November 2020

# Observing our Desert Skies since 1954 ASTRONOMARS OCIATION WWW.tucsonastronomy.org

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## **General Meeting November 2020**

The TAAA's November monthly meeting will be held online on Friday, Nov. 6. We will have one presentation starting at 6:30 P.M. and open to the general public. Followed by a members only meeting at approximately 7:15 P.M.

NON members may view the main presentation on Nov. 6 on Facebook at: <a href="https://www.facebook.com/TucsonAstronomy/">https://www.facebook.com/TucsonAstronomy/</a>

### **Invited Lecture**

From Tucson to Tokyo: Building a Global Movement for Dark Sky Protection presented by Ruskin Hartley , IDA Ruskin Hartley joined the International Dark-Sky Association in February 2019. He brings 20 years of conservation experience to IDA's work to protect the night from light pollution. Ruskin's passion is protecting precious natural resources. He served as Executive Director of Save the Redwoods League, a non-profit dedicated to protecting and restoring the redwood forest; as CEO of Heal the Bay in Los Angeles; and as Vice President of Resource Development at Fair Trade USA. Originally from the United Kingdom, Ruskin holds a bachelor's degree from the University of Cambridge and a master's degree from the University of East Anglia. Ruskin loves to head out on the trail with his wife and kids or cook-out under the stars..

On October 23, 1987, two Tucson Doctors—one M.D. and one PH.D.—incorporated the International Dark-Sky Association devoted to the "protection and restoration of dark nighttime skies through application and promotion of proper lighting practices." What started as an astronomical-driven venture in Tucson is now a broad movement active on all continents. While light pollution has increased in the intervening years, Tucson continues to lead the way and show what is possible. Ruskin will explore emerging themes in dark sky conservation, discuss the global perspective, and share IDA's strategy for accelerating dark sky protection worldwide.

# 2nd Presentation Members Only Meeting @ approximately 7:15 PM

### **TAAA Virtual Star Party**

Join Tucson Amateur Astronomy Association for a Virtual tour of the Night Sky on **December 5th** from **7:00—8:30 PM.** We will explore planets, Nebulae, Star Clusters, Galaxies, and much more. The event will be streamed Live from our Facebook Page.

Facebook: https://www.facebook.com/TucsonAstronomy/events/



STARIZONA ADVENTURES IN ASTRONOMY AND NATURE

5757 N. Oracle Rd. Tucson, AZ 85704 www.starizona.com 292-5010

### **Astronomical League Observing Programs**

### What's Up List for October and November 2020

### by Douglas Smith ALCOR

Fellow amateur astronomers. Many of the Astronomical League observing programs can be done from our backyards. The following is a list of objects visible during November and December for the more common observing programs.

### **Constellation Hunter Program – Northern Sky**

The following constellations are well placed for observing for November and December:

Andromeda, Aquarius, Aries, Cassiopeia, Cepheus, Cygnus, Lacerta, Pegasus, Pisces and Triangulum

### **Messier Observing Program**

The summer Milky Way is setting early. The winter Milky Way is not rising until late. Now we are looking away from Milky Way so objects are more sparse.

The following Messier Objects are well placed for observation during November and December (listed in ascending RA):

M52, M110, M31, M32, M103, M33, M74, M76

### **Lunar and Binocular Lunar Observing Program**

The following is a list of the dates for the lunar phase when observations should be made during November and December:

New Moon: November 15, December 15

**40 Hours waxing:** November 17, December 17 **72 hours waxing:** November 18, December 18

4 days old: November 19, December 197 days old: November 22, December 22

10 days old: November 25, December 25

**Full (14 days old):** November 1, November 29, December 29

Gibbous: November 8, December 8

**72 hours waning:** November 12, December 11 **40 hours waning:** November 13, December 12

### **Urban Observing Program**

The following deep sky objects are well placed for observing during November and December:

NGC 7662, NGC 7789, NGC129, M32, M31, NGC457, NGC663, Cr 463, NGC 752

The following Double Stars are well placed for observation during August and September:

Eta Cassiopeia, Gamma Aries

### Solar System Observing Program

The following list describes the various solar system objects and their visibility during November and December:

**Mercury** is an early morning object in November and moves back towards the Sun in December.

**Venus** emerges from behind the Sun in late November becoming an evening object in December.

**Jupiter** and **Saturn** set earlier and earlier during November and December.

**Mars** is near opposition and is well placed for observation nears its maximum size for the year.

**Uranus** is not too far behind Mars. Now visible at a reasonable time of night.

**Neptune** is still well placed, about halfway between Saturn and Mars.

by Douglas Smith ALCOR

### **TAAA Trivia!**

**NOTE:** Sometimes people have questions, comments, or additional information related to content in the TAAA Trivia. If you do, contact Mae at <a href="mailto:ssmith@email.arizona.edu">ssmith@email.arizona.edu</a>.

### Trivia this month:

- **1a.** Where can you find the "TAAA Virtual Moon Exploration" video made on 6-27-2020?
- **1b.** "I love word search activities!!" Where can you find the following word searches: "Astronomy Word Search Young Astronomers"? "Constellations"? "Telescope"?
- **1c.** Where can you find instructions on "Making a Planisphere or Star Wheel"?
- **1d.** Where can you find information about all the Astronomical League Observing Programs, their requirements and about which programs are considered to be beginner, intermediate or advanced?

### Answers are on page 4.

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### PRESIDENT'S MESSAGE

October has been a fairly hectic month. There have been numerous issues and pressures for all of us with the impending November 3 Election Process, the receipt of confusing healthcare insurance choices; odd weather situations (record number of days over 100 degrees and record small amounts of rain for Tucson as well as an extended hurricane season nationally and still looming wildfires); still more confusion regarding COVID cases; and attention going to considerations in readjustments in This address will reach Jim. traditional holiday planning and celebrating.

Progress is occurring, however, as was demonstrated in the astronomy community success at the recent Pima County Planning and Zoning Commission meeting in which the decision was made to reconsider the proposed new wording regarding Electronic Message Displays (EMDs) (referring to use of LEDs in signage in Pima County). The local Astronomy Community, including TAAA, believed that the proposed wording would increase light pollution and the Commission listened to our concerns.

Fortunately, our November 6th First Friday Member Meeting guest speaker will be Ruskin Hartley from the International Dark Sky Association (IDA). Members will have opportunities to ask questions and to talk with Ruskin. Please think about anything you may wish to discuss with him regarding dark skies and explore how we can all be helpful stewards acting to protect our local and international dark skies.2021.

### **October Board Meeting**

Some actions at the October 9, 2020 TAAA Board (AFSIG) contact Conner Justice at Meeting included:

- The Board approved the following new or revised position descriptions for CAC: Director, Assistant Director, Project Manager, Maintenance Supervisor, Site Engineer, Reynolds Mitchell Observatory Director, Reynolds Mitchell Operator-40 Manager/ Chief Telescope Operator, Reynolds Mitchell Operator-9 Manager, Wally Rogers Observatory Manager, and Observatories Training Coordinator.
- A decision was made to ask Jim Knoll to For information regarding CAC policies, to make CAC represent TAAA at the October 28th Pima County Planning and Zoning Commission in its consideration of signage related to Electronic Message Displays.
- 3. Electronic voting should be added to the options for For information regarding TIMPA, to make TIMPA voting methods used in TAAA Elections. The current reservations or to learn TIMPA Rules of Use during absentee ballot process should be replaced by an Covid19 contact Ralph Means at early voting option. In order to be eligible to vote in an election, new members should join or membersdue-for-renewal should renew at least 24 hours prior to votina.
- The Board discussed possible holiday actions in lieu of the annual Holiday Party.

### **CAC Director Steps Down**

One Important announcement regarding CAC: Alas, for personal reasons, John Mead has needed to withdraw from serving as CAC Director. Jim Knoll is currently serving as Interim CAC Director. To make reservations at CAC, continue to use:

### cac-director@tucsonastronomy.org

### **TAAA Starry Messengers**

TAAA Starry Messengers are in process of designing some astronomy activities that may be used by teachers and parents. They are being posted on the TAAA website under the Virtual Events & Activities page and it is under Community Involvement. Most events only have placeholder links while we are fleshing out the new activities. We will update the page as we move forward. The page can be found at:

http://tucsonastronomy.org/virtual-events-activities/

### TAAA Special Interest Group (SIG) Information

For information regarding the **Astro-Imaging (AISIG)** meetings contact contact Tom Rolfsmeyer at

### astro-photo@tucsonastronomy.org

For information regarding Astronomy Fundamentals

### fundamentals@tucsonastronomy.org

For information regarding Ladies Night Out contact Terri Lappin at

### smsig@tucsonastronomy.org

For Information regarding Starry Messengers (SIMSIG) contact contact Terri Lappin at

### smsig@tucsonastronomy.org

reservations or to learn CAC emergency Rules of Use contact John Mead at

### cac-director@tucsonastronomy.org

### bookbuyer1769@gmail.org

For members to inquire about loaner scopes/equipment, contact Ralph Means at

bookbuyer1769@gmail.org

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### **Member Star Parties**

The TIMPA observing site is located a few miles beyond the Desert Museum. The CAC observing site is located in southeast Arizona near Sunsites, AZ, about 1.5 hours drive from Tucson. Maps to both sites can be found on the TAAA website. Locked gates protect both sites. Call or email the contact person to learn when the gate will be unlocked.

### TIMPA

**Contact Person: Ralph Means** 

Email: fundamentals[at]tucsonastronomy.org

Email: bookbuyer1769@gmail.com

Phone: 520-460-8770

The AFSIG hosts the TIMPA star parties. An AFSIG representative will open the gate for an evening of viewing. The Gila Monster Observatory with its Meade 14" Schmidt-Cassegrain telescope will be open for your viewing pleasure. The TIMPA site features a large parking area and full restroom facilities. Be prepared for cool temperatures after sunset. Guests are welcome, accompanied by a TAAA member. We hope to see you there!

### Chiricahua Astronomy Complex

Contact Person/RSVP to: Jim Knoll Email: cac-director[at]tucsonastronomy.org

Chiricahua Astronomy Complex (CAC) is the club's dark observing site, located in Cochise County approximately 100 miles southeast of the center of Tucson. The site includes concrete telescope pads with electricity, a roll-off roof observatory with a Celestron 14" telescope, a picnic Ramada, and a full bathroom facility with shower room. The new Reynolds-Mitchell Observatory includes a 40" telescope and a large warm room. At an elevation of 4800 feet, be prepared for cooler temperatures. Try to arrive before sunset. Our use permit limits the number of attendees at any one time, so reservations and cancellations are required. If you would like to attend, you must contact CAC Director Mike McDowell. Reservations are on a first come - first serve basis. You need to reserve for both nights if observing both nights.

### **Trivia Answers!**

Question 1a: The "TAAA Virtual Moon Exploration" video made on 6-27-2020 can be located by: a. go to

the TAAA webpage at www.tucsonastronomy.org; b. click on the third item on the right, "Community Involvement"; go down to and click on "Virtual Events and Activities"; go to "Facebook and YouTube Links"; click on "TAAA YouTube"; the fifth item to the right is "TAAA Virtual Moon Exploration 6-27-20"

Question 1b: Word search activities: go to the TAAA webpage at www.tucsonastronomy.org; Click on the third item

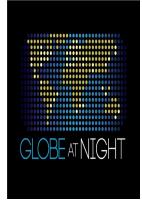
on the right, "Community Involvement"; click on "Virtual Events and Activities"; continue going down until you reach "Virtual Activities"; go on down to "Astronomy Word Searches". A variety of astronomy word searches are listed and will include the three referred to in the question.

Question 1c:

Watch Jim and Susan Knoll demonstrating, think about all the steps they took, and think about how you can make teaching videos!! go to the TAAA webpage at www.tucsonastronomy.org; click on the third item on the right, "Community Involvement"; go down and click on Virtual Events and Activities; under "Activities", go down to "Making a Planisphere or Star Wheel".

Question 1d: Go to astroleague.org/observing.html. There are designated categories to click on that will answer each

of the above questions. Explore an observing program that looks interesting and one that you don't know much about!



Can you count stars? Yes? You can do this! Help increase the awareness of light pollution by submitting observations all year long.

Current Campaign: November 7 — November 16, 2020 Pegasus & Perseus

Learn more at <a href="http://www.globeatnight.org/">http://www.globeatnight.org/</a>

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