our observing projects. Despite this, some useful data was obtained.

Our number of total lunar occultations is down from the past years, however, we did observe two grazing occultations on successive nights.

The event of February 28 was observed by a record number of observers. In addition to the 11 MAS observers, we had help from the Madison and Northern Cross groups. We had so many observers that we filled the cable and had a half dozen using tape recorders. Due to a 0.5" South shift, many observers saw a miss, but Chris Hesseltine was able to record 16 contacts, all within two minutes.

On the following night, we were joined by observers from the Northern Cross and Racine groups. This time, all observers saw at least two contacts since the shift was much smaller.

The following table lists the MAS observers who participated in lunar occultation work last year

| | TOTAL OCCS | GRAZE FEB 28 | GRAZE MAR 01 |
|-------------------|---------------|-----------------|-----------------|
| Keith Bodoh | 4 | | * |
| Paul Borchardt | 16 | * | * |
| Marty Brunet | 2 | * | * |
| Tim Burrus | | * | |
| Brian Ganiere | | | * |
| Chris Hesseltine | | * | * |
| Lee Keith | | | * |
| Jerry Kunicki | | | * |
| Scott Lascowski | 29 | * | * |
| Charlotte Nelson | | * | * |
| Nick Nicholas | 60 | * | |
| Gerry Samolyk | 45 | * | |
| Virgil Tangney | 4 | * | * |
| Ken Waraczynski | | * | * |
| Sally Waraczynski | 30 | * | * |
| | 190 | 11 | 13 |

This has been another poor year for asteroid occultation attempts, only one report was submitted.

Three observers made timings of eclipses of satellites of Jupiter: Chris Hesseltine - 1; Gerry Samolyk - 4; and Sally Waraczynski - 6.

The following observers made observations of variable stars last year. With the conclusion of the ESA Hipparcos mission, the observations of LPV (mainly Mira stars) has dropped off.

Hopefully, 1994 will provide us with better observing conditions

| | EB Minima | RRLYR maxima | EB&RR Obs. | LPV Obs. |
|------------|--------------|-----------------|---------------|-------------|
| Hesseltine | 1 | | 16 | |
| Lascowski | 2 | | 43 | |
| Samolyk | 177 | 9 | 3133 | 459 |
| | 180 | 9 | 3192 | 459 |

North Central Regional news --by Dan Koehler

M.A.S. members are reminded of the NCRAL's 48th Convention to be held on Saturday, April 30, 1994 in Burlington, IA and sponsored by the Southeastern Iowa Astronomy Club. Registration materials were mailed to all members in mid-January. If you didn't receive yours, or if you've misplaced your materials, or you're a new member and your name was not on the M.A.S. mailing list as of late 1993 please contact me

for the information. The Region's Council and Business meetings will be held during the day at the convention. Items you wish to have included on the Business meeting agenda concerning our region should be forwarded to NCRAL Chairman Marion Bachtell, 1901 South 10th Street, Burlington, IA 52601 (319-753-1442) by April 15, 1994. You may also present items for the agenda to Chairman Bachtell at the convention, or during the Council meeting to the assembled representa-

tives. Meeting attendees will consider at least one agenda item at present, and it's a very pleasant problem; what to do with our burgeoning treasury of several thousand dollars!

The four officers of the NCRAL (Chairman, Vice-Chairman, Secretary-Treasurer, and Region Representative) will be elected during the Business meeting. If you're interested in learning more about what these positions involve and would like to have your name placed in

--See page 4

Light pollution bill dies in committee

—by Dan Koehler

The Wisconsin legislature's Assembly - Senate Joint Finance committee voted 9 to 7 against approving AB 344, the proposed legislation dealing with the strict regulation of outdoor lighting, on Tuesday, February 8.

Voting for the bill were Representatives Spencer Coggs (D), Shirley Krug (D), Barbara Linton (D), Gregory Huber (D), and James Holperin (D) and Senators Gary George (D) and Charles Chvala (D). Voting against the Bill were Representatives Steven Foti (R), Ben Brancel (R), and Mary Hubler (D), and Senators Margaret Farrow (R), Joseph Leean (R), Timothy Weeden (R), Dale Schultz (R), Robert Cowles (R), and Mary Panzer (R). I received a letter dated February 14 from Senator Farrow stating that she offered an amendment in committee that would have substantially altered AB 344's effect on Wisconsin's municipalities. That amendment was approved unanimously. Why she ultimately voted against the bill is uncertain, but she did indicate in her letter that she normally votes against state mandates affecting businesses like the ones she claimed were contained in AB 344.

The vote in the Joint Finance Committee came just 28 days after an 8 to 3 vote in the State Assembly's Environmental Resources, Energy, and Utilities Committee (EREUC) approving the legislation. AB 344's quick defeat at the hands of a committee greatly influenced by a strong business lobby is not a shock, but the speed of the bill's demise did surprise at least AB 344's principle author, Representative James Baumgart (D) of Sheboygan. He stated in a telephone conversation with me just after the Joint Finance

Committee vote that he had expected AB 344 to pass through the committee by a 9 - 7 margin, and then meet its ultimate demise in the State Assembly. Among the many factors responsible for the negative outcome, he primarily blamed his sponsorship of a bill dealing with non-metallic mining in Wisconsin which the Joint Finance Committee considered and passed on the same day as AB 344 was brought before them. To paraphrase his reasoning for the defeat, he said that the committee gave him one approval (on what Baumgart termed a "major and controversial piece of legislation") but was not about to grant two favors in one day. He also termed the coincidence of both pieces of legislation scheduled for committee approval in the same session as a "fluke".

Rep. Baumgart has said that he will reintroduce essentially the legislation in January 1995, assuming he is re-elected to the state legislature in November. He ran unopposed in 1992, and no challenger has announced a candidacy for his seat as of late February. He has pledged to work on redrafting the legislation this-summer, and to once again meet with the pro-business lobby groups responsible for pressuring lawmakers to vote against it. Baumgart said that the four main groups opposed to the bill were the Wisconsin Merchants federation, the Wisconsin Innkeepers Association, the Wisconsin Motor Carriers, and the National Federation of Independent Business. Baumgart had met with representatives from each group individually in late 1993 hoping to allay fears of AB 344's effects on their members.

He also told me that collectively, special interest groups in

Wisconsin spent \$18 million in 1993 supporting lobbyists in their efforts to influence state legislators. That breaks out to \$135,000 per state representative and senator, or about 4 times their annual salaries.

When the bill is re-introduced it will face the same review and approval process that killed AB 344. Beginning again with the EREUC it will, if approved, move on to the Joint Finance Committee, the state Assembly, the Senate Energy Committee, the state Senate, ending up on the governor's desk, in that order. As is always the case in the legislative process, bills can die or be substantially altered at any point.

Baumgart feels that a great deal has been learned about the friends and foes of the "dark sky" bill, and the next version of the legislation will reflect the sentiment expressed both for and against regulating outdoor lighting to enhance its chances for passage. He was not specific about the changes in verbiage he will make, or how he plans to change the over-all presentation and packaging of the bill. A few things are clear however.

First, he will have to write a good bill. We need one that is fair to all groups involved, but one that accomplishes the goal of substantially reducing the effects of bad lighting over the course of a decade or two.

The experience with AB 344 demonstrates how a bill can be "gutted" quickly. We saw in the case of AB 344 how the outdoor advertising industry in Wisconsin began immediately to pick it apart because upwardly lit billboards were threatened with rapid extinction.

Committee members who represent-

ed districts with significant agricultural activity complained about how mercury vapor lamps, at least one of which is found on nearly every Wisconsin farm, would be banned if AB 344 was passed. One legislator in the Joint Finance Committee voted against it just because of this provision. Another member of the EREUC attached an amendment that excluded Christmas lighting from regulation. Others worried about what the bill would cost municipalities by altering and regulating street lighting. AB 344 may have attempted to accomplish too much too quickly. We must get it right from the beginning to lessen the arguments and chances for defeat.

Next, the base of support

for regulating outdoor lighting will need to be broadened substantially. The two main groups in favor of AB 344 were environmentalists and amateur astronomers. In Wisconsin everyone is well acquainted with environmental lobbies like Greenpeace, the Sierra Club, the Audubon Society, and Wisconsin's Environmental Decade among others. With the introduction of AB 344 enough amateur astronomers managed to write letters and call legislators to encourage support that some Wisconsin lawmakers have begun referring to the amateur community as a "special interest group". This is a label I find a bit scary. As is well known to most observers of the American political process, the SIG "tag" often implies that the group in question is capable of influencing the legislative process in its favor by offering some form of retribution, like a campaign contribution.

Amateurs know this is ridiculous in the case of our hobby. Amateurs in any state are probably incapable of becoming a true SIG or lobbying group. But due to the proliferation of misinformation that circulates around bills like AB 344 average citizens could easily be persuaded to think negatively about anything supported by an "anti-light pollution

coalition". Negative opinions could result simply because our movement to darken the night sky is composed of relatively unknown, unnoticed, and unique individuals who do "weird things with telescopes". Being labeled as a special interest group carries negative connotations with the general public, and it is at the public's level that we must work to gain support for our cause by educating everyone we can reach by whatever means are available about the benefits of working toward darker night skies. We need to get non-amateur support for dark skies by explaining all of the benefits of lighting conservation and not scaring people into thinking we're just trying to take their security lights away.

The flip side in the issue of being "too visible" is not being visible enough. **More amateurs statewide have to get involved.** We

need to voice strong opinions in favor of regulating outdoor lighting to our legislators and the members of the committees that will take up the issue of light pollution in 1995. We must make this a truly statewide issue. We must show that there are amateurs everywhere in Wisconsin who enjoy astronomy as a hobby and that the general populace has an interest in learning about astronomy from us. If we are to be effective, we must show our numbers and indicate our reasons convincingly for wanting dark skies to our elected officials. To attain this goal will involve greater coordination of communication between the eleven Wisconsin amateur groups concerning the legislation, and a concentrated and sustained letter writing and telephone campaign.

Also, **amateurs should turn out in number whenever a public hearing on the legislation is held in Madison.** Work can begin already this year

by inviting legislators to attend public viewing sessions conducted by amateurs around the state. We need to show legislators first-hand the good work we do with the public, and the beauty of viewing the night sky. We need to keep the issue of light pollution in front of our legislators even if there is no bill currently under consideration in the legislature.

Finally, I think **we've got to believe that we can win the war against light pollution.**

Too many amateurs and most of the professionals have become complacent on this issue. I hate light pollution and bad lighting! I'm disgusted with the problem enough to want to work for change and I believe with time, patience, and a good public relations program we can win. But we've got to work together and figure out how to get others, the "non-amateurs", on our side.

My thanks to everyone who wrote letters and made telephone calls supporting AB 344. Please show your appreciation to the legislators who voted for the bill in the Joint Finance Committee by sending a short note of thanks to each. And remember, in Wisconsin the fight for dark skies isn't over, it's just begun! Anyone with comments is invited to write or call.

-Samolyk honored

even earlier data points.

As a result of this prodigious work, Gerry became the proud co-author of "Observed Minima Timings of Eclipsing Binaries, Number 1", published in October, 1993 by the American Society of Variable Star Observers. This publication has been financed by the Harold S. Martin Fund and has been distributed to all members of the AAVSO: as well as to the professional observers who regularly refer to AAVSO data in their research.

On the list of amateur astronomers whose observations are included in this compilation are a few names besides Samolyk that you might recognize. Brian Ganiere, Chris Hesseltine and Tom Renner are still among us; while Ed Halbach and Gary Wedemayer are in Colorado and California respectively. In all, 19 MAS observers contributed over 38% of the data. Gerry probably would be too modest to mention that his own contribution amounted to nearly a third of the total. The booklet may be found in the third drawer of the vertical file at the observatory in the AAVSO section.

More recently, the AAVSO has recognized Gerry's work in producing charts for variable star observers by presenting him with a CD-ROM reader and an amazing program called "GUIDE". Since 1976, the star charts had been laboriously hand-plotted. This new computer program can generate star field on scales of one arc second to 180 degrees. Whereas the hand-plotted charts were based on the Vehrenberg "Stern Atlas", "GUIDE" draws from "The General Catalog of Variable Stars", "The Bright Star Catalog" and "The Hubble Guide Star Catalog". Gerry can also plot non-stellar objects and planets; and if that weren't enough, he can simulate events such as upcoming occultations within a chosen star field.

--calender, from page 1

| | | |
|--------------------------|--------------------------|--------------------------|
| Aug 15---Board meeting | Sept. 30-Oct. 2-- | Nov. 14---Board mtg. |
| Sept. 7---First Weds. | Campout (TBA) | NOv. 18--membership |
| meeting | Oct. 5----First Weds. | meeting |
| Sept. 12---board meeting | Oct. 10----Board meeting | Dec. 7----First Weds. |
| Sept. 16---Membership | Oct. 21----Banquet | Dec. 9--Christmas social |
| meeting | Nov. 2 ----First Weds. | |

Open house schedule

| | | |
|-----------------|------------------|----------------------|
| Sat. April 16-- | Friday July 15 | Friday, September 2 |
| Astronomy day | Friday July 29 | Friday, September 23 |
| Friday, May 13 | Friday August 12 | Friday, Oct. 7 |
| Friday May 27 | Friday August 26 | |

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nomination for a position please contact me or Frank Roldan of the NCRAL Nominating Committee, N1090 Brookside Drive, LaCrosse, WI 54601 (608-787-1730, home, or voice mail 1-800-562-3956 ext. 9171).

Nominations for the Region Award, presented most years to an outstanding member of the NCRAL, are being accepted by Vice-Chairman Janet Stevens, 2112 Kingfisher Lane East, Rolling Meadows, IL 60008 (708-398-0562) through March 19,

1994. The award recognizes meritorious service to the Astronomical League, the NCRAL, astronomical societies, and the community of amateur astronomy in general. The Award is a beautiful engraved plaque presented at the NCRAL convention banquet during a special ceremony.

Any person in good standing with a member organization of the NCRAL is eligible for the Region Award. This process is to be completed by April 2, 1994, so you must act fast.

MAS INFORMATION

MAS Officers

| | |
|--------------------------------|----------------------------------|
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| | |
|--------------|---|
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