The Manatee Nebula (W50), visible only in radio waves, formed when a giant star exploded as a supernova about 20,000 years ago. In the center of this supernova remnant is the microquasar SS433.

TAAS ON-LINE GENERAL MEETING
Dr. Amy Mioduszewski:
“The Death and Afterlife of Stars”
Saturday, September 5th - 7:00 P.M.
Via ZOOM (Members Only)

The September TAAS General Meeting will once again be held exclusively on-line, via Zoom. (See below for details.)

AFTER WELCOMING REMARKS and announcements by President Jim Fordice, Vice President Steve Snider will introduce the evening’s speaker, Dr. Amy Mioduszewski, PhD, Staff Scientist at the National Radio Astronomy Observatory (NRAO), a global organization featuring several of the world’s largest radio telescope arrays, including New Mexico’s own Very Large Array, west of Socorro. Here is Dr. Mioduszewski’s summary of her presentation:

101, our popular series for beginning (or refreshing) your knowledge of basic astronomy subjects.

Above, double star Mizar and Alcor, found in the handle of the Big Dipper (or tail of Ursa Major)

All September TAAS Events Cancelled

ONCE AGAIN, due to the Covid-19 pandemic, all regular TAAS events are cancelled for the month of September.

The TAAS Board of Directors made this decision on August 27, in accordance with a New Mexico Public Health order to maintain its rules and restrictions for mass gatherings.

Observing events may continue at GNTO, with a five-person limit for each event.
Join Us for the Virtual Observing Sessions

For August we offered the Jupiter’s Moons Virtual Observing Session. I hope you have been able to view the Galilean Moons and our largest planet. The details for all virtual sessions are on the TAAS website. Keep sending your inputs to Dee on what other virtual programs you would like to participate in.

The General Meeting Goes Virtual!

Our first virtual General Meeting held on August was a great success. Our next one is scheduled for Sept. 5. To register for the meeting send an email to Steve Snider at slsnider423@yahoo.com.

GNTO Events

Please see my Under the Dome article or the website homepage for details on the new Friday, Saturday, and Sunday event schedule.

ALCON 2021

The ALCON Committee has started planning for ALCON 2021 which is scheduled for 5, 6, and 7 August 2021. If you are interested in joining the ALCON Committee, please contact me. If you are interested in volunteering for the conference, please contact Marcella Jones at kiwi3528@aol.com.

GNTO Land Ownership

When GNTO was established over 30 years ago the club leadership and Nathan Twining Jr. performed a survey to establish the location of the land Nathan Twining Jr. donated to TAAS. Despite a considerable effort to correctly locate the site subsequent surveys used to locate other parcels of land in the area indicated that TAAS was occupying land owned by two other parties.

In 2016 I commissioned a surveyor to survey the GNTO site and compare where the deed says GNTO is supposed to be located and where it is actually located. That survey showed that GNTO was located about 100 yards south of where it was supposed to be located and that it occupies land owned by two other parties.

In 2017 through 2019 I contacted and communicated with the two parties and engaged a Real Estate Lawyer. The lawyer informed me that we met all of the requirements to gain ownership of the land GNTO occupies based on the concept of Adverse Possession. In order to avoid the need for a lawsuit I communicated with the two parties numerous times and suggested that they donate the land to TAAS. In 2019 I learned that one of the parties was opposed to a donation and was looking to sell their property. I then asked our lawyer to file what is called a “Quite Title” lawsuit to have a court rule that we own the land that GNTO occupies. On 22 July 2020 the 7th Judicial District Court ruled in our favor. TAAS now owns the land GNTO occupies!

We still must take some additional actions to have Socorro County record our ownership and start charging us Property Taxes, but the main part of the effort has been completed.

Keep safe out there and keep Observing, Educating (yourself), and Having Fun.
Updated Language on TAAS Dues and Membership Renewal Date:

An Explanation
By Jim Fordice, TAAS president

Current Wording:

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.

New Wording:

New memberships are registered immediately when you pay online. If you pay by check, your membership is registered when your check is received and processed by the Treasurer.

Renewal notices are sent via e-mail beginning 60 days before your membership expires. When you renew your membership your new expiration date will be advanced one year from the previous expiration date.

If your membership has expired for a long period and you have not participated in club activities during the expired membership period, please contact the President before you attempt to renew your membership. If the President approves, you will be reinstated as a member with an expiration date set as one year from the receipt of payment.

...General Meeting News
continued from page 1

...Astronomy 101
continued from page 1

All stars have a life cycle – they are born in a dense cloud of gas and dust, and most spend the next 1-15 billion years quietly using up their fuel. At the end of their life, depending on their mass, they either explode in a Supernova or they puff off their atmospheres and form planetary nebulae. After this death, there usually remains a compact bit of the star and, in some circumstances, this compact remnant can come to life again in spectacular ways.

*All TAAS members who wish to participate in this meeting must contact Vice President Steve Snider to register. There is a limit of 100 on-line participants. To register, email Steve at slsnider423@yahoo.com. You will then receive an ID and Password, and a short “Zoom Etiquette Tips” on the process itself.

—Lynne Olson

This is for TAAS members only and you must register beforehand with club vice president Steve Snider. (For registration details, see note* at the bottom of the separate article on the General Meeting.)

Following a welcome moment, Steve Snider will introduce Dee.

He will discuss the nature and astronomical history of double stars, which have long been a delight to observers. Dee will explain this, reveal the techniques to best observe them, and point out some beautiful examples that are visible in the September sky.

To add to your enjoyment, our virtual activity for September (see www.TAAS.org) involves double stars that are visible with the naked eye, with binocs and with small to moderate size telescopes.

—Lynne Olson
Friday, August 14 - 3rd Quarter Moon Observing Session
Mark Goodman was the Opener. He reported: GNTO was closed about 10:30 p.m. The cloud cover at the end of twilight was almost complete, and Mike Soukup, Jim Stanley, and I had an enjoyable time setting our camp chairs at a suitable distance and having a great conversation.

Tom Evans and Debra Dees arrived around 9:00 p.m., having attempted (and succeeded, thank goodness) to find GNTO in the dark. We saw them go by the drive to GNTO, stop down the road a bit, back up, and then drive to the entry gate. I showed them around, and when we exited Ortega, the sky had cleared amazingly.

Although the cloud cover had diminished (temporarily, as it turned out), the transparency was quite poor. I saw a note on the Dark Sky Chart that there was a possibility of fire smoke; I think it arrived. We tried to make the best of the clearing, but banks of clouds covered the holes as quickly as they formed. We agreed to wait until 10 p.m. to see what developed.

Mike was using a 3.5" Maksutov and Jim was using an 8" Dob. I would have been using my William Optics 100 mm refractor, but I left my Telrad at home. That turned out not to be a problem, as the conditions never really would have allowed extended star-hopping for NGC globs, which is what I had planned.

At 10 p.m. the conditions had deteriorated, so we decided to close up. Mike closed, completing his second opening toward Opener status. It was a pleasant evening, because of the folks present, not due to stellar observing, sadly.

Saturday, August 15 - 3rd Quarter Moon Observing Session
I was the Opener. I arrived at the site at 6:30 p.m. It was 95% cloudy, 22 mph winds, and some blowing rain. About 7:30 p.m. I talked to John Machuzak who was still on his way down and advised him that it was probably not worth coming to the site. By 8 p.m. it was not any better. Viola Sanchez arrived just as I was closing up. We both headed home a few minutes later. Some days Mother Nature just does not cooperate!

Sunday, August 16 - 3rd Quarter Moon Observing Session
Mike Fuge was the Opener. He reported: There were two observers, along with myself. Viola Sanchez was grateful for better viewing conditions than Saturday night. She focused on the constellations of Sagittarius, Scorpio, and Aquila. (Messier items M4, M8, M28, M54, and M69). John Machuzak was making his first trip to GNTO, and he was very impressed with the facility. He got the full tour, and then some. His time was spent with constellation-identification, in the southern viewing area.

Weather-wise, the winds were light. It’s amazing how green all the desert plants have become, this time of year, in the Belen area. The evening started out with fair viewing qualities. However, as the evening progressed, the transparency diminished, and cloud cover encircled the mesa. The curtain came down on the performance at 11:30 p.m. Overall the weather forecast for GNTO was about 50% accurate, as the cloud cover arrived later than expected. The road conditions were dry, but lots of washboarding on the dirt roads.

continued on page 5...
Friday, August 21 - New Moon Observing Session
Tom Liles was the Opener. He reported: Three observers joined me last night: Jim Stanley, Robert Sullivan and Viola Sanchez.
Fair conditions at 6:30 p.m. deteriorated over the next two hours to cloud cover 100% and wind 10-12 mph. After sitting around and chatting, we decided it wasn’t going to improve a lot!
Started closing up at 8:30 p.m. as Robert and Viola left. Jim closed (and opened) with me as he was practicing the Observing Field checklist. Site was vacated before 9 p.m.
I encountered gale force cross-winds going north on I-25. It was hard to keep the truck in the lanes!

Saturday, August 22 - New Moon Observing Session
Vance Ley was the Opener. He reported: I arrived on site at approximately 6:30 p.m. and found Ricky Adams waiting at the gate. As I opened up, Ricky moved his RV to the western edge of the observing field and began to set up.
When we arrived, it was smoky with some clouds. As it got dark, the smoke remained and the clouds increased. We were joined by Viola Sanchez and, after dark, John Machuzak.
Robert Sullivan emailed me to inform that he would not be joining us. Given the conditions, probably a good choice. By sundown the sky was pretty much socked in, but at about 10 p.m. clear spots emerged. I used the opportunity to test my new pole master. I was able to achieve an alignment of 0.7 arc-min, measured using PhD’s “guiding assistant” over a period of 180 seconds. I was able to do this much more quickly than I’ve been able to do it using PhD’s drift align utility, once I realized that I couldn’t see the little red square I was supposed to align because of the rubylith I keep over my computer screen. I then made video streams of Jupiter and Saturn.
By midnight the sky had once again completely clouded over and I retired to the back of my truck. I woke up at approximately 3:40 a.m. to find everyone but Ricky gone and most of the clouds gone as well. So, I made several video streams of Mars and returned to my air mattress.
At 6:00 a.m. I got up and started tearing down my equipment. Ricky also emerged and left shortly. By 7:00 a.m. I was also on the road.

Sunday, August 23 - New Moon Observing Session
All of the scheduled observers decided not to attend due to the forecast so I cancelled this session.

Friday/Saturday/Sunday Schedule
Since April the GNTO Committee has been hosting observing events that have been limited to five people in order to comply with the New Mexico Public Health Order. Those events have been full and have been successful, but some members have not been able to participate due to the limited size of the events. In order to increase the number of “observer slots” that are available and to make who can attend the events a bit fairer we have implemented some new procedures:
To increase the number of observer slots, the site will be open on the Friday, Saturday, and Sunday of the 3rd Quarter and Full Moon weekends.

Telescope Loan Program Update
By Rick Vergas, Telescope Loan Program Coordinator

<table>
<thead>
<tr>
<th>Loan Program Statistics</th>
<th># of Scopes</th>
<th># on Loan</th>
<th># Available</th>
<th>% on Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Type:</td>
<td>Reflectors</td>
<td>Refractors</td>
<td>Catadioptrics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Size:</td>
<td>Large (&gt;8&quot;)</td>
<td>Medium (5&quot;-8&quot;)</td>
<td>Small (&lt;5&quot;)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>15</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Tracking:</td>
<td>Manual</td>
<td>Push-To</td>
<td>Go-To</td>
<td>Tracking</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

As of: 8/26/20

Under the Dome continued from page 4
an Opener for each one. (An Opener is a GNTO Committee member who I have qualified as someone who has the knowledge needed to fully open the site and who has a set of keys to open all of the buildings.)

If an Opener is not available, I will ask for any TAAS Member to open the site using the GNTO Observing Field Access Procedure (available at http://www.TAAS.org/GNTO/Documents.html) and host up to four other members. When there is an Opener, I have asked the other Openers to not seek to use one of the available observer slots.

To be fairer in selecting who can attend, I will announce each event at least three days in advance (e.g. On Tuesday for a Friday event) on TAAS_talk. Anyone interested in attending the event will have 24 hours to respond to the announcement.

I will then select the members who will be given one of the four observer slots based on how long it has been since those requesting a slot have last participated in a scheduled observing event. Only events where the weather has cooperated, and attendees were able to do some observing, will count (i.e., if an event is clouded out it will not count). About once a month I will share with you the list of those who have had an observing opportunity.

GNTO is a 365-day per year facility. Any TAAS Member who is familiar with the site can open the Observing Field, Cocina, and Outhouse on their own. You are encouraged to use the site whenever you desire on nights when no observing event is scheduled.

Clarification of GNTO COVID-Safe Rules
In order to ensure we do not spread the virus when at GNTO, please follow the New Mexico COVID-Safe practices that are available at https://cv.nmhealth.org/covid-safe-practices/. In addition to not sharing eyepieces with others, please follow these two additional rules:

- Maintain a limit of two people per building (two for each of the Main Dome floors).
- No more than one person may sleep in the Ortega Building.

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.

For more information, e-mail me (Jim Fordice) at GNTO@TAAS.org or phone 505-803-3640.
New Astronomical League Observing Programs

By Becky Ramotowski
TAAS Astronomical League Coordinator

It’s been hot and smoky and we’ve all been cooped up for months. So what can you do to beat the heat, the murk and the smirk of staying indoors?

How about planning your next observing session with the aid of a few good lists offered by The Astronomical League?

You’re probably thinking, oh gosh, here she goes again: prodding and pushing us into looking at stuff we don’t want to look at.

No, not really.

There are so many lists now that it’s super easy and fun to find something you like.

The AL just added five new observing programs, which includes a couple of imaging awards for those that like to dink with pixels and convince bits of data collected on tiny chips to reveal sights of the sky that we in some cases can’t see visually at the eyepiece. Think of it as a list for dipping your chips!

There’s also an Alternate Constellations Observing program that sounds like a lot of fun. It introduces the viewer to some obsolete but historical constellations. I find this intriguing as sometimes I see star patterns in the sky that are not quite in order with the current accepted constellations patterns.

It will be fun to go back in time to learn about the old patterns and the stories that go along with them – and why they no longer exist, or have been taken in by a neighboring star pattern.

For example, do you know where to find Limax, the slug, or Tartandus the Reindeer, or Uranoscopus, the Stargazing Fish?

How about the Battery of Volta?

A quick inquiry online indicates there’s not much to the Battery of Volta. It’s just two stars, 1 Pegasi at mag-
nitude 4.1 and 9 Pegasi at magnitude 4.3. Apparently, Thomas Young, a British physician and Egyptologist wanted to honor the invention of the electric battery by Alessandro Volta in 1806. Perhaps Young just represented the battery terminals: who knows?

I had not heard of these and plan to do the list myself. It’s really a perfect program for these times of staying distant and working toward a goal of going backwards in time.

I bet no one’s ever told you that before!

A bit of online digging and researching will be required to find these old relics of the sky before ever going outside.

You’ll need to sketch 40, from a list published at: https://www.astroleague.org/content/obsolete-constellation-checklist Brad Young, the Alternate Constellation Observing list coordinator, told me he is happy to assist anyone with questions they might have about observing these obsolete constellations; he wants to keep expenses for the observer low by using online resources. He indicated there might be an observing guide later on, but for now you’ll have to rely on online research and I, for one, like that.

It means hours of distraction reading and looking at old files of star charts before ever going outside. This is good because the moon is waxing and the sky is smoky right now so you have a lot of time to research.

Brad can be reached at: allenb_young@yahoo.com The Astronomical League website can be found at: https://www.astroleague.org/
M101, The Pinwheel Galaxy, captured on the evenings of 4-29-20 from my Albuquerque backyard (Hα); 05-20-20 at GNTO (LRG), and 06-18-20 at GNTO (G and B) using an ASI 1600 mm camera mounted on an 11” Celestron HD Edge OTA with Celestron Edge focal reducer, operating at 1960mm focal length. The mount was a Losmandy G11. Processing was done in PI and Lightroom.

M101, a spiral galaxy, is roughly 21 million ly from the Solar System in the direction of Ursa Major, and is seen face-on from our perspective. It’s estimated to have about a trillion stars – at least twice the number in our own Milky Way. There are a lot of Hα regions in M101 and, since I’ve started doing narrow band imaging, I wanted to capture M101 in Hα. I was able to accomplish this from the comfort of my light-polluted backyard.

The LRGB portion of the image required two sessions at GNTO due to short nights and my usual putzing around. I’m still trying to find my groove with NB-RGB processing; I would have preferred the central portion of the galaxy to be brighter, as my RGB image, made with an OSC is.

So this, like everything else I do in astro-imaging, is a work-in-progress.

—Vance Ley
The moon was dancing with the clouds. I see Daffy Duck, flying towards the left. Val thinks I’m nuts.

**A Sunday Skyfest** near GNTO on August 23rd led to some fine images. I had a comfort-food (KFC) dinner in the desert with my good friend Val Garoza. Val is an artist, and he wanted to take pictures of the sunset and moon for his blog. Earlier in the day the weather was smoky, but it cleared up nicely, with pretty clouds framing the setting sun. Soon, the whole Rio Puerco valley was alive with moonlight, and the moon played games with the clouds. Here is a sampling of Val’s pictures from our evening just north of GNTO. Note: These images, along with others, will appear on Val’s blog in the next few weeks. It is located here: [http://val-g.blogspot.com/](http://val-g.blogspot.com/)

—Alan Scott

Daffy soon departed stage left, the clouds thinned, and the moon lit the valley below and the stars shone. Notice the thick layer of smoke.

All photos by Val Garoza

Val decided to take an image of the moon with only his Nikon, and a tripod. Not bad! I tried with my iPhone, but it didn’t have a chance.
Proud To Be a Member of TAAS?
Get a Cap!

FOR MANY YEARS, we have had TAAS hats and other apparel made at Black Duck Embroidery & Screen Printing (http://blackduckonline.com), here in Albuquerque. Recently they gave us an excellent price on two types of caps due to our frequent orders. We can get the TAAS ball cap and/or the woven watch cap, both in midnight blue with the TAAS logo, for only $10, and you can order one (or both!) via our dedicated publicist Lynne Olson, at no additional charge. During this stay-at-home, social-distancing time, if you want to keep TAAS on your mind—and on your head!—notify Lynne at pr@taas.org. She'll let you know when the order comes in, and payment will be arranged.
Donations to TAAS

John Briggs
Amazon Smile
Jim Fordice
General Mills
Timothy Howard
Garrick E. Lewellyn
Adam Niederhaus
Dale Ouimette

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

Welcome to New or Returning TAAS Members

Kranti Numburi • Manas Namburi
Shreyas Namburi • Suneel Namburi
Adam Niederhaus
Adriana Niederhaus
Irish Niederhaus • Mark Niederhaus
Samantha Niederhaus
Scotty Niederhaus
Shawn Niederhaus • Anna Palley
Gabriel Palley • Joseph Palley
Penelope Palley • Sebastian Palley
Bruce Parker • Randall Scarberry
Dennis Simpson • Jamie Simpson
Kris Simpson • Lexi Simpson
Mat Simpson • Rae Simpson
Allison Sullivan • Robert Sullivan
Darin Templet

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 with in 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.

Monthly Membership Report

August 2020

<table>
<thead>
<tr>
<th>Membership</th>
<th>Current Month</th>
<th>Past Month</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>238</td>
<td>238</td>
<td>0</td>
</tr>
<tr>
<td>Family</td>
<td>156</td>
<td>144</td>
<td>12</td>
</tr>
<tr>
<td>Educator</td>
<td>15</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Student</td>
<td>7</td>
<td>9</td>
<td>-2</td>
</tr>
<tr>
<td>Military</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Honorary</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Total Members</td>
<td>425</td>
<td>413</td>
<td>12</td>
</tr>
</tbody>
</table>

Editor’s Note

The deadline for the next issue of The Sidereal Times is Monday, September 21. The newsletter editors’ e-mail address is editor@TAAS.org.

The Official Newsletter of The Albuquerque Astronomical Society
# 2020 TAAS Board of Directors/Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIM FORDICE, President</td>
<td><a href="mailto:president@TAAS.org">president@TAAS.org</a></td>
<td></td>
<td>505-803-3640</td>
</tr>
<tr>
<td>STEVE SNIDER, Vice President</td>
<td><a href="mailto:vp@TAAS.org">vp@TAAS.org</a></td>
<td></td>
<td>505-249-4066</td>
</tr>
<tr>
<td>DOUG LEGRAND, Treasurer</td>
<td><a href="mailto:treasurer@TAAS.org">treasurer@TAAS.org</a></td>
<td></td>
<td>505-559-0252</td>
</tr>
<tr>
<td>CARL LARSON, Secretary</td>
<td><a href="mailto:secretary@TAAS.org">secretary@TAAS.org</a></td>
<td></td>
<td>408-623-4717</td>
</tr>
<tr>
<td>ROBERT ANDERSON, Director</td>
<td>Membership Coordinator <a href="mailto:membership@TAAS.org">membership@TAAS.org</a></td>
<td></td>
<td>505-275-1916</td>
</tr>
<tr>
<td>JIM FORDICE, Director</td>
<td>GNTO Director, <a href="mailto:gnto@TAAS.org">gnto@TAAS.org</a></td>
<td></td>
<td>505-803-3640</td>
</tr>
<tr>
<td>MARK GOODMAN, Director</td>
<td>Education Outreach Director education <a href="mailto:Coord@TAAS.org">Coord@TAAS.org</a></td>
<td></td>
<td>505-328-6157</td>
</tr>
<tr>
<td>BOB HAVLEN, Director</td>
<td><a href="mailto:rhavlen@earthlink.net">rhavlen@earthlink.net</a></td>
<td></td>
<td>505-856-3306</td>
</tr>
<tr>
<td>JIM ROUCIS, Director</td>
<td><a href="mailto:Jim@Roucis.com">Jim@Roucis.com</a></td>
<td></td>
<td>719-651-9663</td>
</tr>
<tr>
<td>BORIS VENET, Director</td>
<td>Chaco Events Coordinator, UNM Observatory Coordinator <a href="mailto:venetb@sprintmail.com">venetb@sprintmail.com</a></td>
<td>505-507-7838, 505-507-7838</td>
<td></td>
</tr>
<tr>
<td>RICK VERGAS, Director</td>
<td>Telescope Loan Coordinator <a href="mailto:telescope_loans@TAAS.org">telescope_loans@TAAS.org</a></td>
<td></td>
<td>505-620-2832</td>
</tr>
</tbody>
</table>

| Astronomical League Coordinator | Becky Ramotowski | 505-286-8334 | AL_coordinator@TAAS.org |
| ATM Coordinator                | Ray Collins     | 505-344-9686 | atm@TAAS.org             |
| Chaco Events Coordinator       | Boris Venet     | 505-507-7838 | venetb@sprintmail.com    |
| Education Outreach             | Mark Goodman    | 505-328-6157 | education_coord@TAAS.org |
| Explora Adult Night Coordinator| Bob Hufnagel    | 505-890-8122 | rhufnagel2@comcast.net   |
| Fabulous Fifty Coordinator     | Phil Fleming    | 505-870-5604 | fab50@TAAS.org           |
| GNTO Director                  | Jim Fordice     | 505-803-3640 | gnto@TAAS.org            |
| Membership Chair               | Bob Anderson    | 505-275-1916 | membership@TAAS.org      |
| Nametag Coordinator            | Billie Sue Patrick | 575-937-1659 | nametag@TAAS.org         |
| Newsletter Co-Editor, Content  | Bruce Meyer     | 917-449-0700 | editor@TAAS.org          |
| Newsletter Co-Editor, Design   | Gary Cooper     | 505-227-3974 | editor@TAAS.org          |
| Public Events Coordinator      | Steve Snider    | 505-249-4066 | events_coord@TAAS.org    |
| Publicity Coordinator          | Lynne Olson     | 505-856-2537 | pr@TAAS.org              |
| Scout Coordinator              | Chaz Jetty      | 505-350-7949 | scout_coord@TAAS.org     |
| Telescope Loan Coordinator     | Rick Vergas     | 505-620-2832 | telescope_loans@TAAS.org |
| UNM Observatory Coordinator    | Boris Venet     | 505-507-7838 | UNM_coord@TAAS.org       |
| Webmaster                      | John Purnell    | 209-355-5166 | webmaster@TAAS.org       |
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
- 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 was honored to receive an “OUT-OF-THE-WORLD” AWARDS 2011 from Astronomy Magazine for Outstanding Public Programming.

TAAS was 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.