

# WEEKLY STARGAZERS' NEWSLETTER

by Dr. Bob

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These are the notes that I use for the weekly radio broadcast on Rome Radio Station WLAQ AM 1410 and FM 96.9. The program airs at 7:50 a.m. each Tuesday morning. The radio station also has a live FaceBook broadcast at the same time: WLAQ-Rome. Send questions to: ryoung@highlands.edu

Etowah GYSTC  
Website QR code



**OBSERVATION PERIOD:**  
02/21/23 – 02/27/23

## **FUN FACT OF THE WEEK:**

Jupiter's Great Red Spot is a massive, hurricane-like storm. This particular storm most likely formed in the 1870s. Transformations of this storm have been observed throughout its existence. The Great Red Spot changes size over time and grows and shrinks as it interacts with other storms in Jupiter's atmosphere. The color of the storm also varies from a light pink to a deep red, and scientists are still unsure why this change occurs.

## **MOON FOR THE WEEK:**

The Moon is First Quarter on Monday, February 27<sup>th</sup>. The Moon was just at perigee so it is starting to get further away. On March 3<sup>rd</sup> it will be at Apogee, it furthest distance from Earth. Currently, the Moon's range is 364,867 kms while on the 3<sup>rd</sup> it will be 405,889 kms away.



To convert kms to miles, multiply kms by 0.62 miles/km.

## **HORIZON TO HORIZON PLANET VIEW**

The sun rises at 7:28 a.m. and sets at 6:22 p.m. This means that there are 10 hours, 54 minutes of daylight compared to 10 hours and 48 minutes daylight last week.

The Sun is still in the **constellation Aquarius**. The Water Carrier, in astrology, is a zodiac constellation.

The is Earth 0.989 AUs from the Sun compared to 0.987 AUs same last week. It is 44.9 degrees altitude at the meridian compared to 42.5 degrees last week.

### **The Planets:**

**Mercury** rises at 6:36 a.m. This is about 65 minutes before the Sun. This is the best time to view Mercury. The planet can be seen if you have a low clear eastern horizon and dark skies. If you see it, you will be in the minority of stargazers so give it a try.

**Venus** sets at 8:44 p.m. which is 2.0 hrs after sunset. If the skies are clear, it is a very easy planet to see in the darkening western sky after sunset. Venus, like Mercury does not have any moons. Venus is covered by a thick layer of CO<sub>2</sub> making it even hotter than Mercury, even though it is further away from the Sun than Mercury. Venus is well over 830 degrees Fahrenheit.

**Mars** rises up in the eastern horizon in the early afternoon and crosses the meridian at 12:21 p.m. You should have no trouble seeing the Red Planet if your skies are clear. The Red Planet crosses the meridian at 7:35 p.m. If you look at it through a telescope, you will see its two moons: Phobos and Demos.

**Jupiter** sets at 9:04 p.m. The biggest planet in the solar system now has the largest family of moons. Since December 20th, the Minor Planet Center (MPC) has published orbits for 12 previously unreported moons of Jupiter. The discoveries bring the list of Jovian moons to 92 moons from what was previously known, 79 moons. With binoculars, look for Io, Callisto, Ganymede, and Europa the four Galilean Moon. Jupiter sets in the West at 9:23 p.m.

You can identify the moons by name if you go to [https://skyandtelescope.org/wp-content/plugins/observing-tools/jupiter\\_moons/jupiter.html](https://skyandtelescope.org/wp-content/plugins/observing-tools/jupiter_moons/jupiter.html). This is a great interactive tool to identify the four Galilean moons of Jupiter.

**Saturn** is still too close to the Sun this week to see it. It will be a couple weeks before we see Saturn again in the evening sky.

### **MARS ROVER PERSEVERANCE**

To get regular and current updates on the progress of NASA's Perseverance rover on Mars, go to the website:

<https://www.space.com/news/live/mars-perseverance-rover-update>

### **SATELLITES FOR THE WEEK (ISS PASSES)**

There are a number of satellite passes but they are too dim and too low on the horizon to mention.

### **STAR PATTERNS IN THE SKY**

Last week we talked about a new asterism “Winter Triangle”. This week we will introduce you to three more in the constellation Auriga.

Along the eastern edge of Auriga are a small group of stars called “**the Little Kids**”. Along the western edge is the asterism called “**the Kids**”, and in the southern middle is the asterism “**Minnow**”.

While these asterisms are not of any significant astronomical importance, they are fun to locate and watch. Typically, asterisms are visible to anyone with dark skies and at the most, a pair of binoculars.

Auriga is well positioned in the sky this month to see it most of the night. It is located between the north star and Orion, so it is not too hard to locate as well.

Go out and see if you can find these fun little asterisms.

### **SPACE HISTORY OF THE WEEK**

**Feb. 21, 1938 at age 69 George Ellery Hale passed. (born 29 Jun 1868).**

American astronomer known for his development of important astronomical instruments. To expand solar observations and promote astrophysical studies he founded Mt. Wilson Observatory (Dec 1904). He discovered that sunspots were regions of relatively low temperatures and high magnetic fields.

Hale hired Harlow Shapley and Edwin Hubble as soon as they finished their doctorates, and he encouraged research in galactic and extragalactic astronomy as well as solar and stellar astrophysics. Hale planned and tirelessly raised funds for the 200-inch reflecting telescope at the Palomar Mountain Observatory completed in 1948, after his death, and named for him—the Hale telescope.

**QUESTION OF THE WEEK:**

**How are stars named? Trever M**

**My mom ordered a star name for me... I got a certificate that looked pretty authentic. Is it authentic and is that star really named after me?**

Sometimes stars are "named" is by means of a star-naming company. You pay a small fee and you can have a star named after you or someone you love.

While nice, the problem is that these names are not actually recognized by any astronomical body and you aren't going to see it referred to by your name in the papers.

Some facilities (Planetariums) sell your name on a star or, if they are building an addition, on a brick in the building. They make it very clear that there's no official standing of the name. However, your donation goes for a good educational cause and helps the planetarium do its job of teaching astronomy.