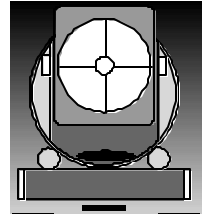


# STARLITE



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## Telescopes Across the Atlantic

by Michael Frasca

The global community is a reality. The Internet and e-mail are making the world a smaller place. Nowhere has this been more evident than this June at Jubilee Observatory.

When avid astronomer David Williams decided to visit his daughter in Peoria, he thought it might be nice to check out the local observatory. What makes this most exceptional is the fact that Williams lives in England.

Six days before leaving for the States, Williams did a web search and discovered the Peoria Astronomical Society (PAS) site. As chairman of the Cranfield Astro-

nomical Society (CAS) <<http://www.cranfield.ac.uk/socs/astro/>>, Williams was intrigued by Jubilee and the 24-inch telescope. "I have looked after our own observatory for the last 20 years and I always find it interesting and instructive to see

how others get along," he wrote.

E-mail via PAS member Dan Son to Society president Steve Wrigley and the PeoriaAstro group started the ball rolling.

Within 48 hours, a reception committee was formed and a tour arranged. [Editor's note — see the PeoriaAstro column on page

(Continued on page 3)



## PAS Banquet Coming Soon

by Michael Frasca

The Peoria Astronomical Society's Annual Banquet will be held on Saturday, September 29, 2001, at Jubilee College State Park. The banquet site is located off the Route 150 entrance to the park in the Quail Meadow picnic area (see map on page six). [Editor's note — This is a *new and different* date from the one reported in last issue's Bulletin Board! Remark your calendars!]

The area is reserved from 4:00 p.m. till midnight, with dinner starting at 5:30 p.m. Fried chicken, baked ham, coffee, iced tea, and lemonade will be provided, but be sure to bring a side dish to share with others and place settings (paper plates, napkins, cups, plasticware, etc.) for yourselves.

The business meeting and election of officers will take place at 6:30 p.m., with observing to follow if conditions allow. If the sky is as clear as it was last year, this is sure to be the highlight of your observing season! y

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## Wrigley's Wramblings

by Steve Wrigley



Can't come to the meetings?

Lost touch with what's going on in the Society?

Want to know when to possibly see

the Northern lights?

**We have the answer  
and it's FREE!!!**

*Better than the telegraph!  
Faster than Western Union!  
Our very own e-mail message  
group!!!*

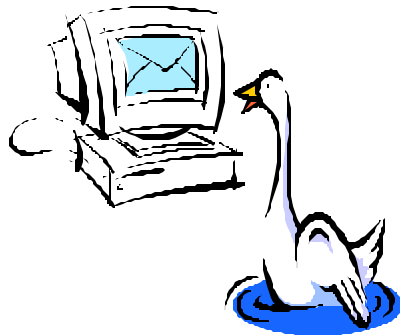
[http://www.yahogroups.com/  
group/PeoriaAstro](http://www.yahogroups.com/group/PeoriaAstro)

Ever have the occasion where you read about some upcoming event in the *Starlite* only to find out it happened before the Postal Service got the issue to you? Disappointed with yourself when you waited too long to go through back issues?

[http://www.yahogroups.com/  
group/PeoriaAstro](http://www.yahogroups.com/group/PeoriaAstro)

I know that there are a lot of you who are computer literate and are already on-line. You are the ones who can catch up on the latest news and current events. It's the next best thing to actually being there.

The finest example I can give is an impromptu star party at Jubilee on the evening of Monday, July 24<sup>th</sup>. Just six days before coming to the Peoria area to visit his daughter, David Williams, Chairman of the Cranfield Astronomical Society in England, got online to find out if there were any astronomical groups in Peoria. Through our web page he contacted Dan Son. Dan sent a message out through the Yahoo groups and before you knew it messages were flying across the Atlantic to invite him to Jubilee. By using this free electronic mail



service, the Society was able to introduce David, his wife Chris, and daughter Jo to astronomy "Peoria style" with nine members (on a Monday night no less).

Did you know that three months ago NorthMoor was closed due to an electrical problem with the dome drive motor? You would have been able to read about it on Yahoo groups.

Did you know that on August 10<sup>th</sup> the Jubilee 24-inch dome was closed due to a shutter-opening motor problem? You would have been able to read about it on Yahoo groups.

Do you know that BOTH facilities are repaired and open again? A very big thank you to all of you who responded through the e-mail to help repair both facilities.

This e-mail group is better than sliced bread and as fast as greased lightning. It is a fantastic way for members to stay in touch and to have a single phone call contact everyone at once. (Okay, I know some of you have faster service through your cable

*(Continued on page 3)*

**...It's the  
next best  
thing to  
actually  
being  
there....**

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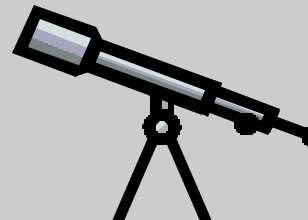
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Visit our site on the World Wide Web at <<http://www.astronomical.org>>





## Minutes of the Board of Directors

by Dan Son and Tim McGrath

*Board meetings are held on the third Wednesday of the month at the Hardee's of Willow Knolls Court in Peoria. Meetings start at 7:30 p.m.*

### May 16, 2001

**14-Inch:** Steve Thomas has stepped down as chairman.

**Light Pollution:** (Rich Tennis) Public Works will be meeting with CILCO to discuss lighting changes. Gregg Potts will be a co-chairman with Eric Clifton and Steve Wrigley also on the group. Looking for more members who would be willing to speak to different groups on light pollution.

**Public Relations:** Astronomy Day went well, more than 50 people in attendance at NorthMoor.

**New Business:** Planning for September 22<sup>nd</sup> as the night for our Banquet, with September 29<sup>th</sup> as a backup. Steve Thomas has stepped down as Vice President.

=====  
**The Board Minutes for June and July were unavailable at press time.**  
 =====

### August 15, 2001

**Academy of Science:** (Scott Hay) There were 100 winners in the Academy of Science treasure hunt. A drawing for the top prizes will be held Sunday, August 26<sup>th</sup>, at 2:00 p.m.

**Jubilee Observatory:** (Eric Clifton) There was a big crowd (70-80) for the Perseid meteor showers, including three from China. Gary Bussman may get Tim Cassidy, the Park Board president, to visit Jubilee. August 24<sup>th</sup> will be a group from the Cornerstone Baptist Church, about 20-25 people visiting Jubilee.

**14-Inch:** The 14-inch telescope is out

of polar alignment.

**24-inch:** (Eric Clifton) The 24-inch dome shutter will not open due to a burnt-out motor. There will be a work party at 10:00 a.m. on Saturday, August 18<sup>th</sup>, to work on it.

**Light Pollution:** (Rich Tennis) Rich would like to purchase placards for presenting the light pollution presentation to small groups. A motion was made to allow Rich to purchase two sets of placards at a cost of up to \$200. Motion passed unanimously.

**Nominating:** (Scott Hay) The slate for the upcoming board elections are as follows: President, Steve Wrigley; Vice President, Scott Hay; Secretary, Dan Son; Treasurer, Mike Shelton; Nominating, Steve Russell; Legal Agent/Parliamentarian, Mike Hay.

**NorthMoor Observatory:** (Steve Wrigley) Public observing has been very busy. An article recently ran in the Journal Star about the NorthMoor observatory.

**Observing Club:** (John Barra) Fall Messier Marathon is scheduled for October 13<sup>th</sup>. Yerkes reunion star party has been cancelled.

**Program:** September will be the "Powers of 10" video; October will be Rich's presentation on Light Pollution; November will be Steve Russell's report on various star parties.

**Public Relations:** The Journal Star ran a full page article and photograph about the NorthMoor Observatory.

**Starlite:** (Mike & Jessica Frasca) A Motion was made to use Kinko's to do the printing and folding of the Starlite. Motion passed unanimously.

**<www.astronomical.org>:** Some of the Society pages are missing, and some have not been updated since the site moved to a new server. Tim is still waiting for access to the new server.

Dan Son, Secretary y

## Wramblings...

(Continued from page 2)

company and don't tie up your phone line.)

Now, who qualifies?

Any member in good standing (meaning you paid your dues before each March 1<sup>st</sup> and are still on the active list) who has a screen name and access to the Internet. Either 1) send an e-mail to Mike Frasca <frasca@uic.edu> and tell him your name, snail-mail address, and e-mail address; or 2) send an e-mail to this web page below and in the subject line type "subscribe". You'll be glad you did!

**<<http://www.yahogroups.com/group/PeoriaAstro>>**

Best wishes from cyberspace,  
Steve Wrigley y

## Telescopes Across...

(Continued from page 1)

five to read the actual e-mail exchange.]

Wrigley commented, "I thought it could be interesting...how someone from a different country could contact us and within six days arrange a tour of our facilities and have a good-sized group of PAS members be there to greet them, all by way of this phangdangled new convenience called e-mail."

The Williams family had a great visit. "For an ad hoc meeting...it was a great evening.... We shall long remember the night with the fireflies in your Jubilee site." [Editor's note — for more observations by Williams, see the PeoriaAstro column.]

Williams left an open invitation to PAS members to visit the CAS observatory should they find themselves in the UK, "especially in autumn and winter when our skies can be (at) their best." y



## Monthly Program Schedule

*Meetings will be held in the Lakeview Museum Planetarium. Unless otherwise noted, all programs begin at 7:30 p.m.*

**September 5, 2001**

**Video — Powers of 10**

**October 3, 2001**

**Light Pollution**

Rich Tennis

**November 7, 2001**

**Star Parties**

Steve Russell

**December 5, 2001**

**TBA**

# Of Starlites Past

by John Barra

## 40 YEARS AGO

Fall Newsletter 1961

“What would be a more appropriate time for stargazers to get together than the day of the Autumnal Equinox, which was the date of our Annual Fall Dinner Meeting. There was truly a heavenly atmosphere with stairways to the stars and a ceiling solar system, thanks to the artistic talents of Ruth Christensen, the decorating chairman.”

*See the article on our fall dinner meeting elsewhere in this issue. It is a picnic, not an indoor event with a solar system on the ceiling — President Wrigley would not allow it because of the fear of Uranus falling on his head. Let's hope for another year of clear skies and good viewing.*

“The Perseids meteor count was very successful right down to the very last sausage and pancake served in the wee hours of the morning. The Orionid meteor shower is due Friday, October 27<sup>th</sup>, and a ‘count’ is scheduled for about 7:00 p.m.”

*We haven't tried pancakes and sausage at our meteor shower parties yet. We are still struggling with getting the microwave popcorn right. I wrote this article before the Perseids, so I hope they were good. A first quarter Moon will probably interfere with the Orionids. y*

# ABCDEFABCDEF

## 25 YEARS AGO

Fall Starlite 1976

“Comet d'Arrest: According to the charts (*Sky & Telescope*) this comet will be at its brightest around September 1<sup>st</sup>, when it will be about 3° north of Beta Sculptor....Its brightness, however, will be at the lower limit of naked eye visibility. Best use at least binoculars.”

*Comet Linear 2001 (it seems that all the new comets are named after the computerized program that finds them) was easily observable with binoculars in the middle of the night in early July, even with a nearly full Moon. It probably will be too faint to see with binoculars in September.*

“And now for our most exiting part (the 24-inch telescope)... Dr. Sam Decker, a Society member of long standing, has pledged \$2500 toward this new telescope. Art Grebner has grabbed the ball and located a 24-inch ground blank which has already been delivered to his basement.”

*The rest is history. Their masterpiece is one-of-a-kind. Art, of course, has gone to the stars in the sky. Sam can be seen from time to time at various PAS functions. y*

## Astronomical Calendar

September 2  
Full Moon

September 5  
PAS Members Meeting, 7:30 p.m.  
Lakeview Planetarium  
Video: “Powers of Ten”

September 10  
Last-quarter Moon

September 15  
Star Party at Jubilee Observatory

September 17  
New Moon

September 19  
PAS Board Meeting, 7:30 p.m.  
Willow Knolls Court Hardee's

September 20  
Venus is 0.5° from Regulus in the morning sky

September 22  
Fall equinox at 6:02 p.m. CDT

September 24  
First-quarter Moon

September 29  
PAS Members Banquet at Jubilee State Park  
Fall equinox at 6:02 p.m. CDT

October 1  
Full Moon

October 3  
PAS Members Meeting, 7:30 p.m.  
Lakeview Planetarium  
Light Pollution: Rich Tennis

September 2001						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29

October 2001						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November 2001						
S	M	T	W	T	F	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October 10  
Last-quarter Moon

October 13  
Star Party at Jubilee Observatory

October 16  
New Moon

October 17  
PAS Board Meeting, 7:30 p.m.  
Willow Knolls Court Hardee's

October 20  
Star Party at Jubilee Observatory  
Orionid meteors

October 24  
First-quarter Moon

October 26  
Venus and Mercury are within 1° of each other high in the early morning sky

October 28  
Return to Central Standard Time; change clocks back one hour at 2:00 a.m.

October 29  
Mercury is at greatest western elongation, 19° from the dawn Sun

November 1  
Full Moon

November 5  
Venus and Mercury are still within 1° of each other high in the early morning sky

November 7  
PAS Members Meeting, 7:30 p.m.  
Lakeview Planetarium  
Star Parties Update: Steve Russell

November 8  
Last-quarter Moon

November 15  
New Moon

November 17  
Leonid meteors

November 26  
Mars is 0.75° from Uranus at sunset in the western sky

November 21  
PAS Board Meeting, 7:30 p.m.  
Willow Knolls Court Hardee's  
Starlite Deadline

November 22  
First-quarter Moon

November 30  
Full Moon

# PeoriaAstro@ yahoogroups.com

compiled by Michael Frasca

Here are some highlights from the Peoria Astronomical Society's e-mail group, the URL of which has changed due to the acquisition of eGroups by Yahoo. If you are an active member of the PAS and would like to subscribe to PeoriaAstro, send an e-mail message to Michael Frasca <frasca@uic.edu> with the following information: name, snail-mail address, and e-mail address. You will be added to the group.

From: Tim and Kerri McGrath <[tkmcgrath@home.com](mailto:tkmcgrath@home.com)>  
Date: Tue, 22 May 2001  
Subject: A cool link  
<<http://www.skyrover.net/ds/>>

This site shows drawings of deep sky objects. The cool feature is that you can "invert" the drawing, so they show up white on black instead of black on white. This makes the drawings look like they would through the eyepiece.

@ @ @

From: Don Ware <[djware@airmail.net](mailto:djware@airmail.net)>  
Date: Sat, 26 May 2001  
Subject: Website

Just a note, our website is moving sometime around the first of June. We are being hosted by a company called ActionWeb, which has a monthly transfer limit of 3 gigabytes per month; we have outgrown that some time ago (around January), and I have been looking around for a more suitable webhosting company...didn't find one, so I decided to move the whole thing in-house...we will be on a Business DSL which runs above T1 speeds, which should hold us for awhile.

I have been working on setting up a Linux server and firewall to handle the website since last weekend. The security stuff is done, and I am currently working on getting a second server up to be a database server. Yep, we will have access to a database, which means we can generate some of the longer pages (the constellations) dynamically. FTP will not be available for file transfers. I am moving to a more secure model based on WebDAV, which provides us some level of version control (if I am working on a page, you can't, and if you are working on a page I can't)...FTP has known security holes, and I don't want to open the servers to possible attackers, I know Macromedia's Dreamweaver and UltraDev already support WebDAV, don't know about FrontPage (don't use it)...I do know Microsoft will be incorporating WebDAV into their XP and Whistler versions of their operating systems, so I hope this won't inconvenience you guys too much....

There won't be telnet available either, another potential security hole; instead I am going to use SSHd, an encrypted version of telnet, so that passwords will not be sent in the clear across the Internet.

You can find more information about WebDAV from <<http://www.webdav.org>> and more information about SSHd from <<http://www.ssh.com>>.

I'll get back to you all later when the static IP address is installed, to give you access to the new system.

@ @ @

From: Dan Son <[sunshine92@home.com](mailto:sunshine92@home.com)>  
Date: Mon, 18 Jun 2001  
Subject: Fw: Possible visit to your facilities  
Well does anyone care to show him around...I might be able

to go out to Jubilee or NorthMoor even, let me know. I'll be gone on Tue and Wed so will check e-mail asap.

----- Original Message -----

From: Dave Williams  
To: [sunshine92@home.com](mailto:sunshine92@home.com)  
Sent: Monday, June 18, 2001  
Subject: Possible visit to your facilities  
Hello from Bedford, England.

My name is Dave Williams. I am presently chairman of the Cranfield Astronomical Society here at Cranfield University. My daughter now lives in Peoria and my wife and I will be visiting her next week, arriving Sunday 24<sup>th</sup> June to stay until Friday 29<sup>th</sup>.

I was just wondering whether it might be possible to visit your facilities while we are there; I have looked after our own observatory for the last 20 years and I always find it interesting and instructive to see how others get along. I should be very interested to meet up if it is possible though I realise it's pretty short notice; I regret that I've only just thought of doing a web search for info and I must say I am very impressed by your website. Hoping to hear from someone if time permits.

@ @ @

From: Steve Wrigley <[BigWrig42@aol.com](mailto:BigWrig42@aol.com)>  
Date: Tue, 19 Jun 2001

Subject: Re: Fw: Possible visit to your facilities  
I have sent this gentleman an e-mail and have invited him to contact me when he gets to town. Is someone willing to show him Jubilee if he has time?

@ @ @

From: JC Kline <[klinejc@bwsys.net](mailto:klinejc@bwsys.net)>  
Date: Wed, 20 Jun 2001

Subject: Re: Fw: Possible visit to your facilities  
I will be around through the 27<sup>th</sup>. I can't show him the 24-inch scope, but I can show him around everything else.

@ @ @

From: Eric Clifton <[ericjclifton@home.com](mailto:ericjclifton@home.com)>  
Date: Sun, 24 Jun 2001  
Subject: Re: Fw: Possible visit to your facilities  
Good Evening, Everyone...

I just had a call from Dave Williams of the Cranfield Astronomical Society... about 40-50 miles north of London. He arrived in Peoria yesterday and is in the process of getting over his jet lag.

Because we've got a good weather forecast tomorrow night, we decided to jump on the opportunity and visit Jubilee on Monday evening. I'll meet him at his daughter's home here in Peoria and lead him out to Jubilee. We should be getting there about sunset. He wants to see the observatory and he wants to look at Mars. Steve Russell will be there with his 6-inch refractor so the views ought to be pretty good.

If you have some free time Monday evening, come on out to Jubilee and meet Dave. I'm sure it will be an interesting evening. Hope to see you at Jubilee Monday evening about 8:30...

@ @ @

From: Dave Williams  
Date: Thu, 26 Jul 2001  
Subject: RE: Hope your visit went well  
Dear Steve,

It was nice to hear from you again and I apologize for not yet getting back to you all. We have been home now for most of a week and have lots of correspondence to catch up on. I did manage to scribble a note of thanks to Eric before we left so I hope that has found its way through the Caterpillar snail mail....

We shall probably visit Jo again next year but perhaps at a

(Continued on page 7)

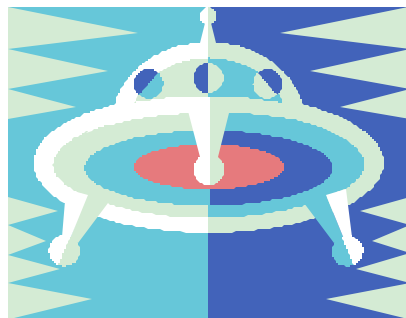
# Smithsonian Planetary Geologist to Speak Here

by John Barra

James Ray Zimbelman, a planetary geologist from the Smithsonian Institution, will speak at Lakeview Museum on Wednesday, September 12<sup>th</sup>, at 7:30 p.m. The lecture, entitled "A Close-up Look at Mars," is open to the public.

Zimbelman has worked at the Center for Earth and Planetary Studies at the National Air and Space Museum since 1988. He works on the analysis of high-resolution spacecraft imaging

data and geologic mapping of Mars and Venus. He previously worked on the Infrared Thermal

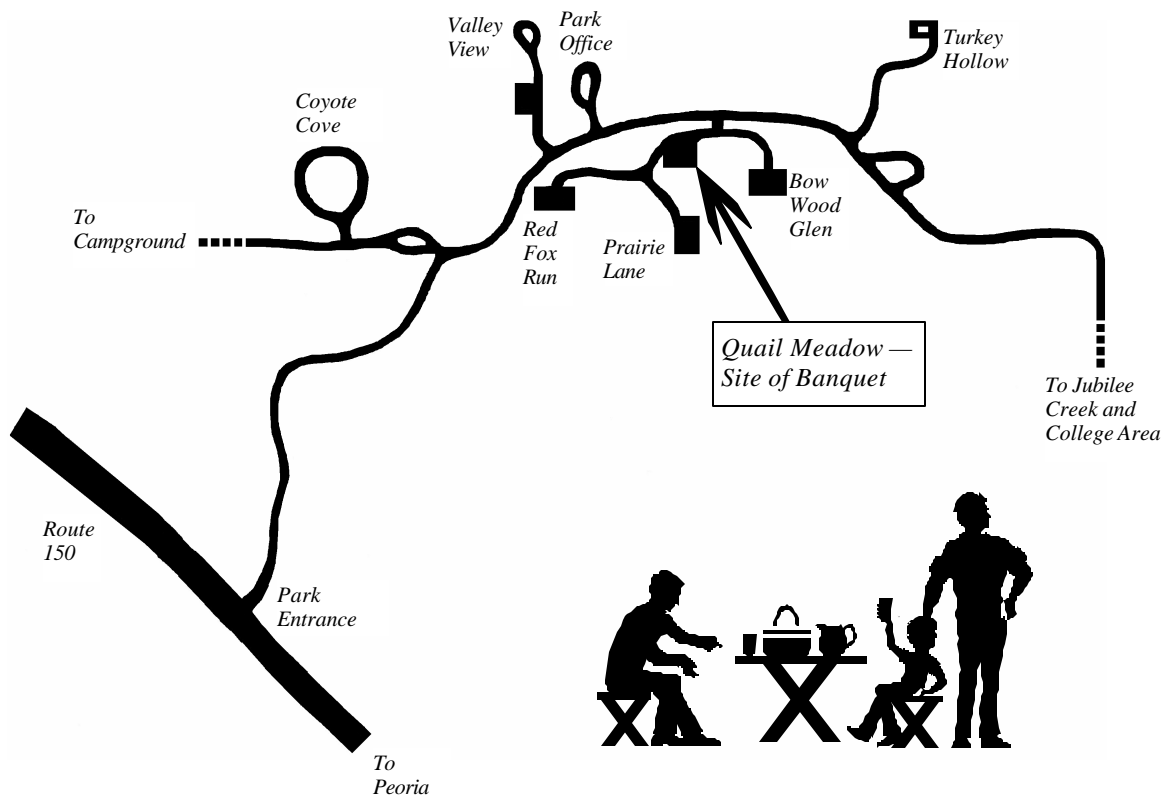


Mapper experiment on the Viking orbiter mission to Mars.

His lecture, which will be illustrated with slides of various spacecraft images, reviews what has been learned from Mars, both from early telescopic studies and early spacecraft missions. It concludes with a study of the present view of Mars based on data from the Viking, Pathfinder, and Mars Global Surveyor missions.

This lecture is a must for those astronomers and geologists interested in the study of Mars, a planet that has gotten a great deal of public attention the past few years. There is no charge to attend. y

## Jubilee College State Park: Map to Banquet Site



## PeoriaAstro@yahoogroups...

(Continued from page 5)

different time of year. Above all else I shall remember the welcome which everyone we met, even casual acquaintances "on the road," gave to us, making us feel appreciated as visitors rather than just tolerated. This applies especially to the welcome given by your Society; I hope we might have an opportunity to reciprocate some time.

Regarding our evening visit to your observatories, we shall long remember the dusk, the fireflies and the gathering of souls at almost no notice (very impressive response to e-mails). I was most impressed by the 24-inch facility, especially the set up and the object acquisition ease and speed. The views were rather as I remember them with our 16-inch 20 years ago, before our campus was brought up to current standards for night lighting. I admired the efforts you have all put in to develop the site and the instruments and long may you reap the benefits of that work. It was good to hear that Peoria is to adopt more sustainable lighting methods for the future so I hope your site remains as good as it is now. It feels like (that is) a battle that we have already lost.

It was a pity we had to leave before midnight to get Jo back to bed in time for her to get to work next day in good order but the session was still very memorable and perhaps the more so because it was pretty ad hoc and so not burdened with too much protocol.

I should like to express my thanks to everyone who made such efforts to welcome complete strangers and make such a pleasant gathering and exchange of banter as well as providing an interesting comparison of views and activities between our two Societies. If ever any of your people visit UK do give them my contact details; I should be very pleased to return the favours as much as I can.

It always seems inadequate somehow when one says "thank you for a great time" at the end of some really memorable gathering of whatever kind. The best one can hope for is a mutual feeling of having had a really good time and that something akin might occur again someday. We felt all of that and indeed, should we visit Jo in Peoria again in the next few years, I should like very much to join in some serious observing, hopefully at greater convenience to your members.

It was a great visit, especially as it was the result of a somewhat casual and last minute web scan just to see what the possibilities might be. And did I hit the jackpot at my first contact!

I am in the process of arranging to retire from active work in the University at the end of September. This means rearranging my astronomy activities also even though I expect to continue my teaching activities each winter and spring. I have a darkish site at my son-in-law's farm where I have plans to build my own observatory to replace my not very dark back yard and even less dark Loxham observatory on campus here. Incidentally, I thought your observatory site was very dark for the summer in comparison with here but I wonder what you get to do in the winter time when we get our best observing conditions? Does it get just too cold? We are into our usual programme of summer refurbishment now in preparation for the next academic year starting in October when we usually get the first really good nights.

Well, enough rambling from me for now and thanks again for all your efforts.

Best regards,  
Dave Williams  
Cranfield Astronomical Society

@ @ @

From: Rich Tennis <[mtennis@mtco.com](mailto:mtennis@mtco.com)>

Date: Sat, 7 Jul 2001

Subject: Peoria City Traffic Commission & full cut-off street lights

Just received a copy of a letter, dated May 31, 2001, that was sent to Eric Clifton, I assume, as well. It is addressed to Mr. Stephen N. Van Winkle, Director of Public Works, City of Peoria. I will pass it on to all:

"Dear Mr. Van Winkle:

At the recent City Traffic Commission meeting a presentation was made by the Peoria Astronomical Society regarding the financial benefits of having 100% of the output from street light to be directed downward. A secondary benefit would be the reduction of sky-glow.

The Commission reviewed the letter of April 24, 2001, by Gene Hewitt to Rich Tennis and Eric Clifton, which indicated that all new street light installation would utilize the lower wattage, full cut-off design of fixtures. The letter further indicates the development of the replacement program.

Based on the above testimony, the Commission unanimously recommended that an annual replacement of lighting fixtures be budgeted using reduced-wattage fixtures with the 'full-cut-off' design. Assuming that electrical rates were to be constant, the lower wattage fixtures would result in reduced energy charges for the taxpayers.

Yours truly,

John Haverhals, Chairman  
City Traffic Commission"

So, what is the next step in having this happen? Stay tuned for the rest of the story.

I sent a letter yesterday to Rita Solis, Peoria Public Works Dept, asking that we get ready to meet with CILCO on implementation of John Haverhals' and Gene Hewitt's requests. I would imagine that this will need to go before the City Council, as it is a budget item. So, when and if it does, PAS and the Light Control Committee will be there to help in any way we can.

@ @ @

From: Don Ware <[djware@airmail.net](mailto:djware@airmail.net)>

Date: Thu, 19 Jul 2001

Subject: Pirelli Award

The Peoria Astronomical Society has once again been nominated for the Pirelli Award, the top prize is 80,000 euros or \$65,000 US, if anyone has ANY ideas to help spruce up the web site, please let me know....

@ @ @

From: Helen Ware <[HELEN@bumail.bradley.edu](mailto:HELEN@bumail.bradley.edu)>

Date: Wed, 25 Jul 2001

Subject: RE: Article in PJS

My congratulations to whoever was responsible for getting that article in the PJS. That was quite a spread. OK, so they blew it with the sound of light, what do expect from reporters :-> !!

@ @ @

From: Helen Ware <[HELEN@bumail.bradley.edu](mailto:HELEN@bumail.bradley.edu)>

Date: Fri, 10 Aug 2001

Subject: Congratulations to Eric.

On Friday night, 10 PM weather, Peoria Channel 25, WEEK, weatherman mentioned that his friend Eric Clifton of the Peoria Astronomical Society called about the Perseid meteor shower. Eric, you got it all mentioned on TV, congratulations! He even said "Astronomical," not the other word.... y

## Can You Spot This?

### NGC 7009, the Saturn Nebula

by John Barra

Can You Spot This? *premiered in Starlite Issue # 144, December 2000*

There are only four planetary nebulae on Charles Messier's famous list: M27 (Dumbbell), M57 (Ring), M76 (Little Dumbbell), and M97 (Owl). However, there are eight other planetaries that have been nicknamed and are brighter than the dimmest of Messier's. My favorite is NGC 7009, the Saturn Nebula.

A planetary nebula is an expanding shell of gas that has been

disconnected from a dying red giant star. This type of nebula gets its name from the fact that many in their early stages look like a planet in a telescope. However, of Messier planetaries, only the Owl has the appearance of a disk, at very low power. The Saturn nebula is a classic example of a planetary that does look like a planet in the eyepiece. But first you have to locate it.

NGC 7009 can be found in Aquarius, very close to M72 and M73 as shown in the naked-eye view of Chart 1. The planetary is

about 1° west of Nu. With a low-power eyepiece in your scope, locate Nu Aquarii. Then starhop to the Saturn Nebula. With Nu in your eyepiece, notice the asterism of fairly noticeable stars shown below it in Chart 2, a telescopic view. Move in the opposite direction to the star marked 1. Note that Nu is magnitude 4.5 and star 1 is 8.5.

Continue in the general direction until you hit the Saturn Nebula, which is magnitude 8. If you reach the magnitude 7 star marked 2, you have gone too far. It may help to note the zigzag of magnitude 9 and 10 stars between star 1 and the nebula. This planetary nebula should seem brighter than the stars around it. It also appears as an out-of-focus star, the telltale sign of most planetaries at low power.

Increase power and you should quickly see how it got its name. It will appear bigger, and noticeable bulges can be seen opposite each other to give it a Saturn-like appearance, with the bulges resembling Saturn's ring plane when it is nearly parallel to our line of sight. In fact, it looks exactly as I remember seeing Saturn the first time in a slightly out-of-focus, low aperture telescope.

William Herschel first observed NGC 7009 in 1782. Lord

(Continued on page 9)

**...A planetary nebula is an expanding shell of gas...from a dying red giant star...**

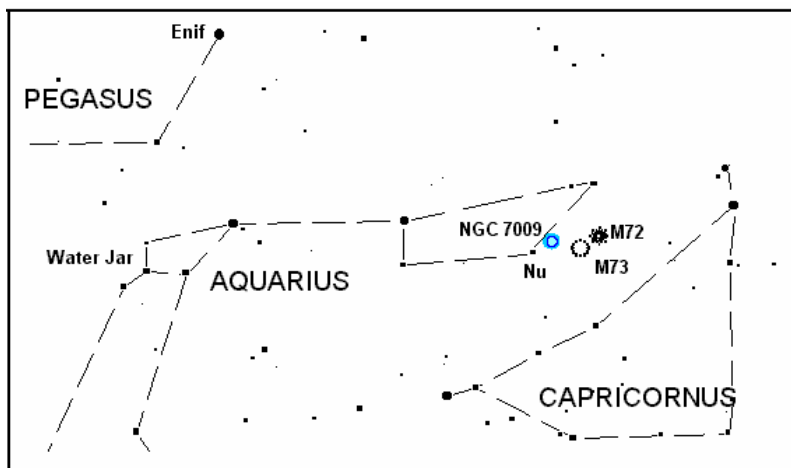


Chart 1: Naked-eye

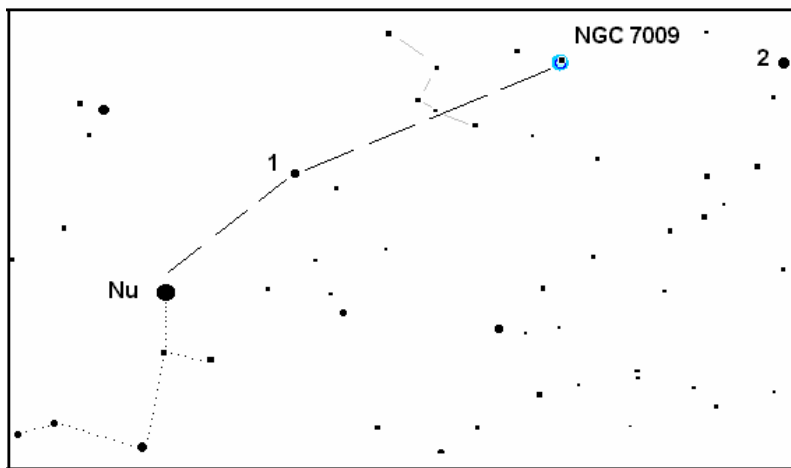
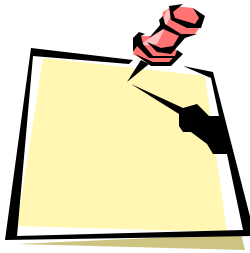


Chart 2: Telescopic







## The Bulletin Board

### New Members

Welcome to:  
Cara Schlotter

☾ ☾ ☾

### Astronomy Class

Don Hill's Astronomy Class will meet weekly from September 23<sup>rd</sup> through October 21<sup>st</sup>. He is asking for assistance with the class. Please contact him at 685-1342 if you can help.

☾ ☾ ☾

### Can You Spot This..

*(Continued from page 8)*

Rosse later named it after Saturn. He said: "It has ansae which probably indicate a surrounding nebulous ring seen edgeways." A high-powered photograph from a 60-inch Mt. Wilson telescope shows the planetary disc itself to look somewhat similar to that of the Eskimo Nebula. That same photo shows the "ansae" to look just like the straight line of Saturn rings just before we lose sight of them when their plane becomes perfectly parallel to us.

#### OBJECT STATISTICS:

Name: NGC 7009, Saturn Nebula  
Type: Planetary nebula  
Magnitude: 8.3  
Size: >25"  
Coordinates: 21 hr. 04.2 min.; -11 deg. 22 min. y

### Slate of Officers Set

The following slate of officers was nominated for the 2001-2002 term. They will be voted on at the Annual Banquet on September 29, 2001.

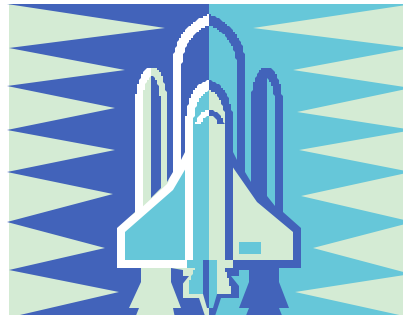
President: Steve Wrigley  
Vice President: Scott Hay  
Treasurer: Mike Shelton  
Secretary: Dan Son  
Legal Agent and Parliamentarian: Mike Hay  
Nominating Chairman: Steve Russell

☾ ☾ ☾

### NorthMoor Viewing Schedule

September 1: B Weston, C Lamb  
September 8: L Bodell, J Wrigley  
September 15: D Son, S Hay  
September 22: M Hay, V Broquard  
September 29: J Barra, S Hay  
October 6: G Bussman, P Burroughs  
October 13: B Hakes, D Wrigley  
October 20: T Lester, D Hill  
October 27: D Grebner, J Miller

☾ ☾ ☾



### Jubilee Mowing Schedule

September 1 (West): C Fleming, J Kline, S Swords  
September 8 (East): E Clifton, J Kelly, D Son  
September 15 (West): G Bussman, D Kasel, M Shelton  
September 22 (East): M Frasca, D Kobilka, D Teeter  
September 29 (West): D Grebner, C Lamb, R Tennis  
October 6 (East): B Hakes, T Lester, S Thomas  
October 13 (West): M Hay, J McElyea, B Weston  
October 20 (East): D Grebner, J Kelly, S Thomas

☾ ☾ ☾

### Observing Club..

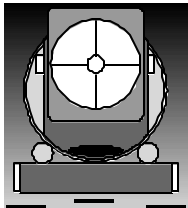
*(Continued from page 10)*

be great this fall, peaking on the evening of December 12<sup>th</sup> and morning of December 13<sup>th</sup>, weather permitting. The Moon becomes new the next day.

#### **Reminder: October 13<sup>th</sup> Messier Marathon**

As reported in the last issue of the *Starlite*, the PAS will conduct its first fall Messier Marathon beginning the evening of October 13<sup>th</sup>. While this time period is not as perfect for a marathon as in March, this second peak in the Messier cycle should allow for viewing of around 100 Messier objects.

As in past marathons, members are asked to bring snacks to share. Even though the weather is typically warmer, be prepared for chilly weather. Hopefully, it will not get as cold as this past March marathon, and certainly no snow at 2:30 a.m. But colder weather in the fall does usually increase the chance of clear skies. Checkoff sheets will be provided in the warmup shelter. y



Astronomy Section Newsletter  
 Peoria Academy of Science  
 c/o Princen  
 677 E. High Point Terrace  
 Peoria, IL 61614

#147, September 2001

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In This Issue...

Telescopes Across the Atlantic, PAS Banquet, Can You Spot This?, and more....

## Observing Club Notes

by John Barra

### Huge Crowd at Jubilee for Perseid Shower

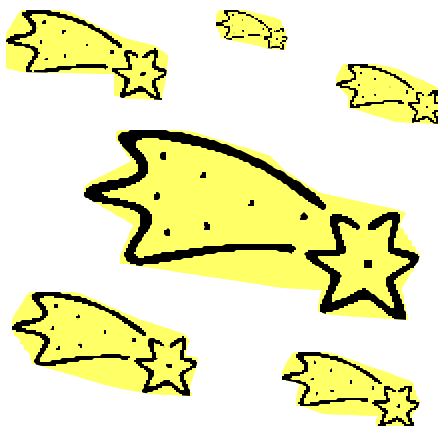
Over 70 people came to the PAS observatories on Saturday,

*...many got the special treat of seeing the early stages of the (Perseid) shower....*

August 11<sup>th</sup>, the night of the Perseid meteor shower. The number was swelled by the fact that over half were non-members from Caterpillar and their families who came as guests of Eric Clifton to see the night skies and telescopes at Jubilee. However, many got the special treat of seeing the early stages

of the shower.

Approximately 15 members brought out their telescopes to assist Eric in showing different views to the special guests. This number gave a rare opportunity for PAS members to compare views of various objects from a vast array of different scopes.



Since the third-quarter Moon was set to rise around midnight before the scheduled peak of the meteor shower, no official counts were planned. However, unofficial counts of 50 to 70 meteors were reported between 9:00 p.m. and moonrise. About 80% were Perseids. These numbers appear typical of those counted in the past during the hours before midnight. Most appeared to be fast moving and a few very bright ones were observed, causing the typical loud comments of all who happened to be looking in the right direction.

By the time the Moon could be seen rising above the tree line around 12:30 a.m., over 30 people remained watching the skies. Although some like me left when the Moon began to interfere with the meteor shower, I understand that those who remained were treated to spectacular views of the third-quarter Moon in Steve Russell's refractor.

Expect the usually greatest meteor shower of the year, the Geminids, to

*(Continued on page 9)*