Open Space Star Party to Air Stars + Jazz—Live!

Lynne Olson

ON FRIDAY September 13 a collaboration of The Albuquerque Astronomical Society, the County of Bernalillo, and The Oasis 103.7 will host a free star party at the Bachechi Open Space (Alameda and Rio Grande—map at www.TAAS.org). The evening program begins with a little solar viewing organized by Roger Kennedy from 6:00-7:00 p.m. and will include a live broadcast by The Oasis 103.7, streaming smooth jazz, a presentation on amateur astronomy entitled “Twilight and Telescopes” by TAAS’s Barry Spletzer from 7:00-8:00 p.m., and stargazing with TAAS members and telescopes from 8:00-10:30 p.m. Live acoustic guitar in the kiva shelter during the observing will add to the ambiance, and children’s activities will be offered in the Education Building. Hope to see you there for an enjoyable evening—come early and picnic under the trees at the lovely Bachechi Open Space! If you want to add your telescope to the ones offering viewing to the public, please contact Lynne Olson at pr@TAAS.org. You can contact TAAS@TAAS.org with any questions or go to www.bernco.gov/openspace, phone 314-0398.

Chaco Canyon Achieves Dark-Sky Status

THE CHACO CULTURE National Historical Park has received the Dark Sky Park designation from the International Dark-Sky Association (IDA). The October 5 TAAS star party at the park will be a celebration of this award as well as an opportunity for TAAS members to participate in the Chaco Night Sky Program. More details will be provided on the TAAS website (www.TAAS.org) as they become available. David Frizzell is the TAAS coordinator for the event.

Roswell And Beyond: How Likely Are Extraterrestrial Visitors To Earth?

Lynne Olson

OUR SPEAKER will be Dave Thomas, President of New Mexicans for Science and Reason and a teacher of classes on science and pseudoscience at New Mexico Tech in Socorro. He will discuss both traditional and scientific explanations for the Roswell, Socorro, and Aztec, New Mexico, UFO stories and will also take a look at the complexities of space travel, including how much energy would be required for teleportation (“Beam me up, Scotty”), warp drive, overcoming the effects of relativity, and wormholes.

Dave Thomas is a physicist and mathematician. He received bachelor degrees...continued on page 5.

TAAS Officer Nominations now open

See page 9.
**President’s Message**

**Blue to Black**

AS A PILOT I want blue skies. As an astronomer I want black skies. I have experienced both, but it is the transition from blue to black that I find most interesting.

Flying along at 41,000 feet, it is possible to view the atmosphere and see the transition from a blue sky to a black sky. In the direction of the Sun, the atmosphere is bright. Looking away from the Sun you can see the darkening of the atmosphere. For an astronomer sitting on the ground, the transition looks different. It is a smaller version of the light to darkness when looking from west to east. What is the same is the “popping out” of the stars as it gets dark.

I love to sit in a comfortable chair and just observe the sky as it grows dark. This is an excellent opportunity to learn the constellations. A little prep time with a basic star chart is a must. I pick a direction in the sky and watch as the bright stars first appear. Mentally I fill in the gaps between the brightest stars with my knowledge of what the constellation looks like. Recently at GNTO, the three stars of the summer triangle were easy to see, but the remaining stars of the three different constellations were not visible. I had to mentally fill them in. This is an excellent opportunity to learn the constellations.

This blue to black transition time is relaxing, educational, and fun. The scene of course changes throughout the year, so this exercise can be done each time we go out to observe. Soon it will be the brightest stars of Orion appearing first and the belt and sword following thereafter. Take the time after setting up your telescope to join me as we go from blue to black.

**OBSERVE  EDUCATE  HAVE FUN**

---

**Call for Proposals for Use of Remaining Mirror Blanks**

AS OF AUGUST 31, 2013, 11 of the 13 mirror blanks have either been sold or have a sale pending. This leaves two mirror blanks that are unsold or unspoken for. The TAAS BOD has agreed to hold the two remaining mirror blanks and solicit proposals from the membership for their use. Any TAAS member may submit a proposal. Proposals must be submitted NLT October 1, 2013.

The proposals are to be submitted to and will be reviewed by the Mirror Blank Proposal Review Committee chaired by Jim Fordice. For the proposal guidelines or to ask any questions contact Jim at jim@fordice.net (505-343-1186).

The Committee will review the proposals and submit recommendations to the TAAS BOD at the October 10, 2013, BOD meeting. The BOD will determine which proposals go forward at that meeting. If there are no approved proposals for mirror use, the two remaining blanks will be offered for sale beginning November 1, 2013.

Consideration of how to use the proceeds from sold mirror blanks will be conducted at a future date. All TAAS members will be given the opportunity to participate.

Any questions may be directed to TAAS@TAAS.org.

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**OAK FLAT STAR PARTY - SATURDAY, SEPTEMBER 28**

**LAST—AND BEST—OF THE SEASON**

_Lynne Olson_

THE FINAL public Oak Flat Star Party of the summer (we’re extending summer for this purpose) will take place at the Oak Flat Picnic Grounds/Juniper Loop on Saturday September 28. Gates open at 5:30 p.m., and will feature the wonderful telescopes of TAAS members, a laser tour of the constellations, and the company of members and visitors under the beautiful skies of New Mexico.

Come early to set up telescopes on the field via the special access road and perhaps to picnic at the tables adjacent to the viewing area. Remember to keep car lights minimal if approaching after dark and when leaving and to use only red headlamps or flashlights on the field to preserve the night vision of observers.

Our past star party dates this summer have met with fire restrictions, rain, and clouds, so we feel that this one will be our reward for all of our “rehearsal” efforts. If any changes are necessary, they will be posted on www.TAAS.org in the Last-Minute Announcements box. Please go to www.TAAS.org for details and map to Oak Flat.

Bring your friends and family and enjoy the early fall!
EVERYTHING produced by the hand of humans will revert to its natural state when left alone. Recent rains have stimulated plant growth everywhere on the mesa. The weed crop on the observing field and in the parking lot is beginning to look like something out of a Stephen King novel. I did not get a look at the amphitheatre or picnic area, but I expect that they too, are greening up; plenty of backlog for a cleanup crew. (Are sheep or goats allowed? ...But that would necessitate cleanup of another sort.) In contrast, the road to GNTO is a smooth ride even by comparison to a few months ago. Kudos goes to our neighbor Carl Frisch for a job very well done. The only washboarding that I experienced was on the gravel portion which is maintained "by others."

The monsoon rains held off for the New Moon event on August 31. Flashes of lightning from storms well to the north, provided a strobe effect, and a few times resulted in a bright meteor false alarm. About 15 members and guests assembled including new members Desiree and Henry Schweitzer, and Gordon Schaefering. Our opener Paul Grunwald brought his daughters and friends and set up his C-11 on the field. Amy Estelle, Dee Friesen, Steve Riegel, Hy Tran, myself, and I’m sure a missed one or two more, gathered on the field. Larry Cash, Gordon Pegue, and Lance Hurt were inside the dome, rather than under it. Ray Collins, back from the Pacific Northwest, was the conversationalist. The photo shows the gathered assembly and some equipment. It is the only decent image that I produced that night. For some reason, I was making all manner of rudimentary errors in alignment, focus, and tracking when I turned my lens to the night sky. Chalk it up to monsoon moisture making me rusty. Hy Tran fared much better with his imaging. Overall it was a fine evening for observing and imaging the wonders of the summer Milky Way. Pleasantly warm with just a slight breeze. The scattered clouds east and west cleared off after sunset. A small

continued on page 7 ...
Upcoming Events

Astronomy 101 Returns in October

THE POPULAR Astronomy 101 program will resume at 6 p.m. prior to the October 12 general membership meeting.

Dee Friesen will present a program entitled “The Vastness of the Universe in Four Acts.” Dee will discuss four features of the universe that we do not normally consider in our everyday lives.

Oñate Star Party Kicks Off Fall Season

Trish Logan

THE TAAS EDUCATIONAL Outreach Program provided a great kickoff for the 2013–2014 school year at the Oñate Elementary School Star Party on August 20. In spite of the rain, there was a full house for the four planetarium and indoor presentations. Joanna Berman set up the planetarium and gave outside instructions, while Judy Stanley worked her magic inside. Tom Grzybowski wowed everybody with his comets, Roger Kennedy educated families about the Sun, and Jim Kaminski demonstrated his refractor telescope with an interesting view of the Moon.

Telescope volunteers were John Laning, Bob Hufnagel, Steve Riegel, and Trish Logan. Jim Fordice shared his binoculars. Just before the party ended, the clouds parted and gave us a beautiful view of the Moon. Dee Friesen kept everything running smoothly and made all the visitors welcome. Papa Murphy’s provided freshly baked pizza for all of the volunteers. A nice evening was had by all.

TAAS to Participate In ASTC International Conference

THE ASSOCIATION of Science and Technology Centers will hold their 2013 international conference in Albuquerque October 19–22, 2013. TAAS has been requested to provide telescope viewing at Explora and the Museum of Natural History for a special event the evening of Saturday October 19. More details will be available at www.TAAS.org as they become available. Questions may be directed to taas@taas.org.

TAAS Members Plan to Attend New Zealand’s Stardate 2014

SEVERAL TAAS members are planning to attend the New Zealand annual star party Stardate 2014 presented by the Phoenix Astronomical Society of Wellington. The dates are January 3–5, 2014. If you are interested, contact Dee at TAAS@TAAS.org. More information on the star party is at http://groupsspaces.com/PhoenixAstronomicalSociety/item/389650.
# September 2013

## Calendar

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<td>10 Mark Twain Elementary School Star Party</td>
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<td>14 Next Big Idea Los Alamos GNTO: BOD Meeting, Equinox Picnic, Training</td>
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### General Meeting News (continued from page 1)

in mathematics and in physics and a master of science in mathematics from the New Mexico Institute of Mining and Technology, where he was awarded the Brown Medal and the Langmuir Award. He is president of New Mexicans for Science and Reason (http://www.nmsr.org), and also is a Fellow of CSI (Committee for Skeptical Inquiry), the publishers of *Skeptical Inquirer*. He has published several articles in *Skeptical Inquirer* on the Roswell and Aztec UFO Incidents, as well as on the Bible Code and 9/11 Truth Theories.

Dave has also published in *Scientific American* (December 1980 cover article), and has several patents. He received the National Center for Science Education’s Friend of Darwin Award in 2000.

Dave is married and has two sons. He enjoys playing bluegrass and performs juggling and magic shows for elementary schools and other groups. Dave is past president of the Coalition for Excellence in Science and Math Education (CESE), and is past president of the New Mexico Academy of Science.

The public is invited and encouraged to attend, so bring family and friends!

(Map to Regener Hall is on the last page and at [www.TAAS.org](http://www.TAAS.org)).
## TAAS General Meeting

**Saturday September 21, 2013, 7:00 P.M.**

Regener Hall  
University of New Mexico  
(See map, last page)

### Roswell and Beyond

How Likely are Extraterrestrial Visitors to Earth?

**Dave Thomas**  
President, New Mexicans for Science and Reason

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<td>8 Navajo Elementary School Star Party</td>
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<td>10 Board of Directors Meeting</td>
<td>11 La Vida Llena</td>
<td>12 International Observe the Moon Night General Meeting Astronomy 101</td>
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<td>13 GNTO Committee Meeting</td>
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<td>22 ASTC Conference</td>
<td>23 TAAS Cosmic Carnival</td>
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<td>25 NMMNH&amp;S Adult Night Fright Night</td>
<td>26 Placitas Star Party</td>
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### Notes

Hotline 505-254-TAAS (8227).

ATM = Amateur Telescope Making.  Call Michael Pendley for information at 296-0549, or e-mail atm@TAAS.org.

GNTO = General Nathan Twining Observatory  
GNTO Training = GNTO Observing and Training  
GNTO NM = New Moon Premium Observing Night  
NMMNH&S = New Mexico Museum of Natural History and Science  
UNM = University of New Mexico Observatory.  
Call the TAAS hotline at 254-8227, or the UNM hotline at 277-1446 to confirm, or e-mail unm_coordinator@TAAS.org.

P & A = UNM Physics and Astronomy Building, Corner of Lomas and Yale  
SIG = Special Interest Group  
TBA = To Be Announced
A band of broken cloud was moving in from the southwest as everyone was departing around 1 a.m.

Pete Eschman, Site Operations, reports that Paul Rodman, iLanga Inc., and author of AstroPlanner software, provided a complimentary software license to GNTO. Thanks Paul and Pete.

Members should be aware that dove-hunting season runs from September through December from dawn to dusk. Hunters need permission of the landowners, and may not discharge within 450 feet of a structure. We have encountered hunting in the area near GNTO.

The Autumnal Equinox Picnic and Training event is Saturday September 14. The GNTO committee will provide burgers, hot dogs, buns, and condiments. TAAS is providing drinks. Join us and bring your favorite side dish or dessert. Festivities start around 4:30. After-dinner activities include introductory training on the Isengard and lunar observing. This event is preceded by a TAAS board of directors meeting.

The New Moon event for October is on the 3rd. The next GNTO Committee meeting is October 13 at GNTO. As always, check TAAS_Talk and the TAAS website for last-minute changes and updates.

GNTO is open to all TAAS members and their guests. TAAS members are encouraged to become involved in running your observatory. If you want to participate or have any questions about GNTO or GNTO committee meetings, e-mail: gnto@TAAS.org. Or, contact the GNTO Director: Mike Molitor (518-225-7077) cell; (505-717-2601) land.

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**SINCE THE MONSOON** season has been bedeviling us, I reached back to 2011 for this earlier image. M67 is one of the oldest open clusters, probably over 4 billion years old. Most open clusters are torn apart by the Milky Way's Spiral Arms in a few hundred million years. However, M67 is above the plane of the galaxy and not influenced by the Arms. The distance is about 2,500 light years and most of the stars are dwarf type still fusing hydrogen.

Equipment: AT102ED f/8, SBIG ST8300M FW5, iOptron iEQ45, Autoguider SBIG SG-4 Orion 80-mm Short Tube f/5. Software: CCDSoft V5, Photoshop Elements V9, Astronomy Tools. RGB 30:30:30 x 1 minute, total 90-minute exposure. April 2011, Tijeras, NM.

—John Laning

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New E-Mail Address for Sidereal Times

The e-mail address for The Sidereal Times is now TAASeditor@gmail.com.
M45, "THE PLEIADES," captured on September 5, 2013, from my backyard in Albuquerque between approximately 0230 and 0400. The Pleiades is an open cluster of very bright stars located in the constellation Taurus. It is plainly visible even in light-polluted skies and is often mistaken for the Little Dipper.

An AT65 refractor with a focal length of 420 mm on a Losmandy G11 mount was used. A total of 15 x 10-min. subs were taken with an SBIG 4000XCM camera with an IDLH LP2 light pollution filter. The camera has a crop factor, relative to a 35-mm frame, of approximately 2, so the image scale is similar to what would be obtained using a 35-mm sensor with an 840-mm lens. Guiding was done using an on-camera guide chip controlling the mount through CCDsoft. Processing was done in DSS and Photoshop. The wind was sufficiently strong that I was forced to abandon my earlier attempt to image M27 using my long-focal-length scope. The short-focal-length refractor allows me to create usable images under conditions of wind and/or poor seeing.

—Vance Ley

NGC 6946, THE "FIREWORKS GALAXY," captured on August 13, 2013, at GNTO. This galaxy is approximately 22 million light-years away and is located between the constellations Cepheus and Cygnus. Because it is located near the galactic plane this galaxy is somewhat obscured by interstellar dust and gas.

A total of 24 x 10-min. subs were made with an SBIG 4000XCM camera mounted on a Celestron-HD Edge 11" with focal reducer. The focal length was 2000 mm. The mount was a Losmandy G11. Due to wind shaking the instrument, only 14 of the subs were suitable for use. Processing was done in DSS and Photoshop. The image was cropped for aesthetic reasons.

—Vance Ley
Nominations Open for TAAS 2014 Officers

The TAAS Nominations Committee is soliciting nominations for all of the officer positions for the 2014 calendar year. The positions are president, vice president, secretary, and treasurer.

All TAAS members are encouraged to submit their nominations to the Nominations Committee at taas@taas.org. Committee members are Tom Graham and Lynne Olson.

Monthly Membership Report
August 2013

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<td>Total Members</td>
<td>361</td>
<td>388</td>
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Editor’s Note

The deadline for the next issue of The Sidereal Times is Friday October 4. The newsletter editor’s e-mail address is TAASeditor@gmail.com.

Text: E-mail text as an attachment, preferably in Microsoft Word or compatible format.

Photos: Caption and credit needed. Attach photos or graphics in separate graphics files. Photos or graphics in Word files are no longer acceptable.

Welcome to New or Returning TAAS Members

Jeremy Metzner

Donations to TAAS

GENERAL
Alex Burd

The Albuquerque Astronomical Society is a 501(c)(3) organization. Donations are deductible as charitable contributions on the donor’s federal income tax return.

Explanation of Dues and Membership Renewal Date

New memberships will be posted as beginning the first day of the month regardless of what day during that month the check is received. Notice of renewal will be sent out the month before the due date. You will have until the end of the month after your renewal date to send your membership check.

If you fail to pay and renew at that time, your membership will lapse. When you pay on a lapsed membership you will be reinstated in the month that the membership was originally due. (If dues were due in March and you did not renew until May or June or July, etc., the date of your renewal will be in March. If your dues are due in April and you pay in March, your membership will still be renewed in April.)

In a nutshell, if you pay late or early your membership date stays the same and your next year’s dues will be due on that date next year.

—Dan Clark

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’

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

Membership Services
for:
- Membership Inquiries
- Events Information
- Volunteer Opportunities

Contact Bob Anderson 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
## 2013 TAAS Board of Directors/Staff

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<tr>
<th>Position</th>
<th>Name</th>
<th>Email</th>
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<tbody>
<tr>
<td>President</td>
<td>Dee Friesen</td>
<td><a href="mailto:president@TAAS.org">president@TAAS.org</a> 505-856-1593</td>
</tr>
<tr>
<td>Vice President / General Meeting Coordinator</td>
<td>Dick Fate</td>
<td><a href="mailto:vp@TAAS.org">vp@TAAS.org</a></td>
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<tr>
<td>Secretary</td>
<td>Pamela Wilson</td>
<td><a href="mailto:secretary@TAAS.org">secretary@TAAS.org</a></td>
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<tr>
<td>Treasurer</td>
<td>Dan Clark</td>
<td><a href="mailto:treasurer@TAAS.org">treasurer@TAAS.org</a> 505-771-4346 (H)</td>
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<tr>
<td>Membership Coordinator</td>
<td>Robert Anderson</td>
<td><a href="mailto:membership@TAAS.org">membership@TAAS.org</a> 505-275-1916</td>
</tr>
<tr>
<td>Director / Volunteer Coordinator</td>
<td>Amy Estelle</td>
<td><a href="mailto:adestelle2000@yahoo.com">adestelle2000@yahoo.com</a> 505-730-0025</td>
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<tr>
<td>Director</td>
<td>David Frizzell</td>
<td><a href="mailto:education_coord@TAAS.org">education_coord@TAAS.org</a></td>
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<tr>
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<td>Bob Havlen</td>
<td><a href="mailto:events_coordinator@TAAS.org">events_coordinator@TAAS.org</a> 505-856-2537</td>
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<tr>
<td>Director</td>
<td>Mike Molitor</td>
<td><a href="mailto:gnto@TAAS.org">gnto@TAAS.org</a> 505-228-4384 (C)</td>
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<tr>
<td>Director / Observatory Director</td>
<td>Lynne Olson</td>
<td><a href="mailto:pr@TAAS.org">pr@TAAS.org</a> <a href="mailto:events_coordinator@TAAS.org">events_coordinator@TAAS.org</a> 505-856-2537</td>
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<tr>
<td>Director</td>
<td>Gordon Pegue</td>
<td>gpegue at comcast dot net 505-332-2523</td>
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<td>Director</td>
<td>Steve Riegel</td>
<td>505-274-3362</td>
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<tr>
<td>Director</td>
<td>Bill Wallace</td>
<td>505-710-5172</td>
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### Archivist
- Pat Appel 505-292-0463 (H) archivist@TAAS.org

### ATM Coordinator
- Ray Collins 505-344-9686 (H) atm@TAAS.org
- Michael Pendley 505-238-6060 atm@TAAS.org

### Dark Sky Coordinator
- David Penasa 505-277-1141 (W) darksky@TAAS.org

### Education Outreach
- Tom Graham education_coord@TAAS.org

### Events Coordinator
- Lynne Olson 505-856-2537 events_coordinator@TAAS.org

### Grants Coordinator
- Barry Spletzer 505-228-4384 (C) grants@TAAS.org

### Librarian
- Arthur VanDereedt 505-821-0530 librarian@TAAS.org

### Membership Chair
- Bob Anderson 505-275-1916 membership@TAAS.org

### Newsletter Editor
- Gary Cooper 505-227-3974 (C) TAASeditor@gmail.com

### Observatory Director
- Mike Molitor 505-717-2601 gnto@TAAS.org

### Public Relations
- Lynne Olson 505-856-2537 pr@TAAS.org

### Telescope Loan Coordinator
- Barry Spletzer 505-228-4384 (C) telescope_loans@TAAS.org

### UNM Observatory Coordinator
- Daniel Zirzow dzirzow at unm dot edu unm_coord@TAAS.org

### Volunteer Coordinator
- Amy Estelle 505-730-0025 adestelle2000@yahoo.com

### Web Master
- Will Ferrell webmaster@TAAS.org
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 Friday 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.

TAAS LIBRARY: Please contact the Librarian at librarian@TAAS.org or 890-8122 to check out a book or make a contribution.

TAAS ON THE WORLD WIDE WEB: 
TAAS Web site: http://www.TAAS.org
The TAAS Web site includes:

- Online Sidereal Times
- 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