For our October meeting, we will have the pleasure of Dr. Leonard (Len) Duda bringing us up-to-date on the current research on “Exoplanets,” those far distant cousins of our own solar system. Something that was once only imagined is now a cast of thousands of planets that have been discovered outside of our solar system, and the number is growing daily.

**Exoplanets**

**Dr. Leonard Duda**

**FEATURED SPEAKER**

*by Lynne Olson*

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**“How to Astro-Speak!”**

**TAAS Astronomy 101**

Saturday, October 15, 6:00 p.m.

Science and Math Learning Center

UNM Campus

*by Lynne Olson*

If you’re often confused by astronomy terms that you think should be obvious, your more experienced friends don’t have to find out. We will discuss the following and much more:

- Measuring angles
- Apparent size
- The four basic types of galaxies
- Altitude and azimuth
- Star chart lingo

As part of our continuing series for beginners, Sigrid Monaghan will lead us through this astronomical vocabulary and the meanings...and handouts will be available. Your questions will be welcome!

See [www.TAAS.org](http://www.TAAS.org) for map.

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**Placitas Public Star Party**

Saturday, October 8, 6:30–10:00 P.M.

Placitas Community Library, 453 Highway 165, 4.5 Miles East of I-25

*by Lynne Olson*

The fall free public star party at the Placitas Library grounds will be co-hosted by The Albuquerque Astronomical Society, Las Placitas Association, and the Placitas Community Library from 6:30–10:00 p.m. on Saturday, October 8.

This is a very popular event in an area with very little light (Library staff make sure all lights in and around their building are red), nice facilities, and autumnal weather and skies.

Telescopes of all types and sizes will be provided by TAAS members for observing the astronomical targets of the season in the dark-sky environment. Please arrive before dusk and get oriented in daylight (sunset is continued on page 2...
It has been a busy time for the TAAS astronomers and for a majority of that time I have been gallivanting around Scandinavia, Scotland, and Ireland. It will be good to get back into all the events we have planned ahead and that precious time we have when it is not too hot, windy, or cold, and it gets dark earlier. I look forward to seeing you at a school star party, GNTO, ATM, or a variety of other events we will be doing.

If you are interested in being Vice President or President in the coming year let the nominating committee or a member of the board know. We have a wide variety of opportunities to do things in TAAS and meet fellow members and have some fun at the same time. Have a great time observing and clear, dark skies to all.

...GENERAL MEETING NEWS continued from page 1

How are these planets found? How big are they? What do we know about their orbits? Have any Earth-like planets been discovered? In this presentation, Len will address these questions, review what we know about these extrasolar planets, and present examples of the different planets that have been observed—so far!

Join us for this journey to these worlds with an expert guide, and also take the opportunity to meet with your fellow amateur astronomers for our monthly meeting and enjoy an evening of sharing your experiences in astronomy.

Leonard Duda, PhD, has been a staff member at Sandia National Laboratories in Albuquerque, NM, for 37 years, working in many different scientific and engineering areas. Len has also been involved with volunteer science education activities, including as a volunteer NASA/JPL Solar System Ambassador, Science Olympiad, the regional and state science fairs, and the Explora Science Center. He is a Grand Awards judge co-chair at the Intel International Science and Engineering Fair...and a TAAS member.

See www.TAAS.org for details and map to SMLC.
September 3 New Moon Observing Session:
Pete Eschman was the opener on September 3. When he arrived at 5:00 p.m. he found that Jeff and Paula Boggs had already got things started by opening the cocina and outhouse. Jeff was busy applying white paint to various posts around the observing field and touching up things in general.

Bill Wallace and Pete used the Isengard, which worked very well throughout the night. No problems were experienced with the new hand pad.

Observing conditions ranged from good to very good, with some interruptions from clouds. There always seemed to be large areas of sky without the pesky clouds, although (as usual) they have a knack of moving into your target area at just the wrong time!

The turnout was 13 people and we know that some of the faithful were probably at Chaco. Those attending included Jeff and Paula Boggs, Peter Eschman, David Downs, Bill Wallace, Sigrid Monaghan (who brought her friend Larry Rustmeyer), Kevin McKeown, Melissa Kirk, Shane and Becky Ramotowski, Jim Lawrence, and me. When Pete left around 12:30 a.m. Jim L., Shane, Becky, and I were still going strong. Jim Lawrence left not long after Pete did but the others spent the night. I closed the site about 6:40 a.m.

Everyone had an enjoyable evening, and Pete certainly appreciated the chance to catch some photons for a change.

September 4 Special Observing Session:
Jim Kaminski organized a Special Observing Session on September 4. Observing that night involved the wind: some reduction occurred around sundown, with still less wind at about 10:00 p.m. It picked up again around 1:00 a.m., then by 2:00 a.m. it stayed 4–7 mph until near calm around sunrise. The scattered clouds dissipated steadily until they were gone by around 11:00 p.m. remaining in great transparency. Seeing (air turbulence) was mediocre.

Jim’s SQM-L darkness reading was about 21.5 unless looking into that bright light source known as the Milky Way, which gave a 21.3 reading. The dirt roads and general area were dusty, especially from the wind (keeping many flying critters at bay).

Observers joining Jim included Vance Ley (imaging), Shane Ramotowski (working on his Veil Nebula imaging), Becky Ramotowski (checking out some Cl. Herschels), Rick Hasi (binocular viewing), Marla and Jonathan Brown (touring the skies with an SCT), John Wheeler (hunting Astronomical League binocular objects), and Edgar Fischer (enjoying W. Herschels with a 10-inch light bucket).

Jim’s best eye candy was the Pisces Galaxy Group around NGC 383, or Arp Peculiar Galaxy 331, viewing 12 galaxies in the same 190x field of view (1 needed averted vision and 6 were somewhat bright) for almost an hour.

Most left the windiness by 1:00 a.m., with Vance, Shane, and Becky keeping Jim company through the night. This weekend seemed to involve clouds or winds as challenges to our observing, but we made the best of it!

Upcoming Events:
- October 22: 3rd Quarter Moon Observing
- October 29: New Moon Observing
- November 19: 3rd Quarter Moon Observing/Isengard and Imaging Training
- November 26: New Moon Observing and TAAS 200 Scavenger Hunt

Don’t forget that the GNTO observing field is available for use by TAAS members anytime. Check the TAAS website for the procedure to follow. Contact me if you have any questions.

As always, check TAAS_Talk and the TAAS website for last-minute changes and updates. GNTO events are open to all TAAS members and their guests.

GNTO Director: GNTO@TAAS.org or 505-803-3640.

Remember to notify TAAS when your mailing address, e-mail address, phone numbers, etc., change. Send updates to Doug LeGrand, treasurer@TAAS.org, or to Bob Anderson, membership@TAAS.org.
OAK FLAT STAR PARTY REPORT
LAST TWO OAK FLAT EVENTS OF 2016
by Lynne Olson

Our Oak Flat attempt on August 27, with Opener/Closer Fernando Torres, unfortunately was not only cloudy but actually raining and did not get off the ground and into the skies. Thank you for taking charge, Fernando.

The star party on September 10 was the best of the season with almost all clear skies and a great attendance by our TAAS telescopes and an estimated 80 visitors who arrived and left around 11:00pm—some TAAS observers stayed until much later. Many came in groups, others individually, and visited the scopes on the “telescope tour” of the oval in the meadow to see the Moon, Saturn, Mars, the Ring Nebula and Andromeda galaxy and much more. There was even a couple from China with their young son, very enthusiastic, going back to China soon. Kevin McKeown gave a star talk on the autumn constellations and their mythology. TAAS telescopes were operated by Tom and Debbie Marker (who were the official

Openers for the night), Jim K and Bunny, Alex Brown (Emanuel), Mike Fairchild, Trish Logan, RalphThorman, Josh Shank, Jim Fordice, John Laning, Jim Lawrence, Martin Hilario (the official Closer for the night), Shane and Becky Ramotowski, Barry “No Hat Tonight” Spletzer, Boris Venet, Chuck Esserine, Buddy Buzzard, Elizabeth Moore, Kevin McKeown, and Greg Dillon.

Our thanks to the telescope wranglers, and to the Openers and Closers who set up and took down the signs and pathway lights for everyone else. Also to the Tijeras Ranger Station which contributes the sites to us and tries to accommodate all of our requests, including a mowing or two. Here’s to clear skies and no fires next year!

TAAS REPRESENTED AT GRAN QUIVIRA DARK SKY CELEBRATION
by Lynne Olson

On September 30 at the invitation of the Salinas Pueblo Missions National Monument, two of our TAAS members traveled to Gran Quivira for the occasion of a star party to celebrate its designation as a Dark Sky Park and the 100th Anniversary of the National Parks.

Jim Greenhouse, Space Science Director at NMMNH&S gave a guided tour of the skies to the visitors and other astronomers, and Bruce Meyer showed many wonders with his telescope. This event has been attended by the Lake County Astronomers from Illinois for 30 years and TAAS hopes to start its own tradition in the future.

PHOTOS: BRUCE MEYER

2017 TOTAL SOLAR ECLIPSE SPOTLIGHTED AT TAAS GENERAL MEETING
by Lynne Olson

On September 17, Mike Molitor gave TAAS members and many visitors a preview of what to expect, what to prepare for and what to learn from the total solar eclipse coming to America in August of 2017. The audience learned about past eclipses, what this one will feature and how to be ready to observe and image this event.

The meeting drew about 80 attendees who stayed focused on Molitor’s presentation and had a good Q&A session at the end. The finish was a distribution of special solar glasses to all who came, provided by Roger and Linda Kennedy.

You can resource this talk at “The TAAS Files” on www.TAAS.org, as well as some of our previous lectures.

PHOTOS: MARTIN HILARIO
The Rho Ophiuchi Cloud Region is an area of gas and dust, covering approximately 4.5° x 6.5°, about 1° south of the star ρ Ophiuchi. This region is the closest star-forming region to Earth (10.6 light-years). The image contains the star Antares, the globular clusters M4 and M80, as well as at least two large dark filaments and the nebulae IC 4604 and 4605. The very bright object in upper left of the image is the planet Saturn.

Captured on September 14, 2016, at GNTO, using the club-owned modified Canon 4Ti camera together with my Canon 100 mm EF lens. This combination yields an image covering an area 8.46° x 12.67° of sky. I chose this lens because it’s my experience that “prime” lenses yield better astronomical images than even the most expensive zoom lenses. A total of 12 x 5’ subframes were captured at f/2.8 and ISO 800. The camera and lens were mounted on my Losmandy G11 and allowed to track unguided.

Subframes were combined with 10 dark frames in DSS and processed in Photoshop CS2. The image was cropped for aesthetic purposes.
Telescope Loan Program Update
by Jim Fordice

I explained last month that I have been selling some of the loan program equipment in order to purchase items that will improve the program. Over the last few months we have raised $7,136.73 and made purchases totaling $1,758.33. The items purchased were:

- 25 eyepieces
- 6 eyepiece containers
- 3 Jumbo Pocket Sky Atlases
- 3 laser collimators

I am in the process of adding the new eyepieces to the telescope packages. Several of you have already received telescope packages with a set of new eyepieces.

### Loan Program Statistics

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On September 22 Jerry Butterfield donated a very nice 10" Meade Dobsonian. With some minor repairs and adjustments, it will make a fine addition to the program. Thanks, Jerry.

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Observing Australia’s Night Sky from 16 Degrees South Latitude

Night Sky Touring Down Under
by Dan Rossbach

Near Cairns, Australia, on the 22nd of August, 2016, sunset was around 6:30 p.m. and moonrise did not occur until after 10:00. We had ample time to focus on the best the Southern Sky had to offer. Obviously days closer to the new moon offer longer viewing opportunities, but in my case I wanted to see things not visible from my home 35 degrees north latitude. Ian Maclean, our guide, provided a 12-inch Sky Watcher Dobsonian with a capable 24 mm Meade, 82-degree FOV, giving a good trade-off between magnification and viewing field.

My favorite of the night? Undoubtedly the Jewel Box! Although the Great Nebula in Carina is big and bright, there is something I like in the Great Nebula in Orion (which can also be seen in Queensland at the proper time). Nothing in the north compares with the Jewel Box. So why waste an opportunity?

Are you planning a visit to Australia? Have you heard that the Southern Hemisphere has the best night skies but your trip doesn’t include any star parties? Well, if your trip includes Cairns, you are in luck! Ian Maclean, proprietor of Night Sky Secrets on the Esplanade, would rather be showing the Southern skies to people than almost anything else. For a modest sum you can go on one of his monthly tours where he provides a meal under the stars followed by a night of discovery. Ian limits the timing of his events, scheduling three days before a full moon to three days after the new moon. If you are heading to Cairns, contact Ian Maclean at Night Sky Secrets on the Web and get ready to be amazed by what folks in areas north of 26 degrees north latitude rarely see.
Heart Nebula, IC 1805, captured on September 9 using an AT65EDQ telescope and a QSI 660 Camera.
A total of 5 x 20-minute exposures in HA.
A total of 3 x 10-minute exposures in RGB.
Stacked in DSS and combined in Nebulosity 4. Processed in Photoshop CC.

Tulip Nebula, Sh2-101, captured on September 16 using a TEC 140 telescope and a QSI 660 Camera.
A total of 11 x 20-minute exposures in HA.
A total of 10 x 20-minute exposures in OIII.
A total of 8 x 20-minute exposures in SII.
Stacked in DSS and combined in PixInsight. Processed in Photoshop CC.

PHOTOS: DWIGHT TALLEY
Thanks to the wonderful TAAS volunteers for making the September 13 school star party a great success. Bob and Georgia Hufnagel got raves for their comet demonstration and also for the delicious birthday cake to celebrate Bob’s birthday. Sigrid Monaghan helped over 100 kids make star charts to take home with them. One boy said that even though it was cloudy, he would look at his star chart the next night and see what he could see.

John Laning arrived with his telescope to discover that there was no key to the drive-through gate, and all the scope equipment had to be lugged in. He graciously set up his telescope along with Martin Hilario, Ed Juddo, Fernando Torres, and a parent from the school. While the skies were not very cooperative, they had big crowds lining up, and later in the evening, Mars and Saturn peeked out of the clouds. I know these excellent astronomers found other distant objects to view as well.

Boris Venet helped me load and unload the planetarium equipment, and Jim Greenhouse gave four great presentations to over 100 visitors. The kids were very well behaved and there was superior parent support all evening. Phil shot some photos while Sandy observed the event from the car due to her broken wrist.

Again, every single school we attend expresses so much gratitude and amazement that we have a club full of knowledgeable and willing volunteers. Never doubt that we are making a difference!
The imaging dome is available for use by all TAAS members. Because of the high optical speed of the system (f/1.9) it is possible to create fairly deep images of large objects in a relatively brief time, on the order of a half to one hour for many objects. The system has a field of view of 91' x 69' which allows us to image fairly large objects, such as M33, in a timely manner. It is, of course, less useful for smaller objects such as M51.

Members interested in using the system should contact Vance Ley for training and/or assistance.

PHOTO: VANCE LEY, MARTIN HILARIO, LARRY SCHWEIZER

The Lagoon Nebula (M8)

M8 (THE LAGOON NEBULA), was captured by Vance Ley, Martin Hilario, and Larry Schweizer using the GNTO C-14 and Hyperstar system located in the GNTO imaging dome, during the dome imaging training session held on September 24, 2016. This huge glowing gas cloud is located approximately 4,100 light-years away in the direction of the constellation Sagittarius.

A total of 30 two-minute integrations were made with the club’s STF 8300 camera, controlled by Sequence Generator Pro. Guiding was done with a separate guide scope, an Orion guide camera and PhD-2. The subframes, together with dark frames and flat frames, were combined using DSS and further processed with Photoshop CS-2. The image was cropped, rotated, and reversed to a normal view for aesthetics. Note that because the Hyperstar-equipped C 14 uses only one mirror, the original image is reversed in one plane.

The Lagoon Nebula (M8)
Meeting called to order: 6:32 p.m.

Attended: Bob Havlen, Trish Logan, Tom Graham, Jim Fordice, Lynne Olson, Doug LeGrand, Sigrid Monaghan, Viola Sanchez, John Miller, Bob Shipley

Absent: Bob Anderson

Previous month’s Minutes: Motion to approve minutes, 2nd, approved.

Old Business:  I. Night Skies – IDA has the application submitted by Vance Ley. The new IDA Chapter Coordinator has informed Vance that the IDA is “redoing the Chapter Handbook and Guidelines.” She expects to have the new handbook approved in the next couple of weeks.

II. Bylaws updated, sent to TAAS newsletter for feedback. Bylaws will also be sent out via TAAS_Talk.

New Business: BoD meeting date changes for October, November, and December acknowledged.

Committee Reports:

Education Outreach: Report received and discussed.

Finance: Report received. Solar Outreach Fund - Motion to move amount to General Fund, 2nd, approved. Solar Outreach Fund will be deleted from future statements.

GNTO: Report received and discussed.

Membership: Report received; total members in report not consistent with total members on website roster. Bob Anderson and Barry will be contacted to resolve discrepancy.

Publicity/Events: Report received and discussed. ATM sessions are being well attended.

Future Activities and Calendar: Report received and discussed. A few schedule revisions were announced.

Adjourn: 7:38 p.m.

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TAAS Membership Report for September 2016

New TAAS members for September 2016

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New TAAS members for August 2016

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18 New TAAS members for September 2016
12 New TAAS members for August 2016
417 Total TAAS Members
29 Renewal Notifications for November 2016
NGC 7023, Caldwell 4, is known as the Iris Nebula. Collender 429 is an Open Cluster around it. The distance to the Nebula is about 1,300 light-years. It is located in the constellation of Cepheus about 3.5 degrees southwest of Beta Cephei. A 7th magnitude star in the center is responsible for the reflection nebula blue color.

Equipment: ES ED127CF f/5.25 with the ESFF reducing lens, SBIG ST8300M FW5 ccd camera, iOptron CEM60 mount, autoguider SBIG SG-4 on an AT72ED F6.


Exposure: RGB 6x5 minutes each filter for a total of 90 minutes. Problem was I forgot to change the filter and overwrote some of the images already done. Also the east/west switch on the autoguider was wrong at the start so I lost a few other images. Finally the clouds moved in and I had to give up early. I ended up with only an hour of exposures so I had to make the background darker to limit the noise.

Location: Tijeras, NM, on my backyard patio.
Date: September 9, 2016, 9:00 p.m. to 11:00 p.m. MDT.
### Treasurer's Report

15-Sep-16

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GNTO Report for the Board of Directors Meeting
(18 August 2016)

General
• The annual GNTO Picnic had a huge attendance, over 60 people were on-site.
• Sale pending for QHY8 camera ($500).
• May have a buyer for the SkyShed POD (~$1400).
• Emergency Flashing Beacon installation completed.
• 30 TAAS Library books moved to GNTO.

Equipment Status
• Purchase of a new version of the hand pad has apparently solved the problems with the Isengard Astrometric system.

Projects Underway
• Security alarm system installation is in progress.
• The documentation update effort is in progress.
• Gasoline and propane storage cabinet: A used cabinet has been located that can be modified and painted to suit our needs.
• Pellegrino Telescope Tube display: Dan Rossbach’s design has been approved. Fabrication in progress.
• Website update is in progress.

Upcoming Projects
• Cot purchase for Ortega Building
• Weather station mast
• Main Dome powered rotation (Evaluating)

Financial Status
• All requested reimbursements have been received.
• Who to pay property taxes in October?
• 2017 Budget being prepared.

Next Events
• 27 Aug: 3rd Quarter Moon Observing
• 3 Sept: New Moon Observing
• 24 Sept: 3rd Quarter Moon Observing

Education Outreach August, 2016
School star parties are starting this month. I am communicating with the folks who are on the team or interested in helping out.

I had a meeting with Tom Grzybowski yesterday, and he is willing to “own” every other star party starting in October. That is a HUGE help! He is having hip surgery on Friday, August 19, but will be ready to start helping within a month.

TAAS General Meeting
Saturday, October 17, 7:00 P.M.
UNM Science and Math Learning Center

Exoplanet Kepler16b

Exoplanets
DR. LEONARD DUDA
FEATURED SPEAKER

6:00 P.M. Astronomy 101: How to Astro-Speak, Sigrid Monaghan

Need help with your Telescope?

Attend the ATM meeting and receive assistance.
First and third Wednesday of the month.
Manzano Mesa Multi-Gen Center
501 Elizabeth St SE, Albuquerque, NM
map is available at: www.TAAS.org
TAAS EVENTS - AUGUST, SEPTEMBER, OCTOBER, 2016

Aug 20  
Sa  General Meeting - 7:00pm - John Briggs-
“Confessions of an Antique Telescope Collector”
Astronomy 101 - 6:00pm - Jon Schuchardt
“Globular Clusters”

Aug 26  
F  UNM Observatory Friday Nights Resume - Fernando Torres

Aug 27  
Sa  GNTO - 3rd Quarter Observing
Oak Flat Pub Star Party

Aug 30  
Tu  School Star Party - Hoover MS - 7-9:30 p.m.

Sep 02  
F  Sid Times Deadline

Sep 03  
Sa  GNTO-NM Observing
Sa  Chaco Canyon Star Party

Sep 07  
W  Amateur Telescope Making & Maintenance

Sep 08  
Th  GNTO Committee Meeting

Sep 10  
Sa  Oak Flat Star Party

Sep 12  
M  Lunar Monday - NMMNH&S

Sep 13  
Tu  School Star Party - NM International School - 7-9 p.m.

Sep 15  
Th  Board of Directors Meeting

Sep 15  
F  Explora Adult Night

Sep 17  
Sa  General Meeting - Raul Morales-Juberias - “Jupiter/JUNO/Planetary Atmospheres”
Sa  Astronomy 101 - Mike Molitor - “August 2017-Solar Eclipse”

Sep 21  
W  Amateur Telescope Making & Maintenance

Sep 22  
Th  Autumnal Equinox

Sep 24  
Sa  GNTO - 3rd Qtr. Observing
Okie Tex - 9/24-10/2

Sep 30  
F  Sidereal Times Deadline

Oct 01  
Sa  GNTO - New Moon Observing

Oct 05  
W  Amateur Telescope Making & Maintenance

Oct 08  
Sa  Placitas Public Star Party

Oct 10  
M  Lunar Monday - NMMNH&S

Oct 11  
Tu  School Star Party - Mission Avenue ES - 6-8 p.m.

Oct 13  
Th  Board of Directors Meeting

Oct 14  
F  Enchanted Skies Star Party

Oct 15  
Sa  General Meeting - Len Duda – “Exo Planets”

Oct 19  
W  Amateur Telescope Making and Maintenance

Oct 21  
F  Fabulous Fifty - Fall Session

Oct 22  
Sa  GNTO - 3rd Quarter Observing

Oct 28  
F  Sidereal Times Deadline

Oct 29  
Sa  GNTO-New Moon Observing

TAAS SPECIAL EVENTS/PUBLICITY REPORT
AUGUST 18, 2016

Most of the special events of the last month have concerned GNTO Picnic, Explora Adult Night, and ATM. The last Oak Flat Public Star party was another successful public outreach and member participation occasion--without the benefit of stars, but with a great connection with the many visitors and a good attitude on the part of the telescope providers, who made up with information what they could not provide for observing.

The UNM Observatory will begin its fall Friday Nights program on August 26th with Fernando Torres continuing as the coordinator between UNM (Ylva Pihlstrom) and TAAS.

This next month will see the last two Oak Flat star parties of the season, very close together on August 27th and September 10th (due to Tijeras Ranger Station scheduling and our own calendar restrictions). I will be absent for both, but we have gathered a Star Party Team to carry on: Fernando Torres and Sigrid Monaghan for August and Tom and Debbie Marker/Martin Hilario for September--perhaps they will bring the magic to give clear skies and fine weather.

The Chaco Canyon Star Party on September 3rd is being organized and presented by Viola Sanchez and Boris Venet in the same excellent manner as the spring event. They have already begun posting notices and lists on TAAS_Talk.

Publicity has seen the best results from the Sandia Daily News, thanks to Len Duda; from the Albuquerque Journal; from UNM and CNM; and some results from the digital Alibi Calendar as well as ABQ365.

I will be gone from August 24th until September 12th and will be doing advance articles and publicity on our upcoming Oak Flat star parties, Chaco Canyon and next month’s General Meeting speaker and Astronomy 101. If you have a request for publicity, please let me know.

Lynne Olson
The Sidereal Times October 2016

TAAS Reports & Notices

Welcome to New or Returning TAAS Members

Heidi Aguilar • Michael James Aguilar
Emmanuel Brown-Ogoe • Jerry Butterfield
Buddy Buzzard • Elizabeth Buzzard
Derrick Shaw Chavez • Mrs. Alisa Cortez
Djoner Cortez • Josh Cortez
Serenity Cortez • Dr. Ahmad Jrad
Dr. Daniel Alexander Klinglesmith III
Symon Michael Elias Majewski
Mahlet Makonnen • Kay McSherry
Paul McSherry • Lyle Menk
Shelley Menk • Ms Kenneth B. Mitchell
Anique Newaz • Dr. Golam Nawaz
Larry Schweizer • Jeffrey M. Silesky
Dr. Joshua Shank • Joseph Shaub
Joseph Spletzer • Matt Spletzer
Sam Spletzer • Ms Betsy Ann Toensmeier

Donations to TAAS

Wayne Itokazu
Alison K. Schuler
Golam Newaz

Thank You

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 are registered immediately if you pay online. If you pay by check, your membership is registered when your check is received by the treasurer.

Renewal notices will be sent out via e-mail beginning 60 days before your membership expires. If your membership is renewed before it expires or within 90 days after it expires, your new expiration date will be advanced one year from the previous expiration date and your membership will be continuous.

If dues payment is received more than 90 days after the expiration date, you will be reinstated as a member with an expiration date set as one year from the receipt of payment.

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 Jim Fordice, GNTO Director, for GNTO information, e-mail GNTO@TAAS.org.

Membership Services

for:
• Membership Inquiries
• Events Information
• Volunteer Opportunities

Contact Bob Anderson at membership@TAAS.org

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

Contact Doug LeGrand at treasurer@TAAS.org

TAAS
P.O. Box 50581
Albuquerque, NM 87181

Monthly Membership Report

September 2016

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Editor’s Note

The deadline for the next issue of The Sidereal Times is Friday, October 28. The newsletter editor’s e-mail address is editor@TAAS.org.
### 2016 TAAS Board of Directors/Staff

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<tr>
<th>Name</th>
<th>Title</th>
<th>Contact Information</th>
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<tr>
<td>Tom Graham</td>
<td>President</td>
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<tr>
<td>Lynne Olson</td>
<td>Vice President</td>
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<td></td>
<td>Events Coordinator, <a href="mailto:events_coord@TAAS.org">events_coord@TAAS.org</a></td>
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<td>Public Relations, <a href="mailto:pr@TAAS.org">pr@TAAS.org</a></td>
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<tr>
<td>Bob Shipley</td>
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<td><a href="mailto:secretary@TAAS.org">secretary@TAAS.org</a></td>
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<tr>
<td></td>
<td><a href="mailto:bobship10@gmail.com">bobship10@gmail.com</a></td>
<td>505-872-8366</td>
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<td>Doug LeGrand</td>
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<td>Robert Anderson</td>
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<td>Gordon Pgue</td>
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<td>Viola Sanchez</td>
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ATM Coordinator: Ray Collins  505-344-9686 (H)  atm@TAAS.org
Dark Sky Coordinator: David Penasa  505-269-8717(W)  darksky@TAAS.org
Education Outreach: Trish Logan  505-856-2537  education_coord@TAAS.org
Events Coordinator: Lynne Olson  505-228-4384 (C)  events_coord@TAAS.org
Grants Coordinator: Barry Spletzer  505-228-4384 (C)  grants@TAAS.org
Membership Chair: Bob Anderson  505-275-1916  membership@TAAS.org
Newsletter Editor: Gary Cooper  505-227-3974 (C)  editor@TAAS.org
Observatory Director: Jim Fordice  505-803-3640  gnto@TAAS.org
Public Relations: Lynne Olson  505-856-2537  pr@TAAS.org
Scout Coordinator: Chaz Jetty  505-350-7949  scout_coordinator@TAAS.org
Solar Outreach Coordinator: Roger Kennedy  505-314-6273  rwkennedy45@gmail.com
Telescope Loan Coordinator: Jim Fordice  505-803-3640  telescope_loans@TAAS.org
UNM Observatory Coordinator: Fernando Torres  505-350-7949  unm_coord@TAAS.org
Volunteer Coordinator: Barry Spletzer  505-228-4384 (C)  webmaster@TAAS.org

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**The Albuquerque Astronomical Society**

Page 16  The Official Newsletter of The Albuquerque Astronomical Society
MEMBERSHIP

You can join TAAS or renew your membership online. Just go to www.taas.org and select “Join Us!” or “Renew Your Membership” from the main menu on the left side. Annual dues are $30 for a regular membership, $15 for educators and active military, and $5 for students. Only regular members are eligible to vote in society matters. Our new member information packet can be viewed or downloaded from the same location on the website. You can pay your dues on line through PayPal, by Visa, MasterCard, or American Express. To pay by check, mail your check to TAAS, P.O. Box 50581, Albuquerque, NM 87181-0581 or give it to the treasurer at one of our meetings.

ARTICLES/ADVERTISEMENTS

Articles, personal astronomical classified advertisements and 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 or compatible word processor format; ASCII and RTF are acceptable. One space between paragraphs is preferred. One column is approximately 350 words. Contact the Newsletter Editor at editor@TAAS.org for more information.

Note that the Sidereal Times is no longer mailed. It is posted on the TAAS website, www.TAAS.org.

Send submissions or correspondence to editor@TAAS.org.

TAAS ONLINE

TAAS website: http://www.TAAS.org

The TAAS website includes:

• Programs . . .
• TAAS 200
• TAAS Fabulous Fifty
• Educational Outreach: School Star Parties, Solar Astronomy Outreach
• Equipment Trader
• Telescope Loaner Program
• Telescope Making and Maintenance . . . And more
• Online Sidereal Times
• Calendar of TAAS Events
• Members’ Guide
• Links to Astronomy Resources and Members’ Blogs

E-mail: TAAS@TAAS.org

Members’ Google Group: TAAS_talk@googlegroups.com

TAAS is honored to receive an “OUT-OF-THIS-WORLD” AWARD 2011 from Astronomy Magazine for Astronomy Outreach Programs

TAAS is honored to receive an “Editor’s Pick 2013 Best of the City” award from Albuquerque Magazine.

BEST PLACE TO STARGAZE CELESTIAL EDITION

MAGAZINES

TAAS no longer offers magazine subscriptions.