



Northwest Skies

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

78 Years of Amateur Astronomy in the Pacific Northwest

Fall 2009

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Preface to the Fall Newsletter

by Dave Norberg

Welcome to the fall. I feel like I'm finally getting the hang of putting these newsletters together, and now I'm thinking about where to go from here. In looking back at past newsletters, there are a number of interesting pieces written by TAS members, and this edition is no different. It has a good piece on observing quasars from Jerry Cotey. (Thanks Jerry!!) His piece has inspired me in two ways. First, it reminded me of my (failed) effort to find the globular cluster G1 in Andromeda last year. I was very close to it, and I'm now working on getting better charts for it. It'll be one of my goals for 2010. Secondly, I'm playing with a members section of the website. If it works out as intended, it would be a place where members could directly add stories, suggestions, and other material that would then become a fixed part of the site. Let me know if you're interested or have suggestions! For winter, I'm working on a piece on rehabbing an old Tasco reflector. In its first life, it was a terrible scope. But, it lives again! It saw first light last week and did much better than I expected. More on it later!

TAS in the National Parks

from Ray Stinson

I am traveling and am currently in Great Falls, Montana having left Glacier National Park yesterday after working there for the past 6 weeks as an Interpretive Park Ranger for Astronomy.

I've been doing solar viewing during the day and star parties at night for the general public. About 3 times a week, I've given lectures on general astronomy at both St. Mary Visitor Center and Many Glacier Hotel which were well attended by the general public. Most of the Solar Viewing was done at Logan Pass (6650 ft elevation) and St. Mary Visitor Center (4500 ft elevation).

We held the star parties at Rising Sun, Many Glacier, Logan Pass and at St. Mary Visitor Center.

I always let the public know I was from TAS and told them about our Outreach Events and programs for Students and Public Nights at Pierce College.

Joe Witherspoon came out for about a week to assist before he heads to Arches National Park to work as an Interpretive Park Ranger there until the end of October.












As you can see, TAS has had a presence in the National Parks this past summer. We also did a couple of star parties at Mt Rainier earlier in the summer.

October 2009

- October 6th: General Meeting.**
 Please note we are meeting at Wyatt Hall, Room 109 at UPS 7:30 PM.
- October 10th: Public Night: Star Hopping and Planispheres**
 7:30pm at Pierce College.
- October 17th: Public Observing Night at PLU**
 7:30pm
- October 24th: Public Night: Astronomy Trick or Treat**
 7:30pm at Pierce College.
- November 3rd: General Meeting.**
 Please note we are meeting at Wyatt Hall, Room 109 at UPS 7:30 PM.
- November 7th: Public Night: Spectroscopy**
 7:30pm at Pierce College.
- November 14th: Public Observing Night at PLU**
 7:30pm
- November 21st: Public Night: Telescope, Binoculars, and Astronomy Gifts**
 7:30pm at Pierce College.
- Outreach Events**
 Too many to list! Please see the website for the current list.









Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4		5		6	7	8
						9
						10
						
11	12		13	14	15	16
						
						
18	19	20	21	22	23	24
						
25	26	27	28	29	30	31
						

November 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
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					

-  Public Night
-  Student Activity
-  Outreach event
-  Member activity
-  Meeting

December 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		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		

- **December 1st: General Meeting.** Please note we are meeting at Wyatt Hall, Room 109 at UPS 7:30 PM.
- **December 8th: Public Night: The Sun** 9:00pm at Pierce College.
- **December 19th: Public Night: The Christmas Star** 9:00pm at Pierce College.
- **Outreach Events** Too many to list! Please see the website for the current list.

Fall Objects

by Dave Norberg

I've been trying to find more objects off the beaten path. Here are a few that I've come across that you *might* find interesting. If you have any suggestions for now or any season, I'd love to hear about them.

- **NGC 404 - The Ghost of Mirach**
This galaxy is located right next to the star Mirach in Pegasus. It can be a difficult to pick out because they are so close together. It's easiest to find if Mirach is placed just outside the telescope's field of view. It's a quick one to find and it's one that I routinely view in the late summer and fall. Semi-dark skies are best for finding this one.
- **H3945**
h3945 is a double-star in Canis Major. It's a fairly short hop from Sirius and isn't too hard to find or observe from Tacoma. It's been called the "winter Albireo" and the name is apt. It is easy to separate and has similar blue and gold colors.
- **NGC 7619 & NGC 7626**
These two galaxies are found in Pegasus and are near twins. They are relatively faint and need dark skies and/or larger scopes. I observed them in my 12" dob at the Umptanum Falls Trailhead outside of Ellensburg. They are striking and are two of the better objects I've seen in the last year or so.

Northwest Skies is a quarterly 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.

Original article contributions are strongly encouraged and may be submitted as an email attachment to editor@tas-online.org

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**Tacoma Astronomical Society
at
Pacific Lutheran University**

Come join TAS volunteers for *free* public observing nights at PLU! Enjoy the opportunity to tour the night sky with a variety of telescopes and the main telescope in the W.M. Keck Observatory. Workshops and/or lectures, in foul weather, may be available. Check the TAS website for updates!

Come before dark to tour the facility and watch telescopes being set up; observing begins after dark.

<u>Date</u>	<u>Time</u>
September 19, 2009	9 pm
October 17, 2009	7:30 pm
November 14, 2009	7:30 pm
April 17, 2010	9 pm
May 15, 2010	9 pm
June 12, 2010	9 pm

**Want more? Check out the TAS
Calendar for Free Public Nights at
Pierce College Ft. Steilacoom and
view opportunities around the Puget
Sound!**

www.tas-online.org

An Observing Challenge

by Jerry Cotey

2 years ago I became interested in observing quasars, the active nuclei of remote galaxies. These objects were powered by black holes that contained one billion or more times the mass of our sun. I say “were powered” because when we look at these objects we are looking back to a time when the universe was a lot younger than it is today. The nearest quasars are about 500 million light years away and the brightest quasar in the sky, 3C 273, is about 1.9 billion light years away. With a magnitude of 12.8 this quasar has been seen with a 6” telescope but because it is in the constellation of Virgo it culminates in the spring, just when our weather seems to be at its worse.

This summer I came across an article telling of the discovery of the second brightest quasar, PHL 1811, in Capricornus. This object has a magnitude of around 13.8. Digging a little deeper I discovered that the original article reporting its discovery states that it is the second brightest quasar with a redshift of over 0.1 and is around 2.4 billion light years distant! As far as I can find, the second brightest quasar is more likely Mrk. 509 in Aquarius. It is also one of the closest and has a magnitude of 13.12. Of course both of these objects are in the summer sky and I was anxious to locate them for myself.

My chance to see these and hopefully some other “bright” quasars came at this year’s Oregon Star Party. Armed with my 22” Dobsonian and finder charts provided by the Deep Sky Browser at Messier45.com, Betty and I arrived on Sunday to spend the whole week. We enjoyed 7 clear nights and saw many objects new to us while we were there. Using the printed Uranometria star charts and an 80mm finder scope I star hopped to the location of both quasars. (The star-hop to Mrk. 509 is especially easy). Next I went to a wide field eyepiece in the telescope and used a 30 by 25 minute print from the Palomar Sky Survey to verify the quasars. (These survey pictures are shown for any object you wish to chart using the Deep Sky Browser). I found Mrk. 509 easy to see and with the scope stopped down to 9 inches still visible. PHL 1811 is definitely fainter and in a field with fainter stars that makes identification harder. It was seen with the scope stopped down to 9 inches also but was extremely faint for me.

These quasars are the most distant objects visible in a 6” to 8” scope and in fact there is a picture of PHL 1811 as seen with a 6 inch scope in an internet article by the “Skyhound”. For the brightest, 3C 273 in Virgo, there is a detailed chart and star-hop described in an article in the May 2005 issue of Sky and Telescope. These are tough objects that require a lot of patience to locate and identify and certainly need a very dark sky. If you wish to look at these objects remember that they need some preparation before hand as they are not plotted, with faint enough field stars, on any printed star chart that I know of. And take a look at Messier45.com if you haven’t already, it’s a great resource for any star-hoppers out there like me.

Clear Skies
Jerry Cotey