

# SIDEREAL TIMES

The Official Publication of the  
Amateur Astronomers Association of Princeton

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## From the Director

Two weeks ago, while looking out over the ocean near Brielle, NJ, I observed—clearly and unmistakably—a large, saucer-shaped vehicle hovering about 500 yards from shore, and a few hundred yards above the water. This astounding silver-gray craft housed a series of strobe-like devices, firing intense pulses of light every few seconds. The saucer rotated at, what I estimated, was 30 RPM. Unbelievable, but true!

Well...not really true. Just trying to see if you're actually reading these columns.



But the idea for that opener above came to me from an amalgamation of real-life and TV Land. A number of your fellow club members frequently bring astronomy to the public. There are always lots of questions (thankfully). Occasionally, the topic of "UFOs" surfaces (often as not by grown-ups rather than children). And, just as often, these people cite cable television productions via companies like the Discovery Channel or the History Channel as fodder for their curiosity. Perhaps you too have viewed one of these presentations. The narrator speaks with a slightly ominous, authoritative tone, and "experts" from all walks are interviewed. Scores of blurry streaks are presented on the screen as "proof" of endless "UFO" sightings ("UFO" always a euphemism for an other-worldly vehicle).

I've always thought shows like this do a great disservice to the audience. For healthy skeptics like this writer, who still agrees with the premise of the scientific method, these presentations carry about the same scholarly influence as an original episode of Lost In Space (warning Will Robinson!). The disappointment here, I guess, is assuming companies like the History and Discovery Channels should be above airing such stuff, and leave it for the Comedy Channel ratings. *Klaatu barada nikto.*

All that said, our Washington spy guys have mentioned one of their spaceships ran out of gas last week. The consequence of this stalled satellite is a deteriorating orbit and inevitable reentry perhaps by the time you read this. Probability leans toward a watery grave, but, unlike other satellite dives (such as Mir in 2001), mission control can't nudge the incoming trajectory. Perhaps this will give the History or Discovery Channel producers something to really talk about if a bus-sized metal slag careens into the set!

It's been a relatively typical New Jersey winter so far. Cloudy; but, as this is written (late January), there have been some uncharacteristically transparent evenings. Have you hauled out the scope? Mars remains very high throughout much of the night, close to Alnath (Beta Tauri) and reflecting at a very noticeable mag. – 0.48, but with an apparent diameter less than 15 seconds of arc, sighting detail is very challenging. However, as member Brian Van Liew reminded me recently, Saturn is heading for opposition February 24<sup>th</sup>, and provides a lot more real estate for the eyepiece than Mars.

Our Simpson Observatory open house schedule commences April 4<sup>th</sup> and continues each Friday through the end of October. Observatory co-chairs Ron Mittelstaedt and Larry Kane (with help from members Prem Jani and Vasi Rahaman) recently made repairs to the broken roof pulley, which is now functioning properly. Not only do these observatory open houses promote the AAAP to the community, they are a terrific opportunity for members to gather and observe with their own scopes. Please mark your calendars and join your fellow astronomers at these weekly gatherings. You'll find details on the club's web site.

**The deadline for the March issue is:**

**February 29, 2008**

**Send your submissions to:**

**editors@princetonastronomy.org**

**Cheers—John Miller,  
Director**

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## AAAP Board Meeting Minutes January 3, 2008

The board meeting was opened by John Miller at 7:32pm.

Board Members present: *Director*, John Miller; *Assistant Director*, John Church; *Program Chairman*, Ludy D'Angelo; *Secretary*, Ron Mittelstaedt; *Treasurer*, Michael Mitrano; *Archivist*, Larry Kane; *Membership Chairperson*, Linda Papetti; *Co-Sidereal Times Editors*, Ira Polans and Bryan Hubbard. *Past Directors present*: Vic Belanger, Bill Murray, and Rex Parker. *Members* Saul Moroz and Brian Van Liew were also present.

**Treasury:** Treasurer Michael Mitrano was asked to make a simple budget, basically to see where our income is derived from. A new source of income has come from Public Outreach. Since July Michael was also asked to find how many members dues money is needed for a "break even" point; a point where the dues income equals the expenses.

**Insurance:** Michael Mitrano read over our insurance coverage with State Farm. He found some interesting items about our coverage. One in particular is that the contents of the observatory will not be covered if the roof is off during inclement weather. Meaning, if the roof is off and can't be rolled back on and it rains, any damage to the contents will not be covered.

There was a discussion about the lease with the State of NJ on who owns what. Without the lease our feeling is that the State of NJ owns the observatory building, but the contents belong to the AAAP. This will be confirmed after reading the lease. The lease of land that the Simpson observatory is located on has been extended for another 25 years in 2000 or 2001. It was established that the State of NJ had been added to our insurance policy as additional insured for the observatory and Interpretive Center.

**Starquest:** After some discussion, it was passed that Starquest will remain an October event after the trial run last October. This year's event will be held on October 24, 25, 26, 2008. The Treasurer will send a deposit to the Hope Conference Center if these dates are available.

**Simpson Observatory:** The discussion revolved around which eyepieces should be bought, and deciding if those eyepieces that are not being used should be sold. Rex Parker will bring the eyepiece case to the January 8th meeting for evaluation.

Next order of business was the newly cleared land on the east side of the observatory. The discussion ranged from pouring concrete slabs for a level platform for members scopes to a foundation for an observatory to house the 12.5" Newtonian now located at Jenny Jump. These plans were tabled for more discussion at future meetings. John Church made a motion that in the near future the land must have the stumps and roots removed, graded and leveled, grass planted and a water drain installed. Estimates for costs will be investigated, and work performed in the Spring by a professional landscaping company.

Additional discussion arose regarding the grass cover on the east side with the existing grassy land on the west side, a lawn mower should be purchased and a small shed attached to the observatory. This would be a last resort if the Washington Crossing Park refuses to cut the additional grass.

**Jenny Jump and United Astronomy Clubs of NJ:** It was decided to renew our membership to this organization. The amount of the dues is assessed at one dollar per member plus an additional twenty-five dollars.

**Public Outreach:** Public Outreach Chairman Jeff Bernardis announced that the only event scheduled is at the Lawrenceville Elementary School for their Science and Discovery night on January 25th from 6:30pm to 8:30pm.

**Program Lectures:** Program Chairman Ludy D'Angelo has the meetings covered to June.

**AAAP Picnic:** The AAAP picnic will be scheduled sometime in June. Thanks were given to Rex Parker for the use of his residence last year.

Meeting adjourned at 9:21pm.

*Ron Mittelstaedt, Secretary*

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## Membership Meeting Minutes January 8, 2008

**Observatory:** John Church will contact three contractors for an estimate for clearing the stumps and planting grass on the east side of the observatory.

There is an issue with the park gates. Both the Bear Tavern Road and the last gate into the park are sagging badly. There were suggestions to contact the park superintendent or perform the repairs ourselves.

Larry Kane and Ron Mittelstaedt have been conducting keyholder training sessions on January 11th and 18th. Each time the training session has accommodated three members desiring this training. On the last session while closing the roof the eyebolt that attaches the chain drive to the roof broke. After 30 some years this bolt has failed from rust. Ron Mittelstaedt has acquired the materials to repair the failed parts and install in the near future. At this writing the roof is closed and will remain that way until repairs are made.

**Pubic Outreach:** Jeff Bernardis announced that the Lawrenceville Elementary School will hold their science and discovery night on January 25 6:30 to 8:30pm.

The NJ State Museum contacted us on Super Science Weekend. This event will be held in May. More information to follow.

At the conclusion of the meeting Rex parker brought the telescope eyepiece case from the observatory. We inventoried the contents and made a list of the eyepieces we want to keep and ones we would sell. This will be discussed further at a later date.

*Ron Mittelstaedt, Secretary*

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## Treasurer's Report

Membership renewals have slowed as expected. As of January 26, the AAAP has received \$3,560 in dues payments for the current fiscal year.

Expenses during the last month have likewise been minor. So far through our fiscal year that began on July 1, we have a surplus of \$2,498

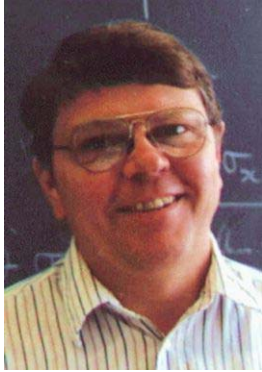
The Association's cumulative surplus at January 26 is \$15,104.

*Michael Mitrano, Treasurer*

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## From the Program Chair

Although he had a limited amount of time, Greg Olsen's talk to us in January was very informative. Sorry for the technical problems, but some computer files just don't like to talk to other computers. I'm sure that if ever any of us have a chance to go into earth orbit, we would jump at the opportunity.



On February 12<sup>th</sup>, our guest speaker will be Jerry Sellwood of Rutgers University. His talk is titled "The Dark Side of The Universe". Jerry Sellwood completed his PhD in Astronomy at Manchester University, England in 1977. He has held positions at the European Southern Observatory, Groningen University (The Netherlands), Cambridge University (England), and the Space Telescope Science Institute in Baltimore. He has been on the Faculty at Rutgers University since

1991. He is a member of the International Astronomical Union and of the American Astronomical Society. He is also a Life Member of Clare Hall Cambridge and recipient of the 1999 Graduate Teaching Award from Rutgers Graduate School. His main interests are structure and evolution of galaxies, their formation and their dark matter content. He has published over 90 papers, edited three volumes of conference proceedings, and delivered more than 40 invited lectures at international conferences.

Please join us in Peyton Hall on February 12th. Prior to the meeting, as always, there will be a pre-meeting dinner at Sotto's Restaurant. Please contact me to reserve a spot and as always send any comments and suggestions to me at [Ludy@princetonastronomy.org](mailto:Ludy@princetonastronomy.org) or [Ldangelo106@comcast.net](mailto:Ldangelo106@comcast.net).

*Ludovico D'Angelo, Program Chair*

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## Picture This—Mars

This month's object is something we all can have a look at no matter what scope you own, Mars. As the sun goes down other than the moon, Mars is the first thing to pop out against the darkening sky. This month it's placed nice and high as the ecliptic plane stretches almost overhead this time of year. Like the last two previous oppositions the red planet's features are still hard to come by. Although since it is higher the chances of getting a window of steady seeing improves but persistence is still needed at the eyepiece.



These two images taken about a week apart are a sample of what you can expect depending on what side is facing earth, although the image scale depends on your setup. These two images were captured with different settings for the area to be imaged so one looks bigger than the other but the planet's size is really the same.

Equipment used; Toucam Pro and a Televue 2.5X Powermate through my C11. Acquisition time was 2 minutes at 30 frames per second using K3CCDTools and stacked using Registax.

*Brian Van Liew*

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## Observatory News

A couple of weeks ago Larry Kane and I were performing keyholder training. While closing the roof after the session, the eyebolt which is attached to the chain broke from 30 years of rust and corrosion. I bought the needed hardware to repair the roof and two weeks later Michael Mitrano, Prem Jani, and I set out to perform the needed repairs. Ludy DeAngelo was at home on standby in case we needed him. The job of replacing the rusted hardware took about 90 minutes with another needed visit to the hardware store and Michael heading to his home for additional tools.

The chain drive was lubricated and hardware replaced with a more corrosion proof type. Hopefully it will last for another 30 years.

*Ron Mittelstaedt*

### Interested in keyholder training?

**Contact: [kane@princetonastronomy.org](mailto:kane@princetonastronomy.org) or by cell phone (609-273-1456)**

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## Community Outreach

Again, we had just one event on our calendar for this past month – on January 25th, we hosted a star party for Lawrenceville Elementary School. Dave Viscio, John Miller, and Ron Mittelstaedt were there with their telescopes; I was there just with my laser pointer. This was part of the school's Science and Discovery night – there were approximately 20 or so tables set up in the gym each relating to a different aspect of science. We were the lucky ones that got to set up outside in 28 degree weather. Conditions were very good (at least as far as the parking lot lights would allow) and we were able to show the usual targets: Mars, M45, NGC 457. Dave kept his scope aimed at M42 for most of the night. As always, there was plenty of interest and there were many questions from both students and parents.

Come experience this yourself by helping us out at an upcoming event. Our calendar currently only has 3 events:

- Friday March 14, from 7PM until 9PM, at the Upper Freehold Regional School in Allentown.
- Saturday March 29th, 10AM to 3PM the Princeton Cotsen Children's Library will be hosting their annual Princyclopedia event in the Dillon Gymnasium on Princeton Campus. This is a daytime indoor event, although if conditions work out, we ought to be able to set up a scope or 2 outdoors for solar observing. We worked this event last year and it was a lot of fun.
- May 17<sup>th</sup> and 18<sup>th</sup> (Saturday and Sunday) from 11AM to 4PM each day, is the New Jersey State Museum's Super Science Weekend. This has become a staple event for us. This is a daytime outdoor event for solar observing. Because it is two days, and because each day is 5 hours long, we really need your help with this one; if we have enough volunteers, we can break each day into 2 shifts.

I know these events (especially the last 2) are some time off, but time has a way of slipping by. If you are at all able to help, please let me know as soon as possible. As other events are scheduled, you can find out about them here, and on the calendar that is on our web site.

If you think this is something you want to do, please contact me at [jbernardis@princetonastronomy.org](mailto:jbernardis@princetonastronomy.org) or 609-466-4238.

*Jeff Bernardis*

Uranometria 2000? Where to download a monthly audio tour of the night sky? Where to find a comprehensive online ephemeris? The Frugal Astronomer has links to these resources plus many more. Categories include "What's Out Tonight?" for upcoming celestial events, "Planning Tools" for organizing your time at the scope, "Charts, Atlases and Maps" for both print and software versions, "What's on Your Bookshelf?" for book recommendations and "Hardware" for telescope advice. The site just went live this month, but it is hoped that users will help the site grow by recommending their favorite inexpensive resources. Check it out and send feedback to [frugalastronomer@verizon.net](mailto:frugalastronomer@verizon.net) or join the newly formed Frugal Astronomer forum.

*Submitted by Michael Wright*

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## Other News...

### The Frugal Astronomer

Do you hate to pay for anything that you can get for free? Well, the [Frugal Astronomer](http://frugalastronomer.com) website may interest you. It is a site for amateur astronomers on a limited budget, which is probably most of us. The site is a single source for locating low-cost, high-quality tools and resources. Do you know where you can download for free a 149-chart, 8<sup>th</sup> magnitude star atlas similar to

### Help Classify Galaxies

Visit <http://galaxyzoo.org/> to help the researchers of the Sloan Digital Sky Survey classify galaxies.

*Submitted by Rod Montgomery*

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## 20 Years Ago In Sidereal Times...

**SIDEREAL TIMES**  
Newsletter of the Amateur Astronomers Association of Princeton, Inc.  
(Address: P. O. Box 2017, Princeton NJ 08540)

EDITOR: Art Esposito      FEBRUARY 1988      DIRECTOR: Art Esposito

AAAP CALENDAR

February 9-----Meeting at 8PM, Peyton Hall/Princeton University. The speaker is Dave Weinberg and the topic is "Meatballs, Swiss Cheese, & Sponges" (A.K.A. The Formation Of Galaxies. Dave is a student of past speaker Dr. J. Richard Gott, a faculty member at Princeton University.

March 8-----Meeting at 8PM, Peyton Hall/Princeton University. The speaker will be Dr. Ted Williams of Rutgers University and the topic will be "Evidence Of Black Holes At The Centers Of Galaxies."

April 12-----Meeting at 8PM, Peyton Hall/Princeton University. The speaker will be our own John Simpson, giving us a talk on Astrophotography.

May 10-----Meeting at 8PM, Peyton Hall/Princeton University. This will be Members Night and Election Night.

June 14-----Our annual Planetarium show/meeting at the NJ State Museum complex in Trenton. The show will be hosted by our own Dick Peery, former AAAP Director and Assistant Curator of the Planetarium.

FROM THE DIRECTOR

Starting this newsletter out on a good note is the fact that, as of February 4th, Wes Walton has tabulated a grand total of \$315.00 in donations from our holiday appeal and/or fund drive. Because of this we were finally able to secure an oscillator for our 6-inch refractor and our next two goals will be to obtain an observing ladder (with handrails) and to fix and/or replace the roof cable.

On a more serious note, we have concluded our audit of the membership and we seemed to have a net loss of 20-22 members. Wes Walton and Kurt Goepfert, who conducted this audit, requested that the following be inserted into the newsletter:

- 1) The following members should have renewed their memberships by now:  
Charles K. Divine      Barbara T. Ross  
Lauren Rudd
- 2) The following members are reminded that their memberships are up for renewal in March/April:  
Jay Albert      Karl Kohler  
Darryl Foyuth      George/Arlene McDonald  
Kurt Goepfert      Doug Wurzler  
Noah Levy      Art Esposito  
Pat Colestock

3) The following people are asked to please call  
Wes Walton at 609-921-9211 at their convenience:

Will Ashton	Bill Phillips
Rodney Auletta	Kurt Rahlfs
Peter Hegmer	Robert E. Sanders
Patrcik Monaghan	Karl Stoltenberg
Paul Ordog	Merle Teschner
James E. Payne	Stan/Cindy Zalenski

While I'm on the subject of memberships, a hearty welcome is in order for some new members. Welcome to the club:

Mary & David Moore	Juan Manes
Melanie & Burt Anderson	Alan & Janet Sare
Paul & Anne Roundtree	Bruce Boyd
David L. Sprague	Jerry & Margaret Rosenkranz
George Briggs & Barbara Pitcher	

Before I forget, all pre-meeting dinners will be held at the TIGER'S TALE Restaurant near the intersection of Routes 206 & 518 in Rocky Hill. It's a good way to get acquainted with the guest speaker and all are welcome.

#### DUES STRUCTURE

FAMILY-\$35    STUDENT-\$21    SENIOR CITIZEN-\$21    SINGLE-\$30

On your membership rosters (sent out in December) you will note a column of numbers on the right. The number after each name indicates what month your membership is up for renewal.

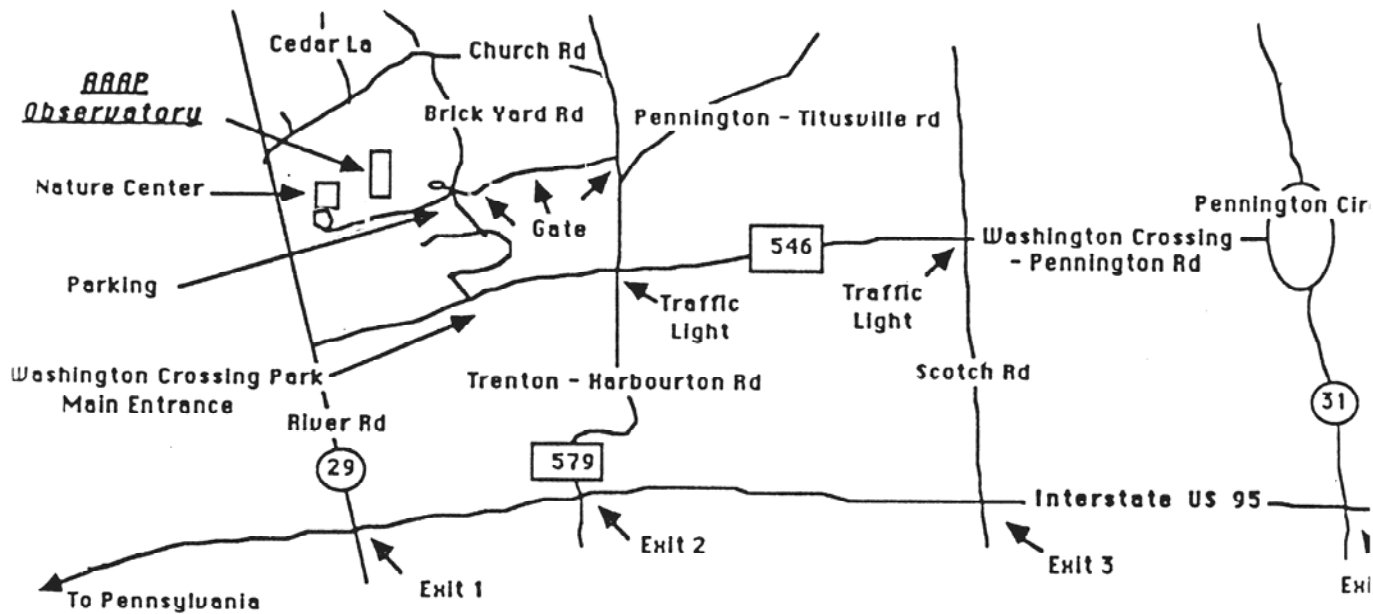
#### SUPER SCIENCE WEEKEND

Thanks go to Jay Albert, Art Esposito, Dennis Hicks, Ron Middlestadt, George Walker, and Wes Walton for volunteering time to man the AAAP display table on January 16 & 17, 1988. All of the magazines in stock were sold and lots of families stopped by to gather information on the club. The next museum event will be Space Day in July.

#### OBSERVATORY NEWS & DUTY

February 12---Will Ashton/Chuck Divine  
February 19---John Ewald/Pat Colestock  
February 26---John Church/Jim Lautenbach  
March 5-----Joe & Kevin Mooney/Louisa Lockette  
March 12-----Art Esposito/Kurt Goepfert  
March 19-----Dennis Hicks/Lee Geiger  
March 26-----Pat Kane/Don Monticello

If you cannot make your assignment, you must get a substitute on your own. Do not call the Director or the Observatory Chairman to do it for you. Also, beware of the mud.



The best way to get to the observatory is to take Interstate 95 South towards Pennsylvania. Then take Scotch road at Exit 3 and proceed north (this amounts to right). Then, at the third traffic light take a left onto the Washington Crossing-Pennington road (County Route 546). Take this road to the first traffic light and take a right onto Trenton-Harbourton road (County Route 579). Take this road to the first driveway on the left, this is the Phillips Farm/Soccer Field entrance to the park. There is a series of three gates with club combination locks. If the gates are not open, you will need the lock combination to open the gate or be accompanied by a Keyholder member. The Simpson (AAAP) Observatory's phone number is (609) 737-2575.

See us on the Web: [www.princetonastronomy.org](http://www.princetonastronomy.org)

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