General Meeting News

Dazzling Images and White Elephants
Go on Display at December 5 Meeting

Dick Fate

PLEASE JOIN US at the December general meeting for the TAAS Holiday Celebration! It will feature an Astrophoto Show, a Members’ Best 2009 Observation Report, and a White Elephant Gift Exchange.

TAAS members will show and discuss their exquisite astro-photos made with film, digital, and CCD cameras. You won’t want to miss these unique and dazzling images that have been captured in the legendary skies of New Mexico throughout the year. Then they’ll have a chance to share their most exciting observations for the year. And they’ll be able to exchange humorous or serious gifts at the White Elephant Gift Exchange.

The meeting will be held at 7:00 p.m. Saturday, December 5, at UNM’s Regener Hall. See map back page for location. Visit the TAAS Web site (www.TAAS.org) for more information.

Robert Malakhov, Nathaniel Pfeifer, and Joseph Young.
Not present was Ludmila Malakhov.

TAAS Honors 2009 Science Fair Winners

THE WINNERS of the 2009 Central New Mexico Science and Engineering Research Challenge were recognized at the TAAS November general meeting. The students received a cash prize provided by Accent Southwest Windows, an astronomy book, and membership in TAAS. Robert and Ludmila’s project was the Amphibia: Interplanetary Explorer. Nathaniel’s project was Measurement of Lunar Reflectivity Using a Lambertian Model. Joseph’s project was The Speed Of Light II.

TAAS president Dee Friesen presents a plaque to Accent Windows owners Greg and Debbie Leon for their sponsorship of the science fair winners.

Accent Windows Recognized as Science Fair Sponsor

EVERY YEAR in March, TAAS selects six middle and high school students to receive an award for their science fair project. For the past two years, Accent Windows has sponsored the winners by contributing financially to the event. At the November TAAS general membership meeting, Accent Windows was presented a plaque recognizing their sponsorship of these science fair awards. The support of Accent Windows is making a difference in the lives of the six winners and is contributing to the science literacy of society.
Mars Again

MARS IS COMING AGAIN. On December 1 it rises above the Sandias at 2230 MST. Of all the objects in the Solar System, Mars receives the most attention from us earthlings. I will not attempt to recap all of the previous times that someone has written about Mars. Some pretend to have visited Mars or even claim to be from Mars. In my encounters with my fellow earthlings, the latter seems to be the more probable.

One of my earliest encounters with Mars was as a young boy on the farm. On Saturday mornings, I would sneak into our 1949 Ford and listen to Space Cadets on the car radio. In one session the space cadets were going to Mars. As I intently listened, I pushed on the cigarette lighter in the car. After a short time it popped out and had a Mars-like color. For some unknown reason, I placed it down on top of the seat cover. The result was a Mars shaped hole in the cover. It even had a Mars-like reddish color. My father’s response to my Martian voyage was completely earthly.

TODAY, we know a lot about Mars. Numerous space probes continue to explore the red planet, and we receive daily reports from the friendly rovers. The future of Mars exploration is uncertain. Our politicians have not figured out how to support further Mars expeditions and retain their privileged positions in Washington. It is a good thing that the launch pads are not in the Capitol. Imagine a congressional rocket. No guidance system can go in that many directions at one time.

Fortunately, we have good scientists and engineers who now know how to convert units from one system to another. Eventually we will get to Mars. When we do, maybe there will be life. I hope so. That discovery will certainly give us more reasons to go to Mars.

Once the public becomes aware of the presence of Mars in the evening sky, we will again receive a deluge of false scenarios of how close the red planet will come to our planet. The late-night talk shows will feature the earthlings who have been to Mars, a few lost Martians, and maybe even some aliens from Washington.

Some of the unfortunate Martians are experiencing winter just as we are about to. Maybe we do have something in common with them. As for me, when the nights get very cold, I will look out of my large windows, peer at the red planet, and return to my reading of Stranger in a Strange Land.

Observe—Educate—Have Fun

Mentorship Program Kickoff Sessions

The TAAS mentorship program is under way. This program pairs experienced TAAS members with those new to astronomy. Together they will complete activities one-on-one to promote a better understanding of astronomy for all involved. The program began November 1. Lynne Olsen and Dee Friesen are leading it.

Mentorship kickoff sessions are scheduled for Wednesday December 9 and Thursday December 10. Both sessions are at Dee’s house in Sandia Heights and begin at 1830 MST (6 p.m.). Details of the sessions and a map to Dee’s are on the Web site (www.TAAS.org). You may also call Dee at 505-856-1593 or Lynne at 505-856-2537.

“Telescopes for Teachers” Report from Cleveland Middle School

Tom Davies

Teacher Anne Stevens sends the following account:

Cleveland Middle School held its first Astronomy Night last Thursday, November 5. About 40 to 50 students, parents, and siblings showed up to stargaze and look at Jupiter and her moons. Our new Orion SkyQuest Intelliscope was working just great, and in addition, Tom Davies with his 12” Orion and Dr. Donna Pontrello with her Meade ETX90 helped things along. My husband operated the Orion 6XTi. Inside the school we had all of our science teachers demonstrating different aspects of astronomy: gas tubes and line spectroscopy, Google Earth constellation maps, straw rockets, and dry ice simulations of comets. It was a fun and educational night. The great weather didn’t hurt either!

Ms. Stevens later added that there was a reporter there from the Albuquerque Journal, and the following Saturday they published a photo of students looking through the telescopes.

Happy Holidays!
Keeping up with an expanding universe

Barry Spletzer

THE UNIVERSE is expanding at an astonishing rate, and I am proud to announce that the TAAS Telescope Loaner Program is dutifully keeping up. “Keeping up” is an understatement. Since the last issue of the *Sidereal Times*, the universe has expanded by about 0.0000000006% while the Loaner Program has expanded by a full 25%. We have added two new and very different scopes to the program.

First is an 80-mm ED Celestron refractor. This is the first quality refractor ever in the program. The ED stands for extra-low dispersion referring to the glass in the objective lens. This allows a reasonably priced scope to deliver very good performance. The scope is on a Vixen alt-az mount and tripod and is equipped with two eyepieces. Check out the Web site for more details.

The second scope is an 8-inch Celestron Schmidt-Cassegrain (SCT). This scope was recently donated and is in fine condition. It has a clock drive and a Magellan computer. This is the largest ever Schmidt-Cassegrain in the loaner program and the only one currently available. Loan of the scope will be restricted to experienced amateurs. The scope should be available for loan in a few weeks.

Both new scopes are intended to allow our members to experience different types of telescopes. We still have a number of Dobsonian scopes ranging from 6-inch to 13-inch apertures. Shortly I will be adding a Magellan computer to our 8-inch Cave Dobsonian, thus adding more variety to the loaner program. Details on all scopes can be found at [http://www.taas.org/loanerprogram/LoanerPage.htm](http://www.taas.org/loanerprogram/LoanerPage.htm) and you can contact me via e-mail at telescope_loans@taas.org.

Steve Welch heads up our CCD imaging program. If you are interested in taking part in this program, Steve asks that you contact him at 505-866-7668 to make arrangements. Steve can have our CCD imaging equipment ready in the 10-foot dome so you can learn about the imaging process and take some images of your own. We will have the heated Robert Ortega Building open and our Guest Trailer available for coffee, hot chocolate and any snacks you might want to share. We’ve got a bunch of great equipment waiting for you at GNTO, so plan your next trip to GNTO soon.

GNTO committee meetings are open to any interested TAAS members, providing a great way to get more involved with your observatory. We meet every other month at 6:30 p.m. Our next committee meetings are December 17 and February 18. We are considering new meeting locations, so I will provide more details later. If you have questions about GNTO, please contact me (Peter Eschman, gnto@taas.org, phone 873-1517).

I hope to see you soon at your observatory.

AROUND THE end of October and beginning of November we had several work sessions at GNTO. On October 26, Ray Collins, Steve Welch and I finished painting the eves of the main dome. Since the GNTO Committee decided to use laptop computers for all computing needs, Steve and I removed all of the old desktop computers and printers and donated them to a charity in Los Lunas. We retained one desktop computer, which can be moved to GNTO if it is needed in the future.

The three of us met again at GNTO on November 4 and 5 and did major renovations on the storage battery box for our photovoltaic system. We sorted and inventoried a fair amount of the material. On November 9, Steve and I returned to GNTO to complete the inventory. In the near future, we plan to install the GNTO control computer and weather station in the area adjacent to the inverter.

Our first November event was slated for November 14 as a GNTO “New Moon” observing opportunity. This event was cancelled due to extensive cloud and rain forecasts. We have one event scheduled for December, a *New Moon* observing event on December 12.

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I hope to see you soon at your observatory.
ONE EVENING, many years ago, my close friend John and I braved the cold of a mid-December night and ventured into the wilderness to do nothing better than lie on our backs on the freezing ground and stare up at the sky. We could have been out Christmas shopping or huddling around a warm fire sipping hot toddies, but no. The event, of course, was the Geminid meteor shower, touted as one of the best meteor showers of the year. As the hours ticked by and the meteors intermittently streaked overhead, John posed an interesting and fairly germane question. Do eyeballs freeze? I assured him that the vitreous humor of the eye was packed with proteins that made this physically impossible at the relatively mild temperature of 28 degrees. Nevertheless, as the evening went on I began to question the validity of my hypothesis. We had an enjoyable time, but really had no idea what to expect from this shower, nor did we know the detailed science behind it. We were just out to have fun and be awed by the occasional fireball. As I recall, we were a little disappointed, having only seen about thirty bright meteors an hour when the prospects were for over a hundred. There are reasons, though, to observe the Geminids, for the opportunity might not last forever. Interested?

KEVIN MCKEOWN has been observing the skies for many years and has a particularly keen interest in meteors and meteor showers. He has an encyclopedic knowledge of this area to more than match his interest. Kevin has agreed to lead our next “Astronomy 101” session and discuss the observation of meteors, meteor showers, and related unexplained things that go flash in the night. If you have never undertaken a systematic observation of a meteor shower, don’t know a meteor from a cement truck, or even if you are an experienced, seasoned observer, this session is for you. Kevin has a terrific session planned with a little something for everyone. I guarantee that you will learn something new or at least something that you never spent much time really thinking about. Kevin, however, does think about these things and is ready to share with all of us. See you at 6 p.m. sharp at Regener Hall on December 5, right before the general meeting. You’ll be glad you came.
Donations to TAAS

General
ALISON SCHULER

Education
ELAINE DROSKA
PATRICK WAYNE

GNTO
DAVID PITONZO
PATRICK WAYNE

Dark Sky
JOANNA BERMAN
ALISON SCHULER
ALBERT SARGEANT

Welcome to New and Returning TAAS Members

VICTORIA AMADA
JOANNA BERMAN
BUCK AND CARROLL FARIS
TOGER FLEGEL
CHRISTOPHER HAMILTON
GAIL AND TOM KREKEL
CARYS ZOE MOSER
GEORGE PETROPoulos
BELICIA, MADONNA, MERCEDES,
AND TOBERT RODRIGUEZ
PATRICK WAYNE

Note from Treasurer

Clarification of Member and Renewal Policy

Renewal notices will be mailed out one month before expiration date. Renewals and new members will be dated on the first of next month no matter when during the month they arrive. This will help with the database reports and queries.

There will also be no grace period for renewals. Please make sure that you send in renewal information and your check before the expiration date. Renewal of magazines and new subscriptions will be sent in twice a month. All checks are to be made out to “TAAS.” Thank you for your attention to this important issue.

If you have any questions or special needs pertaining to membership and/or magazine subscriptions, contact the Treasurer, Dan Clark at treasurer@taas.org.

Location, Location, Location

• Chaco Canyon
6185’ elevation
Latitude  Longitude
36˚ 01’ 50”N     107˚ 54’ 36”W
36.03°    -107.91°
36˚ 1.83’  -107˚ 54.60’

• Oak Flat
7680’ elevation
Latitude  Longitude
34˚ 59’ 48”N  106˚ 19’ 17”W
34.99˚  -106.32˚
34˚ 59.80’  -106˚ 19.28’

• UNM Campus Observatory
5180’ elevation
Latitude  Longitude
35˚ 5’ 29”N  106˚ 37’ 17”W
35.09˚  -106.62˚
35˚ 5.48’  -106˚ 37 .29’

To convert from Degrees, Minutes, Seconds:
Divide seconds by 60, then add minutes, then divide by 60 again.

For security reasons, GNTO location is available by request only, so please contact Pete Eschman for GNTO information.

Membership Services

for:
• Membership Inquiries
• Events Information
• Volunteer Opportunities

Contact Bill Firth at membership@taas.org

for:
• Membership Dues
• Magazine Subscriptions
• Address/e-mail changes

Contact Dan Clark at treasurer@taas.org

P.O. Box 50581  Albuquerque, NM 87181

Monthly Membership Report

November 2009

Membership Current Month Past Month Change
Regular 198 197 1
Family 53 50 3
Educational 12 10 2
Total Paid 263 257 6
Honorary 7 7 0
Complimentary 38 38 0
Total Members 308 302 6

Editor’s Note

The deadline for the next issue of The Sidereal Times is Friday, December 18.

Please e-mail text as an attachment, preferably in Microsoft Word or OpenOffice.org Writer. Please do not embed photos in text. Attach photos and illustrations separately. The e-mail address for the newsletter editor is editor@taas.org.
As we wrap up 2009, the International Year of Astronomy, amateur astronomers have gone out of their way to conduct public outreach events to get the general public involved in amateur astronomy and to get them to look through telescopes. Perhaps as we go forward into 2010, we can take it upon ourselves to share our sense of wonder and awe for the heavens, and to make the time to truly inspire young minds with the wondrous changing view of a universe filled with planets…and promise for future adventure. Let’s inspire the next generation to challenge our understanding of the universe as we discover endless new worlds.

—Tom Koonce
Antelope Valley Astronomy Club, Inc.
Lancaster, California
## January 2010

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### TAAS General Meeting

**Saturday, December 5**

7:00 P.M.  
General Meeting  
Astrophoto Show • Best 2009 Observations  
White Elephant Gift Exchange  
Regener Hall, University of New Mexico  
(See map, back page)

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**Notes**

Hotline 254-TAAS (8227).  

GNTO = General Nathan Twining Observatory  
GNTO Training = GNTO Observing and Training  
GNTO NM = New Moon Premium Observing Night  

UNM = University of New Mexico Observatory.  
Call the TAAS hotline @254-8227, or the UNM hotline @ 277-1446 to confirm, or unm_coordinator@taas.org.  

ATM = Amateur Telescope Making.  Call Michael Pendley for information @ 296-0549, or atm@taas.org.  

P & A = UNM Physics and Astronomy Building, Corner of Lomas and Yale  
School Star Party  
SIG = Special Interest Group  
TBA = to be announced  
*Blue Italic* = Non-TAAS events
The Sidereal Times

The Official Newsletter of The Albuquerque Astronomical Society

October Skies Clear for Annual Placitas Star Party

Shannon Mann

BY LATE AFTERNOON on Saturday, October 24, I was having my doubts. Bunches of high cirrus clouds began streaming, and then piling in from the west. An hour or so before sunset it seemed bleak—a bust for this year’s Placitas Star Party? Nope . . . in classic New Mexico fashion it started to clear thirty minutes before showtime, and by later in the evening we were all enjoying dark and mostly clear skies.

This year as every year, I had bunches of folks looking through my telescope and some hanging around nearly the whole time to chat about astronomy and optics—cool! Some of my visitors had never seen the Moon under any magnification and were blown away to see craters, within craters, within craters! I know many visitors (at least one hundred by my rough count) were asking lots of questions and having a great time.

Speaking of learning, I would like to recognize Robert Williams who led an impromptu public star tour of the constellations. I was within earshot of his tour and learned a lot myself, especially concerning the Greek mythology—thank you Robert!

THE TAAS CONTINGENT was large this year with at least nineteen people and their instruments. They were: Ed Judo—14.5” Dob, Kevin McKeown—60-mm refractor, Steve Snider—8” SCT, Becky and Shane Ramatowski—128-mm refractor, Patricia Rose—8” dob, Robert Williams—13.1” Dob, Larry Cash—10” SCT, Gordon Pegue—10” Dob, Kerry Harter—8” SCT, Richard Brown—two eyeballs (7 mm x 2), Chris Hamilton—80-mm refractor, Dee Friesen—152-mm refractor, John Laning—10” SCT, David Friszell —12” SCT, Sy Santos —digital SLR camera for imaging star trails, Dave and Peggy Tucke—102-mm refractor, Shannon Mann—12.5” Dob, Greg Dillon—were you there? Who else did I (possibly) unintentionally miss?

We also had a small group from Las Placitas Association (LPA) that spearheaded all the logistical arrangements for setup and takedown. Two LPA members in particular who contributed much to this event were Reid Bandeen and Orin Saifer. Thanks to the McAllister family of the Merc Shopping Center and Dave Harper of Placitas Realty (our hosts) for providing the site for our event.

The big lesson for this year’s Placitas Star Party—have faith, clearer skies are coming. See you all next fall out here in Placitas.

Get your TAAS Lanyards here while they last!

Bill Firth

THE TAAS MEMBERSHIP committee has purchased a quantity of lanyards and is selling them for $2 each. The regular TAAS ID badges will fit nicely in the pocket of the lanyard. We are in the process of getting the ID badges printed and they should be available soon. Please see one of the membership team members at the next General Meeting to purchase yours.

The membership team is Mike Roth, Bob Anderson, Arlene Ward, and me, Bill Firth. Apologies to honorary TAAS member Newton, whose first name is properly spelled (of course) Sir Isaac.
Meeting Minutes

TAAS Board of Directors Meeting
November 5, 2009
University of New Mexico Physics and Astronomy Building

Directors present: Steve Welch, Bob Hufnagel, Bob Havlen, Gordon Pegue, Pete Eschman, Robert Williams, Dee Friesen (President), Dan Clark (Treasurer), Dave Pitonzo, and Melissa Kirk (Secretary).

Directors absent: Dick Fate (Vice President), Larry Cash, and Tom Davies are all excused.

The meeting convened at 7:05 p.m.

There are no revisions to the October Board meeting minutes.

President’s Report

The December general meeting will be composed of three parts. Becky Ramotowski will discuss astrophotography, members will present observing reports, and the third part is a white elephant gift exchange.

The Membership Action Team ordered 250 badge holders and lanyards. The price of each badge holder is $1, and the price of each lanyard is $1.

The nominating committee consists of Dick Fate, Tom Graham, and Lance Hurt.

Ballots with the names of the officers nominated for 2010 will be included with the invitations to the 2010 Perihelion Banquet.

Larry Cash is leading the awards committee.

Committee Reports

Education
Bob Hufnagel has been receiving so many requests for school star parties that there are not enough people to staff the requested star parties. On December 8 there will be a star party at Cottonwood Classical Preparatory School.

Treasurer
The Treasurer’s reports are valid as of the 15th of the month. Dan will put from $7,500 to $15,000 in three to four certificates of deposit.

Account balances as of October 15, 2009:

- General Fund: $17,374.84
- GNTO Fund: $7,822.33
- Education Fund: $6,188.56
- Dark Sky S.I.G. Fund: $1,323.96
- Special Projects Fund: $5,457.23
- Science Fair Fund: $475.00
- Cosmic Carnival Fund: $323.85
- Astronomical League Reserve: $58.46
- Total Funds on Deposit: $39,024.23

Total Expenses for Sept. 16-Oct. 15: $869.45
Total Income for Sept. 16-Oct. 15: $647.02

GNTO
There was a committee meeting on October 22. The committee may spend money to procure gravel. There are plans to upgrade the computers and some of the software used at GNTO. Ray Collins, Steve Welch, and Pete Eschman finished painting eaves under the main dome. Ray, Steve, and Pete removed the old battery box and constructed a new one.

Six people were present at GNTO to watch the LCROSS impacts. Three video cameras were set up at GNTO: One on the Isengard, one on the 6-inch refractor, and one on Becky and Shane Ramotowski’s telescope. Robert Williams also had his digital camera running on the 16-inch GNTO loaner telescope, which was mounted on the GNTO Video Outreach equatorial platform.

Loaner Telescope Program
Barry Spletzer and Eric Edwards purchased a refractor for the loaner telescope program.

Telescopes for Teachers
Trish Logan has left the program due to a job change. Another teacher is taking over for her.

Events Prospect

Astronomy 101
The plan is to meet every other month. Dave Pitonzo will host a class about celestial coordinates.

On November 14 there will be a solar observing star party for the National Academy of Science annual conference at the New Mexico Museum of Natural History.

The Leonid meteor shower will occur on the evening of November 17 and the morning of November 18. The Moon phase will be favorable.

Mentorship
Six people have said they wish to be mentors. There will be a meeting about mentorship in early December at Dee’s house.

The science fair winners will be at the next general meeting.

Events Retrospect

The star party at the Open Space Division went well last October 10. Two hundred fifty people attended.

Four hundred fifty people attended the Corn Maize star party. Thanks to Robert Williams for coordinating the star party. Four telescopes were set up.

The weather was pleasant for the Placitas star party. One hundred fifty people attended, including many new TAAS members.

The Board discussed prices for software for the new computers TAAS will purchase.

The Board approved the TAAS budget for 2010, and we discussed the wording for a new resolution about the TAAS glass blanks.

The meeting adjourned at 9:21 p.m.
TAAS 2010 PERIHELION BANQUET

Saturday, January 9, 2010

Keynote Speaker
Dr. Trish Henning
Director, Institute for Astrophysics UNM

Food, drink, prizes, games and more fun

MCM Elegante Hotel, Albuquerque

Visit the TAAS Store online at www.taas.org
Look for the link on TAAS homepage.
TAAS Logo Wear
License Plates
Screen Savers

TAAS Help Wanted, December

TAAS NEEDS PEOPLE to assist with the following areas. If you are interested, contact Dee Friesen or any other TAAS BOD member. Contact information for all BOD members is on page 11 of this newsletter.

General Meeting Planning — Identify speakers, activities and events for the monthly TAAS meetings.
  Contact Dick Fate.

Education — Participate in the TAAS Educational Outreach Program by attending school star parties.
  Contact Bob Hufnagel.

GNTO Committee — Join the committee and receive training to become a GNTO Key Holder.
  Contact Pete Eschman.

Membership — Assist with the conduct of the TAAS membership program. Help track membership, identify reasons for nonrenewal of membership, and promote TAAS membership.
  Contact Dee Friesen.

Observing — Identify significant observing events for TAAS members and events to present to the public. Create observing contests and observing lists for members to complete to receive TAAS awards.
  Contact Steve Welch.

TAAS Mentor Program — Provide learning assistance to a newer member by sharing your astronomy knowledge and experience.
  Contact Dee Friesen.

TAAS Social Events — Assist with the planning and conduct of TAAS social events.
  Contact Dick Fate.

TAAS Web Site — Assist with the the TAAS Web site including e-mail procedures and other electronic communications.
  Contact Mike Fleenor.
# 2009 TAAS Board of Directors/Staff

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MEMBERSHIP: You may request a membership application by sending e-mail to membership@taas.org or calling (505) 254-TAAS(8227). Applications may also be downloaded from the Web site. Annual dues to The Albuquerque Astronomical Society are $30/year for a full membership and $15/year for a teacher, student (grades K-12), or military membership. Additional family members may join for $5/each (teacher, student and family memberships are not eligible to vote on society matters). New member information packets can be downloaded from the Web site or requested from the TAAS Membership Services Director at membership@taas.org. You may send your dues by mail to our newsletter return address with your check written out to The Albuquerque Astronomical Society or give your check to the Treasurer at the next meeting.

MAGAZINES: Discount magazine subscriptions to Sky and Telescope and Astronomy as well as discounts on books from Sky Publishing Corporation are available when purchased by TAAS members through our society. Include any of the above magazine renewal mailers and subscription payments as part of your renewal check. Make checks out to TAAS (we will combine and send one check to the publisher). Warning: publishers take several months to process magazine subscriptions.

ARTICLES/ADVERTISEMENTS: Articles, personal astronomical classified advertisements and business card size advertisements for businesses related to astronomy must be submitted by the deadline shown on the Society calendar (generally the Saturday near the new Moon). Rates for commercial ads (per issue) are $120 per page, $60 per half page, $30 per quarter page, $7 for business card size. The newsletter editor reserves the right to include and/or edit any article or advertisement. E-mail attachments in Microsoft Word, 11 point Palatino, justified, no indent at paragraph beginning, one space between paragraphs is preferred. ASCII and RTF are acceptable. One column is approximately 350 words. Contact the Newsletter Editor at editor@taas.org for more information.

CHANGE OF ADDRESS: Note that the Sidereal Times is mailed at a first class mail rate. As a result, the newsletter may be forwarded to your new address should you move, or it may not! Please provide the Treasurer (treasurer@taas.org) with your new mailing address or e-mail address to ensure that you receive your newsletter.

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  - Educational Outreach
  - Programs: TAAS 200, Equipment Trader, Telescope Loaner Program, and more
  - SIGs
  - Members Guide
  - Links to Astronomy Resources and Members’ Blogs

E-mail: taas@taas.org