

SIDEREAL TIMES

The Official Publication of the
Amateur Astronomers Association of Princeton

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From the Director

AAAP Meeting June 13 (8:00 at the NJ State Planetarium).

At the June 13 meeting we'll continue our adventures through the cosmos with a stop at the New Jersey State Planetarium, where **AAAP member and planetarium operator Bill Murray** will conduct the tour featuring the multi-media show "Hubble Vision".

The facility, recently reopened following extended renovations to the museum, features a state-of-the-art Minolta MS-10 projector instrument and auxiliary devices for video projections. Don't miss our final regular meeting of the season as we head into Jersey StarQuest (see below) then break for the summer until Sept.

Why We Need You at StarQuest – the Essential Event for

AAAP Members! We're aiming for a really strong turnout of club members, families, and friends at the upcoming StarQuest being held June 23-25 at the Hope Conference Center in NW Jersey. Even if you can only make it for Saturday (the main day), this is without a doubt *the* must-attend astro event of the summer. The Hope Center offers many outdoor activities for families with children and adults who have other interests beyond astronomy (as if that were possible!). In addition to excellent observing under high quality dark skies and the Bill Murray Deep Sky Challenge, the schedule includes hands-on technical demonstrations of dozens of telescopes and instruments, CCD astrophotography by AAAP members, valuable doorprizes, a field trip to UACNJ Observatories at Jenny Jump, outdoor fun activities such as canoeing, hiking, basketball, and camaraderie, and a scientific program. The latter

Simpson Observatory (609) 737-2575

features presentations by **Princeton University** post-doctoral fellows **Dr Andrew Youdin**, "Planets and Planetesimals from Protoplanetary Discs"; and **Dr Rus Belikov**, "The Search for New Earths" (Rus is also a AAAP member and an avid observer). For registration info see below or download the form from the AAAP website.



Setting up telescopes and getting ready for the night at StarQuest; bunkhouses in back.

AAAP Board Meeting June 1 (7:30 PM). As announced at the last meeting, we'll hold the quarterly Board of Trustees meeting at my house on Thurs June 1 at 7:30. Board members and committee members should attend, and any interested club member is welcome to join in the discussion and planning for the future of the AAAP. An agenda will be circulated in advance. Please RSVP if you will attend (drexparker@aol.com; 730-0670; 147 Church Rd Titusville, NJ).

Astronomy Observing and Outreach Season Is

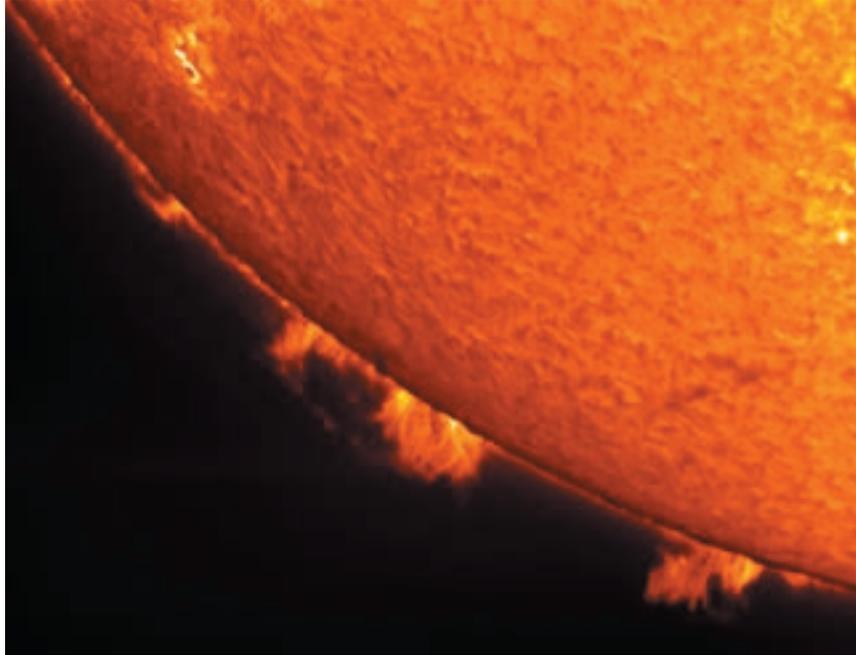
(Director, continued on page 4)

Don't forget to mark
your calendars for
Jersey StarQuest '06
June 23-25, 2006 at the
Hope Conference Center, Hope, NJ

Observations

Ralph Marantino and I were invited again this year to participate in the NEAF Solar Star Party organized by our very own Barlow Bob. We arrived in Suffern, New York on Friday afternoon, had lunch at the local Friendly's, then headed to the Rockland County Community College. At the community college the vendors were already moving their merchandise into the schools gymnasium. I talked to many vendors that I had known for years. Bob Summerfield is one of them. I had known his mother years before I knew him, though I never knew they were related.

Bob's mother was a volunteer at the Academy of Natural Science in Philadelphia. Our family had a membership and my son and later my daughter would visit the museum quite regularly. Bob's mother was great with the kids. She now suffers from Alzheimer's disease, but I relayed my thanks for the interest in science she generated in my kids.



The attached photo was taken by Greg Piepol on the first day of the Solar Star Party at NEAF.

I was able to talk to the Bisque brothers, makers of our Paramount ME mount in the Simpson Observatory. They asked how their mount was operating. Since the PC board was replaced it has been operating well. John Miller was looking into purchasing the upgrade to The Sky version six and its benefits to the ME mount control.

Rob Teeter was changing locations within the gymnasium so I helped with the move. He makes some really beautiful open truss Dobsonians. I talk with Rob about the purchase of a sixteen inch he had on display, but I really don't like standing while observing. My old C11 will have to do.

After a night at the local Holiday Inn, we arrived at the Rockland Community College around 7am. The skies were mostly overcast and didn't warrant taking the solar equipment from the van. We milled around the vendors area to see what was new in the world of amateur astronomy. I walked over to the Tele Vue display and got in line for the cosmetically flawed eyepiece sale. I bought a 13mm Nagler and 2X Powermate. They also had loose eyepiece dust caps at a reasonable price.

I then went outside to set up my Tele Vue 102 with the Daystar .45 ag T-Scanner. The filter was graciously lent to me by Barlow Bob. I was set up right next to Vic Winters who now owns the Daystar Company. The company was started by Del Woods, but because of poor health had to sell it. Vic's knowledge of the Daystar helped me use it to its fullest capability. I am lucky because the filter was made in 2002. Del Woods may

have sold the T-Scanner with the higher quality ATM model components. The higher quality components could have been the only inventory left at the end of Del Woods's ownership. I was surprised to see that the lower T-Scanner model sells now for \$3,200 and the ATM model for \$4,600. The top University model sells for over \$8,000. The red pre-filter needed in the forward objective tube for \$250. It's not just the prominences that are seen clearly, but the surface features. Mottling, and ribbons of prominences shooting straight out are clearly visible.

The least expensive facet of solar viewing is the second layer of the sun in viewing sunspots. This can be done in the \$100 range.

At the Saturday night dinner I was able to chat with the real giants of amateur solar astronomy. True solar observers and photographers like Paul Hyndman, Greg Piepol, Gordon Garcia, Gary Palmer and Alan Friedman. Bill Dean of Meade/Coronado and Vic Winters of Daystar. I will be looking forward to next years event.

Ron Mittelstaedt

Stokes Star Party I & II Review

I have been to this location twice, once last Fall 2005 and this Spring 2006. Both times the conditions were superb. Each trip both Friday and Saturday nights were crystal clear. The field where the scopes are set up is known as the "corral" since it is surrounded by split rail fencing. The dark although blocked by surrounding trees the grassy field near the horizons. But low can be anything that you search the sky above you for objects which in central NJ are



dim but here are much brighter. I even took some time out to just look up and see stars and constellations which normally I cannot see completely from home. The one draw back was the skies toward the southeast had a noticeable glow. There was limited access to AC power but having enough extension cords (300') a line could be run from the outdoor outlets to the field. On both weekends wind and dew were almost nonexistent. I didn't use a heater but did have a dew shield on just in case. In the morning

(Stokes, continued on page 3)

Science Outreach

ken@princetonastronomy.org

Ken Kremer
AAAP Program Chairman

Starquest: Hope Conference Center, NJ, June 23-25. The 17th annual AAAP star party will feature two invited speakers from Princeton University on the search for and formation of Extrasolar Planets on Saturday afternoon and evening. On Saturday morning, I will present a brief update on NASA's Solar System exploration and the recent field trip to Honeybee Robotics.

Washington Crossing State Park, Nature Center: Titusville, NJ. Sat, Sept 30 at 1:00 PM. All are welcome to attend my presentation on "*A Tour of Our New Solar System*" to experience the beautiful and amazing new discoveries in our Solar System. Website:<http://www.state.nj.us/dep/parksandforests/parks/washcros.html>

Lawrence Intermediate School: Lawrenceville, NJ, May 4, 7 PM. A very large crowd attended this Family Science Night where 4th to 6th graders displayed science fair projects and an enthusiastic crowd of kids of all ages enjoyed my astronomy presentation on "*Twin Robots Exploring Mars and a Journey in 3-D*".

NEAF Northeast Astronomy Forum: Suffern, NY, May 6-7. This year's NEAF was a record breaker in attendance. My thanks to the Rockland Astronomy Club (RAC) for generously donating a display table for my astronomy outreach programs. And the seating was packed for my 2 afternoon presentations on "*Twin Robots Exploring Mars*" and "*Mars, Saturn and Comets in 3-D*". Barlow Bob did an outstanding job in organizing the best NEAF Solar Star Party to date with help from Ron Mittelstaedt and Ralph Marantino.

<http://www.rocklandastronomy.com/neaf.htm>

For science outreach presentations please contact me at Email:



The May 9 AAAP lecture at Peyton Hall featured Prof. Mike A'Hearn (center) from the University of Maryland, with AAAP Director Dr. Rex Parker (left) and AAAP Program Chairman Dr. Ken Kremer (right).

From the Program Chair:

On May 9, **Distinguished Prof. Michael A'Hearn** from the University of Maryland was the keynote speaker for the closing AAAP lecture of the 2005-2006 season. He spoke to a very large audience and gave a first hand account of the Deep Impact comet smashing mission in a talk titled "*Deep Impact: Excavating Comet Tempel 1*". As the Scientific Principal Investigator (PI) for NASA's Deep Impact Mission, he is responsible for the mission's overall success in meeting its science objectives.

The Deep Impact mission carried the largest telescope beyond earth orbit to conduct spectral observations from the flyby spacecraft as the impactor slammed into the nucleus of Comet Temple 1 on 4 July 2005. A study of the ejecta in virtually all wavelengths confirmed the presence of water ice, carbon dioxide and organics very near to the comet surface. Altogether about 4000 tons of water was released by the impact. The comet was revealed to be

heterogeneous and quite porous, with a bulk density of about 0.4 g/cc and a consistency like talcum powder. Mike gladly fielded many questions from the delighted crowd.

Please send me your suggestions for speakers, with contact/topic information.

Email: ken@princetonastronomy.org

Ken Kremer
AAAP Program Chairman

(Stokes, continued from page 2)

everything was mostly dry.

The Spring weekend fee was \$25 plus \$5 for the use of the bunkhouse per night. The bunkhouse is just that. A large long building filled with bunks. I highly recommend this heated indoor accommodation especially when the night time temperatures dropped to freezing.

There were about 30 scopes present by Saturday night and some big scopes, 2 twenty-five inch dobs, along with a twenty inch, a seventeen inch and several smaller ones to round out the field. Attending clubs were members from AAAP, STAR, NJNS and probably more but I am not sure who all were there.

As for food, it wasn't included in the fee although I was offered some by others who did.

Bottom line, make the trip this September to the Stokes 2006 Fall star party to be able to see a dark sky that's close to home . . . I will.

Brian Van Liew

From the Treasurer

The treasury balance stands at \$XXXXX.

Brian Van Liew

(Director, continued from page 1)

Now! Late spring and summer are among the best times for observing and reaching out to members and the public to share astronomy and the splendors of the night skies. The AAAP Observatory is in top shape now, with public star watch sessions the first and last Friday of each month at the AAAP's Washington Crossing Observatory. In addition, Observatory Keyholder training is available to those wishing to learn how to study deep sky objects and handle a Celestron C14 Schmidt-Cassegrain scope



A beautiful lake and forest to explore at Hope Center, home of Jersey StarQuest.

with automated Paramount equatorial mount, and to find objects visually using the club's 6.25 inch classical refractor on Losmandy G11 mount (contact observatory co-chair Bill Nagel for training information). Get involved, come out to the observatory any clear evening (call in advance, 737-2575), study your star charts, and pull out that telescope or binocular!

Dark skies! -- Rex

You will find
a registration form
elsewhere in this issue

From the Editor

Introduction to Amateur Astronomy Nature Center interpretive ranger Wayne Henderick and I have set up the dates for our Fall course offering, "Introduction to Amateur Astronomy." As usual it will be conducted at Washington Crossing State Park Nature Center classroom. It is scheduled for four consecutive Friday evenings starting October 6, and concluding on October 27. The

all of us are formulating our vacation plans. For myself, they are kind of loose except that I plan to get out a mid-summer issue of the newsletter out sometime in July. I'm going to set Friday, July 7, as the Sidereal Times deadline which should give attendees of StarQuest time to get articles with pictures submitted. I'm counting on members to write up memories to share as I will be unable to attend due to another commitment. Have fun at StarQuest!

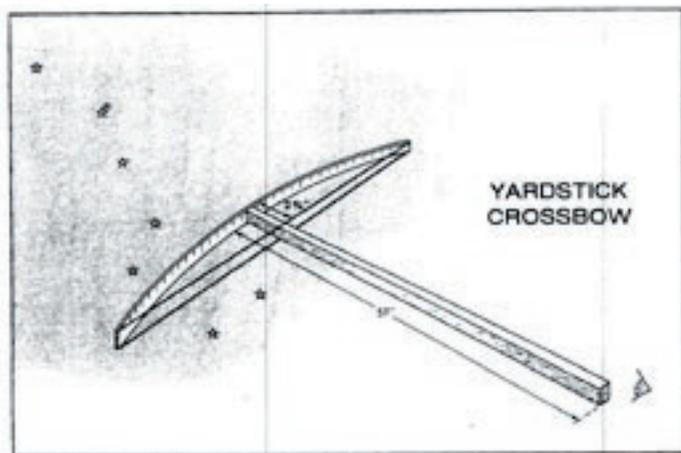
Vic



first session will start at 5:30 PM to take advantage of daylight, each subsequent session will start at 7:30 PM. After the first session, and if the weather is clear, the group will go over to the Simpson Observatory at about 8:30 PM to be introduced to the sky. Our course has always been well received and resulted in attracting new members to our club.

The course is open to interested persons from 8th grade through adult and may not be just for beginners. It is an excellent opportunity for school teachers and even experienced amateur astronomers that have considered teaching a course like this themselves. Contact the Nature Center to sign up (609) 737-0609, there is a \$5 fee to cover the cost of handouts. Enrollment is limited to 25 persons.

Welcome to Summer As we enter the summer season, I'm sure



This simple device will allow angular distances to be measured directly on the sky. The only parts are a shaft 57 inches long and an ordinary yardstick bent slightly with a string as shown. Inches correspond to degrees. The eye-end of the long shaft should be placed in contact with the observer's cheekbone; a flashlight will aid in reading the scale at night.

Sky Crossbow, Reproduced by permission of Sky and Telescope.

Mid-summer Deadline for the
Sidereal Times
Friday, July 7, 2006

Minutes of the
General Meeting of AAAP
May 9th, 2006

The meeting started at 8 PM.

Larry Kane, Nominations Chair, presented the slate of officers to be voted upon for Board of Directors as was previously announced. They are Rex Parker (Director), John Miller (Assistant Director), Brian Van Liew (Treasurer), Ludy D'Angelo (Secretary), and Ken Kremer (Program Chair). A quorum of the membership was present. Vic Belanger motioned for a close of the nominations. Larry proceeded to take a hand vote, which was unanimous. The slate of officers was passed for the 2006-2007 year.

The guest speaker was Michael A' Hearn who spoke on the Deep Impact comet mission. The meeting hall was well attended.

After the lecture break, Rex Parker announced that there would be a Board of Directors meeting on June 2nd, 2006 at Rex's house. With a possibility that there will be observing afterward at Washington Crossing. All are welcome to attend. There will be discussion on future planning and Starquest.

Rex asked Ludy D'Angelo (secretary) to report on the minutes. Ludy indicated there were some corrections but mostly an expansion on the very short report given by Ken Kremer in the last issue about Super Science Weekend at the New Jersey State Museum. The first news of note was that Gene Ramsey was not able to attend because of his health, but arranged for his PST and canopy to be brought so that solar observing could take place Saturday and Sunday. Ludy D'Angelo and Linda Papetti manned the booth in the morning. John Miller joined in the afternoon on Saturday. On Sunday, Herb Bortek (secretary of the Bucks-Mont Astronomical Society) brought his 8" Celestron SCT scope with white light filter. Many thanks are given to Herb for helping out all day Sunday. During the day Sunday, there was quite a crowd of people. Ludy manned the booth in the morning, Larry Kane and John Miller joined in the afternoon. John brought Brian Van Liew's PST. At various times during the day, the crowd was lined

up anywhere from 10-20 deep on each scope. Bill Murray had reported that Saturday all the planetarium shows were filled to capacity, the same goes for Sunday.

Membership stands at 112. Linda Papetti (membership), set out a table of information and snacks, coffee, water, and juice at the April 28th observatory open house. \$30 in donations was made.

Don Monticello reported that there were 25 people signed up for Starquest as of this meeting. Registration forms were mailed to all members through the Sidereal Times, an email attachment went along with the electronic version.

John Miller was not present to give a report on the door prize acquisition. The team that is assigned to this task is still reaching out to their perspective companies.

Linda Underwood has talked to various vendors about t-shirts prices for a Starquest t-shirt. As an alternative, coffee mugs were discussed. Also, the possibility of having kites and other items were discussed. The problem is that there is consensus that we did not want to get stuck with extra t-shirts. More thought will be given to this.

There was a discussion about maintaining the grounds at the Simpson Observatory. It will be discussed further at the Board meeting. A general discussion also ensued about the observatory open houses and attendance from the last few Friday nights. Also discussed were public outreach opportunities and getting more of the membership involved in the outreach to the schools etc. and whether we should ask for specific amounts for our efforts.

The treasury stands at \$XXXX.

Sidereal Times submissions are due by May 26th 2006. New changes to the board members and committee members need to be communicated to Vic in email form.

The next general meeting will be June 13th 2006 at the New Jersey State Planetarium.

Meeting adjourned at 10:45PM

Submitted by
Ludovico D'Angelo, Secretary

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