



Northwest Skies

The Official Newsletter of the Tacoma Astronomical Society
Tacoma, Washington, USA

72 Years of Amateur Astronomy in the Pacific Northwest September—October 2003

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The President's Message

by Matt Flood

Thanks to the many people who helped make the TAS astronomy fair a success. Several people went above and beyond the call of duty. This list is by no means complete, but some special recognition is in order. Thanks to: Ken Board, who provided security for the event, also worked on the kids' events; to our program presenters, Paul Hines (Spectroscopy), John Finnan (Binocular Viewing); for kids' programming, Alice Few, Joe

Witherspoon, and many more; for viewing, Bill Briggs, Jason Christie, George Hiles, Chuck Jacobsen, Dave & Jerry Armstrong and so many others; for concessions, (T-shirts etc.) Lisa Schmidt; for the RV "Hideaway", Joan Koch; and as usual, Ken Slavens for everything! Every member there deserves thanks.

Public Night on Aug. 23 was a smash, almost overwhelming, success. Maybe

250 people! Remember the time change for public nights to 7:30 PM coming up in October.

On a sad note, long time member, historian, and friend of TAS, Rosalie Hosack passed away. I'd hoped no more of our TAS friends would leave us on my watch, but sadly this is not the case.

Good luck to all, and enjoy the Mars viewing during this unique time.

Rosalie Hosack

1915 - 2003

It is with deep sorrow that we announce the death of Rosalie Hosack who passed away at the age of 88. Rosalie was a life time member of the Tacoma Astronomical Society. She was planning on attending a gardening presentation and accidentally walked in on a TAS meeting back in 1968, and has been with the Society since then. During her membership she was the So-

ciety Historian and a 'Miss Welcome', greeting new members as they arrived for their first time at TAS events. She also received the President's Award in 2001 for her work and contributions to the Society. She will be greatly missed by all within the Tacoma Astronomical Society who knew her.

A memorial service will be held for her at

Mountain View Cemetery in Tacoma at 1:00 PM on Saturday, September 6th.

All members who knew Rosalie are urged to attend. In lieu of flowers, the family has asked that donations be made to the Scholarship Fund for the Tacoma Astronomical Society. For more information, please contact JoAnn Lakin at (253) 584 - 0396.

Northwest Skies is a bi-monthly publication of the Tacoma Astronomical Society. All opinions expressed in this newsletter are those of the contributors and not necessarily those of the Tacoma Astronomical Society. Personal advertising is accepted without charge from members in good standing.

Article contributions are strongly encouraged and may be submitted as an email attachment to

editor@tas-online.org

People to Contact

You can also contact us via email through our website at:

www.tas-online.org

Our mailing address is:

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**Bert Brown
turns his
attention to
Near Earth
Objects and
describes the
work done by
Dr. Brian
Marsden and
the Minor
Planet Center
in identifying
high risk NEOs.**

What's Up In Astronomy

by Bert Brown

There are believed to be some 1000 to 1500 asteroids a kilometer or greater in width hanging out in the "inner solar system", mainly between Earth and Mars, and there may be a million rocks 50 meters or larger. Some of these objects; 2250 asteroids and a dozen short-period comets are considered 'near earth objects' (NEO). Back in 1908 a NEO perhaps a hundred meters wide, possibly a comet, flattened a forest in the Tunguska region of Siberia. Evidence points to a much bigger impact about 65 million years ago that allegedly wiped out the dinosaurs. There are meteor craters on the moon and several on Earth.

So maybe we should pay

attention to these things.

The outfit that does pay attention to NEOs is the Minor Planet Center (MPC) of the Smithsonian Astrophysical Observatory in Cambridge, Mass. It is staffed by Dr. Brian Marsden and 1.5 other people (I have not inquired as to the nature of the .5); it is funded partly by NASA and partly by subscriptions and donations. Amateur and professional astronomers from all over the world send asteroid sightings to the MPC, which operates on behalf of the International Astronomical Union. The MPC processes and organizes data, identifies objects, computes orbits, assigns tentative names and disseminates

information. Marsden has headed this operation since 1978, a time when few people were interested in asteroids.

When something suspicious is found, an orbit that may intersect ours someday, MPC solicits follow-up observations and requests archival searches. Sometimes the MPC gets involved in controversy. On March 11, 1998 Marsden reported on the MPC Website that an asteroid discovered in December, 1997 might make a close approach to Earth in 30 years. Although he also said the chance of a collision was small, the media picked up on this and there was much publicity. A day later, further calcu-

lations from old photos erased the threat; nevertheless some people considered the earlier announcement a scientific debacle. But it had the beneficial effect of alerting people to the possibility of such an event.

Of course, when an object on a collision course is found, the question arises, what to do about it? Much would depend on the timing and size of the thing. One suggestion is to blast it with a nuclear device, thus converting it into smaller rocks, albeit radioactive ones, some of which would still be aimed at us. Another possibility is to darken one side of the object in the hope that

any radiated heat would nudge the orbit a little. "We have to do more than the dinosaurs," says Marsden. Of the estimated 1000 to 1500 kilometer-sized asteroids mentioned above, about 650 have actually been identified. It would be desirable to start looking for 200- to 300-meter wide objects, which would require larger telescopes and a 10-fold increase in funding.

In another controversial topic, Marsden is among those who consider Pluto a minor planet or asteroid, rather than a full-fledged planet. Clyde Tombaugh would be unhappy with him.

Brian Marsden is 66 in August, and would eventually like to turn over the MPC to his associate, Gareth Williams; but there is no timetable for this. Locally, Dr. Steve Starkovich and students have worked with asteroids, first at UPS and more recently with the new telescope at PLU, where Steve is now the Physics Chairman. Some of the PLU data has been submitted to MPC. Steve has also presented several excellent programs to TAS.

Primary source for this article: Scientific American, August 2003, pp 84-85, article by Steve Nadis, *Keeper of the Objects*.

Sign Up for The Puyallup Fair

The Tacoma Astronomical Society has consistently maintained an information booth each year at the Puyallup Fair. As you are no doubt aware the Puyallup Fair is by far the largest single attraction held annually in Washington and ranks amongst the top ten of largest fairs worldwide. Our presence at the Fair provides us with an excellent opportunity to meet with many

members of the public and share our interest in Astronomy. This is also one of the main events in our own calendar where we attract the most new members.

Currently we still have many open places for volunteers needed to man our information booth. Please help out by signing up for the following spots.

by Ken Slavens

- Saturday 6th: 10AM - 3PM
- Sunday 7th: 6PM - 10PM
- Wednesday 10th: 2PM - 7PM
- Friday 12th: 6PM - 11PM
- Saturday 13th: 6PM - 11PM
- Sunday 14th: 6PM - 10PM
- Monday 15th: 6PM - 10PM
- Tuesday 16th: 6PM - 10PM
- Wednesday 17th: 2PM - 7PM
- Thursday 18th: 6PM - 10PM
- Friday 19th: 10AM - 3PM
- Friday 19th: 6PM - 11PM
- Saturday 20th: 10AM - 3PM
- Saturday 20th: 6PM - 11PM
- Sunday 21st: 2PM - 7PM

Volunteers will receive free tickets to the fair.

Help Using Your Equipment

The current listing of Tacoma Astronomical Society volunteers is given below. If you need assistance or advice regarding astronomical equipment such as questions regarding operating or purchasing a telescope these volunteers can help. Please remember that they are unpaid volunteers and limit your calls to the hours between 7:00PM and 9:00PM. If you wish to become a TAS volunteer, please contact Sion Heaney.

Al George
253.531.1171

Dave Armstrong
425.277.2175

Contact Ken Slavens to sign up for the Puyallup Fair!

This is a great opportunity to help the society and be part of the Puyallup Fair.



Snacks for the General Meeting

The following good people have volunteered to bring cookies or other snacks to our upcoming general meetings:

September 2nd

Ed Miller

October 7th

John Finnan

Thank you for making our meetings more enjoyable.



Observing Mars with Filters

by Nate Andrews

Optical filters work on a simple principle of blocking some wavelengths of light whilst allowing other wavelengths through. This increases the contrasts of objects being observed. While the eye is a good detector of contrast, it is weaker at detecting subtle differ-

ences in color, especially with bright objects. Using a filter greatly enhances the eyes ability to distinguish contrasts. Viewing Mars benefits from the use of filters as it is a small, very bright object with a large amount of colorful fine detail. More recently

available, specialized filters provide specific filtering whilst preserve some of the actual colors. Here are my notes on observing Mars with standard color filters and specialty filters with my 10" Dobsonian.

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Astronomy According to Dave

by Dave Sherrod

Based on years of experience I have found that amateur astronomers at star parties all fit into one of four categories. They are:

- The Gadget Geek
- The Aperture Freak
- The Harley / Hippie
Homemade
- The Tasco Dad

Gadget Geek

The Gadget Geek is the first to arrive at a star party. They have to get there early due to the fact that it takes hours to get all of their equipment set up and running. Everything is electronic, GOTO, or otherwise computerized including the observing chair and coffee mug. There are at least eight battery packs hooked up to all of the

equipment just to keep everything running throughout the night.

During the star party, very little time is spent actually looking at and appreciating the night sky. Most of the time is spent fiddling with all of the high tech equipment along with other Gadget Geeks. Many times a Gadget Geek can entertain 7 or even 8 other Gadget Geeks at the same time simply by explaining what one little flashing red light is actually doing.

The Gadget Geek gets the most satisfaction by having more of the latest gadgets than anyone else at the star party. It is highly unacceptable to be outdone by other Gadget Geeks. Only the latest

high-tech equipment can ever be used without embarrassment.

All of the astronomy equipment (valued at over \$60,000) fits tightly into their sports utility vehicle.

The Aperture Freak

Taking slightly less time to set up, the Aperture Freak is the second person to arrive at the star party. The Aperture Freak takes the word 'big' to an entirely new level. This person always owns a reflector because they can't find anything big enough with any other type of telescope.

The secondary mirror on the Aperture Freak's reflector is bigger than the primary mirror on most

people's telescopes. The eyepieces are bigger around than most refractors. Also, a special trailer had to be designed just to lug this monstrosity around in. In fact, the scope is so big that a moon filter has to be used when viewing distant galaxies just to keep from blinding people and an oxygen tank has to be made available for people who want to ascend to the top of the observing ladder.

The Aperture Freak receives great satisfaction watching the hoards of people line up just to sneak a peek while balancing at the top of the enormous ladder. Yet despite the size of their scope, the Aperture Freak is never satisfied. Next year he will sell this monstrosity because it 'is not quite big enough'. Besides that, according to his calculations, he can get a telescope with two more inches of aperture into that trailer!

The Harley / Hippie Homemade

The Harley/Hippie Homemade pulls into the star party a little later in a 1969 Volkswagen Bus. They then roll their homemade Dobsonian reflector out on the grass. The sorry looking

thing has been pieced together using an old tire, several tooth brushes, a broom handle and some other odds and ends picked up at garage sales.

While the total monetary cost of the scope was only \$6.73, many hours were spent putting it all together. This astronomer spends more time actually observing the sky than all three of the other astronomers combined. Since the telescope is nothing to look at, one might as well use it for what it was made for.

Two minutes after arriving on site, the Harley/Hippie Homemade is ready to start observing. He can now relax on his homemade lawn chair and wait for darkness to arrive.

The Tasco Dad

Not realizing he has to spend some time setting up, the Tasco Dad arrives after dark. The Tasco Dad is fairly new to Astronomy. He has brought along his ten year old son in order to "get him interested in science". Last Christmas they bought the boy a new Tasco telescope. It has been used very little in the last few months but Dad wanted to go to this star party to

really get the kid serious about using the new scope.

The first evening is spent in frustration as the Tasco Dad is spending way to much time trying to set up the scope. The kid is getting bored and has started tossing little pebbles at other nearby telescopes. By the second night the boy has disappeared. He has wandered off to play with the kids of other Tasco Dads. Now Dad finally has the scope set up but he is having problems because he "CAN'T GET THIS %*#@ING THING FOCUSED!" despite using the "high quality" 7x barlow and 4mm eyepiece that came with the scope. Finally he gives up in frustration, abandons the scope, and spends the rest of the night looking through other people's scopes.

By the end of the Star Party the Tasco Dad now has big plans to purchase a better telescope. By the end of the week the Tasco Dad is now slowly turning into one of the other three astronomy types (usually either the Aperture Freak or the Gadget Geek.)

Which category are you in?



Observing Hill Maintenance

As the Tacoma Astronomical Society becomes the key user of the Observing Hill at Pierce College it is vital that we should also participate in the care of the site.

Please help by volunteering to clear the site and cutting the grass prior to events.

Contact Matt Flood if you would like to assist in the upkeep of our observing site.

Thank you.

September Schedule of Events

- **September 2nd:** General meeting at UPS, Thompson Hall Room 130. 7:30 PM
- **September 5th—September 21st:** TAS Booth open at the Puyallup Fair.
- **September 6th:** Des Moines Star Watch, Des Moines Parks and Recreation Field House, 1000 S 220th St. 9:00PM
- **September 13th:** Public Night at Pierce College, Sunrise Building. Program will be Space Exploration. 9:00 PM
- **September 16th:** Board Meeting. 7:00PM
- **September 26th:** Student meeting at Pierce College, Cascade Building. 7:00 PM
- **September 27th:** Public Night at Pierce College, Sunrise Building. Program will be Space Exploration. 9:00 PM

July General Meeting Minutes

Joe Witherspoon talked about the NASA Exhibit at Lakewood Library. TAS members were invited to assist and answer questions from the general public.

Sign up sheets for the Puyallup Fair were presented. TAS needs people to sign up to man the booth at the fair. People who sign up will receive tickets to get into the fair.

Lisa Schmidt is organizing the

TAS sweatshirts and tee-shirts. They should be available for the Astronomy Fair. Lisa Schmidt has a survey for the apparel. The survey is online as well.

Preparations for the Astronomy Fair were discussed and volunteers were asked for.

Sion stated that we need more members to get the NW Skies online. Circulation jumped from 21 to 50 in less than a

month.

The observing site requires maintenance. Matt has requested that we form a work party on July 18, 2003 at about 4:30 PM. He asked volunteers to bring loppers, mowers, etc.

It was discussed that we have a parking protocol at Public Nights for the top of the hill. It was decided that everyone will park on the outside of the loop.

by Joan Koch

September 2003

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2 7:30PM General Meeting	3 ☽	4	5 The Puyallup Fair begins	6 9:00PM Des Moines Star Watch
7	8	9	10 ○	11	12	13 9:00PM Public Night
14	15	16 7:30PM Board Meeting	17	18 ☾	19	20
21 The Puyallup Fair ends	22	23	24	25 ●	26 7:00PM Student Meeting	27 9:00PM Public Night
28	29	30				

August General Meeting Minutes

Matt discussed the Astronomy Fair and thanked the volunteers for helping make the event a successful one for TAS. He stated that we will continue to have tee-shirts and patches available for sale.

Matt estimated that we had about 250 people throughout the day with the majority of visitors during the early evening and after dark when people arrived for the observing. There were lots of people lined

up at scopes during the evening. George Hiles said that there were about 21 telescopes at the Astronomy Fair. Thanks to everyone who showed up and helped out.

Joe Witherspoon displayed a poster from the Pierce County Boys & Girls Club. It was a thank you directed to Dave Armstrong, George Hiles, and Joe Witherspoon for their help. There will be two more of these events, one on August

by Joan Koch

8th and one on August 15th.

Joe Witherspoon said that there would also be an event on Saturday August 23rd for the Boy Scouts at Fort Lewis. This event will run from about 8:00 AM until about 8:00 PM.

The program for the General Meeting was "Collimating Telescopes" which was a hand's on presentation.

October Schedule of Events

- **October 4th:** Public Night at Pierce College, Sunrise Building. Program will be Telescopes and Binoculars. 7:30PM **Please note winter schedule times are in effect.**
- **October 7th:** General meeting at UPS, Thompson Hall Room 130. 7:30 PM
- **October 18th:** Public Night at Pierce College, Sunrise Building. Program will be Telescopes and Binoculars. 7:30PM **Please note winter schedule times are in effect.**
- **October 21st:** Board Meeting. 7:00PM
- **October 24th:** Student meeting at Pierce College, Cascade Building. 7:00 PM
- **October 25th:** Des Moines Star Watch, Des Moines Parks and Recreation Field House, 1000 S 220th St. 7:30PM
- **October 31st:** TAS Special Event: Halloween Star Watch at Pierce College, Sunrise Building. 7:00 PM

October 2003

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2 ☽	3	4 7:30PM Public Night
5	6	7 7:30PM General Meeting	8	9	10 ☉	11
12	13	14	15	16	17	18 ☾ 7:30PM Public Night
19	20	21 7:30PM Board Meeting	22	23	24 7:00PM Student Meeting	25 ● 7:30PM Des Moines Star Watch
26 Daylight Savings Time ends	27	28	29	30	31 7:00 PM Halloween star watch	

Northwest Skies



First Class

If undelivered, please return to

Tacoma Astronomical Society
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We need your articles.

If you are interested in contributing an article or would like to make a suggestion as to what you'd like to read in **Northwest Skies** then please do contact the Editor. We are always in need of contributions.

Deadline for submitting articles for inclusion in the next edition of **Northwest Skies** is the last Thursday of the month before publishing.

We're on the web!
WWW.TAS-ONLINE.ORG

Continued from Page 5

#25 Red: very good, improves contrast of surface detail.

#21 Orange: same as #25 but not as much contrast.

Light Yellow: did not do much but did cut some of the glare.

#30 Magenta: a little less contrast than the #21 but brought out the polar caps.

#38 Blue: all I could see was the polar cap and a glint of CO haze.

Sirius Optics Variable Filter System: This filter consists of an interference filter in aluminum

housing, with an exposed wheel that allows adjustments to be made. It can be adjusted to become a nebula, contrast or broad band H α filter. It seems to do a little of everything. Contrast compared to regular filters was not as good.

Sirius Optics Mars 2003 filter: It does a good job of balancing the increased contrast and maintaining some color differences in surface detail. It works about the same as the #30 Magenta.

Celestron Baader Contrast Booster: This filter casts a yellow tint and increased the contrast, whilst leaving the polar cap as bright as the Mars 2003 filter does.

It is difficult to determine which of the specialized filters works best but for my scope I would consider the Mars 2003 filter had the edge. I would like to thank Chuck Jacobson for helping with this project.