



THE STAR DIAGONAL

THE JOURNAL OF THE OGDEN ASTRONOMICAL SOCIETY

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The President's Message

Hi All:

Well it's that time of the year when I start itching to get out and start observing with our club members and even the public. I truly enjoy it and start missing it at this time of year. March is just around the corner and we will be at the Messier Marathon before you know it. After that, we will be back to our busy schedule once more.

This month we will be watching the new show that the planetarium has it is called "The Great Space Race". I'm sure that it will happen this time. I was contacted by Kevin and he has apologized for forgetting about us last month. These things happen and we are just thankful that we have such a great place to meet. I will also have the final Calendar at the meeting. I will try and have copies to hand out to the public.

This past month we were treated to two good shows. The first was the Stardust re-entry. It was a spectacular show. If you have never seen a man made object do a controlled burn through of our atmosphere, it is spectacular to see. Hopefully we will have the photo from Bruce Fisher in this issue. He has an incredible photo of the re-entry. We should all watch Sky and Tell for it but it still does not do it justice. We were also treated to one heck of a show at the Clark Planetarium it was riveting and fun filled, the little planetarium show on black holes was OK too.

Clear Skies
Craig

OAS Minutes, Jan 2006

The Monthly meeting of the Ogden Astronomical Society was held on January 12 at the Ott Planetarium. President Craig Browne called the meeting to order. Craig handed out a proposed

schedule for our public and Monte Cristo Star Parties. He asked for input on other star parties that we would like to have. Two private parties were added to the schedule. One was Dead Horse Point on 4/28 and 4/29. The other was Cathedral Gorge on 10/20 and 10/21. Sunset Jr. High also requested a star party on 3/31. One activity was announced, on Sunday January 15th, Star Dust will be returning to earth at 3am. We are planning to meet at the Motel 6 parking lot at 6pm. We will then decide on a place to eat and some locations to view Stardust's re-entry. We were awarded another Night Sky Network kit. This one is on Telescopes. We have 4 different kits available. These kits are great for teaching different subjects to small and large groups. Some of the activities can be done at night during a star party. Lowell Lyon, the president of SLAS, attended our meeting. He wanted to encourage us to attend any of the SLAS activities that might interest us. He also announced that they have a Bryce Canyon Star party the last weekend in June.

After show and tell we adjourned and some of the members went to Village Inn for a snack.

David Dunn

Stardust Re-entry

Craig, Dustin and myself (& the wife) all got up about 1:30 am so we could make it to the airport early. When we got there, there was already about 20 people there. The wind was blowing and it was freezing cold. Before we knew it, there was at least 50-60 people there. It seemed like a long wait and then we all heard Craig yell there it is!!! Breaking through the clouds to the west was the most spectacular site I've ever seen in my life. It was a huge fireball streaking across the sky with a pinkish tail that stretched for miles. And before we knew it, it was over head & getting closer to the ground heading east. It went into a low cloud and we all

waited with anticipation for it to emerge from the other side, but it never did. Then we all got really quiet waiting to see if there was a sonic boom. Almost 3 minutes later, there it was...BOOM BOOM. It sounded like a double. We all erupted into a cheer. As long as we waited for this to come, it was gone in a flash and a boom. Truly, the best and most memorable time of my life. Then Craig and I talked to a few reporters and we left to get warm and go to bed.

Mike Klein

I drove out to Wendover on a cloudy Saturday figuring that I would enjoy a nice dinner and go out and listen to see if I could hear a sonic boom. I enjoyed the nice dinner and visiting that we did, and around 9pm, I went to bed. It was raining and even starting to turn to snow. We had decided that we would meet in the parking lot at 2am and go out to view the re-entry. I was very surprised when I woke up and the sky was mostly clear.

Several of us chose to observe the re-entry from a little bit darker site. We drove down the highway towards Ely, about 20 miles. We pulled off on a pullout along the road. We ended out with a slightly earlier view of it. I saw it within one or two degrees of the horizon. It was very bright, it had a magenta to pink color to it and moved very quickly. I followed it in binoculars until it was overhead. It entered a cloud by the moon and didn't come back out again. I did notice that it was dimming quickly as it approached the moon. We also listened for and heard the double sonic boom. This was a real fun activity.

David Dunn

“Black Holes” Premier

A party of OAS members and friends made the trip to the Clark Planetarium for a "double feature." The first part of the evening was a special showing of the new Clark Planetarium production, "Black Holes", narrated by John de Lancie, the actor well-known for his portrayal of "Q" on "Star Trek-TNG." He attended the premier and said a few words to the audience after the show and at the reception. This

show is still playing: check www.clarkplanetarium.org for more information.

The second part of the evening was an excellent presentation on black holes by Dr. Stacey Palen, WSU faculty member and Ott Planetarium director. Her lively presentation style had everyone's attention, which paid off because she had a lot of information for us. As recently as 10 years ago, evidence for the existence of black holes was less than compelling. New observations have made arguments against existence of black holes much harder to support. In other words, if we do not accept the existence of black holes, we will need a lot of new (and more complicated) physics to explain the observations. Dr. Palen reviewed the latest evidence, including velocity maps of material being ejected to space under the influence of a magnetic field. These ultra-high-velocity jets are mostly simply explained as the consequence of a rotating accretion disk surrounding a black hole. Data from the Chandra X-Ray Observatory have been used to show stars orbiting an invisible but extremely massive object. These orbital motions are most simply explained by black holes. She concluded the talk with images of the latest instruments being developed to observe more detailed features of black holes using small changes in gravity waves. These instruments are the recently operational Laser Interferometer Gravitational-Wave Observatory (LIGO), and the planned Laser Interferometer Space Antenna (LISA). The audience had many questions for Dr. Palen, both during the talk and afterwards, and we all had a great time.

Cristine Jennings

From our Vice President

To date, we have sold approximately 110 coins. That leaves about 40 left to sale. Also, the campground at Dead Horse Point is starting to fill up. Dustin & I have reserved 2 sites (#2 & 3). Also, I have made membership cards, new member application forms & printed the yearly star party schedule out on 1/2 sheets of colored paper. I will bring them to the meeting.

Membership Notes

We are working to update our membership information. We will be sending it out next month. If you haven't renewed your membership and want to be on the list, please renew now. Also, it would be nice if we included cell phone numbers on the list so that when we are on an activity like the Stardust re-entry, we can find each other and communicate better. We had some members that missed joining one of the groups for the observing because they couldn't find us. If you wish to include your cell phone on the list, please add it to the list that we will pass around during the meeting or email it to dunndave@aol.com or Mike Klein at vacman84015@yahoo.com.



Picture of the Stardust Coin.

Winter Events

Usually winter is sitting around waiting for spring, but we have had some great outings this January. Sitting at dinner in Wendover that Saturday night and watching it rain, it seemed like that was all we would get out of the trip, a nice dinner with friends. Amazingly at 2:00 AM the rain had stopped and most of the clouds had moved on. A small group of us drove about 15 miles south of Wendover. Watching Stardust reenter the atmosphere and streak across the sky made the trip worthwhile. Dave called out "there it is" when we looked to the west we could see a bright light, it seemed almost stationary in the sky then moving toward us getting brighter and disappearing into a cloud directly overhead. It had a very visible tail going all the way back to the horizon.

Next was a trip to the Clark Planetarium to see the new Star Theater program Black Holes and hear Dr. Palen talk about the latest information on Black Holes. Her excellent explanations made for a better understanding. The Black Holes program is narrated by John de Lancie (he played Q on Star Trek the Next Generation) he was at a short reception after the program.

We also made it to the Roving Mars program at the IMAX theater in Jordan Commons. The program detailed the construction, travel to Mars, and some of the mission highlights. Another great evening out, thanks to Patrick Wiggins for setting that up.

Lee Priest



Stardust Re-entry. 30 Second exposure taken by Bruce Fischer.



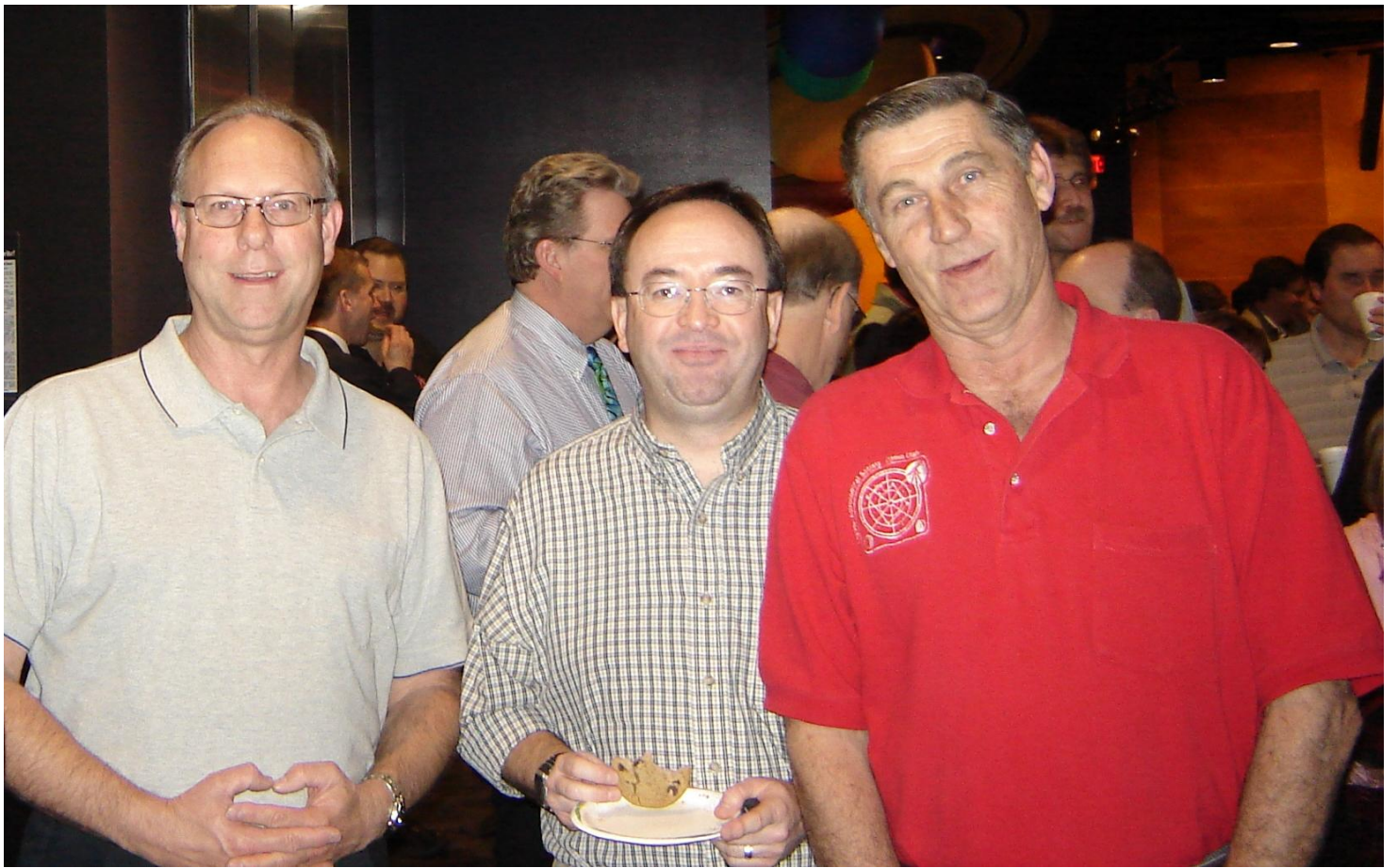
Lee & Carol with John de Lancie at Black Holes



Dr. Stacy Palen



John & Ian Sohl with John de Lancie at Black Holes



Bob, Dale & Doug at Black Holes.